

The Business Model Navigator

Oliver Gassmann,
Karolin Frankenberger
& Michaela Csik



Discover the 55 business models responsible for 90% of the world's most successful companies.

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The Business Model Navigator

Testimonials

The Business Model Navigator™ has been successfully applied in a number of companies to date. Here is what people who are already acquainted with our methodology have to say:

'Product innovations alone won't be enough to ensure our company's continuing success; we want to encourage our people to turn more of their attention to new types of business models. The Business Model Navigator™ helps us to foster creativity and think in other dimensions.'

Dr Volkmar Denner, CEO Robert Bosch GmbH

'The Business Model Navigator™ with its tools, strategy, and visualizations is a perfect complement to the "Foresight and Innovation by Design" philosophy at Stanford. They work in practice and in theory.'

Professor Dr Larry Leifer, Founding Director of the Stanford Center for Design Research

'The Business Model Navigator™ demonstrates impressively that sustainable innovation is not created by inspiration alone, but can and should be approached systematically building on shared experience and based on data. Identifying patterns in fast changing environments and dynamically adapting your companies' business model to them will be crucial for success in any industry.'

Dr Ralf Schneider, CIO Group, Allianz

'BASF has been working for more than five years with the Business Model Navigator™. It has led to concrete business concepts and also created a more open mindset. We applied the methodology described in this book in various environments and industries – and it worked fantastically!'

Dr Petra Bachem, VP Marketing and Sales Excellence, BASF

'An aspiring field such as New Space really benefits from the Business Model Navigator™ because the market will be defined by a variety of innovative business models – going through all the possibilities is a real competitive advantage!'

Dr Henning Roedel, NASA Ames Research Center

'The Business Model Navigator™ has opened our eyes towards business model thinking within the overall innovation process of the company. It brings together commercial and technical leaders and improves the success rate of innovation.'

Stefan Borgas, President and CEO, ICL Group, Tel-Aviv

'How would Amazon's CEO conduct my business? Which new customer segments would Robin Hood open up if he were in my place? The Business Model Navigator™ helps us to break out of our own industry logic and opens the way to a dazzling display of new ideas.'

Wolfgang Rieder, Managing Partner, Head of Advisory Business Unit Switzerland, PricewaterhouseCoopers

'In our Entrepreneurial Clinic we use the Business Model Navigator™ to coach start-ups in Business Model Design. This book goes far beyond other publications regarding concrete guidelines. It is a must for every strategic entrepreneur.'

Prof Dr Dr Thomas Schildhauer, Director Entrepreneurial Research Lab and Clinics, Berlin

'Well researched and easy to apply in practice! That's exactly what an excellent management book should be! It is inspiring, enthusiastic and rule breaking!'

Prof Dr Ellen Enkel, Editor in Chief, R&D Management

'The Business Model Navigator™ is an exceptionally helpful book, using a clear concept and lively examples from real businesses. It is a must-read handbook for managers who want to revolutionize their business.'

Dr Bernd Riggers, President and CEO, Lufthansa Technik Shenzhen Co. Ltd.

'The Business Model Navigator™ offers a great opportunity to challenge our habitual thinking concerning business models and revenue generation. Challenging discussions with project teams and staff are thought provoking and trigger collaborative development.'

Dr Ian Roberts, CTO, Bühler

'The Business Model Navigator™ is a useful tool in defining exactly how and why a business derives revenue from customers. Many nimble start-up companies iterate and/or pivot in their business models (whether planned or unplanned) at different phases in their development. At Datafeel.io, our business model will no doubt change over time and it is helpful to know that it will reflect our evolving value proposition. This demonstrates the reality that start-up companies must remain resilient in order to better solve stakeholder problems and optimize value.'

Robert Schultz, CEO and Founder Datafeel, Boston

'For us at Bosch, too, it will be increasingly important in the future that in addition to developing first-class products we use new business models. The 55 business models identified and described here provide an excellent toolkit for developing our own business model, especially with respect to our future presence in the Internet of Things and Services.'

Dr Heinz Derenbach, CEO of Bosch Software Innovations GmbH

'The Business Model Navigator™ is a very effective way to help local businesses challenge their dominant logic and develop new business models.'

Richard Walker, Business Manager, Queen's University Belfast

'The Business Model Navigator™ makes it possible for us to grasp the business model as a whole and to work within a coherent system. The St. Gallen methodology not only brings results, but broadens the mindset.'

Daniel Sennheiser, President, Strategy and Finance, Sennheiser

'We leverage the Business Model Navigator™ for our Business Model Innovation approach and discovered that it is a great methodology with high practical relevance.'

Dr Ulrich Eisert, Research Manager, SAP (Switzerland)

'All organisations from start-up to the largest organisation need to keep their customers and innovation in full focus – The St. Gallen team's Business Model Navigator provides a very clear methodology to take the next quantum leap in business.'

John Glynn, Managing Director, ShannonFerry Ltd.

'I found that the Business Model Navigator™ has given me a very valuable new approach to use when working with companies helping to define their future direction and it really supports "thinking outside the box". The Business Model examples provide a very useful guide from which to select one or a combination of patterns that can help to define new business models'

Mary Donovan, CEO, Caragh Consulting, Cork

'We applied the Business Model Navigator™ in a 3-day workshop format with a key customer. Apart from jointly developing a promising business model option, the common experience has also strengthened our bonds for future intensive co-operation.'

Dr Susanne Schröder, Innovation Manager, Siemens Energy Sector

'Business innovation requires overcoming mental barriers. This excellent book lays out a new way to think about new business models in the 21st century.'

Reza Vaziri, Managing Director 3M Germany

'Working with the Business Model Navigator™ helped us not only to structure our internal approaches better, but drove us also to analyse and understand our competitors' business models and therefore their and our position in the market space.'

Dr Reiner Fageth, Management Board, CEWE Color

'These patterns are a very powerful creativity method and a great tool to generate a "business model thinking" attitude.'

Dr Angela Beckenbauer, Corporate Innovation Manager, Hilti

'The Business Model Navigator™ provides a structured approach to the fuzzy field of business model innovation. The 55 patterns make it easy to think about alternative ways of running your business.'

Dr Michael Daiber, Innovation Agent, ABB Turbo Systems

'These business models are an important source for inspiration and best practice to create and implement radical innovations.'

Daniel Ledermann, Head of Incubation and Portfolio, Swisscom

'Applying the Business Model Navigator™ helps in challenging today's business logic, opening up the solution space and creating a new mindset. We see this as a prerequisite for future success.'

Dr Christoph Meister, Corporate Innovation Manager, Holcim

'I have learned from others to appreciate successful business models, but I learned from the St. Gallen team how to develop them myself.'

Thomas Moriarty, CEO, Firecomms, Cork

'The world in 55 business models, at first sight unimaginable, but at second glance an incredible source of inspiration to innovate one's own business model and carry it successfully into the future. Compulsory reading!'

Bernhard Klein, Director of Brand, Vienna Tourist Board

'Working with the Business Model Navigator™ provides you with a broad portfolio of ideas and structures for business models. It helps you to create new and individual solutions for your specific business challenge.'

Stefan Strauss, Director, Business Development Service, MTU Friedrichshafen

OLIVER GASSMANN
KAROLIN FRANKENBERGER
MICHAELA CSIK

The Business Model Navigator

55 Models That Will Revolutionise Your
Business

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Introduction

Almost all revolutionary business model innovations of the last fifty years have come from the United States, and this does credit to the spirited and enterprising American nature. Inspired by our own stays in Silicon Valley, we began to dream of developing a method for business model innovation. Every engineer's studies include established design methodologies, and while they cannot guarantee a flawless outcome, they certainly increase the likelihood of success. But in the world of business management, we searched in vain for some such toolkit to aid in that most difficult of tasks, business model innovation. This led us to spend several years researching our own design method and testing it with leading industrial companies that recognised the practical value of such a tool.

Based at the University of St Gallen, one of Europe's leading business schools, we are committed to be at the forefront of business model innovation research. Our long-term experience with regard to innovation processes from an academic as well as practical perspective supported us in creating this method. Many concepts and tools used in top consultancies have emerged from similar academic efforts (e.g. the Stage-Gate process for developing new products by Robert G. Cooper or the concept of Five Forces developed by Michael E. Porter). We are convinced that the Business Model Navigator extends this series of successful tools which are well grounded in research and build on a solid conceptual base.

The practical business model innovation design method we present here is based on extensive empirical research. We have analysed the most revolutionary business model innovations over the past 50 years to determine which predictable and systematic patterns were at their core. To our surprise, we discovered that over 90 per cent of all business model innovations simply recombine existing ideas and concepts from other industries. This knowledge can be used to our advantage, much like engineers use design methodologies that follow certain physical and technical rules and heuristics. Our method, the Business Model Navigator, consists of 55 successful business model patterns, which can serve as blueprints for your own business model innovation efforts.

We subsequently applied the results to further research and consulting projects for many internationally leading companies in a wide variety of industries such as chemical, pharmaceutical, biotech, mechanical engineering, electronic, electric, energy, service, trade, IT, telecommunication, automotive, construction, and financial services. The close working relationships between industry and the academic members of our research consortium and the bilateral projects conducted with these companies were especially helpful in improving the future implementation of our methodology. Our approach was also inspired by our close collaboration with Stanford University's Center for

Design Research where two of the authors each spent several months. The founders of Design Thinking inspired us to incorporate iterative, user-oriented and haptic design into our approach. We also received valuable feedback concerning our methodology from executives at the University of St Gallen's Executive MBA programme where we have been teaching the Business Model Navigator for several years.

The book is structured into three consecutive parts. The first part aims at introducing the core elements and principles of the Business Model Navigator. In this regard, we present a framework to understand the concept of business model design and prepare the reader for thinking in business models. Along with the magic triangle describing the logic and dimensions of a business model, our four-step process to develop innovative business models in a structured manner is presented. A set of key success factors that we regard as highly relevant for business model change projects round off the first part of the book.

Building on the first part of the book, the second part provides deep insight into the core element of the Business Model Navigator – the 55 business model patterns. These are a powerful tool for creating new ideas for innovative business models and form the common ground for creative imitation and recombination of concepts.

For the impatient reader, Part Three offers the opportunity to apply the Business Model Navigator and the 55 patterns on one's business model immediately. Using an abbreviated version of the Business Model Navigator – 10 steps to innovate your business model – today your own business model idea might be briefly sketched right after reading the text.

The present work specifically addresses practitioners and we have consciously avoided complicated theoretical arguments and the citation of references in the body of the text. Interested academics and practitioners will find a classified bibliography at the end of the text and regularly updated research and additional tools on our homepage www.bmi-lab.ch.

The methods we present in this text work surprisingly well and have made their mark in many companies and organisations. Practitioners are hooked on the Business Model Navigator and so are we! It is our hope that our efforts will have helped in some small way to ensuring that future business model innovations are increasingly developed. Our method does not guarantee success, but it will definitely improve your chances. Always remember: nothing ventured, nothing gained!

We wish you all the best!

St. Gallen, Switzerland, Spring 2014

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[PART ONE]

How to drive business model
innovation

The purpose of this book is to introduce you to a methodology – the Business Model Navigator – that will help you innovate your business model in a structured manner. Our research has shown that business model innovation is based on 55 recurring patterns: from being an art, business model innovation has become a science.

To get to the core of business model innovation right away, Part One highlights the importance of innovating the business model in our ever-changing world and lays a common ground for defining a business model. A company's current business model becomes tangible by describing it in four dimensions – the customer (Who?), the value proposition (What?), the value chain (How?) and the profit mechanism (Why?). Further, the main barriers impeding companies to innovate their business model and thereby to benefit from the power of business model innovation are presented.

The central mechanism of the Business Model Navigator is the power of recombination and creative imitation by means of 55 business model patterns. This part gives an introduction as to how these principles are applied and how they work in the Business Model Navigator.

Key takeaways of this part:

- A business model provides a holistic picture of how a company creates and captures value by defining the *Who*, the *What*, the *How* and the *Why* of a business. Innovating a business model means changing at least two of those dimensions.
- One of the key challenges of business model innovation is to overcome the dominant firm and industry logic.
- The Business Model Navigator helps you to successfully structure the path towards an innovative business model and guides you through the process.
- At the heart of the Business Model Navigator lies the recombination and creative imitation of 55 business model patterns – a powerful tool to break out of the box and generate ideas for new business models.
- Change management is a key success factor in any business model innovation project – identifying barriers and enablers is crucial for implementing a business model innovation in your company.

What is a business model and why should it be innovated?

1

Many companies develop excellent, technologically sophisticated products. In the developed world especially, businesses' ability to innovate never fails to impress. Why do such businesses, whether in the East or West, suddenly lose their competitive advantage? Strong companies such as Agfa, AEG, American Airlines, Lehman Brothers, DEC, Grundig, Loewe, Nakamichi, Nixdorf Computer, Motorola, Nokia, Takefuji, Triumph and Kodak suddenly disappear from prominence after trading successfully for decades on end. What went wrong? The answer, although painful, is simple. These companies failed to adjust their business models to the changing environment around them. They have been resting on their laurels from past successes. But relying on the Boston Consulting Group's famous cash cow, which remained the watchword for decades and basically suggests companies squeeze profits from successfully established business, is no longer a guarantee for survival.

Today, a company's long-term competitive success depends upon its ability to create an innovative business model. There are very few European firms – outstanding examples are Nestlé and Hilti (Hilti is a construction goods manufacturer located in Liechtenstein that, among other innovations, managed to implement a fleet management system for tools) – that have actually managed to do so successfully. Most role models thrive in Silicon Valley, and big names such as Google, Apple, and Salesforce come to mind. So, the burning question is: How can my company become a game changer? How can it become a role model for its industry? How, in a word, do I become a business model innovator?

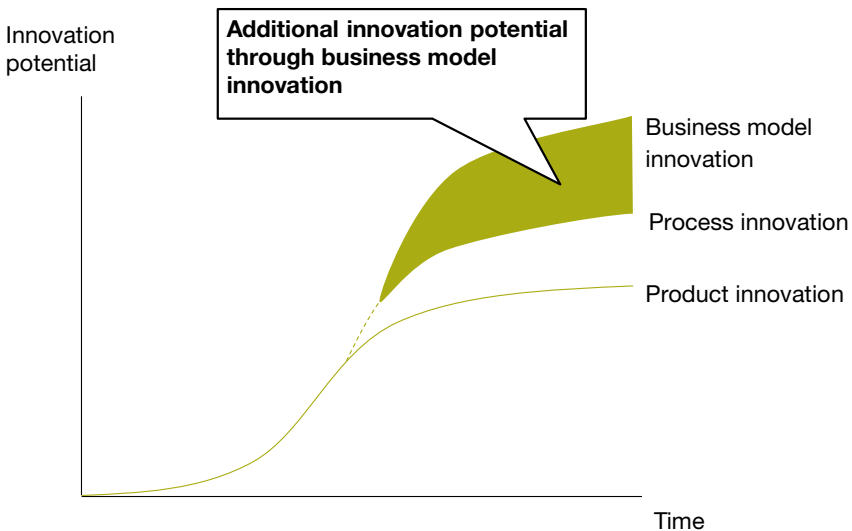
The age of business model innovations

If anyone had asked you ten years ago whether you thought customers would be willing to buy Nespresso coffee capsules from Nestlé for 80 euros per kilogram or whether more than ten per cent of the world's population would willingly make details of their private lives available on an online forum visited by millions of people every day, like in the case of Facebook, you probably would have thought the questioner was crazy. Or would you have believed in the prospect of free phone calls anywhere in the world or flights costing no more than a few euros, pounds or dollars? Less than two decades ago, who could have imagined that the search algorithm developed by a start-up named Google in 1998 could bring in more cash than was earned by large multinationals like Daimler or General Electric with all their products, engineers, global subsidiaries and brand names?

The phenomenon that has given rise to these developments can be found in almost every industry. And that phenomenon, of course, is business model innovation. Hardly anything has put such a powerful firecracker under 'business as usual' as business model innovation, and no other subject has graced the front pages of the business press quite as frequently. But what is it about business model innovation that makes it so influential?

Innovation has always been an instrumental factor in driving growth and competitiveness in business. In the past, an outstanding technological solution or the introduction of an exceptional product was sufficient for success. This being so, many engineering-savvy companies indulged in 'happy engineering' to produce and put on to the market a plethora of products with leading-edge functionalities. But in most industries today it is no longer sufficient to focus on

Figure 1.1 New business models allow for additional innovation potential on top of product and process innovation



product or process innovation, as increasing competitive pressure, ongoing globalisation, the upsurge of competitors in the East and commoditised products, to name just a few of the present driving forces, all erode formerly prominent positions. New technologies, blurred industry boundaries, changing markets, new competitive players and changing regulations all combine to make products and processes obsolete. Whether we like it or not, the rules of the game are changing in most of our industries.

Empirical research has shown unequivocally that business model innovation carries a greater potential for success than mere product or process innovation (see Figure 1.1). A BCG study has shown that over a five-year period business model innovators are six per cent more profitable than their contemporaries who were innovating products and processes. Similarly, 14 of the 25 most innovative companies in the world are business model innovators¹. These findings correlate with a study conducted by IBM in 2012 showing that industry outperformers innovate their business model twice as frequently as underperformers. Moreover, a study conducted by BCG and MIT Sloan in 2013 found that business model innovation is a key driver for successful sustainability-related innovations. More than 60 per cent of companies that have implemented such innovation reported increases in profits.

Of course quality products and processes remain as ever of great importance, of course, but they will not decide a company's success or failure in the future. We have now firmly arrived in the era of business model innovation, where a company's fate increasingly depends on its ability to apply the appropriate innovative business model that differentiates it from its humdrum competitors.

Tomorrow's competitive advantage of companies will not be based on innovative products and processes, but on innovative business models.

In point of fact, many famous success stories go back to an innovative business model rather than a fantastic individual product:

- Amazon has become the biggest bookseller in the world even though it doesn't own a single brick-and-mortar store.
- Apple is the largest music retailer even though it doesn't sell CDs.
- Pixar won eleven Academy Awards in the last ten years without there being a single human actor in any of its films.
- Netflix reinvented video rental despite not owning a single physical shop.
- Skype is the largest telecommunications provider worldwide even though it does not own any network infrastructure.
- Starbucks is the world's largest coffeehouse chain to sell standardised coffee products at premium prices.

¹ BCG (2009).

Be paranoid

The consequences for companies in the innovation race are drastic. The Boston Consulting Group's old adage of milking your cash cows has become less and less relevant today. Even if they are currently successful, it is important for businesses to regularly test their business model. A little paranoia doesn't do any harm, and, as Steve Jobs said, it is crucial to question the pillars of today's success and mentally prepare yourself for your company's demise, even if it's doing famously right now. We live in an era of temporary competitive advantage: success can only be maintained if its roots are continually re-examined and nurtured.

The elements of a business model

The term 'business model' has become a buzzword in every boardroom. It may be used to describe a company's current activities or to signal a break, as for example in: 'We're gonna have to change our business model if we want to remain successful'. You would be hard-pressed to find a manager who has not used some such words as this at some time. However, there is still often considerable disagreement about what the term actually means, even within a given company. In other words, people who meet to discuss their business model may often have very different conceptions of what it is they are talking about. Needless to say, such discussions are rarely fruitful.

In this book, we present a simple yet comprehensive definition that we have developed to describe business models. The simplified system we present is far more expedient as a workshop tool than a complex systematisation.

Our overall model consists of four dimensions, which we present in the form of a 'magic triangle' (Figure 1.2):

- 1 The customer – who are our target customers?** It is important that you understand precisely which customer segments are relevant for you and which ones you will and won't address with your business model. Customers are at the very heart of every business model – always! There are no exceptions.
- 2 The value proposition – what do we offer to customers?** This second dimension defines your company's offerings (products and services) and describes how you cater for your target customers' needs.
- 3 The value chain – how do we produce our offerings?** In order to put your value proposition into effect you need to carry through various processes and activities. These processes and activities in conjunction with related resources and capabilities and their coordination along the

company's value chain make up the third dimension of business model design.

- 4 The profit mechanism – why does it generate profit?** This fourth dimension, which includes aspects such as cost structures and revenue-generating mechanisms, clarifies what it is that makes a business model financially viable. It provides an answer to the central question that every company needs to ask: how do we produce value for our shareholders and stakeholders? Or simpler: why does the business model work commercially?

Figure 1.2 Business model innovation



The aim of this diagram is to become completely clear about your customer segments, your value proposition, your value chain and your profit mechanism fleshes out your business model and makes it comprehensible, while at the same time laying the foundation for future innovation. We call this constellation the ‘magic triangle’ because an adjustment at one corner (for example, optimising revenue generation at bottom left) automatically necessitates tweaking the other two corners.

Who-What-How-Why

In sum, a business model defines who your customers are, what you are selling, how you produce your offering, and why your business is profitable. Who-what-how-why describes a business model of which the first two (who and what) address its external aspects and the second two (how and why) address its internal dimensions.

Innovation of a business model requires modifying at least two of these four dimensions. The effort of solely innovating the value proposition would merely result in a product innovation, for instance. The following three examples demonstrate how companies have innovated two or more elements of their business model either in reference to the dominant industry logic or to their former business model:

- Dell: This computer technology company has been focusing on Direct Selling since 1984. In contrast to other competitors such as Hewlett-Packard or Acer, no middlemen are involved (how?). Dell is hence able to offer customised products at lower costs (what?). Receiving orders directly from customers, Dell obtains valuable information about actual demand that enables it to manage its inventory and network of partners more efficiently (how?). The company also generates further revenues with an Add-on concept (the business model pattern 'Add-on' is described in the second part of the book, page 83) where customers can select additional components to match the base product and thus configure their own personalised computer (why?). In reference to the dominant business model of the industry, Dell has modified all corners of the triangle and created a new logic of how to create and capture value.
- Rolls-Royce: This British aircraft engine manufacturer introduced an innovative business model called 'power by the hour' (the business model pattern 'Performance-based contracting' is described in the second part of the book, page 257), whereby airlines purchase flying hours instead of buying aeroplane engines outright (what? why?). The hitherto existing way of doing business was one-time payments with a cost-based pricing scheme. Rolls-Royce, in contrast, retains ownership of the engines and is responsible for maintaining and repairing them (how?). The company generates a constant revenue stream in this way, and has reduced costs by improving the efficiency of servicing. Given the company's primary aim of building low-maintenance engines, this Performance-based Contracting business model has also changed employees' mindsets, for in the old days engine repairs served as a direct source of income, and this led to ambiguous goals in development.
- Zopa: This financial services business model innovator, founded in 2005, is the world's first social lending platform (the 'Peer to peer' business model pattern is described in the second part of the book, page 252). It enables private individuals to issue loans to one another (what?). The company connects willing creditors and potential debtors who state the desired size of their loan and the acceptable terms in advance (how?). This permits loans to be issued without any bank involvement, a considerable advantage for debtors and creditors as both of them benefit from better interest rates. Zopa earns revenues from fees it charges debtors, while creditors are exonerated from such fees (why?). Besides creating new value propositions (e.g. private individuals may take over the role of a bank, enabling more attractive

interest rates), Zopa has also changed the profit mechanisms and the value chain structures in comparison to traditional banking and finance businesses.

In each of these examples, it will be seen that a business model innovation always involves a change in at least two of the four dimensions:

As a rule of thumb, business model innovation differs from product or process innovation in that it significantly affects at least two of the four components of who-what-how-why.

The goal of every business model is to both 'create and capture value'. What is interesting is that while most business model innovators are quite good at creating value for their customers, many fail to capture it for themselves. Take the video website YouTube as an example, which lets users view and upload video clips for free, funded by ads. Since the launch of its innovative business model, YouTube creates a lot of value: it has roughly two billion visitors every day and over 48 hours of footage are uploaded every minute. But even though YouTube is immensely popular the company is still in the red seven years after it was founded! A viable business model that captures value for YouTube is still missing to date.

The social network Facebook also introduced an extremely successful business model. Although its growth remained steady, the company's share price collapsed during its initial public offering in 2012. One reason for this is that Facebook was no longer able to capture as much value for itself as it had earlier: the increasing mobility of customers using smartphones made the ad business less attractive, since ads are less effective when displayed on mobile phones than on the larger desktop screens. In 2014, the acquisition of WhatsApp for 19 billion dollars has the goal to further enhance value capturing from current transactions and thereby to ensure that the company appropriates a big enough share of the value it creates for its customers.

Successful business model innovation creates value for your customers and captures value for your company. Many business models fail to capture enough value.

The challenge of business model innovation

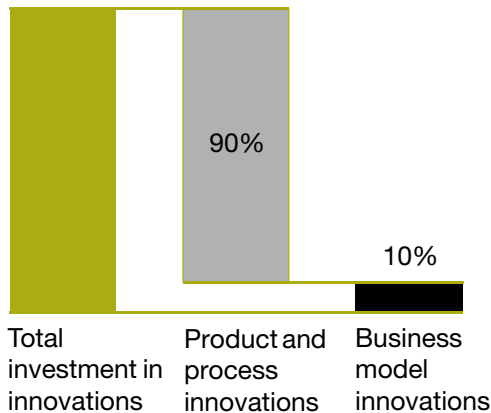
An entire generation of managers has been trained to think in terms of Michael Porter's 'Five Forces'. At face value, there is nothing wrong with this. The core idea of Porter's approach was to analyse industries in great depth so as to position an enterprise optimally vis-à-vis its competitors and thus gain a

competitive advantage. In 2005 Kim and Mauborgne used their ‘Blue Ocean Strategy’ approach to think outside Porter’s box for the first time. Their main message was, if you want to innovate your business model successfully, you must leave the competitive red ocean and create a blue ocean, that is new, uncontested market space. The mantra of the business model innovator is: ‘Beat your competitors without trying to beat them’.

The only way to create a new business model is *to stop looking at what your competitors are doing*: IKEA revolutionised the furniture industry with its cheap yet stylish designs and a new way of selling them. British rock band Radiohead caused quite a stir when it allowed fans to purchase their album *In Rainbows* for whatever price they chose. This daring strategy greatly contributed to Radiohead’s fame, both increasing ticket sales for concerts and enticing fans to buy the band’s older records as well. Car2Go, for its part, turned the car rental industry upside down with an innovative car-sharing concept that lets customers rent cars by the minute.

So why don’t all companies innovate their business models and venture into the blue ocean? In fact, multinational corporations invest no more than about ten per cent of their innovation budget in actual business model development (see Figure 1.3). When Shell spent two per cent of its R&D budget for game changing projects, the company was applauded as brave and innovative in its industry. Small- and medium-sized companies typically spend even less, and most of them totally neglect business model innovation.

Figure 1.3 In multinational corporations the investment for business model innovation lies only at 10 per cent



Source: Johnson (2008)²

However, a lack of willingness is certainly not the answer to the question raised above. Rather, a lack of familiarity with the concept of business models hinders firm innovation. In this respect, we have identified the three core challenges that make it difficult for companies to tackle the issue of business model innovation:

- 1 Thinking outside of one's own dominant industry logic** is no simple matter. Mental blocks hamper the development of fresh ideas.
- 2 The difficulty of thinking in terms of business models rather than of technologies and products:** People prefer physical technologies and products they can see and understand. Most find it much more challenging to think in terms of the more abstract world of business models.
- 3 The lack of systematic tools:** One of the great myths surrounding innovation, and especially business model innovation, is that it is necessarily a chaotic process and that only creative geniuses can bring truly revolutionary innovations to the market. Whereas the fact is that innovation is a discipline that needs to be managed like any other. Admittedly, it needs methods and processes. Just as a barber needs a good pair of scissors and a woodworker needs a quality saw, managers also need functional tools for business model innovation.

Challenge No. 1: Thinking outside of one's own dominant industry logic

The memory of the company's past successes can easily block new ideas. Even very open-minded leaders tend to have a hard time breaking their industry's dominant logic. Today's cash cows and today's competitors still have a big influence on the mindset of the management of the company. Nobody lives in a vacuum, and every company operates in a branch of industry that adheres to certain structures based on the interplay between the existing value chains and the competition. Whether or not a company explicitly addresses these structures, it will be affected by them such that its business model inevitably works within fixed confines. As humans, we tend to follow rules, having been brought up to do so. The more we know the more we are stuck in existing patterns of thought. For corporations, the management literature of recent decades has constantly extolled such uniform one-dimensional thinking as demonstrating a strong 'corporate identity' and thus conducive to competitive advantage.

The dominant industry logic frequently gets called into question by new recruits whose minds are not set in the same way. The questions they ask their employers are the sort of questions only a newcomer would think of. Veteran industry experts then explain patiently and forgivingly: 'Our industry is different. That's how our business works. Our customers won't accept anything else'. Labelled 'orthodoxies' by sociologists, these basic tenets of the company are carved in stone. Orthodoxies are shared beliefs of a group that has a long history and is not open to change.

Only very few companies, such as Nestlé, systematically analyse these questions put by newcomers with a background in other industries and see them as a source for new ideas. Bringing in ideas from outside the company is a promising way for employees to break with their patterns of thought.

Unfortunately, such ideas are regularly challenged by the ‘not invented here’ syndrome – the psychological phenomenon within an established group or organisation to reject any idea coming from outside – and stifled before they can have any real impact on the business. Any business model innovation methodology, therefore, must find a balance between the necessity of integrating outside ideas and allowing management to develop its own ideas.

Leaders often fail to understand why they should venture out of their comfort zones: after all, their current business model is continuing to make profit. But when profits start to dwindle, it should be taken as a sign that time is ripe to introduce a new business model. If it is too late to do so and the company is close to bankruptcy, the board has no other option than to cut costs and restructure. Michael Dell hit the nail on the head when he said: ‘You have to innovate when times are good’.

Kodak went bankrupt because it was unable to break its industry’s dominant logic in good times. The company actually developed the very first-ever digital camera in 1975 but never brought it to market for fear that it would undermine its dominant business, analogue photography. At that time, most of the income came in from selling and developing film, while camera manufacturing played a relatively minor role in Kodak’s business model. The company harboured a strong belief that analogue photography would not be affected by the digital camera. In 1999, when the new technology flooded the market, Kodak famously forecasted that within ten years, digital photography would have conquered no more than five per cent of the photography market as a whole. The misjudgement proved to be ruinous: by 2009 it was analogue photography that had a market share of just five per cent, all the rest being claimed by digital photography. Little did it help that Kodak half-heartedly developed digital imaging technologies in a joint venture with Microsoft in the 1990s, and it was also too late when Kodak blew up its corporate R&D centre in Rochester with TNT in 2008. Kodak got caught up in its own dominant logic and the company filed for bankruptcy in 2012.

A similar story can be told of the music industry’s ‘big five’ (Universal, Warner, BMG, Sony, and EMI). All companies failed to break with their dominant industry logic in a timely fashion, desperately clinging to the status quo as they were. MP3 technology, developed by the Fraunhofer Institute in 1982, was instrumental in rendering file sharing of music a simple matter beyond all imagining by the 1990s. Illegal online file sharing with no regard for copyright spread like wildfire. But instead of acknowledging that MP3 technology was revolutionising the music industry, the companies got involved in legal wrangles with new market entrants such as Napster. It took Apple’s introduction of a legal music downloading service to make the big five realise that the dominant industry logic was now wide open and that there was no turning back the clock. Needless to say, Apple is today the largest music seller worldwide.

To come up with ideas for an innovative business model, it is essential to overcome the dominant logic residing within an industry or company. New ideas can only be found beyond the confines of current concepts.

An example of a company that did succeed in overcoming the dominant industry logic was Streetline, behind which, it should be added, was the discreet presence of IBM. The parking place industry boasts a turnover of 25 billion dollars, and had hitherto seen little innovation. Streetline equipped thousands of parking spaces in the USA – and up to a point in Germany too – with ultra-low-powered cost-effective sensors that indicated whether a parking space is free or a car is present and, if so, whether it is stationary or in motion. The sensor sends a signal by way of a wireless mesh network to a transmitter attached to a streetlight. The signal passes to the Internet and to the appropriate application in real time.

Streetline, instead of targeting drivers as primary consumers, focused on cities and municipalities. A city can earn an enormous income from such a system and will therefore be keenly interested in the business model. It is common practice for 50 to 80 per cent of drivers to not pay their parking fees. With the aid of this system, the city can identify culprits directly and take direct measures to prosecute them. Cars that overrun the allotted parking time are marked on the terminal. The system brings in greater revenues to cities at less cost, since it requires fewer personnel to apprehend parking violators, with a resulting marked increase in the margin per parking space.

In a second stage the business model can be further refined. Thirty per cent of income from traffic in towns and cities comes from parking space seekers. The solution is a means to reduce traffic congestion, fuel consumption and, last but not least, headache.

Challenge No. 2: Difficulty of thinking in terms of business models rather than of technologies and products

This challenge, together with the myth that business model innovation always needs to stem from fascinating new technologies (see BMI myths on page 16), is one reason why business model innovation is such a rarity. While new technologies indeed serve as drivers of business models, it is more common for them to be generic in nature. Technologies such as the Internet, AutoID technologies (e.g. RFID) or cloud computing are widely known and accessible to all. The creative leap lies in their use and application in one's own business, and therewith to revolutionise it. The true revolution is the discovery of the potential economic viability of a new technology – in other words, of the right business model.

One example of such a circumstance is the Pay As You Drive (PAYD) principle in the insurance industry. For some years now a number of car insurers

have been offering car insurance policies that make targeted use of various advanced technologies. The basic principle of telematics car insurance is to monitor the driver directly and reflect the data to the insurance company. To this end the car is generally fitted with a box that measures and relays various data such as brake force, time, distance of the journey, etc. The company calculates the accident risk for the individual driver and adapt the premium accordingly. The system can also be complemented by GPS functionalities, rapid location of an accident site, and other attractive features.

Despite the brilliant technology involved, PAYD is far from having the success one might imagine, for it is vital to apply it in the framework of the right business model. In 2004 Norwich Union and a number of other insurance companies terminated their PAYD programme on account of insufficient custom. The problem with Norwich Union's PAYD offer was its complexity. The insurance company was acting like a watchdog, aware of when, where and how the insured person was driving. On top of that, the revenue model was geared toward punishing daredevil customers who had to pay a premium. In a word, the business model was not thought through, it was difficult to attract new customers, and as such the scheme was a non-starter.

Subsequent service providers in the intelligent car insurance market learnt from the pioneers' mistakes and drastically reduced the complexity of their policies, starting with the introduction by a number of companies such as UNIQA in Austria or Allianz in Switzerland, of a helpline and three simple functionalities: the emergency button, crash sensor and CarFinder. The technology is based on a simple ecall, a sensor and GPS. In the event of an emergency, accident or theft. The system provides very rapid aid at the site of the event. This business model was a good deal more intelligent than its predecessors: the offer was easy to understand, policy holders obtained a marked reduction of their insurance premiums, the processes were transparent, the insurance companies guaranteed that the vehicles would not be monitored in normal conditions, that is to say in the absence of an emergency call, and the revenue model was so designed that the box was fitted into the vehicle free of charge and the service was paid for by the month.

On this basis various companies developed the Crash Recorder, which displayed even less complexity, and brought it to the market. If the insured is involved in an accident, the Crash Recorder makes a 30-second record of lateral and longitudinal accelerations and the date and time of the occurrence. These data permit the accident scenario to be rapidly reconstructed and provide objective evidence in respect of culpability. The business model is similar to that of the helpline box: it helps to ensure greater legal certainty, enables lower premiums for other insurance policies, does not store data permanently, and is provided and installed free of charge as part of the insurance deal.

Shortly after, Progressive brought the Snapshot device on to the market, embedded in a well-designed business model. The customer has the option of installing the device with plug-and-play to monitor his or her driving habits, but the device does not record the location or driving speed and does not resort to GPS technology. Parameters recorded are the time of day, how many miles

are driven and how often the driver brakes hard. This information has a direct influence on the cost of the premium, which is correspondingly reduced. Since its introduction some one million customers have chosen to use Snapshot in the USA.

The UK insurance company insurethebox is offering at this time the most innovative and promising business model on the market. insurethebox combined PAYD technology with existing patterns such as Customer Loyalty, Add-on, Affiliation and Experience Selling (see the second part of the book) to achieve the fastest growth rate in the history of PAYD and was the winner of the British Insurance Award in 2013. This is how it works:

- Driving habits are recorded by the built-in 'in-tele-box' and fed into the driver's personalised online portal. Installation of the box is free, and so far the procedure is standard.
- From here on, insurethebox offers a number of interesting features. First, the driver selects how many policy miles he or she expects to drive in a year, and this is used to calculate the flat rate premium. There is no financial exchange for unused miles, which are thus lost.
- The miles are coupled together with an incentive premium model, whereby positive driving behaviour is rewarded with up to an additional 100 bonus miles each month which can be used for further journeys and may bring the price of motor cover down at renewal the following year. The customer does not receive a direct financial gain, as with Snapshot for example, but the sense of an advantage similar to that in the premium programme Miles & More.
- Any additional miles purchased are more expensive, in line with the Add-on principle.
- In addition, insurethebox created a partner programme whereby the insured collects further miles when buying items offered on the platform: the Affiliation pattern, with the partner paying to be integrated on the platform.
- Lastly, the product has a strong emotional element: links with Facebook etc. ensure that collecting premium miles in the United Kingdom is a social experience.

The success achieved by what is now the country's largest insurer speaks for itself: 6,000 new subscribers a month, 100,000 insured within three years, a reduction of the likelihood of an accident by 40 per cent. The branch offers great promise: telematics-based insurance plans are forecast to produce a turnover of some 50 billion euros in Europe in 2020 and have 44 million people insured by 2017.

The PAYD story goes to show that it is not always the technology that brings unprecedented success, but rather its innovative application in the form of an innovative business model.

Challenge No. 3: The lack of systematic tools

The third major challenge we have identified is the absence of systematic tools that can facilitate creativity and divergent thinking, which is crucial for developing innovative business models. The American scientist George Land researched the relations between age and divergent thinking. For this he studied 1,600 children of various ages on the basis of a creativity test. The test was developed by NASA with a view to recruiting innovative engineers and scientists. The questions were adapted to the age of the children. Children that scored ten out of ten were assigned to the creative genius category.

The results are shocking:

Percentage tested genius

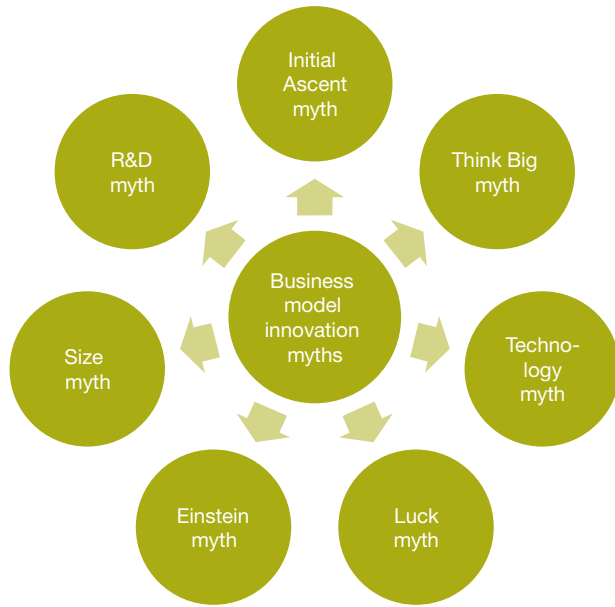
- in the 3–5-year bracket: 98 per cent;
- in the 8–10-year bracket: 32 per cent;
- in the 13–15-year bracket: 10 per cent;
- in adults: 2 per cent.

‘What we have concluded,’ wrote Land (1993) ‘is that non-creative behaviour is learnt’. In other words, adults are less creative and need support in creativity techniques. Interestingly, we see many tools but none in the area of business models.

Overall, business model innovation is still a mythical task that scares a lot of managers. The following myths about business model innovation continue to be quite pervasive among managers (see also Figure 1.4):

- **The Initial Ascent myth:** ‘Commercial success comes with ideas no one has ever had before’. The fact is that new business models frequently borrow from other industries. For example, Charles Merrill purposely applied concepts used in supermarkets to the banking industry when he founded Merrill Lynch. In so doing, he created the financial Supermarket business model.
- **The ‘Think Big’ myth:** ‘Business model innovations are always radical and new to the world’. Most people associate new business models with the giant leaps taken by Internet companies. The fact is that business model innovation, in the same way as product innovation, can be incremental. For instance, Netflix’s business model innovation of mailing DVDs to customers was undoubtedly incremental and yet brought great success to the company. The Internet opened up new avenues for Netflix that allowed the company to steadily evolve into an online streaming service provider.
- **The Technology myth:** ‘Every business model innovation is based on a fascinating new technology that inspires new products’. The fact is that while new technologies can indeed drive new business models, they are often generic in nature. Where creativity comes in is in applying

Figure 1.4 Business model innovation myths: Overcome them to successfully innovate your business model



them to revolutionise a business. It is the business application and the specific use of the technology which makes the difference. Technology for technology's sake is the number one flop factor in innovation projects. The truly revolutionary act is that of uncovering the economic potential of a new technology.

- **The Luck myth:** 'Business model innovation is just a matter of luck and cannot be undertaken systematically'. But the fact is that you will have to put in as much hard work into creating new business models as into new products, technologies, after-sales processes or logistics concepts. Business model innovation requires persistence and drive. You must plan and prepare for it as you would for an expedition into an unknown land. Being systematic about it is no guarantee, but it will increase the probability of success dramatically.
- **The Einstein myth:** 'Only creative geniuses can come up with truly innovative ideas'. Today, success depends less and less on individual masterminds. Interdisciplinary teams that reach across functional silos and companies have replaced the ivory-tower inventors such as Edison and Wright of the past. Innovation is no longer a matter of individual performance, it's a team sport. This is especially true for business

model innovation, where a lack of cooperation means that a single person's good idea will remain just that, an idea. Contrary to popular belief, Steve Jobs didn't invent the iPod all by himself. Tony Fadell, an external IT freelancer, developed the idea of the iPod and iTunes and approached Apple with it. Afterwards, a team of 35 people created the first prototype under Apple's guidance. The team was made up of employees of Apple, design firm IDEO, Connectix, General Magic, WebTV, and Philips. The consortia of Wolfson, Toshiba, and Texas Instruments took charge of the technical design of the portal player and earned \$15 on every iPod sold. The iPod's success story was written by a diverse team of people whose competences were instrumental in bringing the project together.

Management gurus may well write myths about individual geniuses and eureka moments because this lets us celebrate heroes. The truth is that these people hardly ever succeed without the crucial input of others.

- **The Size myth:** 'Big breakthrough requires big resources'. Fact: small start-ups are responsible for the most important business model revolutions. Just look at the most clicked-on websites in the world and the companies behind them: the top three sites are owned by firms that were all outsiders to the industry. Google was founded by Larry Page and Sergey Brin in 1998, Facebook by Mark Zuckerberg in 2004 and YouTube by Chad Hurley, Steve Chen and Jawed Karim in 2005. The highest ranked 'old economy' company is BBC Online, coming in at number 40 (!) of the most clicked-on websites. All other companies began as start-ups. Implementing and diffusing these business models required huge investments, but most successful Internet companies started off small and smart. Joachim Schoss, successful serial entrepreneur and founder of AutoScout24, once told us: 'Established corporations can't do it, precisely because they have so many resources'. The right idea and a healthy dose of courage are much more important than resources.
- **The R&D myth:** 'R&D departments are the source of important innovations'. The fact is that business model innovation is profoundly interdisciplinary in nature. Technology can certainly play a crucial role, but only in connection with the business model. The impetus for change can come from anywhere within an organisation, as is demonstrated by the four dimensions of a business model (who-what-how-why). Innovation doesn't come from just the R&D department, which traditionally has taken charge of new product development. Other departments including strategy, marketing, after-sales, IT, production, logistics and purchasing are becoming increasingly important. 'Business model innovation is a part of every single person's job description – be he a shareholder or a janitor,' proclaims Festo Didactic's managing director Theodor Niehaus.

Our aim is to debunk these myths. Innovation is the principal task of any manager. Merely supervising daily business would not warrant the high salaries that managers receive. Inspiring and driving innovation on a business level separates administrators from inspiring leaders. These leaders need an entrepreneurial mindset and the capabilities to innovate.

2

The Business Model Navigator

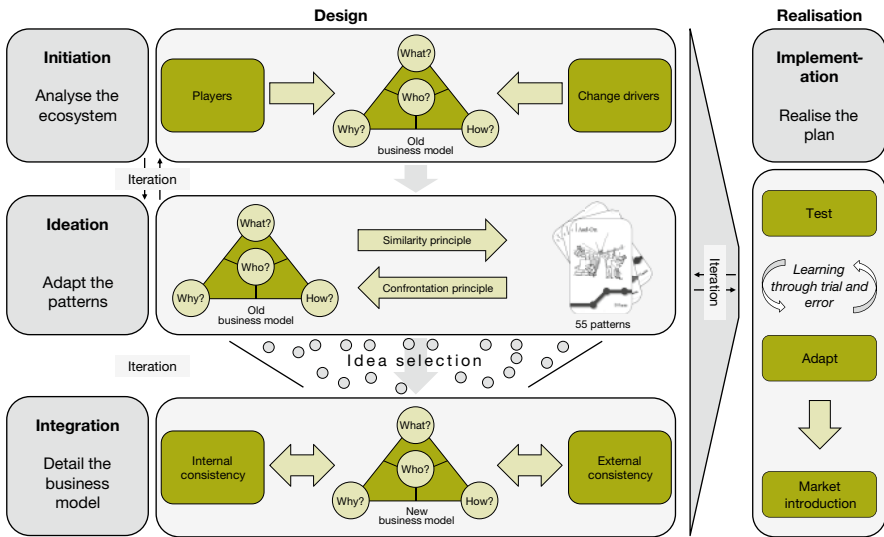
The principles of the Business Model Navigator are similar to the established design rules of the product development tool TRIZ, which is used in mechanical engineering. TRIZ is a Russian acronym for the ‘theory of inventive problem solving’. The key feature of TRIZ-style problem solving is the identification, amplification and elimination of technical and physical contradictions in technical systems. An analysis of some 40,000 patents showed that the technical problems found in various industries could be solved with the use of a limited number of elementary principles. This research resulted in the creation of one of the most well-known and intuitive TRIZ tools for technical problem solving: the 40 inventive principles. Examples of these principles are ‘divide or segment’, ‘remove damaged parts’, ‘use asymmetry’, ‘couple similar parts’, ‘employ countermeasures’ or boosts’. Software-based TRIZ tools have become a central element of modern engineering.

The goal of our own research was none other than to create a similar engineering methodology for business model innovation. The 40,000 patents examined by Altshuller make up but a small fraction of all the patents in the world and yet TRIZ is still one of the leading design tools in mechanical engineering. The business models we have analysed comprise the vast majority of all those that have been successfully developed over the past 50 years, plus a number of pioneering ones from the past 150 years. In addition to analysing successful business models, we also used our experience to examine why a company’s business model failed to work.

The Business Model Navigator (Figure 2.1) is an action-oriented methodology that permits any company to break with its dominant industry logic and innovate its business model. It has been shown to work in all manner of organisations, industries and companies. It builds on the central idea that

successful business models can be constructed through creative imitation and recombination.

Figure 2.1 The Business Model Navigator



Creative imitation and the importance of recombination

Innovations are often variations on something that has existed elsewhere – in another industry, market or context. There is no need to reinvent the wheel with every project and every innovation initiative. Reinventing the wheel often leads to dead ends due to neglecting the learnings from others. Instead, you can be inspired by what already exists. Our research has shown that about 90 per cent of all successful business model innovations actually recombine existing business model elements. The innovation lies in the understanding, translation, recombination and transfer of the successful patterns to one’s own industry. This is not as easy as a simple copycat, but it enables a company to learn from others and thereby reinvent its own industry.

Ninety per cent of all new business models aren’t actually new. They are based on 55 existing patterns. Creatively imitating business models from other industries can empower your business to become an innovation leader in your industry. Just remember: learning and understanding is more important than pure copying.

This realisation came as a huge surprise to us as researchers because we had thought of business model innovation as being something quite radical. But radicalness turns out to be relative as business model innovations are often radical for the respective industry and not for the entire business world. It is about understanding the elements of business models outside one's industry and their interrelationships and applying them to one's own context – in a word, creative imitation.

Our analysis has revealed 55 different patterns that are at the core of business models. A business model is a specific configuration of the four main business model dimensions who-what-how-why that has proven to be successful. Part Two of this book contains a detailed profile of each of the 55 patterns, showing them as train lines and listing chronologically the companies that use them in their business models. Some innovators make use of several patterns simultaneously, and these are represented as transfer stations in the map.

The Business Model Navigator map illustrates how business models are connected with each other and will help you to figure out where your business fits in. The coherence of the patterns is very apparent. Innovations make much smaller leaps than expected when they move from one industry to another.

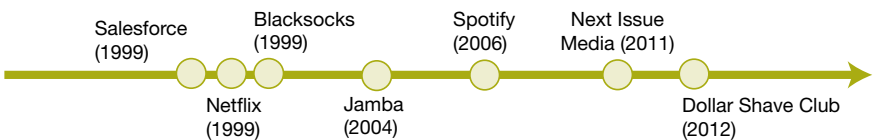
Let us use the examples of the Subscription and Razor and Blade pattern to demonstrate the importance of creative imitation and of recombining elements. Other patterns and more details will be found in Part Two.

Subscription

A Subscription (Figure 2.2) allows customers to pay a monthly or yearly fee (why?) to gain access to a product or service (what?). While this pattern has existed for a long time, it can still lead to radical innovation when introduced into new contexts today. For instance, the international cloud computing

Figure 2.2 Subscription pattern business model

The customer pays a regular fee, typically on a monthly or an annual basis, in order to gain access to a product or service.



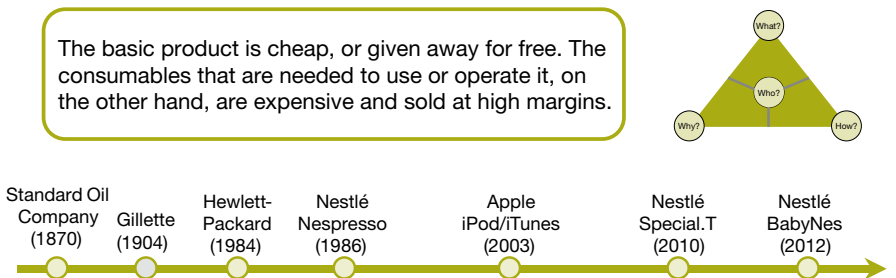
company Salesforce revolutionised its industry's business model by becoming the first software business to provide a Subscription-based service instead of selling licences for a lump sum. The introduction of software subscriptions helped Salesforce to become one of the ten fastest growing businesses in the world.

Other business model innovations based on the Subscription pattern are Jamba, which sells mobile phone ringtone subscriptions in Europe, and Spotify, which offers free streaming of millions of songs and allows customers to purchase a subscription for access to the premium version of its service. Next Issue Media has introduced digital subscriptions to a wide selection of magazines in the United States. A monthly payment of \$15 lets readers access over 70 magazines

Razor and Blade

The main concept behind the Razor and Blade pattern (Figure 2.3, see also second part of the book, page 261) is to offer a base product to customers cheaply or even for free, and then to sell disposables that are required to use the base product at very high margins (what? why?). In order to ensure that customers return to make purchases at the original company, exit barriers such as patents or strong branding need to be created (how?). John D. Rockefeller's Standard Oil Company is considered a Razor and Blade pioneer. At the end of the nineteenth century the business sold cheap petroleum lamps and expensive oil produced at the company's own refineries to go with the lamps. The pattern was used in the razor blade industry – whence it got its present name – a few years later. Gillette gave away free razor holders to customers and sold the matching blades at high prices.

Figure 2.3 Razor and Blade business model



Hewlett-Packard discovered the potential of this pattern for the printing industry: cheap printers and expensive cartridges. Nestlé uses the Razor and Blade model for Nespresso: the espresso machines are a bargain at less than US \$150 – but the matching coffee capsules cost five times as much as regular ground coffee.

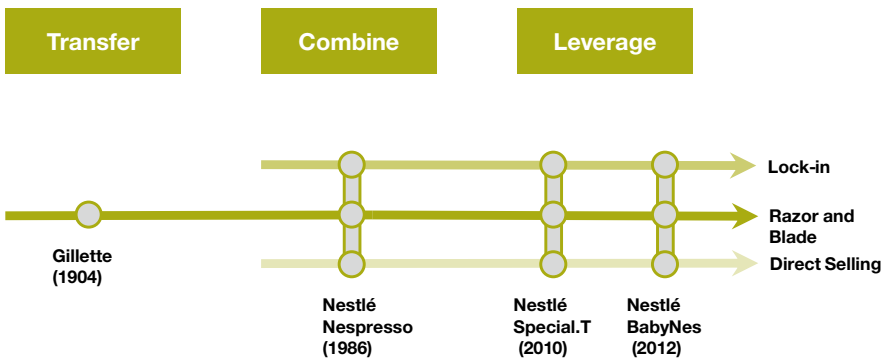
Apple, one of the biggest innovators today, also uses the Razor and Blade pattern in its business model, although it has reversed the pattern. The company sells songs, software, and e-books cheaply, but the hardware that is needed for playback such as the iPod, iPhone, or iPad are comparatively expensive. Apple's earnings from hardware sales totalled \$30 billion in 2010, 60 times more than from song, software, and e-book sales (just half a billion dollars).

Strategies for new business ideas

Three basic strategies have been used in the past to generate new business ideas from the pool of 55 business models (Figure 2.4):

- 1 Transfer:** An existing business model is ported to a new industry (e.g. Razor and Blade to the coffee industry). Most companies use this strategy. Major advantages: other companies serve as blueprints and their mistakes can be avoided, enabling you to become an innovation leader in your industry. Major challenge: leaving enough room for experimentation and adaptation.
- 2 Combine:** Transfer and combine two business models. Especially innovative companies can even use three business models simultaneously (for example, Nestlé uses the Razor and Blade, Lock-in and Direct Selling patterns for Nespresso). Major advantage: synergies decrease the likelihood that competitors will imitate your business model. Major challenge: planning and execution become highly complex.
- 3 Leverage:** A company uses a successful business model for another product range (e.g. from Nestlé Nespresso to Nestlé Special.T and Nestlé BabyNes). Only the most innovative businesses can pull this off. Major advantages: ability to capitalise on experiences and

Figure 2.4 Three strategies for new business ideas



Source: Gassmann, Csik and Frankenberger (2012) 'Aus alt mach neu', *Harvard Business Manager*, 2012

synergies; manageable risk. Major challenge: balancing change and stability.

These strategies can be used one at a time or combined. What can companies learn from these insights? A company has to open itself up to the outside world and be ready to learn from other industries. The past success of industry revolutions might help them to find their own future potential. Use the 55 business models as a source of inspiration for new ideas. Why shouldn't patterns that have been adapted by other companies and have led to innovations work for your company as well? Certainly, an identical copy of a business model will not do the trick, just as the benchmarking methods that were popular in the 1990s could not be indiscriminately applied across the board. Copycats will not be successful, only creative imitators with the ability to learn and transfer these learnings will truly be able to revolutionise their own industry. This is about real learning from others. The differences between companies and industries have to be identified and understood and cherry-picked features adopted. Transferring business models may seem to be a simple matter of imitation, but in actual fact it is a challenging and creative task. A cutout of our business model innovation tube map in Figure 2.5 depicts some popular patterns as lines, along with the companies which applied them in their new business models.

Our approach brings many external ideas into the mix, and these are necessary to effect changes in the dominant industry logic. At the same time we are careful to provide sufficient flexibility to permit adaptation and avoid the 'not invented here' syndrome. The central ideation tool of our Business Model Navigator consists of recombining the 55 patterns to develop business model innovation. The Navigator differentiates between two phases: design and execution. First the analytical and creative part has to be done, which is an iterative design cycle. After having identified the potential and after a first draft of a concept has been developed, the implementation starts: set-up of an organisation, definition of the first pilot, identifying lead users and lead markets. The whole Navigator consists of four steps:

- 1 Initiation
- 2 Ideation
- 3 Integration
- 4 Implementation.

Initiation: Analysing your ecosystem

Before you develop a new business model, you should define a common starting point and the direction in which you want to head. A business model is not an isolated construct, but a complex network of relationships that is perpetually interdependent with the constantly changing ecosystem of your business. Thus to meet the challenge of business model innovation you need

to have an in depth understanding not only of your own business and your existing business model but also the roles played by stakeholders and diverse influencing factors (Figure 2.6). A good exercise to get started with business model thinking is to make a detailed description of your current business model, including its interactions with stakeholders and influencing factors. In so doing, it is important that you go from a static to a dynamic perspective.

Our experience at workshops has taught us that it is much harder to grasp one's own business model than it appears. Even people with more than 20 years of industry experience often struggle to describe their business model and the underlying industry logic. You need to allow sufficient time to complete this step. In large companies, this inevitably involves consulting people in different departments and with different functions so as to obtain a comprehensive picture of the business model as it stands. With this you will also be introducing the concept of business models to the people involved and helping to create a common understanding of the situation. Most employees tend to be familiar only with their own particular area of the business, marketing, finance or whatever. But successful business model innovation will often affect several areas of the company, so that participants need to have a basic understanding of fields outside their particular remit. Ideally, people from outside your branch of industry will be included since long-standing employees often do not see the forest for the trees.

Keep a certain distance when describing your own business model. Don't get lost in the details. Your goal should be to understand the overall business model and industry logic. At the same time the description must be specific enough to capture any critical issues. As Herbert Simon, who received a Nobel Prize for his work on bounded rationality, pointedly remarked: 'Problem solving involves not only the search for alternatives but the search for the problems themselves'.

Business models are often analysed in too much detail, caught up in the company's daily struggles. Thus it's a good idea to visualise examining the problem not from ground level, but from 30,000 feet up: this is sure to permit a better understanding of the dominant logic of the industry as a whole.

Defining your business model can already be an important first step towards change. Such analysis frequently sheds light on weaknesses and inconsistencies that were not obvious before. At the same time examination of the status quo creates energy for change, an important aspect of innovation. Coming to realise that one's business model is only marginally different from the dominant industry logic awakens a willingness and desire to change. Most executives understand that companies such as Apple and Google have succeeded not because they have played by the rules, but because they make their own rules and have broken with the dominant industry logic.

Figure 2.5 Metro lines

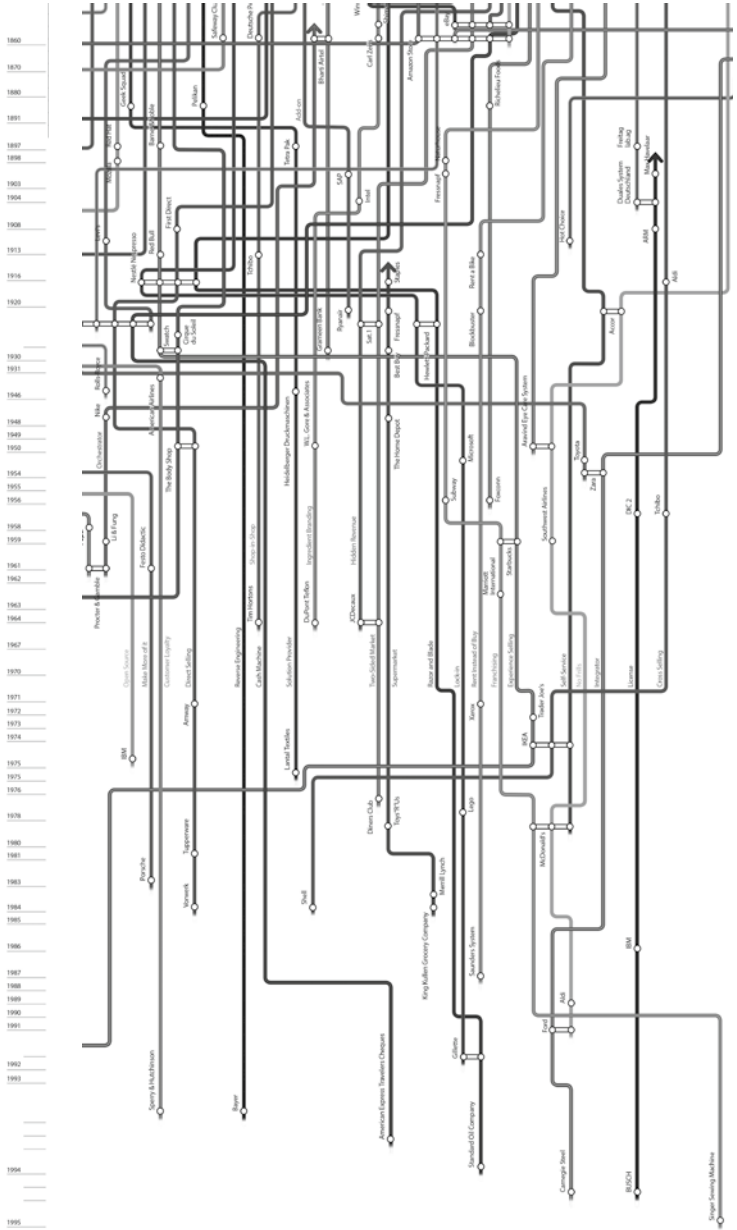
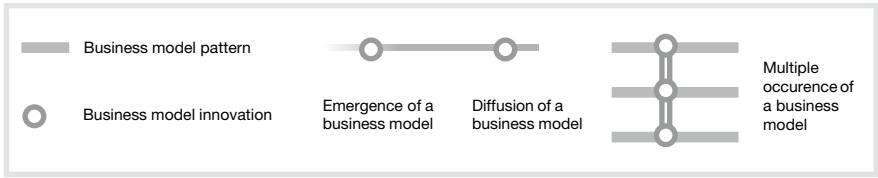
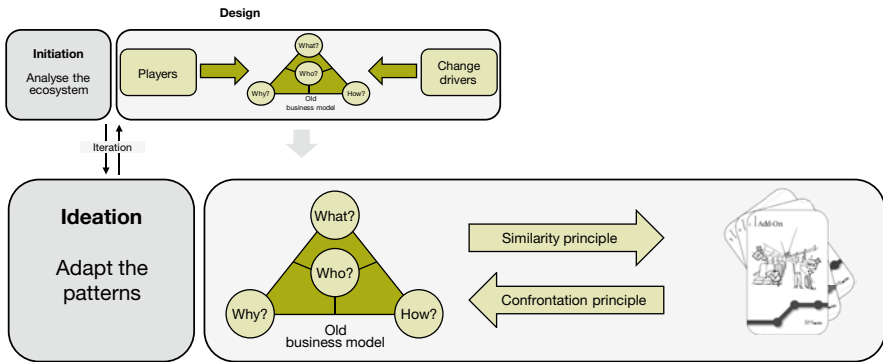


Figure 2.6 Initiation: Analyse your ecosystem



We recommend describing your business model on the basis of the four core dimensions who-what-how-why. The following questions will help you with this task:

- **Who?** (customers)
 - What customers and customer segments do we mainly serve?
 - What kinds of relationships do our customers expect and how do we maintain them?
 - Who are our most important customers?
 - Who are the other important stakeholders that need to be considered?
 - What distribution channels do we use to serve our customers?
 - Who influences our customers (opinion leaders, stakeholders, users)?
 - Do different departments address the same customer segments differently?
 - What people are behind our customers? Will the same people be here for the next ten years? (The people behind customers are often neglected, especially in B2B dealings.)
- **What?** (value proposition)
 - What customer problems do we solve and what needs do we meet?
 - What are the products and services we put in place to accomplish this?
 - What is the perceived customer value? Usually this is not the same thing as a product or service’s technical specifications.
 - What value or benefit do we create for customers? How do we communicate it?

- How do our offerings differ from those of our competitors? What alternatives do customers have?
- Does our current business model meet our customers' needs fully?
- **How?** (value chain)
 - What key resources are behind our offerings and value proposition (e.g. physical, labour, financial resources, intellectual property)?
 - What competencies and key activities do we need?
 - Does our value chain make full use of our core competencies?
 - Who are our most important partners? What is their relation to our business and what do they bring us?
 - Who are our most important suppliers and partners and what do they contribute?
- **Why?** (profit mechanism)
 - Why will the customer pay for our product or service?
 - What are our main sources of income?
 - How is the income generated? What are customers willing to pay for?
 - What are our main costs and the most significant cost drivers?
 - What are the main financial risks in our current revenue model?

Understanding the actors

Successful business model innovation requires you to understand all the actors in your ecosystem. In fact, most of the significant innovations of the past few years (iPod, iTunes, etc.) were not developed wholly internally, but were the result of close collaboration with external actors.

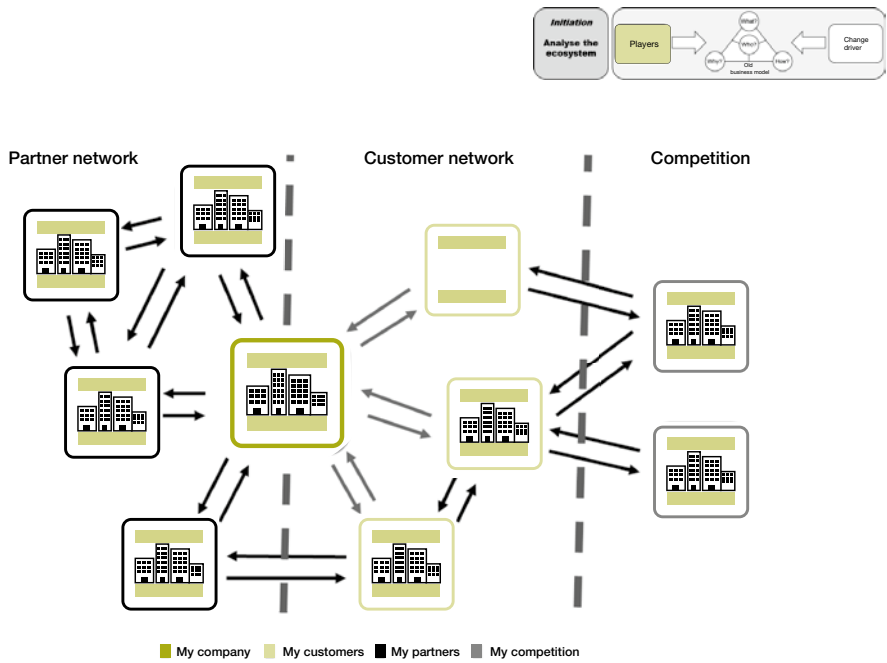
Our research partner SAP, a Germany-based multinational software corporation and world market leader in enterprise software, has represented the network of connections in which a business model operates very well. They use this network mindset as a starting point for one's own business model analysis and development. Figure 2.7 illustrates the network of all the relevant actors for a business. In addition to your own company, it will consist of customers, partners and competitors.

Our customers

The basis for any analysis of such an ecosystem should be a thorough understanding of your customers' needs, as they are among the most important sources of business model innovation ideas. This should not be limited to the customers you are currently serving, as you must also consider potential and future customers.

For example, Starbucks was quick to recognise that customers don't just want to drink coffee; they also want to find a welcoming and cosy place to do

Figure 2.7 Network of relevant actors for a business model according to SAP



so. The result of this realisation is over 20,000 highly successful coffeehouses. The Spanish fashion company Zara trimmed its business model to be able to react to unpredictable customer needs at a moment's notice. The firm is fully integrated: design, production and sales are all handled by Zara, which can bring a new collection to market within as little as weeks. This approach has revolutionised the fashion industry, where it would normally take up to nine months to accomplish the same task.

Recently, companies have been going a step further and asking their customers to give direct feedback about their products and services or even to become personally involved in product development. European market leader in industrial photofinishing CEWE created a business model innovation based on customer suggestions in the company's online chat forum. This led to their establishing viaprinto.de, which specialises in printing documents, flyers, etc., online. Many customers ordering prints from CEWE had expressed a desire for professional high-quality prints of documents such as Microsoft Office files and PDFs. viaprinto.de was established in 2010 and gained customer groups in various industries within a short time. The business model has received several innovation prizes.

At T-shirt manufacturer Spreadshirt, customers can design and buy their own shirts. As the company's founder Lukasz Gadowski put it, 'We empower

customers to do their own thing'². Spreadshirt follows this 'to the T' by making customer needs the centrepiece of its business model.

A company can run the risk of failing quite spectacularly if customers are left on the sidelines during new product and business model innovation:

- Chrysler recognised the trend towards an increasingly feminised society in the early 1950s, a trend that continues on today. Realising that women would become an important customer group, the pioneering company developed a rose-coloured Dodge called 'La Femme' specifically for women. Chrysler's creation flopped terribly at the time, but has since become somewhat of a cult classic.
- CargoLifter decided to use an old technology in a new way. This company, founded in 1996, used Zeppelins for extremely heavy and large loads that could not be transported via road or rail. Market research indicated that a demand existed, and at first many parties seemed interested. Heavy machine manufacturers such as ABB, General Electric, and Siemens would be able to deliver their machines fully assembled and tested. Industrially prefabricated elements could be transported directly to bridge construction sites and installed there. But production managers, developers and logistics specialists were the wrong people to ask. When the time came to sign contracts, lawyers pointed out the significant risks involved in transporting heavy freight by air. What would happen if a giant gas turbine crashed into a family home? In addition to insufficient consideration of such risks, CargoLifter was unable to obtain financing for its project, as costs were climbing steadily as the technical details were being worked out. CargoLifter had to file for bankruptcy in 2002 because the CL160 Zeppelin could not be adequately financed.
- Even large companies such as Google can stumble if they don't understand their customers well enough. Most readers will not remember Google Video, the company's attempt to get a share of YouTube's business. Google's offering was too confusing for YouTube's spoilt customers. Ultimately, Google was left with no other choice but to close its own video service and to purchase YouTube itself for a lot of money.

Our partners

In addition to customers, other important actors such as suppliers, distributors, solution providers, or those participating indirectly such as researchers, consultants or associations, contribute in some significant way to creating value for customers. Such partners can inspire new ideas in much the same way as customers can, and may also be frequently instrumental in actually realising new concepts.

² Seidler (2006).

Bühler is a global leader in process engineering and certainly one of Europe's hidden champions, in particular in respect of production technologies and services for the development of products in the food industry and advanced materials. This company collaborated closely with a food supplement manufacturer to develop a type of fortified rice called 'NutriRice'. In order to enable potential customers to test this new product, Bühler founded a joint venture with DSM to produce the recomposed fortified rice and offer it to rice mills who can enter the market without having to invest in the technology beforehand. If the market responds favourably to the new type of rice, then the mill can choose between continuing to purchase rice from the joint venture or directly investing in its own production facility. Bühler generates revenues in either case: from selling the fortified rice or from selling its technology.

Companies are increasingly recognising the value of external input and are moving beyond serendipitous innovation with partners towards creating structured processes that systematically integrate partners in their innovation activities. Some use Crowdsourcing (see second part of the book, page 121) to outsource specific tasks to an outside group of people. Consumer goods manufacturer Procter & Gamble has become an expert at Crowdsourcing ideas for new products and business models, and aims to collaborate with the best innovators in the world through its 'Connect + Develop' programme. Instead of traditional and internal research and development, the company focuses on 'outside-insights' for developing and commercialising products. At the present time more than half of all Procter & Gamble's new product initiatives stem from collaboration with external partners. Procter & Gamble's partners are as diverse as the ideas they come up with: small firms, multinationals, researchers, individual inventors, and sometimes even competitors elsewhere in the world. The company moved from being an internal knowledge creator to a fast moving, commercial oriented knowledge broker.

Our competitors

You can learn from your competitors too. In 2001 *Metro* became the first fully ad-funded newspaper in Spain. Various existing newspaper companies imitated the business model, among them was *Recoletos* with its free newspaper *Qué!* The increasingly tough competition obliged the original innovator *Metro Newspaper Spain*, a subsidiary of internationally successful *Metro* newspapers, to stop publishing its free newspaper in 2009. Meanwhile, *Qué!* was printing almost a million papers a day and doing very well. This example clearly shows that you can still get a slice of the pie if you react quickly enough, even if the innovative idea was originally conceived by a competitor. Daimler's *Car2go* was the first company to enter the by-the-minute rental car business. A number of competitors such as Deutsche Bahn's *Flinkster*, BMW's *DriveNow*, and VW's *Quicar* reacted quickly and are gaining a share of the growing market. In terms of the number of customers reached, *Flinkster* became the market share leader in 2012, with over 190,000 customers in Germany (49 per cent). *Car2go* comes in second with 18 per cent, followed by *DriveNow* (11 per cent) and *Quicar* (1 per cent).

Analysing influencing factors

In addition to thoroughly understanding the major actors, you must be aware of the most important drivers of change and how they transform and impact your business model. The two major influencing factors that you need to consider in the ecosystem analysis are (1) technologies and (2) mega trends.

(1) Technologies

A great number of successful business model innovations have been triggered or enabled by technological advances. On the one hand, the early adoption of disruptive technologies or applying bottleneck technologies can be a major success factor in developing business models. On the other, technological advances can also constitute an important risk factor. Many once successful business models have failed because of an unawareness of the potential of new or substitution technologies. The above-mentioned examples such as Kodak illustrate that extremely eloquently. But the good news is that by carefully observing your environment such threats can be avoided and made into unique business opportunities.

In the first place it is important to keep the future in mind. Technologies develop very rapidly and, contrary to popular belief, this development is not linear, but exponential. Today's technology is vastly different from what it was just a few short years ago – and will continue to develop at an accelerated pace as time goes on. It is therefore essential to keep one's ear to the ground for technology-related changes that can suggest potential business model innovations, or you risk cannibalisation of your current business model. Together with the internal quest in R&D for new technologies, there is no substitute for constantly identifying and evaluating the current and future significance of generic technology trends. These may be technical advances by your partners and competitors (a business model may be cannibalised as a result of technological inventions by suppliers, for example) or technological trends stemming from your customer base (for example, B2C business models had or have to react to the ubiquitous use of smartphones).

Let's turn back the clock a little: in 2002 Research in Motion (RIM) introduced the first widely adopted smartphone, the BlackBerry. Back then the smartphone was very expensive to buy and was used almost exclusively for business. As other producers entered the market, smartphones were bought by more and more customers. Already by 2009 the sales of smartphones and tablet PCs had outstripped traditional PC sales worldwide, only seven years after the technology had been first introduced. Similarly, Skype's success changed the telecommunications landscape profoundly and contributed to the proliferation of VoIP technology.

But it must be added that not all technologies automatically create value for the company that develops them. To create and capture value, the right innovative business model is needed. Harvard's Clayton Christensen and colleagues (2009) had this to say on the subject: 'The history of innovation is littered with companies that had a disruptive technology within their grasp but

failed to commercialise it successfully because they did not couple it with a disruptive business model'. Germany's Fraunhofer Institute was instrumental in developing the MP3 digital music format in 1982. Fraunhofer generates tens of millions of dollars in revenues from this technology annually. In 2003 Apple brought the iPod and iTunes on to the market, both of which use the MP3 technology. Just three years after their introduction Apple was already earning tens of billions of dollars in income per year – a bitter pill to swallow for Fraunhofer, who actually invented the technology.

Iridium also failed to couple its fantastic satellite telephony technology with the right business model. In 1998 the company launched 66 satellites into geostationary orbit to the tune of US \$5 billion. The telephone was expensive and bulky, and calls at US \$8 per minute were decidedly too expensive for the general public. Moreover, the phones worked everywhere except in buildings. Naturally, this made the product basically useless to managers – their intended target. Instead of the planned two million customers, only 55,000 people bought the product, and Iridium filed for bankruptcy in 2000.

Xerox had to fail many times before it managed to integrate its innovative technology into the appropriate business model. In 1959 the company developed a new photocopying technology that enabled much faster printing. The machines were too expensive and few were sold until Xerox found a way to circumvent this problem: the creation of a new business model whereby customers leased the machines at reasonable rates and paid an additional fee per page copied. This new business model was so successful that Xerox's revenues increased from US \$30 million in 1959 to US \$2.5 billion in 1972.

Seven IT-enabled business trends to watch

The Internet, the cloud and other recent inventions spawned by the IT industry are constantly inspiring new business models. Here are a number of technology trends that have triggered new business models in Web 2.0 (trend 1 and 2) and will make for many innovative and service-oriented business models in Web 3.0 in the future (trend 3 to 7). These trends were identified in close cooperation with Elgar Fleisch and his team at our institute within a collaborative research project on IT-driven business models.

(1) Social media as a key feature to engage with customers

The speed of propagation of the social media has been more rapid than the propagation of the Internet itself. Usage has evolved exponentially: today, 60 per cent of customers born after 1985 use their phones mainly for social networking and playing with apps instead of telephoning or emailing. Social networks and blogs that did not even exist a few years ago are now an integral part of our online experience. Facebook has over one billion users; more than ten per cent of the world population. LinkedIn, which is geared towards

professional networking, had over 277 million users worldwide in 2014. In common with Coca-Cola, which had more than 78 million fans on Facebook and was thus the 'most liked' in 2013, almost all companies have by now identified the potential use of the omnipresent Internet platforms. It has become common practice nowadays to interact with customers through the social media and chat forums to acquire better customer insights.

(2) Sharing community and networks

Technology influences society and, with it, consumer preferences. The Internet has facilitated the creation of online user networks, the sale of used items online (eBay), the provision of private loans (Zopa), and the renting out of living space for vacations (Airbnb), to name just a few examples. More than one in seven married couples in the United States met online. Banking on the continuation of this trend in Europe, the founders of PARSHIP created an online dating agency in 2000 that uses a profile-matching algorithm to bring together like-minded couples. PARSHIP now has a greater than 70 per cent market share in Europe. External networking effects – the larger number of members increases the network's value, which in turn makes it more attractive to new members – are responsible for this development, as Abba so memorably sang to us with their *The winner takes it all*. You will be hard-pressed to find a better barrier to entry than your own early presence in this context.

After Web 2.0, Web 3.0 will have an even greater impact on how firms do business. There are already more connected devices on the planet today than people living on it, and Cisco forecasts 50 billion connected devices for 2020³. The Internet of Things primarily fosters the connection of the physical with the digital world and allows businesses to create new digital value-adding services for their customers.

(3) Physical Freemium and digital Add-on

Customers have been spoiled by the Internet which offers free and easy services: information from Wikipedia or Internet newspaper sites, free films and software, the list is endless. As a consequence customers increasingly expect the corresponding physical services to be free as well. Apart from free shipping under certain conditions, Amazon, Zalando or Best Buy even offer their customers cost-free reshipment.

Furthermore, the IT industry has gone along with the consumers' demand for the flexible usage of products along their life cycle. The functions of our

³ Cisco IBSG (2011).

smartphones can be personalised through apps and we have the option to upgrade the server performance or data-storing capacity of our tablets through cloud computing. Companies whose core value proposition relies on a physical product need to look carefully for ways to apply this concept to their value proposition and to develop it through digital add-ons.

A prominent example of such add-ons is the offering of apps that extend the spectrum of functions of a physical product. The total number of downloaded apps rose from four billion downloads in 2009 to seventy billion in 2013. However, despite this trend, the profession of app development has not turned out to be a goldmine for everyone so far. For example in Great Britain, 35 per cent of all app developers earn less than 1,000 dollars a month. In Germany, the number has attained 19 per cent. This all goes to show that the growth of the app industry is not necessarily the result of financial success, proving the point that a good product or a novel technological trend alone is not enough to build a sustainable business, but that a viable business model is essential.

(4) Digitally reloaded products

An attractive way to push products of otherwise little interest into the digital age is to equip them with small online sensors and thus make them smarter. This enables the primary value proposition to be offered with numerous service functions, a trend that can change the way companies do business.

The French app development firm Withings, for instance, successfully developed a baby monitor, a blood pressure meter and an activity tracker. By combining hardware and mobile software applications, it was able to build a viable business model. Besides the monitoring hardware, the software apps offer several personal analytics tools and functions for free. These reverse Razor and Blade, Add-on services really add value to the customer's life and have made the Withings business thrive and highly coveted: in 2013, the company received a 30-million-dollar venture capital funding. Another company, Limmex accomplished an award-winning innovation in a similar way, equipping a simple watch with the possibility of emergency calls – a valuable asset not only for older people but also for extreme athletes or small children.

Many firms that tune top-end vehicles such as BMW or Harley-Davidson also offer software downloads to increase their horsepower or change their sound. These are attractive businesses, since the marginal production costs of such a digital download is close to zero.

(5) Sensor as a service

The potential use of sensors as a service also opens up whole new perspectives for companies. Sensors can be used to offer a record of product run-time, system optimisation or behaviour-based services. Products do not disappear after being sold, but can be tracked and monitored through connected sensors. Essential for such an increase in customer intimacy is the creation of perceived customer value by offering services. In this way preventive or reactive maintenance can be changed into predictive maintenance, meaning that the company can identify when the system needs to be maintained and spare parts need to be replaced through analysis of user data.

By means of sensors as a service, the efficiency of new SIG packaging machines on Nestlé's shop floor can remotely optimise chocolate production. The same can be said of FLSmidth of Denmark's complex cement plant systems installed at Holcim cement manufacturing sites worldwide. A further example is the remote diagnosis of printing machines from Heidelberger Druck working at printer sites worldwide. A common feature is parameterisation of the machines where a sophisticated engineering background can be applied remotely.

Another example is provided by the armbands manufactured by Fitbit, which can be worn 24/7: in the daytime they monitor the number of steps taken, distance and calories burnt, in the night they monitor the sleep rhythm and in the morning they wake you discreetly without a sound. Free online tools and a mobile app allow the user to make personal settings and keep track of the results.

(6) Integrated digital and physical experience

Originally, simulation and virtual realities were used only in the internal R&D departments of the large tech companies. With the steady technical advances and lower cost of the necessary facilities, this technology is about to find its way downstream to consumer-centric activities. Augmented reality can be used as a sales enhancement tool or as a way of improving services. BMW, for example is a leader in researching augmented realities for their dealerships and service points as a means to assist mechanics in their increasingly complex work of fixing a car. Augmented realities are soon likely to support the customer with the virtual configuration of the individual car in a way that is close to the real world.

(7) From analytics to big data

Rapid technologic advances in data transfer, storage and processing and the availability of numerous connected devices offer a basis for building innovative and service-oriented business models. Big data suggests that sensors and connected devices are not limited to being a generator for tailored services. The challenge now is to fuse the data gathered to identify potential cost savings and obtain better customer information and other competitive advantages that will capture value for the company. In 2014 General Electric employs 800 engineers in the area of connected networked products with all the business implications. Off-shore wind turbines communicate with each other and support their self-diagnosis: no unnecessary shutdown of the middle turbine if its neighbouring machines are both operating in the right conditions, for example. As the B2B world adopts more and more such methods, these business models will often add the end-consumer as a new customer. As a result of big data and the new networked product, world B2B is increasingly becoming a B2B2C world. Totally new business models in nearly every industry are enabled by these IT trends today.

(2) Megatrends and regulatory changes

Future developments and trends play a central role in the creation of new business models. While managers can't change them, they should think about them on a regular basis so as to be sure to react to them in a timely manner and even anticipate them to some degree. As early as the 5th century BC, Pericles recognised the importance of looking ahead towards the future: 'It is not a matter of predicting the future accurately, but rather being ready for it'. The following examples of new business models demonstrate how companies can take advantage by identifying social and economic trends early and accurately:

- Seeing the constant growth of the Asian markets, the Indian telecommunications company Airtel decided to tailor its business model specifically to the needs of this customer group. It outsourced 90 per cent of its processes and aggressively acquired new customers to the tune of 10,000 per business day. As a result, Airtel's per-minute rates are five times lower than those of western telecommunications providers. The company has become so appealing that western customers use the service too. Airtel is available in 20 countries, has over 260 million customers, and as of 2012 has become one of the largest telecommunications providers in the world.
- Foreseeing the potential of budding markets in lower-income countries, Grameen Bank developed a banking business model

specifically for these markets. Credit is only issued to groups of local community members who co-sign loans. This mechanism increases social pressure on debtors to repay their loans in full since the next group of community members will not be eligible for a loan until the first group has repaid its loan. The bank issues 98 per cent of its loans to women, who have shown themselves to be more reliable debtors. The business model was developed by Nobel Prize winner and former CEO of Grameen Bank, Muhammad Yunus. Today, the bank is so successful that it has issued microcredits totalling more than eight billion dollars.

A company must focus on what it regards as the most important influencing factors and trends for its business model. Numerous trends are happening at any one time and these may differ in respect of different markets. MinuteClinic and Geek Squad, for example, identified and focused on the trend towards a service society that demands a high level of convenience in North America:

- MinuteClinic, a division of CVS Caremark corporation, offers basic healthcare services such as vaccinations and treatment of minor wounds and common family illnesses at its CVS/pharmacy stores. Being open every morning, 365 days a year, makes these retail medical clinics very convenient for customers.
- Geek Squad centres on the growing importance of technology in our daily lives and our resulting dependence on it, helping customers with any problem they may have with consumer electronics and networking. Geek Squad solves issues with computers and networks, TVs, video, telephones, cameras and audio equipment, and, contrary to what you might expect, its customers are willing to pay for these services. Best Buy acquired Geek Squad ten years ago for three million dollars and now generates annual revenues in excess of one billion dollars.

Global scenarios

Many business models are successful because they deliver the right answer to social megatrends; based on a global survey of our colleague Peter Maas forecasts by the year 2050:

- 1 Knowledge society:** In mature societies the basic needs are disproportionately highly satisfied. As a result, topics concerning the individual fulfilment of a person are becoming increasingly important.
- 2 Networks and connectedness:** The decline in transport and communication costs is bringing the world together as never before. The Internet, in particular, is giving our society an opportunity to discover itself in a new way.

- 3 **Centralisation:** Urbanisation will continue at a faster pace, not only in the wealthy countries, but the poorer ones too.
- 4 **Cocooning:** In a globalised world, people are looking for a respite from hectic environments and closed societies.
- 5 **Resource shortages:** The supply of resources will reach its limits – the current CO₂ and global warming discussions are only the beginning.
- 6 **Pursuit for identity:** In our pluralistic society, individuals will continue to seek uniqueness.
- 7 **Security:** Natural catastrophes, terrorism and political uncertainties will continue to trigger the need for security.
- 8 **Self-administration:** As a backlash to globalisation, in some areas decentralisation and local issues are gaining renewed importance and adherence.
- 9 **Demographic change:** In contrast to the BRIC countries, the wealthy industrial nations are facing higher average ages and declining birth rates.

Regulatory changes in the environment are as important as trends for your business. For instance, pay television providers such as Sky would not exist today had the television industry not been privatised more than 20 years ago. Trends and regulatory changes are complex and may often be difficult to recognise. At the same time they are of the utmost importance for business model innovation. We recommend following Albert Einstein who remarked, 'I am more interested in the future than in the past, as I intend to live in it'.

We have compiled a checklist of important questions to help you cover all the important aspects of your ecosystem analysis.

Checklist for actor and influencing factor analysis

- 1 Who are the relevant actors in my business model?
- 2 What are their needs and what factors influence them?
- 3 How have they changed over time?
- 4 What does this imply for my business model?
- 5 Will changes in the competitive environment create opportunities for a new business model? If so, which one's?
- 6 What, if any, significant business model innovations have occurred in my industry in the past? What were the catalysts of change?
- 7 What technologies currently influence my business model?

- 8** How are technologies changing? What will technologies look like in three, five, seven, or ten years?
- 9** How are future technologies affecting my business model?
- 10** What trends in my ecosystem are relevant for me?
- 11** How do these trends affect the various actors in my business model?
- 12** Do they tend to amplify or minimise the weaknesses and strengths of my business model?

Ecosystem analysis

- 1** In small groups of three or four employees, describe your business model in detail using the four dimensions as shown in the magic triangle: Who-What-How-Why (see above).
- 2** Think about why your current business model may not survive or where its weaknesses lie. Keep actors and drivers of change as elements of your ecosystem in mind.
- 3** Write a eulogy for your business model based on the above findings.
- 4** Write down what you've learnt and present your conclusions to the other groups.

It may seem absurd to write a eulogy, but this exercise serves an important purpose: even if your business is doing well right now, it should help to predict how and why your business could fail. Don't be afraid to use some dark humour here. This is an important step you must take to gain a necessary distance from your business model and analyse your company critically.

Ideation: Adapting patterns

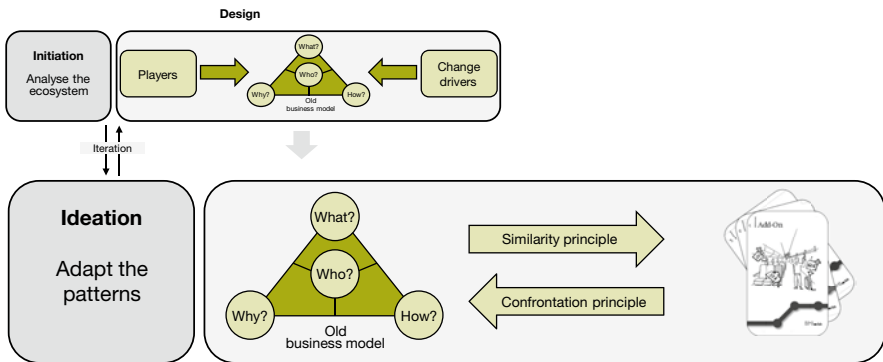
Analysing your ecosystem and business model generally brings to light certain opportunities for business model innovation. But interpreting these discoveries and incorporating them into a new business model can be very challenging. You will often have to choose from more than one viable option. And responding too literally to your customers' ideas will not necessarily help you think outside the box. Henry Ford was spot on when he said: 'If I had asked people what they wanted, they would have said faster horses'.

The starting point for business model innovation can be anything from a vague guess at a source of potential value creation to a concrete problem you are facing. But chances are that at the end of the innovation process, what you started off with is barely reflected in your final result. On the contrary: successful business model innovations are frequently counter-intuitive. This is compounded by the fact that most companies often struggle with thinking

in terms of business model categories because they require a more abstract approach than physical products.

Our findings that there are 55 different business models in all and that innovation is a matter of recombination 90 per cent of the time led us to develop a systematic methodology we have called Pattern Adaptation for Ideation (Figure 2.8). The basic idea is to apply the 55 identified patterns to your own business model and thereby generate new ideas for your business. Leading neuroscientists and neuroeconomists such as Gregory S. Berns have argued in favour of such an approach. Berns (2008) contends that in order to get a different perspective on an issue, we need to confront our brain with ideas that it has never considered before, push our brains to re-categorise information to enable us to break free from our habitual patterns of thought and ultimately begin to develop entirely new ideas. This ties in well with the results of research on analogical thinking and creativity.

Figure 2.8 Ideation: Adapting patterns

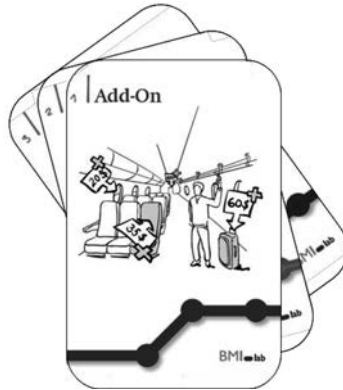


Working with business models will allow you to develop new patterns in a structured manner. First, the process will help you to break with your dominant industry logic and you can adapt the pattern to your company’s specific context and so create an innovative variant. Your own ideas and creativity are essential at this point, and ultimately you will find a balance between new ideas from outside and your own creativity from inside the firm.

To simplify the process of pattern adaptation we have profiled the 55 successful business models in a card set (Figure 2.9). Each card describes the business model in full: title, general description of the pattern’s underlying idea, description of a real-life firm that uses the pattern in its business model, and examples of other firms that employ it. The quantity of information provided is geared to your needs at this ideation stage: not too little, which would

not bring you out of your comfort zone, nor too much, which could inhibit your creativity⁴.

Figure 2.9 Pattern cards



The 55 patterns can be applied in two ways, using either the similarity or the confrontation principle. Each has its advantages and both may be employed simultaneously.

Using the similarity principle to adapt patterns

The similarity principle starts inside and moves outside; that is to say you begin with pattern cards for business models in related industries and progress to more dissimilar patterns, which you then adapt to your own business model.

To apply the similarity principle, the steps to be carried out are as follows:

- 1** Define your search criteria to identify related industries. For example, if you are a utility company in the energy industry you might consider the following search criteria: non-storable goods (service industry), deregulation (telecommunications), high volatility (financial industry), commodities (chemical industry), from product to solution (tool manufacturers), capital-intensive (railways).
- 2** Next, based on your predefined search criteria and related industries, select patterns from the pool of 55 that are already used in the industries you have identified. Ideally, work with six to eight patterns.

⁴ There are two versions of the card sets available to support the process: physical cards that are used in workshops and interactive software accessible to employees globally are available, see www.bmi-lab.ch.

- 3 Now apply the identified patterns to your own business model. Develop concrete ideas for each pattern as they might work in your company and address the challenges you have recognised.
- 4 Should you fail to find a viable idea for business model innovation at the first attempt, repeat the process. You may want to expand your search criteria and include additional business models in your analysis.

The most important question to ask with the similarity principle is: 'How will adapting pattern X to my company change my business model?'

The similarity principle requires a thoroughly systematic and analytical approach. You gradually depart from your current industry logic and consciously try to exclude patterns from more distant industries. The fast food industry is, for instance, quite distant from the telecommunications industry. Our coaches fared well with the following thought model, 'How would a different company conduct this business after acquiring us?'. The idea is to consequently think through how the pattern would be applied to your own company.

In the similarity principle your field of investigation is defined relatively narrowly, which means that less abstract thinking is required of your team members. However, you still have to find analogies in ideation. The process of finding these analogies is structured in such a way as to increase the likelihood of finding relevant solutions and ideas. For this reason, the similarity principle is more likely to lead to only slightly or moderately radical business model innovations.

A large Swiss printing company successfully employed the similarity principle. Like that of many of its competitors, its business was suffering from significant excess capacity. More and more printing presses were available to complete fewer and fewer print jobs. The company looked to the No Frills pattern used by low-cost airlines and saw that it could exploit its excess capacities by offering simple, low-cost printing services. Jobs are accepted online and are not printed until one of the machines has some spare capacity. While this new offering is of little interest to existing customers, it will appeal to flexible price-sensitive customers who would ordinarily print their documents abroad.

A food processing machine manufacturer, by analogy with IKEA, applied the Self-service business model (outsource parts of the value chain to customers). It decided to outsource the task of equipment qualification to customers by furnishing them with a DIY toolkit that enabled them to take care of equipment qualification themselves. The manufacturer is absolved from having to make any guarantees to customers, and instead helps them to complete the process correctly by offering the right tools.

Using the confrontation principle to adapt patterns

Unlike the similarity principle, which involves a careful search for new business models in related fields, the confrontation principle specifically wants to face off with extremes, that is to say you compare your current business model with scenarios in completely unrelated industries, and study the extremes in respect of their potential impact on your own current business model. You will progress step by step from outside to inside (your business model). The wide disparities between your present situation and the alternative business models are designed to challenge your current business model. The intention of this approach is to push participants beyond their typical patterns of thought and bring up entirely new and unexpected areas for innovation. As any experienced sailor will tell you: ‘Drop your anchor quite a distance from the boat. By the time it has reached the seafloor, it will have found its way back to the boat all on its own’.

The confrontation principle is especially useful in situations where your problem statement is still hazy or largely unknown: for example, if you have recognised that you need to take action (on account of diminishing returns, increased competition with lower margins, etc.), but have not been able to establish a specific plan. At the same time, the confrontation principle offers an excellent approach to a proactive exploration of potential business model innovations.

Ask a roomful of employees of an industrial company, ‘How would Apple manage this business?’ At the beginning the typical answer is likely to be, ‘Our company is different, so Apple’s success factors don’t apply for us’. But if your listeners choose to engage in the discussion, it is bound to generate new ideas. It is an eye-opener for how many new ideas and concepts a focused group of workshop participants can come up with when working with the confrontation principle.

Together with a mechanical engineering company, we looked at the Subscription pattern – customers pay a monthly fee for its offering – as a possible new business model. The confrontation with this pattern spurred the idea to train operators for the company’s own machines and lease them to customers. At the same time it became apparent that the new business model would create closer relationships with customers, which indeed was the primary reason the company was seeking a new business model.

A steel producer used the Pay Per Use pattern – customers only pay for their actual usage of a product or service – to develop an idea whereby it would charge customers only for the steel they actually used instead of simply billing them per unit of steel originally shipped. Any excess steel is then collected by the company and recycled in future production.

A supplier working on Apple’s iPhone used Ingredient Branding – including another supplier’s products that customers would not know otherwise – to market its own products more prominently and reduce its dependence on Apple and expand into new markets.

The confrontation principle is applied as follows:

- 1 The first step involves the selection of six to eight patterns from the 55 available business models that have a markedly different logic from those prevalent in your own industry. Use your intuition to choose the patterns. We also obtained positive results in some workshops by letting teams pick ten patterns quite at random, then discussing them briefly, and finally selecting a few interesting ones. It is a good idea to limit the amount of time participants are given to take their decision, to reinforce the spontaneous, intuitive element in this step.
- 2 Next, challenge your business model with the patterns that have been selected. We have found that working with real-life examples works best here, to push team members to break with their regular patterns of thought. 'How would company X manage our business?' To improve comprehension, we suggest reformulating this question in terms of thinking of company X's actually acquiring your business and seeing how this would change the management style and logic of the company. This might entail the following questions, for example:
 - Freemium: How would Skype manage our business?
 - Franchising: How would McDonald's manage our business?
 - Razor and Blade: How would Nestlé Nespresso manage our business?
 - Long Tail: How would Amazon manage our business?
 - Subscription: How would Netflix manage our business?
 - Two-sided Market: How would Google manage our business?
 - User Design: How would Threadless manage our business?
 - Cash Machine: How would Dell manage our business?
 - Self-service: How would IKEA manage our business?You need to devise more than one idea per business model card. This isn't always an easy task, especially in these extreme cases. At the beginning, participants often find that they have to force themselves to come up with ideas for every pattern.
- 3 If you do not have enough good ideas after a first run, simply repeat the above steps using different business models as an impetus.

A team is unlikely to fall in love with a business model at first sight. Asking automotive suppliers in a workshop how McDonald's would manage their business would probably only make them shake their heads incredulously. Such a question seems to be coming from too far out of left field. But this changes when you delve deeper into McDonald's business model: McDonald's trains new employees for just 30 minutes to bring them fully up to speed. McDonald's Franchising business relies on simplicity and reproducibility. By now most team

members will have understood how important this question is for their business – or indeed for any company.

You have to dig really deep to get to the ‘Eureka!’ moment. So don’t give up too early!

Using the confrontation principle generally requires a team charged with positive creative energy. Building analogies to such extreme patterns is cognitively taxing; at first sight business models offer very little to go on, and a deep dive is required. An experienced moderator will be able to ask the right questions to drive the conversation forward. As in all creative exercises, the knowledgeable coach who can provide hints in the right direction is very helpful.

Table 2.1 compares the similarity and the confrontation principles, which gives rise to recommendations as to which patterns should preferably be used under which circumstances. If business model innovation is a top strategic initiative for your company, it makes sense to think about all 55 patterns carefully. Generally, examining 15 patterns inspires a workable number of ideas. After an extensive check of all 55 patterns BASF’s strategic group – BASF Perspectives – decided on 26 patterns which are highly relevant to the chemical B2B business of BASF. Such a selection should be done only at a second step.

Successful ideation processes

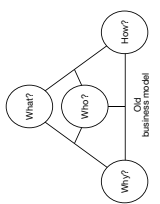
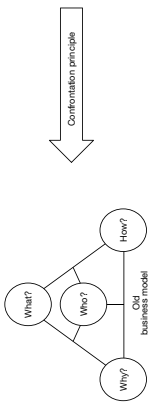
The ideation process is a core element of the Business Model Navigator. As such, high tribute must be paid to it. We usually work through the ideation process in a workshop setting whose outline may vary as described in the following. As the output with regard to creative ideas is heavily dependent on the performance of a workshop, helpful advice for its realisation is presented as well.

Pattern adaptation

We first try to generate as many ideas as possible. The development of ideas comes in two phases: first, each person comes up with ideas individually after looking at the pattern cards, and the participants then discuss them, building on them, modifying and contributing to them. These phases may be mutually exclusive or approached iteratively to address additional parameters. The workshop can be organised in different ways:

- *Face-to-face or virtual workshops:* Thanks to the development of especially designed software, we are able to hold both face-to-face workshops and virtual workshops. The major advantage of the virtual approach is that it opens up the workshop to more participants whatever their geographic location might be: the more employees take part, the more pattern cards can be considered. This has proven to be

Table 2.1 Similarity and confrontation principle compared

Similarity principle		Confrontation principle	
Principle			
Selection criterion	<ul style="list-style-type: none"> ● Similar industries 	<ul style="list-style-type: none"> ● Extreme variants 	
Motto	<ul style="list-style-type: none"> ● Lose your familiarity with what you know 	<ul style="list-style-type: none"> ● Become familiar with what you don't know 	
Advantages	<ul style="list-style-type: none"> ● Rather better structured ● Suitable for creativity beginners 	<ul style="list-style-type: none"> ● Break out of thought patterns ● Opening up of undreamed-of innovation potentials 	
Disadvantages	<ul style="list-style-type: none"> ● Depending on the degree of abstraction of the problem formulation, thought patterns will only be partly demolished ● Risk of remaining stuck with known customer problems 	<ul style="list-style-type: none"> ● Requires a high degree of creativity, and as such more demanding in its application 	
Recommendation	<ul style="list-style-type: none"> ● Innovation projects with a specific problem formulation 	<ul style="list-style-type: none"> ● Innovation projects with an open problem formulation or one that is familiar only in part 	

very beneficial in the case of large multinational corporations where we as external coaches have not been able to train all participants across the geographic regions involved. Social media tools are also used to motivate participants to actively contribute. IT can help to develop the global business model community in a global company. Moreover, the community can be broadened to a wider group of product developer, designer, marketers, logistic managers; in other words, every decision maker of the company should think in terms of the dimensions of business models, not just a small central strategy unit. On the other hand, virtual group discussions are rarely as lively and productive as they are in physical workshops. Ideally, we recommend using a combination of both physical and virtual workshops to take advantage of the strengths of each type and compensate for their weaknesses.

- *Sequential or parallel*: Patterns can be considered sequentially (one by one) or in parallel (all at the same time). In the second, parallel instance, each team member receives a given number of cards and proceeds to present one or two business models to the rest of the group. In the sequential approach, the group as a whole gets down to evaluating and creating ideas for each business model. It is more difficult to discover potential ways to combine patterns when looking at them sequentially.
- *Open or closed*: You can also adjust how openly the process takes place. In the first case ideas are generated individually – using brainwriting – and then discussed as a group. In the second they are pitched immediately to the group. Brainwriting obliges all the participants to come up with ideas, enabling you to really tap into the creative potential of the group. A good way to implement this concept is to give each participant a certain number of business model cards and ask them to come up with at least one idea for each pattern. Brainwriting also keeps disruptions to a minimum so that early ideas cannot be put down by disgruntled employees or sceptics. However, since it is an individual process, it does not create the same kind of creative momentum as would a group discussion. For your first run through, we suggest keeping the discussion open.
- *High or low frequency*: Finally, you can limit the amount of time that participants are permitted to devote to each business model pattern. It is thought that most creative ideas come to mind within the first three minutes, after which you will mostly get incremental changes to already established ideas. Keeping things short and sweet in this way, by giving participants three minutes, say, per pattern (90 seconds for individual work) to generate ideas, makes for more lively discussion, but for some participants this quick pace may prove to be too stressful, and their innovative capacity is impeded by a mental block. The decision to run the workshop quickly or slowly will depend on the group in question and how experienced its members are.

You should plan on running at least two to three rounds of ideation: most participants will reach the height of their creativity during the second round. The third round is meant to unleash any final and deep-seated creative potential. Generally it will be helpful to try a different approach in each round.

Experienced moderators are instrumental in joining up the dots between the dominant industry logic and new business models. Moderators will be most likely to maintain the appropriate level of abstraction needed for ideation if they come from outside the industry.

Cross-industry workshops bringing together people from various companies that do not compete in the market and led by a neutral moderator can be very fruitful as well.

Success factors in the pattern adaptation phase

The following rules have proven to be helpful in pattern adaptation:

- 1** *Get it all out:* Before spending time on generating new ideas, be sure to get any existing ones out first. This allows participants to focus fully on pattern-based ideation and ensure that they are not hung up on their old ideas.
- 2** *No limits to creativity:* Anything goes! It is important to establish the basis that there is room for each and every idea. Participants must be free from the fear that their suggestion might be 'wrong', for this would inhibit creativity and spoil the process. Obviously, negative or snide comments have no place in ideation.
- 3** *No copyright:* At this ideation stage, ideas do not carry a copyright. You work on the principle that every idea belongs to everyone and is available to be built upon and developed by all the team members. It is of no consequence who puts forward the idea in the first place, and there is no need to count how many ideas any team member has contributed. Ideas emerge and are developed through teamwork.
- 4** *Quantity has precedence over quality:* At this stage too, it is more important to generate a multitude of ideas. Those that are 'off the wall' may turn out to be the most exciting and bring the group into interesting new territory. Participants should be encouraged to produce as many ideas as possible: the time will come later to evaluate them.
- 5** *Avoid negativity:* Responses such as, 'But we've already tried that!' are counter-productive and have no part in the ideation process. A creative way of bringing this home is to post several such conversation-stoppers around the room at the beginning of a session to serve as a reminder.
- 6** *Ten seconds:* To make sure ideas or associations don't get lost, write them down within ten seconds. It's amazing how quickly a creative flash

can disappear over the horizon. Help participants to follow this rule by providing plenty of pens and paper.

- 7 *Cast the net wide*: Regardless of whether an idea is likely to be implemented or looks strategically important, the focus should be on generating radical rather than incremental ideas in the ideation phase. It is generally a relatively simple matter to trim a radical idea down to make it an implementable, incremental version of itself. On the other hand, trying to scale up an incremental idea into a radical one is virtually impossible because of our existing thought patterns.
- 8 *Anecdotes and asking the right questions*: It is important that the moderators ask participants the right questions while the cards are being analysed to ensure that they think about every single pattern in detail. The use of anecdotes can also greatly help to stimulate thought. An example might be the McDonald's story referred to above, because projecting it on to how you could radically simplify your own company in a similar way is sure to produce a myriad of ideas for change, along the lines of lean processes, elimination of complexity and scalability, and so on. Application of McDonald's KISS principle (keep it simple, stupid) in some way makes sense for any business.

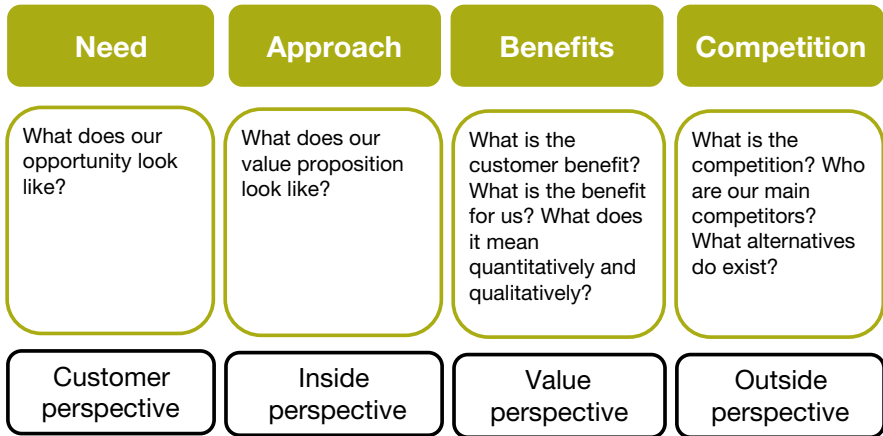
The above success factors should be presented as the rules of the game or even handed out on paper to participants before the start of the session. While most participants will probably be familiar with them, the rules tend not to be followed unless they are stated explicitly.

How to select ideas – the NABC method

The NABC method (Need, Approach, Benefits, and Competition) of the venture capitalists has proved to be very valuable for business model idea evaluation and selection. Very often it will be useful to cluster the ideas that come up by general concept and then make a selection from each cluster. Next comes the 'elevator pitch'. This technique was first introduced in the 1980s: the presenter has the duration of an elevator ride to pitch his or her idea in a convincing manner: venture capitalists now listen to start-ups' elevator pitches to sort out new business ideas efficiently. The group prepares a brief elevator pitch based on the four NABC perspectives, lasting between eight and ten minutes. Anything longer is not likely to add very much. This method provides a great opportunity to evaluate ideas critically and eliminate less interesting ones. The four perspectives treated in NABC-style pitches are shown in Figure 2.10.

A major difference between business model innovation and venture capitalism is that in the former, ideas should not be dismissed too quickly. Venture capitalists generally make snap decisions, but in business model innovation the ideas are there to be built upon. A useful method at this point is the iterative approach used in design thinking. A cycle consists of the following four steps:

Figure 2.10 The NABC approach to evaluate ideas

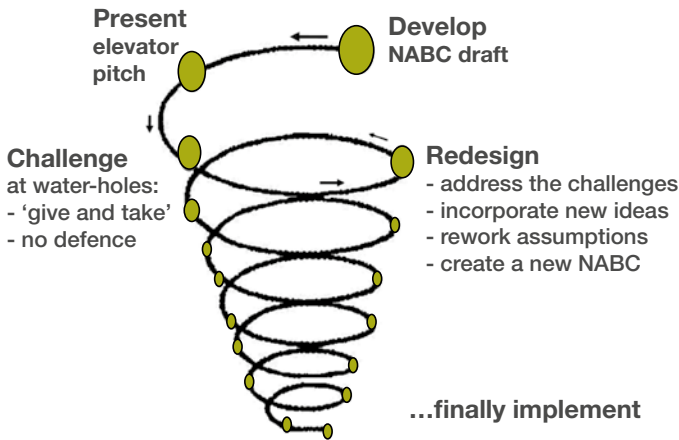


- 1 *Development*: Once the above process has been terminated, the most promising idea that has emerged is developed into a concept to be presented according to the NABC principle.
- 2 *Sharing*: Each group presents their ideas to the other participants in an elevator pitch style: it should be precise, short, headline-driven and underlined with the core facts. The name ‘elevator pitch’ comes from the idea that a person should be able to convey the main ideas of a concept within the timespan of an elevator ride. If you were to meet an investor or decision maker in the elevator, how would you explain your idea?
- 3 *Water-holing*: After each presentation, the group receives give-and-take feedback. Any answers from the presenting group should only be points of clarification: they will not respond to any criticisms directly, thus ensuring that they listen receptively and absorb what they hear rather than entering into futile discussion. All criticisms are held over to be considered in the next round. Venture capitalists call this ‘water-holing’, because the teams are refreshed and strengthened by the new ideas expressed. And of course, all criticism offered during feedback must be constructive, to the exclusion of destructive conversation-stoppers. It is legitimate, for example, to question assumptions that are contained in the presentation of a business idea. Generally speaking, the criteria will be openly discussed without a hidden agenda. The appearance of any such conflicts must be addressed directly and openly by the moderator.
- 4 *Redesign*: In the final phase, any weaknesses and challenges that have been uncovered are addressed by way of new ideas. This may involve revisiting previous ideas and/or examining new business models. Assumptions are re-evaluated and new impulses taken in and developed into a new NABC pitch. The selection of ideas in teams supports both

acceptance and efficiency. If the process is not moving forward, it may make more sense to start over and either drop the current idea or combine it with one that was eliminated earlier.

Following the redesign phase, a new cycle is instituted in which each team now presents the improved ideas and concepts. Iterative application of the NABC method (Figure 2.11) is very useful to substantiate the ideas that have been developed, and their weaknesses often come to light at this stage.

Figure 2.11 Iterative application of the NABC method



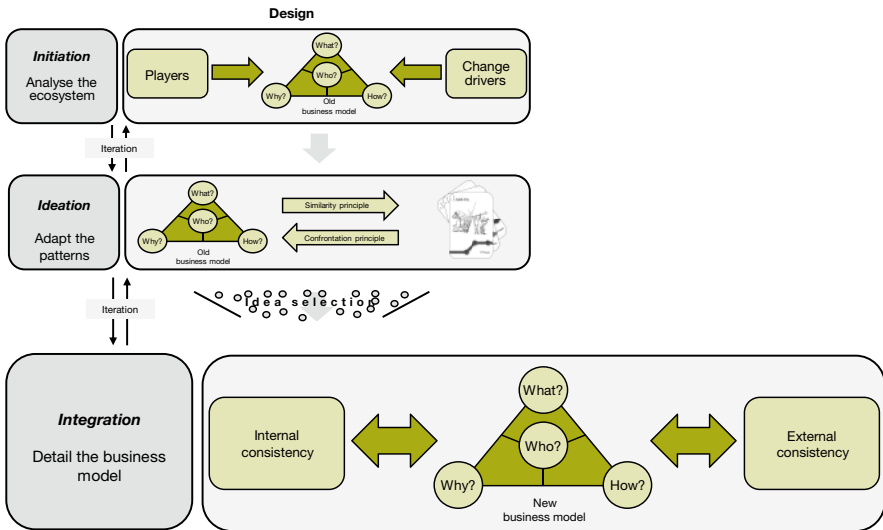
Integration: Shaping your business model

Applying the pattern adaptation principle usually results in a rich harvest of ideas for a potential new business model. It is vital to identify and adapt new patterns if you are to break with the dominant industry logic. This step should not be confused with the development of a new business model. Before an innovation can be viable, the new ideas must be shaped into a coherent business model (who-what-how-why) that meets your company's internal requirements and is consistent with the external environment (Figure 2.12). A successful business model innovation will not only break with the dominant industry logic, but also have a high level of internal consistency without being based on an established model.

Internal consistency

Internal consistency may be defined as presenting a harmony between the who-what-how-why dimensions. Managers often have considerable difficulty incorporating new ideas into a business model. As a CEO once told us, 'It's relatively easy to change one dimension of your business model; the problem is

Figure 2.12 Integration: Shaping your business model



to adapt the rest to it'. It is generally found that the product and market aspects are more malleable at this early stage, while the revenue and value aspects need to be dealt with later in the integration phase.

To ensure that the who-what-how-why question is well balanced, we recommend describing your new business model in detail on the basis of these four dimensions. Table 2.2 provides a detailed checklist to help you complete this step.

Once the four dimensions fit internally, you will have secured a competitive advantage for your company that cannot be easily imitated by your competitors. In the words of strategy-champion Michael Porter (1996): 'It is harder for a rival to match an array of interlocked activities than it is merely to imitate a particular sales-force approach, match a process technology, or replicate a set of product features'.

External consistency

External consistency refers to the fit between your new business model and the company's environment. How well does your new business model satisfy stakeholders' needs and how well equipped are you to answer to the prevailing trends and competition? As such, this step involves examining your environment in the context of your new business model. Because your environment is continually evolving, it is very important to bear it constantly in mind throughout the new business model development process.

Should any internal or external inconsistencies come to light that you cannot resolve, you will need to run through the steps outlined above until you have created a coherent system. Iterative development is preferable in general

Table 2.2 Who?-What?-How?-Why? checklist

Who?	Customers	<ul style="list-style-type: none">● Who are our target customers?
	Stakeholder group	<ul style="list-style-type: none">● For whom do we generate (added) value?
	Distribution channels	<ul style="list-style-type: none">● By way of what channels do we reach our customers?● Are these channels integrated with our other business activities?● Do the channels correspond to our customers' needs?
	Customer segments	<ul style="list-style-type: none">● Have we segmented our customer base?● What business relationship is to be sought in respect of each customer segment?
What?	Value proposition	<ul style="list-style-type: none">● What customer problem are we attempting to solve?● What customer needs do we try to satisfy?● What segment-specific products and services do we offer our customers?● What value do we generate for our customers?● How does our value proposition differ from that of the competition?
How?	Internal resources	<ul style="list-style-type: none">● What resources are essential to ensure that we deliver on our value proposition?● How can we allocate the resources efficiently?
	Activities and competencies	<ul style="list-style-type: none">● What activities are essential to ensure that we deliver on our value proposition?● What activities are we equipped to carry out with our existing competencies?● What new activities and what competencies do we need in addition?
	Partners	<ul style="list-style-type: none">● Who are our most important partners?● Who are our main suppliers?● What activities can our main partners undertake or what essential competencies do they have?● What do our main partners get out of working with us and how can we bind them to us?
Why?	Cost drivers	<ul style="list-style-type: none">● What are the principal costs in our business model?● What are the financial risks? How do we address them?
	Revenue streams	<ul style="list-style-type: none">● What are our sources of revenue?● What is the customer willing to pay for?● How do customers pay at present? How should they pay in the future?● How much does each revenue stream contribute to the overall turnover?

since it allows you to be more innovative and to produce better results. The following is a textbook example of new business model design, when Hilti, a premium manufacturer of tools for the construction industry, switched to fleet management (see Hilti case study).

Hilti case study

Hilti made a name for itself as a business model innovator when it introduced fleet management in 2000. The move was a response to the fact that ‘customers want to buy holes, not drills’ (as the company’s CEO put it at the time). Instead of buying tools from Hilti outright, with the new business model customers purchase permanent ‘tool availability’, i.e. lease a fleet of tools from Hilti, which takes on the responsibility of supplying, repairing and replacing tools and preventing their theft.

But fleet management was only the start of business model development at Hilti, for essentially it provided an answer only to the ‘what?’ question: this was a new and innovative value proposition for the construction industry. In addition, Hilti put much effort and analysis into embedding this new value proposition within a consistent business model. The other three dimensions – who, how, and why – all had to be modified to the point that the new idea could create value for customers and capture value for Hilti.

The plan was to target the same customers – the *who* dimension – with the new business model. Hilti made the decision to address its existing customers despite the fact that the new value proposition might interest new potential customers such as small businesses or construction firms in emerging markets.

The *how* dimension necessitated changes in all aspects of Hilti’s value chain. The sales department, for example, although serving the same customers, needed to develop a training scheme to prepare the sales team for imminent challenges. The company would no longer be selling its tools directly to site managers, but instead would negotiate multi-year service contracts with upper management. Logistics and acquisitions for their part now needed to be sure to deliver on Hilti’s Guaranteed Availability promise as well as managing all product repair and replacement services. Other challenges for these departments were collecting and managing tools when a contract ended. Last but by no means least, Hilti defined and developed IT-assisted processes to enable the company and its fleet management customers to manage their tool inventories and leasing contracts.

The revenue model also had to be completely redefined, since originally Hilti had sold tools, spare parts and maintenance services directly. Under the

new business model large lump sums of income would be replaced by regular smaller payments and assets would disappear from customers' balance sheets. The basic structure of leasing contracts could be readily adapted from the automotive industry, but pricing remained an issue: how much should Hilti charge for monthly or yearly guaranteed availability? Would the number of claims skyrocket once Hilti remained the effective owner of the tools? What about theft? Should pricing differ for diverse markets? Should Hilti offer various options? Would customers value the greater efficiency enough to cover all the additional costs Hilti would incur in offering such all-inclusive packages? All in all, Hilti managed to minimise these risks and as a result implemented a successful revenue model.

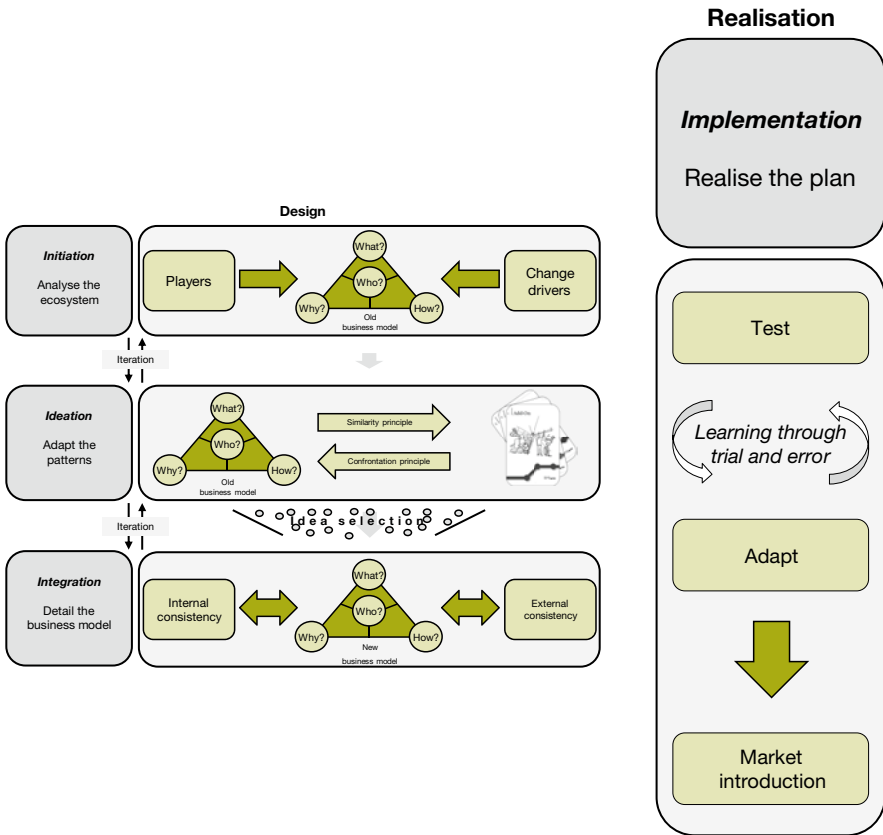
Hilti took an innovative idea and adapted the other three business model dimensions to develop an extremely consistent and successful business model. The business model is responsible for generating up to 50 per cent of tool sales in several markets. The model further creates additional revenues through Cross-selling and upselling. The innovation represented a highly significant step for Hilti in that it drastically and sustainably differentiated the company from its competitors. Hilti's Chief Technology Officer described the importance of the innovation thus: 'Hilti has developed many very innovative and successful product innovations over the years, but they pale in comparison with the fleet management business model, which is the most important innovation in Hilti's history'.

Many competitors, among them Bosch, have tried to copy Hilti's fleet management business model, but, without established Direct Selling channels, this concept remains too complex and elusive. Competitors have succeeded in imitating the business model only for large corporate customers that are served directly. Fleet management allowed Hilti to build a sustainable competitive advantage.

Implementation: Realising your plans

Once you've completed all the first three steps in the Business Model Navigator, you will have finished designing your business model. Next comes implementation, probably the most difficult task in business model innovation (Figure 2.13). Specifically it involves negotiating contracts with new collaborative partners, creating new sales channels, specifying your go-to-market strategy and more. You will have to question all your previous assumptions and push past resistance from all quarters including the market and your partners

Figure 2.13 Implementation: Realising your plans



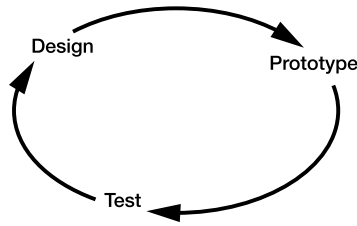
and employees. To meet such a challenge, you will need to harness all your strength.

We recommend taking a step-by-step approach when rolling out your business model innovation. Rather than trying to implement it in one fell swoop, it is wise to develop prototypes and test them on a small scale. This will minimise the risks and create opportunities to learn more about the process and adapt your strategy accordingly.

Our approach to this whole subject was shaped in large part by our cooperation with Larry Leifer, a Stanford University professor whose Design Thinking School has established itself as a forerunner in innovative product development. The thrust of this collaboration was to devise processes to facilitate the implementation of a new business model. Thus we tested, verified and built on these processes in our research projects with companies. The basic process consists of a three-step cycle⁵ (Figure 2.14).

⁵ Leifer and Steinert (2011).

Figure 2.14 The basic cycle of business model innovation



Design

As we have said, business model innovation consists of the three steps of initiation, ideation and integration. By the end of the design phase, you will normally have come up with one or two innovative business models that have coherent dimensions.

Prototype

The aim of the next step is to consolidate your design. To quote the wise words of our Stanford colleagues: ‘A picture is worth a thousand words and a prototype is worth a thousand pictures’. In other words, ideas need to be physically prototyped before they can be accurately evaluated and refined. Architects have lived by these words for a long time, always building a model before they actually constructed a building. A prototype is graspable and helps people to trust new products. Rapid prototyping is especially useful in this context since it allows for quick and cheap testing where the risk is very manageable. The strengths and weaknesses of your ideas will rapidly come to light.

‘Show, don’t tell’. What does this mean for your business model innovation? How do you build a prototype for business model innovation? Such a prototype can take on a variety of forms, ranging from detailed presentations to business plans and pilot projects in small markets. The only really important thing to remember is not to waste too much time or money on figuring out the minutiae of your prototypes. The inherent uncertainty does not justify such expenditures.

Another Design Thinking principle will be helpful as you progress through the Design-Prototype-Test cycle: interdisciplinary teams with a wide range of experience and knowledge are the most effective. Complete the whole of each design cycle in an iterative manner. Your initial rudimentary business model prototypes will be succeeded by more sophisticated prototypes, and this will help you to define the details of your business model. In line with Popper’s principle of falsifiability, you are making assumptions and quickly testing them in real time⁶. This approach obliges your team to generate new knowledge rapidly, gain a common understanding of preconceptions, and work together to overcome them.

⁶ Popper (1968).

Test

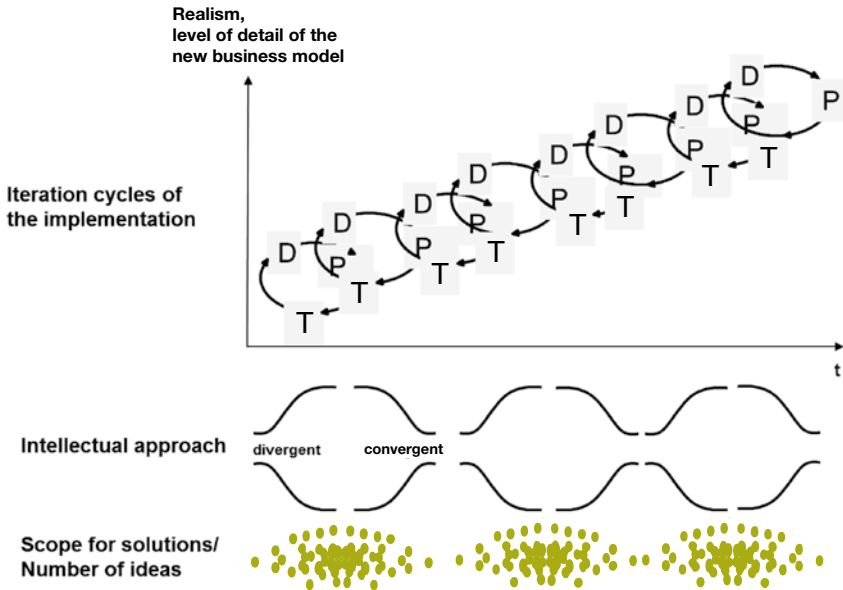
Testing your prototypes will determine which dimensions of the new business model work and which ones don't. Important stakeholders both within the company and outside of it, potential customers and suppliers, should be invited to give feedback. The important thing is to collect as much information about your prototype as possible. Everything you learn is then incorporated into the next round of prototyping to make better and more refined prototypes. On occasion you may even have to completely discard a prototype and explore other avenues instead. Abandoning prototypes can in fact be a blessing in disguise in the innovation process. Our Stanford colleague Larry Leifer continually stresses the importance of iterative trial and error. Failure is a major source of learning, and the Stanford Design Thinking experience has shown that failure is often essential to finding new ways of refining an existing idea or even discovering an entirely new idea.

Implementation is not a simple process, but a multidimensional one: the Design-Prototype-Test cycle will need to be completed a number of times before you can be ready to introduce your innovation to the market. With time, the new business model will become more realistic and its features increasingly detailed. Both divergent and convergent thinking are required in this process. During the diverging phase, the opportunity space is opened up to create a maximum number of possibilities; during the converging phase the solution space increasingly focuses on the few most promising ideas (Figure 2.15). Iterations continue until you have found the correct solution, that is when you feel ready to introduce your new business model to the market. As early as the 1990s, the rapid prototyping approach popularised Design-Prototype-Test cycles to speed up learning. The development of traditional, very formalised business plans becomes less important; the proportion of flexible doing and iterative learning replaces planning. Fast cycles of learning are getting more important. While we are not suggesting that you abandon business plans entirely, do make sure you focus on quick and iterative experimentation to drive progress forward.

The following are the ten keys to success in the Design-Prototype-Test cycle:

- 1 *Openness*: Just because we don't do it doesn't mean it's no good.
- 2 *Courage*: 'Fortune favours the brave'.
- 3 *Iteration*: The good makes way for the better, making for continuous improvement and better results.
- 4 *Diversity*: Teams should consist of a balanced mixture of both divergent and convergent thinkers.
- 5 *Change*: Recognise and specifically follow up on pivotal moments.
- 6 *Summaries*: Record what you have learnt after each cycle.
- 7 *Failure*: We all need to learn, and failure leads to progress. Learning is more important than measuring results.
- 8 *Challenge*: Ask any number of questions, for they increase output during implementation.

Figure 2.15 Iterative process of business model innovation



- 9 *Coach*: Make strategic use of pivot thinkers who master both divergent and convergent thinking to speed up processes.
- 10 *Directions*: Be open to ‘dark horses’ that can lead you in an entirely different direction.

Here again we can usefully take Nestlé Nespresso as an example. Nestlé’s business model went through a lengthy phase of trial and error before it succeeded. Nestlé researcher Eric Favre applied for the first patent on coffee capsules in the 1970s. At this time Nestlé’s only coffee product was Nescafé instant coffee. Coffee capsules were invented in an attempt to strengthen Nestlé’s position in the roasted and ground coffee markets. Nespresso was founded in 1986 as a wholly separate company from Nestlé. For a long time coffee capsules lingered in obscurity, and the company’s top management was close to selling its machinery. In 1988 a new CEO looked at the original business model and started to work on it: in future the company would address households instead of just businesses. With this, Nespresso began to ship its product directly via mail. The company’s new sales model of selling coffee machines through retailers and making its capsules available online or in boutique Nespresso stores proved to be very clever. An additional boost was the recruitment of George Clooney as a spokesperson, and all in all the company has managed to grow by 35 per cent annually since 2000. In 2013 the company sold over 5 billion coffee capsules, generating revenues of over €3 billion.

The Spanish food supplement chain Natur House also needed to develop its business model iteratively until it arrived at the solid solution it operates today. Originally the business model was geared towards distributing the company's food supplements through retailers. Profits sank significantly when the market for dietary products in Spain was deregulated. In response, the company's founders decided to create new retail stores that they could franchise later on. The first prototype was a store opened in 1992 in the Basque country. This shop soon failed for a number of reasons, including an ill-conceived location, purchase of the space instead of renting it, and offering too many products. Natur House learnt from these mistakes and continued to develop its business model iteratively, and, in particular, took feedback from retail store managers into consideration. Only five years after opening its initial pilot store, Natur House was marking up annual growth rates of 40 per cent. With now over 1,800 stores globally, Natur House is one of the biggest franchisors in the world.

Don't waste too much time calculating business cases; you'd be better off assessing your business model qualitatively: Which is the best market to test our business model? Where can we get early customer feedback? What are the technological opportunities and risks? Which key customers would jump to use our new business model?

Business plans create elaborate dreams based on assumptions. Prototypes test assumptions and push you to learn. What you do is more important than what you think.

Managing change

3

Your greatest hurdle in business model innovation will be to overcome internal resistance. Only by doing so is it possible to implement an innovation successfully. Why do employees resist change so forcibly? The simple answer is that they are wary of change. According to annual surveys by McKinsey, 70 per cent of all change initiatives fail. The main barriers to successful change, nearly 60 per cent, have been employees' attitudes and non-supportive behaviour by management. The situation has not improved over the years: people don't want change. They don't ask for new business models which oblige them to unlearn what they have learnt. They are afraid of losing something. Here are some of the extremely common concerns expressed by employees during an exercise in business model innovation:

- What will our company be like once the business model innovation has been implemented?
- Aren't we cannibalising our own business? Do we really have enough resources?
- How will our business be organised, is innovation good for our organisation? Wouldn't it be better to keep doing what we're doing right now?
- Why should we change now, everything's still working as it should, isn't it? Our competitors aren't changing anything.
- How will interaction with other business units change?
- Where will I stand in the new company? Do I have the necessary skills to take on a new job?

- What will happen to me if my job is done away with?
- Where do I fit in with all this?

And privately, most of them think:

- What will happen to my business unit, my department?
- Will I lose power and my budget?
- Is it threatening for me?
- What's in it for me?
- What will happen to me?

Managing change requires steadfast leadership. It is not enough to send your employees to a training course or to post an office memo about the impending changes. Resistance to change is strongly entrenched. Once, when we kicked off an innovation project, a long-time employee commented: 'When you're done with your business model innovation, send me a copy of the results. I'll put them in my desk drawer with the other innovation ideas from previous consultants. Just like those other concepts, we won't be implementing yours either'.

Drive change

Without change management even the most thoroughgoing analysis will go nowhere. Business models are only as good as their implementation, and all ideas, however good, will fail without top management support. Here are the five most important ways of managing change from the top.

Show commitment

'Every car is a piece of me,' says Volkswagen chairman Martin Winterkorn about his involvement in company innovation projects. He personally inspects every car before start of production. Ravensburger's new digital learning system, *tiptoi*, was also heralded by the manager in charge of innovative business models. Steve Jobs was himself project manager for the iPad, and SAP founder Hasso Plattner oversees the 'In-Memory' movement personally.

Management's actions are a visible sign of its commitment to change initiatives in employees' eyes, who ask questions such as: How much time does top management spend with the new business's project manager? How often does top management meet to discuss the business model project? How easily can the project manager access strategic resources in the company's informal hierarchy? How does the company present the new business model in official press releases, annual reports and conference calls? How does top management support its fledgling business with our scarce resources that could also be used by the existing business?

The Swiss company Lonza provides products and services to the pharmaceutical and life science industries. A few years ago the then CEO recognised

that, although the company was customer-oriented, it did not have the resources to produce radical innovation by itself. So he established a separate venture team charged with driving radical technological, product and business model innovations. The LIFT initiative (Lonza Initiative for Future Technologies) was tasked with generating yearly revenues of CHF 500 million within 15 years and so far has been allotted an annual budget of something under CHF 20 million to achieve this ambitious goal. The CEO's commitment became apparent when he upheld the LIFT budget even during the financial crisis and cash became tight. He believed in the project and defended it in the face of employees, management and the board.

Mahatma Gandhi has famously said: 'Be the change that you wish to see in the world'. Employees are loath to support change initiatives until they are sure that management is behind them. Innovation has to be driven by the top management team or it is doomed to failure. In our experience – and especially in our Executive MBA workshops – we learnt of various lower- and middle-management initiatives to revolutionise organisational architectures, but they all failed. All too often, CEOs will revert to 'sticking with what you know'. But never forget that how a project starts is going to determine how it will end.

Business model innovation has to be implemented top-down. Otherwise it will not succeed. This is by no means to suggest that lower and middle managers in large firms or even the employees of SMEs cannot contribute in significant ways. But when push comes to shove, we must bear in mind that successful implementation almost always hinges on top management support – not just because resources need to be distributed during roll-out, but most importantly in order to offer direct opposition to resistance.

Involve employees in change management

Make sure that employees are directly involved in change management, actively shaping processes and defining tasks. An involved employee is an open-minded employee. An automotive supplier once explained pointedly: 'Change processes involving employees are like hiking with a backpack. You can't walk as quickly as you would without a backpack, but you're carrying all you need with you. You just take a short break and you're ready to set off again or start exploring your destination'.

A medium-sized printing company in a German-speaking country, like most of its competitors, was experiencing considerable margin pressure. Its managing director, on the other hand, was dreaming of the print shop of the future. At night and on weekends he spent his time developing a concept for a radically different company. He presented his labours to company employees at a strategy workshop and was surprised to find that most of them were very sceptical and openly resistant to his idea. This is a common issue mostly underestimated by top management. CEO and bestselling author Jim Collins offers an interesting picture: he tells his staff that the company is like a bus. The bus is leaving for a particular destination and anyone who wants to go

elsewhere had better find a different bus. First a CEO should get commitment from his team; discussions on jobs, position and task can follow later on. In the words of Collins: First check out who is on the bus, then ask where they sit in the bus.

That's what the metaphor tells us. In practice such a leadership style is often met with subterfuge. Employees will go through the motions to appear to accept change, but will continually create administrative roadblocks. It can be very difficult to handle such a situation.

An effective strategy to develop innovations is to involve employees from all levels within the company. When we conducted an innovation project with a large shipping company, we made sure to include the company's truck drivers in the process. Instead of relying on PowerPoint presentations – which have often no power and no point – we used a set of special building blocks to experiment with new processes (and to look at the *how* question). The truck drivers loved it, motivated to implement innovations that they had personally helped design. They worked tirelessly on implementing the new business model – the most inspirational speech in the world wouldn't have motivated them anything as much.

The good news is that you can influence motivation. The bad news is that it's a lot easier to destroy motivation than it is to build it up. One offhand comment by a CEO on an employee's blog spreads like wildfire through a multinational corporation. The CEO and his communication advisers may try for months to correct the faux pas, but to no avail. A few thoughtless seconds can damage the employees' trust in their leader irreparably.

Establish champions and change management leaders

Change management processes require early champions and change drivers within the company who push for change in the business and mobilise the masses. Such champions are often pioneers who contribute enormously to the innovation process. But it might also make sense to ask the most vocal change resisters to become champions, especially if their opinions are very influential. When we were supporting a far-reaching innovation project in a high-tech company, one of the middle managers repeatedly and vehemently opposed change, and had succeeded in convincing other employees to do the same. But notwithstanding, we asked this manager to think that he might well become one of the core change drivers in the company and convinced him to join the change management task force. Despite significant initial difficulties, the strategy worked out surprisingly well. The manager no longer felt like a victim, and became someone who could actively shape change instead. Thus, the motivation of both the manager and that of the supporters of change increased substantially. This strategy of turning victims into active participants can save a lot of the time. Any time lost early on is more than compensated for by faster implementation later.

Most innovation projects meet with about 15 per cent opposition, 5 per cent support, and 80 per cent indifference. In each situation you will need to

evaluate how much time you want to spend on convincing your opponents of the merits of your idea. In a situation such as the one described above, where you find yourself head-to-head with an influential manager who has many supporters, it may well make sense to make the necessary effort to convince that person to change sides and back your project. For example, a production manager with 25 years of experience in the same position is unlikely to support the idea of outsourcing his production. You should not direct all your energy towards the opposition. Instead, address the indifferent 80 per cent who are quietly watching from the sidelines. Politicians are well aware that it makes more sense to try to win over the undecided majority in an election rather than the supporters of the opposing party.

Avoid cognitive biases

The analysis and selection of new business model concepts regularly give rise to the same errors of judgement and wrong decisions. Here are some of the most common reasons for this.

On any given day, an average human makes roughly 10,000 intuitive decisions about all sorts of mundane things, such as when to get out of bed or what clothes to wear. But in the world of the engineer or scientist, one needs to be a Nobel Prize winner to be allowed to make intuitive decisions. Ordinary project teams are expected to use elaborate utility analyses to justify their decisions, despite the fact that in the 1970s Herbert Simon showed that these very collective decisions within the enterprise are extremely irrational. Our emotions play a considerable role in decision-making and our gut feelings are more important than we would like to believe.

Managers are human beings too and have cognitive biases like everyone else. Systematic mistakes in choosing between ideas can have a variety of causes, among which are the following seven psychological phenomena:

- 1** *Status quo bias*: It is natural to want to preserve the status quo, and human nature being what it is we tend to defend the dominant industry logic against a conflicting new business model. It is important to understand that this does not necessarily imply being afraid of change.
- 2** *Centre-stage effect*: Present someone with three options and they are most likely to go for the middle course. This is true for almost all countries; generally, people don't like extremes.
- 3** *Anchoring*: Once a number (however random) has been suggested, all future alternatives will be measured by it. Experienced car salesmen are well aware of this pathology: they will almost always start by showing the customer a model with all the extras, and its high price lodges in the customer's mind, making other cars seem cheaper. Similarly, if a project business worth US \$300 million to top management and in fact 'only' US \$50 million are effectively generated, management is likely to find this result disappointing – regardless of how useful this was for the company's growth.

- 4 *Sunk costs*: Even when a company has not managed to capitalise on an innovation, it is much easier to abandon a US \$50,000 project than a US \$3 million one.
- 5 *Frequency validity effect*: The more frequently we hear a fact, the more likely we are to believe it. Boards of directors will often be willing to believe ridiculous forecasts, just because they have heard them over and over again. Letting go of indoctrinated ideas is incredibly difficult.
- 6 *Zero-risk bias*: Option A, where a relatively small risk is eliminated, will be preferred to option B, where a much larger risk is drastically reduced. This is true even if the expected value of option B is greater than that of option A. In other words, we are ready to give up a whole lot for a sense of security. A new business model with a high net present value will always be seen as more risky than investing in the existing business.
- 7 *Bandwagon effect*: In 1951 Solomon Asch conducted conformity experiments to demonstrate the power of peer pressure. Humans have a tendency to follow the herd. As long as there are no dissenting voices or if the boss has argued convincingly, most employees will jump on the bandwagon despite having personal doubts.

Routine decisions are easier to make than big strategic ones. And for this reason it is important to call them into question more often. Everyday decision-making all too often ends up addressing the symptoms of a problem rather than its causes. For this reason Toyota introduced the '5 Whys' technique: each time you encounter a problem, ask 'why?' five times – with a new why for each answer. This will help to uncover the root cause of problems and help you make more informed decisions.

Rules for good decision-making

- **Innovation usually occurs in conditions of high uncertainty. Make sure you have a solid grasp of the facts on which to base your decision.**
- **Keep the number of decision-makers to a minimum. The presence of anyone who does not need to be directly involved will just make the process more cumbersome.**
- **Analyse underlying causes. Keep asking why.**
- **Be open to your gut feelings. Intuition is based on experience and subconscious knowledge; it can be very helpful in making complex decisions.**
- **Avoid cognitive biases. The first step is to be aware of them.**
- **It will be easier to implement your decision if you can achieve a consensus among decision-makers.**
- **Be courageous: you can fix mistakes, but indecision keeps everyone from doing their job.**

- **Address power struggles and conflicts of interest openly.**
- **Learn from your mistakes: We all make mistakes, but do try not to make the same ones twice.**

The Fat Smoker syndrome

Tap and shower fixture manufacturer Hansgrohe's CEO Hans Grohe once said: 'To innovate you need: brains, patience, money, luck...and stubbornness'. Innovation means change, and change is not easy to handle. At a conference, a Catholic bishop once stated that it takes around 50 years before an encyclical – a papal letter – reaches all parts of the church and becomes universally adopted. Admittedly, most businesses move faster than the Catholic Church, which with more than a billion members is probably the largest institution in the world. But it is easy to underrate how long it takes to implement a new idea. Researchers estimate that it takes 30 years for a groundbreaking development to progress from initial idea to a commercially viable product.

Middle management often extols the value of short-term strategies that react to market circumstances. Kodak used short-term strategies to keep its analogue photography business going. But the expression 'short-term strategy' is in fact an oxymoron, because trying to reach short-term goals is not strategic by definition. Many companies keep holding on to paradigms that have long become obsolete as a result of market, technological, consumer, and competitor developments.

Employees of such companies are like fat smokers: they are aware of the health risks and have a strategy to solve the problem within their grasp. But they lack the determination and discipline to keep their promises. The temptation of another cigarette or sumptuous meal is just too much. It is not a matter of expert knowledge: despite all their training, doctors are above-average smokers. To bring the analogy back to the world of business: an impending contract that will cover at least part of your fixed costs is better than nothing, and the temptation to go for it is great, despite the knowledge that the company cannot survive over the long term if the costs are not covered in full. Yet it can be very difficult to resist temptation and turn down that small contract in favour of investing in future-oriented radical change. Both are necessary: doing business for today and preparing for the future. The problem starts when the company concentrates in a too limited manner on today's business.

And returning to our medical metaphor: once a tumour is sufficiently advanced, the only remedy is often to radically and perhaps painfully excise it – even if the patient is less well initially. Consultant and former Harvard Professor David Maister has explored the Fat Smoker syndrome in depth and sees management's responsibilities exactly here: leaders must develop energy, discipline, and focus to resist short-term temptations and do what is good for their sustainable business.

Define a plan of action

A central step in successful change management is to define a rough plan of action. This serves as a blueprint for employees' everyday decisions and helps to allay their fear of uncertainty. The twin goals you must bear in mind are to develop a long-term vision that inspires your actions and achieve short-term milestones that confirm you're on the right path.

Develop a vision

Every change management initiative requires a clear, long-term vision. Where is our company headed? Where will it be in three, five, seven years? Why do we need to change? Communicate your vision clearly. The reason most business model innovations fail is because their goals are not clear enough.

A vision is a dream with a deadline. If you don't define by when you want to realise your vision, it remains a dream. If you don't have a dream because you are too taken up with everyday deadlines, you will remain stuck where you are.

But the cause of failure is usually not too little communication, but too much. Today's employees are flooded with information: emails, interoffice memos, weekly meetings and more, and it is often difficult for them to understand what is important and what isn't. One manager we worked with on a business model project went so far as to install an out-of-office reply for anyone trying to contact him: 'I will not be reading my emails any longer. Please call my mobile phone should you have anything really important to discuss'.

If you plan a change management initiative, you need to consider how you can best reach your employees. One of our project partners, a company in the high-tech industry, successfully used town hall meetings. These meetings are the ideal place for change managers and employees to meet face to face, and are typically held at all major company locations and all employees are invited to attend. Bühler launched its new innovation initiative in an unusual manner, putting posters, flags and stickers all around the company's premises, inside and outside buildings, and broadcasting a video message. Remember that in change management, 'perception is reality'. If you don't define a plan of action, employees can't follow it.

What matters is the substance of what you have to communicate and how you do it. It is important to speak the relevant employees' language when you tell them about your plans. Your message to upper management will necessarily be different from the one directed to your sales representatives. Further, you also need to be clear about what your intended changes truly mean for the people you are addressing. Each employee should understand how he or she will personally be affected: How will life change for your sales team if you introduce online selling? Which jobs will stay and which ones will have to go?

What new tasks will the employees affected have to take on? These questions need to be addressed in order to get commitment for change.

Earn a few quick wins

In addition to having a solid long-term vision of where you want to go, you want to reach your initial goals quickly. Harvest the low-hanging fruit first. In business model innovation a quick win may take the form of positive customer feedback, successful negotiation with an important partner, or even obtaining a first contract once the new business model is in place. Success at this level is important because it provides a sense of security to your business in transformation. It indicates that you're moving in the right direction and helps to silence the cynics. Make a celebration out of these quick wins to generate positive momentum for the entire business.

In 2011 3M, perhaps the most innovative company in the world, created 3M Services to establish itself as a service provider in several countries, offering one-stop customised solutions, including consulting, project management, training and after-sales support for all 3M products. This was a huge step for a company with more than 50,000 products and 45 backing technologies, for products and technologies run in 3M's blood. So the endeavour was met with a fair amount of scepticism within the company. Management had to demonstrate that its service business would be beneficial to the company's product line as well. The arrival of the first contracts, which also increased revenues from product sales, very quickly led to acceptance of the new business model.

Management should actively seek and orchestrate quick wins. You do not necessarily have to wait for them to happen, for to a certain extent you can control them by actively seeking feedback from customers or focusing on the aspects of the business model that can be implemented relatively easily to attain some early objectives. Especially during the early stages it is important to ensure that employees are continually informed about your successes, however minor.

But meanwhile, don't lose sight of your long-term vision. Try to maintain a healthy balance between short-term and long-term goals.

Define structures and goals

A third important aspect of change management is the definition of formal structures, processes and goals. Everyone needs incentives to do things, so it is important to set up the appropriate formal rules of conduct for the process of business model innovation.

Set the structures

Business model innovations can be put into practice in various ways: as part of the existing business, integrated in a new business unit, or even as their

own independent company. External circumstances will dictate which one is the best form to use. In the 3M scenario we mentioned above, the company knew from the start that 3M Services should be a new business unit, in order to demonstrate its independence from 3M's core business. CEWE also went for the spin-off variant for its new digital copying product business because the new company's radical mission would otherwise have jarred with CEWE's established highly efficient technologies and products. This thinking gave rise to the founding of CEWE Digital in 1997. In order not to cannibalise its core business with new digital products, CEWE Digital hired mostly new employees from different technological backgrounds, and the new company enjoyed CEWE's full support. It was given enough freedom to develop new processes, production technologies and products using new digital applications. CEWE Digital was reintegrated into the core business in 2004. Many of the parent company's employees were trained to work with the new digital products and CEWE's product portfolio was successively strengthened with more and more digital products. Today, CEWE is the leader in almost all European markets, with an average market share of more than 40 per cent. In 2009 the company developed over 2.6 billion photos and over 3.6 million CEWE photo books and gifts.

Regardless of whether or not you intend to spin off your new business, it is important to ensure that the innovation is 'protected' from the core business in the early stages. Evonik innovates in separate facilities and the company's venture teams are treated like start-ups. Many companies take this procedure a step further and install security systems to limit access to facilities where business model innovation is taking place. The elevator and escalator manufacturer Schindler created physically separate protected buildings as a safe haven for radical innovations, to which only authorised employees have access. In the 1980s Steve Jobs and his team developed the Macintosh series in an independent building complex at Apple, crowned by a pirate flag!

The main reason for taking such drastic measures is to make sure that your new business model doesn't become cannon fodder for your internal counterparts whose business you are cannibalising. In large companies these opponents of your project are waiting to pounce on your inevitable mistakes and failures. When SAP was developing SAP Business ByDesign, its cloud-based solution tailored to medium-sized companies, the team was housed in a separate building that was protected by strict security measures, ensuring that the other SAP employees could not interfere with the task force's work.

Teams working on new business models do best when they are administratively and physically independent of the company's everyday business. Such a set-up enhances their ability to break out of the dominant industry logic and take radically new approaches. And at the same time, the likelihood that the new

business model will survive is increased. While early mistakes are inevitable, they don't need to mean the end: the new business model has to be actively pushed into the organisation to ensure its acceptance. This is a difficult path to go.

Define goals

In addition to your vision and a long-term action plan, specific goals in respect of inputs and outputs are also very important in change management. For the classic definition of goals we recommend the SMART approach:

- **Specific:** Goals must be specific and precise;
- **Measurable:** Goals must be clearly measurable;
- **Acceptable:** Goals must be accepted by the team;
- **Realistic:** Goals must be reachable;
- **Time-bound:** Goals must be achievable within a given time-frame.

In business model innovation you must be careful about when you institute goals. In the earliest stages of development especially, it will be more important to leave space for creative freedom than to set fixed goals. A manager of business development at a large software company complained to his boss that the firm's controller was continually breathing down his neck and requested that the company should treat business development in the same way as venture capitalists treat start-ups: as investments in a new business, in which the management team needs a certain degree of creative licence to be successful. Fortunately, his boss listened, and he was allocated a three-year budget, with no pressure to present his results before time.

Henkel, the consumer goods manufacturer, uses '3x6 teams': six R&D employees work freely on six product concepts for six months. The only expectation the company has is six potential concepts at the end of the period, nothing more. Such an approach is doubtless fruitful in business model innovation as well, where the need for freedom is just as great.

Setting goals too early can suffocate business model innovation. Before instituting any measures you should test a pilot in the market. Once goals have been set, there is a tendency for decisions to favour achieving short-term success rather than creating the necessary conditions for long-term success. 3M was aware of this danger when it allowed the CEO of 3M Services to work independently for one year before coming in to set clear goals and KPIs. As 3M Services' CEO remarked: 'It was such as a dream, not having any goals for a whole year. It was the right strategy too – the business model needed time to unfold properly'. And time has shown that he was right. The company is now talking about generating a quarter of its revenues with integrated solutions in the medium to long term.

Implement performance management systems

In addition to defining goals, it is important to measure the performance of individual employees, teams and even the innovation itself over various dimensions. Dashboards can help you to keep track of your progress and make any necessary changes if you find you are veering off course. The progress made should be measured against your goals, but it may also serve to spur competition between teams. For example, in one of our innovation projects we posted the number of quick wins achieved by the regional teams in the company's cafeteria on a weekly basis. Competition among the teams heated up, but it stayed friendly and the implementation process got a great boost.

Incentives are paramount if you want to achieve a goal, so be sure not to miss out on this important mechanism when implementing your business model. Needless to say, they need not always be monetary in nature; other incentives such as commendations will motivate employees as well. CEWE rewards employees with a bonus for an outstanding idea, and they are invited to present it to top management if it is selected for further development. This may often mean more to employees than monetary rewards. The Swiss technology company Bühler holds innovation contests among its employees. Winning teams can choose to attend a course at Harvard Business School or apply for seed money to start a business based on their idea. Denmark's FLSmidth, a leading supplier in the cement and mineral industries, uses similar incentives: the winning teams are permitted to take half of their time off work and devote it to implementing their project under the guidance of experts at DTU (Technical University of Denmark) Copenhagen, Denmark's MIT. Rewards such as these provide motivation at two levels: extrinsically, by offering money and status, and intrinsically, in that the task itself spurs employees on. Empirical research has shown that innovations are more likely to succeed with intrinsically motivated teams.

Build capabilities

To market a business model innovation successfully, you will need the appropriate capabilities, built up from repeatedly applied knowledge. But while the right knowledge is a prerequisite for developing capabilities, it still needs to be applied correctly. In other words, the team must stay with the new business model right through until the launch.

Select the right team

Like any other project, business model innovation requires resources. In the earliest phase – design – financial resources will be of less consequence than a clear vision and determination. It is much more important that the management and everyone involved in the project understands what is behind the initiative. Just imagine that Martin Luther King had gone down in history for saying,

'I have a budget...!' However, there's no denying that a budget does provide a tangible sign of top management's support for a project when it takes on the opportunity costs of letting important employees step back from day-to-day business to undertake a new task.

Teamwork is a must in business today. But in practice, team selection is almost always made haphazardly. This can be a problem insofar as a project can only be as good as the team working on it. Team selection needs to take individual factors into consideration such as professional knowledge, working style and sociability, while paying attention to the balance between the various functions and disciplines represented. Each and every team member must make a creative contribution, for long gone are the days when Henry Ford reportedly lamented, 'Why is it every time I ask for a pair of hands, they come with a brain attached?'

In the past the task of innovation was often limited to the engineers in research and development; only 'creative' employees were expected to innovate. Today, we know that innovation – and this is especially true for business model innovation – is an interdisciplinary, highly interactive process in which as many perspectives as possible need to be considered. In addition to the R&D department, a business model innovation requires right from the start the involvement of marketing, strategy, sales, manufacturing, logistics and purchasing, as well as customers and suppliers. If the project was started out by just a small core team, complementary input will have to be sought as it becomes necessary. Otherwise there is a risk of missing blind spots in the design of the business model which, unattended, could lead to its ultimate demise.

The following ten points should help you in recruiting team members.

Team selection checklist

- 1 Does the team include members from all relevant functional areas such as marketing, technology, strategy, logistics, manufacturing and purchasing?**
- 2 Are customers and potential customers included or at least represented?**
- 3 Are there enough members who are capable of thinking outside the box?**
- 4 Have we included team members from outside our industry?**
- 5 Does the team have enough motivation to overcome the initial organisational inertia?**
- 6 Are we sure this isn't just a theoretical exercise? Are there enough practical team members who know about day-to-day business?**
- 7 Is the team well-connected to the rest of the company, but at the same time far enough removed to do its own thing?**
- 8 Is there a team member who can act as catalyst to push the project forward?**

- 9 Does the process require an external moderator?
- 10 Do we have a sponsor within top management?

Build missing capabilities

Once you start to work out the details of your business model, you may find that you lack certain capabilities to implement the project. This can be remedied in three ways:

- **Develop the capabilities internally:** Capabilities can be developed in-house through learning on the job, recruiting new employees, or organising training sessions. But this is a very time-intensive process that requires a great deal of patience. When the technology and consulting company Zühlke decided to create a new business unit called Zühlke Ventures in 2010 to finance and lend technological assistance to start-ups, the company's venture capital know-how had to be built up from scratch. Two members of the top management team devoted all of their time to accomplishing this task. Since then the company has become a familiar figure among start-ups and entrepreneurs while maintaining its position as a technology expert.
- **Partner with others:** Your second option for building capabilities is to partner with others. Partners can bring whatever capabilities you may need to your business. This is easier to accomplish than hiring employees for the same purpose. 3M Services, for instance, decided to offer solutions based on 3M products, but opted to source all the required services from partners, given that 3M Services lacked the necessary resources and service capabilities itself and that enough skilled service providers were available to take on the task. Here is an example of how the system works: a car dealership ordering 3M vinyl stickers for its cars communicates exclusively with 3M Services, from scheduling the deadlines to billing, but the vinyl itself is applied by a certified 3M partner. 3M Services takes advantage of the capabilities of over 30 different partners. In other domains the company may work with just one single service provider.

When it went from a push strategy to a pull strategy in 2000, Switzerland-based sanitary parts producer Geberit made a fundamental change in its business model. Instead of selling its products to retailers, it began to serve private households directly. Not possessing the necessary know-how to implement this strategy, as it had never served end customers directly before, the company decided to create a network of partnered plumbers. Geberit offered these partners incentives to join the network, such as free support, conferences and continuing education and training. The new business model worked out well, and Geberit is now the market leader in Switzerland and Germany.

- **Buy capabilities or businesses:** The final option for building capabilities is to buy up entire businesses or business units. While this is the most rapid strategy for acquiring capabilities, it is also the riskiest.

Not too long ago Germany's Lufthansa was struggling to compete with low-cost carriers. Since Lufthansa's cost structure made building its own low-cost airline impossible, the company decided to purchase Germanwings instead. Now the airline is straining to juggle the demands of its low-cost airline with those of its premium business. The situation is particularly tricky because the new business model continues to encroach on the old one, causing some consternation among customers. One disgruntled customer wrote on the airline's Facebook page: 'I'm really starting to wonder whether Lufthansa has all its ducks in a row'.

Oracle founder Larry Ellison is famous for his ostentatious buying sprees. The company originally dealt in database software, but has spent more than US \$50 billion to buy other companies over the past ten years. The intention of these purchases was to transform Oracle into a business IT Solution Provider. Today's business customers can satisfy all their IT needs at Oracle and obtain database software, hardware with operating systems (acquired from Sun), virtualisation and administration software (from Virtual Iron), ERP software (from PeopleSoft, BEA, and Siebel), and cloud-based CRM (from RightNow). Some industry commentators are sceptical about the technical and business implications of integrating these acquisitions: the business model is still in the process of being developed and its long-term success has yet to be determined. But at Oracle, business is booming. Forbes has named the company the second largest software provider in the world and at least part of its success can be attributed to its acquisitions.

Innovations can be acquired too: many businesses have gotten into corporate venture capital. Among them is 3M New Ventures, which continually screens the market to find new interesting investment opportunities. Unlike a number of similar initiatives, 3M New Ventures seeks opportunities only in strategically promising business areas where 3M could use and expand its core competencies.

Establish a culture of innovation

Technology-oriented businesses especially often underestimate or even completely fail to consider the impact of company culture in change management. Culture is often treated with a fatalistic attitude: 'Everything is a part of a culture, but we're just engineers...that's the form our culture takes'. In fact, culture can be actively shaped by management.

3M is well-known for its strong culture of innovation. The '15 per cent rule' is just one visible aspect of this culture. All 3M employees are allowed to invest 15 per cent of their time into creative tasks beyond their core job description – a concept that has since been adopted by other innovative companies such

as Google. When working with 3M people, you inevitably get a sense that openness to new ideas is an inseparable part of their identity. 3M organises an innovation summit every year where employees can openly discuss their innovation ideas.

W. L. Gore & Associates (Gore), most famous for its Gore-Tex membranes, emanates a similar spirit of innovativeness. This company has over 8,000 employees who elect the chairman of the board in a democratic manner. The company steadfastly operates under the guiding principle that everyone is intrinsically motivated to work hard and doesn't need to be led. Gore's 8,000 employees are all associates (partners). Individual employees are elected by their team mates to take on the role of leader for the duration of a project. New arrivals are not assigned a direct supervisor, but rather are mentored by an existing employee. The divisions of the company are never allowed to have more than 150 people, so as to ensure that they remain flexible and no hierarchies develop. If a given division grows larger than that, it is divided according to what the company calls the amoeba principle. Thanks to this approach Gore has maintained its status as a highly innovative and open company not only in the textile field but increasingly in medical technologies, electronics and industrial products. CEO Terri Kelly fully supports the company's almost anarchic culture: 'No ranks, no titles. If you call a meeting and nobody is there your idea was probably not good,' she says.

Gore's statutes are composed of the following principles:

- 1 *Freedom*: Be yourself, develop yourself, and develop your own ideas. Failure and mistakes are accepted, build on them. Making mistakes is viewed as part of the creative process.
- 2 *Commitment*: We are not assigned tasks; rather, we each make our own commitments and keep them.
- 3 *Fairness*: Everyone at Gore sincerely tries to be fair with each other, our suppliers, our customers, and anyone else with whom we do business.
- 4 *Waterline*: Everyone at Gore consults with other associates before taking actions that might be 'below the waterline' – causing serious damage to the company. Other than that, experimentation is encouraged and demanded.

Harvard professor Michael Stern conducted a study to determine the specific traits exhibited by companies with a strong culture of innovation:

- **Employees show initiative**: Empowerment is very important.
- **Permission to work on unofficial submarine projects**: Ericsson explicitly allows its employees to spend time on unofficial innovation activities. These are projects not helmed by management. The Touring estate car, one of the most successful models at BMW, was developed by one of the company's employees in his garage because the company had no plans to do so itself. Not until management had seen the first prototype did it believe the model could succeed. But of course this is

a two-edged sword: we only hear about submarine projects when they are successful. It's impossible to say how many more millions have been lost at sea.

- **Serendipity:** The ability to seize upon lucky coincidences. Discovering and implementing opportunities that seem to offer themselves by chance is the key here. This is how the Post-it came into being at 3M, at first an accidental idea but later on successfully commercialised. Gore's amoeba structure is specifically designed to promote this process.
- **Employee diversity:** Companies are more innovative if they have employees of different technical, occupational and social backgrounds, genders and nationalities. The global design firm IDEO sees diversity as a central driver of creativity.
- **Communication, communication, communication:** Innovation almost always results from communication. Ninety per cent of all business model innovations recombine existing ideas, concepts and patterns. While exceptional discoveries by individual inventors remain important, they pale in comparison to the innovation that can be achieved by teamwork.

All these aspects can be consciously steered and influenced by management. It is more difficult to shape a company's culture than it is to introduce a new development tool, but it is possible. The most important levers at your disposal are the employees, goal-setting, how you deal with failure, and you yourself as a role model.

Successful business model innovation demands an open culture and the ability to see failures as a source of learning. This is the paradox: the doubters are right nine times out of ten when they reject a new business model idea, but if the doubters rule the company then innovation has no chance and the company will be overtaken by its competitors. A strong innovation culture will help you to create the necessary momentum to break out of your dominant industry logic. But it won't be easy. Humans are creatures of habit and you will need to work tirelessly to make everyone realise how much more exciting innovation is than the status quo.

[PART TWO]

55 winning business models –
and what they can do for you

As our empirical findings show, repeating patterns build the core of many new business models. This finding works perfectly well for every prospective business model innovator, as thinking outside the box is hard to do from scratch. The structured set of 55 business model patterns falls right into place when trying to overcome mental barriers that may block the road towards new ideas.

The key premise for a successful application of the Business Model Navigator is an in-depth understanding of these 55 patterns. Creative imitation and recombination require a deep comprehension, as imitation does not merely mean pure copying. Rather, a business model must be applied to one's own situation and thereby understood with regard to its overall meaning, key success factors and peculiarities. Only then the power of recombination and creative imitation may be released.

In this part the 55 business model patterns are explained in detail. The descriptions provided here are enhanced with content on early origins, description of the general logic, triggering questions, graphics and a great number of practical examples and anecdotes. In this way, you will gain deep insight into every pattern and expand your knowledge.

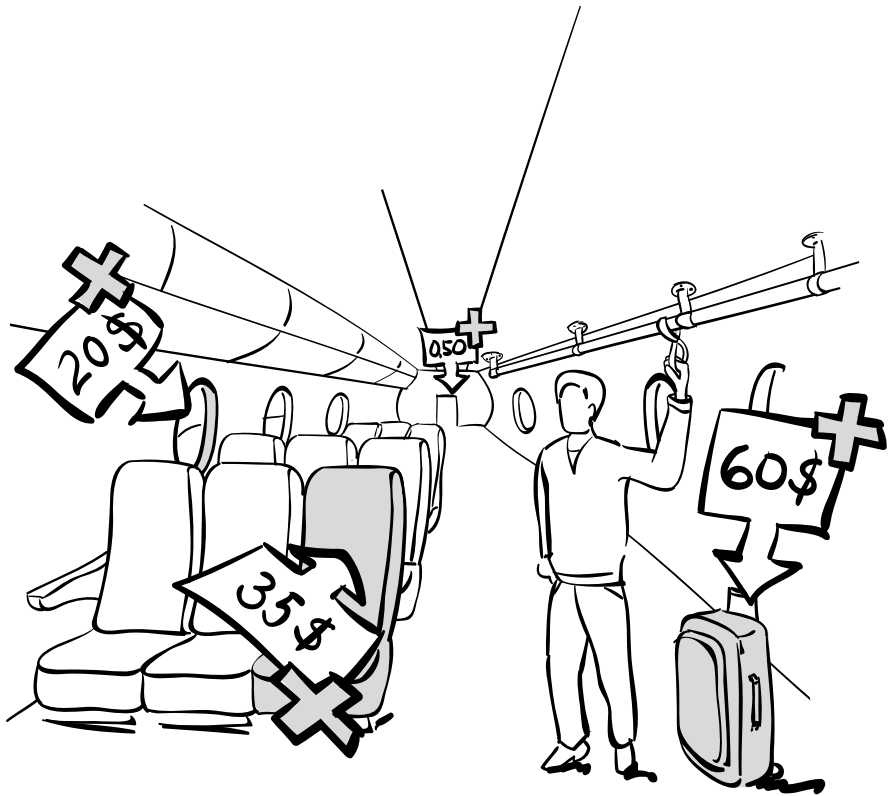
Key takeaways from this part:

- To innovate your company's business model, you don't need to reinvent the wheel – most of the successful business model innovations from the past can be traced back to at least one of the 55 business model patterns.
- A business model pattern is not restricted to a single industry, but can be applied in various different settings – the key to business model innovation is to find a way to apply a business model in a context it has not been used before.
- Take the 55 patterns as a common ground for the rethinking of your own business model and for the creation of entirely new business models.
- Patterns are not carved into stone – innovative concepts, as for example by recombining, may evolve already while reading this part.

Add-on

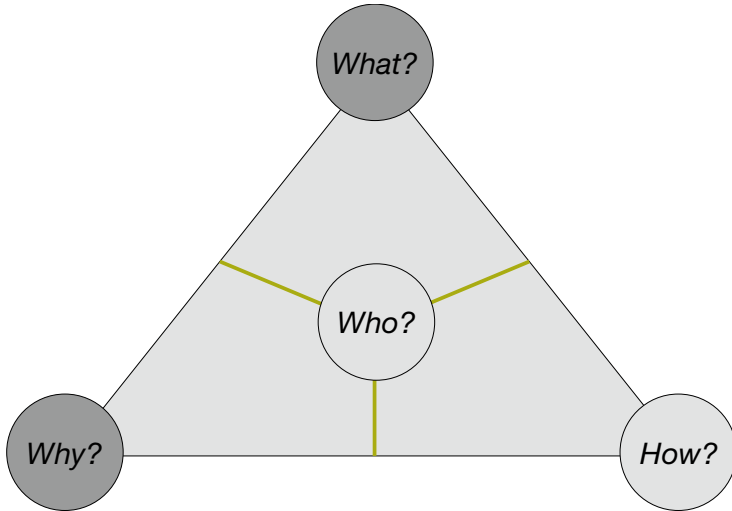
Additional charge for extras

1



The pattern

In the Add-on business model, while the core offering is priced competitively, numerous extras drive up the final price. In the end, customers pay more than originally anticipated, but benefit from selecting options that meet their specific needs. Airline tickets are a well-known example: customers pay a low price for a basic ticket, but the overall cost is increased by 'add-on' extras such as credit card fees, food, and baggage charges.



The Add-on pattern generally requires a very sophisticated pricing strategy. The core product must be effectively advertised and is often offered at very low rates. Online platforms support this kind of pricing since they allow customers to compare (basic) prices. FareCompare.com and Skyscanner.net compare cheap flights, while other services are available to compare the price of hotels, car rentals, vacations and more. Such hard price competition promotes a winner-takes-it-all philosophy.

As described, customers pay a hefty premium for extra features (why?), which may cover anything from additional attributes, accompanying services, product extensions, or even individual customisation of the product. It's up to customers to decide whether they want to spend additional money on add-ons or whether they will settle for the initial basic value proposition. This is where they can derive benefit from the Add-on pattern, being free to choose whether they want to customise their product according to their individual preferences or prefer to disregard superfluous extras (what?). Conversely, customers may wind up paying more for the final product than they would have for similar competing products because they chose additional optional features (what?).

When creating a value proposition, businesses generally need to determine which selection of product features will yield the highest marginal utility for the

greatest number of customers. Starting with the core functions of the basic product, each customer can then choose his or her preferred add-ons so as to derive an optimal level of utility from the product.

The Add-on business model is especially well-suited for hard-to-segment markets, where customer preferences often diverge vastly. Simply dividing products into different levels or versions is insufficient; and no optimal value proposition can be guaranteed for a large number of customers. Thus, it has become standard in the car industry to offer optional features and extras at a premium in addition to versioning the basic product.

The origins

The exact origins of this pattern are hard to trace. Additional offers or modular products have existed for a long time. Particularly in the case of services, it is logical to offer special services or additional features to fully exploit a customers' willingness to pay more. Industrialisation also allowed companies to create modular products and consequently to offer additional features and extras.

All of us have at one point, usually in the middle of the night, been tempted by that refreshing bottle of water in our hotel minibar. The hotel, however, charges quite a premium for this added service. Beverages and snacks cost a pretty penny. Taking a leaf from the hotel book, the tourism industry has since made wide use of the Add-on business model. Tour operators such as cruise lines undercut each other to offer the best bargain, with packages that normally include basic transportation and accommodation on board for a low price. Staterooms with a balcony, shore excursions, beverages, special events, the gym and spa are all available to customers at a premium.

The innovators

Ryanair, founded in 1985 as a regional Irish airline, is today one of the largest low-cost airlines in Europe. Ryanair follows a clear budget airline strategy. In 2011, the company had 76.4 million passengers, making it Europe's largest airline, surpassing even Lufthansa, the next largest airline with 65.6 million passengers. An aggressive pricing strategy and a lean cost structure ensure the company's profitability. These approaches are directly enabled by the Add-on business model that Ryanair pursues.

Ryanair offers its basic fares at very cheap rates. Many complementary extras such as on-board service, meals and beverages, travel insurance, priority boarding, additional or excess baggage are then charged separately. Moreover, many other costs are passed on to customers, which are included as an add-on in customers' invoices. Several years ago, Ryanair's Irish CEO, Michael O'Leary, told us in a strategy discussion with a wry smile: 'There are three things important in business: costs, costs, costs. The rest you leave to the business schools'. Stringently adhering to such a hard line leads to cutthroat competition.

How Add-ons add up

Ryanair	
Base Fare:	19,99€
<i>Checked Baggage (15kg):</i>	
<i>Fee per bag per one way</i>	
<i>flight 25€ (x2)</i>	50€
<i>Sports Equipment</i>	50€
<i>Allocated Seating:</i>	
<i>Premium Seat (incl.</i>	
<i>Priority Boarding)</i>	10€
<hr/>	
Sub-Total:	129,99 €
<i>CreditCard Fee (2%)</i>	2,59€
<i>Food and Beverages on</i>	
<i>the plane (e.g. Pepsi-Coke</i>	
<i>& Premium Sandwich)</i>	7€
<hr/>	
Total:	139,58€

*Price for a flight booked online at ryanair.com,
high-season, figures as of March 2014*

Thanks to online reservations and transparent product pricing, this strategy is a workable path to increase customer numbers.

The German manufacturing company and automotive supplier Bosch, unable to serve the market in a comprehensive way, was forced to create a new business model for its engine production unit. Here's why: A central part of each engine is the Electronic Control Unit (ECU), which is a combination of hardware and software that has to be customised for each type of engine and car. Previously, Bosch had sold such customised hardware and software as a package to car manufacturers, who paid for it per unit produced (including a premium for hardware and software customisation). While suitable for large series of engines (to achieve economies of scale as Bosch had to adapt the settings just once for the whole series), this procedure was not appropriate economically for smaller orders of engine series such as special sports cars manufactured in smaller quantities.

To resolve this problem, Bosch founded a completely new legally separate entity, now called Bosch Engineering GmbH (BEG). When it was founded in 1999, it employed only ten people. The company builds upon standard hardware and offers customisation as a separate service, inbuilt software being customised as required to address specific customer needs. The new business

model is also suitable for smaller orders, while large orders are still processed by Bosch itself. The strategic decision to found a separate business model innovation unit turned out to be a major success. By 2013 BEG grew to over 1,800 employees and generated more than €200 million in revenues per year.

The Add-on business model is not only relevant for airlines that compete on costs, but also for luxury products. The car industry successfully applies the Add-on pattern: here, additional features and extras sometimes actually improve the contribution margin more than the production car itself. The Add-on business model is particularly profitable for luxury car brands such as Mercedes-Benz or BMW, which are able to offer their customers individually tailored products and thus realise bigger margins. Higher-priced manufacturers are able to position themselves as premium brands, for their numerous possibilities to individualise cars and luxury packages allow them to better satisfy their customers' wishes. For example, when configuring a Mercedes-Benz S-Class, customers can choose from over a hundred premium options. Features include everything from whole packages to individual accessories. Customising your S-Class can easily increase the price by more than 50 per cent over the price of the standard model. At Harley-Davidson the price of emotionalised (Mass) Customisation may double or triple the price of the product. In the past decade the company has also started to introduce cheaper bikes (such as the Sportster Forty-Eight) in order to create entry products and provide a wider platform for profitable customisation.

Another example of the Add-on business model is SAP, a German software company that provides enterprise and management software for businesses. The company offers its standard business suite at a moderate price, but in order to exploit the full potential of SAP software, clients are encouraged to purchase additional features such as Customer Relationship Management, Product Lifecycle Management and Supplier Relationship Management applications. SAP's additional software packages greatly extend the scope of services offered to clients. Customers can purchase basic software, but are also able to specify a configuration precisely addressing their needs. In this way, SAP generates revenue from the basic product and from selling extras as required by the customer.

Finally, Sega is a global software and video game developer with headquarters in Japan and divisions around the world. The company was the first of its kind within this industry to utilise the Add-on business model. As a video game publisher, software and hardware developer, Sega originally manufactured game consoles. However, the company now concentrates on video game software development for third-party hardware and consoles. Sega was the first video game developer to employ additional features within its video games. Termed DLC (downloadable content), these add-on extras could be purchased and downloaded directly from Sega. In line with the Add-on concept, Sega benefited from sales of the game itself and additional revenue through the sale of downloadable extras, while the customers benefited from the individual choice of optional extras for their video games.

The Add-on business model can be used by your company to help certain technologies and accessories break through to the market. Often this requires add-ons to be cross-subsidised. In order to force acceptance of expensive technologies in the automotive industry such as driving assistance systems and to increase the number of units sold, these features are subsidised by pricing other standard extras more expensively.

When and how to apply Add-on

This pattern will work well for your business if your customers are able to choose a basic product first, e.g. a flight from London to Paris or an Audi A4, and then later add options to which they will be less price sensitive. Recent consumer-behaviour research demonstrates that this is often the case for consumer products. Customers initially decide on the basis of rational criteria including price but later drift into emotionally driven purchasing patterns. Once you're hunkered down in that tight economy seat, you don't care how much that beer and sandwich are going to cost you.

The Add-on pattern can also work well in the B2B context when multiple decision makers are involved: Investors often try to minimise their upfront investment so as to maximise their profit when they sell their property later on; the cheapest air conditioning units, elevators and security system will do. This leaves the facility management to deal with mounting service costs down the road.

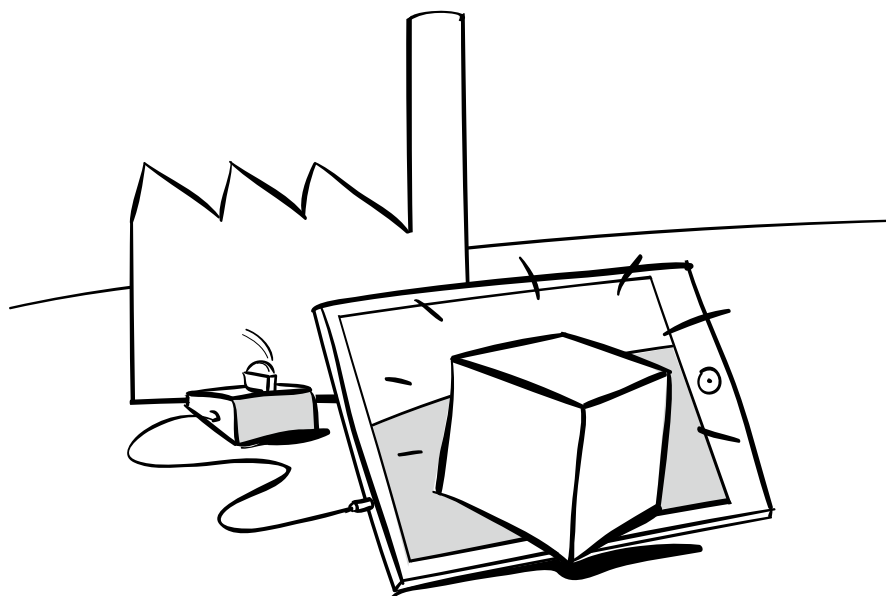
Some questions to ask

- Can we provide a basic product to which customers can be price sensitive and then add on services?
- Can we lock our customers in so that they will buy the Add-on products from us?

Affiliation

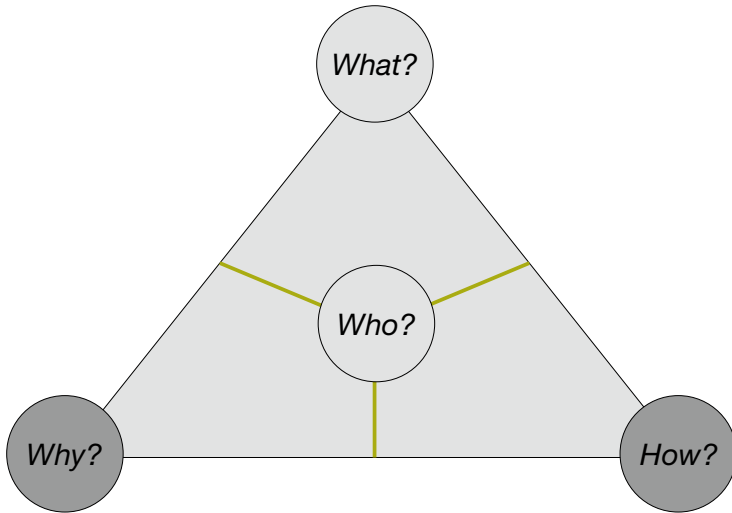
Your success is my success

2



The pattern

In the Affiliation business model, the company's focus lies in supporting other parties to market products in order to benefit from successful transactions. With this the company gains access to a diversified customer base without additional sales and marketing efforts. Affiliates usually operate on the basis of some form of pay-per-sale or pay-per-display system and generally online. A website publisher may, for instance, act as an affiliate by including another company's banner ads on its website in return for commission on 'clicks' or 'impressions'. In other cases, affiliates are able to market their own products on larger networks and pay commissions on sales to the hosting website.

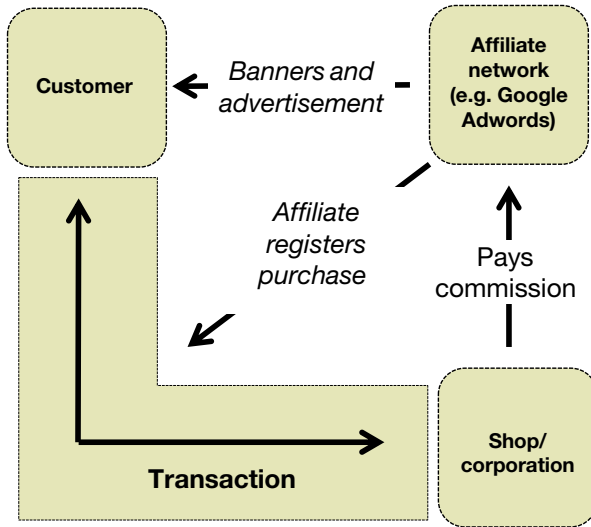


This idea is not new: insurance agents receive a commission on each policy they sell. However, the Internet enabled and facilitated the large-scale and open affiliate programmes with which we are familiar today. A vendor of products or services can set up his or her own affiliate programme or draw on the expertise of professional affiliate network providers. Resellers are generally given a lot of leeway to position the original vendors' offerings as long as they respect certain basic guidelines.

It is crucial that the customer ultimately ends up on the original vendors' website by fulfilling this condition, the customer receives an identifier that allows the vendor to recognise the referring reseller (how?). There are various models for commissions. Most frequently, resellers receive some fraction of the revenue or a fixed sum based on the performance by customers of a predetermined action, for example completing a purchase or submitting a request for more information.

While Affiliation greatly influences the sales channels and revenue generation of vendors, it can also serve as a business model for resellers too, for whom

Affiliation: The business model of Google Affiliate Network



Affiliation is now an important element of the revenue model (why?). A large number of popular blogs, forums, price comparison sites, as well as product and service directories are heavily dependent on commissions or even wholly financed by them.

The origins

The roots of modern Affiliation can be traced back to the genesis of the Internet. One of the first ever companies to create an affiliate programme was PC Flowers & Gifts which started selling its products on the Prodigy Network at the end of the 1980s. A year after PC Flowers & Gifts had moved to the Internet proper in 1995, the company already boasted an affiliate programme with 2,600 partners. Its founder, William J. Tobin, holds several patents related to affiliate marketing and is considered one of the forefathers of the Affiliation business model. According to web marketing experts at ClickZ, it is highly likely that adult sites such as Cybererotica in fact pioneered the concept in the early 1990s. In the extremely competitive adult entertainment industry, commissions of up to 50 per cent of turnover per customer are not unheard of. The business model spread to other industries like wildfire, and refer-it.com was founded in 1997 to keep track of the ever-growing number of affiliate programmes. Not surprisingly, until its sale in 1999, the company financed itself largely from commissions earned from connecting businesses with distribution partners.

The innovators

Affiliate marketing really took off when Amazon introduced its Amazon.com Associates Program in 1996. Amazon, at the time still an online book store, obtained US patent number 6029141 for an 'Internet-based customer referral system', despite the fact that several other companies had previously employed such systems. With this system, owners across the world could recommend books to their readers and participate in Amazon's success by collecting commissions on sales. Consequently, Amazon's affiliate marketing scheme spread rapidly throughout the Internet, not only contributing greatly to Amazon's success but at the same time also profiting from Amazon's rapidly expanding product range. Online discussions and reviews of music or films rarely appeared without an obligatory 'Buy from Amazon.com' button, nor tests of electronics and household goods. Amazon generally distributes 4–10 per cent of turnover per customer to the affiliate partner, at the same time assisting its partners to optimise their sales activities.

A good number of websites and their parent companies would not exist without such affiliate marketing programmes. For them, Affiliation is the central revenue generator in their business model. A prime example of this process is the social network Pinterest, which became successful not only through its buzz-worthy design, but especially on the clever use of commissions. This two-pronged approach allowed Pinterest to become one of the most popular Silicon Valley start-ups within an exceptionally short time. According to the Internet analytics company comScore, Pinterest is the first website to have managed to secure ten million unique visitors per month within less than two years of existence. The concept behind Pinterest is as simple as it is brilliant: users create theme-based virtual pinboards of their favourite pictures and links, which they share with friends and other interested parties. Often, users pin pictures of beautiful items on sale elsewhere on the Internet. Pinterest cleverly links these entries to the original vendor's website and includes its own affiliate identifier. Pinterest has managed to drive even more referral traffic to retailers than Google, Twitter, and YouTube. The company does not publish its financials, but we can probably safely assume that they must be quite impressive.

When and how to apply Affiliation

A strong ecosystem and passionate customers are a prerequisite for this pattern. Affiliation works well because it generally leads to a win-win situation for all the parties involved. Merchants can drive traffic to their business and only incur costs once these efforts translate into actual sales. At the same time the customers or other merchants who are funnelling the traffic are enticed by financial rewards. Choose Affiliation if you know what kinds of customers you want to attract. This pattern can be an excellent option if you cannot afford a direct sales force.

Some questions to ask

- Can we capitalise on new customers and retain them in the long run?
- How do we choose the best possible partners for our affiliate network?
- How can we handle any uncertainties associated with managing this pattern's revenue stream?
- How do we handle backlash from customers if our partners do not deliver on their service?

3

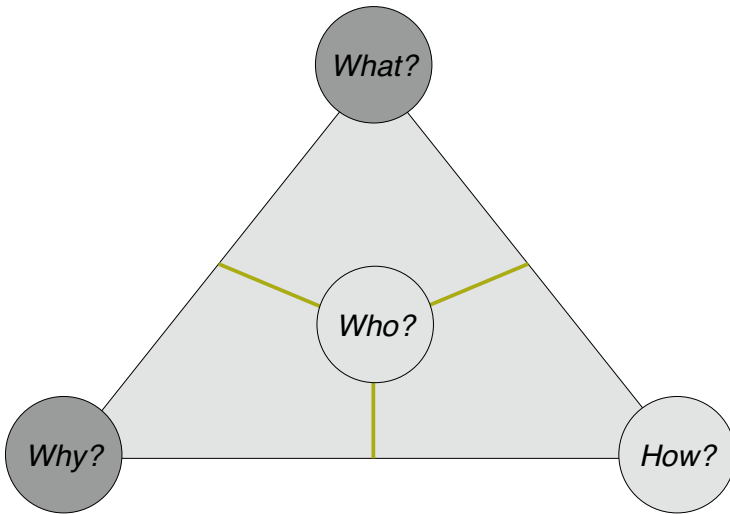
Aikido

Convert competitors' strengths to weaknesses



The pattern

Aikido is a Japanese martial art performed by blending with the motion of the attacker and redirecting the force of the attack. This requires very little physical strength as the attacker's momentum is used against himself. In terms of business models, Aikido refers to products or services that are radically different from the industry standard (what?). In company terms this means that it seeks to occupy a position that is diametrically opposed to that of its competitors, obviating the need for direct confrontation with them (why?). The competitor is likely to be so preoccupied with his own concerns that this new way of doing business will come as a surprise, and his former strengths such as better quality or lower prices can no longer compete against the otherness of the new competitor.



We might say the Aikido principle is a form of differentiation, but a very provocative one. Differentiation factors that have been taken for granted in an industry are eliminated and completely new ones are created. These differentiation elements are in fact not always necessarily new but have their origins in another industry.

The origins

Doing the exact opposite of what one's competitors are doing and using their own weapons against them is an age-old concept. In the Bible, the shepherd David managed to overcome Goliath, a great and formidable opponent, with his slingshot. David had no real weapon and was much smaller than Goliath, so he had to find an unconventional way to defeat him. Goliath's weakness (which

became David's strength) was his inability to escape the slingshot because he was not used to fighting with such kinds of weapons.

In the realm of business one of the first companies to apply the Aikido model was Six Flags, an American corporation that currently operates 21 amusement parks in the USA, Canada and Mexico. In line with the Aikido business model, the focus lies on regional themes and an accessible structure for customers, a strategy that contrasts with nationally oriented theme parks such as Disneyland. The regional proximity of the parks facilitates more frequent visits by local customers, creating higher revenues with less marketing effort. Another plus is that in the low season such parks continue to attract local customers.

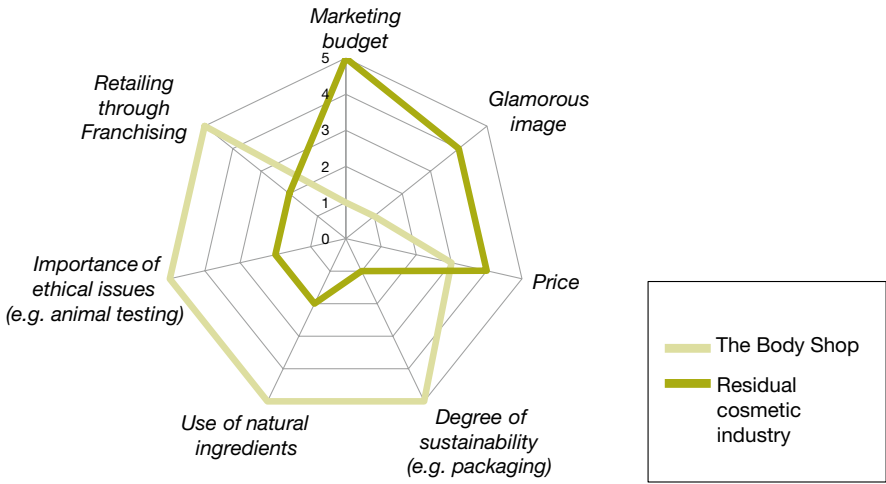
The innovators

The Aikido business model has spread to other areas as well. Founded in 1976, and now part of the L'Oréal corporate group, The Body Shop International plc (known as The Body Shop) is a chain of cosmetic retail stores. True to the Aikido business model, the company adopts a radically different approach within the cosmetics business. Its founder, Anita Roddick, summarised her strategy as follows: 'I watch where the cosmetics industry is going and then walk in the opposite direction'. A major difference characterising The Body Shop is the absence of glamorous ad campaigns, making do with a marketing budget of no more than a fifth of the cosmetics industry standard. In addition, The Body Shop believes in selling environmentally friendly containers that can be reused wherever possible, also putting natural ingredients into its products and championing an ethical approach by not testing them on animals. All these choices make The Body Shop something of an oddity in the cosmetics industry, but has also enabled it to carve out an entirely new market for natural and environmentally friendly cosmetics for itself.

Created in 1983, Swatch is a Swiss manufacturer of distinctive designer watches. Swatch offers moderately priced watches that have transformed the image of timepieces in the direction of fashion accessories. Swatch followed the Aikido business model to operate in direct contrast to the Swiss watch industry, which traditionally focuses on expensive luxury products. Offering high quality at lower prices enables Swatch to increase revenue. The company also appeals to a wider fashion-conscious market and further increases demand by influencing consumer behaviour towards owning more than one watch. This unique position brings in customers and increases revenue and profits for Swatch.

Cirque du Soleil also uses the Aikido business model very successfully. The company is a cultural phenomenon building on the concept of a circus, but differing from traditional circuses in a few key areas. Cirque du Soleil consciously avoids costly animal performances and star artistes who would normally be the staples of traditional circuses. Instead, it combines elements of opera, ballet, theatre and street performance arts with classical circus arts, creating an entirely new entertainment experience. Cirque du Soleil's unique

Aikido: How did The Body Shop change the dominant business logic?



style allows it to save costs while also addressing new and completely different audiences, including adults and corporate customers.

The Japanese consumer electronics company Nintendo is the world’s largest video game company in terms of revenue. Following the Aikido principle, Nintendo produced the Wii, a very different game console from that of its competitors. Nintendo Wii offers a host of advanced features such as a wireless controller that can be used as a pointing device and movement detector. Compared with other game consoles, the Wii offers a more interactive gaming experience. With the Wii product, Nintendo is able to target a broader public than its competitors, thus increasing sales and revenue. Sales of the product are also driven by the Wii console’s unique concept and supporting software.

When and how to apply Aikido

The Aikido pattern is very seductive, but it requires a lot of courage. If you want to use your competitors’ strengths to turn the business upside down, you really need to think outside the box. This pattern can work in any industry. You must be careful to heed any signs that you’re no longer on the right path. There might be some very good reasons why your competitors’ way of doing things is working so well for them. Market checks are always important, but when applying Aikido they are crucial.

Some questions to ask

- Do we have a lead customer who will follow us into the fray if we adopt the Aikido pattern?
- Is this lead customer representative of the target market or so visionary that others are unlikely to follow suit?
- Can we overcome all the obstacles we meet in order to change the rules of the game?

Auction

Going once, going twice...sold!

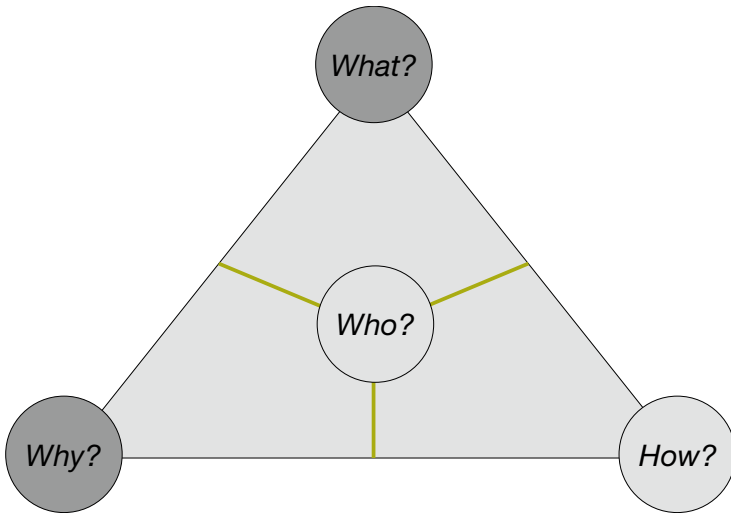
4



The pattern

The Auction business model is based on participative pricing: in other words the price of a product is not determined by the vendor alone, but buyers actively influence the final price of the goods or services. Finding a price starts with a potential buyer bidding a certain amount based on his or her willingness to pay. When the auction is over, the customer who has made the highest bid is committed to purchasing the product or service.

From the point of view of buyers the chief advantage here is that they never have to spend more than they can afford or are willing to pay (what?). The advantage for the vendor is that products can be allocated more efficiently across the market (why?). This feature is particularly valuable for very rare or heterogeneous products where no reference prices exist or the demand is difficult to determine. In order to ensure that vendors are not obliged to sell their products below what they consider to be an acceptable threshold, it has become customary in some cases to set a reservation price (why?), and the selling price for a given item or service does not become fixed until the auction has ended.



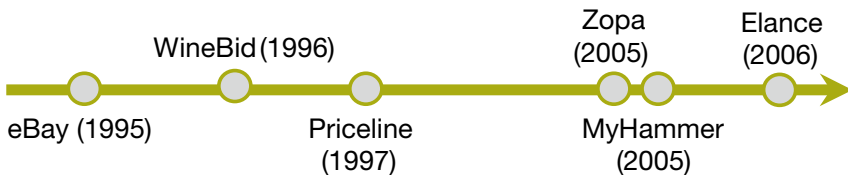
The origins

Auctions are age-old business models. Around 500 BCE in Ancient Babylon women were auctioned off to their future husbands. Today, auctions have become popularised by the development of auction houses. One of the oldest and most historic auction houses is Sotheby's, which was founded in London in 1744 by bookseller Samuel Baker. The company's first-ever auction was undertaken by Baker himself on 11 March, 1744 with a view

to liquidating several hundred valuable books at a profit. From there the business quickly expanded to include the auctioning of medals, coins and prints.

The Internet opened up an important new era for this business model. The Web makes it possible for auctions to take place with no limitation of physical space, so that they are now accessible to a vastly larger audience than before. One of the pioneers in this area is the online auction site eBay, through which people and businesses sell a wide variety of goods and services worldwide. Vendors set up a page on the website with a description of the product they wish to auction off, and interested buyers then bid for the product. Since its founding in 1995, some two billion auctions have taken place on eBay, making it by far the largest auction house in the world.

Auction: Timeline of the Auction pattern



The innovators

Side by side with eBay the Auction pattern has been applied in other innovative ways to business models in recent years: WineBid, based in Napa, California, is an online wine auction site where both private individuals and wine dealers can auction off their wines to connoisseurs all over the world. The vendor sets a reservation price per bottle to prevent the wine being auctioned off for less than it is worth. Since its establishment in 1996, WineBid has had very successful growth, now counting more than 60,000 registered users, making it the largest auction site of its kind.

Other examples of business model innovations based on the Auction pattern build on the concept of 'reverse' auctions, also known as procurement auctions. The reverse Auction is a variant of the traditional Auction whereby vendors bid for a contract rather than buyers bidding on a product. Priceline, founded in 1997, is a well-known and very successful reverse auction house that focuses on travel-related services. In this model, the customer specifies his or her preferences for a given travel itinerary (flight, hotel, rental car, etc.) and may also state the maximum price they are willing to pay for the trip. On the basis of this offer, Priceline searches for bids that conform to the customer's specifications among its partners within the network. Submitting an offer commits the customer to purchase the corresponding offer proposed by Priceline. Despite a certain degree of risk for the customer, Priceline's business model is a thriving one: in 2011 the company had 3,400 employees and a worldwide turnover of 4.4 billion US dollars.

The Auction business model has also been used in the brokerage of intellectual-property-based transactions. Ocean Tomo, since 2009 a division of ICAP patent brokerage, has matched buyers and vendors for the sale of patents and other intellectual property assets through private brokerage platforms and live auction. With hundreds of transactions to its credit and over US \$150 million in sales Ocean Tomo is the world market leader in the difficult business of patent trading. The company itself has had its ups and downs and the Auction principle is very difficult to apply on account of the information asymmetry: the potential buyer does not know what he is buying since a patent is always a bundle of legal claims combined with the know-how of the patent application. But, in most cases, the buyer sees no more than the patent document. New ways of patent trading need to be developed for this principle to work successfully, and, at the present time, such know-how-intensive products with a high amount of non-codable information remain difficult to auction.

Another company that has applied the Auction business model successfully is MyHammer. The company was established in 2005 and specialises in reverse auctions for tradesmen and related service contracts. As with Priceline, MyHammer customers state the kind of services they require, which may include anything from small repairs through relocation to entire construction projects. The Auction business model enabled MyHammer to become one of the leading marketplaces for tradesmen and service contracts within a very few years. It is estimated that over €100 million worth of contracts have been auctioned off on MyHammer.

When and how to apply Auction

The Auction pattern's allure and potential lie in its flexibility and vast possibilities for implementation. You can either offer your own products or create a marketplace for sellers and buyers available to all sorts of products (think eBay) or targeted towards niche products. The Auction business model is highly scalable and can serve millions of users around the clock. These users invariably benefit from the network effect this scenario creates. The pattern works well if an auction creates more transparency for standardised products such as C-parts or raw material. Auction is also geared towards selling highly specialised products, provided the auction site attracts sufficient traffic.

Some questions to ask

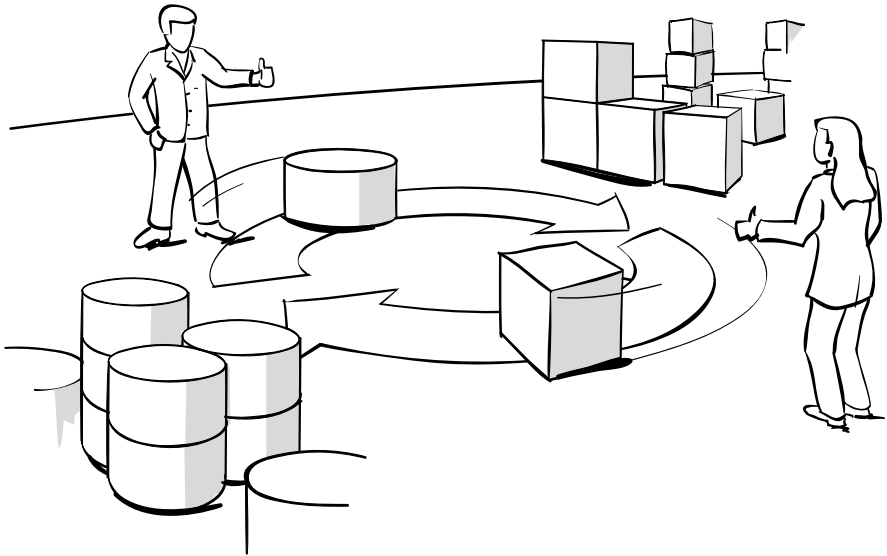
- How can we achieve a unique selling proposition that will allow us to steal customers from the big established players like eBay and Yahoo!?
- Can we generate high reach for market players?
- How do we maintain a competitive advantage in a highly competitive landscape?

- **How can we ramp up the number of market players quickly and efficiently?**
- **How can we uphold our reputation and certify that transactions are completed correctly?**

5

Barter

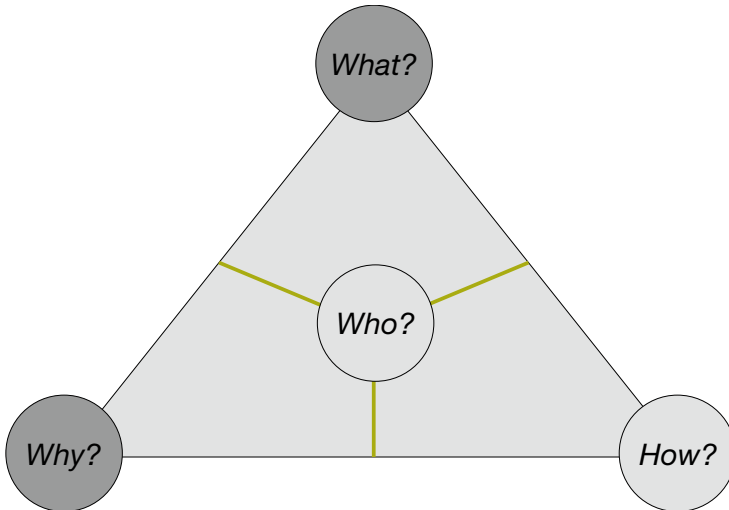
Tit for tat



The pattern

The term 'barter' describes a business model in which products or services are exchanged between people or organisations for products or services in kind. The exchange relies solely on goods or services, without the involvement of money. While similar to sponsorship, as a business model Barter goes beyond the mere promotion and financial support of third parties, to take on a form of marketing. The external partners are actively engaged in the value creation process. An example is Google, which provides free directory assistance in order to improve its voice recognition technology. Another example is to be found in the pharmaceuticals industry, which supplies drugs free of charge to doctors and hospitals that then test them on patients in clinical trials, with which they perform a very important brokerage function for the pharmaceutical companies.

Barter can also serve as a useful tool to boost a brand by introducing more new potential customers to certain products (why?). This strategy is frequently used for baby food. Most new parents are confronted with these products for the first time after a child is born. In such a situation Barter can be a great way to acquire and retain new customers, as offering baby food to new parents for free familiarises them with the brand.



The origins

The roots of Barter go back to antiquity. In Ancient Rome it was not unusual to foster culture and community with non-financial incentives. Gaius Cilnius Maecenas, a political adviser to Emperor Augustus, is regarded as the founder of this system: he developed the concept of patronage, whereby individuals or

institutions were supported without a reciprocal contribution. His gifts were not entirely altruistic, however, as Maecenas used them to further his own political or economic agendas. The Barter pattern developed on the basis of this principle and has become increasingly common in professional circles since the 1960s. While the Barter system was used primarily as a means of backing organisations and sports clubs financially and publicly, in the twenty-first century it has developed into a full-blown business model. More and more companies now include Barter as a staple element of their value creation logic.

The innovators

Fast-moving consumer goods giant Procter & Gamble (P&G), based in Ohio, is probably one of the most well-known innovators of the Barter business model. This multinational corporation and producer of consumer goods, which include personal care products, cleaning agents and pet foods, works together with entertainment outlets (radio and TV) to promote its brand and products in a form of bartering. P&G has sponsored and produced radio and TV shows (hence their designation as 'soap operas' on account of the company's involvement with soap manufacture), which enabled P&G to gain exposure and marketing benefits, while the broadcasters obtained entertainment material with little or no production costs. By producing successful radio and TV programmes in return for advertising slots, P&G was able to reach a large audience cost-effectively, and thus increase the popularity of its mainstream products and its earnings. P&G today remains involved in this form of collaboration and marketing by way of its Procter & Gamble Entertainment division (PGE). P&G also relies heavily on the Barter business model in its marketing for Pampers, one of its 26 brands. People tend to pay little attention to diapers before they become parents, and by offering Pampers products free of charge in maternity wards, P&G vastly increases its chances of gaining new parents as customers.

PepsiCo is an American food and beverage company based in New York. The company is best known for its soft drink brands such as Pepsi, 7UP, Gatorade and Mountain Dew, although 63 per cent of its revenue is in fact made up of food brands such as Doritos and Walkers. PepsiCo became the first foreign product to be sold in the USSR. In 1972, under a Barter agreement, PepsiCo offered its Pepsi-Cola drink to the Soviet Union in return for exportation rights of Stolichnaya vodka to America, for which they were granted exclusive sales rights on the American market. This strategy also increased exposure of the Pepsi-Cola brand and availability of the product, especially in the USSR.

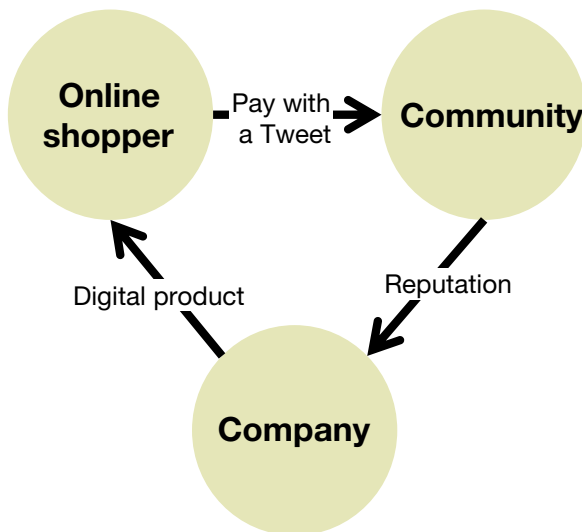
Lufthansa was also open to Barter trading. Based in Germany, Lufthansa is one of the world's largest airlines. With a fleet of over 870 aircraft, Lufthansa offers civil flight services to 18 domestic and 197 international destinations. In the 1990s, the company owned an expensive retail space in New York (2,000 square feet) that was unused. As the lease had some years on it and mounting costs could not be fully recouped by subletting the space, Lufthansa's answer

was to barter – swapping vacant real estate for airtime and paraffin. This allowed Lufthansa to work around the potentially huge losses they would have suffered if they had simply sublet the space.

Based in Denver, Colorado, Magnolia Hotels manages and develops a number of boutique hotels in Dallas, Houston, Denver and Omaha. The company uses the Barter concept in many of its business functions, offering room nights and meeting spaces in exchange for goods such as flat screen TVs, laptops, and gifts from other companies. In addition, services such as advertising or building work are accepted in exchange for agreed use of the hotel facilities. Magnolia generally offers these options in the off-peak season so that they do not affect its regular income from hotel guests. Rather than paying for goods and services, in this way Magnolia cuts its overheads for services such as construction work, room renovations and the acquisition of products such as televisions and laptop computers. Such a practice of trading resources can also be beneficial between hotels in different locations, reducing overheads and increasing profit margins.

The Internet is now awash with Barter formulas. One exceptionally inventive implementation of the concept is Pay with a Tweet, harnessing the network effects of social media platforms to market goods and services. Businesses register the products they want advertised through Twitter on Pay with a Tweet's website. Twitter users then receive a free sample of the product when they tweet information about the company and its products to their followers. Pay with a Tweet has the potential support of some 550 million Twitter users and, as such, is a highly efficient system to exploit the Barter concept and market products online.

Barter: The business model logic of Pay with a Tweet



When and how to apply Barter

This pattern is full of potential for businesses with complementary partners. Partners can include not only suppliers or customers, but also competitors, and they do not have to be doing business with one other already. It is also recommended to think totally outside the box and approach highly dissimilar partners, for example suggesting to combine a subscription to Blacksocks with Lufthansa Miles & More or with a subscription to a newspaper.

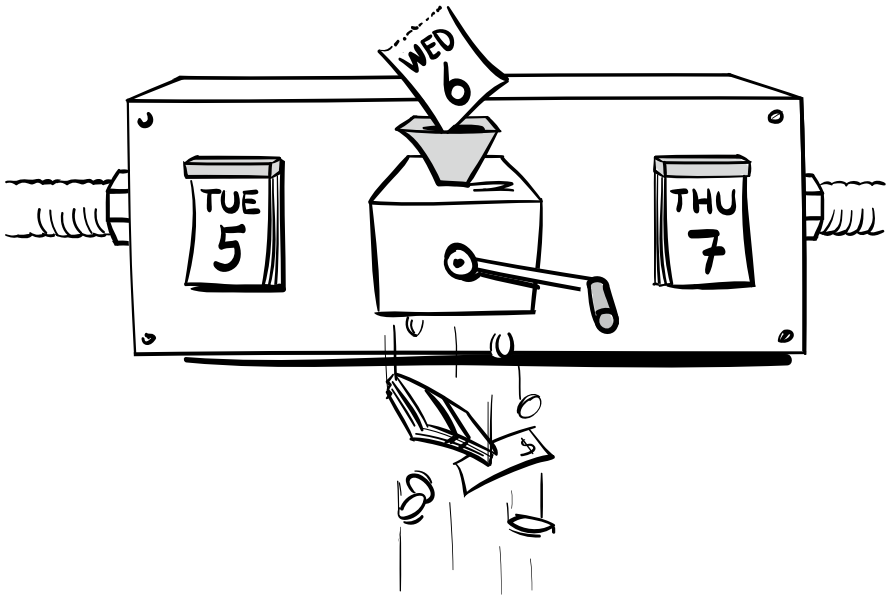
Some questions to ask

- Is there a mutual interest in the relationship, that is to say in acquiring consumers without competition?
- Is there a complementary service or product that supports our product?
- Have we considered brand spillovers from our new partner?
- Are we able to implement the Barter deal within a reasonable cost framework?
- Is the question of culture relevant and do we have a similar corporate culture?

Cash Machine

Coining money with negative working capital

6

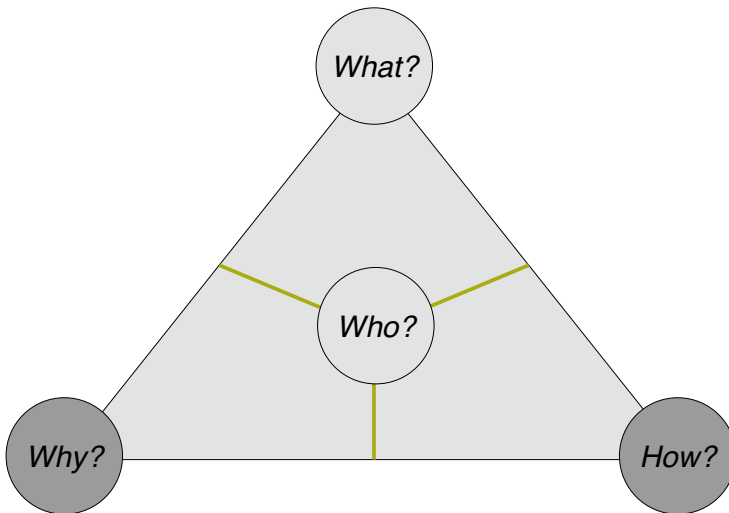


The pattern

The Cash Machine pattern involves running a business with a negative cash conversion cycle. As will be seen from the formula below, the cash conversion cycle is the time-span between the spending and collection of cash by a company. More specifically, it defines the average storage time of inventory, including raw materials, work-in-process, finished products and delayed payment terms by customers and suppliers:

$$\begin{aligned} \text{Cash conversion cycle} &= \text{Inventory conversion period} \\ &+ \text{Receivables conversion period} \\ &- \text{Payables conversion period} \end{aligned}$$

In order to run a negative cash conversion cycle, a business must generate revenue faster than it has to pay its suppliers for purchased goods. Customers will not generally be aware of this kind of business model. The implications for the business, however, are far-reaching. The pattern generates additional liquidity that can be used for various purposes such as settling debts or making new investments (why?). This allows the company to lower its interest payments or speed up growth (why?). The two important levers one needs to be aware of when aiming to achieve a negative cash conversion cycle are, first, to ensure that the business obtains generous payment terms of goods with suppliers and, second, to make sure that customers pay promptly (how?). Additionally, a build-to-order strategy or a very short stock turnover time can help a business to realise a negative cash conversion cycle by keeping the time goods are kept in inventory as short as possible (how?).



The origins

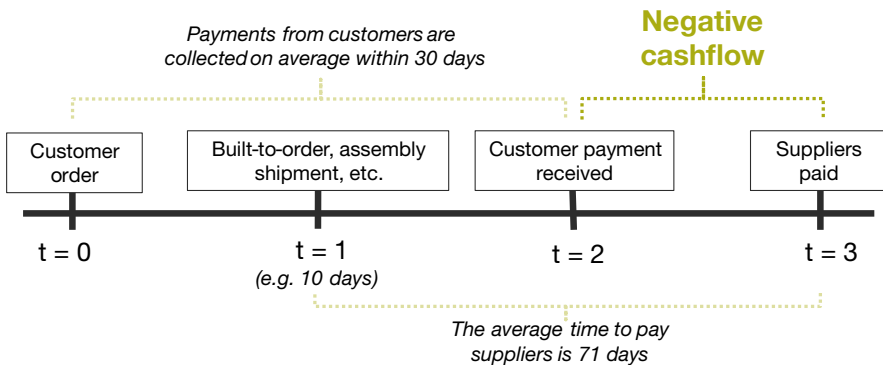
The Cash Machine pattern has actually been around for quite some time: bankers have employed it in the form of the cheque, which is simply a document ordering the payment of money to a named person from a bank account. The bank usually acts as the interface between the person writing the cheque (drawer) and the person receiving the money (payee). It collects money from the drawer and then issues it to the payee when the cheque is cashed. Cheques entail a negative cash conversion cycle for the bank, because it is able to generate revenues before having to finance the expenditures. Cheques became popular in Europe at the beginning of the fourteenth century, when the economic boom at the time put traders increasingly in need of non-cash forms of payment.

The traveller's cheque developed by American Express (also known as AmEx) in 1891 is a business model innovation based on the Cash Machine pattern. An American Express employee travelling abroad had great difficulty obtaining cash; what led to the idea of issuing a traveller's cheque. William C. Fargo, nephew of American Express co-founder William G. Fargo, was the first person to cash a traveller's cheque on 5 August 1891 in Leipzig, Germany, which was also the year the traveller's cheque was invented.

The innovators

In the field of information technology, computer manufacturer Dell was the first company to employ a build-to-order strategy in the 1980s. This allowed it to achieve a highly negative cash conversion cycle. In its early years the Cash Machine pattern presented an important means for Dell to finance its growth. When Michael Dell founded the company in 1984, his seed capital consisted of a mere US \$1,000. Large investments or a substantial and costly inventory would undoubtedly have led to bankruptcy.

Cash Machine at Dell



Source: Data from 'Dell – Der Geldjongleur', *Handelsblatt*, 13 January 2003 (www.handelsblatt.com/unternehmen/management/strategie/unternehmen-mit-fettem-polster-dell-der-geldjongleur/2219312.html)

Online retailer Amazon also uses the Cash Machine pattern very intelligently. Amazon typically achieves a negative cash conversion cycle for 14 days. The primary method through which Amazon does this is by ensuring a very rapid turnover of inventory. In addition, Amazon's bargaining power with suppliers allows it to negotiate generous terms of payment. The combination of these two factors means that Amazon does not have to pay its suppliers until it itself has been paid by its customers for the goods they have purchased.

A subsidiary of eBay Inc., PayPal is an American company providing online payment and money transfer services via an E-commerce website. PayPal performs payment processing for commercial and private vendors (including a large proportion of merchants and individuals on the eBay auction site itself), and charges a fee dependent on the method used, the currency, and the country of sender and recipient. Using the Cash Machine model, PayPal receives upfront fees for payments or transfer requests to individuals or small businesses that would otherwise be unable to process credit cards and other methods of payment. As well as receiving revenue on upfront fees for payment processing and transfers, PayPal earns interest on funds in users' accounts (the 'float'). This increases liquidity and enables PayPal to offer its services competitively to an increasing volume of users.

When and how to apply Cash Machine

This pattern will work very well for a business that builds to order or has negotiated generous payment conditions with suppliers. Cash Machine will provide you with liquidity. You receive payments for services rendered as early as possible, but wait as long as possible to pay your suppliers. In the meantime, any liquidity is your own to do with as you see fit. Such a situation is only feasible if your offerings have a high perceived value for your customers, for example an online build-to-order process. The Cash Machine model was the secret behind Dell's success. You may want to combine the Cash Machine pattern with the Subscription pattern since customers pay up-front, but receive products and services later on.

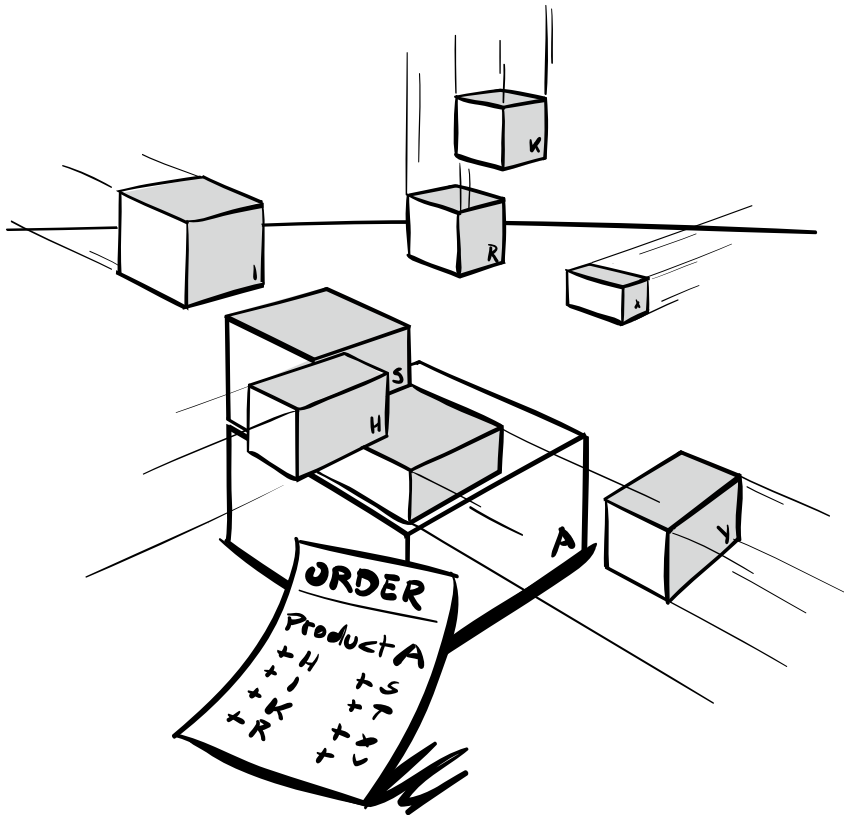
Some questions to ask

- Can we effectively pay suppliers only after receiving payments from our customers?
- What benefits can we create for the customer by establishing a build-to-order process?
- Will we be able to renegotiate contracts with suppliers?
- Is it possible for us to postpone finishing our products and services until they have been paid for?

Cross-selling

Killing two birds with one stone

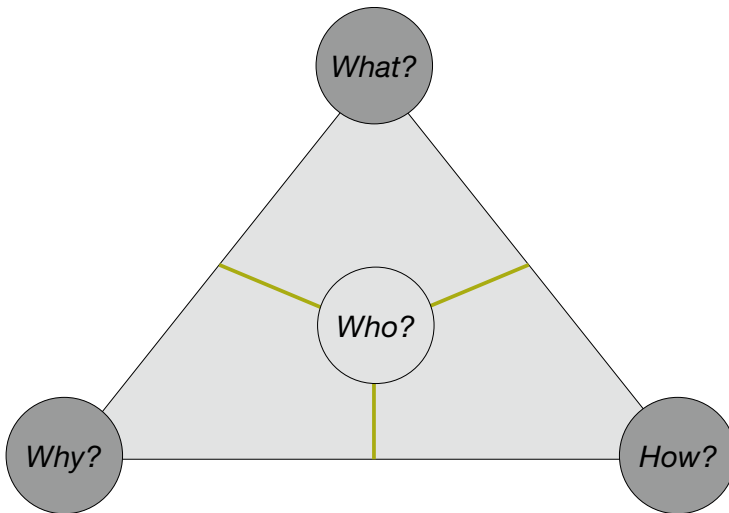
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The pattern

Cross-selling involves offering complementary products and services beyond a company's basic product and service range, with the aim of exploiting existing customer relationships to sell more goods. Cross-selling also offers an opportunity to leverage existing resources and competencies such as sales and marketing (how? why?).

For customers, the primary benefit of Cross-selling lies in deriving more value from a single source, thus saving on the cost of searching for additional products (what?). A further important advantage of the Cross-selling pattern is the sense of security it instills: customers who already have a good relationship with a business will not feel they're taking a risk trusting it again, something that cannot be said for new businesses (what?). When offering additional products and services, it is important to maintain customer satisfaction to ensure that dissatisfied customers do not move away from the original product as well. This demands careful planning and execution of the company's product portfolio.



The origins

Cross-selling was already used by merchants in the ancient Middle Eastern bazaars. A modern example of its use is afforded by the oil and gas giant Royal Dutch Shell (Shell), which successfully launched an innovative business model based on the Cross-selling pattern. Shell uses its network of petrol stations to sell a range of goods that are quite unrelated to the oil business, such as groceries and other everyday items. Legend has it that the practice

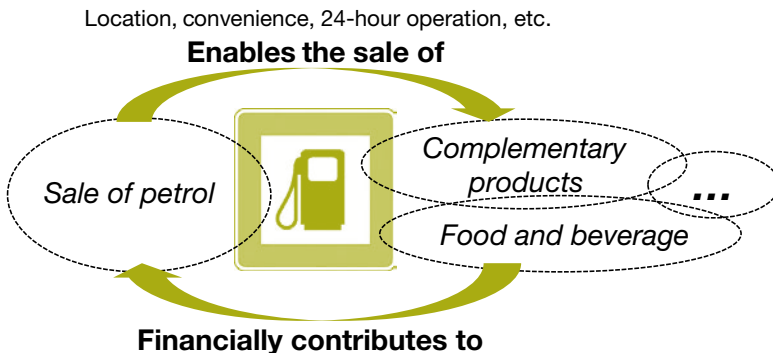
started when a clever Kentucky Fried Chicken (KFC) franchisee opened a KFC restaurant in a Shell petrol station. Soon customers were refuelling not only their cars but also their bodies, sparking the idea of Cross-selling at Shell. In fact, the combination of food and petrol was so successful that Shell rapidly applied the Cross-selling concept to other areas of its business.

The innovators

The Swedish company IKEA is the world's largest furniture retailer, The company manufactures ready-to-assemble furniture, appliances and home accessories. To complement its furniture sales, IKEA employs the Cross-selling concept, by offering a wide variety of additional services and products such as interior equipment, home decoration, in-store restaurants, and car rental services, all of which significantly increase the company's profits.

German coffee retailer and coffee chain Tchibo also successfully runs a Cross-selling-based business model. The original coffee business was founded on the mail order principle by Carl Tchiling-Hiryan and Max Herz in Hamburg in 1949, after which the company successively added non-coffee products to its range. In 1973 Tchibo established a new division specifically for non-food products. Under the slogan 'A new experience every week', Tchibo offers a wide range of non-food products for a limited time at competitive prices. The myriad items available include cookbooks, household goods, clothing, jewellery and insurance, to mention only a few. The expanded product range contributes to about 50 per cent of Tchibo's revenues and to more than 80 per cent of its profits. Cross-selling has in large part been responsible for Tchibo's stellar brand recognition statistics in its native Germany: no less than 99 per cent of Germans are familiar with the company.

Cross-selling



When and how to apply Cross-selling

This pattern holds great potential in situations where a simple, low-margin product or service addressing a basic need can be combined with high-margin products. This is frequently the case with consumer goods, where convenience can drive customers to make additional purchases, e.g. food at petrol stations. The pattern also finds application in the B2B sector, where highly specialised products can be bundled with other products or services. This could, for example, be specific high-rise elevators in a building with low-rise commodity elevators and escalators, or new escalator installations that include maintenance services. Such bundles usually address customers' desire for one-stop shops. In B2B, Cross-selling is often used in conjunction with the Solution Provider pattern.

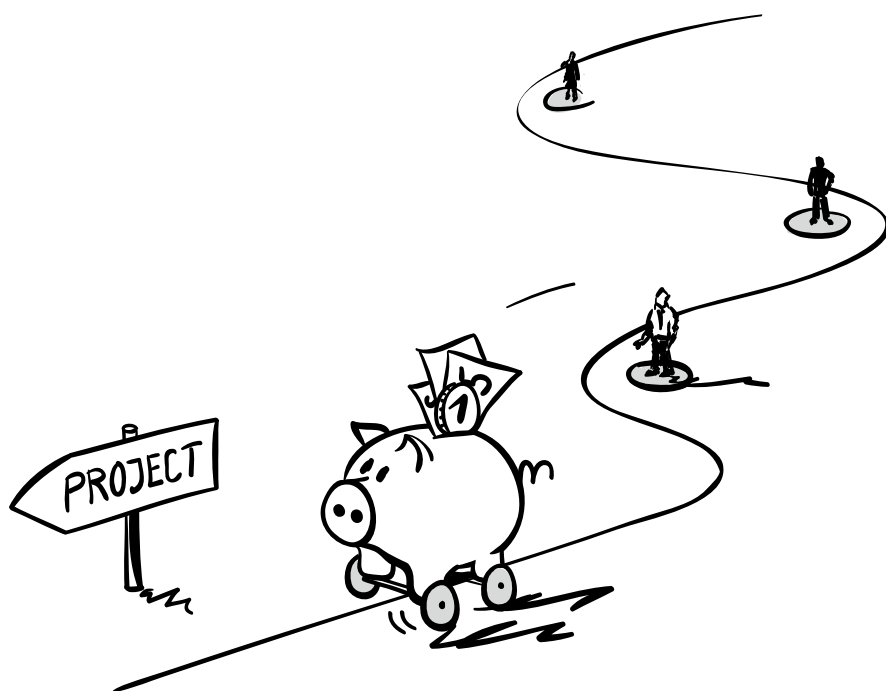
Some questions to ask

- Can the product be bundled to the advantage of customers?
- Is the perceived customer value of Cross-selling high enough?
- Is there a natural need to bundle the products from the customer's point of view?
- Can we achieve consistent pricing of these products?
- Are the market entry barriers against potential new competitors high enough?

Crowdfunding

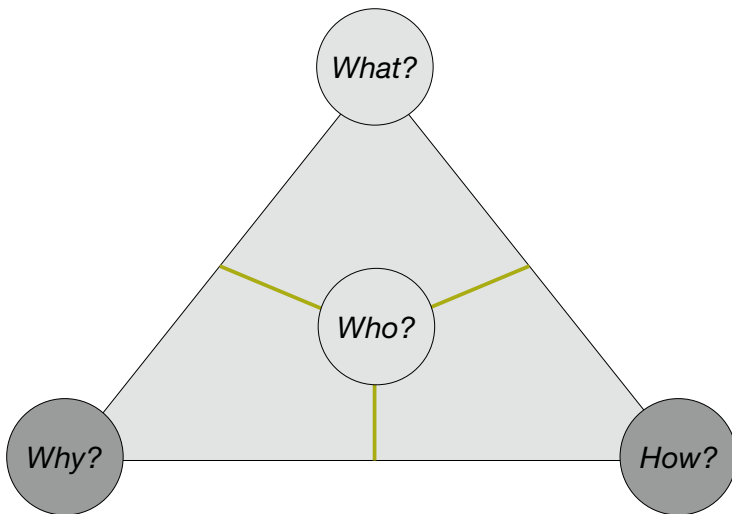
Taking finance by swarm

8



The pattern

The Crowdfunding business model involves outsourcing the financing of a project to the general public. Its intention is to limit the influence of professional investors (how?). It starts with announcements designed to raise awareness of projects looking for potential backers (how?). The majority of crowdfunders, as they are known, are private individuals or private collectives, who choose freely how much they want to invest in any given project. In return for supporting a project, backers receive some sort of project-specific reward: this may be the finished product itself developed by the project (for example, a CD or DVD) or additional special benefits such as bonus material (how?). Funding is generally an all-or-nothing proposition, meaning that a project can only come to fruition when the minimum funding goal has been achieved, thus reducing the likelihood of having to terminate a project once it has been launched.



Unlike conventional financiers or banks, crowdfunders may be less interested in maximising their returns than in helping to see a project realised. To encourage such motives, a limit is sometimes applied to the amount crowdfunders may invest in a given project. This has now become a legal restriction in the context of the financial regulations that came into force in the wake of the financial crisis of the past decade. For project creators, Crowdfunding offers a unique opportunity to broaden their circle of investors and thus increase their chances of obtaining advantageous financing conditions for their project (why?). The fact of announcing the project in advance also serves as free advertising for its creator, and may have a positive effect on the subsequent success of the product (why?).

The origins

The practice of Crowdfunding as a business model can be traced back to ancient times. Back then, funds were collected from the public to erect temples and other buildings. Today, the advent of the Internet and the creation of crowdfunding platforms have made the pattern increasingly appealing to businesses and individuals. The British rock band Marillion made early use of Crowdfunding: under contract to a small label, the band could not afford to tour the United States in 1997 after the release of its latest album. But fans stepped in and together provided enough money in a Crowdfunding campaign on the Internet to fund the tour. Since then, Marillion went on to make use of the business model to finance the production and marketing of their albums.

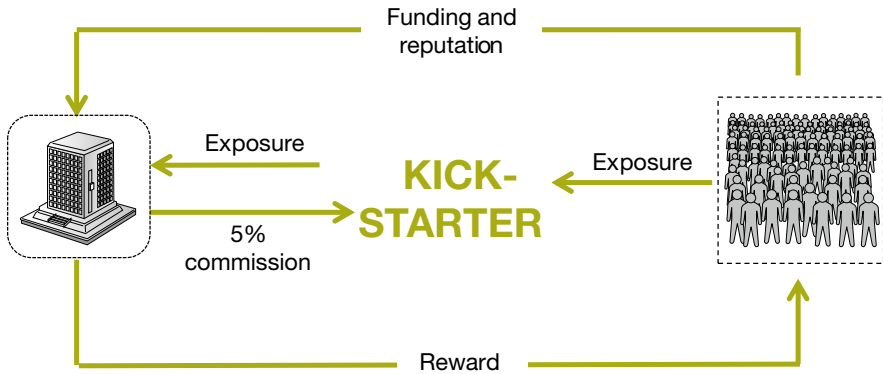
The innovators

Independent film production company Cassava Films was the first to employ Crowdfunding on the Internet to (partially) finance a film. Not having sufficient resources to complete post-production for his film, *Foreign Correspondents*, after the main shooting episodes, the director and founder of Cassava Films, Mark Tapio Kines, set up a website inviting interested people to participate in funding the completion of the film. The 'crowd' benefited by its involvement in helping to realise a project they found interesting, while Kines's production company did not depend on large investors to finish the job. The production company obtained revenues from its subsequent distribution and royalties, investors received a return on profits made, and donors had the simple satisfaction of being associated with the project.

Another company that successfully employed Crowdfunding is the start-up Pebble Technology, which launched a project on the Crowdfunding platform Kickstarter in 2009. The company's target was to raise US \$100,000 to produce its Pebble watch, a digital timepiece that can communicate with smartphones via Bluetooth, allowing users to receive calls and read text messages or email directly on the watch screen. The success of the project was such that Pebble achieved the funding goal in just two hours. Overall, Pebble raised US \$10 million, a hundred times its original target!

Another prominent company to use Crowdfunding is diaspora, a non-profit organisation that offers a decentralised social network not owned by any one entity, and is thus free from the influence of large corporations, advertisers or takeovers and maintains an emphasis on protecting users' privacy. To finance the programming of its software, diaspora launched a project on Kickstarter, which raised US \$200,000 (20 times the US \$10,000 target initially set). Ongoing revenue derives from donations and T-shirt sales. This is a good example of the usefulness of the Crowdfunding pattern in the case of companies offering emotionally oriented products in early development.

Crowdfunding: The business model of Kickstarter



When and how to apply Crowdfunding

This pattern appeals intuitively to both companies and individuals. First and foremost, Crowdfunding provides access to crucial zero-interest financial resources. It also lets project initiators obtain validation for ideas early on and gauge the future success of implemented projects. Moreover, project initiators receive valuable feedback, critique and comments from interested members of the audience, enabling them to refine their ideas without having to build prototypes or test the product in a costly pilot phase. You should use Crowdfunding if you have an appealing idea that you believe is supported by a lot of people who will be willing to put their money where their mouth is.

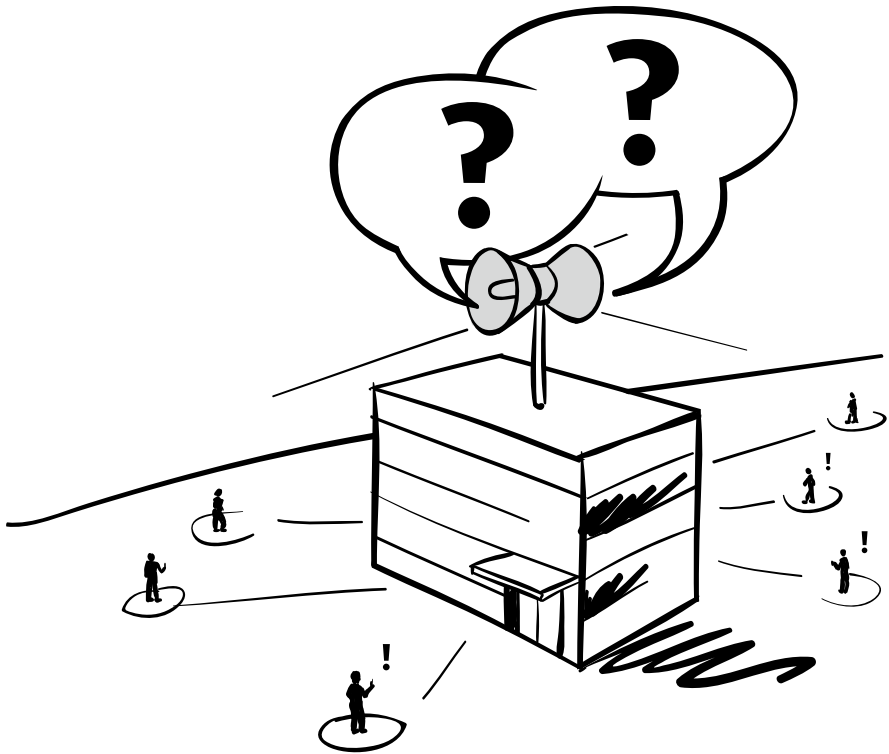
Some questions to ask

- Is the idea exciting enough to raise the needed capital?
- Should we offer a reward to funders, either monetary or in kind, and how can we ensure that it complies with applicable laws and regulations?
- How do we protect our intellectual property?
- Can the crowdfunders become our new customers or even product fans?

Crowdsourcing

Outsourcing to the crowd

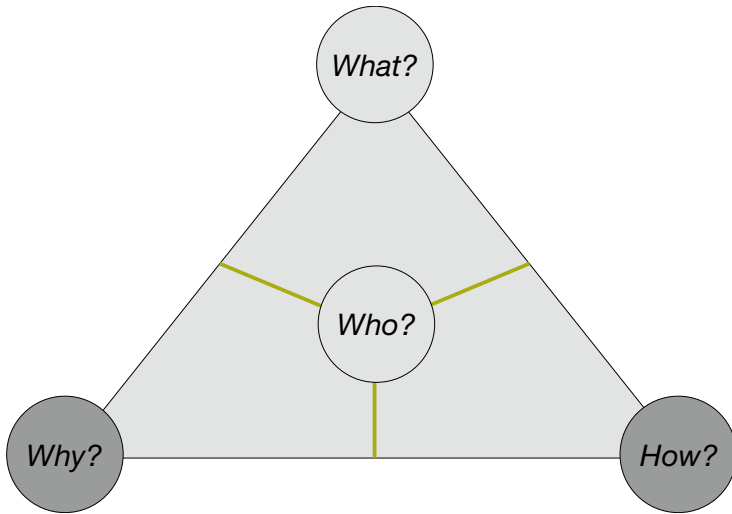
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The pattern

Crowdsourcing is the technique of outsourcing specific tasks to external actors, who typically learn about assignments by way of an open call (how?). The aim of Crowdsourcing is to extend the company's sources of innovation and knowledge, and open up possibilities to develop cheaper and more effective solutions (why?). Crowdsourcing tasks may encompass a range of assignments such as the generation of innovative ideas or the solving of specific problems.

Crowdsourcing is also eminently suited to discovering more about customer wishes and preferences for future products (why?). The 'crowd' can be motivated both extrinsically and intrinsically to participate in Crowdsourcing challenges. While some businesses provide monetary rewards for its contributions, others rely on the crowd's loyalty to the company or each participant's personal interest in the subject matter at hand.



The origins

Although the term 'crowdsourcing' itself was not coined until 2006 by Jeff Howe of *Wired*, this business model has in fact been around for quite a long time. A historical case of Crowdsourcing can be found in the British 'Longitude Act' of 1714, whereby the government offered a reward of £20,000 to anyone who could find a practical method of determining a ship's exact longitude. At that time navigators were able to determine their latitude by means of a compass, but no similar method to ascertain longitude had yet been devised. This posed significant dangers on sea voyages, and sailors were obliged to choose lengthy and cumbersome detours or risk tragedy. In 1773, Englishman John Harrison was finally awarded the prize for his marine chronometer, which contributed to solving the age-old longitude problem.

While not technically new, the Crowdsourcing pattern as employed today is vastly different from its earlier form. In the past challenges were made public primarily by word of mouth or in newspapers, so reaching only a limited audience. Assignments are now most often advertised online, immeasurably extending their reach.

Crowdsourcing: The logic of Crowdsourcing



The innovators

Crowdsourcing has gained enormous traction in recent years through the possibility of connecting actors in entirely new ways across the Internet. Threadless, a company founded in Chicago in 2000, has made online Crowdsourcing the core of its business, inviting designers from all over the world to submit T-shirt designs to its platform. Customers then vote on which models they like best. Threadless produces and markets the highest-rated T-shirts. The designers are rewarded financially if their work is chosen for production, and again if the work is reprinted or wins a competition. With this method, Threadless offers three to four new T-shirts per week that generally sell very well.

Over the past 25 years US-based company Cisco has grown mainly by acquiring other firms and thus securing innovations. The company has performed remarkably well in terms of innovation output, so well in fact that it surpassed Bell Labs, previously the largest research laboratory in the world. Crowdsourcing regularly features in Cisco's Open Innovation strategy to procure new ideas. Cisco has targeted young innovators with its Crowdsourcing competitions since 2007, creating the 'I-Prize', for which people (the 'crowd') are invited to submit and present their innovation proposals online. The company's senior management then decides on the best idea, which is financed and put into practice. The winner receives a substantial financial reward in exchange

for ceding intellectual property rights. Through its I-Prize competition, Cisco draws on the creative and intellectual potential of a global audience, generating revenues from successful innovations and the acquisition of intellectual property rights. Successful innovators benefit from both the financial reward and the prestige and publicity of the competition.

Procter & Gamble (P&G) is another company that successfully innovates using Crowdsourcing. At the beginning of the twenty-first century P&G found itself in a serious crisis, with stagnating revenues and skyrocketing research and development costs. To confront this predicament, the company introduced the 'Connect + Develop' Crowdsourcing programme, at the same time increasing the quota for the number of external ideas used in product development from 15 to 50 per cent. In order to achieve this ambitious goal, P&G created a huge network of external partners connecting its 9,000 researchers with more than 1.5 million scientists around the world. The Connect + Develop initiative allowed Procter & Gamble's research division to increase its productivity by over 60 per cent within only five years.

InnoCentive is a Crowdsourcing platform launched by American global pharmaceutical company Eli Lilly. InnoCentive specialises in finding solutions over a broad range of spheres such as engineering, science and business. Companies with R&D challenges ('solution seekers') post details of their requirements on the InnoCentive online platform and offer a financial reward with a view to attracting a global audience of solvers and acquiring the intellectual property rights for the idea or solution chosen. The 'crowd' consists primarily of top-class experts who submit their suggestions to the platform for free. InnoCentive typically receives revenues of between US \$2,000 and US \$20,000 from companies for solution seekers to post various challenges on the platform, but prizes of up to US \$1 million have also been posted. InnoCentive enables companies to reduce their R&D budget by tapping into a global network of experts, while the solvers benefit from the financial prize offered. InnoCentive's concept made it a pioneer in this field and has led it to become one of the most successful Crowdsourcing intermediaries.

A similar technology- and science-based Crowdsourcing platform is NineSigma, while yet other platforms focus on different areas such as design (99designs.co.uk), cheap labour (freelancer.com) or simply new ideas (atizo.com). Many companies have since developed their own platforms to attract potential users, customers, suppliers or freelancers. A pre-condition for such private platforms is to be attractive to solution providers, typically associated with a well-known brand and the reputation of a fair-dealing company.

When and how to apply Crowdsourcing

Any company can implement Crowdsourcing in its ideation phase. However, our experience has shown us that Crowdsourcing does not work for very unimaginative companies that will put the onus of finding new ideas on the crowd. If you are already innovative, you can profit from Crowdsourcing: leverage your

innovation potential by getting help from the crowd or intensify your relationship with customers by involving them in your ideation process. A fringe benefit of Crowdsourcing is that your customers will become more loyal to your brand. The market for Crowdsourcing platform providers appears limitless – ever more providers are opening up shop to serve very specific fields. At the same time few providers are able to stay competitive over time.

Some questions to ask

- **Can we foster a community that will be interested in generating new ideas for us?**
- **Can we frame our problems specifically enough for the crowd to respond to them online?**
- **Have we established clear and transparent criteria with which to select the best ideas?**
- **Can we define and communicate the process clearly?**
- **Are we equipped to manage social media dynamics such as evaluation process group dynamics?**

As a Crowdsourcing platform provider:

- **Is there a real market for the selected topic and/or community?**
- **Will we be able to attract companies and the relevant crowd?**
- **Have we checked the revenue model carefully?**

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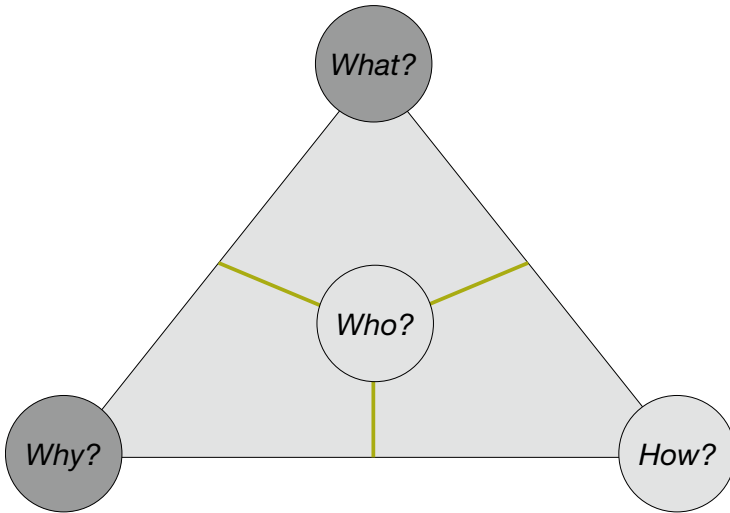
Customer Loyalty

Incentives for long-lasting fidelity



The pattern

In the Customer Loyalty model, customers are retained and loyalty is achieved by providing value over and above the basic products or services (e.g. through incentive-based programmes). The goal is to develop a relationship with customers and foster their loyalty by rewarding them with special offers or discounts. In this way, customers are voluntarily bound to the company, which discourages them from opting for competitors' products and services and thus protects the company's revenue.



Today a card-based loyalty programme is generally the principal means of maintaining customer loyalty. The card records customer purchases and calculates the corresponding rewards. Such bonuses take the form of either physical products or rebates on future purchases. Goods offered at discounted prices to loyal customers are designed to entice them to return to the store frequently (what?). While loyalty programmes overtly appeal to customers' rational purchasing decisions, more importantly still they exploit psychological effects. Customers are frequently driven by a 'bargain hunting' instinct, which in fact is often of greater consequence than an offer of financial rewards for enrolment in the loyalty programme. At the end of the day this can mean that customers base their shopping decisions inordinately on the rewards they can earn through a loyalty programme – even if on average they receive as little as 1 per cent of their money back. Offering such a loyalty programme enables a company to profit from sales that it would not otherwise have been able to make (why?). The fulfilment of rewards can serve as a new source of income, as they can usually only be utilised with the issuing company or a select range of partner companies. Such rewards also act as an incentive for customers to make additional purchases, given that the rewards generally cover only part of the price of new products or services (why?).

Another useful aspect of this pattern is its ability to generate important customer data for the business. Depending on the system chosen, the company can obtain a virtually complete record of the individual customer's shopping behaviour, opening up further vast opportunities for analyses that can be applied to optimise future offerings (why?), increase the effectiveness of advertising and generate additional sales (see Leverage Customer Data on page 197). An e-business even has the option of linking rebates directly to specific customer accounts. When customers return to make another purchase the discounts are applied automatically. Customer Loyalty plays a particularly important role in the case of online sales, on account of the absence of a physical connection or personal interaction between the customer and the business. A further option in this context is to run a cashback programme: this is similar to the above loyalty programmes except that customers actually receive money back on their purchases rather than obtaining physical rewards or rebates.

The origins

The Customer Loyalty pattern is over 200 years old. Towards the end of the eighteenth century, traders in the US started giving tokens to their customers, who could collect and subsequently exchange these tokens against additional products. In the nineteenth century, retailers began to distribute badges and stamps to their customers that could be exchanged for vouchers when the customer returned to the store. The American company Sperry & Hutchinson was one of the first to provide a third-party loyalty programme in the form of Green Shield Stamps. Under the Customer Loyalty business model, customers were entitled to receive Green Shield Stamps when purchasing goods from a variety of retailers such as supermarkets, petrol stations and shops. These stamps were collected in a special book until a certain number of points was reached, after which they could be redeemed by claiming products from a catalogue or the Green Shield Stamps store. Retailers purchased Green Shield Stamps from Sperry & Hutchinson and distributed them to customers, offsetting the cost of purchasing the stamps by customer loyalty and greater revenue. The popularity of the scheme was beneficial to all parties, while sale of the stamps further benefited Sperry & Hutchinson.

The innovators

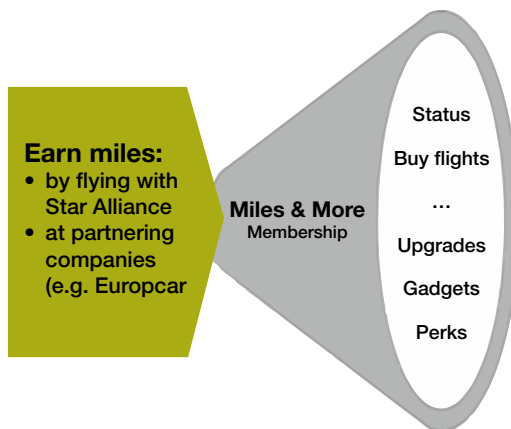
American Airlines, a company operated by AMR Corporation based in Fort Worth, Texas, was one of the first to introduce a loyalty programme within the commercial flight sector, AAdvantage. The flight booking system, Sabre, provided information permitting American Airlines to determine which customers flew with them on a regular basis. These 'frequent flyers' as they became known were offered participation in the AAdvantage programme whereby they

would gather air miles with each booking. The points earned were redeemed against upgrades, future bookings, special offers and other benefits. The airline benefited from the repeated business by the loyal clients. The costs of offering the service and the special offers were offset by the consistent (or increasing) revenue from the programme. Thus American Airlines' AAdvantage scheme succeeded in binding customers to the company by way of the Customer Loyalty business model.

Payback is a German loyalty card concept initiated by the company Metro A.G. It currently boasts over 26 million users. Payback also took over India's i-mint rewards programme in 2011, rebranded Payback India. For every cent spent, customers are credited with points on their Payback card account which can be redeemed against cash, exchanged for rewards on Payback's website or from the company's partners, or donated to charity. Throughout the process, Payback can track the purchasing behaviour of customers with partner firms. The great majority of customers do not seem to mind this, as 80 per cent of Payback's customers give the company consent to store their data. Employing data-analysing methods such as data mining, partner firms are able to achieve higher rates of return and improve marketing efforts through targeted advertising campaigns. Such customer data are extremely valuable in the quest for higher sales and revenue for both Payback and its partners.

Customer Loyalty principles are often applied to purchasing in the B2B business: the more is bought, the greater is the bonus at the end of the year. This simple strategy leads to strong loyalties without the additional costs of spreading contracts. In a wider sense, the life cycle management of suppliers often leads to strong loyalties, e.g. in the automotive industry to strategic alliances between first-tier suppliers and OEMs.

Customer Loyalty: The Customer Loyalty programme of Star Alliance/Lufthansa



When and how to apply Customer Loyalty

This pattern works well in a plethora of situations. In fact, Customer Loyalty has become something of a necessity; customer-centric cultures are instrumental for the long-term success of companies. If you put the customer at the heart of your business and put loyalty programmes in place, you will be able to enter into dialogue with your customer base. Such initiatives increase your customers' loyalty and identification with your brand. Given the intensely competitive nature of most industries, winning and retaining customers is both an art and a science that everyone should strive to master.

Some questions to ask

- Which channels are the most suitable to engage with our customers and build loyalty?
- How can we best address our customers?
- How can we interact with them and better understand their needs?
- Can we give something back to our customers that is of value to them?
- How can our customers become fans?
- Could we as a company interact with our fans the way sports clubs do?

Digitisation

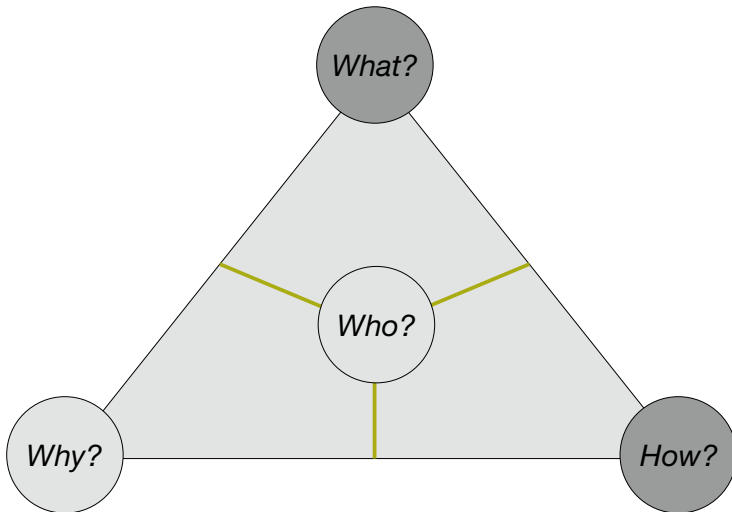
Digitising physical products

11



The pattern

The Digitisation business model – sometimes called Digitalisation – consists of transforming an existing product or service into a digital variant, thus providing advantages such as the elimination of intermediaries, reduced overheads and more streamlined distribution. The model can be applied by a large number of business types: print magazines offering online versions, and video rental stores providing online streaming services. More than most, the Digitisation business pattern embodies the principal technological, social and economic developments of recent decades. Automation makes virtual offerings increasingly available, highly reliable, very flexible and ever more efficient, so that the Internet has had a paramount influence on business models. And indeed, these features can often be applied (almost) seamlessly to business processes or products and services. Digitisation not only allows an existing business to be ‘reproduced’ online and some of the business processes and functions relocated to the Internet (how?), but can also lead to the creation of entirely new offerings. Contents that could not have been produced in their present form before the advent of the Internet, are now offered to customers with a moderate amount of effort (what?).



Goods that were traditionally sold in physical form are increasingly being supplemented or even replaced by immaterial representations and display several advantageous characteristics. In today’s world we can buy music online – anywhere, anytime. Only a few years ago, when we were still relying on CDs or cassettes, this would not have been imaginable. But this development also has a dark side, bringing into play issues of copyright and digital rights management, not to mention pirating. A considerable time and effort

need to be directed towards protecting the owners' intellectual property rights.

Contents that are already available electronically can also be enhanced by Digitisation. Consumer electronics has been immeasurably impacted by the addition of interactive communication, and customers are able to watch television at any hour when they use video-on-demand, and even cast votes or comment on a television feature in real time.

Digitisation has close connections with other business models: Crowdfunding or Leveraging Customer Data would never have become such financially sound propositions otherwise.

The origins

Being heavily reliant on modern computers and communication technologies, the Digitisation business pattern still is a relatively recent phenomenon. It resulted from the drive to automate standardised and repetitive business processes within enterprises. The concept has been gradually applied to satisfy customer needs in the same way.

At first, Digitisation served to create digital products and services in domains represented by numbers and logical connections. It thus comes as no surprise that the first electronic services were created by banks in the early 1980s. Initially, these services made use of terminal interfaces and data transfer via telephone lines. The advent of broadband Internet in the 1990s permitted more rapid Digitisation on a wider scale directed towards the individual consumer. With the development of graphic user interfaces, browsers and encryption, a huge array of web services became available.

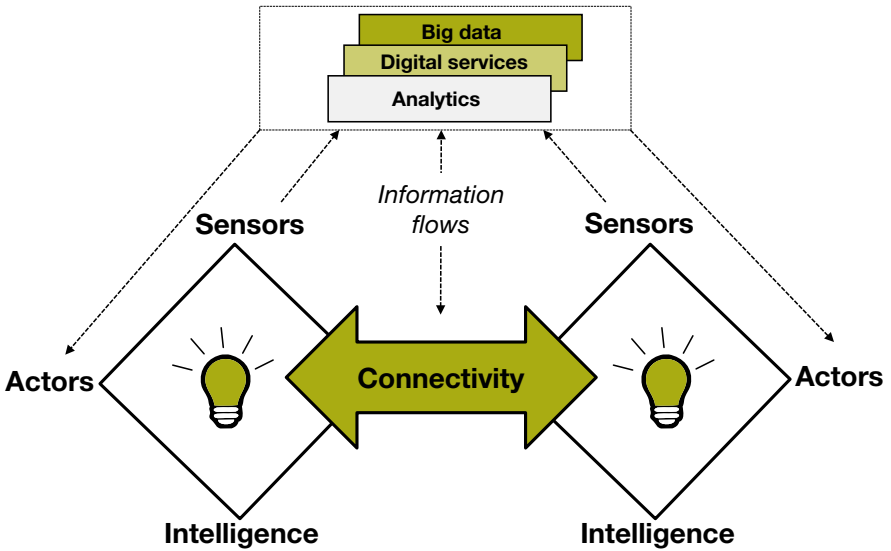
The innovators

Since the 1990s many businesses have started to distribute their products and services online. Licensed to Chapel Hill in North Carolina, WXYC is an American college radio station broadcasting 24/7, 365 days a year. Beside music, the station broadcasts many other programmes including talk shows, content specific to North Carolina, student-related features, and sports. WXYC was one of the first stations to realise the potential of Digitisation, venturing to broadcast its programmes not only on FM but also over the Internet, thus broadening its popularity among wider audiences in locations far beyond North Carolina, including the American Northeast and Great Britain.

Hotmail, now operated by Microsoft, was one of the first webmail service providers to use the Digitisation business model to provide electronic mail rather than conventional letters. The basic Hotmail service, including a modest email storage capacity, is offered free of charge, while customers must pay if they wish to benefit from premium features such as increased storage capacity

or freedom from intrusive ads (see Freemium, page 165). Hotmail user's access their email via a web browser, or more recently by linking to third-party software via POP3 accounts. Address books are set up online and emails can be composed, stored and sent within the user interface. The cost to Microsoft of offering a free basic Hotmail account is negligible when cross-financed by revenue received from premium users.

Digitisation



Another example is Jones International University, an American for-profit university offering qualifications in education and business online. In 1999, it became the first American University to earn recognised accreditation for courses studied and administered solely online. The university offers bachelor's, master's and doctoral degree programmes through 'distance learning' programmes over the Internet. These 'e-learning' courses offer great flexibility to students in remote locations or who work part time. The course material is supported by online discussions via chatrooms, forums, email and telecommunications. Modules, assignments and a series of assessments enable students to work towards the goal of achieving qualifications. Today, leading schools such as Harvard University and MIT also offer online courses, either free of charge or for a small tuition fee.

The development was also heavily exploited by the banking industry, as traditional banks introduced online services to complement their existing products. Digitisation spawned new businesses specialising in online virtual banking that did not operate physical branches. Examples include Germany's 1822direkt, DKB and comdirect.de, Austria's bankdirekt.at, Switzerland's Swissquote.ch, Great Britain's First Direct and Russia's VTB direct bank. These banks often focus on specific financial products such as securities trading or other special investments. One advantage of Digitisation is lower costs, which are frequently shared with customers in the form of higher interest rates.

When it comes to it, Facebook is no more than a digital iteration of a formerly common physical object. The name itself could have conjured up yearbooks or student directories in the past. Now, Facebook stands for the world's largest social network, with over one billion active users. It has managed to transport the old concepts to their digital extremes. Despite its incredibly large user base, the company still tries out new concepts to monetise its customers' potential. Facebook and other similar services have come under criticism on account of their social impact, being accused of replacing people's real-life relationships. Sweden, traditionally a trailblazer among the European nations, registered a decline in Facebook users for the first time in 2013. Digitisation is certainly here to stay, but there is no denying that more and more people are looking for smaller and more private platforms online.

When and how to apply Digitisation

Digitisation is a very promising business model pattern that we will see more of in the near future. Internet businesses will be hard-pressed to avoid Digitisation, but it is also relevant for many other players: with the advent of the Internet of Things (IoT) where physical products are becoming intelligent and networked, Digitisation is becoming important for manufacturers too. These changes are driven by dramatically reduced costs of sensors and corresponding networks, which collect data at the locus of the product and communicate it efficiently. These developments have given rise to new software-based business opportunities: at marginal costs approaching zero, machines can be activated on demand. Cars or machines can, for instance, ramp up their power on demand (Software as a Service). The automotive industry is actively exploring areas of application for Digitisation, but these are early days still. Over recent decades the virtual and real worlds have started to meld and the possibilities are enormous. We may predict that in the future nearly all products and services will tangent this pattern in some way: preventive maintenance, intelligent inventory management, real-time logistics, fully integrated supply chain management, software-based services. Over the next five to ten years Digitisation will disrupt many more industries.

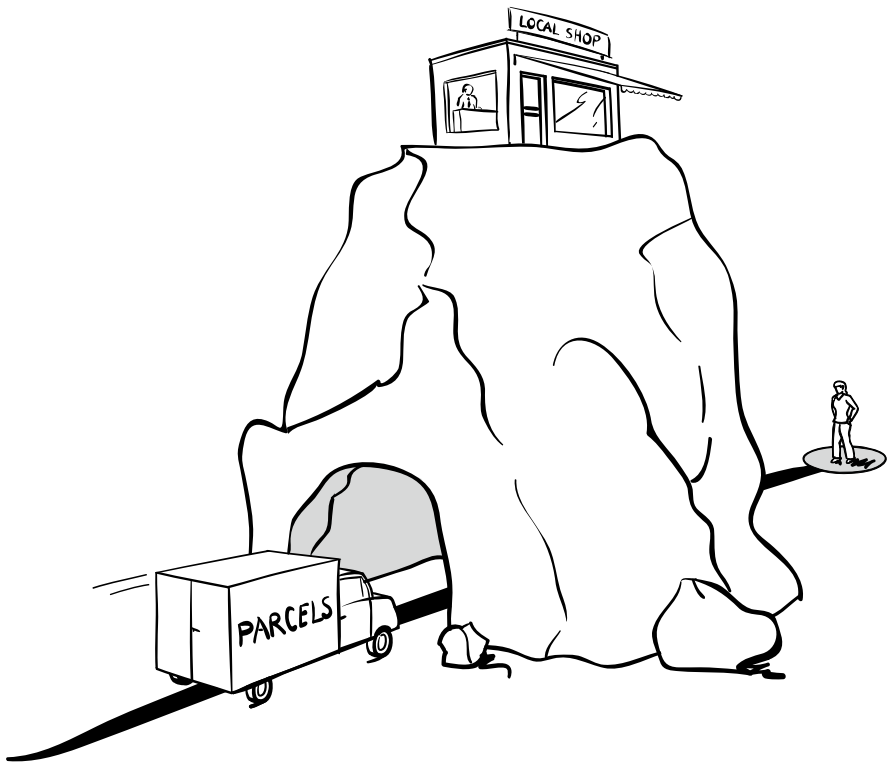
Some questions to ask

- Which parts of our product offering would derive value from including software?
- Can we create and capture value from Digitisation?
- When and where will this pattern make sense for us?

Direct Selling

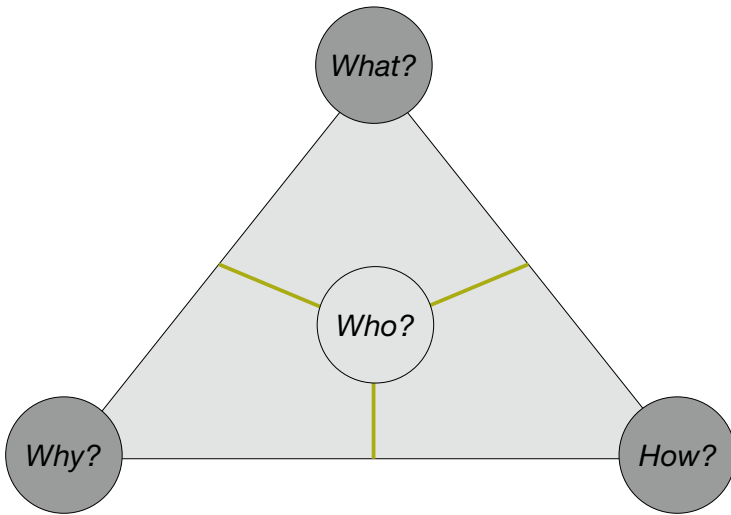
Skipping the middleman

12



The pattern

In the Direct Selling business model, a company's products are made available directly by the manufacturer or service provider, rather than via an intermediary channel such as retail outlets (how?). This enables the company to eliminate retail profit margins and other costs. Savings can be passed on to the customer (why?). The pattern also facilitates a more personal sales experience with customers and helps the company to better understand their needs, propelling new ideas for improving products and services (what?).



Additionally, Direct Selling allows the company to keep more accurate control of sales information and to safely maintain a uniform and consistent distribution model (how? why?). Customers for their part experience the distinct advantage of receiving better service promptly from the company, an important point when the products in question require extensive explanations (what?).

The origins

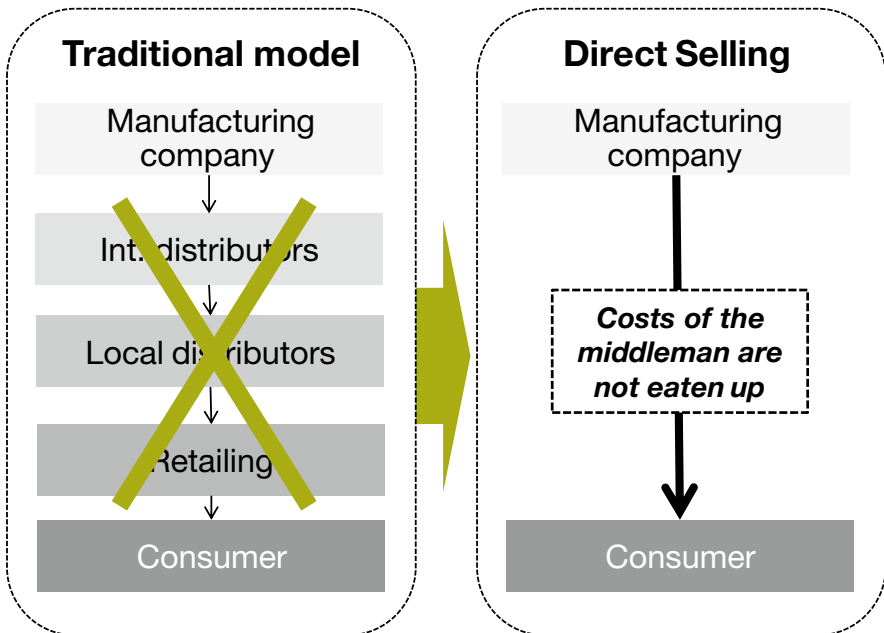
It goes without saying that Direct Selling is one of the oldest forms of distribution. In the Middle Ages craftsmen and farmers used Direct Selling almost exclusively to hawk their wares at market and wayside stalls. The modern world has seen a burgeoning of new inventive ways of applying the model, and many exciting business model innovations have come into being.

Tupperware (a subsidiary of its parent company, Tupperware Brands Corporation) introduced a new twist in the Direct Selling of kitchen and household products such as plastic containers, serving dishes, bowls and refrigerated storage containers, organising sales events in the homes of its present

and potential customers. These consultants and representatives host what are known as ‘Tupperware parties’ to which relatives, friends, and neighbours are invited. The representatives are classed in hierarchies to manage a distribution and sales system based on networking activities. Direct Selling enables Tupperware to supply its products without needing a retailer or engendering advertising costs. Brownie Wise (1913–1992) is credited with the invention of this concept, when she very successfully started selling Tupperware products to friends and family at home parties in the late 1940s and 1950s in Florida. The founder of Tupperware, Earl Tupper, subsequently asked Brownie Wise to become sales director of the company. She coined the term ‘Tupperware party’ and was instrumental in popularising the concept throughout the United States; earning her the distinction of being the first ever woman to grace the cover of *BusinessWeek*.

Hilti, which is headquartered in Liechtenstein and specialises in anchoring systems in the construction industry, is one of the most successful B2B direct vendors in the construction industry. Three-quarters of the company’s 22,000 employees are occupied with sales and deal personally with customers on a daily basis. The company’s high profile in construction has helped it to secure a seemingly unassailable competitive advantage over its competitors. Hilti is best known for its Hilti Centres and especially for its expert sales consultants. According to Michael Hilti, the Direct Selling principle was the main success factor in the company’s sustained success. While closeness to the market can be costly, it ensures that customers get what they want.

Direct Selling



Amway is an American marketing corporation specialising in the direct sale of beauty, healthcare and homecare products, marketing a wide variety of brands including Artistry, Beautycycle, eSpring, Bioquest Formula and iCook. The products are made available to Amway's customers via a worldwide network of affiliates and individuals. People sign up as Independent Business Owners (IBOs). This enables them to sell Amway's products directly to customers and recruit and train other IBOs (who then become part of their 'downline' network). Amway reduces HR costs by providing CDs, DVDs, website material, and seminars to support the IBOs' independent recruitment and training activities. The broad network of affiliates and IBOs reduces distribution and advertising overheads, thus increasing the company's profits. IBOs receive commission on product sales and bonuses when they meet their personal sales targets, as well as of those within their 'downline' network of recruited IBOs.

Finally, the PC manufacturer Dell is well known for its successful application of the Direct Selling principle. Since the company's foundation in 1984, it has focused exclusively on direct sales by taking orders for new PCs by phone and later online. Dell furnishes each ad directed to specific target customer groups with an individual phone number. Sales representatives are immediately able to identify which ad led the customer to call Dell. This means they can cater more accurately to customer wishes. Dell has been able to effectively differentiate itself from its competitors who predominantly sold computers through retailers. Today, Dell has opened up its business model to other sales channels, as the competitive advantage of Direct Selling that had been the success factor for Dell's existence and incredible growth story is now outdated.

When and how to apply Direct Selling

Direct Selling is widely established. Cut out the middlemen and interact directly with your customers. Precise control of the entire sales process serves a dual purpose: first, you can keep tabs on your customers and track their changing needs, and, second, you can optimise the internal coordination of sales with marketing, production and other functions.

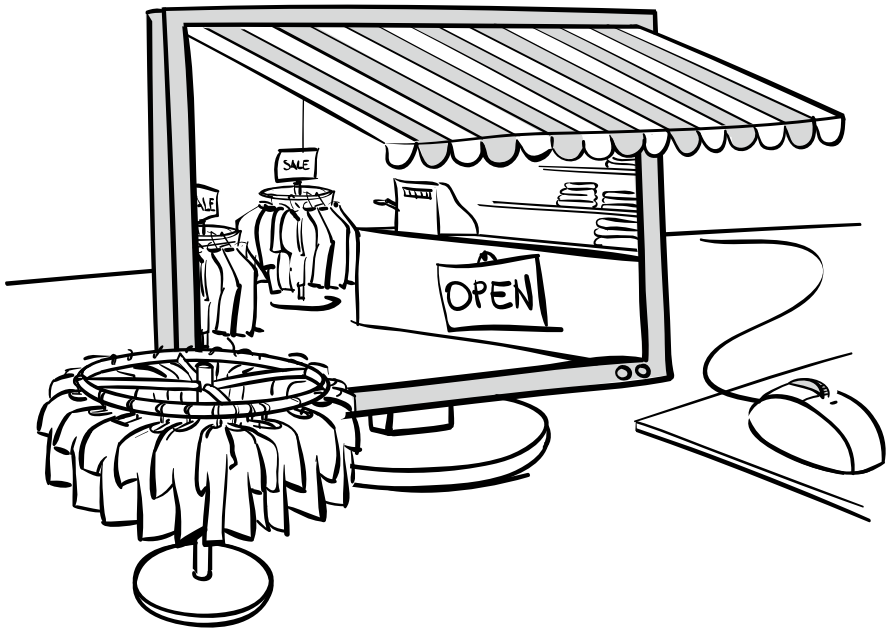
Some questions to ask

- How large should our sales force be?
- Can we encourage healthy competition among our salespeople and put smart incentive systems into place?
- How must we train our sales force to ensure that every aspect of the sales process is well managed?
- How can going out to our customers personally increase customer intimacy? Which functions do we need to change and which customer insights are we still missing?

E-commerce

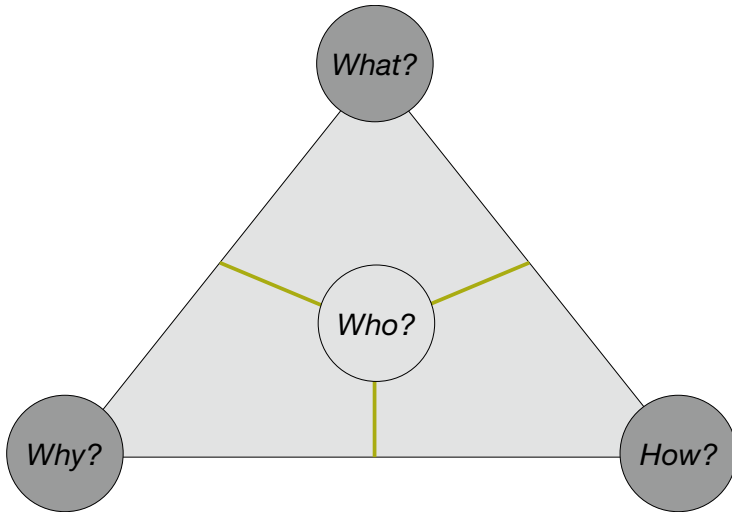
Online business for transparency and savings

13



The pattern

Within the E-commerce business model, traditional products or services are delivered via online channels, thus removing overheads associated with running a physical branch infrastructure. Customers benefit from searching online for products and services, being able to compare offers, eliminating time and travel costs, and obtaining lower prices. Companies benefit by making their products and services searchable online, and reducing intermediaries, retail premises and traditional non-targeted advertising.



E-commerce, which came in with the universal adoption of the computer, refers to the buying and selling of products and services via electronic systems (how?). Since both business and information technologies continue to develop, it is hard to define the exact dimensions of E-commerce. According to Vladimir Zwass, editor-in-chief of the *International Journal of Electronic Commerce*, E-commerce is 'sharing business information, maintaining business relationships, and conducting business transactions by means of telecommunications networks'. Aside from the immediate sale of goods and services, E-commerce also includes customer service and support (what? how?).

Selling virtual goods entails one major disadvantage compared with selling regular physical goods: buyers can't test or evaluate virtual goods first-hand before spending money on them. This shortcoming has to be offset by making the various benefits abundantly clear to buyers (including making sure that the goods are always available and easily accessible, irrespective of time or place). Furthermore, customers want increased market transparency, which should include being able to consult other customers' reviews of the products. Conversely, there is no problem with offering a larger selection of goods without overwhelming customers, since they can easily search, filter and navigate the product range online (what?).

The E-commerce business model may affect all levels and areas within a company. For instance, the sales department will use data mining or similar methods to analyse sales with the aim of directly optimising sales strategies, a task that can also be carried out automatically. Customers receive individualised advertisements and recommendations, and the company is able to reach many more customers – the Internet’s reach is truly global – with minimal additional cost (why?). E-commerce can also act as a complementary sales channel through which the inherent benefits of digitised products can be exploited (how?). When a customer downloads digital music, films or software, this comes about through a rapid integrated sales process which completes all the necessary transactions with virtually no wait times.

The origins

E-commerce has now been around for over 60 years, in particular since the electronic transmission of messages during the Berlin Airlift of 1948–49. The later development of electronic data interchange (EDI) became a prominent precursor of the E-commerce of today. Numerous sectors of industry worked together during the 1960s to develop a common electronic data standard. The original format was designed exclusively for purchasing, transportation and financial data and was primarily employed in intra-industry transactions. The first sectors to develop and utilise EDI were the retail, automotive, defence and heavy industries. A global data standard developed between the 1970s and 1990s.

Originally, such EDI systems were extremely expensive *and* primarily used by businesses. The growing general availability of the Internet acted as a catalyst in developing and redefining E-commerce. Today, traditional E-commerce channels are slowly but surely moving towards taking full advantage of the Internet’s capabilities, which have enabled private customers to access it as well.

The innovators

One company that has perfected the E-commerce business model is Amazon. Jeff Bezos founded the bookseller in 1994 and a year later the company had already sold its first book after launching its website and E-commerce platform. Since Amazon faced far fewer restrictions in terms of logistics, it was able to offer a much larger selection of books than brick-and-mortar stores at the time. Amazon’s strong growth and increasing pervasiveness on a global scale allowed it to continually introduce new product lines. The E-commerce model enabled Amazon to establish integrated ordering and distribution systems as well as to make these systems available to other retailers via its online platform.

Asos is a British online retail store that offers fashion and beauty products as well as its own range of clothing, using an easy-to-navigate online E-commerce platform on its website. Asos reduces the costs associated with subsidiary

Facts and figures about Amazon

- Amazon was founded in **1994** by Jeff Bezos
- In **2013**, sales reached **US \$74.45 billion** (figures as of 2013)
- According to Millward Brown Optimor, Amazon is **one of the most valuable companies on earth**: the brand value is about US \$45.73 billion
- Amazon's logo is supposed to show a smile which goes from A to Z: this signifies the company's desire to **deliver everything to everyone worldwide**
- 224 million people worldwide order at least one product per quarter from Amazon

Sources: Spiegel Online (www.spiegel.de/spiegel/print/d-123826489.html), Amazon (amazon.com)

branch infrastructure and intermediaries, and is thus able to offer excellent customer service at competitive prices. Its highly effective website and global reach enables the company to connect with millions of active customers in over 160 countries.

Formed in 1999, Zappos.com is America's largest online footwear retailer, offering a vast collection of shoes by way of its E-commerce website. The company further diversified to include products such as clothing, accessories, sports goods, eyewear and home goods. Now linked with Amazon, the company aims to provide an easy-to-use online shopping experience with speedy delivery. Zappos warehouses all products and distributes in-house so as to streamline the process and eliminate intermediary costs. Minimising infrastructure and intermediary costs, the E-commerce model results in lower prices, a convenient online shopping process and good customer service coupled with speedy delivery, bringing more customers and revenue to the company.

With almost 300,000 customers, Flyeralarm, founded in 2002, is one of the largest printing companies in Europe. Customers place orders on the E-commerce website and receive products, including flyers, magazines, office supplies, branded accessories, brochures, etc. Users specify the format, size, colour, artwork and paper quality and many orders are delivered within 24 hours. Flyeralarm is an example of an efficient E-commerce website on which the printing process is automated, thereby eliminating intermediaries and reducing costs while customers are attracted to the fast, efficient service and inexpensive printing supplies Flyeralarm offers.

Many companies' purchasing departments rely on B2B platforms to increase transparency and reduce transaction costs. E-commerce also provides new opportunities when companies open themselves up to their partners: Screw boxes will autonomously order new screws directly from Lowe's or Home Depot or directly from screw manufacturers such as Würth once their capacities are almost depleted. The growing intelligence of products and their increasing connections make for automated order processes and thus enhanced efficiency.

When and how to apply E-commerce

Just like Digitisation, E-commerce is brimming with potential. It has redefined shopping, for almost any B2C transaction can now be conducted online. The advantages of traditional online marketing and transaction management are clear, but there are additional hidden benefits associated with E-commerce. Both big data and the use of search and transaction data show promise. Despite increasing concerns about the implications of sharing data in (western) society, they will continue to be commercialised as long as doing so creates value for customers. In professional B2B settings, E-commerce has contributed to improving cost efficiency and reducing transaction costs.

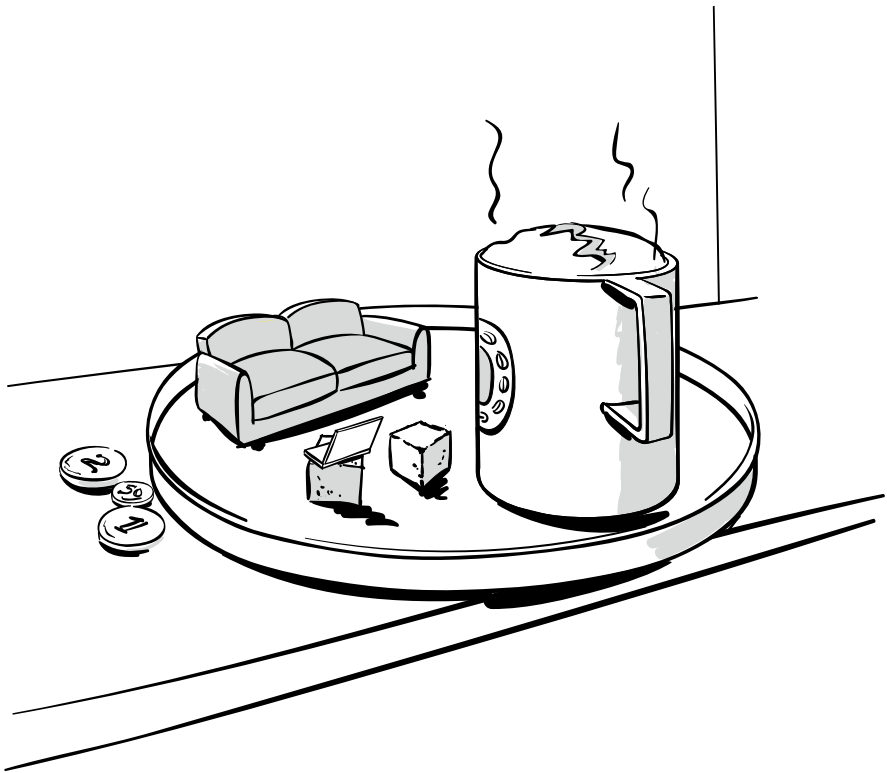
Some questions to ask

- Will introducing E-commerce allow us to create value for our customers or to reduce costs?
- Can we codify information relevant for our customers and put it online?
- Does going online leverage our unique selling proposition or will it incapacitate our competitive advantage?

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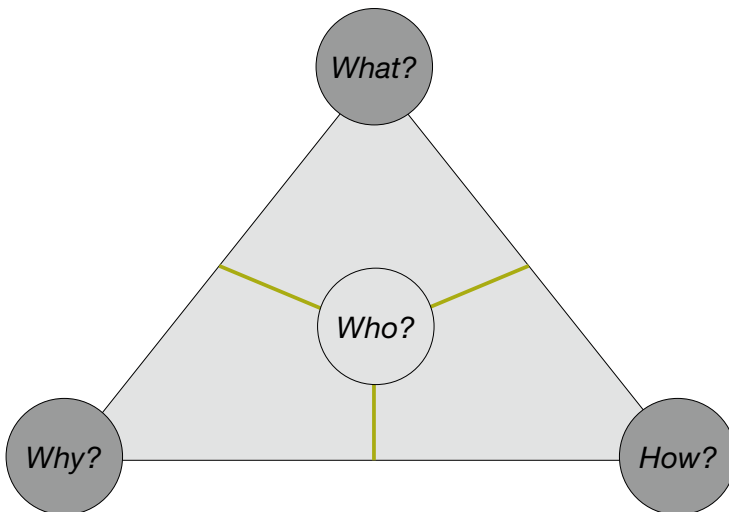
Experience Selling

Products appealing to the emotions



The pattern

In the Experience Selling model, the value of a product or service is increased by an additional experience offered with it. For example, a bookstore may provide a range of features such as coffee areas, celebrity book signings and workshops to create a fuller experience. This business model is closely connected to marketing. Over and above designing products or services, experiences and impressions are created, going beyond offering just another undifferentiated product on a saturated market and, instead, providing customers with an encompassing experience rather than just product functionality (what?). The intention of this model is for the company to actively shape its customers' observable environment, thus differentiating it from its competitors. The successful sale of experiences makes customers more loyal and willing to buy more at a higher price, given that the related experiences are included (why?). Experience Selling requires managing all activities affecting customers' experiences in concert: these will include promotions, retail design, sales personnel, product functionality, availability and packaging (how?). It is also important that customers obtain the same experience regardless of which branch of the business they deal with (how?).



The origins

The Experience Selling pattern was described in detail by Pine and Gilmore in their 1998 book *The Experience Economy*. The authors reference Alvin Toffler's *Future Shock*, which, back in 1970 at the time of the Cold War, recognised that future consumers of the 'experiential industry' would increasingly spend their money on unusual positive experiences. The German sociologist Gerhard

Schulze left his mark on Experience Selling theory when he coined the term *Erlebnisgesellschaft* ('thrill-seeking society') in 1992, and later Rolf Jensen contributed to the subject speaking on the 'dream society'.

Harley-Davidson, the well-known American motorcycle company founded in 1903, fully embraced the Experience Selling concept. The film *Easy Rider* (1969) presented an excellent opportunity for the company to associate the feeling of unbridled freedom with the Harley-Davidson brand. Philip Morris's cigarette brand Marlboro employs similar associations of boundless freedom and adventure embodied in the smoking 'Marlboro Man' cowboy to sell its products.

One of the pioneers of Experience Selling was Restoration Hardware. Founded in 1980, this chain sells timeless, updated classics and authentic reproductions of historic furniture and home decor. Customers become immersed in the comfort and quiet nostalgia that permeates Restoration Hardware stores, evoking their desire to live a simple life in an ever more complex world.

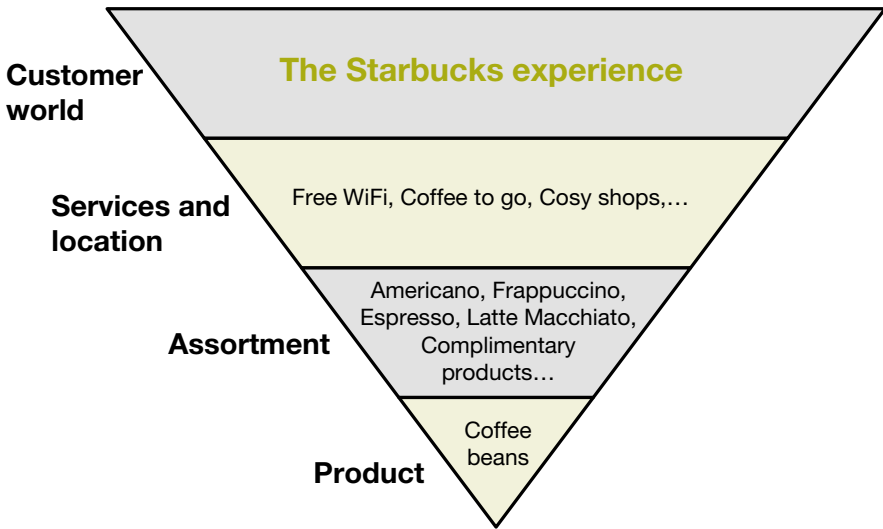
The innovators

Based in Seattle, Washington, Starbucks is a coffeehouse chain that currently operates over 20,000 stores in 62 countries. Starbucks' worldwide stores provide a range of food and beverages including coffee, pastries, snacks, teas, sandwiches and packed food items. Its coffees also include more 'gourmet'-type drinks such as caffè latte and iced coffee. In addition, Starbucks offers a series of features, products and services that together make for the unique Starbucks experience (e.g. WiFi, relaxing music, a cosy atmosphere and comfortable furniture). By adopting the Experience Selling model and offering many unique features besides coffee, Starbucks has gained in popularity and customer loyalty, ultimately leading to increased revenue.

Barnes & Noble is the largest American bookstore. The New York-based company has an online presence, but it is known primarily for its large retail outlets that adopt the Experience Selling concept. In addition to book sales (many of which are sold at discount prices), Barnes & Noble provides its customers with a variety of other products and services as part of the overall 'experience' in each of its hundreds of stores throughout the country: coffee-houses, events, special author appearances and book readings. Many Barnes & Noble retail outlets also sell DVDs, video games, gifts and music. Experience Selling has enabled Barnes & Noble to differentiate itself from the competition and cross-sell many products and services within its chain of bookstores. Customers are drawn to the overall experience and the convenience of many products and services available in one store, giving rise to a unique 'Barnes & Noble experience'.

Trader Joe's, an American retailer of speciality groceries based in California, also serves as a great example of Experience Selling, offering customers a unique shopping experience, with many gourmet, organic, vegetarian foods. The company also sells staples such as bread and cereal, and non-food items such as household products, pet food and plants. Many of Trader

Experience Selling



Joe's goods are located on individually customised shelves, in itself a unique customer experience. The shelves are often named according to the origins of the product, for example, Trader Giotto's (Italy), Arabian Joe's (Middle East), and Trader Jacques (France). The sales personnel are dressed to match these areas, a further customer experience. Trader Joe's places emphasis on environmentally friendly and organic products, thus attracting a wide range of similarly inclined people. To save costs, the company offers a small, selected range of up to 4,000 products, 80 per cent of which are its own brands.

Another example of Experience Selling is Red Bull, an Austrian company founded in 1987 and known for its energy drink of that name, the most popular of its kind in the world. The product is heavily marketed throughout the world with the distinctive Red Bull branding, targeted towards young males, with a prominent marketing campaign associated with active lifestyles and extreme sports such as Formula One, motocross, windsurfing, BMX and snowboarding. Like no other company Red Bull supports extreme flying events such as Felix Baumgartner's jump from the stratosphere or unusual ones such as boxcar races. These associations complement the Red Bull 'experience', encouraging people to engage in the lifestyle themes as well as the drink itself. Red Bull is able to charge higher prices for its products, because customers want the entire experience and not just the drink.

When and how to apply Experience Selling

The retail industry has done exceptionally well with Experience Selling. Retailers no longer sell products; they are in a tug-of-war to win the hearts of customers. Experience Selling presents a major step towards achieving just that. You can differentiate yourself from your competitors and forge a direct bond with your customers by providing a holistic experience. Customers are wont to spend more time and money at your stores as well as visit them more frequently.

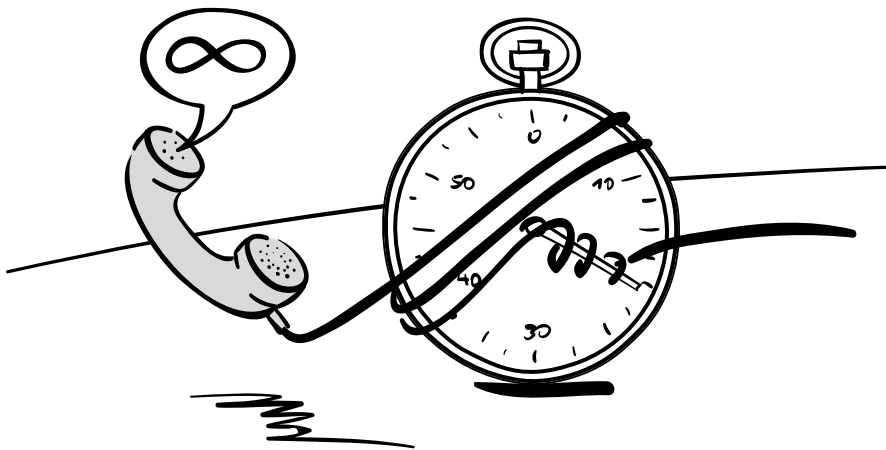
Some questions to ask

- How can we create experiences for customers that truly reflect what our brand stands for?
- How will we get everyone in our company on the Experience Selling bandwagon?
- How do we clearly define the experience our product offers?
- How can we create positive emotions and actually convert them into purchases?

Flat Rate

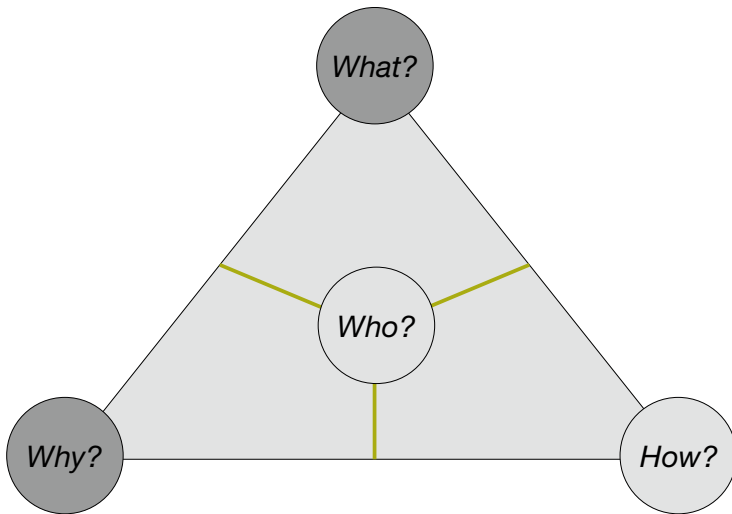
'All you can eat' – unlimited consumption at a fixed price

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The pattern

With this business model, customers purchase a service or a product for a lump sum and then use it as much as they wish. The main advantage for them is unlimited consumption with full control of their costs (what?). It remains financially sound for the business, if customers who exceed the normal rates of use are balanced out by those who use the service only sparingly (why?). In a few cases companies have to set upper limits of consumption in order to protect themselves from exorbitant costs, and, while this goes against the basic principle of unlimited use, it is the only way to ensure that the transaction can remain profitable.



The origins

Buckaroo Buffet, originating among the casinos of Las Vegas, was the name of the first restaurant to make use of the 'all you can eat' concept. Customers pay a fixed price to eat as much as they want, regardless of their actual consumption. Given that there is a physical limit of food that a person can consume in one meal, the prices are based on an average. Profits come from the many customers who purchase an all-you-can-eat ticket and eat less than average.

In fact, we know relatively little about the history of the Flat Rate business pattern, but it has doubtless existed for a very long time. Switzerland's national railway company Swiss Federal Railways (SBB) introduced an annual season ticket based on the Flat Rate concept in 1898, which is still operative over a century later. Passengers buy a single ticket for a fixed sum

(the travelpass) allowing them unlimited travel (in respect of time, train type and route) for a year. Such an arrangement makes travelling by train more appealing, and passengers who use public transportation intensively are cross-financed by less frequent users. Annual tickets also create a more reliable and steadier revenue stream than the normal Pay Per Use pattern. In addition, SBB created something of a status symbol by introducing a yearly ticket.

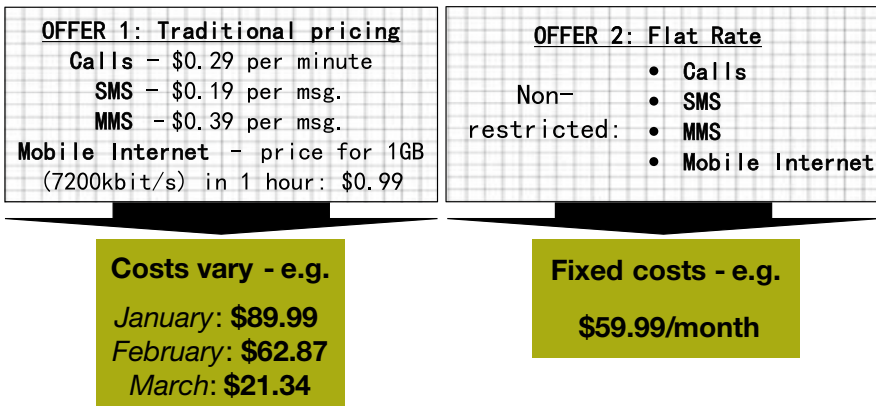
The Flat Rate business model was adopted by the tourism industry in the 1980s. In this context the term 'all-inclusive' is used to refer to package deals where all meals and beverages during a vacation are included. The founding father of this concept is Gordon Stewart, who opened the first all-inclusive hotel called Sandals Resorts in Jamaica in 1981. His goal was to attract tourists who had been reticent to visit the island on account of political unrest. Today, Sandals Resorts has made Stewart one of the most influential hoteliers in the Caribbean.

The innovators

Aside from the above examples, the Flat Rate business model has also led to some exciting innovations elsewhere. In the 1990s the telecommunications industry recognised the possibilities of Flat Rate plans for mobile telephony; customers are able to make unlimited calls to all their contacts within a predefined network for a fixed monthly price. Such plans have indeed become commonplace today, but they originally served as an important way for companies to differentiate themselves from others in a newly deregulated telecommunications market.

Netflix, founded in 1999 as the first on-demand Internet streaming media provider, also serves as an important Flat Rate business model innovation. For a monthly fee of as little as US \$7.99, customers gain unlimited access to

Flat Rate



over 100,000 films and TV shows. With over 26 million subscribers worldwide, Netflix's business model is regarded as a great success. Next Issue Media is currently working on porting Netflix's business model into the realm of magazines. The company's proprietary software allows customers to access over 100 magazines such as *Sports Illustrated*, *Time* and *Wired*. Instead of having to pay for each magazine individually, customers purchase a monthly subscription to the service starting at US \$9.99.

The Swedish company Spotify presents a mix between the Freemium and Flat Rate business models: the company offers a commercial music streaming service providing digital-rights management-restricted content from record labels including Sony, EMI, Warner Music Group and Universal Music Group. Founded in 2006, the company had approximately ten million users in 2010, one quarter of whom paid a monthly subscription fee. By 2014 Spotify was reaching 24 million users, more than 12 million of whom paid a fee in addition to advertisement income. Some 4.5 billion hours of music was streamed in 2013. Upon account registration or first login with a Facebook account, a six-month free trial period is activated, allowing the user to listen to an unlimited amount of music supported by visual and radio-style advertising. After the trial, listening time is reduced to ten hours per month, divided into two-and-a-half-hour weekly portions (with carry over of unused hours). This company could become a serious threat to Apple's dominating iTunes system in the near future.

When and how to apply Flat Rate

Flat Rate will likely work for you if you can meet one or more of the following criteria. First, you need to have manageable costs, e.g. you are an Internet business with low marginal costs. Second, your customers are exposed to diminishing marginal utility: that is to say that with every additional slice of the pie your customer eats, his or her desire for another one decreases. Third, billing customers Flat Rate would be more cost-efficient for you than billing them for every outlay.

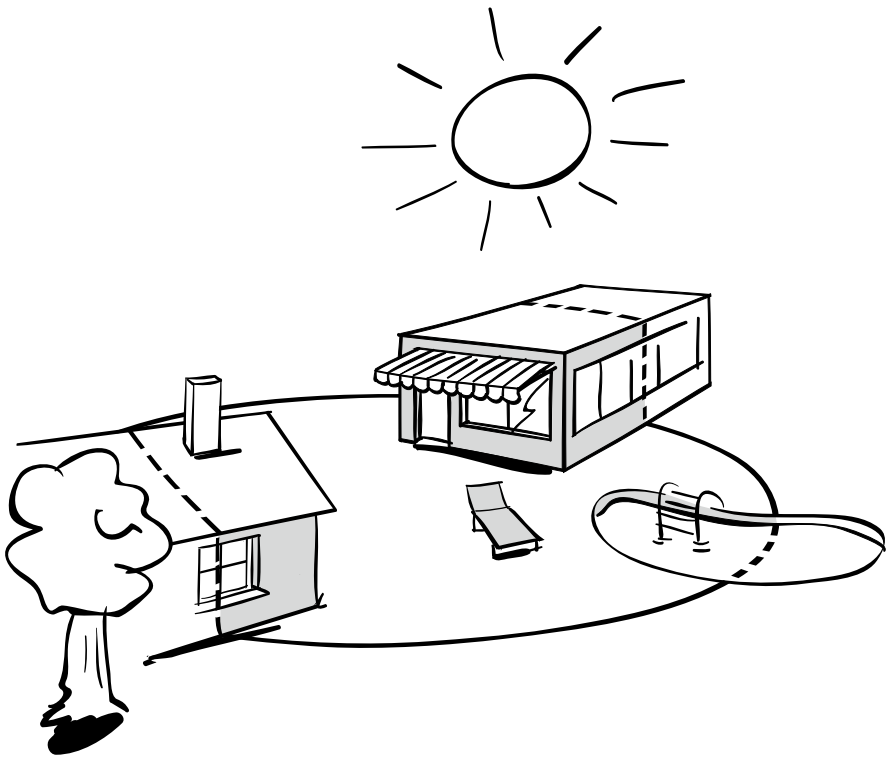
Some questions to ask

- Is the average customer still in the calculated margin?
- Do we want to increase our market share and grow at the possible cost of reduced profits?
- Can we protect ourselves from customers abusing our offer?
- Have we checked the price elasticity of demand?
- Have we taken the loss of price differentiation as a potential asset into account?

Fractional Ownership

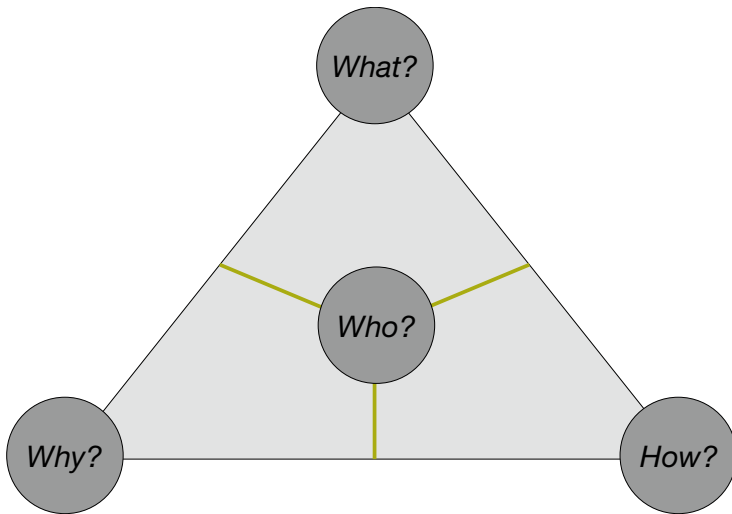
Timeshare makes for efficient usage

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The pattern

In the case of Fractional Ownership, customers purchase only a part of an asset rather than its entirety. Since customers have to come up with only a fraction of the full price. This gives them the possibility of purchasing products or services that they otherwise might not be able to afford (what?). Fractional Ownership is usually implemented in the form of an association where each buyer receives a certain amount of access based on the percentage of ownership. Typically, a company will oversee the maintenance of the asset as well as the rules and regulations governing the association (how?). Such a company profits from Fractional Ownership, given that dividing the total price of an object into smaller shares enables it to reach a wider circle of potential customers and the total sums received are larger than Direct Selling would have brought in (who? why?). Divvying up costs in this way can be especially valuable in the case of capital-intensive assets, which generally interest fewer customers. Another important advantage of Fractional Ownership is the more efficient use of assets when shared by several customers rather than owned by just one (what?).

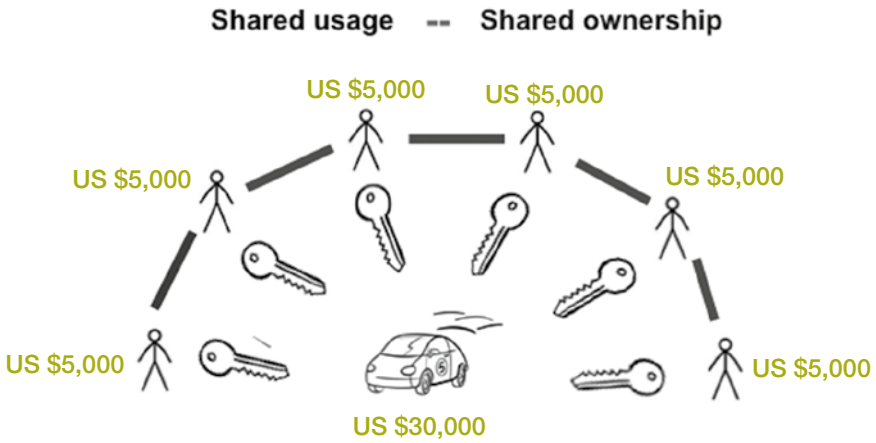


The origins

The origins of Fractional Ownership trace back to communist ideology and the practice of collective farming in early twentieth-century Russia. One of the pioneering companies to bring this business model into the private sector was NetJets, which established fractional ownership of aircraft in the 1960s. Customers buy fractions of an aircraft, entitling them to a certain allotment of flight hours. They are not restricted to a particular aircraft type, but can use any of the company's fleet of over 800 planes worldwide. By this means NetJets

guarantees its customers an available aircraft within 24 hours, a situation commensurate with owning a private aircraft oneself. Adopting this business model allowed NetJets to create an entirely new market segment in the field of private aviation.

Fractional Ownership



The innovators

Since its introduction, Fractional Ownership has been embraced by other industries as well. The tourism industry, for instance, has developed timeshares. Customers buy the right to use a holiday home, typically a resort condominium unit, for an allotted period of time each year. Switzerland's Hapimag was one of the innovators in this area. Founded in 1963, it is now one of the world's leading timeshare providers. Customers who purchase Hapimag shares acquire the right to use one of over 56 resorts in 16 countries. Hapimag is responsible for maintaining the properties and managing reservations, for which it collects a yearly maintenance fee. Timesharing led to the introduction of an entirely new concept in the tourism industry which proved to become one of its fastest growing segments.

Car sharing is another application of the Fractional Ownership concept. The sharing of cars among several owners implies a more efficient use. It furthermore enables people to access private transportation without needing to own a car. Mobility Carsharing is a Swiss vehicle-sharing company and was one of the first to commercialise the concept of Fractional Ownership within the car business. The scheme operates on the basis of short-term leasing of cars by individual users. Mobility Carsharing provides many central and regional Self-service

stations across the country, available around the clock for short-notice, short-term vehicle rental. Card-carrying customers pay a fee for membership and bear the costs of fuel and insurance, but are freed from the commitment and expense of outright purchase. The company recoups the initial capital and running costs by receipt of ongoing members' rental fees. The Self-service operation also reduces overheads and increases profits. Today, the company is one of the most successful car-sharing operators, with over 100,000 customers.

Established in London in 2005, *écurie25* is an international supercar club offering Fractional Ownership services for high-end luxury cars, operating on NetJets' business model. Customers purchase shares of a luxury car, entitling them to use it by the week. *écurie25*'s programme appeals to people who wish to enjoy the convenience and prestige of owning or driving a luxury supercar, even if only occasionally.

Finally, HomeBuy is a UK-government initiative based on the concept of fractional property ownership. Customers are offered one of two schemes: (1) an equity loan, whereby the government and property builder facilitate a loan of up to 20 per cent of the purchase price, and customers cover the remaining percentage with a deposit and mortgage; (2) shared ownership, whereby customers purchase a share of between 25 per cent and 75 per cent in the property, and the remaining percentage is purchased by a housing association who will charge rent, which will vary according to the down payment made. In a climate of high property prices, HomeBuy provides customers who would otherwise not be able to afford a home, access to home ownership through a combination of government subsidy and cooperation of property builders and housing organisations. Repayment schemes are structured accordingly. As customers own shares of the homes offered, they benefit from any increase in value pro rata, and, similarly, any additional shares they purchase will be at the current market value of the property. The rental income and government subsidy add security to the scheme and provide an opportunity to access a customer base that would otherwise not qualify for property ownership.

A number of models of Fractional Ownership have been implemented in the manufacturing industry. Shared investments are starting to become popular in cases where economies of scale are effective and the market is not very large or is highly specialised, but seldom-used machines nevertheless have to be bought. Since no standards have been established, the system depends on a high level of trust between the partners.

When and how to apply Fractional Ownership

Fractional Ownership works very well in industries where customers are willing to share assets. This business model pattern becomes viable and even appealing as assets increase in value. Classically, the pattern has been applied in the aircraft and real estate industries. If you choose to apply this pattern, you will be able to reach a larger customer pool and gain new customers who would not have been able to afford your product otherwise.

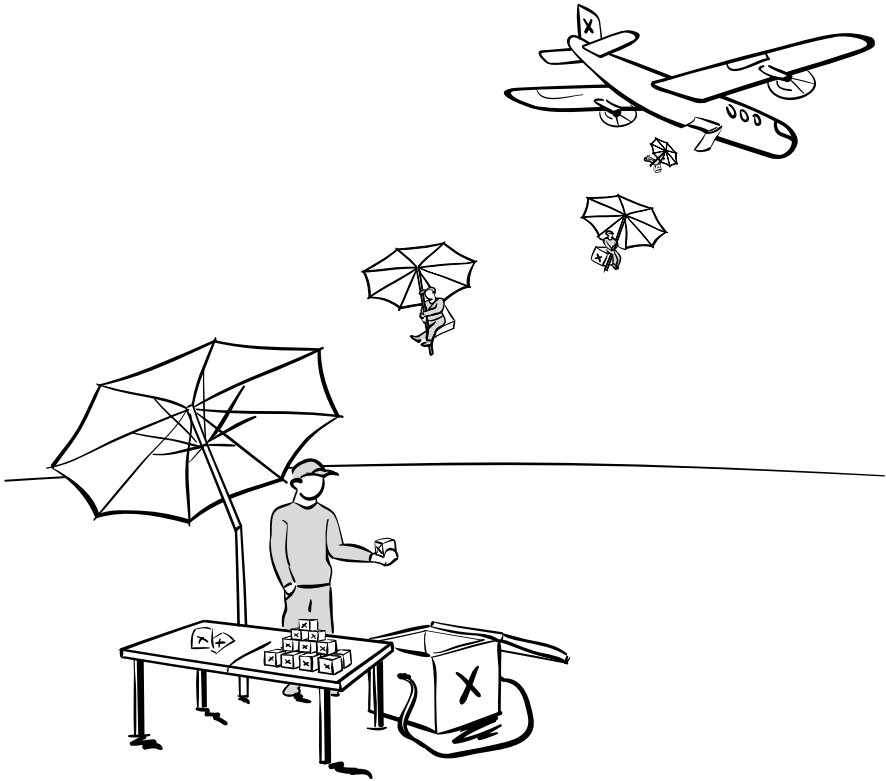
Some questions to ask

- **Can we devise an appropriate sharing scheme that minimises the risks for customers when sharing assets?**
- **Is dividing ownership likely to make our product more affordable to customers?**
- **How do we best split usage rights for our products in respect of contracts and transactions?**
- **Have we included simple and robust exit clauses for those customers who wish to sell their ownership shares?**

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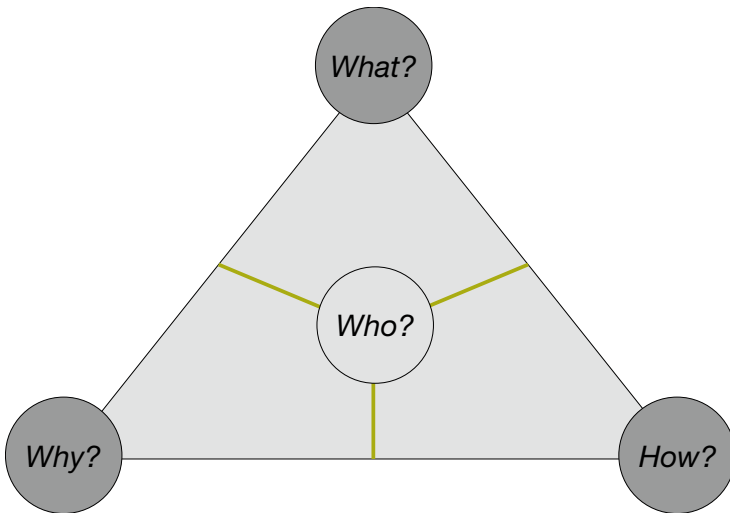
Franchising

All for one and one for all



The pattern

In Franchising, franchisors sell the right to use their business model to franchisees. The system permits a company to expand its business geographically very quickly without having to muster all the resources itself or carry all the risk (how? why?). Both of these functions are handled by the franchisees, who act as independent entrepreneurs and therefore bear responsibility for the majority of all transactions. Franchisees benefit by getting access to a proven business model with all its performance and differentiating features (products, trademarks, equipment, processes) (what?).



The entrepreneurial risk involved is much smaller than that of independently developing a novel business idea (what?). Franchisees can take advantage of the franchisor's expertise, which may include professional development, in-depth process knowledge, and brand spill-overs (what? how?). In a best case scenario, Franchising leads to a win-win situation where franchisors expand their business rapidly and franchisees participate in their profits.

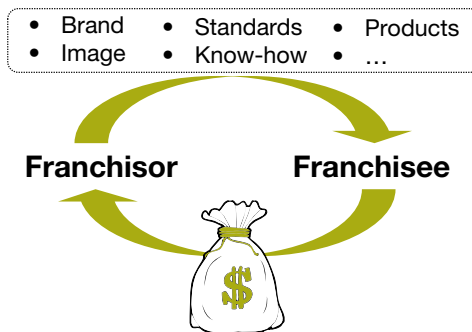
The origins

Franchising was originally developed in mediaeval France, where it was used primarily by kings to allow third parties to produce specific goods in their name. With the advent of industrialisation, Franchising spread to the private economy as well. The Singer Corporation, founded in 1851, is an American manufacturer and distributor of sewing machines, one of the first companies to be associated with the Franchising concept. Singer provided sewing machines in a form of franchise to retailers who were then able to sell them under licence in

a specified geographical area. The corporation also offered financial assistance to retailers in order to manufacture and sell sewing machines under licence. In return, the retailers were responsible for training people to use the machines. Singer generated revenue from royalties on the extended sales of the product and benefited from a wider distribution network which would otherwise have been unattainable on account of prohibitive manufacturing costs.

Fast food giant McDonald's reached worldwide fame through Franchising with its Self-service restaurant chain. Sales representative Ray Kroc was instrumental in making McDonald's a success story by convincing brothers Richard and Maurice McDonald to let him expand their restaurant countrywide. Upon their agreement, Ray Kroc in subsequent years recruited franchisees and business went so well that in 1961 he bought the rights for the brand from the brothers for US \$2.7 million. Kroc went on to transform McDonald's into the world's largest restaurant chain and became one of the richest men in the United States. Today McDonald's restaurants operate in 119 countries around the world. Entrepreneurs can apply to become a franchisee, and, if accepted, McDonald's supplies them with the necessary information, equipment and furniture to open a restaurant. Standardisation allows the company to sell the concept as a whole, including processes and products. As franchisor, McDonald's generates revenue and profits through premiums earned from its large network of worldwide franchisees. The company focuses on its key service to provide competitively priced fast food, reducing costs on waiting staff and other overheads and increasing customer throughput and profit.

Franchising



The innovators

Widely popular in the food and beverage industry, Franchising is applied by a slew of well-known restaurant chains including Subway, Pizza Hut, and KFC. Subway, for example, is an American fast food restaurant chain, best known for its 'submarine' (sub) sandwiches and salads. Operating in over 100 countries and territories, Subway is one of the fastest growing franchises in the world.

Franchisees adopt Subway's business concept and apply it to restaurants in all sorts of locations worldwide. The menu varies from country to country, enabling Subway to achieve a wider reach and address regional tastes and customs. The company provides the information, premises and support for franchisees to ensure consistent representation of the brand in their chosen territory. For its part, Subway receives royalties from its extensive, growing global network of franchisees and over 30,000 restaurants. Other large international companies that have successfully applied the Franchising concept are Starbucks and 7-Eleven.

The hotel industry also employs Franchising. One of the first companies to do so was Marriott International, founded in 1993. Marriott International is an American company specialising in the hotel and holiday accommodation business. The company manages and franchises facilities within its extensive worldwide portfolio. Marriott provides hotel facilities with a focus on business customers, plus holiday accommodation facilities. The Franchising business model enables Marriott to apply its brand and concept to locations worldwide, providing information, property and the necessary support to its franchisees to ensure standardised branding and consistency of service. Marriott International is paid an application fee by franchisees and receives ongoing royalties during operation. The franchisees also pay a fee for national marketing programmes and the use of Marriott International's reservation system. Franchising has allowed Marriott International to establish itself successfully in some 70 countries, marking it as one of the largest hotel chains in the world.

Natur House is one of the largest Spanish franchisors, with over 1,800 stores worldwide. Through its chain of stores, Natur House provides dietary advice, ongoing consultations and diet plans to its customers, as well as products such as food supplements, healthy food, cosmetics and body care products. Natur House enables franchisees to open up their own stores under the Natur House brand and offer products and advice in the fields of nutrition and dietetics. This is achieved by Licensing and the provision of ongoing support for franchisees within the chain. Natur House receives an initial payment from franchisees and annual royalty fees. All in all, the company benefits from a growing identity, thus increasing customers and revenue.

Another successful example of franchising is offered by Holcim, one of the world's leading suppliers of cement and aggregates as well as further activities such as ready-mix concrete, asphalt and related services. In 2006, Holcim Indonesia launched the innovative Franchising business model called Solusi Rumah. In line with its tagline '*Datang bawa mimpi, pulang bawa solusi*' (Come with a dream, go home with a solution), Solusi Rumah offers a one-stop housing solution to the Indonesian home builder by providing architectural services, building materials, access to finance for housing mortgages and/or micro finance, and construction and property insurance under the roof of one single retail outlet. Those outlets are run by Holcim's franchisees who may be either concrete product manufacturers or retailers without their own concrete production activity. Solusi Rumah enables Holcim to expand quickly in the Indonesian market while offering franchisees the possibility

to differentiate themselves from local competition by benefiting from Solusi Rumah's positioning as a high-quality, premium brand. The success of Holcim's Solusi Rumah business model is impressive: only a few years after its launch, 180 Solusi Rumah stores have been opened in Java, Bali and the southern part of Sumatra – the most populated islands in the country.

When and how to apply Franchising

You should consider the Franchising pattern if you have already built up important assets such as knowledge or brand strength and want to leverage these to grow fast with limited risk.

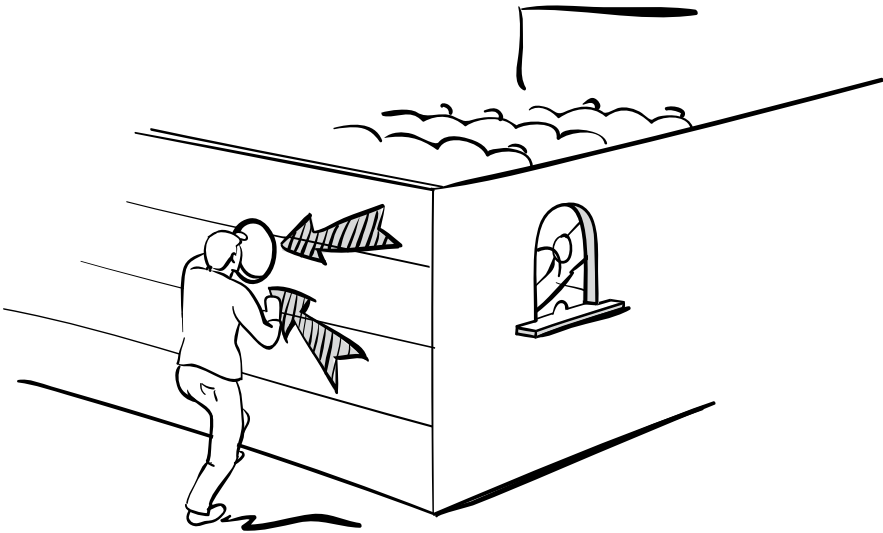
Some questions to ask

- Are our competencies and assets attractive enough to persuade potential franchisees to play by our rules?
- How do we multiply our business and realise our growth potential with limited risk?
- Are we equipped with adequate standardised processes and IT systems to support our business model and strengthen our partners?
- Are we able to legally and/or technically protect our codified knowledge to safeguard against imitation?
- Is the business model protected against imitation?
- How do we ensure that franchisees stay with us?

Freemium

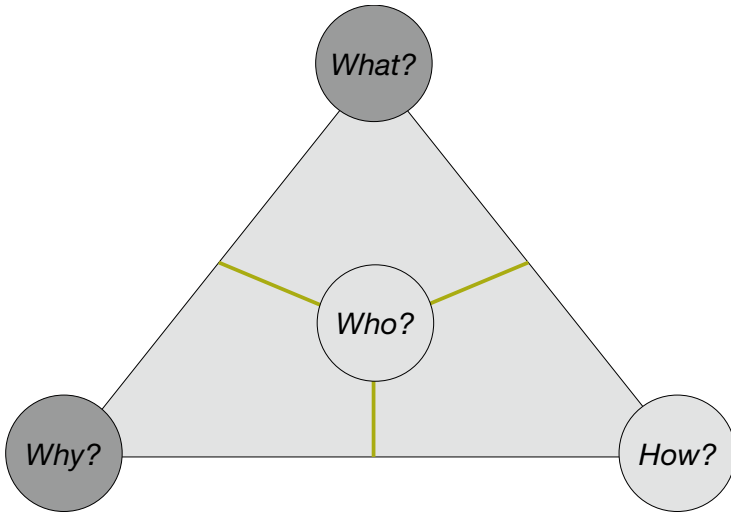
Choosing between free basic and paid premium versions

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The pattern

The term 'freemium' is coined from a combination of 'free' and 'premium'. As this suggests, the business model involves offering a basic version of the product or service free of charge, while the premium version is made available against additional payment (what?). The free version of the product is intended to permit the company to establish a large initial customer base, from which it is hoped that enough customers will want to make the jump to the premium version later (why?).



A key performance indicator for this pattern is the so-called conversion rate, which measures the ratio of paying to non-paying customers. The percentage will vary according to the specific business model, but is generally situated in the single digit range. Given that the vast majority of people use the free version of the product, which therefore needs to be cross-subsidised by premium customers, it follows that the cost of offering the basic product should be very low, ideally zero. In many cases this is the only way to ensure that 'free' users are supported and that the business model is likely to be profitable for the company (why?).

The origins

Venture capitalist Fred Wilson was the first to describe the Freemium business model back in 2006. He summarised the pattern as follows: 'Give your service away for free, possibly ad supported but maybe not, acquire a lot of customers very efficiently through word of mouth, referral networks, organic search marketing, etc., then offer premium priced value added services or an

enhanced version of your service to your customer base'. The coinage of the name goes back to a post Wilson put on his blog calling for a fitting name for this business model. 'Freemium' was chosen as the most appropriate term and has since become firmly established.

The Internet and the digitisation of services are the main drivers that have enabled the development of this business model. Both offer the possibility of an 'economy of bits', which allows a myriad of products to be reproduced virtually cost-free and sold at a minimum price. Some of the first Freemium business models were web-based email services developed in the 1990s. Microsoft's Hotmail, for example, offers its users a free basic account, but charges a premium for additional features such as unlimited storage.

The innovators

In line with the rapid expansion of the Internet, the Freemium pattern was adopted over a large range of products. The telecommunications company Skype, founded in 2003, is an example of an enterprise that was able to capitalise on the Freemium pattern for business model innovation. Skype offers its users a Voice-over Internet Protocol program (VoIP) that enables them to call anywhere in the world over the Internet. In addition, Skype offers its customers the option to purchase call credits for use with landlines and mobile phones. Now owned by Microsoft, the company has had a profound effect on the telecommunications industry, boasting well over half a billion users at the present time. Many traditional telecommunication providers have seen drastic reductions of their revenue from fixed line and mobile phone calls now that users have the ability to communicate for free.

Freemium



Another example of a business model based on the Freemium pattern is the music streaming service Spotify. Users who pay nothing are regularly exposed to advertisements, which are no longer imposed if they upgrade to the more user-friendly premium package. Introduced in Sweden in 2006, Spotify acquired over a million customers within its first year of existence. Spotify has since tinkered with its Freemium business model to permit non-paying users access to the music streaming service for a limited number of hours each month, thus providing an incentive for them to switch to the premium version of the service.

Other prominent Freemium-based businesses are Dropbox and LinkedIn. Dropbox offers users a limited amount of free cloud storage space, which can then be expanded at will for a monthly fee. Purchasing a 'premium badge'

allows LinkedIn subscribers to access the premium version of the product. This gives them a more prominent position in searches within the network or the possibility of browsing other members' profiles incognito.

When and how to apply Freemium

This pattern is popular with Internet-based businesses with marginal production costs approaching zero and the benefit of external network effects. In the past these kinds of companies have used the Freemium model to test user acceptance of new software releases or business models. The pattern works even better when coupled with a strong customer focus.

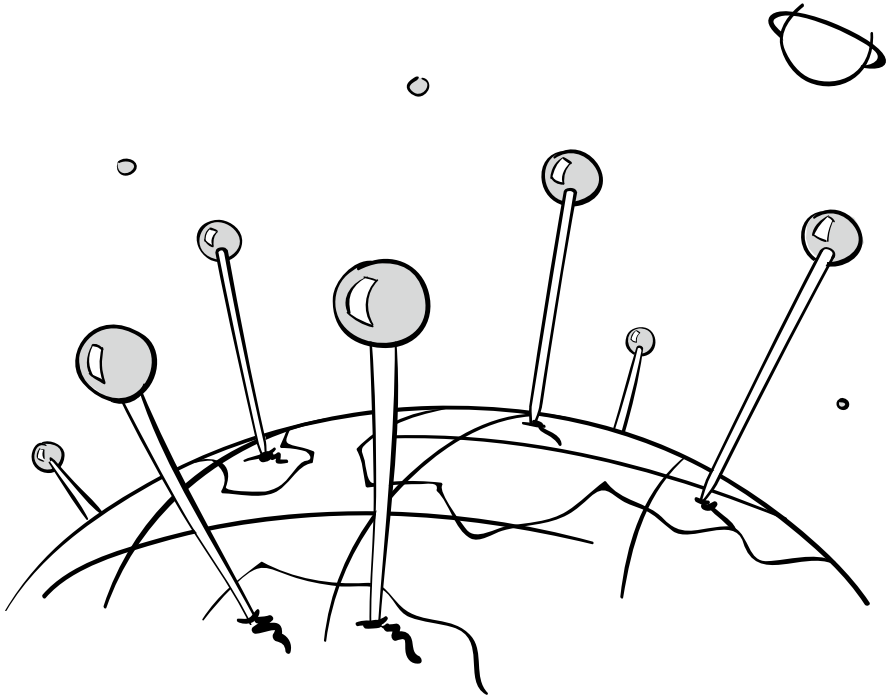
Some questions to ask

- What do our customers need?
- How can we improve our customers' experience?
- Can we somehow lock our customers in?
- What functionalities provide added value and increase customers' willingness to pay for our product or service?

From Push to Pull

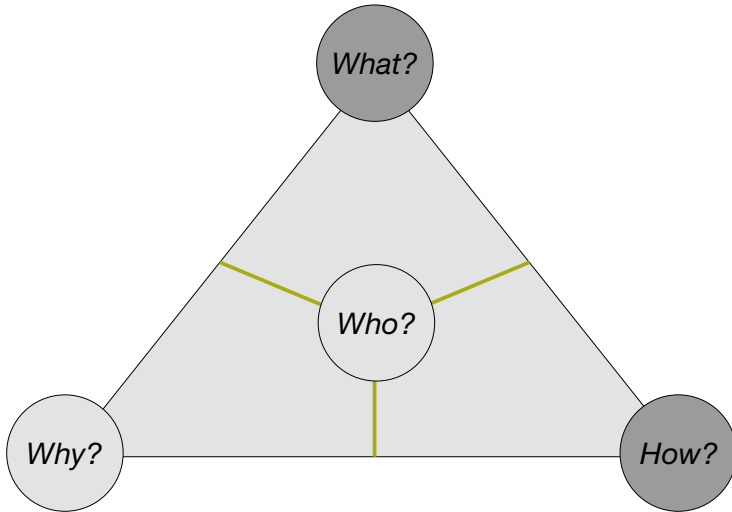
Customers create a value vortex

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The pattern

Most people are aware of the shift from a vendors' to a buyers' market and the corresponding need for change towards demand-driven selling, but the challenge remains of how to adapt to these findings with a proper business model. The From Push to Pull pattern focuses on the 'customer is king' paradigm, making it central to all decisions within the enterprise, be they related to research and innovation, new product development, production, logistics or distribution (what? how?).



Figuratively speaking, we may imagine the customer pulling on a long rope that sets all company processes into motion and so shapes the value proposition. This is in direct contrast to the push strategy, which follows a 'make-to-stock' approach. If a company wants to switch from 'pushing' a value proposition on its customers and employ a 'pull' strategy instead, it needs to have a flexible and responsive value chain (how?). As a result, inventory costs go down and non-value-adding activities are eliminated. The pull philosophy has to be consequently implemented at every phase of the value chain. The production process, for instance, will take a very different shape depending on where along the value chain the decoupling point is set. This point determines from which point on to implement a pull strategy and let production be dictated by present demand. In other words: the decoupling point determines the push-to-pull boundary. From Push to Pull obliges a change in perspective towards producing only what customers want in as efficient a manner as possible.

A pull strategy can be applied to all other aspects of the business, for example, to product development processes (how?). Open innovation and engineer-to-order projects are two ways of including customers at the very

earliest phases of development without having to involve intermediaries or other third parties.

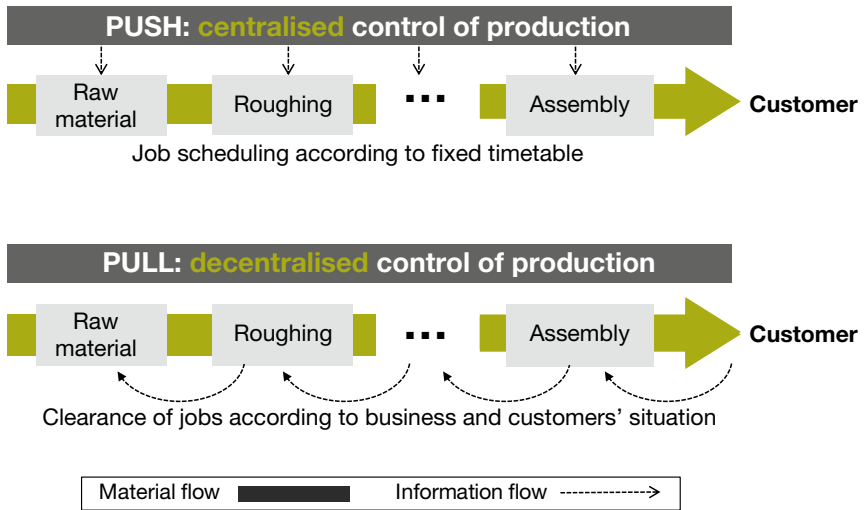
When customers actively ask for products from a company, this may also be considered a pull strategy. Specific marketing or similar means can be used to pique customers' interest and bring them to actively suggest a product. This approach is often used by consumer goods manufacturers who market their goods directly to customers and thus increase the retail demand for their goods. In turn this means that retailers will be more inclined to allocate these goods shelf space. To implement the From Push to Pull business model successfully, it is imperative to examine carefully each step of the value chain and to establish the optimal points at which to integrate and interface with customers in order to attract them to the company's offerings.

The origins

The terms 'push' and 'pull' originated in logistics and supply chain management. Toyota has become synonymous with the implementation of pull strategies in production and logistics. In the period following the Second World War, the company developed a production system which was the key to Toyota's ascent to becoming one of the largest car manufacturers in the world. The Japanese economy was characterised by weak domestic demand and massive shortages of resources. The response of manufacturers was to attempt to produce goods as efficiently and economically as possible. The Toyota Production System employed the Supermarket model to set off demand-driven production, replenishing the inventory on demand so that internal inventories were reduced to a minimum. Introduction of the Toyota Production System obliged the company to reorganise its entire value chain in such a way as to reduce waste and costs, all the while maintaining a clear customer focus. Strategies such as just-in-time (JIT) production, minimising of cycle times, reducing inventory by applying Kanban logistics, or total quality management (TQM) were central to customer-oriented manufacturing. Thus, Toyota is able to react very rapidly to changing customer needs and market situations. Since Toyota only produces what customers order, each fabrication step is initiated directly by the one before, the whole process is set off by a customer's order. In addition to reducing inventory costs, this approach also avoids overcapacity so that unused capital can be employed more gainfully elsewhere. The production system proved to be so successful that it is still considered state of the art to this day.

Subsequently, a whole array of instruments and methods came together to form a business model that still serves as an example for many companies today. Toyota's business model has been much imitated, for example by Bosch where the pattern has a similar name (Bosch Production System, BPS), or further developed, as by BMW for its premium models.

From Push to Pull: The concept of the Toyota Production System



The innovators

Geberit is a Swiss multinational that develops products for the sanitation industry. Founded in 1874, the company for a long time relied on demand from wholesalers and hardware stores. In the late 1990s the company found itself facing various challenges in its field of business: a large number of commodities that had little potential for innovation or differentiation plus pressure on prices as a result of stagnant demand. In 2000, the company finally succeeded in breaking with the dominant industry logic, which previously had depended heavily on intermediaries such as hardware stores, and established a new business model. Geberit henceforth pursued the concept of disintermediation and sought to establish direct contact with its customers, in other words to develop an appropriate From Push to Pull business model. Geberit came to recognise that its customers were not the hardware stores, wholesalers, or end users of sanitation systems, but that it needed to target the decision-makers in the construction industry – architects, builders and plumbers. This permitted the company to eliminate intermediaries in distribution to a considerable extent. In addition, Geberit developed a number of instruments that afforded greater inclusion of customer feedback and integration into the new product development process. The methods employed ranged from free training, full customer support management and appropriate software support to greater presence during the assembly phase. With the introduction of the From Push to Pull business model based on disintermediation, Geberit achieved a true shift in perspective: instead of ‘pushing’ products on to hardware store shelves, its products were now being ‘pulled’ by a target group of qualified customers.

In the fashion industry, the From Push to Pull model has been embraced by Spanish apparel and accessory retailer Zara. The company sells its clothes at affordable prices in its retail stores and online. Zara is known for its ability to rapidly offer collections in line with the latest fashion trends. The fashion retailer achieves this by employing over 200 designers and droves of fashion observers around the globe to ensure early recognition of the latest trends and developments. New collections are designed quickly and put together in company-owned production facilities, from where they can be swiftly expedited to Zara's shops and online stores. Zara's retail stores are generally located at select locations in city centres to attract a large number of walk-in customers. In this way Zara's shop windows serve as advertising space and the company is spared from having to fund expensive advertising campaigns. While Benetton pioneered the introduction of elements of the business pattern to the fashion industry, it was Zara who perfected its implementation. By virtue of its flexible customer-oriented business model, Zara overtook its competitor Hennes & Mauritz (H&M) in 2006 as the world's top-selling fashion retailer.

When and how to apply From Push to Pull

From Push to Pull aims to challenge your entire value chain. It will help you eliminate waste. You can use such a customer-centric approach regardless of the industry you are in. For manufacturing companies with little product variety, stable consumption and high inventory costs, the biggest potential for application rests at the front end of the value chain, in production and logistics.

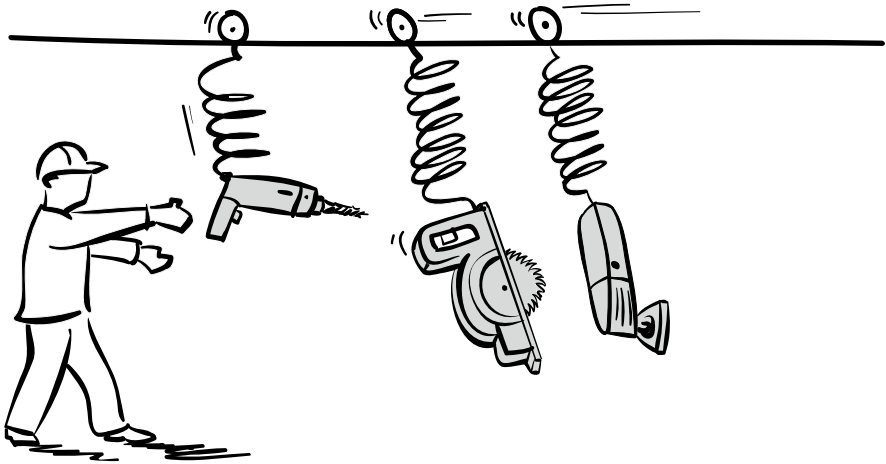
Some questions to ask

- Do our production and logistics systems need to be more flexible?
- Are we currently stocking excess inventory?
- Are we able to truly focus on our customers in every activity of our company?
- Can our suppliers cope with just-in-time production?
- Are our suppliers qualified enough to manage pull production?
- Will this pattern help us to be more flexible?
- Which value chain activities need to be explored first?
- Would centrally planning our activities limit our endeavours?

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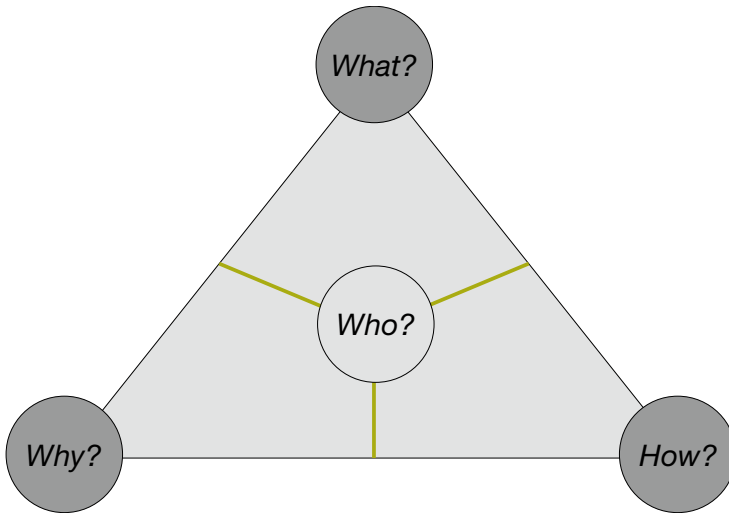
Guaranteed Availability

Assured access to the product



The pattern

The essential aim of the Guaranteed Availability business pattern, whose meaning speaks for itself, is to reduce the costs incurred by the breakdown of technical machines or equipment by ensuring almost zero downtime (*what?*). Its implementation generally involves a Flat Rate contract entitling customers to all the services necessary to guarantee constant product availability. In addition to providing replacement equipment and machines, this generally also involves the provision of repair and maintenance services (*how?*). Because customers value such steady availability, businesses typically build up strong long-term relationships with their customers (*why?*).



The origins

Little is known about the origins of Guaranteed Availability, but we may safely say that it has existed for a long time. Way back in ancient China doctors were paid not to heal patients, but to ensure maintenance of their health, and a doctor's skill was measured by the number of healthy patients in his or her charge. A Chinese proverb states: 'The superior doctor prevents sickness; the mediocre doctor attends to impending sickness; the inferior doctor treats actual sickness'. In the private economy the Guaranteed Availability model has gained popularity through fleet management concepts: that is to say, the planning, administration, and control of fleets of trucks, cars, ships or trains. One of the first companies to provide fleet management was PHH Corporation, an American outfit that among other things provides customers with leasing and fleet management services with more than 580,000 vehicles based on Guaranteed Availability. PHH Corporation offers to manage a company's entire

fleet of vehicles in such a way that the customer has access to the required number of vehicles at all times, handling acquisition, finance, maintenance, safety, insurance, security, vehicle tracking, and all logistics and administration associated with the customer company's fleet. PHH Corporation draws on its huge experience and expertise in fleet management to offer its services at competitive rates, thus boosting its customer base and revenue. Customers are attracted by the ready availability of vehicles and the outsourcing of fleet management to experts in the field. Fleet management has now become an integral part of the business activities of transportation and logistics companies.

The innovators

A considerable number of companies have adapted the Guaranteed Availability pattern in recent years. IBM, the American multinational and producer of computer hardware, software and infrastructure, is responsible for many IT inventions and business innovations, offering a wide variety of products and services in the field of communications and information technology. The rapid fall in computer pricing in the 1990s put the company in serious financial trouble, and its difficulties peaked in 1992 when the company reported a historic US \$8.1 billion loss. To ensure the company's survival, then-CEO, Lou Gerstner, undertook the company's conversion from a straight product vendor to a solution-oriented service provider. In the PC division this meant giving up the hardware business in favour of offering integrated Guaranteed Availability solutions to customers, whereby IBM became responsible for maintaining the computer infrastructures of banks, businesses, and other large organisations. This revamped approach gave IBM more flexibility and independence within the highly competitive computer market. Today it is once again a highly profitable company that makes only 20 per cent of its profits from hardware sales.

Another prominent example of the Guaranteed Availability pattern is the Liechtenstein-based anchoring specialist Hilti, which over ten years ago launched its Hilti Fleet Management scheme for hammer drills. Like a vehicle fleet manager, Hilti takes charge of managing its customers' fleet of tools, taking full responsibility for all maintenance and repairs. If a tool is damaged, Hilti guarantees to either repair it or replace it at once. Such a reliable service is of course very beneficial to the customer, for whom downtime costs due to breakdowns, which can have a huge impact in the construction industry, are minimised.

MachineryLink is an American company that offers equipment and rental programmes with proprietary data services in the domain of agricultural machinery such as combine harvesters. Customers can rent harvesters and other farming equipment and are given access to the FarmLink analytics data service, which improves performance by providing them with up-to-the-minute harvest information on the weather, market prices and trends, crop conditions, etc. With MachineryLink's rental service, customers can allocate capital to other areas of business rather than having to purchase machinery outright. Taken together, all these benefits attract customers and increase the company's

revenue. Thanks to the Guaranteed Availability concept MachineryLink is now one of the leading providers of combine harvesters in the United States.

ABB Turbo Systems in Switzerland is a subdivision of Zurich-headquartered ABB Group, providing their global customer network with services for the provision and maintenance of turbochargers. Customers using any of ABB Turbo System’s 200,000 turbochargers (powering ships, power stations, locomotives, etc.) have access to a highly efficient 24-hour worldwide service network. Customers select a service plan giving them access to more than a hundred service stations linked via a computer network to the company’s central headquarters in Baden. ABB Turbo Systems plans the necessary maintenance activities proactively so as to guarantee optimum availability of its products and spare parts. The service network affords customers considerable savings through its outsourcing of maintenance and repair tasks.

Customers subscribing to the full service contract with elevator industry companies such as Otis, Mitsubishi Electric or Schindler are guaranteed a certain percentage of availability of their elevator systems. This is crucial in office buildings such as the Willis Tower (formerly the Sears Tower) in Chicago, where 12,000 employees come to work every morning. A shutdown or even reduction in the availability of the elevator system creates costs as high as several million dollars per week. The security offered by this business model is more than welcome to both customers (guarantee) and the elevator companies themselves (margins).

Guaranteed Availability

<p>Schindler</p>	<p>Example Guaranteed Availability: 95%</p> <ul style="list-style-type: none"> • Cost control: Monthly usage fee with no additional costs as fee includes service and repair costs of the elevator. • Contract ensures operational reliability through regular maintenance and inspection by Schindler. • In the event of a breakdown, Schindler is responsible for repair and downtime costs.
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When and how to apply Guaranteed Availability

If you are in an industry where availability is crucial you may want to make use of this business model pattern. The B2B context is particularly conducive to Guaranteed Availability. If both of the above situations apply to you, then you

can use the pattern to win big customers over the long run and demand a hefty price premium for your service. In order to excel at this business model, you must be adept at handling unforeseen customer crises expertly.

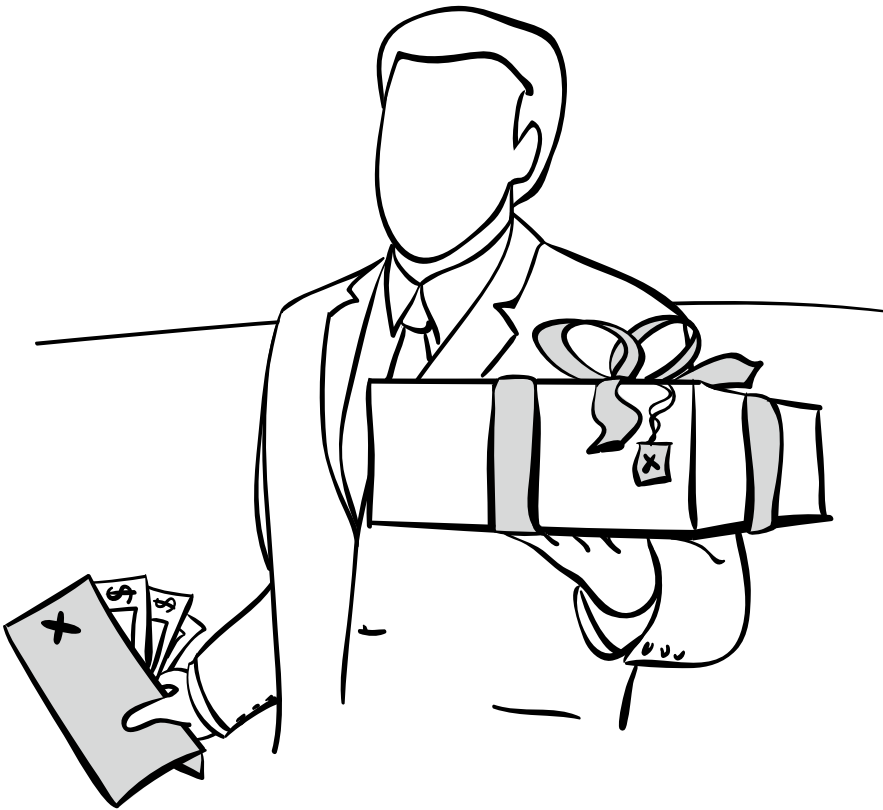
Some questions to ask

- **Can we afford to adopt this business model? Will we be able to manage inventory sufficiently well and maintain surplus equipment to be exchanged for damaged items?**
- **How can we limit the downside risk of technical product failure?**
- **How can we speed up maintenance and recovery procedures operationally?**
- **How should we design penalties to handle the downside risks of product failure?**
- **Could we deal with the potential financial and/or reputational fallout if we were to fail to deliver on our Guaranteed Availability promise?**

Hidden Revenue

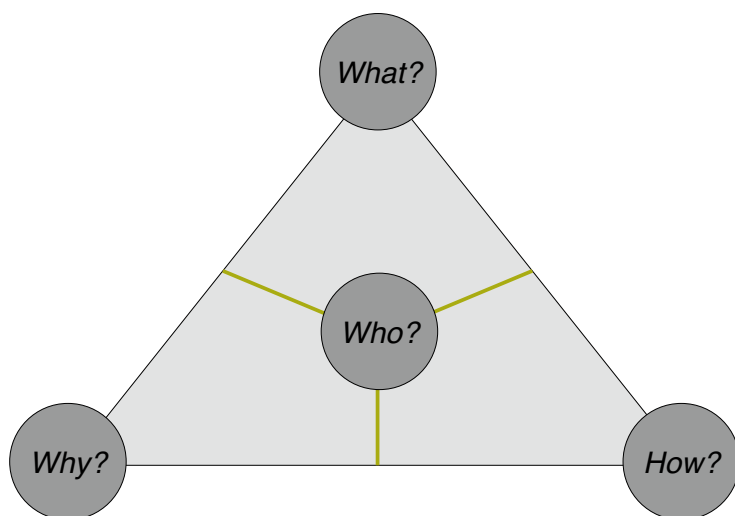
Seeking alternative sources

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The pattern

In the Hidden Revenue business pattern, the logic that a business has to rely exclusively on the sale of products or services is abandoned. Instead, the primary source of revenue is derived from a third party, who cross-finances the attractive free or low-priced offerings made to customers (what? how? why?). A common application of this model is to integrate advertisements into the offering, thereby attracting customers to the advertisers who fund it (who?). The chief advantage of working with the Hidden Revenue pattern is that it accesses an alternative source of income that can supplement or even wholly replace the revenues generated by the conventional sale of products (what? why?). Obtaining financing through advertising may also have a positive impact on the original value proposition. Normally many customers will be willing to watch a few ads if this means that they get a better deal on your goods or services (what?).



The origins

While it appears that the ancient Egyptians already resorted to advertising, the practice of using ad sales as a main source of revenue is a more recent development. The first instances of ad-based funding can probably be traced back to the bulletins that began to be distributed early in the seventeenth century with the development of the printing press. These typically contained public announcements, court hearing schedules, obituaries, as well as paid private and commercial classifieds. The classifieds business was so lucrative that most bulletins were financed almost entirely by it. The modern intrusive version of these bulletins is the ad flyers we all receive at our homes today.

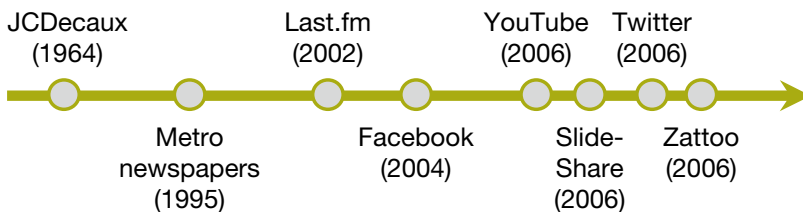
The innovators

Over time a range of other exciting and innovative business models have been created based on ad funding. JCDecaux, founded in 1964, is an excellent example. The company delivers innovative advertising systems for public ‘street furniture’ including bus shelters, self-service bicycles, electronic message boards, automatic public toilets, and newspaper stands. JCDecaux works with city authorities and public transport operators to provide such ‘street furniture’ for free or at a reduced price in return for exclusive advertising rights. Advertisers pay JCDecaux for prime locations and transit media opportunities, while the cities benefit from the free or cheaper public services and advertising design innovations, with JCDecaux serving as intermediary between the two parties. In the case of the self-service bicycle scheme Cyclocity, further revenue is achieved from hire and subscription charges. The result is happy users of the bicycle rental service, less motor traffic in the cities, and effective advertising for local businesses. The Hidden Revenue model generates annual revenues of over €2 billion for JCDecaux, making it the largest outdoor advertising corporation in the world.

Another type of innovation based on Hidden Revenue is free daily newspapers. Financed entirely through advertising, these free dailies generally achieve a very high circulation, which in turn has a positive impact on advertising rates. Media company Metro International is a pioneer in this area. Its eponymous free daily newspaper is one of the most frequently read papers in the world. The first edition of Metro was distributed in 1995 in Stockholm, and today it is distributed in more than 20 country editions to reach some 35 million readers a week.

Zattoo provides ad funding for Internet television by way of its website and mobile applications. Customers sign-up on the Zattoo website and gain access to a variety of television channels via web-streaming Internet technology. Zattoo offers its Internet broadcasting service free of charge, cross-financing operating costs by selling advertising space in the form of banners and clickable commercial videos. The commercials are produced by the advertisers themselves, so that Zattoo is concerned only with placing the material in its broadcasting schedule. The attraction of the free services attracts viewers to the advertising market. Today Zattoo is Europe’s largest live-web TV provider.

Hidden Revenue



'Targeted advertising' is a special version of Hidden Revenue adapted to the Internet. Ads are adjusted to specific target groups to avoid waste coverage and communicate the advertising content efficiently. Google has very successfully implemented Hidden Revenue in that novel form. Originally founded purely as a search engine for the Internet in 1998, Google now dominates the search engine market with a number of free services including web search engines, personal calendars, email services and maps, as well as specialising in other Internet technologies such as cloud computing and software. With all this, Google has become one of the biggest brokers in the online advertising business. The company is able to maintain its register of free services by cross-financing through its AdWords advertisement program, which allows companies to purchase targeted advertisements that then appear on Google's search listings depending on the search terms entered by the user. Google receives revenue on a cost-per-impression (i.e. each time an ad is displayed) or cost-per-click (each time a user clicks on an ad) basis. With this scheme the company attracts more customers and this in turn increases advertisement revenues. Google's business model allows it to generate billions of dollars in revenues every year and to maintain an online advertising market share of over 60 per cent.

When and how to apply Hidden Revenue

This pattern's potential was systematically overvalued throughout the early years of the new economy: countless companies were valued highly but failed to generate any real revenues. Hidden Revenue is still hard to assess today. Just think of Facebook paying a staggering US \$16 billion dollars for the WhatsApp messaging service. At the same time customers have become increasingly wary of Hidden Revenue. In Germany, where consumers are known to be especially concerned about sensitive data being misappropriated, every third WhatsApp user considered leaving the service upon hearing about the deal with Facebook. At the same time, Hidden Revenue continues to be extremely popular in advertising and customer data trading.

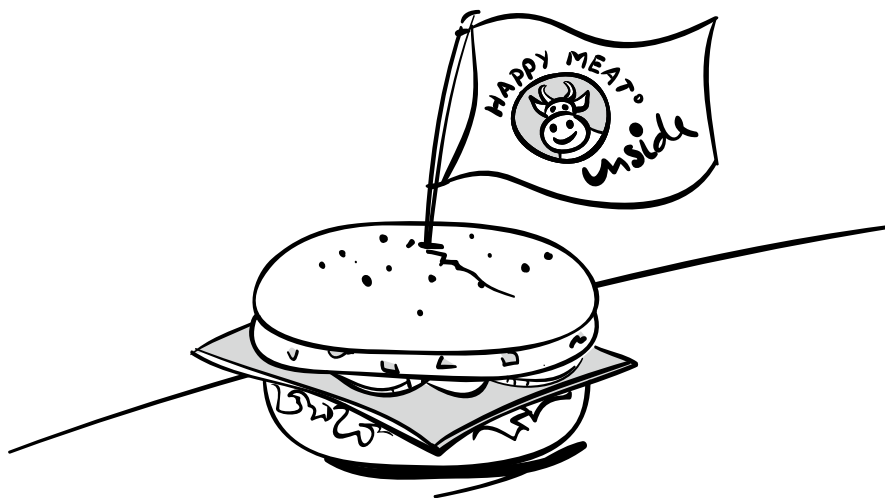
Some questions to ask

- Can we separate customers from revenue streams?
- Can we commercialise our assets by other means?
- Will we be able to keep our existing business relations and customers even if we tap into additional Hidden Revenue streams?

Ingredient Branding

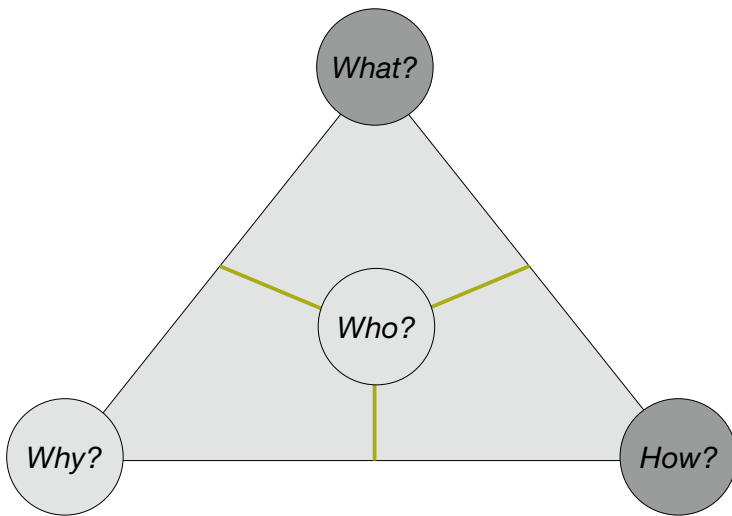
Brand within a brand

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The pattern

Ingredient Branding refers to branding a product that can only be bought as an ingredient of another product, that is to say, the ingredient product cannot be bought individually. The ingredient product is advertised as a notable feature of the final product. In effect customers see 'a brand within a brand' when viewing the end product (how?). A company that supplies such an ingredient product enhances its brand's profile and attracts end customers. The brand awareness created by Ingredient Branding reduces the possibility of substituting products by others and gives the company more bargaining power in its dealings with the manufacturer of the end product (how?).



Ideally, Ingredient Branding results in a win-win scenario where the positive attributes of the ingredient product are transferred to the end product and increase its desirability in the eyes of consumers (what?). For the Ingredient Branding principle to successfully work, the supplied ingredient product must fulfil an essential function in the final product, and be significantly better than competing products. Otherwise it will be very difficult to convince customers that the ingredient is an integral and valuable part of the final product.

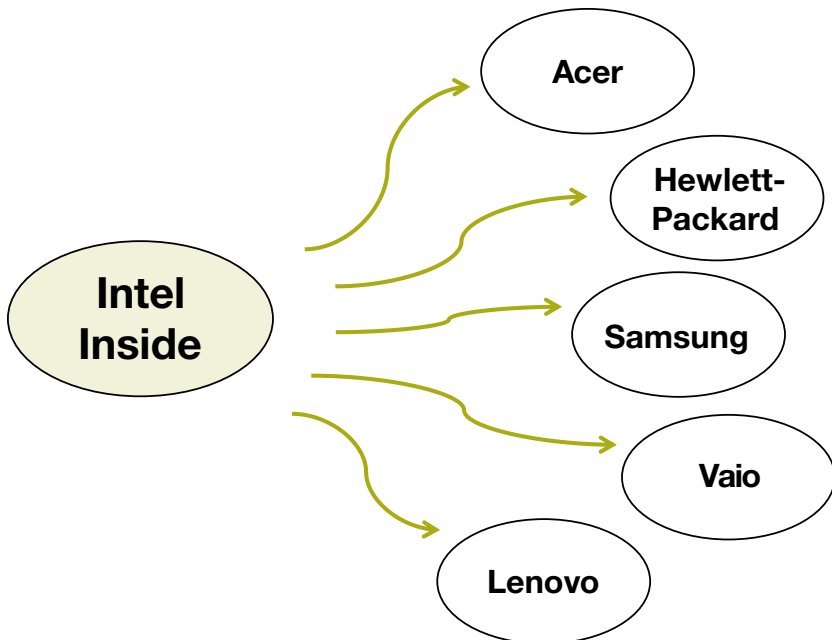
The origins

Managers have been using Ingredient Branding since the mid-twentieth century. Chemical companies in particular recognised the advantages of this business model when popularising their dyes and plastics with consumers. Founded in 1802, DuPont de Nemours is an American chemical company

which developed the polymer polytetrafluoroethylene, better known by its brand name Teflon. Teflon is an extremely versatile synthetic material, and its inherent low coefficient of friction and non-reactive characteristics make it useful in a large number of industries. The establishment of Teflon as a brand synonymous with practicality and high quality means that other companies can render their own end products more attractive to customers by incorporating the ingredient into them. A prime example is the frying pan made with a coating of Teflon, this benefits frying pan manufacturers while Dupont benefits without having to manufacture the pans itself. With the Teflon brand visible on so many pots and pans sold today, the brand's recognition level stands at over 98 per cent.

US-based semiconductor chip maker Intel is another pioneer of Ingredient Branding. The company launched its 'Intel Inside' campaign in the 1990s to increase brand awareness. PC manufacturers agreed to advertise Intel processors on their PCs in exchange for Intel paying some of their advertising costs. Simultaneously, Intel independently produced a number of ad campaigns to raise consumers' awareness of the importance of microprocessors. This strategy greatly contributed to increasing the demand by end consumers, with which Intel has become the number one brand of microprocessors globally. Little more than 20 years since the launch of the campaign, Interbrand rates Intel as one of the world's ten most valuable brands.

Ingredient Branding



The innovators

Over the past few years many suppliers have used the Ingredient Branding business model to strengthen their product's brand awareness. US-based company W.L. Gore & Associates (Gore), founded in 1958, employs Ingredient Branding very successfully to market its Gore-Tex membrane. Gore-Tex is a breathable, water- and wind-proof membrane that was brought to the market in 1976. Although the membrane was a very innovative product, its advantages were not readily apparent to customers at first. But Ingredient Branding enabled Gore to publicise the membrane and ultimately turn it into a commercial success. Gore has since partnered with over 85 well-known textile companies including Adidas and Nike who use and advertise Gore-Tex.

Another Ingredient Branding success story is that of Shimano. Founded in 1921, Shimano is a Japanese multinational manufacturer of cycling components that has managed to secure an 80 per cent share of certain sectors of the bicycle market. For a long time consumers considered multi-geared bicycles to be too expensive and complicated, so that none of the companies in the bicycle gear shift industry were able to establish a clear leadership position. Recognising the potential of Ingredient Branding for the bicycle component industry, Shimano succeeded in building a strong brand. Similar strategies are followed by Remus for motorcycle exhaust pipes.

CEWE promotes CEWE inside for photo books which have been previously branded by the distributor or supermarket. While this was a major step towards further growth, this business is always a trade-off between the satisfaction of the B2B customer (distributor) and the strength of the own-brand model.

Bosch, the multinational German engineering and electronics company and one of the world's largest suppliers of automotive components, is an innovator of the Ingredient Branding principle in the automotive industry. Bosch is known for its product's high quality and for innovations such as the Electronic Stability Program (ESP), a system to prevent loss of traction by a vehicle. Bosch's reputation for high quality and reliability attracts vehicle manufacturers who incorporate the brand into their designs and market vehicles with high visibility of the Bosch brand. The good reputation of the ingredient gets projected on to the end product. Bosch benefits from increased demand for its components without having to enter into vehicle manufacturing. Meanwhile some car manufacturers in developing countries such as Tata are already advertising 'Bosch inside'. Such promotion by a supplier is a clear indication that the strategy has been successful.

When and how to apply Ingredient Branding

Products that enjoy high brand awareness among customers and are of high quality can benefit from Ingredient Branding. This pattern is especially helpful when the ingredient product is synergistic with or complementary to the final product.

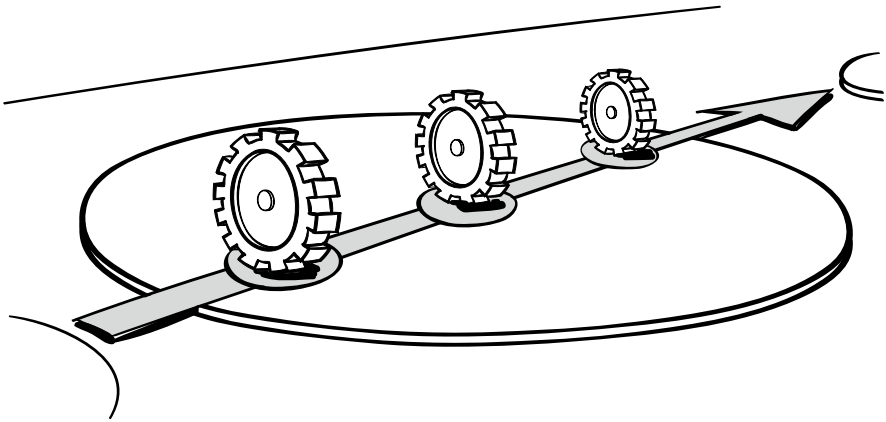
Some questions to ask

- **How can we make sure that the ingredient brand doesn't overshadow the final product?**
- **How can we keep competitors from using the same ingredient product and cause our product to become generic?**
- **How do we differentiate ourselves from OEMs and assembly companies?**

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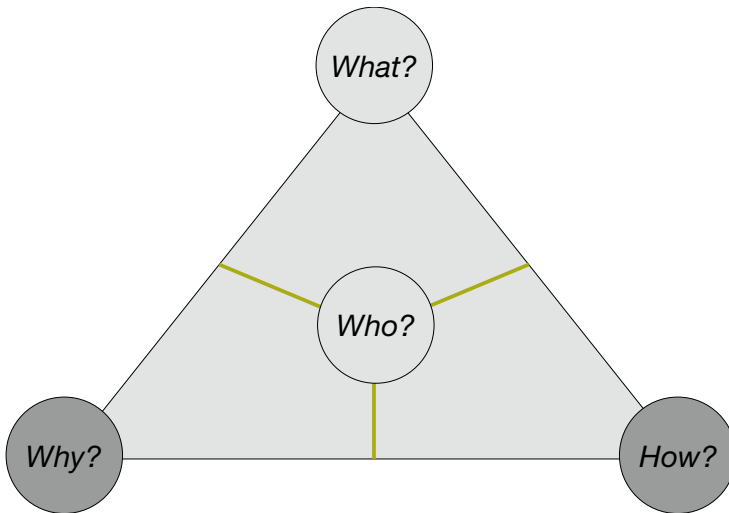
Integrator

Involvement all the way down the line



The pattern

In the Integrator business model, a company controls most or all parts of the supply chain (how?). Being involved, for example, in various parts of the production process from sourcing raw materials to manufacture and distribution. Such control permits the company to improve economies of range and efficiency. This approach obviates delays through dependence on third-party suppliers, with a consequent decrease in costs (how?). Additionally, the firm should be able to reduce transaction costs by tailoring the value chain to the industry's needs and processes (why?). The company will benefit from both more efficient value creation (e.g. through shorter transportation times or better coordination of intermediate products) and faster reaction times to market changes (how? why?). The downside to integration is that the company cannot capitalise on specialisation, which could be effected by outsourcing specific tasks to specialised suppliers (how?).



The origins

The Integrator pattern came into being during industrialisation in the early nineteenth century and the founding of the first large international companies. These firms' primary motives for integrating were to maximise their market power and to secure access to vital resources and distribution channels. US-based Carnegie Steel, founded by Andrew Carnegie in 1870, was an early pioneer of the Integrator model. His company became the second largest steel mill in the world by gaining access both to strategically important iron ore mines and the steel industry's entire value chain. In addition to buying coal mines and furnaces, which were necessary to produce steel, Carnegie Steel built an entire

proprietary railway network to support its operations. In 1901 Carnegie Steel was sold to the United States Steel Corporation for US \$400 million (equivalent to around US \$10–11 billion in 2014), which allowed the latter company – again with a heavily vertically integrated value chain – to become the global steel market leader.

The innovators

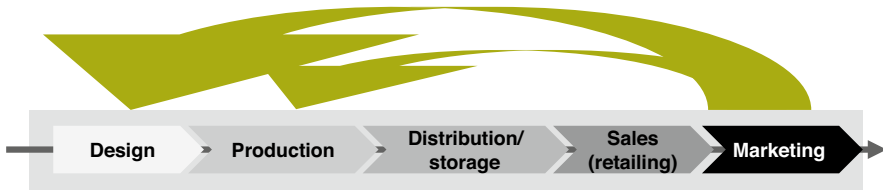
The Integrator model has spread to other industries too. Notable examples can be found in the oil industry where most companies own not only oilfields and drilling rigs, but also refineries and even petrol stations. The multinational oil and gas corporation Exxon Mobil, founded in 1999, displays a highly vertically integrated value chain embracing oil production, processing and refining. As a provider of oil and gas products, the company owns hundreds of subsidiaries such as Esso, SeaRiver Maritime, and Imperial Oil Ltd. In terms of revenue, Exxon Mobil is the largest company in the world.

The Ford Motor Company popularised integration in the automotive industry, which is better known for a very shallow range of manufacture today. Early in the twentieth century Ford began to manufacture many of the components it had previously sourced externally, in order to mass produce its vehicles more efficiently than before. Acquisition of a steel mill integrated steel production directly into the company.

Another example of integration in the car industry is BYD. Founded in 2003, BYD (Build Your Dreams) Auto is a Chinese car manufacturer that makes use of the Integrator business model. The company manufactures cars predominantly for China, but also exports to other territories such as Bahrain, Africa, South America and the Dominican Republic. The range of vehicles produced includes small- and medium-sized cars, including compacts, people carriers, sedans and hybrids, and electric models. BYD operates at all levels of the production process of each core component of the cars. This approach fosters innovation, improves efficiency, and has brought BYD to a competitive position within the automotive industry as one of the largest car makers in China.

Spanish fashion retailer Zara also employs the Integrator business model. Unlike most of its competitors, Zara decided not to outsource production to garment suppliers in Asia and other emerging economies. Instead the company designs and produces the vast majority of its apparel and accessories in Zara-owned factories in Spain and other European countries. This allows the company to respond to changing fashions and varying demand extremely quickly. In effect Zara is able to bring a new collection from the drawing board into shop windows within a mere two to three weeks. While competitors who produce almost all their clothes in China benefit from a lower cost than Zara, they must do so at considerably slower speed: ocean freight from China to shops around the world alone can take several weeks. If a new collection fails to meet customer expectations, Zara is equipped to make adjustments within a very short time-frame or even stop production entirely. This business model

Integrator



ZARA

A strong vertical integration enables short loops between the value-chain steps. Zara for instance reacts immediately on market trends and customer needs as the end of the value-chain (**sales**) directly reports to the front-end (**design**). Necessary modifications on the shop-floor (**production**) may directly and internally be implemented. That way Zara achieves a short turnover time at their stores.

has made Zara one of the most innovative and successful companies in the fashion industry.

In the machinery industry most sophisticated companies in the West strive towards integration, consistent with their customers' demand to get everything from a single source. However, not all companies have managed the complexity that arises from this pattern: that is to say, reduced economies of scale, an explosion of variants and a larger supplier base.

Würth is a worldwide wholesaler of fasteners, screws and screw accessories, dowels, chemicals, furniture and construction fittings, tools, machines, installation material, automotive hardware, inventory management, and storage and retrieval systems. Its inventory of 120,000 products provides virtually everything a tradesman could need. In addition to its sales sector, Würth is also active in research and development, and secured over 60 patents in 2007. Today Würth has more than three million B2B customers.

When and how to apply Integrator

This pattern implies focusing on the downstream value chain. Integration offers two specific advantages: higher margins and a better understanding of the entire value chain. As customers are increasingly demanding one-stop solutions, you too may want to follow in 3M's footsteps and integrate different suppliers to create your offering. Bear in mind that in order to succeed you must build a broad knowledge base and risk losing depth and specialisation.

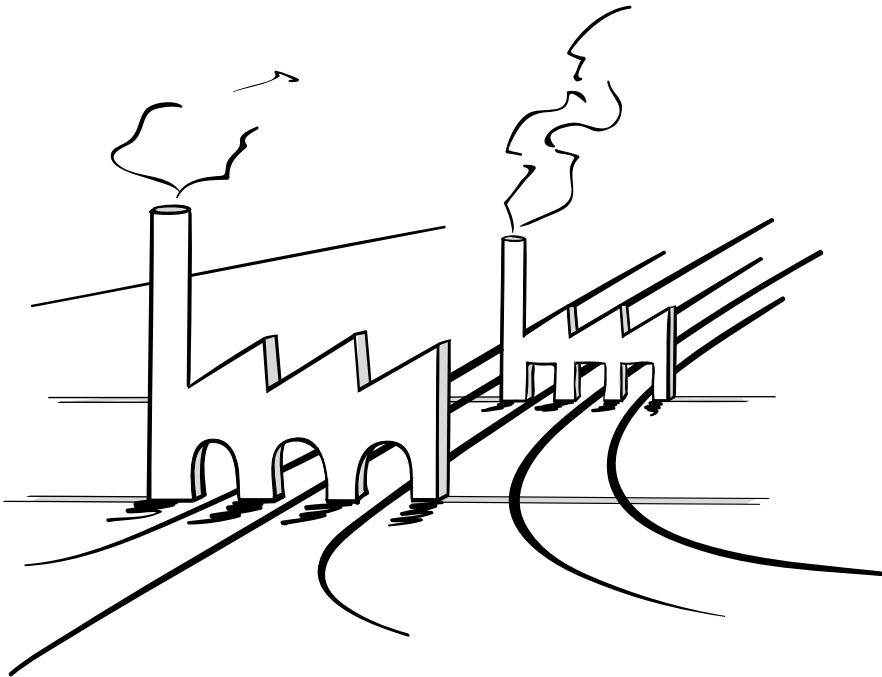
Some questions to ask

- Is vertical integration more profitable and sustainable for us?
- Will we derive value from integrating other activities in terms of complexity management, IT systems, and technical competence?
- Do the advantages of integration exceed the downsides associated with a lesser degree of specialisation?

Layer Player

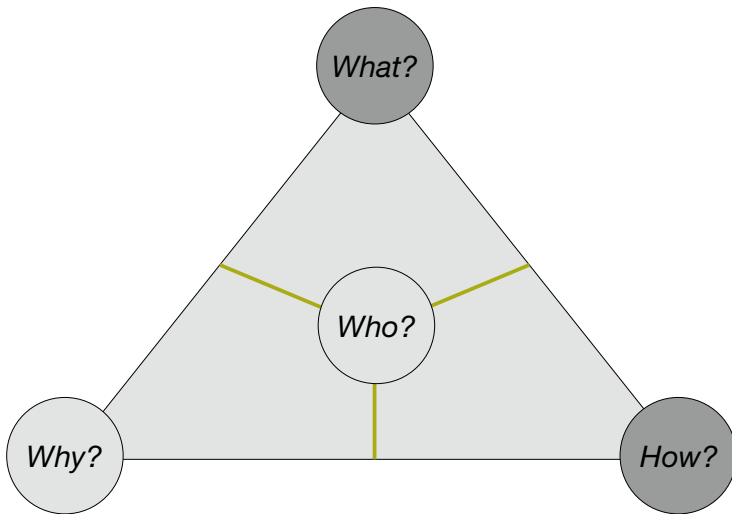
Benefiting from specialised know-how

24



The pattern

A company applying the Layer Player pattern usually focuses on one or just a few activities within a value chain (how?). Such a company serves a number of market segments of several industries (what?). Its typical customer will be an Orchestrator, who outsources the majority of value chain activities to specialised service providers. As a layer player the company benefits from its ability to specialise both in terms of efficiency gains and multiplying know-how and intellectual property rights. As such, it is often able to influence and develop standards within its specific field to its own advantage (how?).



In the Layer Player business model, the focus is on one specific step of the industry value chain, exploiting economies of scale and the benefits of superior expertise and capabilities. The company is typically able to expand into other fields. Amazon has for instance started its business by selling books and later branched out into other areas such as CDs, DVDs and a very wide variety of other diverse products.

The origins

In the course of the 1970s, efficiency and cost advantages became increasingly relevant for companies in many industries. This led to a general trend towards slimming down value chains (see the Orchestrator pattern on page 240 for further information). Labour was organised in new ways that were conducive to the Layer Player business model. One direct result of these developments is the establishment of dedicated IT service providers in India. An example is Wipro Technologies, which specialises in IT outsourcing and

related consulting services. It is now the third largest IT company in India, primarily offering consulting and outsourcing services. The company places an emphasis on customer-facing processes to deliver bespoke IT solutions for industry customers.

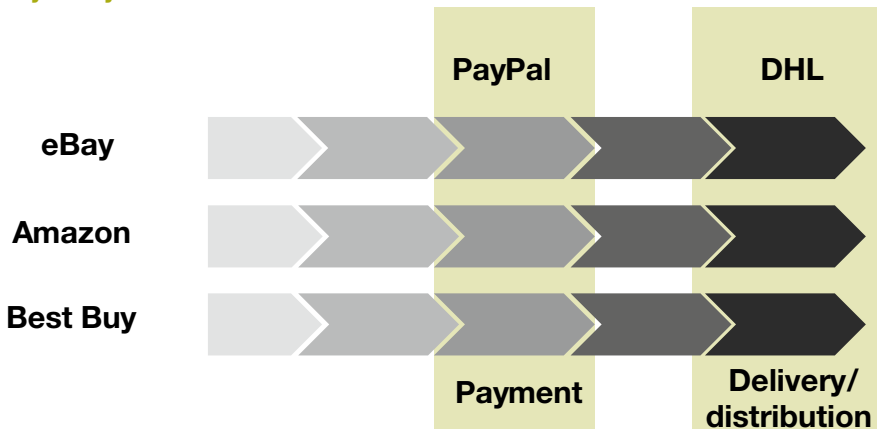
The innovators

The Layer Player model has worked well in other fields as well. US-based company TRUSTe, for instance, specialises in data privacy management services, operating a privacy seal programme to certify customers’ websites and increase their credence in the public eye. The company offers related services in the fields of reputation management, supplier rating and representation in data privacy disputes. The services of TRUSTe, a leading company in online data privacy, are used by many successful companies such as Facebook, Microsoft, Apple, IBM and eBay.

Another company that thrives on the Layer Player pattern is Luxembourg-based Dennemeyer. As a layer player, Dennemeyer focuses on providing complete coverage within the domain of intellectual property (IP) management and protection. The company’s services span legal advice, software solutions, consulting services and portfolio management. As such, major companies outsource these related services entirely to Dennemeyer. Although the services Dennemeyer offers appear to be quite diverse, they are strictly related to IP management and highly integrated. The company serves thousands of customers worldwide from all industries.

PayPal, a subsidiary of eBay, is an exceptionally successful layer player which focuses on online payment, offering various services in this domain. PayPal’s services are much employed in E-commerce and a great variety of industries. It is estimated that half of eBay’s revenues are generated through PayPal.

Layer Player



New layer players are expected to emerge in the financial industry, where up to the present few standards have been developed and the division of labour is still relatively limited. Typical targets for new layer players are mature industries with highly vertically integrated companies.

When and how to apply Layer Player

As a layer player, you maximise the potential inherent in specialising and becoming a leader in your particular area of expertise. You are competent to serve several industries and readily apply skills learnt in one setting to another. If you operate in a particularly competitive environment, specialisation may be right for you and allow you to focus solidly on a core area of expertise and to nurture and build your strengths.

Some questions to ask

- **Are we knowledgeable enough to spot changing trends and rapidly tailor our business to market needs?**
- **Do economies of scope play an important part in our area of specialisation?**

Leverage Customer Data

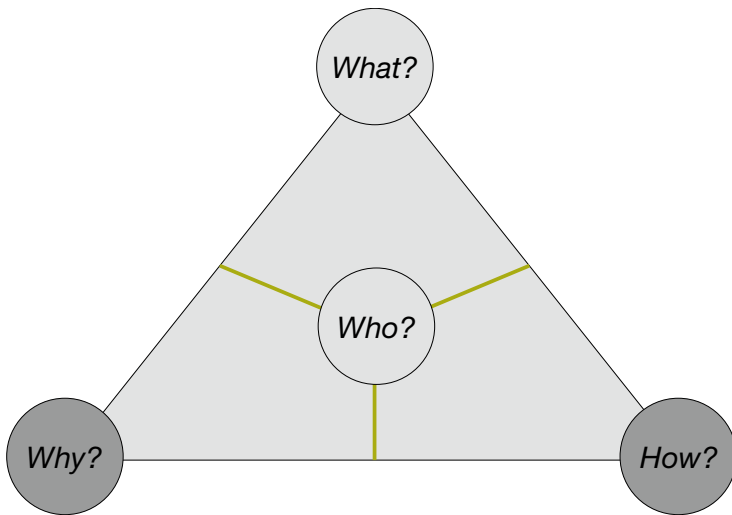
Making use of what you know

25



The pattern

Leveraging customer data is one major area benefiting from present-day technological progress and the possibilities it opens up in the fields of data collection and processing. Companies whose main activities centre on the acquisition and analysis of data (how?) are already thriving abundantly and illustrate the enormous demand in this segment. The concept is mirrored in increasingly frequent statements such as ‘data is the new oil’. Way back in 2006 Michael Palmer made the point in his blog that unprocessed or unanalysed mounds of data, like crude oil, serve very little purpose. Both need to be processed if they are to be of any value to businesses.



The parallels between the market potential of data and oil industry don't end with their inherent possibilities, for there are also considerable similarities in terms of their value chains. This value creation process is at the core of the Leverage Customer Data pattern and focuses on customer data as a profitable resource that needs to be tapped into with the appropriate tools (how? why?).

Collected customer data are used to establish people's profiles. Individual profiles may contain up to a thousand attributes (how?). Considering the incredible growth in the quantity of available data – current calculations estimate a tenfold increase every five years – it is not surprising that certain large data pools have earned a specific name. ‘Big data’ is the term we use to describe enormous data sets that can hardly be evaluated with conventional database and management systems. Many of the methods employed in data analysis today come into the purview of data mining. Thanks to ever growing computing capacities, we are now able to analyse data on a massive scale more easily than we ever could before.

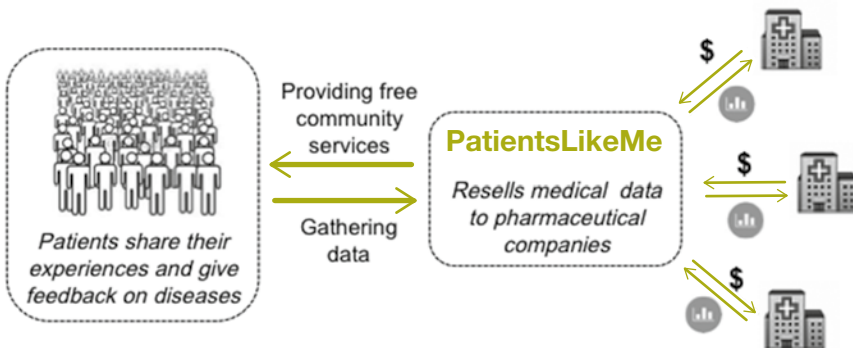
The applications seem to be largely independent of which industry a company operates in: the manufacturing, energy, finance or healthcare industries all use ‘big data’ applications. Leveraging customer data can help to secure a competitive edge, identifying potential savings, carrying out real-time market analyses, generating more effective advertisements and discovering dependences. In short, it serves as an extraordinarily powerful tool to aid decision making (how? why?).

The origins

Growing understanding of the value of data began in the 1980s with information management. The resulting ability to create personalised advertisements led to a veritable rush on data. At the same time the first attempts were made to address corporate clients directly through customer service groups with a view to building personal relationships and catering more effectively for individual customer needs. The 1990s saw the creation of databases to capture such data, which also enabled companies to address smaller customer groups with greater precision. Here we are talking about the predecessors of our modern electronic customer relationship management (CRM) systems. These early systems got a boost from the creation of Customer Loyalty programmes, especially those associated with credit cards, since these programmes provided a readily accessible stream of data about purchasing patterns.

Customers began to leave more digital traces as the Internet began to spread, and it became a relatively simple matter for businesses, and retailers in particular, to collect such information and create detailed and personalised customer profiles. The new uses these data have been put to have also given rise to considerable public criticism, and data privacy concerns have grown concurrently.

Leverage Customer Data



The innovators

Among retailers, Amazon stands out head and shoulders above the rest. The desirability for Amazon to analyse and cultivate customer relationships stands to reason, for the cost of gaining a new customer is five times higher than the investment required to retain a happy customer. To capitalise on this differential, Amazon uses sales data to determine the relationships between products and ascertain which purchases result in follow-up acquisitions. According to Amazon, relatively little basic information is required in order to be able to gauge future customer behaviour accurately. This serves as a basis for personalised recommendations or even wholly customised webpages. Its intent is to entice customers to make impulse purchases, an important contributing factor to Amazon's success.

At Google, which sells its own personalised advertising service, data acquisition is even more closely related to income generation. Google succeeded in successfully using an ad-funded business model based on its AdWords service only two years after bringing the Google search engine to market. AdWords unobtrusively places customised written ads among search results. In 2004 Google extended the functionality of AdWords by introducing AdSense, an advertising service that can be integrated directly into customers' websites. The following year Google acquired Urchin Software's analysis service which enabled it to implement the Leverage Customer Data pattern more fully still. This service is a powerful website analysis tool now offered to site owners free of charge under the name Google Analytics. Google generates over 90 per cent of its revenues through advertising, acquiring its data through a myriad of free services such as search engines, personal calendars, email accounts, maps and rating systems.

A number of American telecommunications companies, among them Verizon, AT&T and Sprint, have also recognised the inherent value of customer data. Their business is to sell aggregated anonymised data to third parties who can, for example, apply usage statistics to determine the optimal location for building a new store.

The business models of online social networks rely wholly on the analysis of user data. Facebook and Twitter use such data to present personalised ads by third parties on social network pages efficiently. Both have so far been made available for free, so we might think of the data that users provide as payment for using these services. While Facebook continues to work on expanding on this business model, Twitter has decided to take a somewhat different path: companies that use Twitter can take advantage of certain premium services to have their tweets prioritised in followers' feeds, which then serve as a type of ad. Additionally, Twitter has entered into partnership with third-party data analysis companies who are given unlimited access to Twitter databases that offer seemingly inexhaustible sources of information for market research, advertising and R&D.

23andMe is an American genomics and biotechnology company that was founded in 2006 and offers rapid genetic testing via the Internet. This company

realised the need to organise and study genetic data, and to provide information to individual customers. Customers sign up on the 23andMe website, receive a test kit and send a sample back to 23andMe. Following analysis in a CLIA-certified laboratory, they then log on to the website to receive the results of their genetic test. Customers are willing to pay for the genetic test and access to the online database, which enable them to gain health and genealogical information, while 23andMe use the information for the research and development of new drugs and treatments and enjoy the revenue that comes in.

PatientsLikeMe is a networking site aimed at people with medical conditions and health problems. Users are able to connect with others in a similar situation to share their experience and exchange information on how best to cope with the condition. Valuable data are generated in the process, and PatientsLikeMe uses the aggregated, anonymised data it obtains through its network for sale to third parties in the medical sector such as researchers, pharmaceutical companies and device manufacturers. PatientsLikeMe receives revenue from these sales, while medical companies can employ the data for future development of drugs and medical treatments.

When and how to apply Leverage Customer Data

The Leverage Customer Data pattern often works particularly well when combined with Hidden Revenue streams. Customer behaviour and transactions leave digital footprints that can be analysed from different perspectives. Customer data can often be leveraged when dissimilar businesses are combined, e.g. intelligent homes that use Google's search engines. Because consumers are becoming increasingly aware of the risks associated with providing sensitive data to companies, you will have to evaluate carefully how these attitudes can and in all likelihood will affect your business.

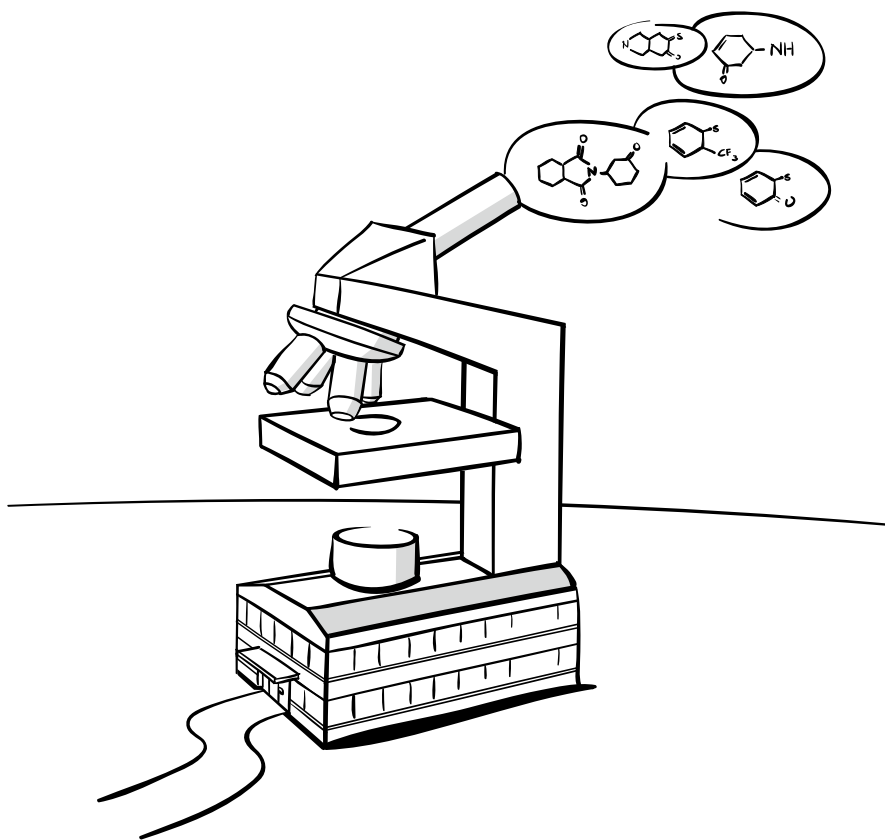
Some questions to ask

- Can we create value from our customers' data without losing them or endangering our basic business?
- Are there other means by which we can commercialise our customer relation assets?
- Can we retain our business relations and customers if we leverage customer data?

26

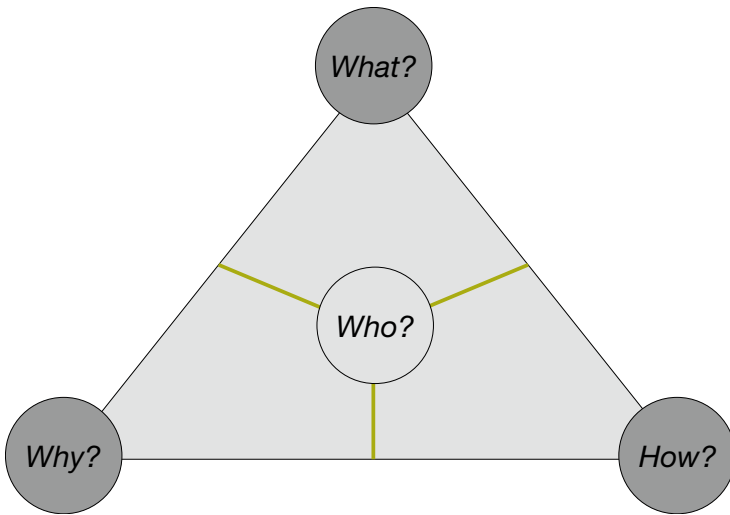
Licensing

Commercialising intellectual property



The pattern

The Licensing business model deals with creating intellectual property, which is licensed by third parties. The focus is on the question of commercialising the rights (how?) rather than realising and capitalising on the IP. An important advantage of Licensing is that rights can generally be sold to more than one interested party. Licensing serves as a means to diversify the company's revenues and risks (why?). Moreover, since the products and services often experience higher and more rapid rates of diffusion, the brand concerned becomes more recognisable and customers are more likely to remain loyal (why?). On the downside, licence fees are usually lower than if the IP were sold outright. On the upside, the products and services are likely to be disseminated much more quickly, leading to more sales (why?).



A further advantage of choosing Licensing is that it provides the freedom to focus exclusively on research and development without requiring additional competencies in respect of the production or marketing of concrete applications (how? why?). These tasks are taken on by the purchasers of the rights. The benefit on the opposite side is not having to undertake costly, lengthy, or uncertain research and development activities.

The origins

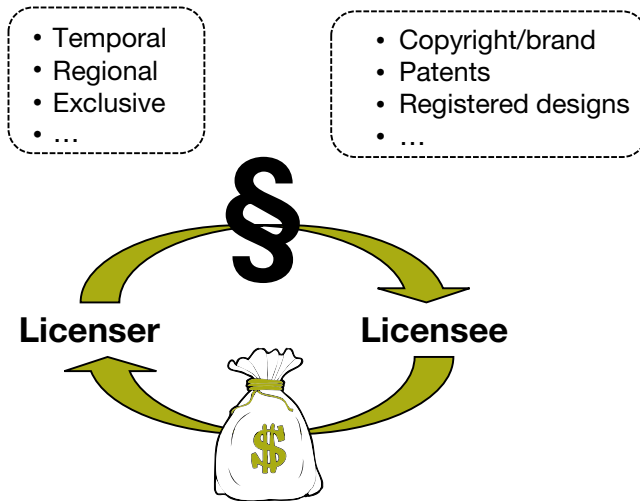
The Licensing concept goes back to the Middle Ages, when the Pope granted licences to local tax collectors so that they could be officially affiliated with the Catholic Church. The practice of transferring rights in exchange for a licence fee continued into the eighteenth century, when two English ladies of nobility

agreed to let a cosmetics manufacturer brand a range of products with their names against a share of the profits.

Founded in 1852 by German businessmen, Adolphus Busch and Eberhard Anheuser, Anheuser-Busch is an American brewing company best known as the producer of Budweiser beer. Busch licensed out his and the company's name to manufacturers of products such as calendars, bottle openers, knives and corkscrews, who benefited from being associated with the well-known brewery. Although Anheuser-Busch received limited revenue from these Licensing fees, the company enjoyed wide distribution of a large number of products bearing its name and so established a strong brand identity which encouraged customers to buy beer and other Anheuser-Busch products, with a consequent positive impact on revenue and profits.

The cartoon character Mickey Mouse, created by Walt Disney in 1928, is one of the most famous examples of Licensing. Disney licensed the rights to a company in 1930, which proceeded to produce Mickey Mouse schoolbags. Films, video games and a plethora of other merchandise followed. Using this model, Walt Disney built an exceptionally strong brand and earned immense profits from his creation.

Licensing



The innovators

One of the best-known companies to use the Licensing business model is probably IBM. The firm was founded in the United States in 1911 and has had an international presence for a long time. IBM started to license its intellectual property at an early stage, before most of its competitors in the information

and media technology industry had caught on. IBM's research and development department sometimes creates technologies that cannot be directly applied to new products in-house, so at least a portion of its output is licensed to other companies. IBM generates around US \$1.1 billion in revenues from Licensing. Indeed, IBM Research has the specific mission to create innovations for Licensing to other companies. A key prerequisite for Licensing to work is strong and rigorous patenting, which is why IBM attributes great importance to patenting strategies.

Based in Cambridge, England, ARM is a software and semiconductor design company developing systems architectures and specifications for microprocessors. However, the company does not produce microprocessors itself, but rather focuses on the research and development of microprocessors and licenses chip designs to interested companies who then manufacture them. The company gains a competitive edge in microprocessor R&D by focusing on this aspect while earning significant revenues from Licensing its intellectual property.

Another example for a viable Licensing strategy is provided by the German eyeglass lens manufacturer Carl Zeiss Vision. Instead of having the lenses produced at its own, large manufacturing sites, Zeiss provides small laboratories with licences for the new technology enabling them to accomplish the individualised lens production part by themselves. As a world leader among lens producers, Carl Zeiss Vision was a pioneer in the introduction of this business model. Carl Zeiss Vision developed and introduced the so-called 'freeform technology' more than ten years ago.

BASF, the world's leading chemical company offering a vast product portfolio ranging from chemicals, plastics, performance products and crop protection products to oil and gas, has also applied the Licensing business model lucratively. Like IBM, BASF licenses out ideas generated by its R&D department which, while comparatively uninteresting to itself, nevertheless have a considerable production potential.

But this is not to say that BASF does not apply the Licensing model for products. With its unique Kaurit Light processing technology for lightweight chipboards (30 per cent less weight and consequently lower transportation costs), the company offered the wood-based material industry an attractive alternative. BASF has been selling glues and impregnating resins for various applications in the furniture, floor and construction industry since the 1930s, a field in which it is the European market leader. This highly commoditised industry is characterised by fierce competition and high cost pressure. Previously, BASF had applied the dominant business model, selling chemicals by weight. Since 2013, the company has extended its offering to the wood-based material industry with an innovative solution, applying a new business model centred around the Kaurit Light technology. Under the new business model, BASF licenses the Kaurit Light technology to chipboard manufacturers at the same time as selling them the foamed polymer plus the binding agent. This approach provides BASF with additional value for its customers (lighter and more cost-effective products) and is able to capture more value than with the traditional

business model. The example illustrates how the introduction of a new business model leads to greater differentiation and a higher competitive advantage in a cost-driven commodity market environment.

Created in 1973 and based in Italy, DIC2 is a Licensing firm in the entertainment business representing famous brands and cartoon characters. DIC2 focuses on providing licences for third parties for fictional cartoon characters from the Marvel Comics, *Star Wars* and *Zorro*. The company also represents brands in the art and fashion sector, as well as large companies such as Shell, Route66, and *Penthouse*. By focusing on the acquisition and management of licences for brands and cartoon characters, DIC2 is able to mediate between international rights holders and licensees.

When and how to apply Licensing

This pattern is best applied in knowledge- and technology-intensive contexts. Licensing presents an interesting option to monetise your products and technologies that do not form the core of your business. Rather than abandoning these products and technologies, you can use a Licensing model to create steady revenue streams for your company. However, keep in mind that solid patents are a necessary prerequisite for successful Licensing. You may also use Licensing as a tool to raise product or brand awareness and to speed up global distribution.

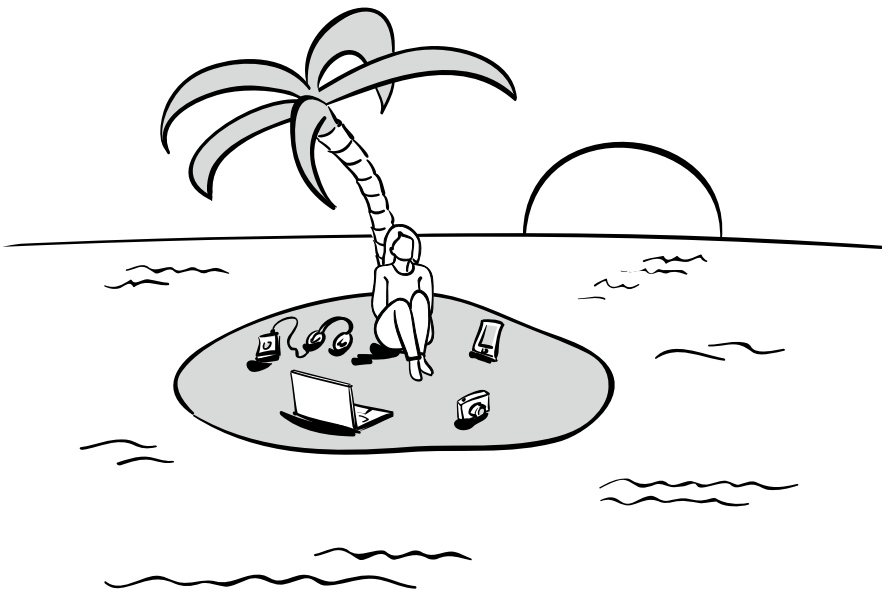
Some questions to ask

- Which products or solutions are not at the core of our business and could be licensed out to other companies?
- Are our patents strong enough to safeguard us from partners' developing their own solutions?
- Would we increase our product or brand awareness by Licensing the product out to partners?

Lock-in

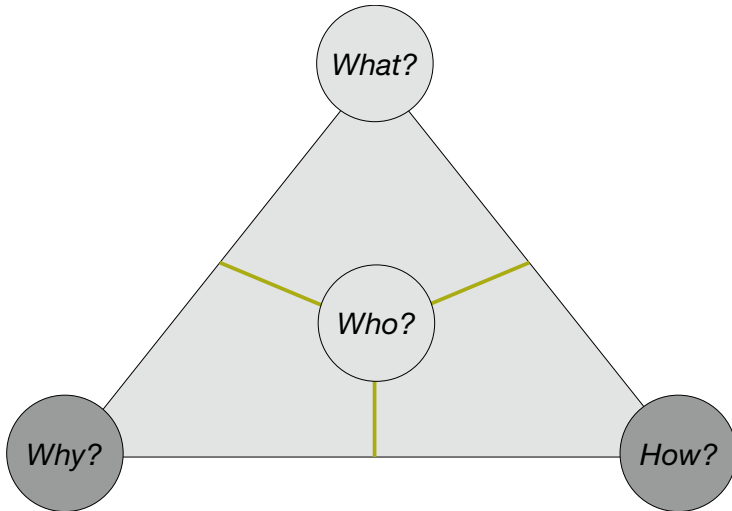
Forcing loyalty with high switching costs

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The pattern

In this business model, customers are 'locked in' to a vendor's world of products and services in such a way that changing to another provider would incur substantial costs or penalties. It should be noted that in this context the term 'costs' does not refer to monetary costs alone: the time needed to switch to a new option and learn how to use it may be just as relevant for customers.



Customers can be tied down to a company through various means. They may, for instance, have to invest in new technologies such as a new operating system or may be obliged to work with a particular insurance salesperson who has been serving them for a long time and knows them intimately (how?). The principal concern for the vendor is to prevent any interoperability between himself and the competition to keep customers dependent on the company, brand, or supplier, thus actively strengthening customer loyalty and promoting future repeat purchases (why?).

Due to past purchases of the customer, future decisions and flexibility will be constrained. Although familiar with switching costs, companies generally find managing and evaluating them accurately very difficult. In order to convince customers to still purchase products, the Lock-in concept can be combined with other schemes such as the Razor and Blade model.

The Lock-in pattern exhibits a number of different variations. Contracts mandating the use of a particular supplier, for example, are a fairly obvious version of the pattern (how?). Another, very common, form, are invested assets that require specific follow-up purchases (how?). Such dependency is frequently established by means of technological restrictions such as compatibility or even patents. The latter may play an essential part in the Lock-in concept (how?). Ties can be created through the mere act of purchasing additional accessory

products from a manufacturer, since customers will not be able to recoup past investments should they want to switch. Again, considerable switching costs can result from required training and classes offered by a specific provider (how?).

The origins

Because of the large number of its variations, it is difficult to trace the origin of the Lock-in pattern. Contracts stipulating legally binding obligations were regularly negotiated and recorded in the Roman Empire as far back as the sixth century. Other Lock-in variants such as training requirements or technical mechanisms have also presumably been around for a long time.

The complex technological advancements and increasing use of patents over the past hundred years or so have greatly favoured the rise of Lock-in business models. In the computer and software industries in particular, this concept has gained favour through the technological developments that have emerged since the end of the nineteenth century.

The innovators

Gillette, the American manufacturer of safety razors and personal care products that created the disposable safety razor, was one of the first firms to employ a Lock-in business model successfully. Its first razors with disposable blades were sold in 1904. In line with the principle of this system, only Gillette's disposable blades match the handles. Customers are obliged to purchase Gillette-brand blades, which carry a higher margin. Control is reinforced by a number of patents that prevent other companies from entering this market with accessory products. The disposable razor blades (consumables) generate recurring revenue with high margins and offset any losses incurred by the initial low-priced offer of the handle.

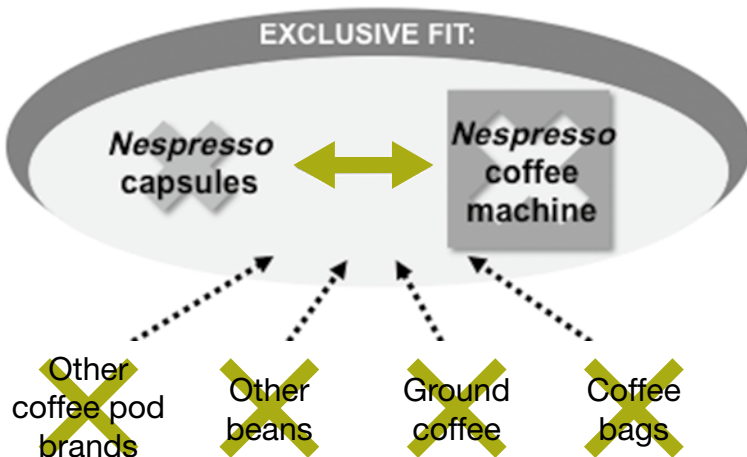
Lego is a Danish manufacturer of a small brick-based toy system comprising interlocking parts. Lego adopted the Lock-in business model by designing its products and accessories to work only with other compatible components of the patented design. Since it is not possible to combine Lego's parts with those of its competitors, customers must purchase Lego-compatible products, thus increasing customer retention and revenue for the company.

The camera industry also successfully employs Lock-in business models. Lenses are a necessary accessory for camera bodies and offer customers some flexibility in how they want to use the product. Manufacturers began to take out patents for the mounting mechanisms used for interchangeable lenses in the 1930s, securing a sort of monopoly on the sale of lenses that matched their cameras. Once customers had chosen a particular camera body, they were obliged to return to the same manufacturer for additional

parts. Typically, only once several manufacturers have followed such a strategy does pressure to set a new standard begin to mount with help from consumer rights advocates. In the case of cameras this resulted in standardised bayonet mounts.

Nestlé is a past master in the implementation of the Lock-in pattern. Its Nespresso system was invented by a Nestlé employee in 1976. It consisted of a coffee machine and patented coffee capsules, which were sold separately by Nestlé. Customers were obliged to continue purchasing coffee capsules from Nestlé on account of the technological specifications of their coffee machine. Switching to another system rendered that customer's current machines obsolete, leading to the obligation to purchase a new series. The Lock-in business model can often be usefully supported by appropriate product innovations: Nestlé found that one of the major threats to customer loyalty was if its coffee machines broke down. The critical element influencing the lifespan of Nespresso's machines was the gaskets built into the machines themselves. Nowadays gaskets are fitted within the capsules rather than the machines in order to lengthen the latter's lifespan and at the same time delay customers' decisions to update their systems – another Nespresso or a competing machine. While rather more expensive than fitting the gasket into the machine, this solution significantly extends the lifespan of the machine and consequently improves the Lock-in effect.

Lock-in



When and how to apply Lock-in

'Keeping existing customers is cheaper than creating new ones.' This old marketing adage is the basis of the Lock-in pattern. You can implement Lock-in in three different ways. First, legally, by writing contracts with tough termination

clauses; this is probably the most obviously off-putting Lock-in mechanism for customers, making it somewhat short-sighted. Second, technologically, by creating product or process-based Lock-in effects, preventing customers from easily switching to different suppliers or providers; this often goes hand in hand with maintenance activities. Third, economically, by creating strong incentives that make customers think twice before changing their supplier or provider. Users who want to leave iTunes will forfeit something of their previous investment into music. Financial rewards for cumulative purchases made are popular Lock-in methods, but more sophisticated mechanisms can be created by combining Lock-in with patterns such as Razor and Blade or Flat Rate.

In order for a Lock-in strategy to be effected successfully, a number of factors need to be borne in mind. One important aspect is the commercial shelf life of a product, as switching costs become lower the shorter this is. Other criteria to be considered are the ability to resell a product or offer a range of additional products. Whether it makes sense to do so is in turn dependent on how many suppliers are willing and able to offer them.

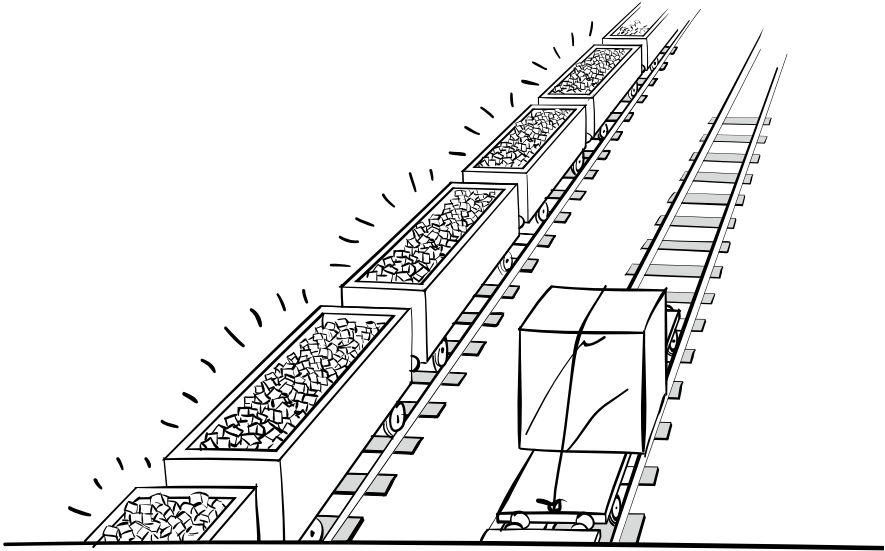
Some questions to ask

- **Do we have legal, technological or economic means by which to retain our customers?**
- **Can we successfully implement the Lock-in pattern without damaging our reputation and losing potential customers?**
- **What soft and indirect mechanisms can we use to lock our customers in, for example creating additional customer value?**

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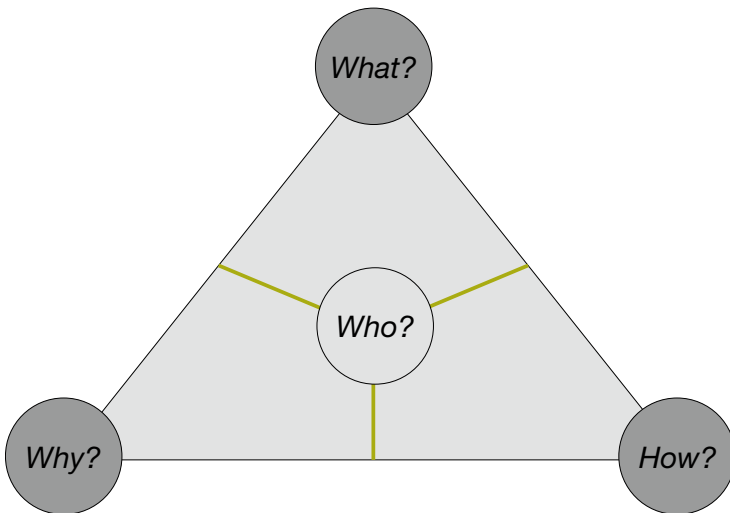
Long Tail

Many a mickle makes a muckle, or
little and often fills the purse



The pattern

The Long Tail business model concentrates on selling small quantities of a very large range of products, in contrast to a 'blockbuster' model (what?) offering large quantities of a small range. Although Long Tail offers narrower margins and lower volume sales of individual products, profits are significant over the wide range sold in the long run (why?). The Long Tail pattern disregards the classic 80–20 rule whereby a company generally earns 80 per cent of its profits with the sale of just 20 per cent of its products. With this model, mass and niche products can generate equal shares in revenue, and in some extreme cases niche products can even bring in a larger share of the revenue than mass products (why?). The model enables a company selling niche products to differentiate itself from those offering blockbuster products and to tap into an alternative source of revenue (why?). The Long Tail pattern gives customers the distinct advantage of being able to browse among a much broader, more vibrant range, and increases their chances of finding products that satisfy their individual needs (what?).



In order to succeed with the Long Tail model a company needs to be capable of handling distribution costs efficiently. More specifically, the cost of selling a niche product must not be substantially greater than that of selling a blockbuster product (how?). In addition, customers must be able to find these niche products without incurring considerable search costs. Smart search and recommendation systems proposing products to customers based on their past searches and purchases can be instrumental in helping customers find the right niche products without difficulty (how?). Another way to reduce search costs is to allow customers to design products themselves (how?). This concept is applied in the Mass Customisation and User Design business

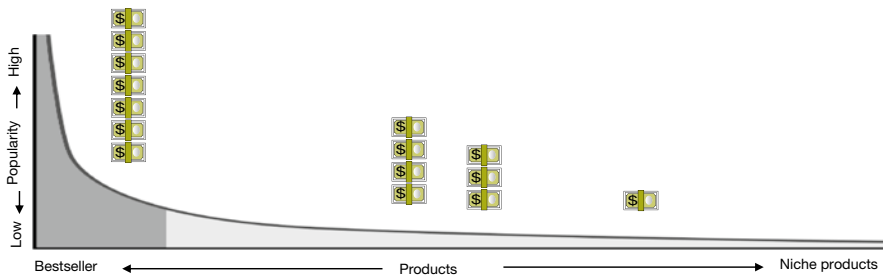
models, which allow customers to modify products or even create them from scratch to suit their personal needs.

The origins

The Long Tail business model, first described in 2006 by Chris Anderson, editor-in-chief of *Wired* magazine, benefited enormously from the Internet. At last, companies were no longer tied down by restrictions such as physical distance or an absolute need for brick-and-mortar stores. This development opened up important new sales opportunities for niche products. For its part, Digitisation has enabled companies to store products in ‘digital warehouses’ for next to nothing. Products and especially niche products, could now be distributed far more cost-efficiently than was the case even 20 years ago.

Online retailer Amazon, founded in 1994, and auction site eBay, founded a year later, were two of the Long Tail pioneers. According to some estimates, Amazon generates 40 per cent of its revenue by way of books that are not available from traditional booksellers. For Amazon this Long Tail of niche products is not just a valuable revenue stream, it is also an important way for it to differentiate itself from the conventional book trade. On eBay, private individuals create a Long Tail by putting items up for auction. A total of several million auctions take place on eBay every day. Some of the more eccentric niche products available for auction there include Pope Benedict XVI's Volkswagen Golf and a lunch date with Warren Buffett.

Long Tail



The innovators

As the Internet continued its rapid expansion, several other innovators followed Amazon's and eBay's suit. The rapid expansion of the streaming service Netflix, for instance, brought the Long Tail concept to video rentals. Netflix customers have access to over 100,000 films, television series and shows, about a hundred times the number of titles available from a traditional video rental store.

By virtue of its uniquely wide offer, Netflix has largely effaced conventional video rental shops. With over 26 million users, Netflix is an over-achiever in its industry by any standards.

Apple is another company that successfully applies the Long Tail pattern. Its iTunes and App Store are the world's largest online music and application stores. The huge selections available through Apple's stores have helped the company to generate enormous revenues as well as successfully gain its customers' loyalty. While more than 25 billion songs have been sold on iTunes, the numbers displayed by the App Store are even more impressive. Over 50 billion applications have been sold until May 2013.

To conclude, YouTube is a further example of the Long Tail pattern. Founded in the United States in 2005, YouTube is the largest online video-sharing website in the world. YouTube operates as a subsidiary of Google, which bought it for US \$1.65 billion in 2006. Both professional and non-professional users can upload and share a wide variety of content including personal videos, film and television clips, shorts, educational films and video blogs at no cost and with relatively few limitations. Low costs of storage open the way to a massive variety of content. A search engine and a browsing directory enable rapid access to the millions of video clips that can be played on YouTube or shared by embedding them on other websites and social media platforms.

When and how to apply Long Tail

You too may think that offering everything under the sun would make life easier for you and help you avoid having to make a decision about which products to focus on. But in point of fact too many mature companies are floundering in competition because of their inability to apply themselves to a few core products and competencies. If, however, you do manage to usefully apply your knowledge of complexity – products, technologies and markets – and are able to keep complexity costs below those of your competitors, then the Long Tail pattern is full of promise for you. This is especially true if you deal with highly specialised or individualised offerings.

Some questions to ask:

- **Would our customers derive added value by getting everything from us?**
- **Are we better at managing complexity than our competitors?**
- **Can our processes and IT systems handle a massive number of products?**
- **Can we handle back-end processes such as purchasing, order processing, logistics and IT?**

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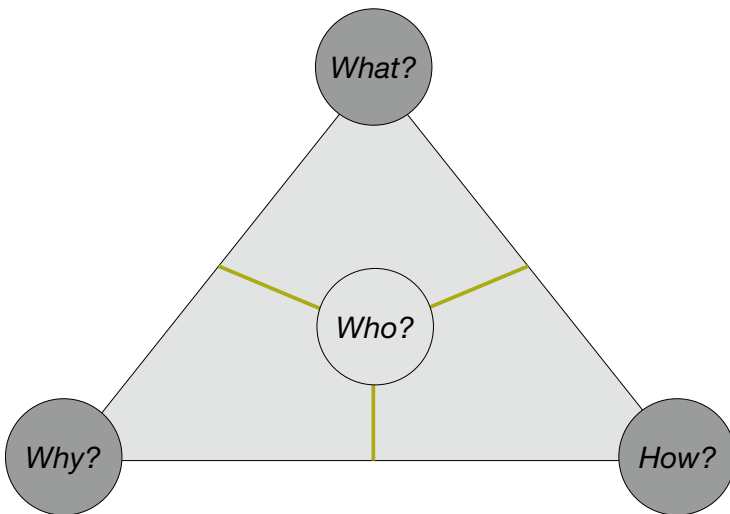
Make More of It

Multiply competencies outside your core business



The pattern

In the Make More of It business model, a company's know-how or other resources are offered to outside companies in addition to being used in-house. In this manner, 'slack' resources help to add revenue on top of the core value proposition's returns. In effect, the know-how and resources are sold to third parties as a service (what? how?). Accumulated specialist knowledge and spare capacities can be monetised (why?) and new expertise built up, all of which can be used to further improve internal processes and revitalise the core business (why?). A company known to be a Make More of It user is likely to be seen by others as an innovation leader, an image that will have a positive long-term effect on sales (why?).



The origins

Founded in 1931 by an Austrian-born engineer, Porsche is a German manufacturer of cars affiliated with the Volkswagen Group, best known for its sports cars. Porsche is recognised for the high quality of its research and development and the effective customer development strategies it employs. Via its subsidiary, Porsche Engineering Group, the company leverages these core competencies by contracting out its expertise to third parties. Porsche Engineering Group supports its customers throughout the process of car and component production, enabling them to benefit from Porsche's many years of engineering experience and R&D facilities. The engineering know-how and facilities of Porsche Engineering Group serve to foster the company's reputation as an innovative leader in the field, and thus attract business customers

and increase revenue. Before Porsche was bought out by Volkswagen, the company did not have enough products to keep a continuous high level of research and development capacity utilised, and in times of low utilisation of this capacity the engineering capabilities were sold to third parties. Porsche has modernised Harley-Davidson and developed their leading machine, V-Rod, and developed drive modules for the elevator company Schindler. Today, Porsche Engineering sells 70 per cent of its services to companies outside the Volkswagen family.

The Swiss company Sulzer adopted a similar model when it started marketing its engineering knowledge and expertise through Sulzer Innotech. The company offers specialised know-how to outside customers in order to better finance its research and development activities. Another company, MTU, which develops turbines, follows a similar strategy through MTU Engineering.

The innovators

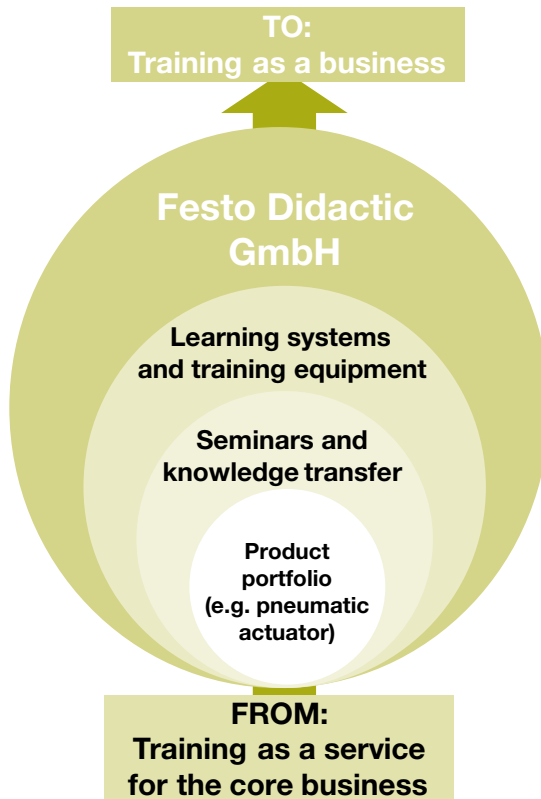
Automation specialist Festo Group applies the Make More of It pattern very effectively. Festo started to develop learning systems and training seminars in the field of automation products and processes as early as the 1970s. Customers appreciated these efforts, which led the company to establish its subsidiary Festo Didactic, the industry's premier technical educational institute and consulting services provider. Throughout the 1980s and 1990s Festo Didactic trained future automation technicians, in particular in developing countries, supported in part by government funds. As a result an entire generation of young engineers and technicians was trained with Festo products, later becoming future users and customers. This has had a sustained effect on sales in the company's core business. Today, Festo Didactic is the world leader in industrial training and continuing education. Approximately 42,000 specialists receive training from Festo Didactic every year and 36,000 technical schools and universities employ products developed by Festo.

Amazon also uses the Make More of It strategy. Its Web Services division offers a variety of Internet infrastructure management services, capitalising on Amazon's 20 years of experience as an E-commerce giant. Several hundred thousand companies in over 190 countries benefit from the data and server management consulting expertise of and server space for rent on Amazon Web Services.

BASF is a German company providing chemicals, plastics and other synthetic materials for industrial use. Production plants are intricately connected through BASF's Verbund (network) sites so that raw materials can be used efficiently and by-products from one stage integrated seamlessly into another stage. BASF frequently works with subsidiaries and occasionally also with external partners at its Verbund sites. They become natural customers for its by-products, thereby generating additional revenues for BASF.

Sennheiser Electronic GmbH & Co. KG (Sennheiser) is a German manufacturer of high-end audio products such as headphones, microphones and

Make More of It



stereo receivers for private and commercial customers. The company saw Make More of It as a means of exploiting its enormous technical know-how in the field. Production of its high-quality audio products is complemented by the Sennheiser Sound Academy, which provides training and expert knowledge to employees, retailers and customers across a wide spectrum of audio technologies and processes. This enhances the company's position as an authority in the audio technology field.

When and how to apply Make More of It

The Make More of It pattern conceives of core competencies in a much more meaningful way than as a mere outsourcing mantra. You should see your core competencies as a gateway to new market opportunities. Unique, hard to imitate competencies pave the way to new markets. High-precision machinery companies in the automotive sector have seized Make More of It opportunities by moving into the medical device sector. Before charting your course, identify

which technologies, processes and skills contribute to your core competencies. Based on these assessments, you can examine markets where your core competencies can be applied in new and innovative ways.

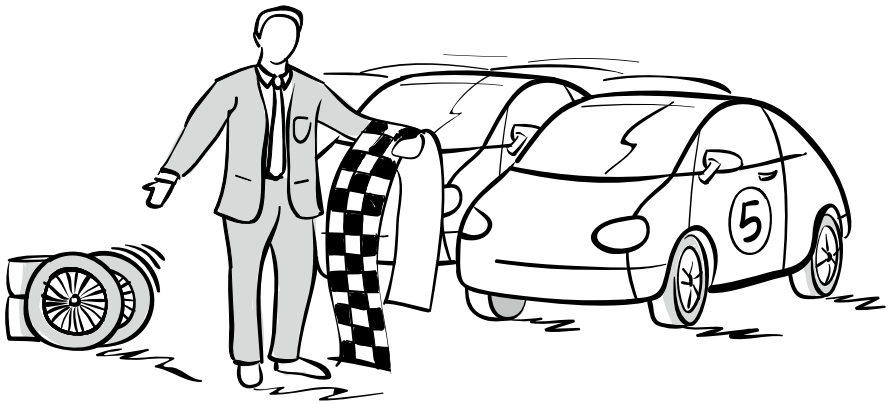
Some questions to ask

- **Do we really know our core competencies?**
- **Are they truly unique and hard to imitate?**
- **Can we draw analogies to different industries where we can use our core competencies?**
- **Have innovation experts in our new target market cross-checked the potential inherent in our core competencies?**
- **Have we tested our assumptions about the target market, its characteristics and its attractiveness in terms of facts and external expertise?**

Mass Customisation

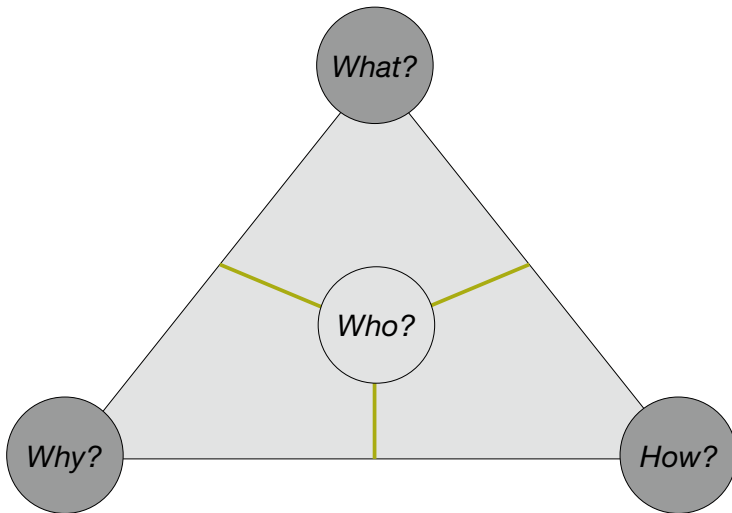
Off the rack individualism

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The pattern

Strictly speaking, the term ‘mass customisation’ is an oxymoron, since it combines the conflicting ideas of ‘mass production’ and ‘customisation’ in a single notion. In the world of business models, Mass Customisation refers to the customisation of products according to customer needs while simultaneously keeping efficiency as high as in traditional mass production (what? why?). This is made possible by standardised modular product architectures (how?). The individual modules can be combined to form a myriad of end products, providing customers with a wide variety to fit their individual tastes. The benefit for customers is to buy bespoke products without having to pay significantly more for them (what?). For businesses, Mass Customisation of services is a means of differentiating themselves from mass-producing competitors (why?). It is also likely to lead to closer relationships with customers, who have a sense of personal involvement in the individualisation of their products. The emotional connection customers form with their products is then projected on to the company as a whole (why?).



The origins

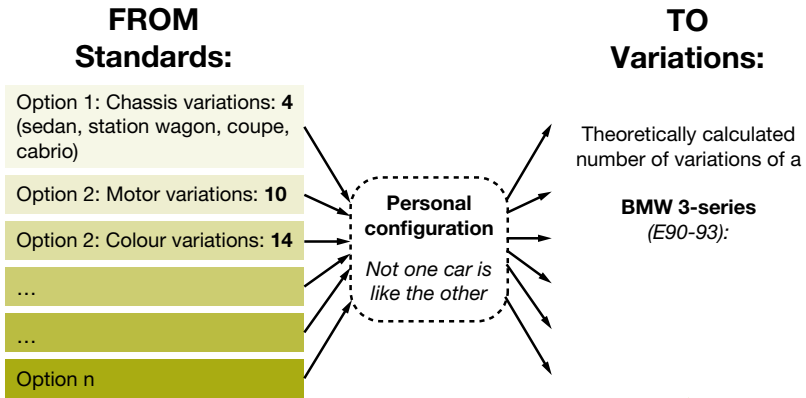
The apparent contradiction in the term ‘Mass Customisation’ already implies the long struggle towards financial feasibility. How could it be possible to reconcile uniform products that achieve economies of scale with personalised production? The answer to this question came with the advent of computer-aided manufacturing in the 1990s, which finally removed the obstacles to efficient modular production. The ongoing segmentation of markets also contributed to the rise of Mass Customisation. Today’s customers are no

longer satisfied with mass-produced goods, but are increasingly desirous of customised solutions.

PC manufacturer Dell was one of the first companies to harness the potential of these developments. Unlike its competitors selling preconfigured PCs, Dell offered its customers computers tailored to their own specifications, so that the Mass Customisation business model helped Dell to establish itself at the forefront of the PC industry.

The pattern has also been extensively used in the automotive industry. Premium manufacturers in particular have been offering their customers the possibility of choosing from a variety of options for a long time now: chassis (sedan, estate car, convertible, etc.); motorisation; automatic or manual transmission; exterior colour; interior colour; rims; etc. etc. Conversely, cheaper vehicles tend to be offered in fewer variations, additional components usually being available in packages or bundled by model, reducing the number of variants manufacturers are obliged to make and at the same time facilitating customers' decisions. Mass Customisation enables up to 5 per cent higher margins in the automotive industry.

Mass Customisation



The innovators

Aside from the above developments, many other successful innovations have been achieved thanks to Mass Customisation. Levi's experimented with the concept in the 1990s when it launched Levi's Personal Pair. Jeans are customised to perfectly fit individual body measurements, thus allowing a choice of thousands of fit combinations, rather than the traditional 52. A salesperson takes measurements of a customer and enters them into a networked computer along with the desired finish and colour. This information is relayed to the Levi's factory where the product is individually manufactured on a production line and sent to the store a few weeks later. The jeans are thus made to order with more attractive choices offered to the customer than by

competitors. In addition, the retailer has less money tied up in inventory, while individual configuration of the product is carried out on a normal production line, making for an efficient process with higher profit margins. With Levi's Personal Pair, the company successfully differentiated itself from its increasingly strong competition. In hindsight the initiative was a successful implementation of Mass Customisation; at times some of the stores increased their sales by up to 300 per cent.

Miadidas is a project initiated by the sports apparel manufacturer Adidas, to offer customisable football shoes, football shirts, etc. and accessories to customers according to individually specified configurations. Products are customised on the Miadidas website using an advanced graphical interface. Colour and other design options such as adding a personalised image are available. Once configured, an order is put online for the product to be manufactured and delivered by mail. The Miadidas initiative draws on a customer base increasingly attracted to individualised, rather than standard sporting products and designs.

PersonalNOVEL produces and distributes personalised books and novels via its website. The customer chooses a predefined novel, thriller or other book and selects names for the various roles and can apply other individual characteristics and dedications to the book. Details such as hair and eye colour, model of car owned by the characters and location can all be defined. In addition to the revenue achieved by this new market appeal, on-demand publishing offers an efficient process that circumvents the need for stock and conventional bookstores.

Founded in 2007, mymuesli is another company that has embraced Mass Customisation. Customers can create their preferred breakfast cereal or muesli by choosing from over 566 billion potential muesli options! This possibility of composing a dream muesli is a far cry from the choice available on supermarket shelves. Thanks to its application of the Mass Customisation business model, the company has been in the black since the very first day it was founded. Other areas in which Mass Customisation has been successfully applied are tea at allmyTea, handbags at My Unique Bag, and watches at Factory121.

When and how to apply Mass Customisation

This pattern provides an answer to the increased desire by customers for personalised and customised products and solutions. Greater customer loyalty and higher sales are the rewards if you are able to provide individualised products and services. Mass Customisation is relevant in all industries and can be applied to both products and services. To succeed with this pattern, you must have the necessary back-end systems to cope with the ensuing complexity. If you make significant use of industrial automation, then Mass Customisation may be especially interesting for you. The more intelligent your value creation process including online orders, computer-aided manufacturing and robotic assembly, the easier it will be to marry individualisation with economies of scale in mass production.

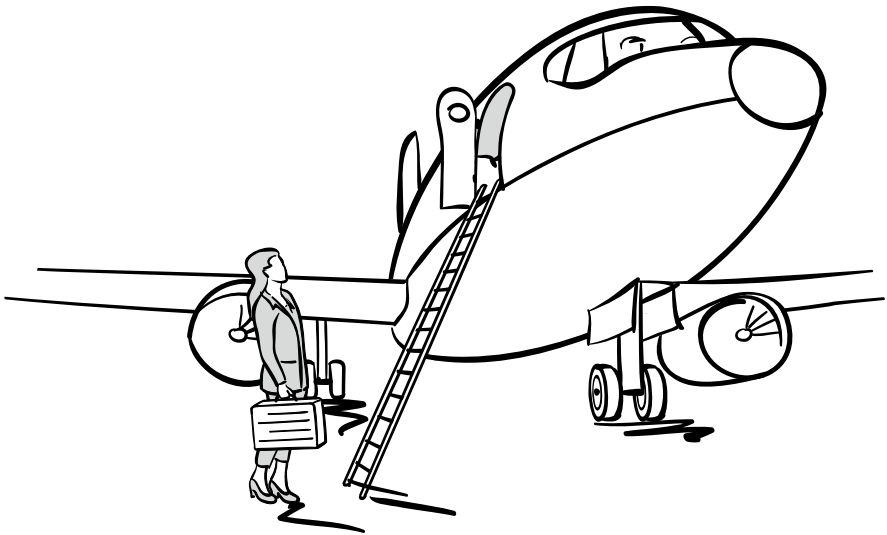
Some questions to ask

- **How can we tailor our products and services to different customer tastes and expectations?**
- **In which areas of our business will customers value customisation the most?**
- **Can we modify our back-end systems to efficiently handle Mass Customisation?**

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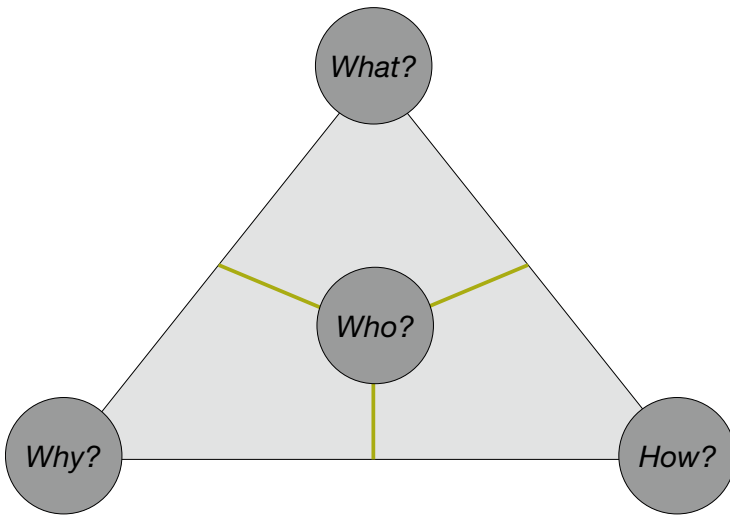
No Frills

Whatever, as long as it's cheap



The pattern

No Frills is as simple as this: the usual value propositions are trimmed down to their minimum (what?), with the resulting savings in costs typically being passed on to customers in the form of significantly lower prices (what?). The basic aim is to reach a much larger target audience and ideally even the masses (who?). Although such customers are generally more price-sensitive than those in the upper socio-economic strata, this business model can still be very profitable once it has taken off in the mass market (why?). A prerogative for success, of course, is to consistently adjust all processes to minimise costs, the only sure way to keep prices so low that you can attract a truly wide audience (how?).



One effective method of keeping costs low is to standardise the offerings so as to take advantage of economies of scale and fully utilise production capacities (how?). Another is to optimise distribution by introducing Self-service for instance (how?). If all goes well, the combination of a slimmer value proposition and cost savings will do the trick. This implies that the trimming down of the value proposition should be concentrated in areas where the greatest reduction in costs can be achieved.

The origins

Henry Ford became a famous No Frills pioneer when he introduced his Model T in 1908. At launch, the car was available for the incredibly low price of US \$850, about half the usual cost of a motor vehicle at the time. Ford was able to arrive at such a low price by introducing methods for large-scale manufacturing and, later on, assembly lines. Customers were no longer able to customise their cars

according to their wishes, but the price spoke volumes. Henry Ford's quip on the subject, 'You can have any color as long as it's black,' has now gone down in history. A major factor in keeping the price so low was the simple construction used for the Ford Model T. It was built with a modest 20 horsepower engine on a relatively uncomplicated steel chassis. Henry Ford's success was so resounding that by 1918 every second car in the United States was a Model T and over 15 million units had been sold when production ceased in 1927.

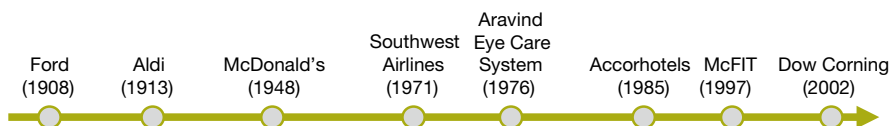
The innovators

Since Ford's Model T, the No Frills pattern has served as an impetus for innovative business models in many other areas. A very familiar example today is the airline industry's low-cost carrier model. US-based Southwest Airlines launched it in the early 1970s, offering its customers very cheap fares bereft of comforts such as meal service, seat reservations or booking assistance through travel agencies. Unlike traditional carriers, airlines employing this model generally don't use major airports, but choose instead to fly to smaller airports located at city peripheries. While less conveniently located, they charge lower airport taxes. The introduction of the low-cost carrier model has led to enormous changes in the airline industry, and it is estimated that every second flight in Europe is operated by a low-cost carrier.

Discount supermarkets selling groceries at low prices are another manifestation of the No Frills business model. Such price reduction is generally effected by avoiding branded products and drastically limiting the product selection on shelves. As a result turnover is usually very high, which means that such supermarkets not only save on inventory costs, but also have an advantage when negotiating with suppliers. For good measure, discount supermarkets normally steer clear of unnecessary decor in their stores (remaining consistent with the No Frills principle) and limit the number of staff on hand to a minimum.

Fast food restaurant chain McDonald's also banks on the No Frills business model. When the company's drive-in restaurants were floundering during the 1940s, owners and brothers Richard and Maurice McDonald instituted a comprehensive restructuring of their business, reducing the service offering to fewer than ten menu items, replacing the dishes with paper plates, and introducing a newer, cheaper method of preparing burgers. Two-thirds of the waiting

No Frills



staff were laid off and Self-service introduced. These changes made it possible to sell hamburgers at the drastically reduced price of 15 cents apiece. The No Frills concept helped the restaurant get back on the road to success, and is still a part of McDonald's philosophy today. Soon after re-opening, customers formed long lines at service counters – the rest is history.

Aravind Eye Care System is an initiative launched by Dr Govindappa Venkataswamy, providing ophthalmologic treatment for people in India and around the world. Aravind Eye Care System provides high-quality treatment and surgery for patients via its network of hospitals. It is the largest provider of eye surgery in the world and conducts thousands of free operations for impoverished people. These interventions are cross-subsidised by larger payments from wealthier patients who are able to pay the market rate, plus it receives funding from the Indian government as part of a World Bank project. Aravind's innovative approach to treatment, making efficient use of doctors and resources, enables a high throughput of patients without compromising quality of care. As a result, per-patient costs are kept low, and some hospitals deal with 2,000 patients a day. Despite its attention to the large population of people who are unable to afford treatment, Aravind's reputation for high quality continues to attract wealthier patients from around the world who are willing to travel and pay higher fees for treatment.

When and how to apply No Frills

Markets with cost-conscious customers are made for the No Frills pattern. Extremely price-sensitive customers will only buy products and services at a price that is suitably low for them. The No Frills pattern will work best if you can take advantage of economies of scale and reduce costs by using standardised products, processes and services. Emerging markets and their 'frugal' products are a hotbed for No Frills offerings. 'Less is more!' is the No Frills war cry.

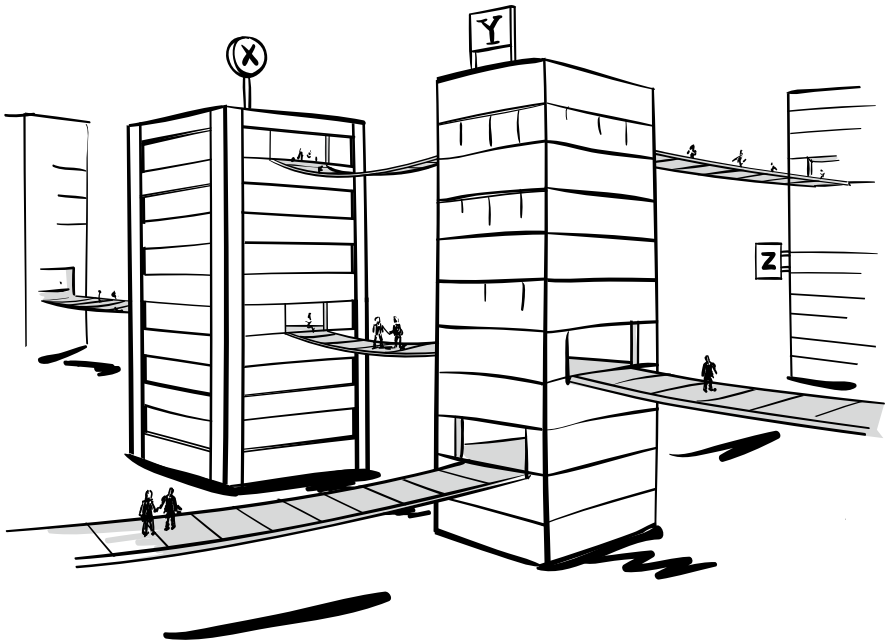
Some questions to ask

- Which customer requirements can we bundle and standardise to reduce variety?
- Where do we really need to differentiate?
- How can we think outside the box created by our over-engineered society and target extremely cost-sensitive emerging markets?
- Where and how can we eliminate waste and reduce costs in the value chain?
- How can we generate economies of scale in purchasing, production, R&D and distribution?
- Can we radically redesign our processes to save costs?

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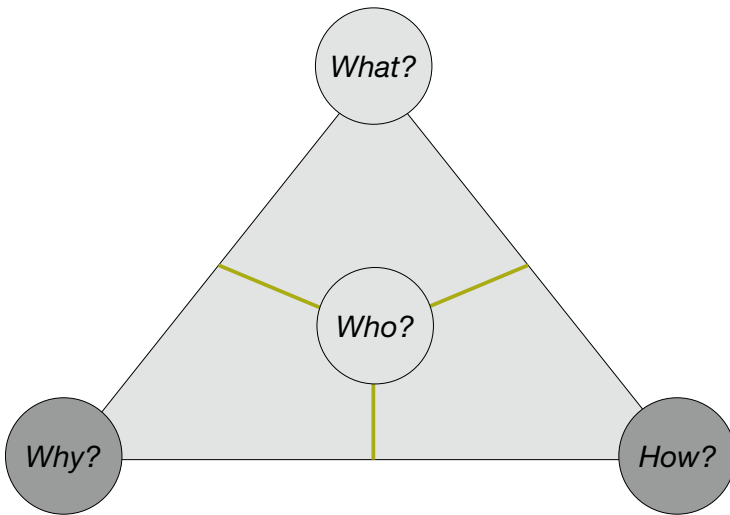
Open Business

Leverage collaborative value creation



The pattern

Adoption of the Open Business model often marks a fundamental paradigm shift in a company's business logic. Openness refers to the inclusion of outside partners into normally closed value creation processes such as research and development (how?). The precise form such cooperation takes is not set in stone, but being based on the concept of collaboration tends to differ substantially from classic customer–supplier relationships. Companies pursuing the Open Business model try to leave profitable niches for potential partners within the model to enable them to engage in independently gainful business activities (why?). Not without reason is a healthy business ecosystem often made up of firms that co-exist peacefully using different business models thriving through cooperating. Such ecosystems often develop around the focal company's products and services – akin to 'keystone species' in biological ecosystems – whose disappearance would destroy the whole ecosystem.

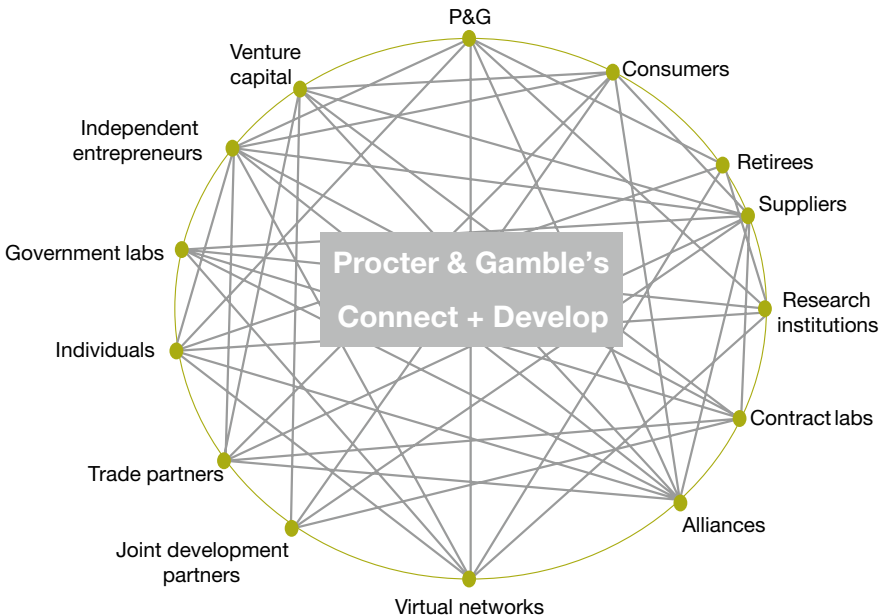


Embracing an Open Business model involves the systematic identification of areas in the value creation processes where other parties can contribute their own resources or use existing resources in new and innovative ways. The aim of opening up a business in this way is to improve efficiency, gain a share of new markets and/or secure strategic advantages (how? why?). The design of an Open Business model requires special consideration on two counts: first, the original business model, and particularly its value chain, must be both internally coherent and attuned to the business models of future partners. Second, it is important to ensure that the added value created also benefits the original business. In other words, the conflict of goals existing between one's own profitability and partners' objectives must allow a win–win solution (why?).

The origins

Henry Chesbrough (2006) was one of the first researchers to conceive of the Open Business model as an independent pattern as opposed to a closed business model. As such, the creation of this pattern is closely related to Chesbrough's Open Innovation, that is to say the opening up of a business's typically closed innovation activities to allow for the purposeful in- and outflow of knowledge. Rather than working on innovations behind closed doors, firms network and harness the potential of joint ideation. Consumer goods giant Procter & Gamble took these principles to heart when it launched its Connect + Develop programme in 2000. Aiming to improve its own innovative capacity, the company actively seeks out product ideas and knowledge from partners which they can then bring to market together. The Mr. Clean Magic Eraser traces back to an industrial melamine foam developed by BASF. It was sold as an all-purpose sponge in Japan and noticed by a Procter & Gamble 'scout'. An agreement with BASF secured the technology for use at Procter & Gamble. The Mr. Clean brand benefited greatly from this new product, and rapidly spawned a whole range of cleaning products developed in collaboration with Butler Home Products. Butler provided product ideas and production capacity, while Procter & Gamble contributed with its brand name and distribution network. Stories of such mutually beneficial partnerships are a dime a dozen at Procter & Gamble, for over half the corporation's new products are developed through such collaboration and partnerships. They have by no means been limited to exchanging

Open Business



technologies, ideas and production capacities: distribution networks and brands are all shared, exemplifying the progression from Open Innovation to a fully Open Business model.

The innovators

A whole slew of companies in a variety of industries have adopted the Open Business model in their quest to discover more efficient innovation processes. Pharmaceutical company Eli Lilly, although belonging to an usually secretive industry, founded the InnoCentive platform in 2001. It serves as a venue for researchers from all around the world to contribute to and be financially rewarded for solving the company's current challenges. InnoCentive was spun out of Eli Lilly in 2005 and it is now open to all businesses looking to solve innovation problems. Over 300,000 registered problem solvers have contributed to finding answers and have been awarded a total of over US \$40 million for their suggestions since InnoCentive was founded.

Openness can have a significant impact on the business model of a company beyond opening up research activities. IBM, for instance, in its often-cited metamorphosis from product to service provider, decided to stop developing its own operating system. Instead, it now actively participates in advancing the Linux Open Source system. With this move, IBM reduced its development costs by 80 per cent, while its server business, which profited from its seamless compatibility with the increasingly popular free Linux operating system, received a healthy boost. IBM's intimate knowledge of Linux helped its new services business to flourish, and the company's turnaround in the late 1990s was in large part due to its increasingly open business model.

Valve Corporation, a video game developer and distributor based in Bellevue, Washington, benefits in two ways from its Open Business model. On the one hand, the company decided to build its debut first-person shooter Half-Life in 1998 in such a way as to make it possible for technically minded players to easily create mods for the game. Thanks to the active support of Valve Corporation, an ecosystem of developers who brought their own first-person shooters to market was created. Among these developers were the creators of Counter-Strike, one of the most successful video games of the Internet era that led to the creation of highly popular professional gaming leagues in Asia. Valve then repeated its Open Business model success with Steam, its digital video game distribution platform. In contrast to its competitors, who reserved their distribution channels for their own products, believing them to be a core competency requiring protection, from 2005 onwards Valve permitted any game developer in the world to use Steam to distribute its games in exchange for a 10–40 per cent share of the turnover. At the present time, Steam hosts some 2,000 games from both independent developers and all major game studios. Thanks to its Open Business model, privately owned Valve is now valued at over US \$3 billion and ranks as one of the great hidden champions of the entertainment industry.

ABRIL Moda is a fashion brand that was created using the Open Business model out of 29 small textile companies based in Costa Rica. These companies formed a consortium to unite their efforts to create a single fashion brand under which to market their products. Using the social media platform hi5, and with support from their partner Barrabes, these companies succeeded in sharing their marketing and communication resources, enabling the consortium to split the costs of an effective marketing and branding campaign.

Holcim Costa Rica provides another example of a successful Open Business model. Based on an Open Innovation initiative launched in 2010, Holcim is constantly seeking new ways of collaborating with external partners to create additional value for its customers. One tangible outcome is the community of Los Olivos – the first integrated social and sustainable community in the country. In order to build Los Olivos, Holcim created a platform to integrate solutions from different actors such as construction companies, developers, universities, consultants and social researchers. Opening up its business model enabled Holcim to set a new standard in providing housing solutions for low-income families – an effort which has been recently awarded the Sustainable Construction Prize by the national construction chamber of Costa Rica.

When and how to apply Open Business

Opening up your business model and integrating partners into the value creation process is a key element for future growth and competitive advantage. In an increasingly connected world where industries are converging, you will need to open up to stay successful. Consider developing an entire ecosystem to create the kind of value for your customers that none of the participating companies could provide independently. In order for such ecosystems to function, all partners must generate sufficient revenue and benefit from collaboration.

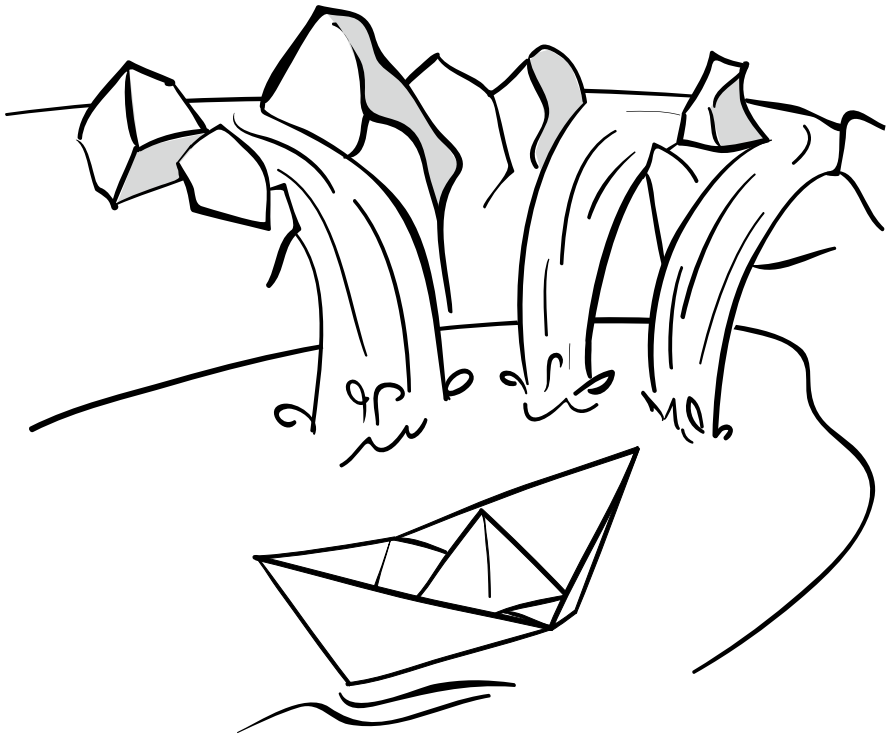
Some questions to ask

- What value-added offerings can we provide customers by partnering with other firms?
- Which areas in our company would benefit the most from outside knowledge and partners?
- What roles should the various partners play and where do we position ourselves in the ecosystem?
- How will we split revenue between partners?
- How can we all benefit from the ecosystem?

Open Source

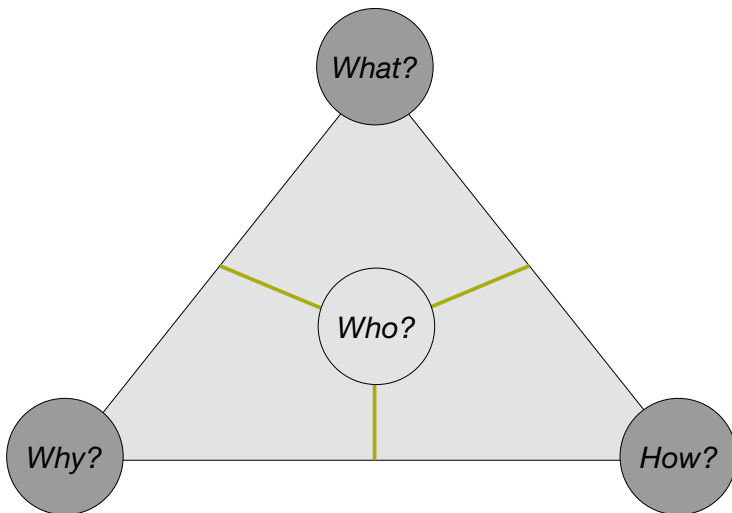
Working together to create a free solution

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The pattern

Open Source denotes that products are developed by a public community rather than a single company (how?). The source code is publicly accessible, so that anyone – a part-time tinkerer or professional – can join the community and contribute his or her expertise. As a result the solutions developed do not belong to a single company, but to the public as a whole. As such, Open Source products are freely available (what?). This does not, however, rule out the existence of opportunities for income generation with Open Source business models: rather than earning revenues directly from the developed solution, indirect returns can be pocketed through products and services that build on an Open Source foundation (why?).



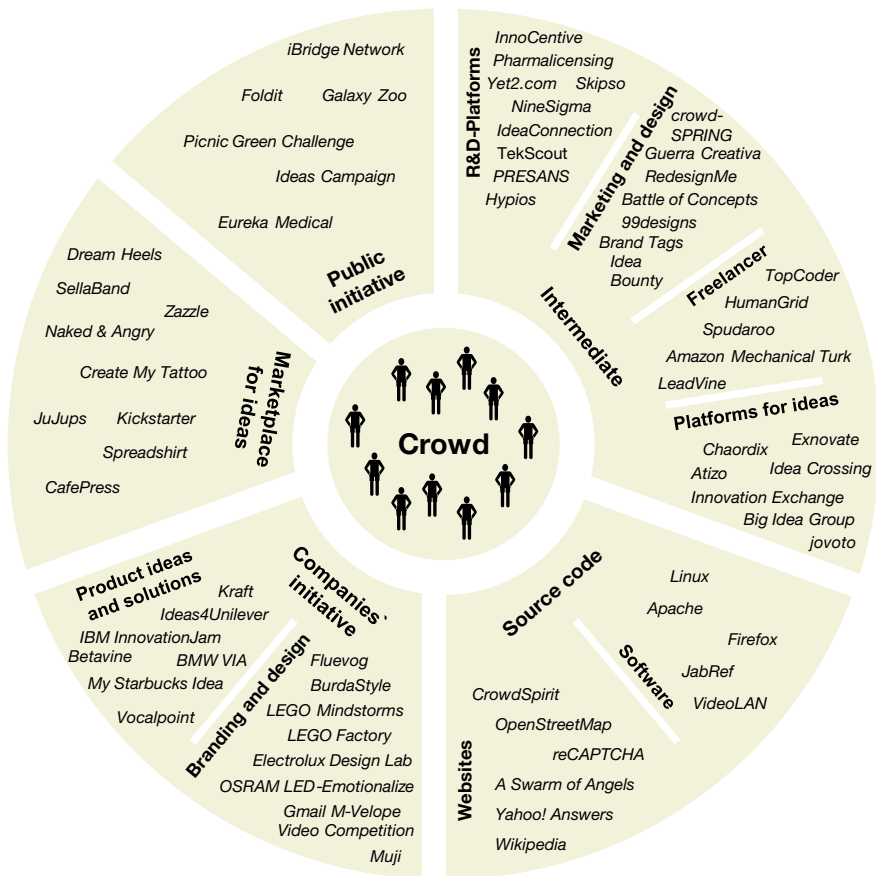
Companies that wish to use this business model enjoy the advantage of not having to invest in the development of new products (why?). Development is usually carried out spontaneously by community members free of charge. These members are often personally motivated to participate in development; such as an interest in improving the current solution. Proponents of Open Source are often convinced that this approach results in better solutions than proprietary development, as it harnesses the community's collective brainpower (what?). Finally, a decidedly significant advantage is that Open Source development is free of dependencies on suppliers (what? how?).

The origins

Open Source originated in the software industry, first being used by IBM in the 1950s. Two years after IBM introduced its original computers, the Share

user group was formed by IBM users to exchange technical programming, operating system, and database information. In the 1990s Open Source was applied to advance the development of the Netscape browser. Microsoft's growing dominance on the browser software market. The development team at Netscape Communications Corporation was pushed to seek an alternative path to value creation. This marked the start of the Mozilla Open Source project, which went on to develop the Firefox browser. In the meantime Open Source Software (OSS) has become an integral part of the software industry. Red Hat is generally acknowledged to be the first company to have established a profitable business model in this area. Red Hat generates most of its revenues through the sale of service agreements and complementary software applications for the Linux operating system. The enterprise was one of the first businesses to attain revenues in excess of US \$1 billion from Open Source products.

Open Source



Source: Gassmann, O. (2010). *Crowdsourcing*, p. 15, Hanser: Munich.

The innovators

Over the past few years Open Source has moved beyond the software industry. Online encyclopaedia Wikipedia, launched in 2001, is perhaps the best-known example. It has now become the world's most-used reference work. Wikipedia consists of articles composed by Internet users all over the world and is constantly edited and improved. Since the use of Wikipedia is free, the company is financed primarily through donations. Wikipedia has ousted many established encyclopaedia publishers from the market, forcing them to give up on an age-old business model.

Switzerland-based mondoBIOTECH also uses an Open Source business model. mondoBIOTECH calls itself the first Open Source biotechnology company in the world and has given itself the task of finding compounds to combat rare diseases, known as 'orphan diseases'. Development of these substances is not done in laboratories but online by screening existing research results and information for their potential. This provides a more efficient way of exploiting the current knowledge of the modes of action of drugs, and is also a significantly cheaper method. Just 11 years after the launch of mondo-BIOTECH, its product pipeline contains over 300 active substances, of which six have even achieved orphan drug status to date. In the conventional pharmaceutical research world, this status is attained by only one in ten thousand active substances studied.

The automotive industry also serves as a proving ground for Open Source business models. Local Motors became the first Open Source car manufacturer when it was launched in 2008. Its business model is based on an open design network, allowing engineers from all over the world to contribute ideas for building new cars and to develop them collaboratively on the company's online platform. Rally Fighter was the first car to be developed and produced on this principle. While only some 150 units have been sold to date, they have cost Local Motors just US \$3.6 million, a mere 3 per cent of what the typical car manufacturer spends on developing a new vehicle. Even with only 150 units sold, Local Motors reached its break-even point barely two years after launch.

The Open Source pattern has made a myriad of research initiatives successful, including the Human Genome Project. The greatest challenge is not to 'create' value, but to 'capture value'. When designing such a business model, it is important to ensure that at least part of the created value stays within the originating company.

When and how to apply Open Source

Open Source has found wide application in software design. While you relinquish a great deal of control over a given project, you can gain a competitive advantage by setting standards, sharing resources and risks, and creating a community of users to whom you can later sell additional commercial products or services. Back in the 1990s Open Source was still rather avant-garde, but

today the pattern is finding increased application in more and more fields. Young programmers in particular are making use of Open Source. Firms in the biotechnology and pharmaceutical sectors are also increasingly opening themselves up to this pattern.

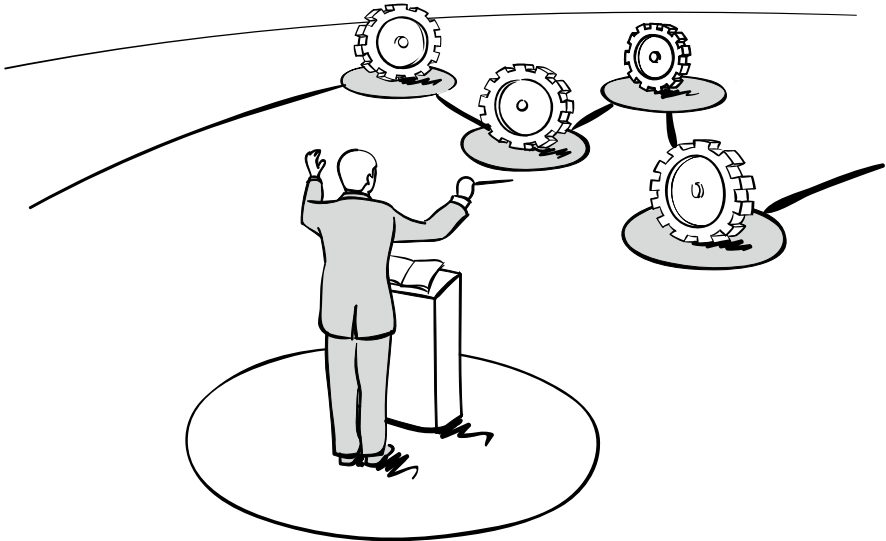
Some questions to ask

- **Is the technology in question (software, information, etc.) appropriate for Open Source?**
- **Can we gain a competitive advantage by sharing our R&D efforts?**
- **Do we expect the products and community to develop in line with our strategic direction?**
- **Will the Open Source business model enable us to both create and capture value?**

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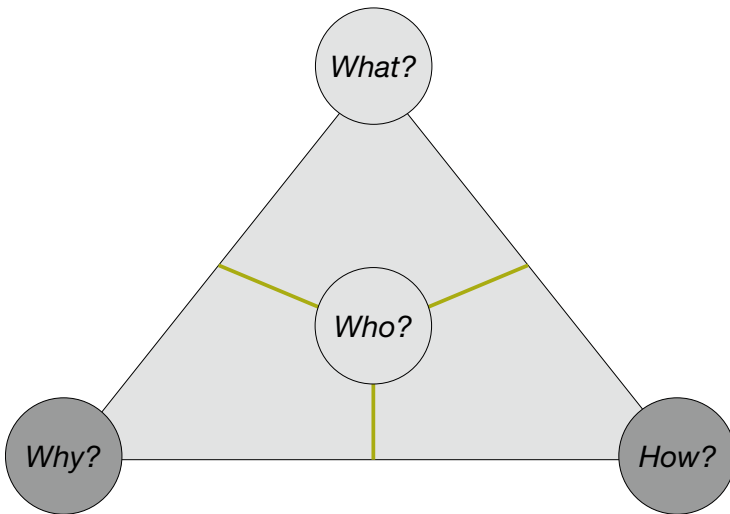
Orchestrator

Directing the value chain



The pattern

Orchestrator companies focus on their core competencies. Any activities in the value chain that fall outside these areas are outsourced to specialised service providers who possess the necessary skills to carry them out successfully (how?). Thus as director of the value chain, the Orchestrator will spend a great deal of time coordinating and matching individual value creation activities. The comparatively higher transaction costs that this incurs are offset by taking advantage of partners' specific skills (why?). An important advantage of the Orchestrator pattern is that it gives rise to close cooperation with external partners, whose innovative capacity can benefit one's own production (how? why?).



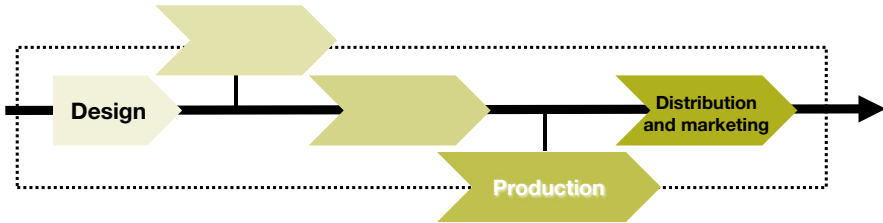
The origins

The Orchestrator pattern traces back to the 1970s, when growing globalisation and resulting cost pressures forced more and more companies to outsource parts of their value chains to countries with lower production and labour costs. The primary beneficiaries of this first wave of outsourcing, the Asian Tigers with their export-oriented industrialisation strategies, were the perfect foil to western companies' outsourcing goals. One of the pioneers of the Orchestrator pattern was the fashion industry, which began to move large segments of its production to Asia early on.

A prominent example of the application of this business model is offered by sports equipment manufacturer Nike. In the early 1970s, under CEO Phil Knight's stewardship, Nike started to outsource production of its products to low-wage countries such as Indonesia, China, Thailand and Vietnam, and to concentrate more on its own core competencies of R&D, product design

and marketing. Cost savings from outsourcing and this new focus gave Nike an advantage over its competitors, establishing the company at the head of the sports equipment industry. Nike produces an estimated 98 per cent of its products in Asia today, making the Orchestrator pattern an integral part of its business model.

Orchestrator



The innovators

Several companies have used the Orchestrator pattern successfully for business model innovations in the past. Among them is Indian telecommunications services company Airtel, which was founded in 1995. With over 260 million customers, it has evolved to become one of the largest telecommunications companies in the world. Airtel possessed very little to differentiate it from other telecommunications providers. It began to turn itself into an Orchestrator from 2002 onwards, laying emphasis on its core competencies marketing, sales and finance, and outsourcing other parts of its value chain such as IT support to companies such as Ericsson, Nokia, Siemens and IBM. Airtel negotiated contracts with these companies that allow it to incur only variable costs on the basis of capacity used. Trimming the value chain in this way made it possible for the company to offer its telecommunications services at very low rates. Its Orchestrator role increased Airtel's revenues by up to 120 per cent and its annual net profits by some 280 per cent between 2003 and 2010.

China's Li & Fung is also a profitable Orchestrator. It accepts production and development orders from prominent customers such as Toys R Us, Abercrombie & Fitch or Wal-Mart for a variety of goods ranging from toys to fashion accessories to apparel. Li & Fung does not produce these goods itself, but manages a global network of more than 10,000 suppliers who complete the tasks. As such, the company is a global supply chain Orchestrator with the core competence of connecting individual value chain partners and processes. Without owning a single factory, Li & Fung earns multi-billion dollar revenues every year.

When and how to apply Orchestrator

To be an Orchestrator you need to know and fully understand your company's key strengths. This is especially true if you are active in a large number of steps of your value chain. As an Orchestrator you focus all your efforts on those activities you know you excel at and outsource the rest, thereby reducing costs and increasing flexibility. It is paramount that you hold your cards close; otherwise you risk being replaced by another company. In order to be a good Orchestrator, you need to be good at actively managing diverse partners.

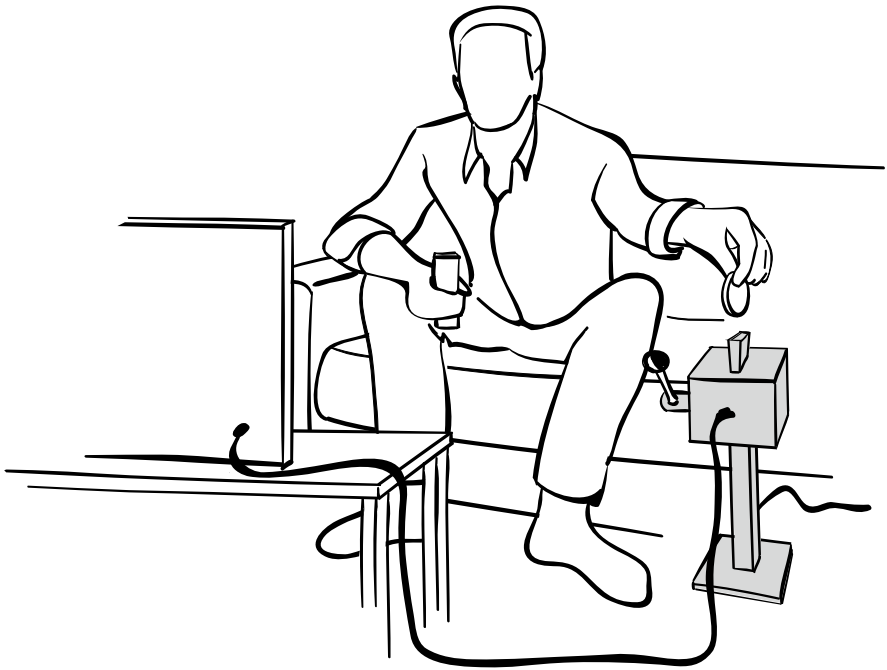
Some questions to ask

- What are our key activities?
- Where do our unique strengths lie?
- Which activities are less important for our value proposition as a whole?
Could we outsource them to other firms?
- Will we be able to reduce our total costs by outsourcing certain activities?
- Can we become more flexible?
- Are we capable of managing different partners at the same time?

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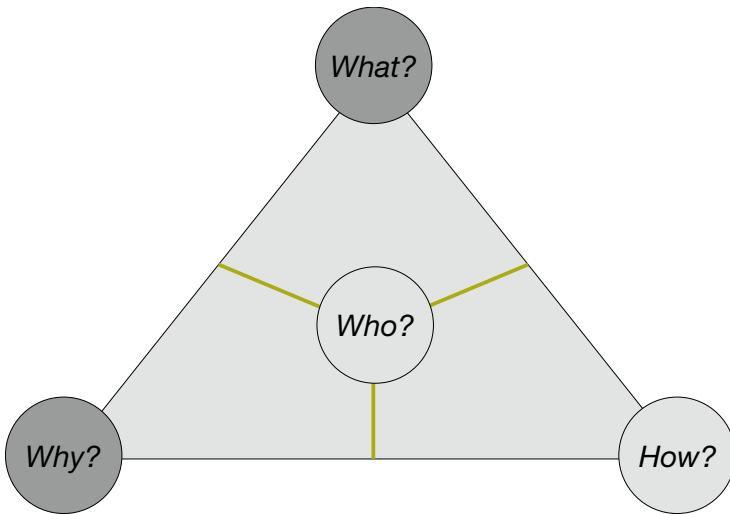
Pay Per Use

Pay as you go



The pattern

In the Pay Per Use model, the specific usage of a service or product by the customer is metered and charged. It is employed extensively within the consumer media market (television, online services, etc.) and attracts customers wishing to benefit from flexibility. In other words, in the Pay Per Use model customers pay for services based on their effective usage instead of a fixed rate (what?). Depending on the service, they are billed in different ways, for instance based on the number of units used or the duration of use (why?). A considerable advantage for customers is that the origins of the incurred costs are highly transparent (what?). The pattern is also a very fair one, since customers who use a service sparingly pay much less (what?).

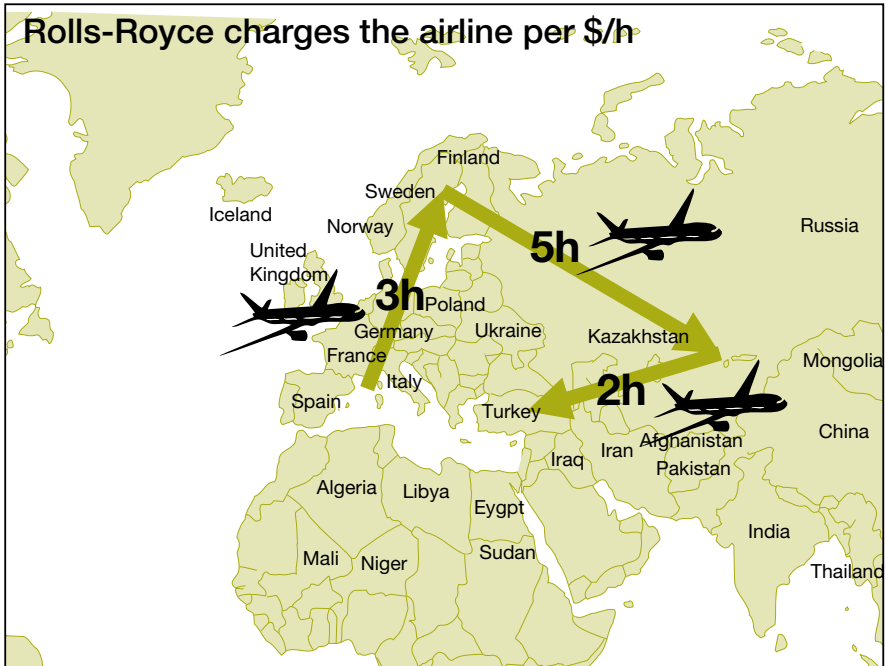


Conversely, because customers typically use services spontaneously, it may be difficult for a company to make an estimate of sales. To ensure reliable planning and a regular income, many companies stipulate minimum usage of the service in their contracts, guaranteeing them constant returns.

The origins

Pay Per Use has a long history as a business model. Rentals have seemingly always been charged pro rata, that is, billed according to the specific amount of time the asset was used for, and new electronic billing methods have supported the transfer of the pattern to other areas. Made possible by the advent of digital television, pay per view services are an example of a business model innovation inspired by Pay Per Use: customers can watch films or sporting events on demand without having to subscribe to a television network. Unlike analogue

Pay Per Use



television, the number of channels can be greatly increased and customers given a flexible choice from among a range of paid options.

The innovators

The Pay Per Use pattern spurred the creation of a variety of innovative business models including the Internet advertising ‘pay per click’ model. Rather than having to pay for displaying their advertising, advertisers are charged according to the number of times Internet users actually click on a given ad. Start-up GoTo, which used this billing method for the first time in 1998, is credited with having invented the pay per click option. Pay per click has now become one of the dominant models in online advertising. Google, for example, generates over 90 per cent of its advertising revenues with pay per click ads.

In 2008 Daimler launched its car-sharing concept Car2Go, which represents an innovative application of the Pay Per Use pattern. Typically car sharing or car rental services lend their vehicles by the hour or day. Car2Go takes a different approach: customers rent Car2GO cars by the minute. Furthermore, they do not have to specify a return time and are permitted to hand in keys at their convenience. Car2Go also differs from other car-sharing services in that customers are not required to pay a basic annual fee, but simply a one-time fee on initial registration. Car2Go has taken a page from the telecommunications

companies' playbooks by charging its customers for their actual usage of its services. Customers appreciate the flexibility and ability to control costs afforded by Car2Go, and Daimler seems to be on the right track with this form of car-sharing service. After early pilot tests in Ulm, Germany and Austin, Texas, the Car2Go offer is now available in eight North American and nine European cities. By 2016 the company aims to reach at least 50 additional cities.

Pay Per Use is also applied in the insurance industry, where various car insurers have been offering pay as you drive insurance policies for quite some time now. Premiums are calculated on the basis of the policy holder's actual risks, which are determined from his or her driving habits and other risk factors such as location and time of day. The data are transmitted to insurers via a GPS system. The US-based insurance company Ally Financial, formerly GMAC, has been offering this type of policy since 2004, making it a pay-as-you-drive insurance.

When and how to apply Pay Per Use

The Internet of Things is a world of smart networked products which sense and generate data and communicate them for further analysis or intelligent adaptation. The Pay Per Use pattern derives its enormous potential from this new product-founded ability to gather and analyse information. Technologies to measure product usage have, of course, always existed, but thanks to falling IT costs, new applications to strong business cases are now possible.

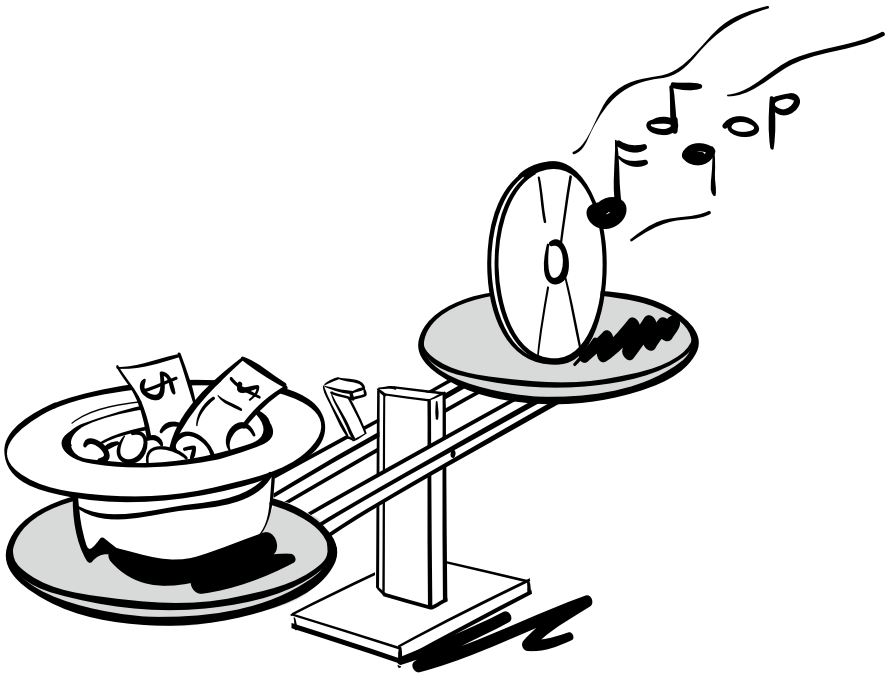
Some questions to ask

- How can we make our billing process as simple as possible?
- Will our customers alter their behaviour once we introduce Pay Per Use?
- What kinds of product data can we measure and analyse?
- What additional value other than data on usage can we provide for our customers with these intelligent products?
- What can this pattern teach us about our customers' behaviour?

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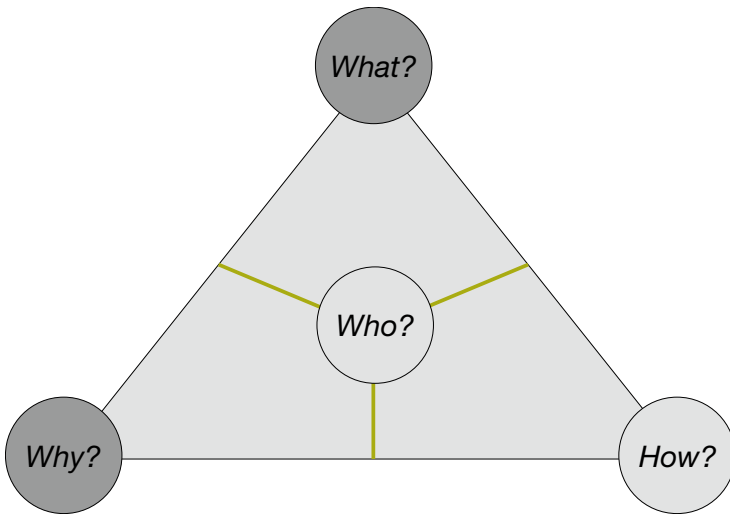
Pay What You Want

Whatever it's worth to you



The pattern

In the Pay What You Want business model, it is the customer who sets the price to be paid for a product or service (what?). The vendor commits to accepting the price offered by the customer, even when it is zero or way below the actual value of the offering. Sometimes a price floor or a price is suggested to the buyer for guidance. This model can attract a wide customer base, but is most applicable in competitive marketplaces dealing in products with low marginal costs, and where there is a strong relationship between the parties and a fair-minded customer base. Contrary to what might be thought, customers seldom take advantage of this business model: research has shown that prices paid for Pay What You Want services differ significantly statistically from zero (why?).



Social norms such as fairness function as a type of control mechanism in the pricing. In addition, customers typically base their prices on the cost of comparable products. They often perceive such pricing schemes as advantageous since they are enabled to control incidental costs (what?). An advantage of the Pay What You Want pattern for the vendor is the likelihood of getting a positive press and thus a marked increase in custom (why?).

The origins

Pay What You Want has been around for a long time: a typical example is money given to buskers or a tip to waiters. The Pay What You Want pattern was first applied commercially by the restaurant One World Everybody Eats, based in Salt Lake City, in 2003. In addition to paying what they want for food and drinks, customers can also pay in kind, for example by volunteering to wash

the dishes or work in the garden. In the words of founder, Denise Cerreta, the Pay What You Want concept contributes to bringing healthy, good quality food to those less fortunate.

The innovators

Pay What You Want has grown in popularity over the past few years. In the music industry, British rock band Radiohead applied it in 2007 when it marketed its new album 'In Rainbows'. The album was available for downloading from the band's website and fans could decide independently whether or how much they wanted to pay for it. Although the average price paid by fans was less than the usual market average for an album, 'In Rainbows' was downloaded more often than all the band's previous albums combined, thus greatly increasing the band's popularity.

Online music service NoiseTrade was founded in 2006 with the Pay What You Want model in mind. Unsigned artists can promote their music on NoiseTrade by uploading songs to the website free of charge. Music fans can download tracks, and in return donate money. They further support the artists by providing their contact information, a testimonial and spreading the word via social media links and widgets. NoiseTrade receives revenue from website advertising and commissions on any donations made.

In 2010 the Pay What You Want model was applied in the marketing experiment Humble Bundle. Humble Bundle is a website offering online collections or 'bundles' of content such as video games, eBooks and music for download. The price paid is set by the customer. A number of incentives are built in that lead to higher revenue: users paying more than average are rewarded with bonus media, and top contributors are listed on the website. In addition, a share of the sale price goes to a non-profit organisation. Humble Bundle receives an average of 15 per cent of the total funds raised through the website, and over the past three years has earned over US \$33 million in sales with the Pay What You Want business model.

Pay What You Want: The business model of Humble Bundle



When and how to apply Pay What You Want

Pay What You Want assumes that customers understand the value of a product and will pay an appropriate amount for it. This pattern has its roots in the B2C consumer market, but also finds application in the B2B sector. Often it is not applied to the entire offering, but only to a certain percentage of the product or service. Some consultants, for instance, allow customers to pay a share of the consulting fee based on their level of satisfaction with services rendered.

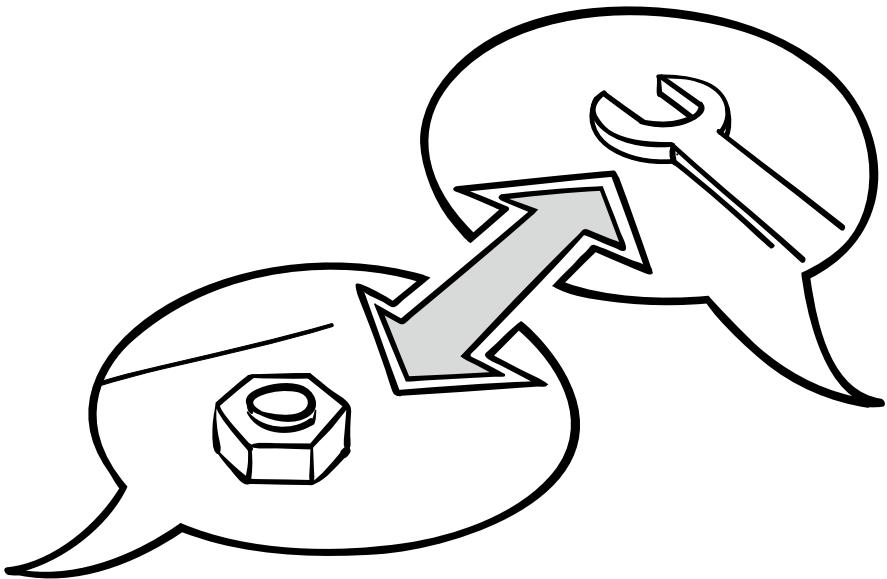
Some questions to ask

- Which of our offerings would customers value in an appropriate manner if they could decide on the price?
- Can we split our revenue model into a fixed and a flexible portion where customers can pay what they want?
- How can we avoid free riders who consume our product but are not willing to pay?

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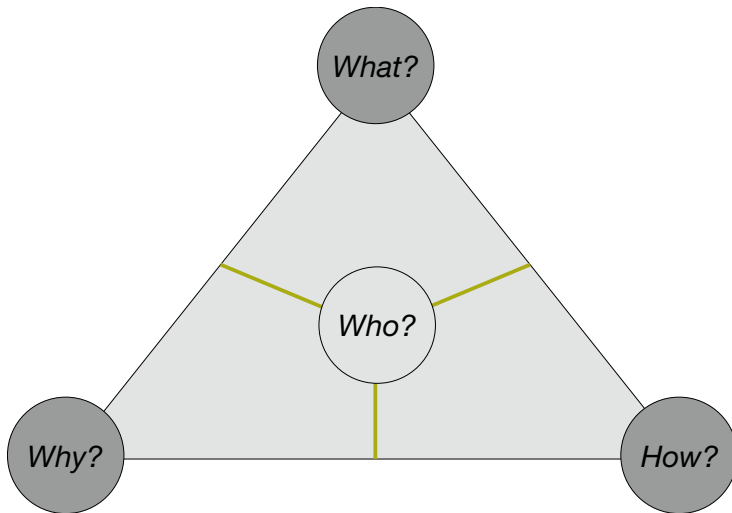
Peer to Peer

Dealing from person to person



The pattern

The term 'peer to peer' originated in the computer industry, where it refers to two or more equivalent computers communicating. In business model terms, Peer to Peer normally refers to transactions between private individuals such as lending personal items, offering specific services and products or sharing information and experiences (what?). The organising outfit functions as a sort of intermediary responsible for the safe and efficient handling of transactions (how?), ideally becoming a nexus for community relationships. As time goes by, this function can be monetised, for example by charging transaction fees or indirectly generating revenue through advertising or donations (why?).



A major advantage of Peer to Peer business models is that customers can make use of private products and services in much the same way as they would use commercial offerings (what?). Additionally, customers value the social aspects of Peer to Peer networks (what?). A company's success implementing this business model will hinge on whether it is able to establish a trusted image of the various offerings (how?). For while users appreciate the opportunity to purchase privately produced products and services, they also want the simplicity and ease of commercial transactions.

The origins

The Peer to Peer business model began to develop in the early 1990s. The creation of the Internet was a central driver for this model. The 'collaborative consumption' trend is also partially responsible for the development of Peer to Peer models. At the centre of this trend is a desire to revitalise the community

spirit and communal use of resources. Online auction site eBay is one of the pioneers of the Peer to Peer model, giving people in over 30 countries an opportunity to auction off items they no longer need. Globally, eBay handles over 12 million auctions a day.

The innovators

A number of companies have followed in eBay's footsteps in the past few years. Craigslist is a private web communications company specialising in online classified advertisements for local goods and services such as housing, jobs, gigs, personals, wanted, for sale, etc. The company revolutionised the market when it created an online Peer to Peer network, undercutting the monopoly previously held by print media. Through free listings, Craigslist developed a digital Peer to Peer network that processes over 60 million new classifieds and 50 billion page views per month. Craigslist uses this favourable market position to charge for certain listings such as job postings or apartment offers, while the remaining listings remain free of charge.

Zopa is a UK-based company providing financial exchange services through an online network and E-commerce business model. The service enables people to borrow or lend money independently of banks and financial institutions. Zopa works as a Peer to Peer credit platform, facilitating and securing money exchanges (lending and borrowing) between individuals online. Users willing to lend money post the amount on the Zopa website with the desired lending conditions. The offer is then matched with someone wishing to borrow that amount under the stated conditions. Zopa works solely as an intermediary, bringing together borrowers and lenders and cutting out the role of banks, allowing for favourable lending terms for both parties (e.g. a lower interest rate). Zopa receives revenue by charging both parties involved a fee for successful transactions.

Peer to Peer



The Berlin-based start-up friendsurance.com established yet another Peer to Peer model. The pattern has found application in the insurance industry by connecting social networking with a classic insurance concept. The basis of the concept consists in forming private insurance networks (e.g. four or five friends) over social networks. Taking car insurance for instance, the individual's network comes up with a certain amount of money in case of damage (e.g. €20 per person). The remaining amount is covered by a classic insurance back-up. In that way, friendsurance.com, achieves a reduction in customer insurance rates

of up to 50 per cent. Benefits accrue not only to customers: costs of distribution are eliminated and customers solicit other customers. Moreover the risk of moral hazard is reduced drastically.

Founded in 2010, RelayRides also uses a Peer to Peer business model. RelayRides is a car-sharing company through which private car owners rent their cars to other private citizens. Cars are chipped, outfitted with security systems, and registered in RelayRides' booking system. The start-up is financed by General Motors and has been very successful in the United States. It has attracted half a million members just two years after launching.

TIGER 21 (The Investment Group for Enhanced Returns in the twenty-first century) is a Peer to Peer learning platform for high-net-worth investors founded in New York City in 1999. The group addresses members with a minimum amount of US \$10 million in assets: entrepreneurs, CEOs, investors, top executives, etc. The aim is to improve its members' investment knowledge and explore issues of wealth preservation, estate planning and family dynamics. What is special about TIGER 21's approach is that it organises monthly small group meetings where members can discuss topics related to wealth and discuss one another's portfolios. These meetings are highly confidential and facilitated professionally. Members come up with business ideas and personal issues or look at world events, all of which is evaluated and discussed collectively to spot opportunities and chances for each member's wealth management. The real value evolves from the different perspectives members bring into the debate. Meetings are topped off by guest talks from external experts. TIGER 21 charges US \$30,000 a year for membership, which covers tuition for group meetings, expert speeches and access to the online community.

American company LinkedIn provides the largest social network for business professionals. Like Facebook, users on LinkedIn can create personal profiles with a business-oriented focus on the website free of charge. Company representatives are able to seek professionals for hire and job seekers browse job opportunities. Of course, users within the Peer to Peer network communicate among themselves and build relationships. The website is easy to handle and enables users to display a comprehensive profile and expand their network of professional contacts.

Peer to Peer has also caught on in lodging. Airbnb is a privately owned company based in San Francisco offering users ('hosts') a means to rent their living space, private rooms, apartments, castles, boats and other assets to a wide range of people within a Peer to Peer community. Logged on to its conveniently configured website, users of Airbnb can present their living space or property for short-term rent to a community of travellers and other people looking for affordable accommodation. A rating system has been introduced for both the accommodation facilities and guests to prevent fraud and misrepresentations. Airbnb's primary revenue is raised through service fees on bookings (between 6 and 12 per cent). Other sources of revenue include guests' credit card processing fees.

When and how to apply Peer to Peer

Peer to Peer is most effective in online communities. The principal idea behind this pattern is to increase marginal utility. With every new user, the attractiveness of the network for other users rises. This creates a self-reinforcing cycle whereby the 'winner takes it all' and it becomes increasingly difficult for new players to enter the market.

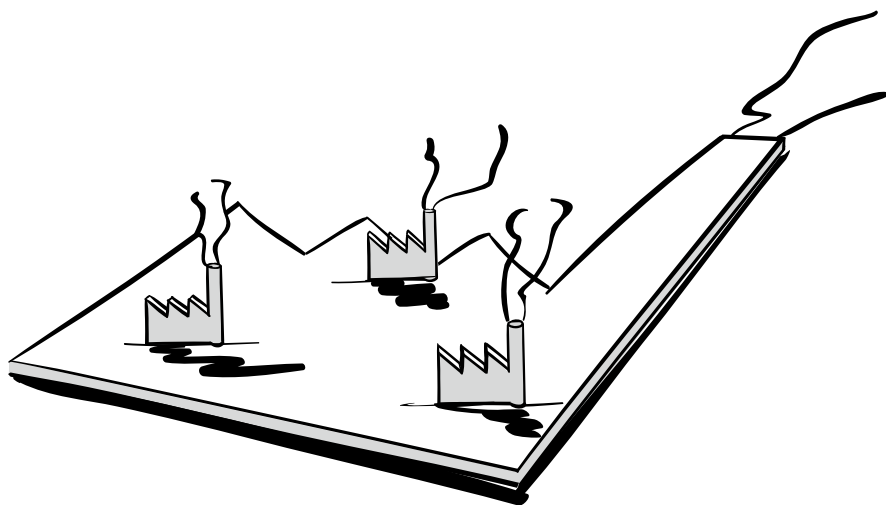
Some questions to ask

- How can we convince users to switch from an existing network to our own? What can we contribute to the community?
- What incentives must we offer so that users stay in our network; can we create soft Lock-in effects?
- How do we implement our designs technically?
- What do we hope to achieve by setting up a Peer to Peer network?
- (When) should we stop letting people use our platform for free and introduce a fee-based or Freemium revenue model?

Performance-based Contracting

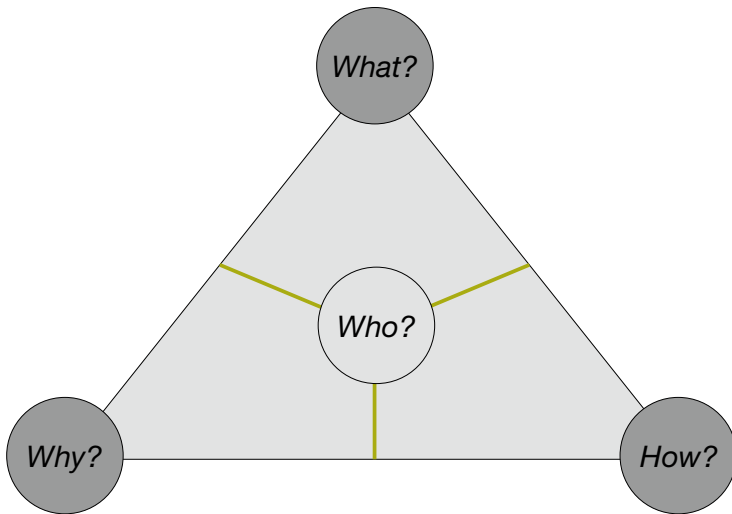
Basing fees on results

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The pattern

Performance-based Contracting implies calculating the price of a product by considering the services it renders rather than its face value. Such services are measured as a precise output quantity for which customers pay the company a specified amount (what? why?). This amount typically includes all pertinent costs such as operation, maintenance and repair expenses, so that customers can more easily control their costs (what?). It is important to note that the use-intensity of the product is irrelevant to pricing, making it essentially the opposite of Pay Per Use. The manufacturer who distributes the products in question will frequently be strongly integrated into customers' value creation processes (how?), passing on past experience with the product and building up new expertise with its use (why?). Integrated own-and-operate systems are an extreme variant of this pattern, whereby a company retains ownership of and operates the product another company has bought (how?). The greater financial and operational risk is offset by long-term and more cooperative relationships with customers (why?).

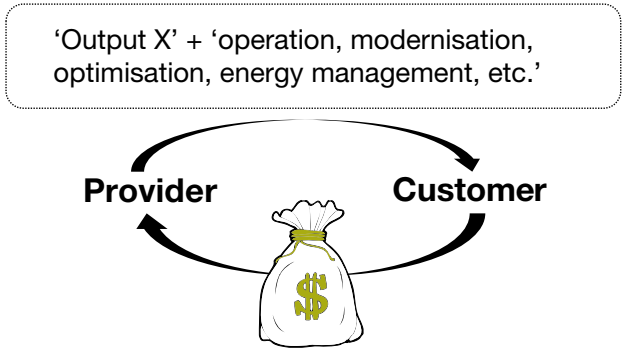


The origins

Performance-based Contracting derives from public sector infrastructure policies, which have been applying the concept in public-private partnerships (PPP) since the mid-twentieth century. PPPs are cooperative agreements between public authorities and private enterprises. The public authorities grant concessions to companies, legally authorising them to perform public functions. As a rule companies are remunerated based on demand fulfilment (for example, the number of available kindergarten places they have created); in other words, payment depends on results.

Over time results-based compensation found its way to industry. British aircraft engine manufacturer Rolls-Royce was a Performance-based Contracting pioneer. In the early 1980s the company achieved large-scale success with its power-by-the-hour scheme. Rolls-Royce does not sell engines per se, but rather their performance per flying hour. The engines are owned, maintained and repaired by Rolls-Royce. The power-by-the-hour programme is very popular with customers, and Rolls-Royce generates over 70 per cent of its revenues through it.

Performance-based Contracting



The innovators

Performance-based Contracting has been applied in a variety of areas. In the chemical industry, BASF Coatings has been using it since the late 1990s for 'cost per unit' models. The cost of vehicle coatings is calculated per item (or module) coated, rather than by the amount of paint used. BASF has taken on some of the responsibility of finishing cars by lending its support to customers in situ and assisting them in improving their efficiency. Any savings achieved from using the finish more economically are split between customers and companies, resulting in a win-win situation.

Xerox is an American manufacturer of printers, photocopiers and other peripherals which also offers a wide range of document management services. Printers and photocopiers are distributed to customers, but remain the property of Xerox. The company's vast resources and expertise in maintenance reduces costs and increases efficiency. Put differently, Xerox supplies and maintains the printers, photocopiers and other devices, while customers pay per page printed. Xerox's superior experience in this field enables it to operate with lower operating costs and increased profit.

Smartville is a manufacturing plant based in France for the motor car brand Smart, a joint venture established by Daimler (at this date: Daimler-Benz) and Swiss watch manufacturer Swatch. Smartville provides a modern, highly efficient manufacturing process for the Smart car, a popular compact vehicle available in electric and petrol versions. All essential suppliers of components

for the Smart car are located at the cross-shaped production plant. Smartville has the lowest depth of in-house production, accounting for just 10 per cent (although most of the external suppliers are located in or around the Smartville plant). Smartville's production concept allows for efficient integration of suppliers into the manufacturing process. Vehicles are manufactured to order with a modular delivery of systems from suppliers, whose close proximity allows for greater communication and rapid testing and delivery without the need for long-term storage on site. The efficient integration of companies allows for a shorter production time, lower costs, more efficient collaboration between the suppliers and ultimately leads to higher revenue.

When and how to apply Performance-based Contracting

This pattern allows you to monetise existing knowledge and services including process knowledge, maintenance know-how and related services. Performance-based Contracting works well if you deal with complex products that also have a challenging application. Customers who want to avoid upfront costs will be inclined to favour Performance-based Contracting, as will those who desire increased transparency and stability regarding costs of final products and services.

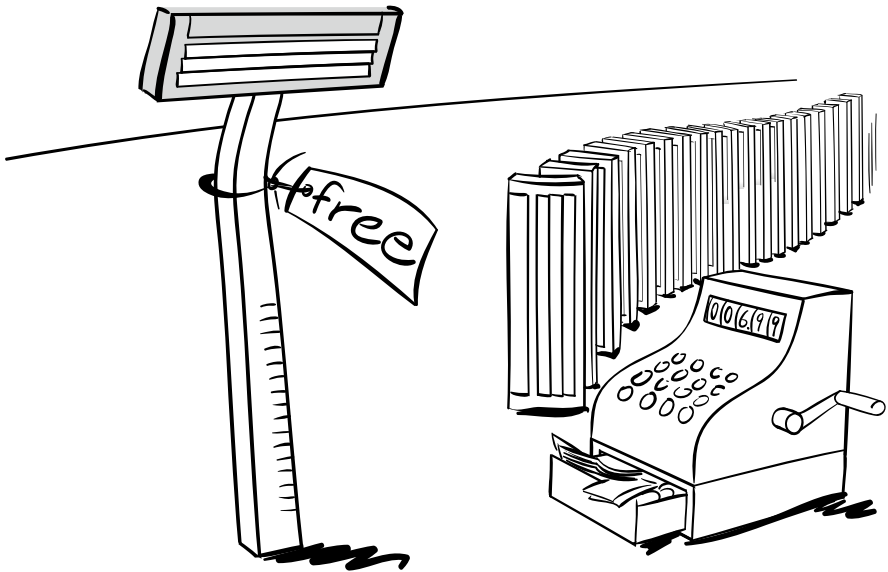
Some questions to ask

- What do our customers really need?
- Would offering customers packages of knowledge and services create additional value for them?
- Would customers prefer cost structure transparency that would allow them to manage their costs by actual usage?
- How can we design our value chain to boost fulfilment levels and reliability?

Razor and Blade

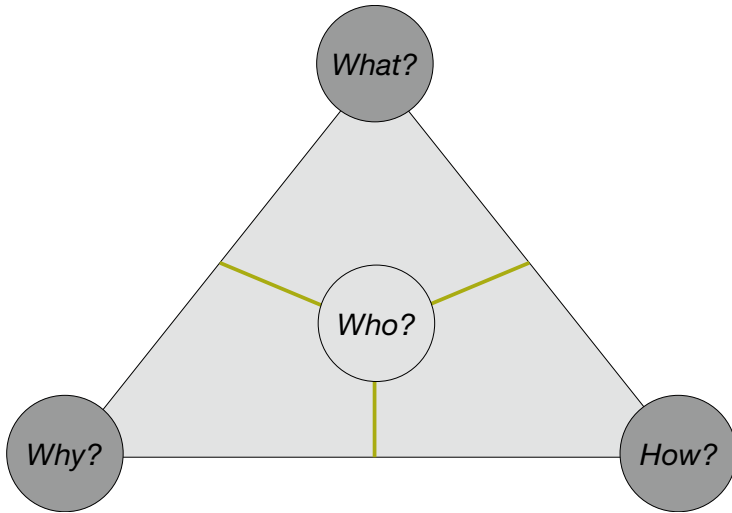
Bait and hook

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The pattern

In the Razor and Blade business model, the basic product is offered at a bargain price below cost or even for free. Additional products that customers need in order to use the basic product, on the other hand, are high-priced and so become responsible for generating most of the revenues (what? why?). This simple yet ingenious business logic describes the model, which is also known as the 'bait and hook'. The principal idea of the pattern is to win the customer's loyalty by lowering the barriers for purchasing the basic product (what?). Money will start coming in once the customer purchases complementary products (why?).



Razor and Blade requires basic products to be cross-subsidised by accessories. This business model can be particularly lucrative when accessories are frequently used (why?). In other words, the company sells not just basic products, but also ups potential revenues associated with future sales of complementary products. In order to capitalise on this potential, exit barriers must be built in preventing customers from purchasing complementary products from competitors. Common strategies include patenting the complementary product or building a strong brand (how?). The Razor and Blade pattern is often employed in combination with the Lock-in strategy, as illustrated by Nespresso.

The origins

To trace the origins of the Razor and Blade business model we have to look far back into history. One of the fathers of the pattern is John D. Rockefeller, who

started to sell cheap paraffin lamps in China towards the end of the nineteenth century. Purchasers of the lamps had to buy expensive fuel in order to light them, which Rockefeller manufactured in his Standard Oil Company refineries. This business model generated such enormous revenues through the sale of oil that Rockefeller became the richest man in the United States and later even the world. The term 'razor and blade', however, stems from another famous entrepreneur: razor blade pioneer King Camp Gillette, who invented the interchangeable razor blade at the beginning of the twentieth century. To boost blade sales, Gillette gifted the corresponding razors to military establishments and universities. Success of the disposable razor blade system was so resounding that the company sold more than 134 million razor blades within three years of bringing the product to market. Incidentally, Gillette is also a prime example of how patents can be used effectively in conjunction with the Razor and Blade business model. The Gillette Fusion razor alone is protected by over 70 patents. This makes it exceedingly difficult for competitors to enter the lucrative razor blade business and usurp Gillette's primary source of income.

The innovators

In the 150 years that the Razor and Blade model has been in existence it has spawned a number of other innovative applications. Hewlett-Packard appropriated the model in 1984 by adapting it for the ThinkJet, the first inkjet printer in the world developed for private use. Unlike expensive industrial printers, it sold for as little as US \$495, rendering it affordable by the average American. Hewlett-Packard generated most of its revenue through the subsequent sale of printer cartridges. This business model influenced the future course of the entire printer industry, and Razor and Blade is the primary business model employed by printer manufacturers even today.

Razor and Blade



Another prominent company that effectively uses the Razor and Blade business model is Nestlé's Nespresso. Here the system involves a combination of inexpensive coffee machines and pricey coffee capsules. The introduction of the Razor and Blade business model in the coffee industry over 20 years ago signified a marked break with the previous industry logic. Coffee had earlier been viewed as a simple commodity: there was no room for high prices or innovation. Nespresso's business model innovation was so successful – the company's revenues were about €2.9 billion in 2011 alone – that Nestlé has

since applied the Razor and Blade model to other products such as tea (Nestlé Special.T) and baby food (BabyNes) as well.

When and how to apply Razor and Blade

Razor and Blade is very well known in the B2C context. In future, however, we will be seeing more and more B2B firms that make use of it, especially in the after-sales business, in the machinery industry for example. This pattern is particularly powerful when combined with Lock-in effects. Companies today already use these patterns to protect their lucrative after-sales and spare-part businesses from imitative competitors. In order to capitalise on these business model patterns, you may need to strengthen your patenting and branding capabilities.

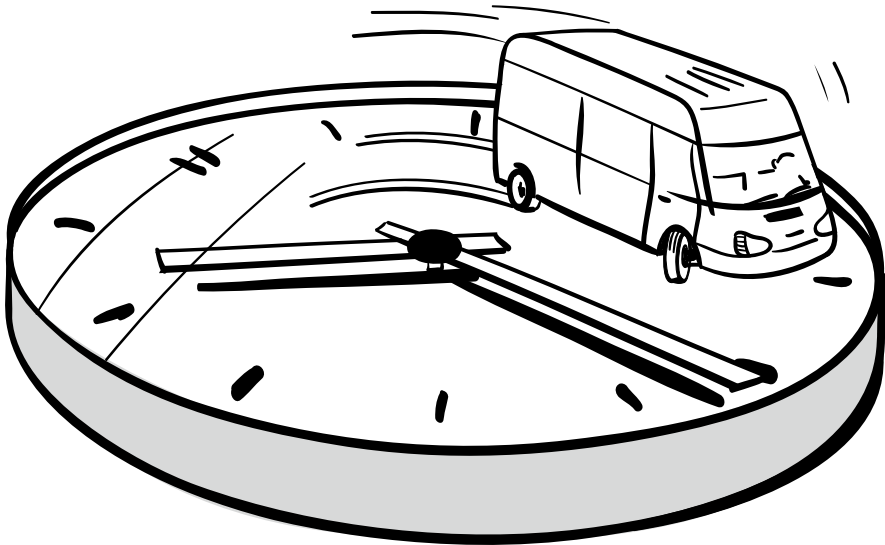
Some questions to ask

- **Can we protect our after-sales business with features and functionalities created in the product design phase (e.g. a remote diagnostic device that requires servicing by the OEM)?**
- **Can unique and hard-to-imitate components stop our competitors from copying our service or spare part businesses?**

Rent Instead of Buy

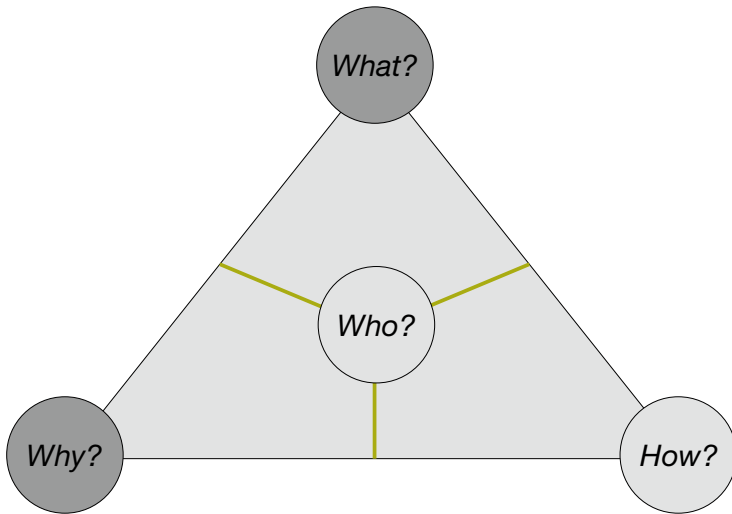
Pay for the temporary right to use

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The pattern

The term 'rent instead of buy' speaks for itself. The chief advantage for the customers is not having to come up with the initial acquisition costs of a straight purchase, permitting them to get products that they might not be able to afford otherwise (what?). Renting avoids locking up capital for long periods of time, leaving customers with more financial leeway (what?). Many people greatly appreciate these advantages – especially in the case of capital-intensive assets. This opens up the opportunity of greater sales potential compared to an outright purchase (why?). An important prerequisite for offering the Rent Instead of Buy option is the ability to finance the products in question in advance, as revenues will only come in at a future date (why?). In this respect renting is similar to Pay Per Use, but with the major difference that rents are defined by the duration of use and not the actual usage. The transition between Rent Instead of Buy and Pay Per Use can often be quite fluid, such as levying a fee in addition to the base rate by rental car agencies when customers exceed the stipulated mileage limit.



The origins

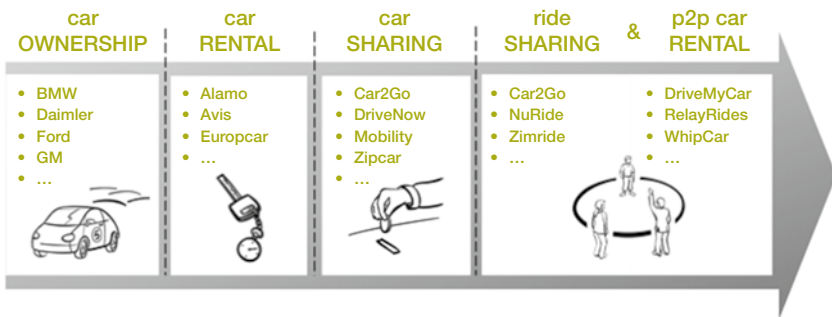
Rent Instead of Buy is an old business model. There is evidence to suggest that Romans rented out livestock as early as 450 BC. Consequently the concept was extended to a number of applications. In mediaeval times, for example, the nobility rented its land to farmers in exchange for a share of the crop (tithe). Such 'rents' were of course not paid voluntarily, but levied based on the grounds of the estates of the realm concept, whereby peasants had a status below the church and nobility in social hierarchy. Today, the main application of

renting is in the real estate market. In German-speaking countries more than half of all apartments are rented rather than owned.

The innovators

Rent Instead of Buy has been around, for a long time, but has also inspired a number of more recent innovative business models. An example is the first car rental agency, which came into being in the late nineteenth and early twentieth centuries. One noteworthy pioneer of the system is Joe Saunders: he began by lending his Ford Model T to business people in 1916, using the ten cents he earned per mile driven to maintain the car. As a clever entrepreneur he soon realised that he could build an entire business around the idea, and by 1925 the Saunders System car rental company had branches in 21 states.

Rent Instead of Buy: The evolution of P2P car sharing



Another Rent Instead of Buy business model innovation was introduced by photocopier manufacturer Xerox (then known as The Haloid Photographic Company). Its Xerox 914 model was the first commercial automatic copier in the world to use a dry photocopying technique when it came to market in 1959. The device's technical features were revolutionary, for suddenly it was possible to copy several thousand pages a day instead of a measly 15 to 20 as before. Because the Xerox 914 machine was too expensive for most potential buyers, Xerox decided to rent it out instead, at a cost of US \$95 a month. This gave a tremendous boost to the demand for such advanced rental copiers, to the point that a few years later Xerox was no longer able to cope with production. *Fortune* magazine later named the Xerox 914 the most successful product ever marketed in the United States.

Blockbuster LLC is an American rental service offering videos, DVDs and online films. At its peak, Blockbuster employed 60,000 people in 17 locations worldwide. As a result of mismanagement and increased competition, however, the company lost significant revenue and filed for bankruptcy in 2010.

With a history dating back to 1908, CWS-boco is a Swiss provider of working clothes and laundry services whose products can be rented as well as bought. CWS-boco provides convenient all-inclusive service in the fields of hygiene and sanitation that go beyond mere sales, so that renting is often more attractive and convenient to the customer than buying.

FlexPetz is a provider of pet products and services based in the United States. Controversially, the company offered people the opportunity to rent a dog on a short-term basis rather than having the expense and responsibility of ownership. Potential customers would be screened to ensure the animals' safety before instituting the rental programme. However, this part of the business was shelved by FlexPetz owners following government legislation and concerns that it would promote the idea of 'disposable pets'. Under the proposed business model, customers would pay a fee in order to spend time with the pet, thus generating ongoing revenue for the company.

Even when the practice of renting is well established, it is frequently supplemented by additional services including assembly, expertise and operation. Most ski destinations have experienced the growing popularity of ski rentals – more flexibility, less complexity and greater comfort are the main motivating factors for customers. Luxusbabe and RentAFriend make use of Rent Instead of Buy: customers can rent designer purses cheaply, or even a friend, respectively.

When and how to apply Rent Instead of Buy

This pattern is widely applicable. If you offer products or services at a fixed price, you can also think about renting them out instead. In fact, if you choose to do this you will be able to play into an increasingly common trend: people want to use things and do not necessarily want to possess them. This trend, which started in the consumer goods industry, is already relevant in the automotive industry and will soon affect other sectors as well.

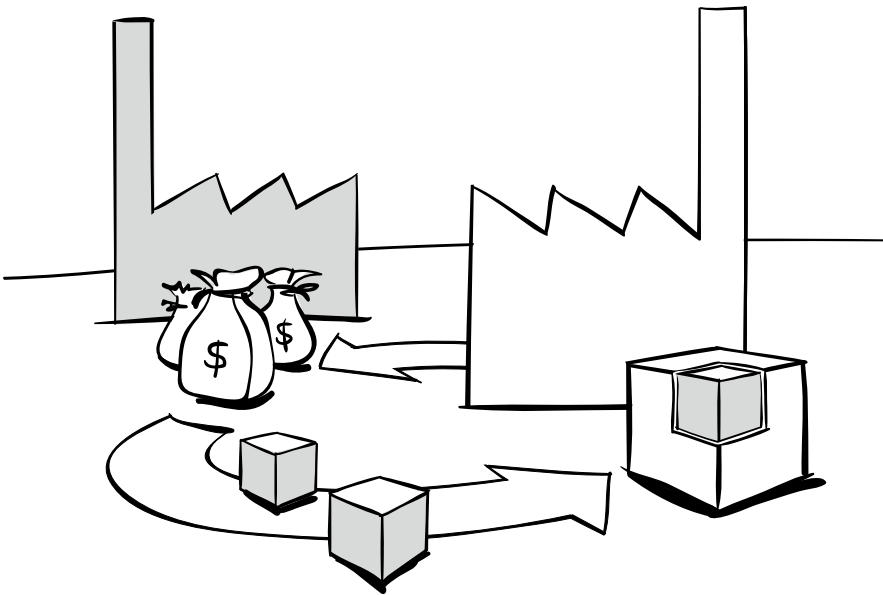
Some questions to ask

- Do our customers really want to own our products or are they happy just using them?
- How should we finance our products to create sustainable cash flow?
- Which products could we rent rather than sell to our customers?
- How does this create value for our customers?

Revenue Sharing

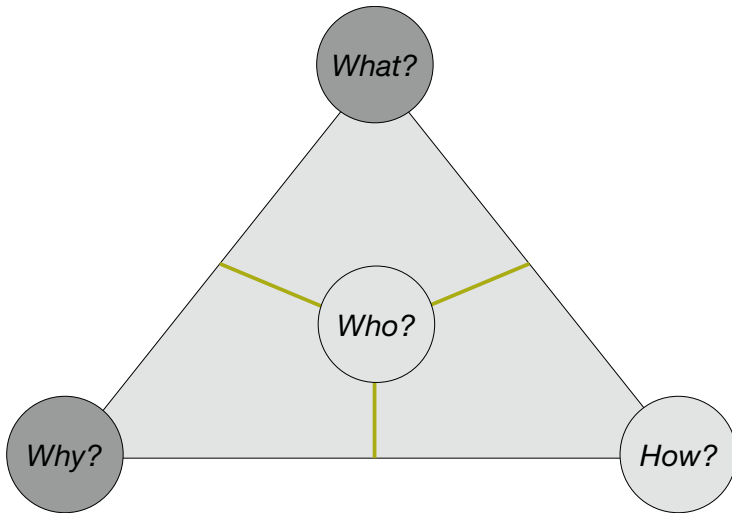
Win-win with symbiosis

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The pattern

The Revenue Sharing business model refers to individuals, groups or companies working together and sharing resulting revenues (what? why?). This model is often associated with affiliate schemes commonly found on the Internet (e.g. an e-commerce site operator may refer customers to a business via an affiliate advertisement and receive payment for 'clicks'). The operator benefits from revenue received, while the business benefits from a large customer base due to referrals. Other methods enable individuals to register online to work together to achieve a common goal and share in the profits made. Customers may also be encouraged to upload content to the Internet, and in return receive a share of advertising revenue on the number of ad banner 'impressions' or 'clicks' associated with the content.



Revenue Sharing can assist in building strategic partnerships that broaden a company's customer base and consequently increase its income and strengthen its competitiveness. They may also serve as a means to lower distribution costs and share risks with the other stakeholders (why?). In order for the Revenue Sharing pattern to work, one party must increase revenues and share these with another party in exchange for its participation, resulting in a symbiotic, win-win relationship.

The origins

Evidence of Revenue Sharing can be found as early as Venice's commercial expansion around 810 BCE. Two partners formed a so-called *commenda*

contract to cooperate in selling goods. The two parties usually comprised a merchant domiciled in Venice who acted as creditor and a travelling merchant who transported goods between ports. Both risk and Revenue Sharing were contractually defined: the creditor took on the credit risk and the travelling merchant invested his labour. If the business was profitable, proceeds were split in the ratio of 3:1 between the creditor and the debtor respectively.

The first experiment of Revenue Sharing in France came about in 1820 when the French National Insurance Company started using a share of profits as part of its payment to its workforce. Numerous companies in various industries began to adopt profit sharing as well. Based on the ideas of philosophers John Stuart Mill and Robert Hartman, the concepts of revenue and profit sharing spread. Hartman recognised that Revenue Sharing would help employees to feel more connected to and identify with their employer. The greater motivation engendered would in turn increase profits.

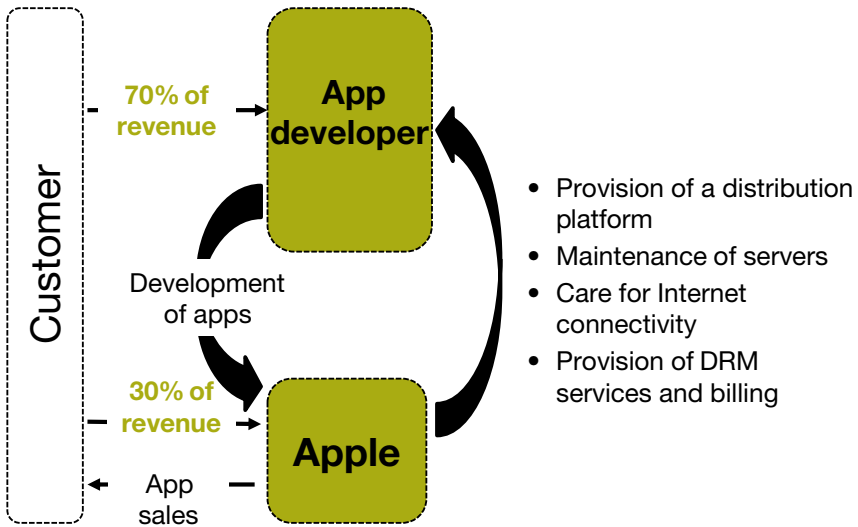
The innovators

In 1994 brothers Jason and Matthew Olim founded CDnow, a website offering a wide range of CDs, films and video to music enthusiasts. Three months after the company was established, they instituted the Buy Web programme, the first application of what we now know as 'affiliate' or 'associate' marketing. Record labels as well as smaller artists were able to create links to their music (and later videos and films) on the website to be purchased there. To encourage partners to create links on CDnow, the company entered into Revenue Sharing contracts with them, whereby the partner received 3 per cent of sales of products purchased via affiliate links to CDnow. This method proved to be highly effective in attracting partners.

American consumer electronics manufacturer and online service provider Apple also applies Revenue Sharing in both its App Store and its iTunes Store. Developers program their own applications and upload them to the App Store free of charge or at prices set by them. Once reviewed and approved, these apps are published on the App Store, with Apple receiving a third of the revenue. A similar principle is applied in the iTunes Store: bands, artists or labels can upload their music and the incoming revenue from every track downloaded is shared among Apple and the band or label in a 2:1 ratio. Apple's platforms provide ample room for synergies: the company increases the number and variety of applications in its App Store and benefits by generating revenue through commissions for each app sale as well as attracting more people to buy Apple's smartphone. Customers are not only drawn by the phone itself but also by the broad range of apps available. This arrangement is beneficial to both Apple and developers looking to distribute and sell their apps.

Founded in 2006 in San Francisco, HubPages is a user-generated content, Revenue Sharing website. It acts as a social platform on which writers, the 'Hubbers', can share content in the form of magazine-style articles. The

Revenue Sharing: Apple, iTunes and apps



site offers a variety of categories in the fashion, music, arts, technology and business worlds, where contributors are encouraged to provide articles and associated content such as videos and photos. HubPages has become one of the 50 most visited websites in the US, and generates its income via the Revenue Sharing model. Clickable advertisements are placed on users' webpages and the resulting revenue is shared with HubPages.

A number of service providers and consulting firms are currently attempting to institute value-based pricing of their services with the aid of Revenue Sharing. For customers this means less risk due to high costs, while the consulting firm establishes an active relationship with its clients.

When and how to apply Revenue Sharing

As value chains have become more fragmented, open and interdependent, the importance of the Revenue Sharing pattern has increased. Whatever industry you operate in, you will be able to benefit by sharing risks through strategic alliances. This applies both in the B2B and B2C context.

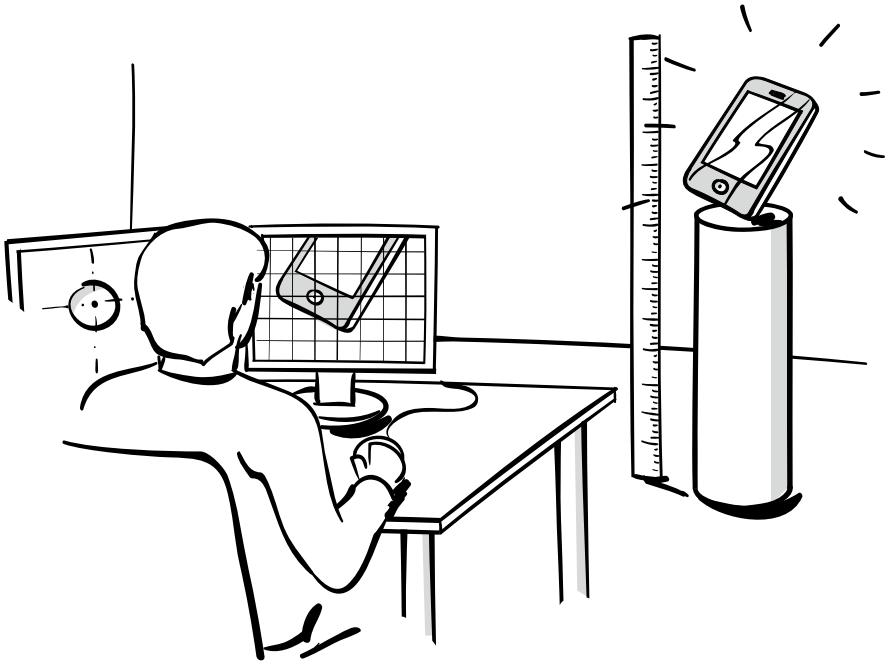
Some questions to ask

- Who is the right partner for our business model?
- How should we design the product bundle in order to create synergies?
- Will our partnering concept allow us to exploit synergies?
- Can we implement simple processes and mechanisms to share financial revenue comfortably?
- Will co-branding create positive or negative spill-over effects?

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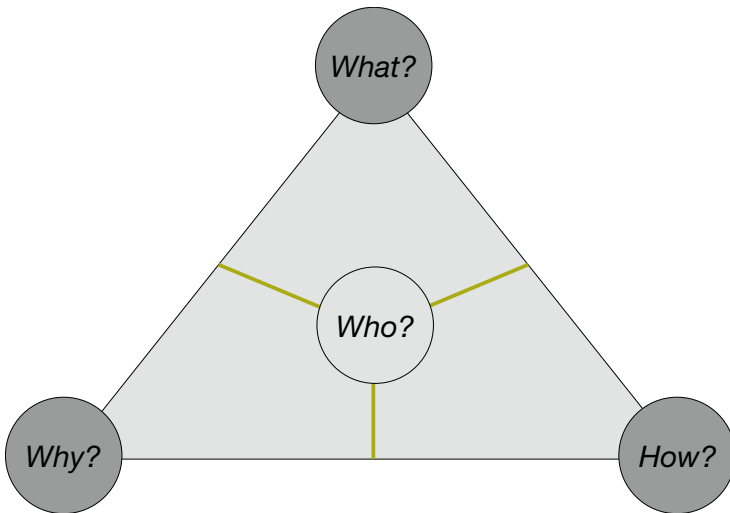
Reverse Engineering

Taking lessons from competitors



The pattern

In the Reverse Engineering business model, an existing technology or competitor's product is analysed and the information obtained is used to develop a similar or compatible product (how?). Since this requires little investment in research and development, the products can be offered at a lower price than their market equivalents (why?). Reverse Engineering is not limited to products or services: for example it can also be applied to whole business models, when competitors' value chains are analysed and their principles applied in the focal company.



The advantage of such imitation is being able to forego superfluous features, replace expensive materials with cheaper components, and to bring established successful products to new customer segments that would not want or could not afford the expensive original products. By dint of learning from the pioneers' mistakes and experiences, imitations frequently have the potential to be as good as the original (what?). The primary aim is not to attain 'first-mover advantages', but to optimise existing products.

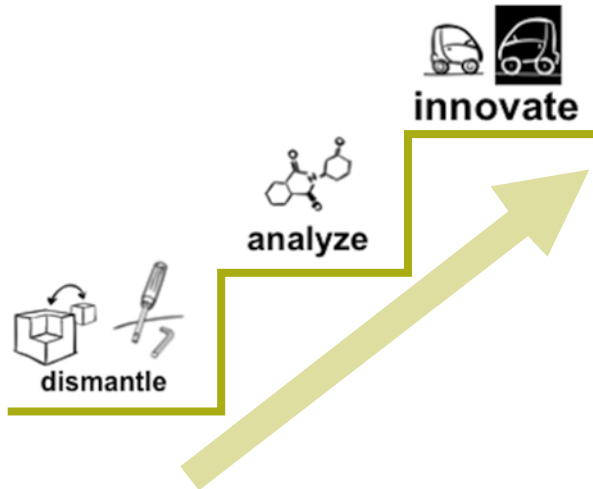
Because such imitations might infringe the original inventors' and developers' intellectual property rights, it is paramount to have a full grasp of patents and licences in order to be sure of staying within the bounds of the law and avoiding time-consuming and costly litigation (how?). It is also important to keep an eye on patent expiration dates, since imitations of goods based on expired patents cannot be attacked by initial patent holders.

The origins

Reverse Engineering was primarily used in military contexts and, in the narrower sense of the term, applied for the first time during the First and Second World Wars. At this time, rapid technological progress made it a strategic necessity to understand enemy troop armaments and transportation systems. Reverse Engineering was frequently used to learn from acquired or stolen enemy equipment and make this information available to one's own armed forces. After the Second World War, researchers in the German Democratic Republic took a similar approach in trying to reconstruct and copy certain computer and hardware technologies.

Within the automotive industry, Japanese manufacturers such as Toyota and Nissan bought and systematically analysed western cars in order to learn how to build high-quality cars. Each car was disassembled and its components analysed in respect of their functionalities, structures and characteristics. This is how the Japanese car industry began to imitate western industry in the 1970s and 80s. Since learning and improving was in the DNA of the culture, using systematic methods such as Kaizen and quality circles, Toyota and other companies were able to outstrip western industry.

Reverse Engineering



The innovators

Many innovative instances of Reverse Engineering are to be found in the Chinese automotive industry. Not many years ago, less than a dozen car brands were available in China. Today the industry registers double-digit growth and offers well over a hundred models, which are often surprisingly similar to

their western counterparts manufactured by Audi, Mercedes-Benz, or Škoda. Brilliance China Auto offers a clear example of the use of Reverse Engineering. This Chinese company originally manufactured cars for BMW in a joint venture, and then began to produce its own cars. Its design was clearly inspired by its Bavarian partner, with specifications gleaned from BMW informing the reconstruction of certain parts and technologies. The strategy was highly effective for Chinese producers, who could sell their cars at very competitive and attractive prices. With minimal research and development, costs are much lower, and Brilliance Auto is able to manufacture its imitations much more cheaply than the original brands.

Pelikan is a Swiss-incorporated manufacturer of fountain pens, ballpoint pens, paper, arts materials, printer accessories and office equipment that made use of the Reverse Engineering concept. In the early 1990s, the company began manufacturing ink cartridges in imitation of models for popular printers and selling them at very competitive prices. This was made possible because Pelikan did not have to commit to substantial research and development costs, or cross-subsidise low-cost printers. The cartridges offered a similar quality to the branded products, thus presenting an attractive option to customers, and the competitive pricing strategy boosted sales and increased revenue for Pelikan.

Denner is a Swiss supermarket chain selling a wide range of discounted products throughout its branded stores. In addition to selling many of its own groceries and products, Denner began distributing coffee capsules that were compatible with Nespresso machines. These were offered at lower prices and were accessible to a larger customer base. Using the Reverse Engineering process, Nespresso capsules were analysed, redesigned and filled with various types of coffee. These were then sold in Denner stores at a lower price than the original Nespresso versions. Furthermore, without being bound by an exclusive distribution system, Denner is able to reach a wide customer base through its discount stores, thus increasing sales and revenue.

When and how to apply Reverse Engineering

Companies in the automotive, pharmaceutical and software industries make frequent use of this pattern. Reverse Engineering's appeal and numerous benefits are often surprisingly intuitive. Some of these include cutting costs and reducing the time required for R&D activities, acquiring knowledge and know-how for products that have already been proven on the market, and recreating products whose manufacturers or documentation no longer exist. 3D scanning and printing are instrumental in the spread of Reverse Engineering practices.

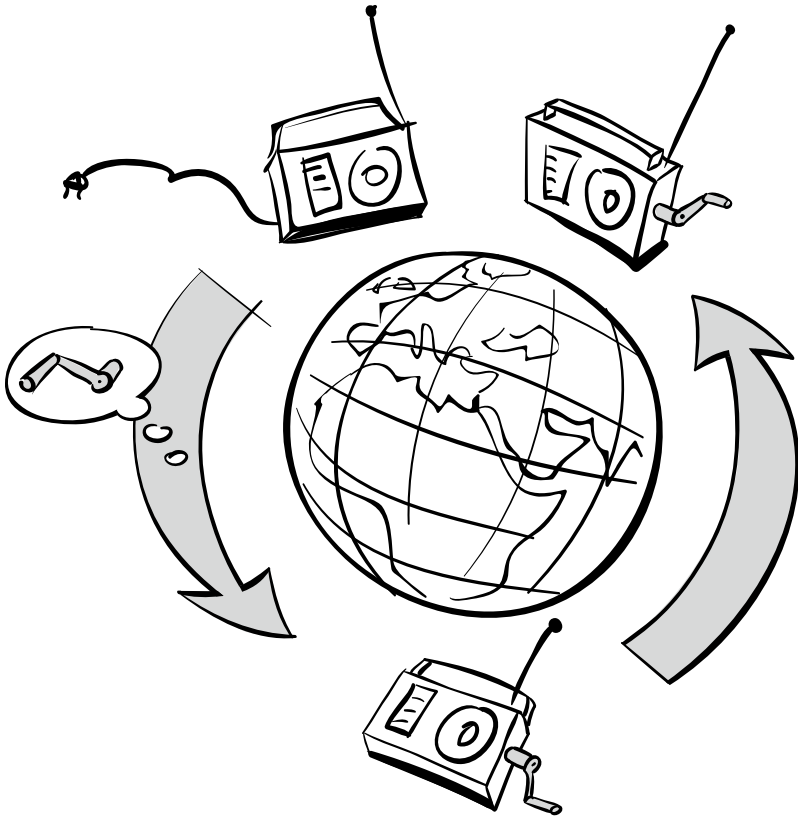
Some questions to ask

- What can we learn from successful practices in our industry and leading practices in other industries?
- How can we get legal access to our competitors' products?
- Where can we learn the most?
- How can we learn about product functionality and cost leadership from leaders?
- How do we deal with voices in the public that are critical of Reverse Engineering practices?
- Will we be able to navigate the sometimes tricky legal waters that companies engaging in Reverse Engineering often face?
- How can we translate and implement what we learn into our products and our company?

Reverse Innovation

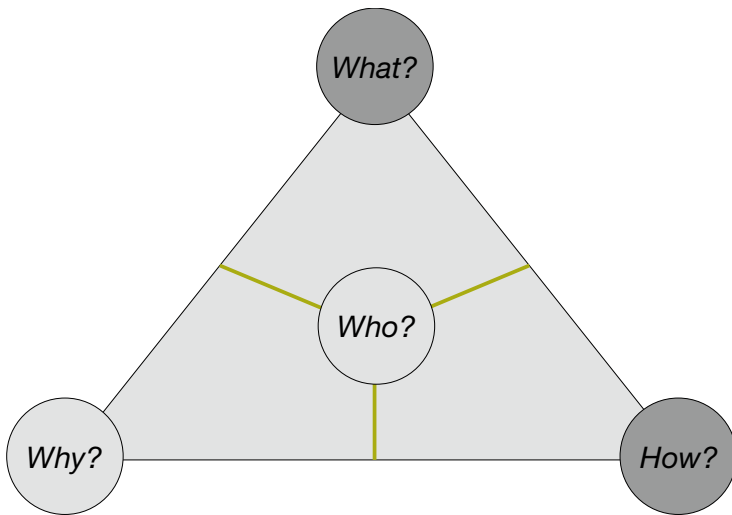
Learning from good-enough solutions

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The pattern

In the case of the Reverse Innovation business model, goods are first produced for the developing world, before being repackaged and resold at low cost to industrialised countries (how?). Examples are battery-operated medical instruments or vehicles originally designed for the developing world. The underlying logic is that many products developed for emerging economies or lower-income countries have to meet very stringent requirements. For customers to afford products, costs must be a fraction of similar products in higher-income countries. At the same time they must display functionalities that meet the standards in developed markets.



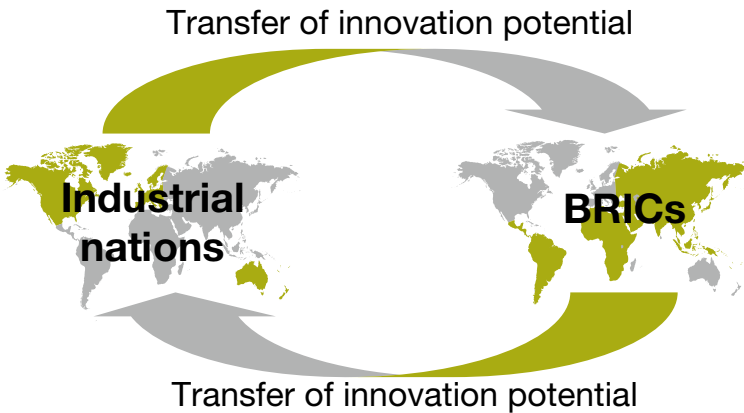
Doing business in such a tricky environment often gives rise to entirely new solutions to problems, which can be very valuable for customers in more developed markets (what?). In the past, new products were generally developed in western laboratories and brought to emerging economies or lower-income countries only later on (through 'glocalisation'). Reverse innovation turns this concept back to front: new products are developed at locations in emerging economies or lower-income countries and then commercialised globally in developed markets (how?). This runs directly counter to certain economic principles such as Vernon's product life-cycle theory of the 1960s, whereby products should be developed in knowledge- and capital-intensive higher-income countries and produced in low-wage countries (Vernon 1966).

The origins

The genesis of Reverse Innovation is found in the 1990s, when many former low-income countries like India or China were turning into increasingly attractive markets. Over the past few years various multinational corporations have established R&D departments in these countries to bring innovative products to local consumers, and to the surprise of many multinational companies these innovations sold well in developed markets as well. Thus the Reverse Innovation business pattern was born.

The US-based multinational conglomerate General Electric is widely considered to have pioneered Reverse Innovation. In 2007 the company developed a portable electrocardiography (ECG) device for the Indian and Chinese markets which could be connected to a standard laptop computer and cost just about one-tenth of the price of a conventional ultrasound machine. A few years after launching the product, General Electric brought this low-cost alternative to developed markets such as France, Germany and the United States, where it sold very well.

Reverse Innovation



The innovators

A number of companies other than General Electric have made use of Reverse Innovation. The Finnish telecommunications company Nokia used the concept of Reverse Innovation to develop its Nokia 1100 mobile phone in 2003. This low-cost phone was designed specifically for the rigours of India's hinterland, excluding expensive features such as a colour screen and camera, and opting for practical country-specific features such as a torch, alarm clock, and slip-free grip. Following success in the Indian market, the Nokia 1100 became very popular in industrialised countries, appealing to customers looking for a simple

telecommunication device without too many additional features. It sold like hot cakes all over the world – more than 250 million Nokia 1100s were bought, making it the world's top selling consumer electronics product.

The Dacia Logan is a further example of Reverse Innovation. French car maker Renault, who designed and produced this low-cost vehicle priced at €5,000 and aimed at low-income customers in Eastern European markets, particularly Romania. The car employs cost-saving design and manufacturing techniques, and labour-intensive assembly processes undertaken in low-cost countries. After its success in Romania, the Dacia Logan was introduced in developed markets, and Renault subsequently generated two-thirds of the vehicle's total revenue in these countries and has sold over 200,000 units since its launch in 2006.

Chinese electronics company Haier employed the Reverse Innovation model to produce a small washing machine that was originally sold exclusively in rural China. Towards the end of the 1990s, Haier introduced the Mini Magical Child, a low-priced alternative to large and expensive washing machines. After considerable success with Haier's low-priced washing machine in China, the company sold a slightly revised version on the world market with great success. Over two million Mini Magical Child units were sold in more than 68 countries.

In order to translate a product designed for the Chinese market to developed markets, companies frequently have to perform market segment innovation. For example, technical medical products developed in China for the Chinese market for instance, frequently have simpler and slimmer specifications. Products that fulfil only very basic functions are known as frugal products. Siemens has set up the SMART principle for products designed for China: Speedy, Maintenance-free, Affordable, Reliable and Timely. When products that have been developed with Chinese customers in mind are marketed in developed countries, they open up access to new market segments and domains. Thus a much cheaper ultrasound machine will no longer be used exclusively in hospitals, but can be taken out into the field. Radical cost savings permit new uses and market segments for the same products.

When and how to apply Reverse Innovation

Reverse Innovation is a comparatively new strategy. If you have substantial R&D or innovation capabilities and are located in an emerging country such as China or India, then this pattern may be of interest to you. Reverse Innovation can also be helpful to you if you are based in a higher-income economy and your industry has come under significant pressure to reduce costs. So far the medical technology industry has brought forth many Reverse Innovations and other industries are sure to follow suit.

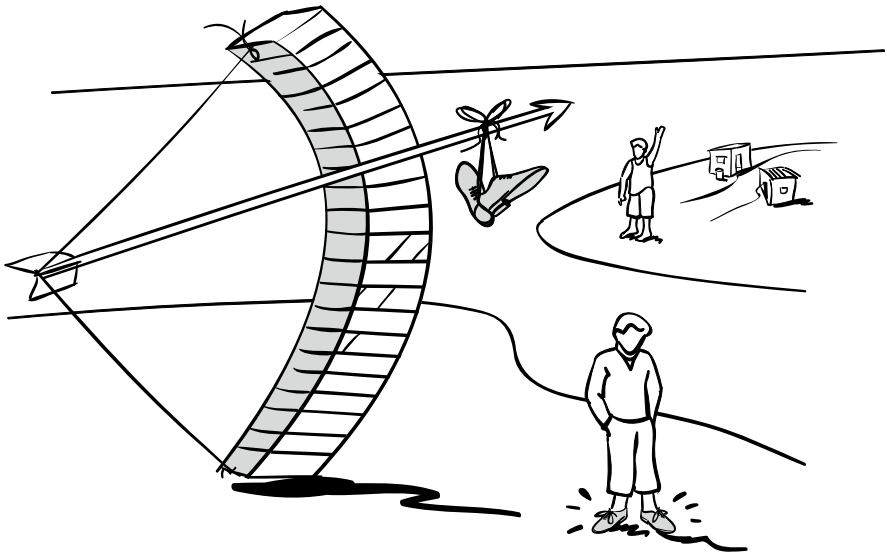
Some questions to ask

- **Are our R&D and innovation capabilities in emerging markets strong enough?**
- **Can we protect our intellectual property successfully?**
- **How can we avoid unintended knowledge spill-overs to local competitors in China or India?**
- **Can we transport our frugal product to higher-income economies?**
- **Have we addressed the not-invented-here syndrome found in the West ('a product designed in China will never sell in Europe')?**
- **Have we addressed the differences and new market segments that we will invariably encounter when transferring our product to a higher-income economy?**

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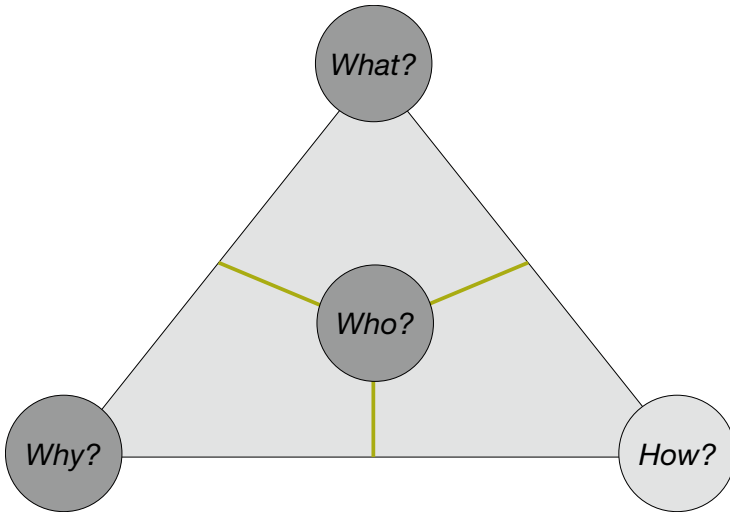
Robin Hood

Take from the rich and give to the poor



The pattern

It would be difficult to find a more evocative title for the Robin Hood business model, whereby a product or service is sold to 'the rich' at a much higher price than to 'the poor'. The bulk of the profits are generated by the rich customer base. Serving the poor at a low price is often not directly profitable, but creates economies of scale that other providers cannot achieve. Additionally, accommodating the poor in this scenario can have a positive effect on a company's image.



Following in Robin Hood's footsteps, a company pursuing this philosophy supports the economically disadvantaged at the expense of the better-off. A primary goal is to offer access to products and services that the disadvantaged could not afford (what?). Any revenues generated from selling to the well-off can be used to cross-subsidise access for the disadvantaged who will either obtain the offering at a much lower price or for free (what? who?). The disadvantaged benefit from this support and the well-off can have a clear conscience (what?). Becoming a Robin Hood practitioner helps a company to bolster its image (why?).

The origins

While the tales of Robin Hood have been around since the Middle Ages, the business model didn't come into being until somewhere around the 1970s. A central driver for its development was companies' increasing sense of social responsibility, known as 'corporate social responsibility'. The Indian ophthalmologic hospital Aravind Eye Care Hospital was an early pioneer of the practice.

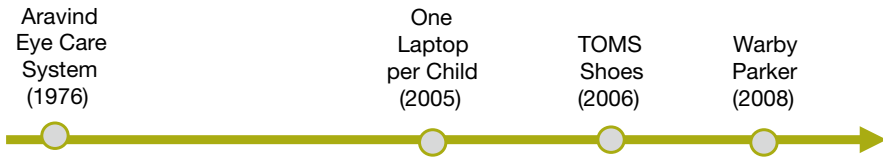
It was founded in 1976 by Dr Govindappa Venkataswamy to combat treatable blindness in the Indian populace. Over 60 per cent of such blindness is caused by cataract, which can be cured medically by surgery. Unfortunately this is too expensive for a large proportion of the Indian population. To counter this injustice, Venkataswamy developed a business model where wealthy patients pay the full price for an operation and poorer patients pay as much as they wish to or can afford, which in some cases of course may be nothing at all. Revenue generated by wealthy patients is used to subsidise poorer patients' procedures. Because of the large number of poor patients, the hospital is used to capacity, permitting economies of scale. The success of this business model is truly impressive: although two-thirds of Aravind's patients receive free operations, the hospital actually earns a profit every year and has completed over two million operations to date.

The innovators

A number of companies have used the Robin Hood pattern to launch their own business model innovations since. Among them is TOMS Shoes, based in Santa Monica, California. The company was founded in 2006 by Blake Mycoskie, who had travelled to Latin America and was shocked to learn that many locals either owned no shoes at all or could only afford very poor quality ones. As a result foot diseases such as podocoinosis ('mossy foot'), which is caused by chronic exposure to irritant soils, are very common. Mycoskie founded TOMS Shoes to put an end to this state of affairs. The company practises a 'One for One' policy, meaning that for every pair of shoes sold, the non-profit subsidiary of TOMS, Friends of Toms, donates another pair to an impoverished person. Revenue is generated by selling shoes based on the Argentine alpargata design to customers in developed countries. To finance this endeavour TOMS charges between 50 and 100 dollars per pair. This is about twice the cost of manufacturing the shoes – but the customers don't seem to mind the mark-up. Just four years after TOMS Shoes was established, it had already sold over one million pairs of shoes to customers in over 25 countries. Revenue was further increased when the scheme was extended to apparel and eyewear.

The One Laptop per Child (OLPC) initiative also successfully uses the Robin Hood business model. Founded in 2005, OLPC is a Miami-based non-profit organisation that provides children in developing countries with inexpensive XO-1 laptop computers for educational purposes. It evolved as a result of an education research project led by MIT professor Nicholas Negroponte, aiming to provide children in lower-income countries access to knowledge, information and modern communication tools to help them build a better future. The XO-1 laptop is the OLPC initiative's centrepiece. It costs a mere US \$100 to make and was developed specifically for use in schools in lower-income countries. To distribute its laptops across the globe rapidly, OLPC uses a business model similar to the one used by TOMS Shoes: the Give 1 Get 1 programme. The

Robin Hood



plan was for consumers in the USA and Canada to receive an XO-1 laptop by donating US \$399 (plus shipping) and, in return, a similar laptop was sent to a child in a developing country. OLPC now concentrates on fundraising rather than sales to consumers in developed countries.

Warby Parker is an American provider of eyewear (prescription eyeglasses and sunglasses) that employs the Robin Hood business model to provide high-quality glasses to its customers, while also helping needy or impoverished people to obtain glasses. For every pair of glasses sold in the developed world, Warby Parker directs a proportion of the revenue to non-profit partners such as VisionSpring. Warby Parker’s partners also support personnel training and manufacture in developing countries. As a predominantly online company, Warby Parker is able to reduce overheads and bypass optical retailers to provide glasses at lower costs, thus increasing revenue and donations to its partners.

When and how to apply Robin Hood

The Robin Hood pattern works well if you serve a core market with strong and solid customers and could feasibly allocate some of your resources to providing your products or a modified version of them to lower-income customers. Robin Hood has two main goals: on the one hand to bolster your reputation and on the other to serve as a valuable strategy towards gaining future sales. Most companies today can expect their future growth to occur in what are now lower-income economies. More than 1.8 billion people will become part of the global consumer class by 2025⁷. Robin Hood allows you to build strong and lasting relationships with lower-income customers right now. These relationships are likely to be a significant source of competitive advantage in the future, when the same customers become part of the global consumer class.

⁷ McKinsey Global Institute (2012).

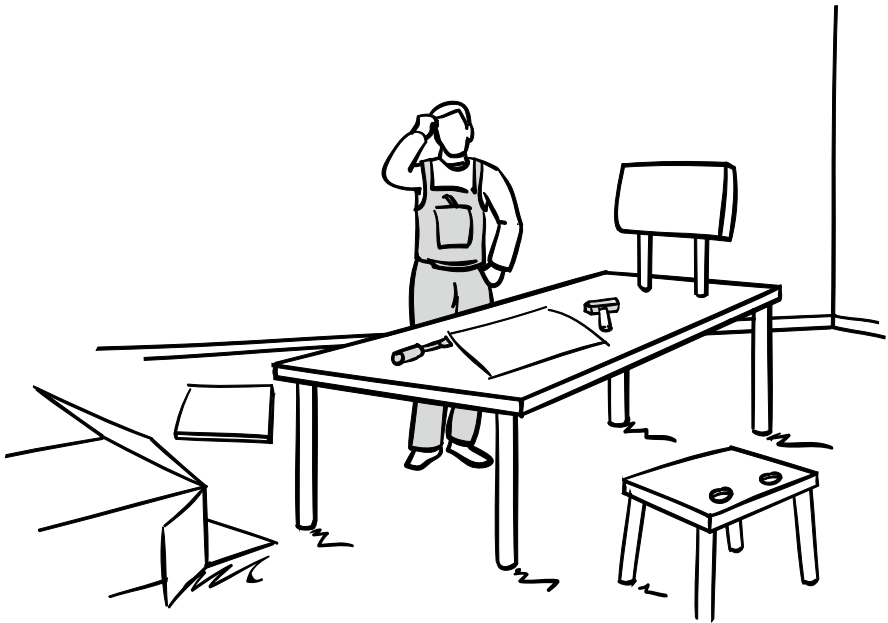
Some questions to ask

- **Could we offer our products and services to lower-income customers?**
- **How can we reliably and sustainably segment the market?**
- **Can we cross-subsidise these offerings or adjust our products such that they cost less?**

Self-service

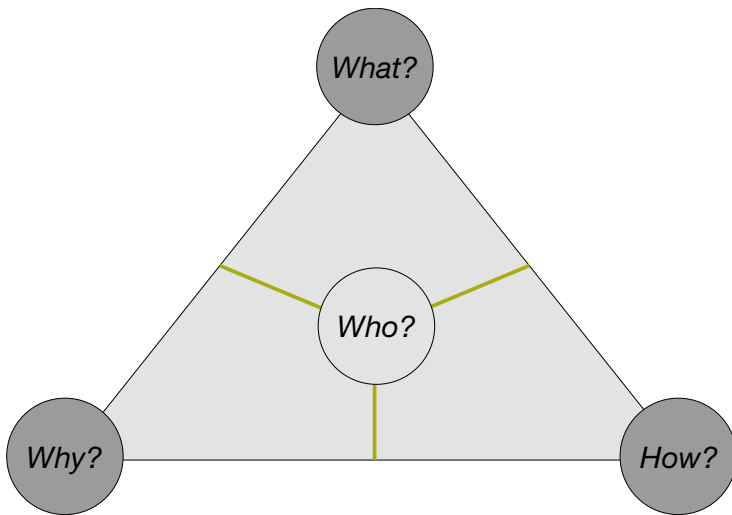
Putting the customer to work

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The pattern

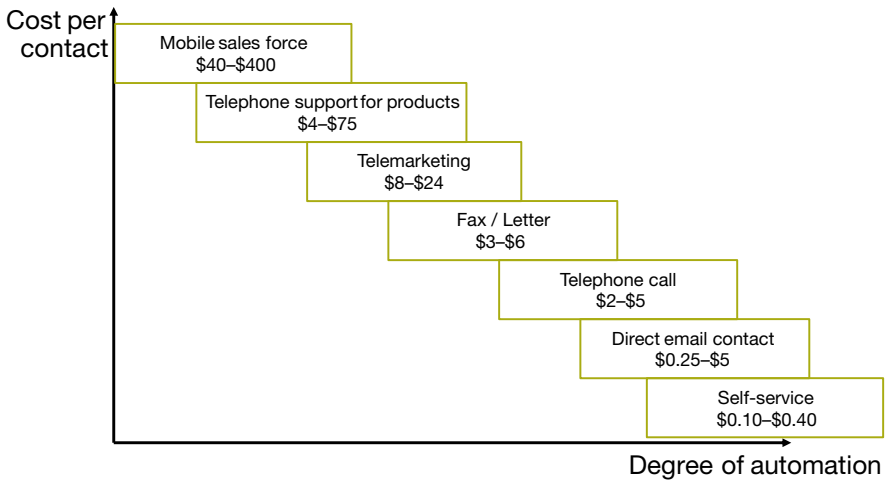
In the Self-service model, a part of value creation of a product or service is handed over to the customer in exchange for a lower price (how?). This is particularly suited to processes that generate high costs but add relatively low perceived value for the customer. In addition to lower prices, customers typically find that Self-service saves them time as well (what?). They may even increase efficiency, since in some cases they can execute a value-adding step more rapidly and in a more target-oriented fashion. Classic applications include picking items up from shelves, planning their own projects, or autonomously conducting the payment transactions for products and services. A Self-service business has a large savings potential and customer labour can often replace a significant number of staff positions (why?).



The origins

The Self-service business model originated in the United States, where it led to the establishment of Self-service stores at the beginning of the twentieth century. Whereas customers had always been served at counters in 'mom and pop stores', they now had to fetch their own groceries from shelves. The concept of Self-service developed with the general desire for increased productivity and efficiency that came with industrialisation. Anecdotal evidence even suggests that Self-service grew out of a situation where stressed customers became impatient and started helping themselves to items on shop shelves. Over time Self-service stores became a familiar sight outside of North America too: Sweden and Germany were among the first European nations to open Self-service stores, in the 1930s and after the Second World War respectively.

Self-service



The innovators

With the need for efficiency in areas other than retail, the Self-service model spread to other industries. We would be remiss not to mention the Swedish furniture company IKEA, a manufacturer of ready-to-assemble furniture, appliances and home accessories. IKEA customers are integrated into the value creation process by purchasing self-assembly products (beds, chairs, tables, etc.) and bringing them home themselves. IKEA displays its products on a sales floor for customers to browse and consider for purchase, after which the customers are required to collect them from the warehouse on a lower floor in compact ('flat pack') packaging for self-assembly. The company saves immensely on distribution and production costs and increases revenue by providing products at very competitive prices with this form of Self-service. Inventory costs are also much lower than those of traditional furniture manufacturers since IKEA's flat-packed items require considerably less warehouse space. Today, IKEA's business model has attained cult status, but when it was first introduced over 70 years ago it revolutionised the furniture industry.

One of the most famous examples for the Self-service business model is the fast food restaurant McDonald's, which bases a major part of its business on this concept and ranks among the world's largest franchises. McDonald's offers standardised menus of hamburgers, cheeseburgers, chicken, French fries, breakfasts, soft drinks and deserts in its restaurants in 119 countries

around the world in the form of franchises, or run by the corporation itself. In most restaurants, customers order their meals from staff at a counter, receive the food immediately and proceed to a table. There is no waiting staff serving customers. Other Self-service options available at some of the restaurants include drive-through and walk-through facilities. McDonald's focuses on its key service to provide competitively priced fast food, reducing costs on waiting staff and other overheads, thus increasing customer throughput and profit.

The Self-service concept has also been applied in bakeries. BackWerk was the first such bakery in Germany. At BackWerk, instead of being served at counters in the traditional manner, customers personally browse and select from a wide variety of products in glass-fronted display cases without the aid of store personnel. They use the tongs provided to put the selection of products they wish to purchase on a tray, and then proceed directly to the cashier at the point of sale. Since customers take over some of the value creation process, the company greatly reduces its personnel costs by providing only the most necessary services (the cashier, for example) and can therefore offer its products for about 30 to 45 per cent less than its traditional competitors. BackWerk has enjoyed considerable success with this business model and currently operates over 285 stores.

Self-service is also found in the hotel industry. The French hotel group Accorhotels uses the concept for its ibis budget hotels. These hotels offer low-priced rooms with fewer staff in attendance throughout the hotel, but with highly efficient Self-service facilities. At these hotels, guests obtain their rooms at a station similar to a vending machine without the assistance of professional receptionists. At this station they pay and receive their keys, and take their luggage to the room themselves. Other services within the hotels have a similar Self-service approach, such as business areas (with Self-service printers, faxes, and WiFi), breakfast, beverages, newspaper access, etc. This business model enables Accorhotels to operate with lower personnel costs than most of its competitors, permitting it to charge lower prices and attract a greater number of guests. At the present time, some 600 ibis budget hotels exist in 12 different countries, most of them located in France.

When and how to apply Self-service

The Self-service pattern is good for customers who are willing to take on some additional work in exchange for lower prices. This pattern is also beneficial when a DIY element in the manufacturing process creates perceived customer value, e.g. T-shirts that customers design themselves. In order to successfully implement Self-service, you must analyse the potential of the pattern from your customers' point of view.

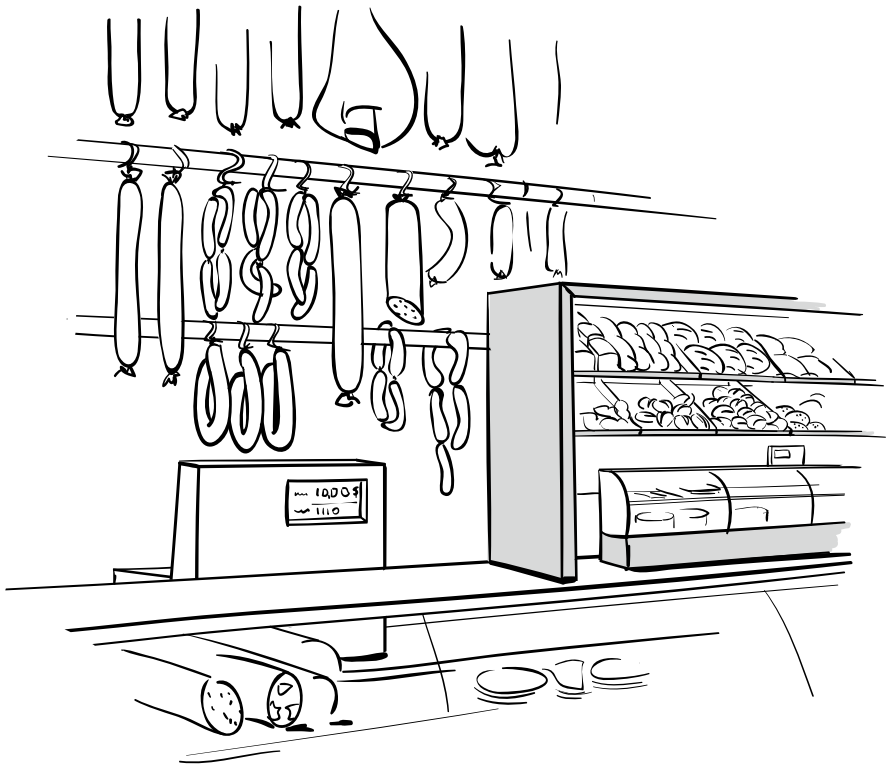
Some questions to ask

- How do we position ourselves against full-service competitors?
- How should we price Self-service?
- Are we delivering the kind of value customers expect?
- Will customers perceive the work they take on as a positive experience?
- How can we ensure that the processes around customers' inputs are robust and error-free?

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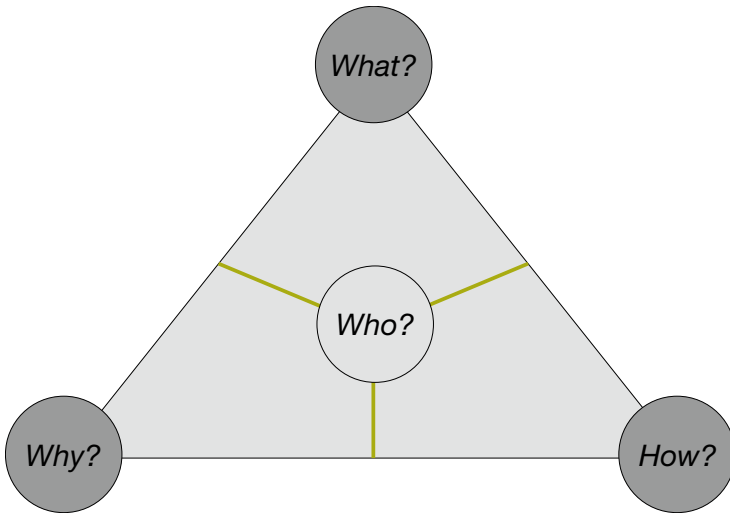
Shop in Shop

Piggybacking



The pattern

The Shop in Shop business model refers to the practice of retailers or service providers establishing an independent store in another company's retail space (how?). The integrated business is generally free to select its own product range and design the sales space to its own specifications, so that no sacrifice is required in the promotion of its brand. Such constellations can produce valuable synergies that result in a win-win situation. The hosting establishment benefits from customers attracted to the products or services of the smaller sub-branch, and from the rent received; the smaller branch benefits by having its brand positioned in an active shopping area or workspace, and cheaper resources such as space or workforce. Experience has shown that integrating a business in another company's premises provides a cheaper and more flexible alternative than building one's own store, and of course setting up a Shop in Shop sometimes gives access to a prime site that may otherwise be difficult or impossible to come by (why?).

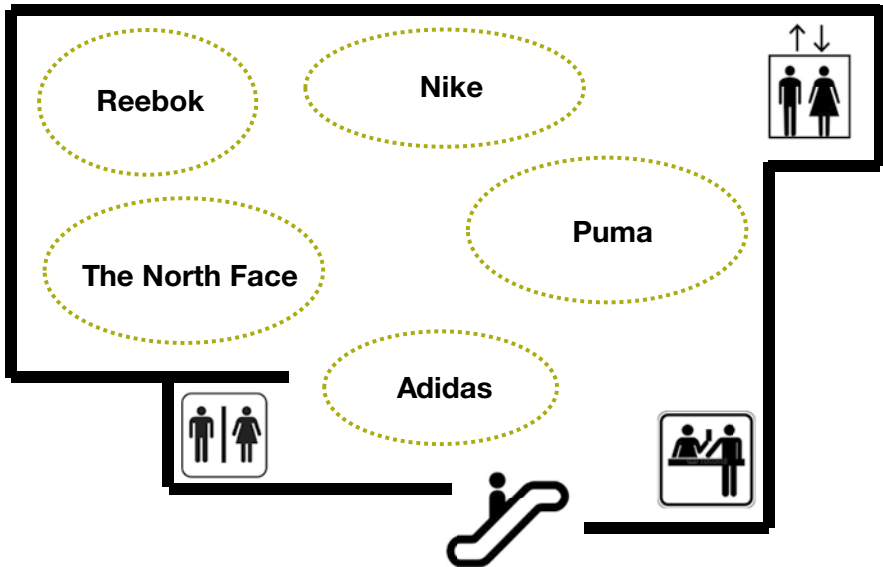


Clearly, the host company's regulars also serve as target customers for the integrated business, and there are a number of advantages for the company that rents out its space: customers may become more loyal as a result of the added value presented by the extra products and services on offer (what?); it can generate revenues from rental income and save on the choice and presentation of certain product lines since these tasks will be taken over by the integrated business (what? how?). Shop in Shop establishments offer a wider range of products and services to their customers and enable convenient one-stop payment solutions (what?). The Shop in Shop cooperative contract can be structured in a great variety of ways, ranging from classic rental agreements to innovative Franchising concepts.

The origins

This business model dates back all the way to Ancient Rome, where a variety of businesses were located and grouped together at Trajan's Market. Modern versions of the concept appeared increasingly in the United States at the beginning of the twentieth century. Various stores took advantage of retail space offered at shopping malls. The Shop in Shop model was established later on when speciality retailers began to rent and independently organise retail space from other shops.

Shop in Shop



The innovators

Tool manufacturer Bosch is one of the most well-known Shop in Shop innovators. The German engineering and electronics company manufactures industrial products including building materials, power tools and household appliances. Around the turn of the millennium Bosch saw more and more 'no-name' competitors entering the market, and hardware store customers increasingly opting for their cheaper alternatives. Most customers looking for a tool go to hardware stores without specific prior knowledge to inform their decisions. Significant price differences often lead them to skip the more expensive brands. But most customers actually desire detailed information at the point of sale so as to better understand the characteristics of the various tools. This provided an impetus to recognised brands like Bosch to start using

the Shop in Shop concept. Part of their sales now occur in proprietary retail spaces within other stores, where they occupy a facility in a separate area comprising a branded design and layout, with shelves containing special advertising materials. Here, customers can learn more about Bosch products and receive dedicated consultations. This allows the company to position its products more favourably against 'no-name' competitors, while customers appreciate having company staff present the products in a professional manner. This both reflects positively on Bosch's bottom line and helps customers choose the right product. The company renting out its retail space benefits from supplementary revenues and added value created by Shop in Shop owners.

Deutsche Post, the German postal service, also uses the Shop in Shop concept. Maintaining post offices can be very costly. Burgeoning private courier delivery services and logistics providers, plus the ever increasing use of email, pose a considerable threat, and owning a post office is often no longer an option. Thus, Deutsche Post has started to place counters in a number of supermarkets and shopping centres. Packages and letters can be conveniently dropped off or picked up there, so that customers benefit from a higher density of establishments providing parcel services. By utilising partnered stores and establishments in this way, Deutsche Post increases the coverage and availability of its services together with its customer base and revenue through convenient and high-density Shop in Shop facilities.

Tim Hortons Inc. is a Canadian restaurant chain that initially specialised in coffee and doughnuts, but now offers other products such as pastries, bagels and cakes. It is Canada's largest fast food service with thousands of stores nationwide, plus a select number in other countries. As well as operating through its standard premises, Tim Hortons positions its stores in other locations such as airports, hospitals and universities. By operating many smaller branded stores in busy areas, the company provides convenient access and high visibility for its brand. By adopting the Shop in Shop business model and collaborating with other businesses and organisations, Tim Hortons cuts costs by providing smaller outlets without the overheads of a full branch. This enables the company to expand its reach, increase its customer base, and hence receive greater revenue and profits.

The Shop in Shop pattern is also used by German coffee retailer Tchibo. Besides traditional coffee products for sale in its chain of coffee shops and cafés, Tchibo offers its customers a broad variety of consumer goods and services such as clothing, electronic goods, household items, mobile phone contracts and travel insurance. Many of Tchibo's outlets present as smaller stores within dedicated areas of supermarkets and other retail businesses. The company negotiates special contracts for these spaces, giving the company key positioning for its brand and widening its reach, all with the benefit of lower costs for smaller branches.

When and how to apply Shop in Shop

You may consider the Shop in Shop pattern if you use distributors or intermediaries to sell your products. The pattern allows you to enhance your customers' brand awareness, given that they can engage with your company more directly. You will also be able to obtain feedback on your solutions from customers.

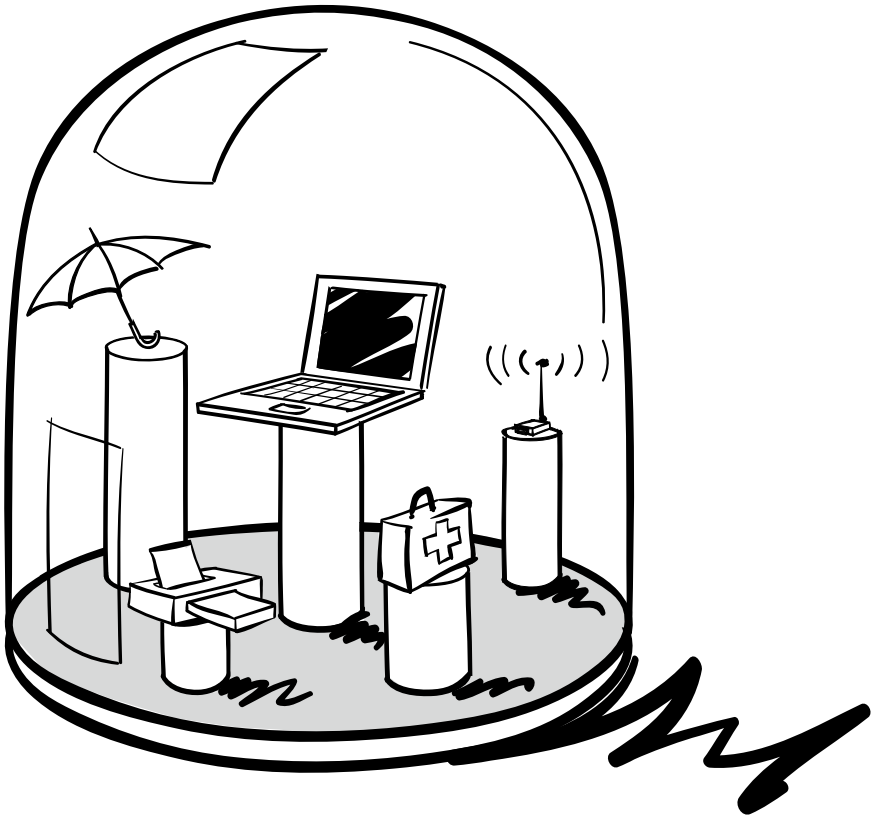
Some questions to ask

- Can we use our sales channels to increase our visibility?
- How can we raise our customers' awareness of our brand and our solutions?
- What channels or platforms should we use to present ourselves?
- Which partners fit in with our approach, brand and competencies?

Solution Provider

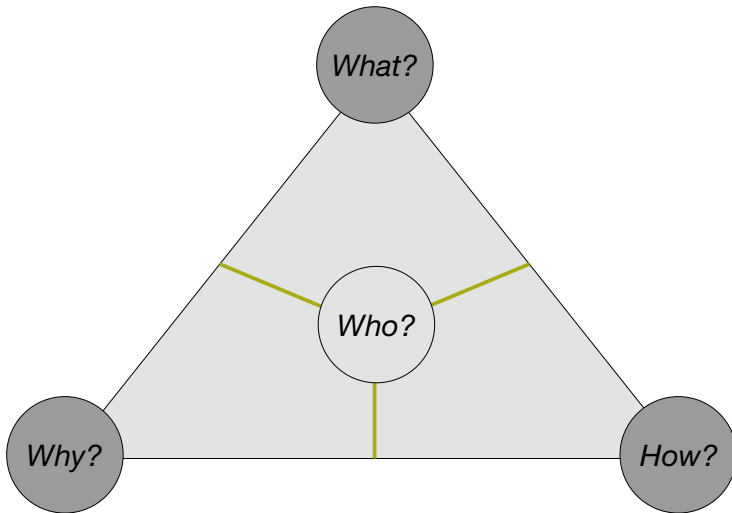
Finding all you need at the one-stop shop

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The pattern

A Solution Provider offers total coverage of products and services in a particular domain, consolidated into a single source (what?). It typically provides customised service agreements and consulting services as well as all necessary supplies and spare parts. The goal is to offer the customers an all-inclusive package that takes care of their tasks and problems in a certain area. Customers can concentrate fully on their core business, by what frequently improves performance (what?). The model is particularly applicable for customers wishing to outsource a complete area of expertise, for example to an Internet Service Provider (ISP) for web services or to a transportation company for international delivery tasks. A major advantage for a Solution Provider is the possibility of building increasingly close relationships with customers (why?).



A Solution Provider company and its products and services often serve as the single point of contact through which customers solve their problems by way of specific information or training, increasing efficiency and performance (how?). By becoming a full service Solution Provider, a company can increase its revenue by finding new ways to extend its range of services. The insights into customers' needs and habits can be used to improve the products and services offered.

The origins

Theoretically, the Solution Provider concept can be applied in any area imaginable, but in fact it originated in the mechanical engineering industry. Because this industry is highly cyclical, most companies are dependent elsewhere on

generating revenues beyond product sales. Heidelberg Printing Machines is a prime example. Over the past 15 years the company has completed an impressive evolution from traditional printing press manufacturer to a total Solution Provider. The company sells not only machines, but also the entire process involved in producing printed products. Thus, in addition to selling printing presses, Heidelberg Printing Machines also provides monitoring and consulting services to help customers improve their printing workflows. The company is a global leader in sheet-fed offset printing. In the past it earned 80 per cent of its revenues through machine sales; today that figure has been reduced to 60 per cent, while the other 40 per cent derive from its service business.

The innovators

The Solution Provider business model has gained in popularity in recent years. Lantal Textiles, which started out simply weaving linen, now manufactures and sells textiles and services internationally to airlines, bus companies, railways and cruise lines. Today, CEO Urs Rickenbacher explains, Lantal Textiles 'in a constant transformation process from being a former textile company that made beautiful fabrics to becoming a total Solution Provider that designs and implements solutions for customers'. Rather than individual products, Lantal Textiles' portfolio of services offers complete solutions for the transport and hospitality markets with additional service components. Lantal customers are offered total coverage of interior design activities, including the development of innovations, health and safety considerations, transportation, storage, updating and maintenance of its products. This comprehensive service is less sensitive to business cycles, ensuring the company a steady revenue stream. The Solution Provider model has enabled Lantal Textiles to differentiate itself lastingly from the competition and become the market leader.

Globally leading wholesaler Würth supplemented its traditional screw business with over 120,000 fastening and assembly products as well as tools. Tradesmen can get everything they need from Würth and in many cases they don't even need to worry about ordering supplies of consumables. Würth transformed itself from a two-man business to a Solution Provider within a generation, going on to have over 66,000 employees and earning €10 billion in revenues. Würth is currently working on the challenge of bringing its successful business model to Asian growth markets.

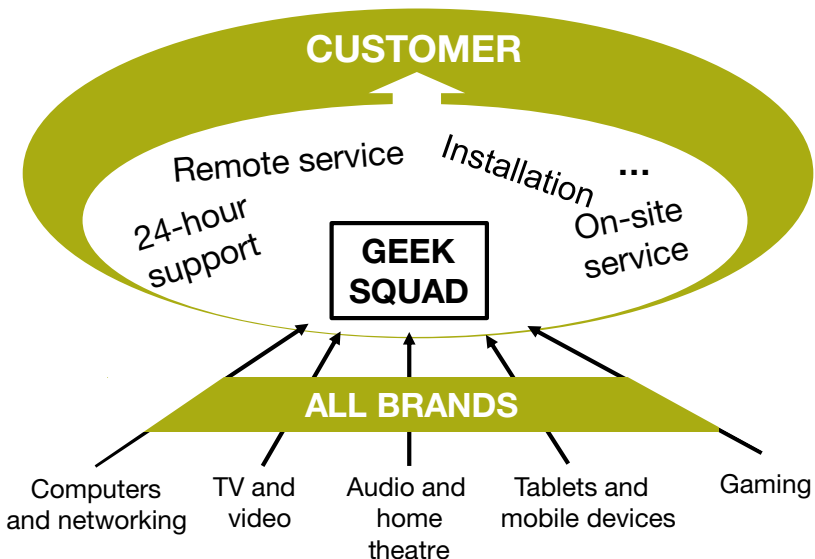
Swiss packaging company Tetra Pak also learnt how to be a successful Solution Provider. The firm offers its customers a wide portfolio of products and services to process, package and distribute food. Customers are provided with complete one-stop solutions ranging from product reception (foodstuffs and drinks) to final treatment and packaging. In addition to developing Tetra Pak packaging materials, the company also designs entire bottling and packaging plants. Its innovative aseptic processing technology prolongs the shelf life of drinks and foods, bringing with it reductions in distribution and storage costs. By providing a range of solutions from a single source, Tetra Pak is able to

attract customers with its efficient and cost-effective service, thus securing consistent revenue and high profits. The company operates in 170 countries and employs over 23,000 people.

3M has always been known as a company that develops highly innovative products. In 2010 it established 3M Services GmbH in Germany and took the first steps to becoming a Solution Provider. The company offers product-related services from a single source, and while its services normally centre on its innovative and extensive catalogue of products, they are complemented by services from partners. In this way, 3M Services has broadened its scope to reach new markets. 3M Services offers a convenient, less time-consuming and more cost-effective service-product combination than most of its competitors. This reduces the impact of poor sales during cyclical business periods and increases revenues and profits.

Best Buy's Geek Squad has a business model that revolves around providing comprehensive around-the-clock, 365-days-per-year service in the field of technical support and troubleshooting for all types of electronic devices: computers, mobile phones, printers, consoles, webcams, as well as DVD and MP3 players. If customers have trouble with any of their products, Geek Squad will work towards finding a solution to their problem. The company's in-house task force of trained specialists is available to assist customers in person either by phone or online. Technical support membership plans are available for fixed monthly fees, as well as insurance plans and repair services. Geek Squad seems to have its finger on the pulse of modern consumers who are increasingly overwhelmed by complex electronics. The company is based primarily in the United States, employs over 20,000 agents, and has seen double-digit growth rates since being founded in 1994.

Solution Provider



When and how to apply Solution Provider

If your customers believe that your products and services can and should be expanded, you may want to become a Solution Provider. A typical area in which you can apply this concept is that of after-sales services. In some sectors such as the elevator industry, after-sales services have come to exceed new installations both in terms of importance and profitability. Another fruitful application area involves integrating various offerings from suppliers for your customers.

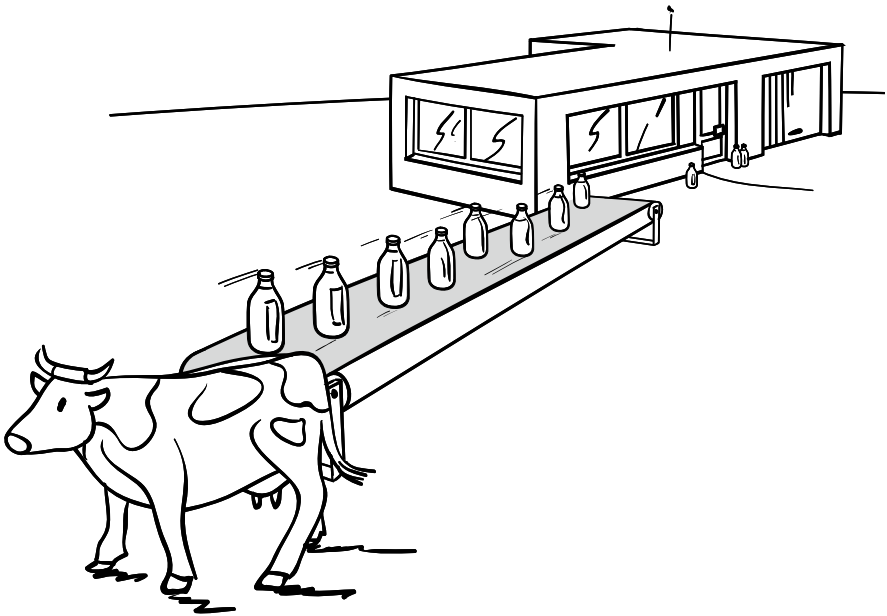
Some questions to ask

- Can we increase perceived added value by integrating more products and/or services?
- Can we plan for and design our after-sales business in the early product innovation phase, e.g. preventive maintenance and remote diagnostics in the machinery industry?
- Can we handle the complexity of increased variety?
- How do we retain our position as a knowledgeable and competent partner if we become less specialised in order to accommodate a wider range of products in our portfolio?

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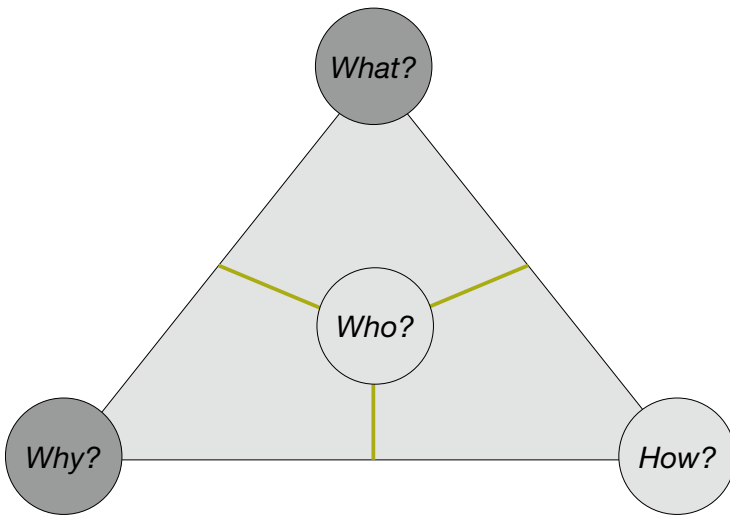
Subscription

Taking a season ticket to services



The pattern

Subscription allows customers to receive products or services regularly. The business enters into a contract with its customers, defining the frequency and length of service provision. Customers either pay for the services in advance or at regular intervals, typically on a monthly or an annual basis (why?). Customers appreciate Subscription because they do not have to bother about purchasing individual products or services over and over again, and this saves them time and money. A further advantage is that the price of a subscription frequently works out lower than purchasing the same product or service several times (what?). Many firms offer their customers a discount when they take a subscription, since this constitutes a pledge to purchase its products or services repeatedly, signifying foreseeable returns for the business (why?). In order for subscriptions to work in the long term, it is important that customers perceive the benefits of the system and never feel that they have been tricked.



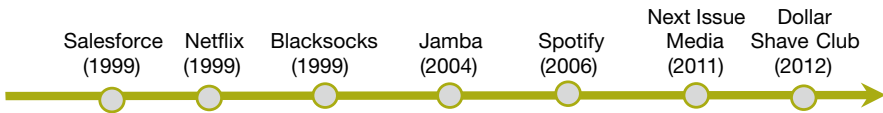
The origins

German booksellers were the first to introduce the Subscription model in the seventeenth century. The main reason was to gauge demand for expensive books such as multi-volume encyclopaedias or reference works so that sales would cover production costs. Newspaper and magazine publishers soon adopted the Subscription model and in fact most of them still use it today.

The innovators

Whatever its origins, the Subscription concept has given rise to a number of modern business model innovations. An example is the cloud computing company Salesforce, whose customer relationship management (CRM) software is available as a series of products within a centralised cloud. Salesforce introduced subscriptions to the software industry over ten years ago: customers pay a monthly fee to access the company's software and all updates online. Rather than uploading an expensive customised solution to the customer, individual components of the software are made available via Subscription packages according to customers' needs. Furthermore, regular upgrades to these components are available immediately after release. The Salesforce business model differentiates the company markedly from its competitors in the software industry, where most software used to be subject to individual licences granting permission to use copies of software. Salesforce is now one of the ten fastest growing companies in the world. The Subscription model enables it to measure and forecast its finances accurately through recurring revenue from subscribers, making for much more effective business planning than with traditional one-time licence payments.

Subscription



Switzerland-based Blacksocks has also discovered the potential of Subscription, using the byline *Sockscription: There is no easier way to deal with your sock sorrows*. Customers receive between three to six new pairs of socks at specified intervals each year in return for regular payments. Other garments such as underwear and shirts can be ordered in the same way. The company was founded in 1999 and has been doing very well with its business model. Over 50,000 customers in 75 countries have bought more than a million pairs of socks. One of its keys to success has been to emotionalise a simple product – black socks. Sock deliveries are accompanied by inspirational quotes, letters and goodies. This has led to a high rate of customer retention and steady growth of the business in a number of countries. A company that has brought Subscription to razors is Dollar Shave Club: customers purchase a subscription for new razors which are sent to them for as little as a US \$1 a month. No more forgetting to buy blades!

When and how to apply Subscription

This pattern is ideal when customers need your product or service on a regular basis. A subscription should provide your customers with some additional value such as less time required to purchase your products, continued availability, or less risk when buying your offerings. You may operate in a broad variety of industries and contexts and find this pattern useful.

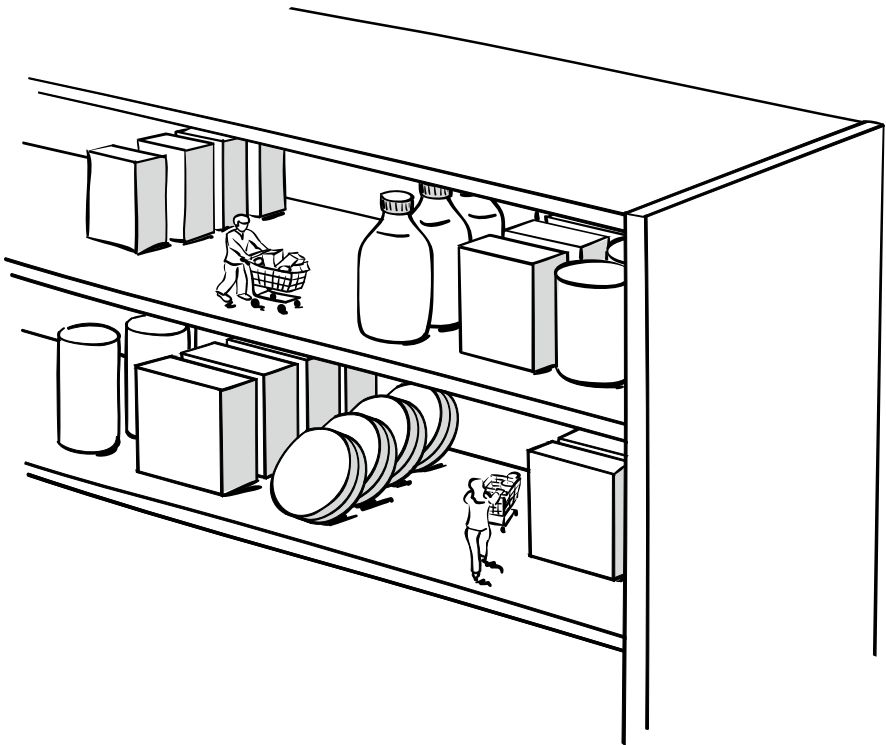
Some questions to ask

- Which products and services do customers need regularly?
- Which of our products or services are appropriate for Subscription?
- Can we provide any additional value by offering subscriptions rather than selling our products outright?

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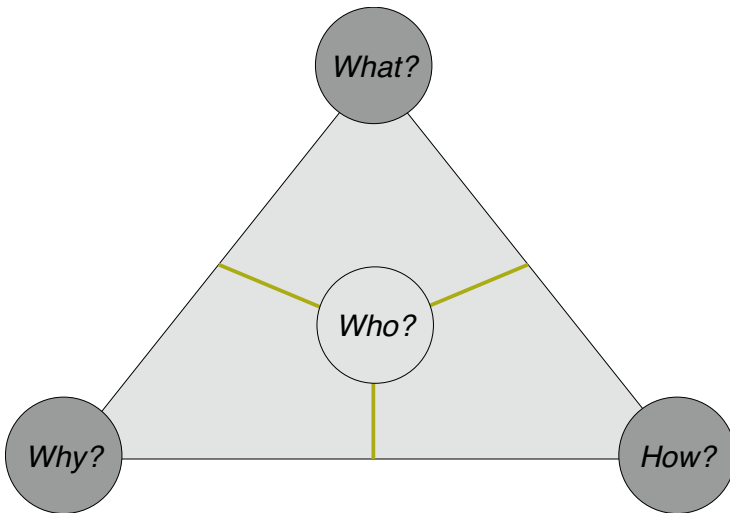
Supermarket

Large selection and small prices under one roof



The pattern

In the Supermarket business model, a company sells a variety of readily available products and accessories all under one roof (what?). The consciously wide range of products made available satisfies most customers' desires and generates considerable demand (why?). Prices are generally kept low to draw customers, while economies of scope yield advantages to the company in terms of efficiency and product diversification (how? why?). Supermarkets are popular because customers typically like to be able to get everything they want or need under one roof (what?).



The origins

Supermarkets were first developed for the retailing industry. Michael J. Cullen, the founder of King Kullen, the world's first true Supermarket, is considered to be the original pioneer. The King Kullen Grocery Company opened in 1930, and, operating under the motto of 'pile it high, sell it low', offered its customers a complete selection of food items at low prices, thus saving the customer time and cost. The company seized many opportunities to market related products and offers to its customer base of price-conscious shoppers, leading to cross-promotions, offers and discounts. Economies of scale and scope resulted in increased efficiency. In developing his idea, Cullen looked to general stores like Macy's and The Great Atlantic & Pacific Tea Company (now A&P), which were continually expanding their retail spaces. He recognised that the increasingly popular Self-service concept should be used. King Kullen enjoyed great success and at the time of Cullen's death in 1936 the supermarket had 17 stores.

The innovators

Today, we are very much used to groceries being sold in supermarkets, but the Supermarket concept has inspired a variety of business model innovations in other areas. For example, Merrill Lynch introduced the ‘financial supermarket’. Within its umbrella company, it offers a wide range of investment products and services for private and corporate customers. The goal is to reach as many investors as possible so as to increase trading volume. Merrill Lynch founder Charles Merrill thought of the idea after gaining experience as an actively involved investor for the supermarket industry. The notion of bringing the Supermarket concept to the financial world spurred Merrill Lynch to introduce a variety of measures that would provide average Americans access to the hitherto elitist investment business and in some ways ‘democratise’ it. The bank advertised extensively in daily newspapers, provided training, established a countrywide network of branches, and, in the 1970s, introduced the Cash Management Account system.

Supermarket



Toy retailer Toys R Us also implemented a Supermarket-based business model. Founder Charles Lazarus, just like Merrill Lynch, wondered how he could bring the success of the Supermarket pattern to the toy industry. He came up with a solution at the end of the 1940s: Toys R Us, the first toy supermarket. In contrast to other players in the industry that focused on boutique stores with a narrow product range and higher prices, Toys R Us built a Supermarket concept that offered customers a wide variety of toy products at lower prices in larger stores. Therefore it benefited from global scope and was able to offer lower prices than competitors, so attracting customers and increasing revenue and profits. Toys R Us operates over 2,000 stores in more than 30 countries worldwide.

When and how to apply Supermarket

This pattern can be applied in all situations where economies of scale and scope come into play. The Supermarket concept involves offering a wide range of products, making it diametrically opposed to boutiques, which focus on niche products.

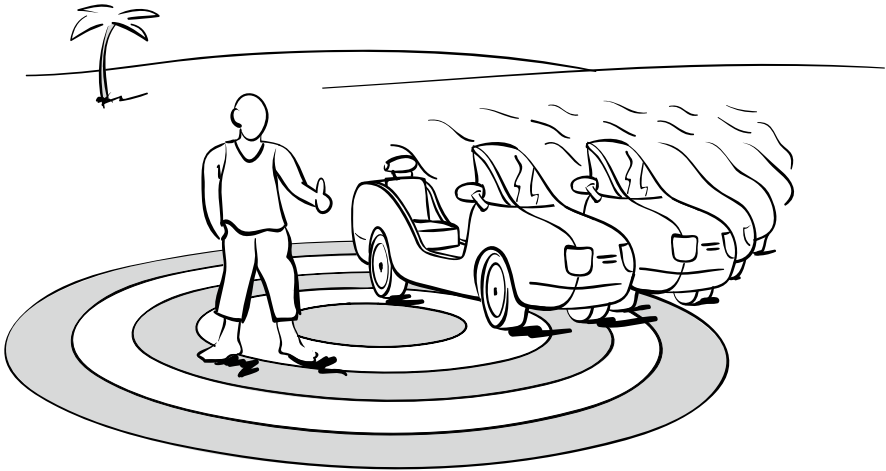
Some questions to ask

- **Is there enough market potential to run a Supermarket business model?**
- **How must we design back-end processes including IT efficiently so as to exploit economies of scale and scope?**
- **How can standardisation make our process more robust and cost-efficient?**

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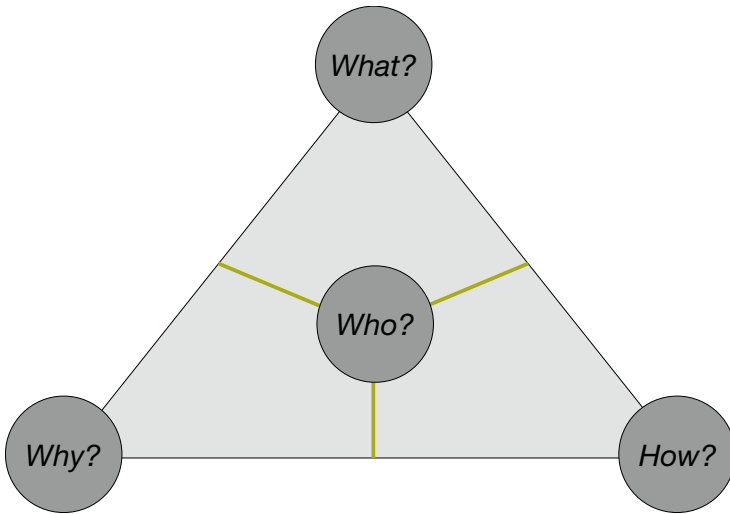
Target the Poor

Customers at the base of the earnings pyramid



The pattern

Target the Poor specifically addresses people in the lowest-income countries at the base of the pyramid (who?) who would benefit from access to affordable products and services. Generally this comprises people earning US \$2,000 or less per year (corrected for purchasing power), but the figure will vary according to the classification scheme used. Despite their relatively low purchasing power, these customers offer enormous sales potential, given that over half the world's population belongs to this customer group (why?).



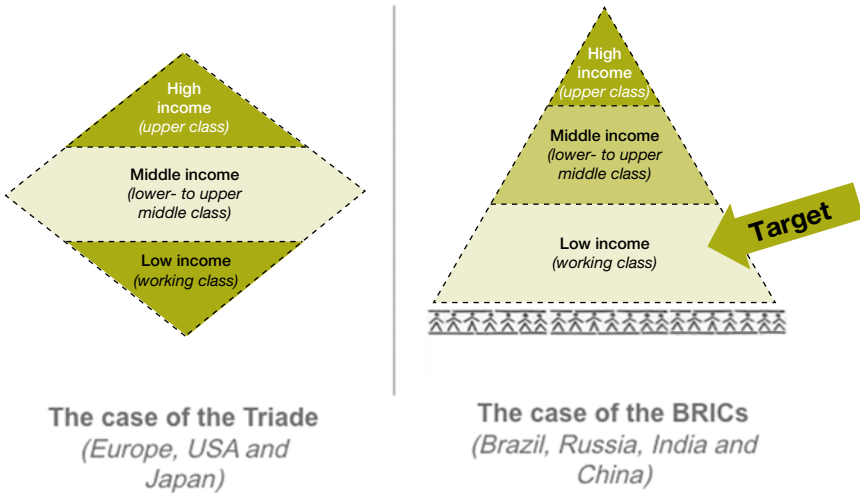
A business model will normally have to be considerably modified in order to be able to reach this less well-off population (what?). This often means having to eliminate a whole slew of features or even redevelop a product. Entirely new distribution and logistics concepts are also likely to be necessary (how?) for those target markets in emerging economies and lower-income countries that have rather rudimentary infrastructure.

The origins

The Target the Poor pattern developed mainly during the 1990s. Strong economic growth in China, India, Latin America and elsewhere led to a rapid increase in demand in those markets. Unilever's Indian subsidiary Hindustan Unilever was one of the first companies to gain a solid footing at the base of the pyramid. In the 1990s this subsidiary introduced Wheel, a laundry detergent specifically developed for the Indian market, containing a lower oil-to-water ratio to make it suitable to hand wash textiles in rivers, as is frequently the custom in India. To make this detergent accessible to

the broader Indian populace, Hindustan Unilever decentralised production, marketing and distribution, selling the product at local corner shops. A further outlet was so-called Shakti entrepreneurs who sold their products door-to-door. This business model allowed Hindustan Unilever to increase its revenues by 25 per cent and market capitalisation by 40 per cent between 1995 and 2000. Today, Wheel is among the best-selling laundry detergents in India.

Target the Poor



The innovators

Over the past few decades the Target the Poor pattern has been the source of several innovative business models. Micro-finance institution Grameen Bank, founded by Muhammad Yunus, is an excellent example in this context. Grameen Bank and its founder were jointly awarded the Nobel Peace Prize in 2006 for ‘their efforts to create economic and social development from below’. The bank provides impoverished applicants who do not have adequate collateral with access to small-scale loans that are easier to repay, while attaching conditions of repayment, and instilling discipline in borrowers to develop a strong credit standing. The system is based on the notion that poorer people often have underutilised skills that would enable them to earn money for repayments. About 98 per cent of borrowers whom the bank supports are women from the countryside. In many cases, the village community acts as a guarantor for a loan, which adds social pressure to meet repayments. Since its founding in 1983 the bank has issued more than \$8 billion in loans. The default rate is less than 2 per cent, a rate that banks in developed markets can only dream of.

The Tata Nano car is another successful application of the Target the Poor business model. This vehicle was developed in 2009 by Indian car manufacturer

Tata and is sold for the incredibly low price of just US \$2,500. The car is practical and has many innovative cost-cutting features. To keep costs down, it is sold without extras. Manufacturing processes rely on a low-cost Indian labour force and were adapted to reduce the amount of steel. International engineering contributions and a policy of outsourcing enable a cost-effective production. The company benefits from good publicity of this low-priced car, and its efforts to address the needs of impoverished people have given it a positive public image.

Retail giant Wal-Mart introduced Target the Poor banking services in the United States. The global financial crisis has caused many US citizens to lose everything, including their credit rating. Established banks would no longer serve these people. Wal-Mart widened the range of products and services available to its main target group of low-income customers and offered a series of financial services tailored to them such as prepaid credit cards. Because the company did not hold a banking licence, it had to limit the financial services it offered to those that did not require such accreditation.

When and how to apply Target the Poor

The Target the Poor pattern aims to address the growing number of lower-income customers. The 'base of the pyramid' is interesting because it is a large market that provides opportunities for sustainable business development. If you succeed in contributing to reducing global poverty, for instance, by offering low-cost healthcare solutions or drinking water filters, you will undoubtedly benefit from positive PR. You will also and perhaps more importantly, create value for your employees. Interestingly, this low-income customer group is increasingly connected: ever more people in lower-income economies are connecting to the Internet via mobile devices. While they often cannot afford fixed lines, mobile phones are crucial. In fact, many of these customers will be browsing the Web before they have access to running water or reliable electricity.

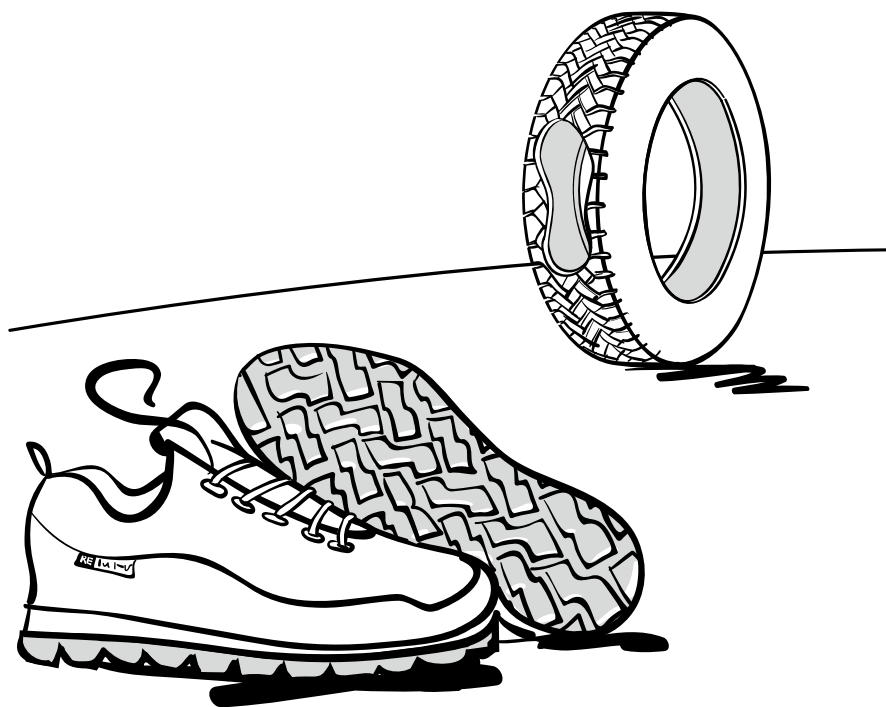
Some questions to ask

- Which services or products could we offer to lower-income customers in addition to our established clientele?
- Can we adjust our services to make them attractive to people who cannot afford them at the present time?
- Can we reach new customers by porting our solutions to mobile devices?

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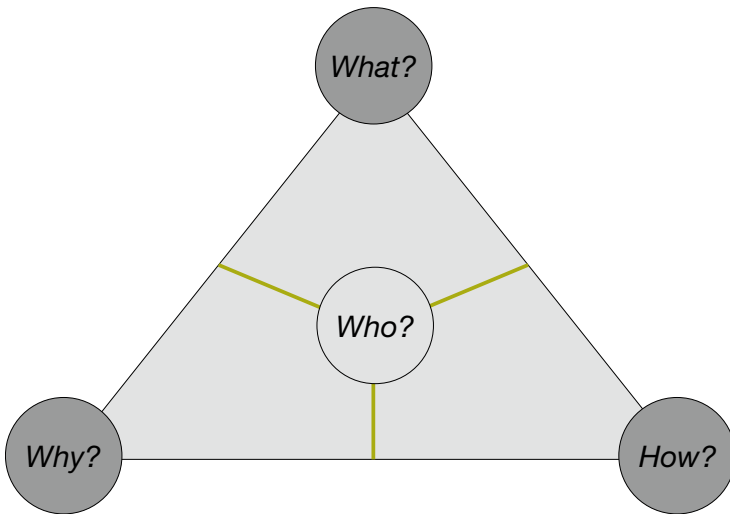
Trash to Cash

Turning old rubbish into new cash



The pattern

The Trash to Cash pattern builds on the idea of recycling and reusing old materials. Used products are collected and either sold in other parts of the world or transformed into new products. The profit scheme is based on the low or zero purchase price, so that resource costs for a company adopting this model are usually eliminated (how?). Customers receive refined products that leave a lasting impression that can be bought with a good conscience (what?). With all this, Trash to Cash results in a win-win situation for both the supplier and the manufacturer: the former's waste disposal services are catered for at reduced or zero cost (how?), and the latter gets cheap resources or materials with which to make his products (why?).



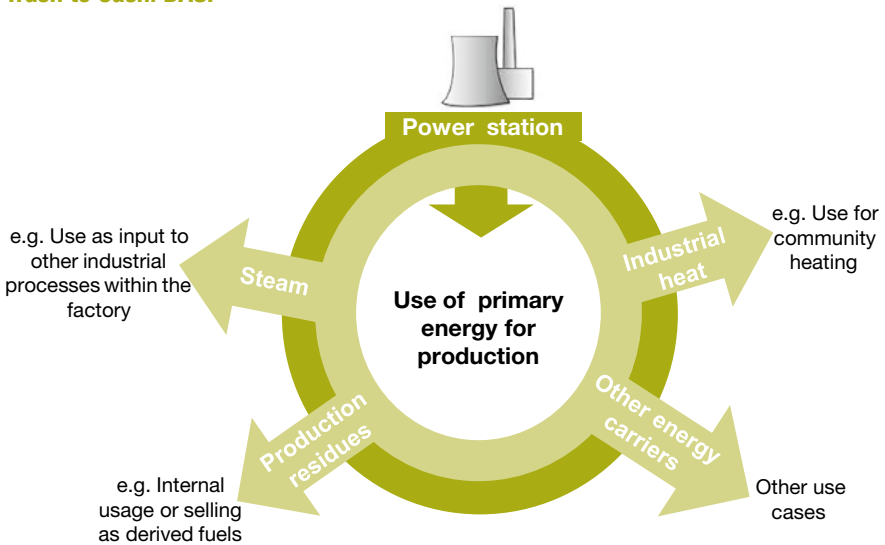
The Trash to Cash principle can also work without reprocessing the 'rubbish' raw materials. One option is to sell unprocessed resources in other markets or geographic regions, which has been a commonplace concept in the used-car market for decades and is now being applied to many other used goods as well.

An added benefit of selling processed rubbish and by-products is an image of being environmentally friendly (what?). The Trash to Cash model also addresses issues of environmental responsibility, enabling companies to operate green policies. Responsible behaviour is becoming increasingly important for companies as our society faces ever more environmental and societal challenges. Thus, the idea of recycling, inherent in the Trash to Cash business model, can constitute a real competitive advantage.

The origins

In principle, Trash to Cash is not a new concept since it borrows heavily from traditional raw material and scrap metal merchants. Indeed, the origins of this business model have been traced all the way back to Ancient Greece, for archaeological excavations reveal that people reused materials to avoid shortages even back then. The modern, commercial reuse of waste- and by-products gained increased attention around 1970 with rising energy prices. These developments continue today as society becomes more environmentally conscious and is taking measures to grapple with climate change.

Trash to Cash: BASF



Professional recycling company Duales System Deutschland was an early bird in this area. This German company is concerned with taking care of waste and packaging materials. It introduced the Green Dot logo ('Der Grüne Punkt') as a symbol for recycled packaging materials, which manufacturers can use under licence on their labelling. The whole waste disposal programme integrates packaging and product manufacturing companies and is therefore able to utilise a constant stream of free waste materials. This wide range of materials is recycled efficiently via a dual system operating in conjunction with municipal waste collection systems. Companies subscribing to the scheme benefit from efficient waste disposal and recycling. For its part, Duales System Deutschland also earns revenue from companies that purchase a licence for the Green Dot logo. These companies benefit from an enhanced environmental image (and potentially more customers and revenue), access to cheap materials from the recycling process, and reduced waste disposal costs.

The innovators

Swiss company Freitag lab was one of the early Trash to Cash innovators. Founded in 1993, it uses a range of old materials (mainly from vehicles), such as canvas covers from trucks, inner tubes and airbags, to manufacture bags and fashion accessories. The eco-friendly nature of the business attracts many ecologically aware customers and those seeking unusual and stylish designs. The company employs a strong green marketing strategy to support the concept of reusable materials in businesses. The recycling of old materials makes the company's resource costs very low, but without compromising quality since many of the materials recovered are durable and waterproof. These cost savings can be transferred to customers. Today, the company has over 130 employees and sells its products in more than 400 stores worldwide.

British company Greenwire, which specialises in recycling old mobile phones and laptops for reconditioning and resale, pursues a similar strategy. The company organises pick-ups, quality checks, refurbishment, and repair processes so that these products can be resold to customers at low prices, especially in developing countries. Corporate clients are attracted to the convenience and eco-friendly methods of disposal or sale of their old electronic goods, and so provide low-cost (or even cost-free) resources for Greenwire (companies have the option of receiving a payment or having the amount donated to a charity of their choice). Greenwire fulfils an extremely valuable environmental service: the battery of just one single device contains enough cadmium to pollute 600,000 litres of water, but, sadly, only about a quarter of all mobile phones are currently recycled.

US-based furniture manufacturer Emeco was founded in 1944 and uses readily recyclable materials such as aluminium, wood, PET (polyethylene terephthalate from plastic bottles etc.) and WPP (wood polypropylene, from wood substitute fencing etc.) to manufacture a variety of designer furniture products. In a unique example, it entered into partnership with Coca-Cola to better exploit the Trash to Cash business model. A plastic version of Emeco's Navy Chair is made from some 111 recycled Coca-Cola bottles. Thus the company conveys a strong environmental image through its production techniques and marketing. By using the Trash to Cash business model, Emeco attracts ecologically aware customers within the furniture market. In addition, its products are functional, fashionable and affordable, generating high demand and revenue for Emeco.

When and how to apply Trash to Cash

This pattern taps into the concept of sustainability. The 'trash' in the business model refers to resources that are regarded as waste in one value chain, but are reused in another value chain. If you are a manufacturing company that produces trash, then you could be affected by this business model pattern.

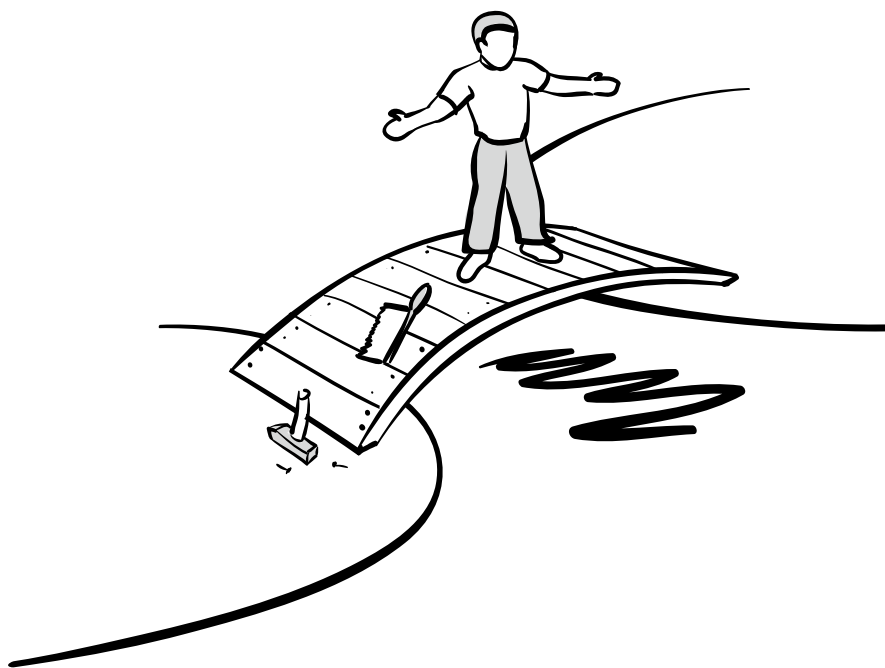
Some questions to ask

- How do we create value with trash?
- Can we give our brand a leg up by building on this concept of sustainability?
- What mechanisms create value for partners?
- What industries (often those with high margins) create valuable trash?

Two-sided Market

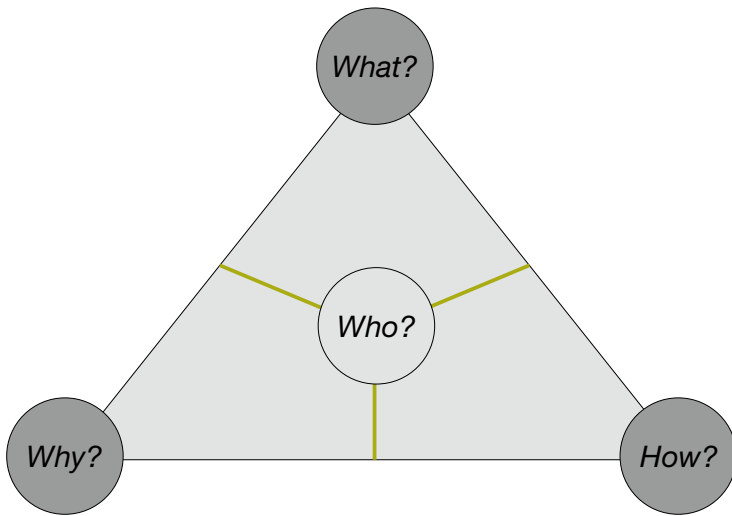
Attracting indirect network effects

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The pattern

Two-sided Markets facilitate interaction between two complementary groups for mutual benefit via an intermediary or a platform. For example, recruitment websites link jobseekers and recruiters, while a search engine attracts both users and advertisers (who?). Central to the concept are so-called indirect network effects: the more people from one group use the platform, the more attractive it becomes to people in the other group. This works in both directions (what?). The main challenge in operating such a platform is to steer the two customer groups in such a way as to maximise indirect network effects. Achieving this helps to bind customers to the company (how?). It is also possible to target three or more customer groups: we then speak of a multi-sided market. Google's search engine constitutes a three-sided market that brings together Internet users (searchers), website hosts and advertisers. Not all participants necessarily pay for involvement: in the case of search engines, for example, they are free for users to browse, but advertisers pay to be included on the website (why?).



Before a Two-sided Market can work, the chicken or the egg problem needs to be resolved. So long as there are no customers using the platform, neither group has an incentive to join it. Thus the situation calls for achieving speedy visibility of the platform by means of far-reaching ad campaigns and special offers (what? how?).

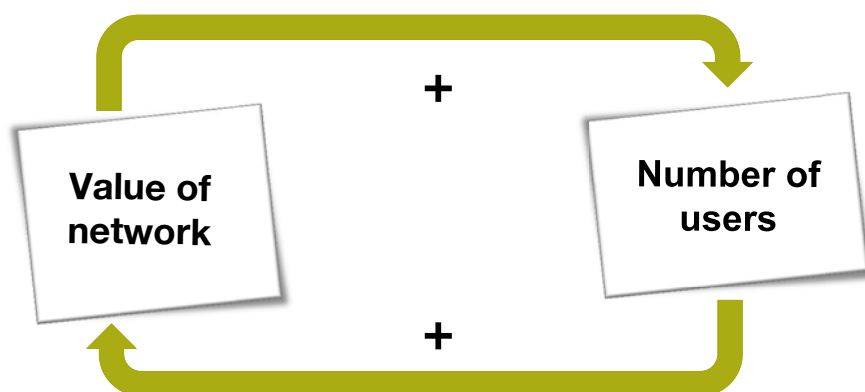
The origins

Two-sided Markets have been around for a long time. Stock exchanges were one of the first applications of the concept more than 600 years ago. The first

such exchange that most resembles the current model was founded by the Van der Beurze family in the fifteenth century. The family owned an inn in the Flemish city of Bruges, which was an important European trade hub at the time. Regular visits from influential traders made the inn a centre for trade and financial activities, connecting buyers and vendors. Today, stock exchanges are still some of the most powerful and essential instances of a Two-sided Market.

Two-sided Market

The winner takes it all:



The innovators

The Two-sided Market pattern is extremely versatile and has been used in a number of business model innovations, for instance in the credit card business: credit card companies bring together credit card owners on the one hand and retailers and businesses that accept the cards on the other. Diners Club, founded in 1950, was the first credit card company to provide consumers with an average of two weeks' credit before they were required to repay the debt. Cardholders were not charged interest (this came later), but rather an annual subscription fee of US \$3, while merchants were charged 7 per cent on each transaction made. But to gain momentum, Diners Club first had to face a different challenge (the chicken and egg again). Without a sufficient number of cardholders subscribed, merchants would not participate, and, similarly, customers would not acquire a card unless sufficient merchants (shops, restaurants, hotels, etc.) were party to the system. This obliged Diners Club to undertake marketing exercises to encourage people to adopt the system, initially focusing on salesmen who would use the cards in restaurants.

Online marketplaces such as eBay, Amazon, or Zappos enable seller–buyer interactions as well, and as such they are also two-sided markets. Consider Groupon: this company brokers discounted gift certificates (‘deals’) between buyers and vendors, promoting the idea of a group discount, whereby a greater discount is obtained from merchants. Customers benefit from these discounted offers and rebates, while the merchants involved enjoy exposure to large numbers of consumers. In each of the markets it serves, Groupon presents a daily special offer. Interested customers can sign up for the offer, and if a predetermined number of customers is reached, the offer becomes available to them all. This reduces the risk for merchants, whom Groupon charges a percentage of the sales price on the discounted product. The site generates considerable indirect network effects: the deals attract a great number of potential customers, and this in turn inspires many businesses to place offers on Groupon. The company serves thousands of markets worldwide and claims that it reaches over 70 million users in more than 35 countries.

The ad-funded business models run by JCDecaux, Facebook, and Metro newspapers are also Two-sided Markets connecting advertisers to users. The two groups come together through indirect network effects; advertisers benefit from classic customers who circulate the ads and customers benefit from advertisers who cross-subsidise merchandise with their advertisements. JCDecaux, for example, works with city authorities and public transport operators to provide street furniture for free or at reduced rates in return for exclusive advertising rights. Advertisers pay for prime locations and transit media opportunities, while cities benefit from free or reduced-cost public services and advertising design innovations.

Metro is a free UK newspaper that is distributed on weekdays at public transport services and other urban outlets such as cafés, bus stops and workplaces across the country. It attracts a broad readership and creates a Two-sided Market with advertisers seeking to gain exposure to its audience. Metro finances production and distribution of the newspaper through the sale of advertising space. In return, it ensures access to a wide readership and reduces its own costs by its mode of distributing the newspaper.

When and how to apply Two-sided Market

A multi-sided business model that connects various parties is practically imperative for all companies. Traditional one-on-one models no longer suffice to compete in the market successfully. You must understand who your relevant stakeholders are and how they are connected. Building on this understanding, you can think about what a multi-sided business model should look like for your company.

Some questions to ask

- Who are the relevant stakeholders in our industry?
- How are they connected today?
- Why are some players left out?
- Which value streams (consisting of products, services and money) flow between players?
- What is our position in this value network?
- Can we build a multi-sided business model that connects all players in innovative ways and creates additional value for customers?

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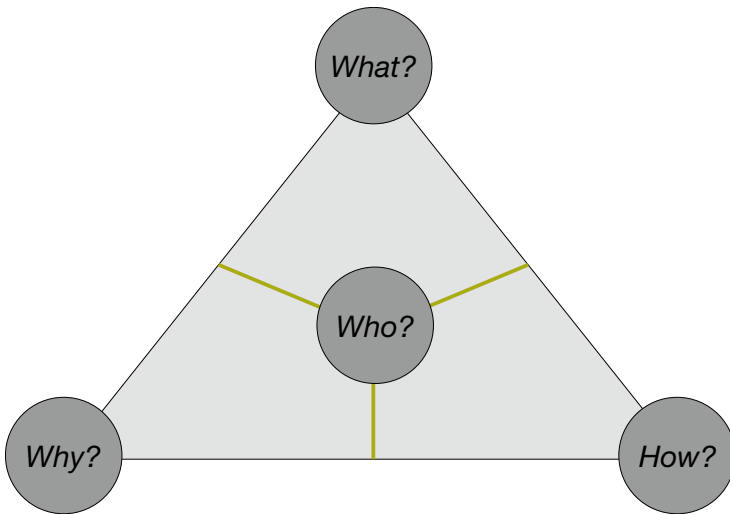
Ultimate Luxury

More for more



The pattern

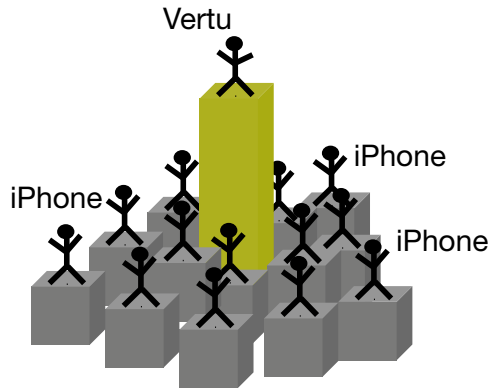
The Ultimate Luxury pattern focuses on customers in the very top financial bracket (who?). Companies that operate here can distinguish their products or services by providing the highest quality privileges and services, commensurate with the spending power of the wealthy market it targets: uniqueness and self-actualisation are values that appeal to these buyers (why?). The great investments required to provide these products and services are offset by the wide margins practised. Thus the focus lies on branding, employment of competent and knowledgeable sales representatives to promote goods and services, and frequent memorable special events for customers (how? what?). The market for luxury goods is growing globally, especially in China and Russia. Microeconomics talks about the snob effect: luxury watches sell better with higher prices. To reach the extremely affluent, thorough adjustment of the business model is necessary.



The origins

Ultimate Luxury actually dates back to antiquity. Merchants presented ancient Roman patricians with precious fabrics for clothes and gems for intricate jewellery, architects designed pompous and spacious palaces and villas to house luxurious furniture. All this served to give the upper classes an air of respectability and gave them a sense of self-realisation. During the Middle Ages many businesses sought to become official purveyors to the court, which afforded them the privilege of displaying the royal coat of arms on their goods and services. The super-rich are the modern version of royalty – while they might not have a kingdom, they do have similar needs and desires.

Ultimate Luxury



The 'snob-effect': The individual wants to stand out from the crowd. A 'snob' only wants to possess those goods that the crowd cannot afford.

The innovators

A number of companies have made use of the Ultimate Luxury business model. Among these is Lamborghini, which was founded in 1963 by Ferruccio Lamborghini. His company's small-scale or limited edition approach to the manufacture and sale of high-powered sports cars makes for high prices. Its wealthy clientele is happy to respond, encouraged by the company's policy of close customer contact and comprehensive support packages. Thanks to this strategy, Lamborghini is able to realise high margins to finance development, production and marketing. Customer orders are driven by the exclusive nature, performance and image of the products, with resultant high revenue and profits for Lamborghini. The company's crest prominently displays Murciélago, a bull that survived a bullfight in 1879 even though it was pierced by 24 lances and was later pardoned for this astonishing feat. The crest symbolises strength. When the company was first established it differentiated itself from its competitors through the superior power of its motors. In the second year of its existence, Lamborghini surprised car enthusiasts everywhere when it introduced the twelve-cylinder 350 GT that outshone all of Ferrari's cars at the time. In 1966 Lamborghini introduced the Miura, which with its 350 horsepower engine could reach speeds of almost 300 km/h. All Lamborghini car models are named after famous Spanish bull breeds (Diablo, Gallardo, Murciélago), except for the Countach, a Piedmontese exclamation meaning 'best of the best'.

Jumeirah Group develops Ultimate Luxury hotels. The company's portfolio includes the Jumeirah Beach Hotel, Emirates Towers, as well as what is probably the most famous and luxurious hotel in the world, the Burj al Arab in Dubai. The hotel's impressive height of 321 metres and its inimitable sail

shape are a magnet for the wealthiest. Officially awarded with five stars, it is considered the most luxurious hotel in the world, far exceeding the requirements for a five-star hotel (some rate it as the world's only seven-star hotel). Its ostentatiously spacious and luxuriously furnished suites are between 169 and 780 square metres in size. Guests wishing to take a break from the lavish interiors can use the hotel's helicopter or one of several Rolls-Royce cars offered by the hotel to make a foray into the city. These high standards of service are costly to maintain, but offset by high margins.

Another Ultimate Luxury service provider is Abbot Downing. A brand of the multinational bank Wells Fargo, it offers financial services business to the wealthiest sector of society, 'ultra-high-net-worth' individuals capable of investing in excess of US \$50 million. In return, clients receive a range of services that goes beyond those of traditional banks, such as asset planning over family generations, wealth education, risk assessment, trust management, tax payment support and legacy planning. The company is able to operate profitably with a relatively small customer base, since its fees are very high.

When and how to apply Ultimate Luxury

You may be tempted to increase your prices. However, bear in mind that the market for luxury goods is a very small one. There is substantial potential in emerging markets where you can cater to new millionaires and billionaires with an eye for luxury.

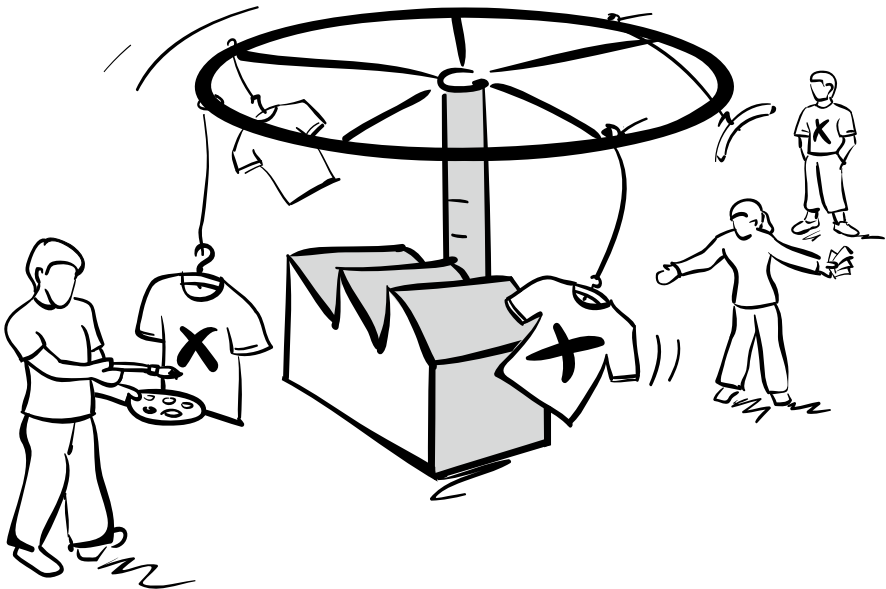
Some questions to ask

- Can we create value for people who already have everything?
- How do we handle fluctuating demand, given the low number of consumers we will be serving?
- What kinds of employees will we need in order to deliver on our clients' extremely high expectations?

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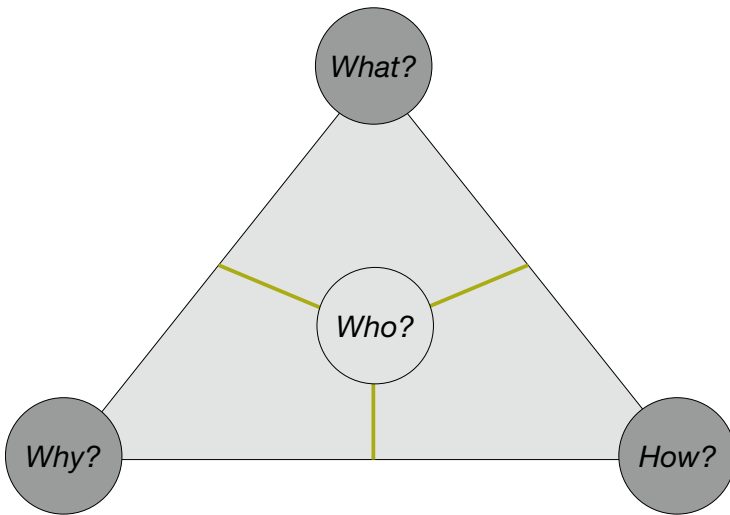
User Design

The customer as inventive entrepreneur



The pattern

In the User Design business model customers act as both designers and consumers (who?). By designing products other people will later buy, they take part in their own product development process. Thus, the company supports its customers in their undertakings and benefits from their creativity, while customers benefit by realising their entrepreneurial ideas without having to create any infrastructure (what?). Typically, an online platform provides customers with the necessary support to help them design and market products, such as product design software, manufacturing services and an online shop to sell the product (how?). For every item sold, the company receives a fixed fee, which is generally based on realised returns (why?). The key advantage of User Design is that a company does not have to invest in developing its own products, provided it can succeed in helping customers tap into their creativity (how?).

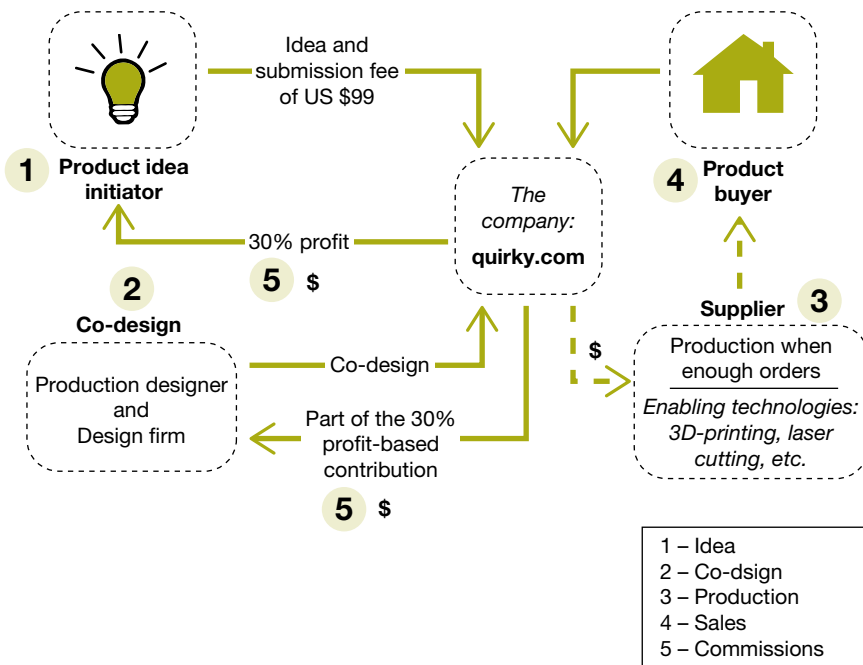


The origins

User Design is a fairly recent phenomenon. It has been around for only a few years and was primarily made possible by new job production techniques such as 3D printing, CNC milling, or laser cutting. These technologies now make it possible to produce products in very small batches at acceptable unit costs – a common feature of user-designed products. Mass Customisation has also opened customers' eyes to the possibilities of personalised products and popularised the pattern. One of its early creators was US-based company Threadless, an online community of artists with an E-commerce website. Its

co-founders Jake Nickell and Jacob DeHart started the company in 2000 with US \$1,000 of their own money. Threadless designs are created, evaluated and chosen by an online community. Each week, about a thousand different designs are submitted online and then put to a public vote. After seven days the staff reviews the top-scoring designs. Based on the average score and community feedback, some ten designs are selected weekly, to be printed on clothing and other products. They are sold worldwide through the online store and the company's retail store in Chicago. Designers whose work is printed receive US \$2,000 in cash and US \$500 in Threadless gift cards. Each time a design is reprinted, the respective artist receives an additional US \$500.

User Design



The innovators

Over the past few years the practice of User Design has spread way beyond the world of fashion. Danish toy manufacturer Lego applied it very successfully to the toy industry. The Lego Factory service provides the online design tools, manufacturing infrastructure and a sales platform. Customers utilise this flexible production technology to realise their creative ideas and bring their product to the online marketplace. The platform embraces its customers' creativity and ideas, without being concerned about a possible failure of the product to

sell: Thus Lego benefits from custom-products that exactly match customers' perceptions. The company calculates which bricks are needed for a model and sends them directly to the customer's home.

Ponoko, a start-up founded in 2007 in New Zealand, also successfully employs User Design. The company allows its customers to create all sorts of products to their exact specifications – ranging from jewellery to furniture to kitchen utensils – and sell them on its online store. The system of distributed manufacturing and on-demand manufacturing allows design and distribution without further infrastructure costs. Just two years after launch, the company was already hosting 20,000 different products in its store. This makes Ponoko both one of the first and one of the most successful of its kind.

Among other applications of this model are user-designed shoes and tattoos: all are welcome to create and sell custom shoe designs on Dream Heels, or commercialise tattoo designs on Create My Tattoo.

When and how to apply User Design

User Design is especially promising in industries with comparatively simple products that appeal to customers on account of their design. The pattern feeds into the idea of social communities in which people are increasingly seeking interactivity: they want to help generate ideas, as well as comment and build on the existing ideas and solutions of others. Implementing User Design will provide you with access to new and innovative designs. Additionally, the pattern will help you build a community of interested and engaged customers around your products and solutions, which will greatly foster your company's brand.

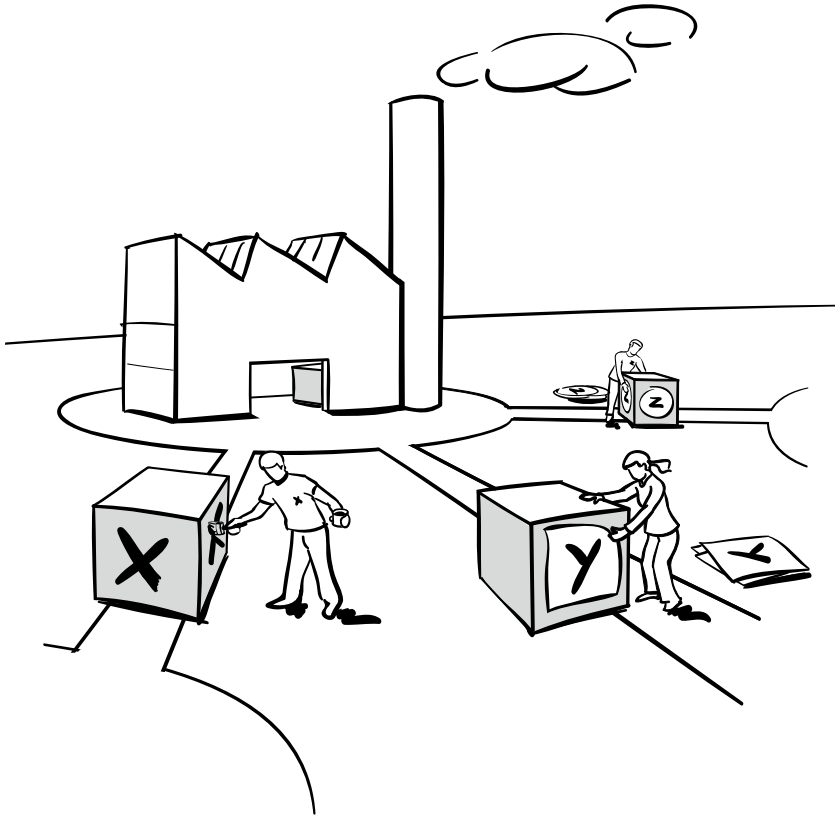
Some questions to ask

- How can we improve collaboration and communication with our customers?
- How can we step up the quality of our solutions by integrating our customers' ideas and input?
- How can we raise the perceived value of a product by increasing the amount of DIY work customers contribute?
- Can we use social media to help users engage in our design process?

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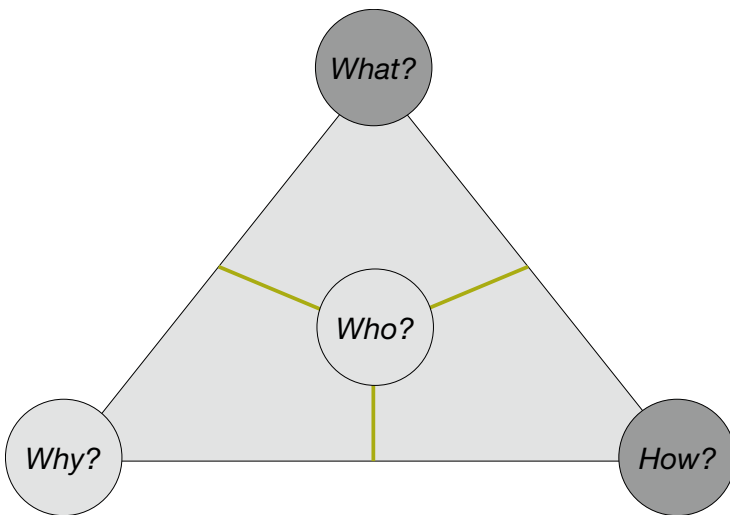
White Label

Own brand strategy



The pattern

White Label goods are not given a specific name after being manufactured, but are sold by different companies under different names and in different market segments (what?). Producers of White Label goods bear only the product manufacturing costs: this is a significant advantage of this business model, because it obviates the need to invest in infrastructure (how?). The White Label company focuses on optimising production processes and will therefore have a better chance of generating economies of scale. Since the finished products have not been branded, vendors can market them in whatever way they choose. White labels can also be used to sell a section of a company's products under a different brand name. This is commonplace in the food industry, where products may be manufactured at one facility, packaged in various ways, and sold by retailers under different names (how? what?).



Revenues generated with the sale of no-name goods can supplement those from branded products. This opens up access of the business to lower-income customers and alternative distribution channels. In addition, production will be more efficient if it is possible to reach customers with differing product quality expectations. Very little extra work will often be needed in order to supply these additional customers, since all the goods are based on the same basic product. For the White Label business model to work, it is important that customers do not realise that ostensibly different offerings are actually the same; otherwise sales of the more pricey brand are likely to be eroded or cannibalised by the cheaper substitution product.

The origins

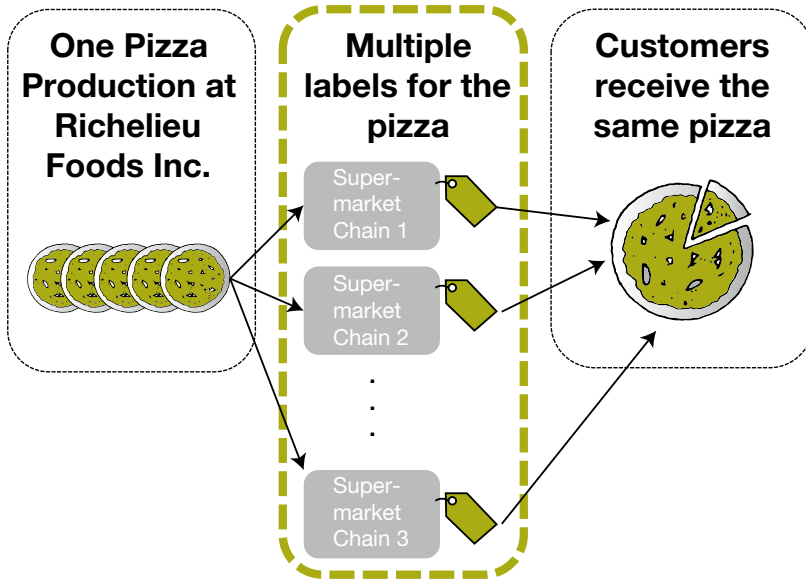
The music industry first invented the term 'white label' and propagated it during the second half of the twentieth century. Artists frequently sent unlabelled demos to radio stations and clubs before officially releasing their CDs and LPs. These demos bore the name of neither the record label nor the artist, hence the designation 'white label'. This served two main purposes: first, to attract new listeners to an artist's sound, and, second, to ensure that listeners were not prejudiced, enabling the record labels to estimate production quantities more accurately. If albums were well received, they were officially released, adorned with a proper label and given professional marketing. Other industries, the food industry especially, later adopted similar methods. A familiar feature in the food industry is the presence of comparatively small margins over substantial sales volumes. This is conducive to application of the White Label business model.

The innovators

Taiwanese technology company Foxconn is perhaps the biggest and most important White Label innovator, as it manufactures many electronic devices and components for well-known brands. Reputable companies including Apple, Dell and Intel are among its customers. An estimated two-thirds of all computer motherboards sold under the Intel name are actually manufactured by Foxconn. Regardless of whether a console is labelled Microsoft, Nintendo or Sony, it will contain at least some Foxconn hardware. Surprisingly too, the company is even the leading manufacturer of central processing units (CPUs) and computer casings. All of this makes Foxconn a prime example of what constitutes a White Label producer. As a contractor, the company focuses wholly on producing electronics. In this way, the contracting companies benefit from its consistent and cost-effective production and are able to concentrate on research, marketing and branding. This principle has enabled Foxconn to build considerable expertise in the industry. The company owns some 20,000 different patents, employs almost a million workers, and generated revenues in excess of US \$110 billion in 2011.

White Label producers are also well established and highly innovative in the food industry. Richelieu Foods is a famous White Label contract food producer of frozen pizzas and salad dressings. The company's products are marketed and sold under the brands of various retail chains. Customisation of manufacturing processes and packing options by Richlieu Foods for the contracting client enables the latter to benefit from consistently high-quality products that they can brand with their own label without the costs associated with establishing manufacturing and packaging facilities. As discount stores gained market power, the White Label concept obtained a strong foothold in food retailing. No-name and store-brand products make up more than two-thirds of all goods sold in the food industry. These developments explain the continued steady growth of White Label producers.

White Label



Printing In A Box is a White Label producer in the printing industry that offers its customers an opportunity to start their own online printing business. The firm provides everything required to start an online printing business, from webpage templates and marketing information to handling of the ordering and delivery process. Customers can embellish their website and online store with their own logos and layout, and sell printed products such as postcards, letterheads, gifts and flyers to their customers. It's a win-win situation. Customers can concentrate on distribution and marketing and sell prints without needing detailed knowledge of printing processes or even own any printing equipment at all, while Printing In A Box focuses on production without the overheads and infrastructure required to manufacture and deliver the goods, leaving the marketing, branding and distribution to its customers.

When and how to apply White Label

You may choose to opt for a White Label strategy if your customers are very price sensitive and you already have a firmly established brand. This business model has been applied very successfully in both the food and garment industries in the past. To start with, you will most likely want to introduce a limited number of White Label products.

Some questions to ask

- **Can we handle any conflicts with premium brand products if we sell them as White Label products?**
- **How do customers perceive the value of our products?**
- **What can we learn and how can we benefit from our current premium brands if we wish to create White Label products?**

[PART THREE]

Finished reading? Let's implement!

Action trumps mere intent any day, especially where innovation is concerned. Even the best strategy must be implemented – otherwise all your efforts will be wasted. As Thomas Edison remarked, ‘vision without execution is hallucination’.

With the Business Model Navigator we have developed a new methodology that structures the process of business model innovation and encourages outside-the-box thinking, which is a key prerequisite for successful business models. Well-grounded in theory, it has proven its applicability in practical settings many times over. In order to achieve successful business model innovations within a company, it is important not only to acknowledge the importance of business model innovation, but also to implement an effective business model innovation process within the firm. This is the most difficult but also the most important step. We have developed various tools to support managers during the business model innovation process. Given the overwhelming demand for a new business model innovation methodology, the journey of the Business Model Navigator will continue. The future race for comparative competitive advantages has shifted from pure products and services to business models. Firms need to get ready for that race. Identifying opportunities is not enough; innovators and entrepreneurs have to capture opportunities and start moving. Knowing the past helps in creating the future.

The managerial implications presented in this last part of the book should prove valuable for practitioners using this new approach to revolutionise their business model.

10 recommendations to innovate your business model

- 1 Get top management support – business model innovation is not a walk in the park.
 - Raise awareness for the business model innovation topic by highlighting the benefits new business models can have for your company.
 - Refer to best practice cases of business model innovations from within and outside your industry – vivid examples can serve as an important eye-opener.
 - Be persistent – an understanding of the importance of business model innovation is unlikely to be established overnight.
- 2 Set up a diverse team – new business models shouldn't be developed in silos.
 - Business model innovation is a cross-functional topic – try to integrate employees with different backgrounds and from different departments.
 - Make sure to bring everybody on the same page with regard to the meaning of a business model – it defines the *What*, the *Who*, the *How* and the *Why* of a company's business.
 - Don't forget to integrate outsiders as well – nobody will challenge the orthodoxy of your industry more effectively.
- 3 Be prepared for change and be open to learn from others. Keep in mind: the future is already here: it is just unequally distributed.
 - A little paranoia doesn't do any harm – always question the pillars of today's success.
 - Embrace a 'proudly found elsewhere' attitude within your company to get rid of the 'not invented here' syndrome.
 - Constantly monitor and analyse the changes within the ecosystem of your company – are there any signs that your current business model may be put into question in the future?
- 4 Challenge the dominant logic of your firm and of your industry by using the 55 business model patterns.
 - Apply the similarity and/or confrontation principle to use the business model patterns in a structured way.
 - Try close patterns, but also confront your business model with more distant patterns.
 - Keep on trying. At first, it seems impossible to learn something from

industry outsiders. Individuals with a profound background in the existing industry, in particular, have difficulties in overcoming the dominant industry logic.

- Use haptic cards or other devices to multiply the creative potential of the business model patterns.
- 5** Create a culture of openness – there should be no sacred cows in the room.
- Avoid negative judgements towards ideas for innovative business models in an early stage of an ideation session – it is too easy to kill any idea right in the beginning.
 - Be aware that innovation is a process naturally covered with some failure and risk – provide your employees with the necessary freedom to bring up new ideas and allow them to fail.
- 6** Use an iterative approach with many loops. Verify assumptions.
- Carefully decide when to change between divergent and convergent thinking; managing the balance between creativity and discipline requires some experience.
 - Don't expect to come up with the most brilliant idea right at the beginning; innovation requires hard work, many iterations and time like any other process.
 - Verify assumptions right away and don't wait too long.
- 7** Don't overcalculate the business cases – typically they are totally wrong in the early stages.
- No business plan survives first contact with the customer – this is even truer for necessarily fuzzy business model cases.
 - Think in different scenarios in order to be prepared for forthcoming changes.
 - Define thresholds your business model has to achieve in order to be successful.
- 8** Limit risks by prototyping: a picture is worth 1,000 words, a prototype 1,000 pictures.
- Try to materialise ideas into a prototype.
 - Engage in rapid prototyping to get quick feedback on the business model.
 - Prototypes can be a detailed presentation, customer feedback, a pilot project with an 'initial' market entry, etc.
 - Use the insights gained throughout the pilot project to re-adapt your business model accordingly. Try to fail fast and early in the process.
- 9** Give your new business model the necessary context to grow successfully.
- Ensure a protected environment for the business model.

- Give the business model team freedom at the beginning and set clear goals later on.
 - Ask for long-term benefits instead of short-term results.
 - Ensure that business model innovation becomes an ongoing process
 - a new business model is not carved in stone and should be challenged regularly.
- 10** Actively manage the change process.
- Be a role model for your employees regarding forthcoming changes and set incentives to enhance their motivation.
 - Promote understanding within the company for business model innovation.
 - Ensure a change process that is fair and transparent.
 - Develop skills that are lacking within your organisation.
 - Ensure a positive mindset towards business model innovation.

The 55 models at a glance

<i>Model number</i>	<i>Pattern name</i>	<i>Affected BM components</i>	<i>Exemplary companies</i>	<i>Pattern description</i>
1	Add-on	What Why	Ryanair (1985), SAP (1992), Sega (1998)	The core offering is priced competitively, but there are numerous extras that drive the final price up. In the end, the customer may pay more than was originally assumed. Customers benefit from a variable offer that they can adapt to their specific needs.
2	Affiliation	How Why	Cybererotica (1994), Amazon Store (1995), Pinterest (2010)	The focus lies in supporting others to sell products successfully, thus benefiting directly from successful transactions. Affiliates usually have some kind of pay-per-sale or pay-per-display system. The company itself gains access to a more diverse potential customer base without any additional active sales or marketing efforts.
3	Aikido	What Why	Six Flags (1961), The Body Shop (1976), Swatch (1983), Cirque du Soleil (1984), Nintendo (2006)	Aikido is a Japanese martial art in which the strength of an attacker is used against himself. As a business model, Aikido allows a company to offer something diametrically opposed to the image and mindset of the competition. The novelty of the value proposition attracts the type of customer who prefer ideas or concepts that diverge from the mainstream.
4	Auction	What Why	eBay (1995), WineBid (1996), Priceline (1997), Google (1998), Zopa (2005), MyHammer (2005), Elance (2006)	Auctioning involves selling a product or service to the highest bidder. The final price is attained at a predetermined moment or when no higher bid has been received. This allows a company to sell at the highest price acceptable to customers. The customer benefits from the opportunity to exert an influence on the price of the product.

5	Barter	What Why	Procter & Gamble (1970), PepsiCo (1972), Lufthansa (1993), Magnolia Hotels (2007), Pay with a Tweet (2010)	Barter is a method of exchanging goods with no transfer of money. In the business context the customer provides something of value to the sponsoring organisation. The goods exchanged do not have to have a direct connection and are likely to be valued differently by each party.
6	Cash Machine	How Why	American Express (1891), Dell (1984), Amazon Store (1994), PayPal (1998), Blacksocks (1999), Myfab (2008), Groupon (2008)	According to the Cash Machine concept, the customer pays up-front for the products sold before the company has to cover the associated expenses. This results in increased liquidity that can be used to amortise debts or fund investments in other areas.
7	Cross-selling	What How Why	Shell (1930), IKEA (1956), Tchibo (1973), Aldi (1986), SANIFAIR (2003)	In this model, services or products from an outside business are added to the offerings, thus leveraging existing key skills and resources. In retail especially, companies can easily provide additional products and offerings that are not linked to their main focus. In this way more potential customer needs can be satisfied and additional revenue generated with relatively few changes to the existing infrastructure and assets.
8	Crowdfunding	How Why	Marillion (1997), Cassava Films (1998), Diaspora (2010), Brainpool (2011), Pebble Technology (2012)	A product, project or entire start-up is financed by a group of investors who wish to support the underlying idea, typically via the internet. If the critical mass is achieved, the idea will be realised and investors receive special benefits, usually proportionate to the amount of money they have provided.

<i>Model number</i>	<i>Pattern name</i>	<i>Affected BM components</i>	<i>Exemplary companies</i>	<i>Pattern description</i>
9	Crowdsourcing	How Why	Threadless (2000), Procter & Gamble (2001), InnoCentive (2001), Cisco (2007), Myfab (2008)	The solution to a task or problem is adopted by an anonymous crowd, typically via the Internet. Contributors receive a small reward or have a chance to win a prize if their solution is chosen for production or sale. Customer interaction and inclusion can foster a positive relationship with them and subsequently increase sales and revenue for the company.
10	Customer Loyalty	What Why	Sperry & Hutchinson (1897), American Airlines (1981), Safeway Club Card (1995), Payback (2000)	Customers are retained and loyalty assured by providing value over and above the actual product or service itself, for example through incentive-based programs. The goal is to enhance loyalty by creating an emotional connection or simply rewarding it with special offers. Customers are bound to the company voluntarily, and this protects future revenue.
11	Digitisation	What How	WXYC (1994), Hotmail (1996), Jones International University (1996), CEWE (1997), SurveyMonkey (1998), Napster (1999), Wikipedia (2001), Facebook (2004), Dropbox (2007), Netflix (2008), Next Issue Media (2011)	This pattern relies on the ability to turn existing products or services into digital versions of themselves, which thus offer advantages over tangible products, such as easier and more rapid distribution. Ideally, the digitisation of a product or service should not reduce the perceived customer value.

12	Direct Selling	What How Why	Vorwerk (1930), Tupperware (1946), Amway (1959), The Body Shop (1976), Dell (1984), Nestlé Nespresso (1986), First Direct (1989), Nestlé Special.T (2010), Dollar Shave Club (2012), Nestlé BabyNes (2012)	Direct Selling refers to a scenario whereby a company's products are not sold through an intermediary but are available directly from the manufacturer or service provider. In this way, the company avoids the retail margin or any additional costs associated with the middleman. These savings can be passed on to the customer. The pattern helps to establish a uniform distribution model and the direct contact enhances customer relationships.
13	E-commerce	What How Why	Dell (1984), Zappos (1999), Amazon Store (1995), Fiyeralarm (2002), Blacksocks (1999), Dollar Shave Club (2012), WineBid (1996), Asos (2000), Zopa (2005)	Traditional products or services are delivered through online channels only, thus removing costs associated with running a physical branch infrastructure. Customers benefit from greater availability and convenience, while the company is able to integrate its sales and distribution with other internal processes.
14	Experience Selling	What How Why	Harley-Davidson (1903), IKEA (1956), Trader Joe's (1958), Starbucks (1971), Swatch (1983), Nestlé Nespresso (1986), Red Bull (1987), Barnes & Noble (1993), Nestlé Special.T (2010)	The value of a product or service is increased by an additional customer experience offered with it. This opens the door to higher customer demand and a commensurate increase in the prices charged. The customer experience needs to be adapted accordingly, for example by appropriate promotion or additional shop fittings.

<i>Model number</i>	<i>Pattern name</i>	<i>Affected BM components</i>	<i>Exemplary companies</i>	<i>Pattern description</i>
15	Flat Rate	What Why	SBB (1898), Buckaroo Buffet (1946), Sandals Resorts (1981), Netflix (1999), Next Issue Media (2011)	In this model, a single fixed fee is charged for a product or service, regardless of actual usage. The user benefits from a simple cost structure while the company benefits from a constant revenue stream.
16	Fractional Ownership	What How Why Who	Hapimag (1963), NetJets (1964), Mobility Carsharing (1997), écurie25 (2005), HomeBuy (2009)	Fractional Ownership describes the sharing of a certain asset class among a group of owners. Typically, the asset is capital-intensive but is only required on an occasional basis. While the customer benefits from the owner rights, the entire capital does not have to be provided by him or her alone.
17	Franchising	What How Why	Singer Sewing Machine (1860), McDonald's (1948), Marriott International (1967), Starbucks (1971), Subway (1974), Fressnapf (1992), Natur House (1992), McFit (1997), BackWerk (2001)	The franchisor owns the brand name, products and corporate identity and licenses them to independent franchisees who bear the risk of local operations. Revenue is generated as part of the franchisees' revenue and orders. The benefit for the franchisee is in the marketing of well-known brands and the availability of know-how and support.

18	Freemium	What Why	Hotmail (1996), SurveyMonkey (1998), LinkedIn (2003), Skype (2003), Spotify (2006), Dropbox (2007)	The basic version of an item is offered for free in the hope of eventually persuading customers to purchase a premium version. The free offering attracts the highest volume of customers possible for the company, while revenue is generated by the (generally smaller) volume of premium customers.
19	From Push to Pull	What How	Toyota (1975), Zara (1975), Dell (1984), Geberit (2000)	This pattern describes the strategy of a company to decentralise and thus add flexibility to the company's processes in order to be more customer-focused. To respond rapidly and flexibly to new customer needs, any part of the value chain – including production or even research and development – may be affected.
20	Guaranteed Availability	What How Why	NetJets (1964), PHH Corporation (1986), IBM (1995), Hilti (2000), MachineryLink (2000), ABB Turbo Systems (2010)	This pattern makes the customer's needs central to decisions within the enterprise and the shaping of the value proposition. It can be applied to all aspects of the business.
21	Hidden Revenue	What How Why Who	JCDecaux (1964), Sat.1 (1984), Metro newspapers (1995), Google (1998), Facebook (2004), Spotify (2006), Zattoo (2007)	The logic that the income of the business depends on the users is abandoned. Instead, the main source of revenue comes from a third party, who cross-finances whatever free or low-priced offering attracts the users. A very common application of this model is financing through advertisements: the customers so attracted are of value to the advertisers, who then fund the offering. This concept facilitates the concept of separation of revenue and customer.

<i>Model number</i>	<i>Pattern name</i>	<i>Affected BM components</i>	<i>Exemplary companies</i>	<i>Pattern description</i>
22	Ingredient Branding	What How	DuPont Teflon (1964), W.L. Gore & Associates (1976), Intel (1991), Carl Zeiss (1995), Shimano (1995), Bosch (2000)	This is the inclusion of a branded ingredient originating from a different supplier into a product. The principal product is then advertised as containing the ingredient product and stressing the added value it brings to the customer. The positive association with the ingredient brand is projected on to the product and increases its attractiveness.
23	Integrator	Why How	Carnegie Steel (1870), Ford (1908), Zara (1975), BYD Auto (1995), Exxon Mobil (1999),	A company functioning on the Integrator model has command of the majority of the steps in the value-adding process, including all resources and capabilities in terms of value creation. Efficiency gains, economies of scope and reduced dependency on suppliers result in a decrease in costs and may increase the stability of value creation.
24	Layer Player	What How	Denemeyer (1962), Wipro Technologies (1980), TRUSTe (1997), PayPal (1998), Amazon Web Services (2002)	A Layer Player is a specialised company limited to providing one value-adding step to different value chains. This step is typically offered within a variety of independent markets and industries. The company benefits from economies of scale and often leads to more efficient production. Furthermore, the established special expertise can result in a higher quality process.
25	Leverage Customer Data	How Why	Amazon Store (1995), Google (1998), Payback (2000), Facebook (2004), PatientsLikeMe (2004), 23andMe (2006), Twitter (2006), Verizon Communications (2011)	New value is created by collecting customer data and preparing it in beneficial ways for internal usage or transmission to interested third parties. Revenues are generated by either selling the data directly to others or leveraging them for the company's own purposes, e.g. to increase the effectiveness of advertising.

26	Licensing	What How Why	Anheuser-Busch (1870), IBM (1920), DIC2 (1973), ARM (1989), Duales System Deutschland (1991), Max Havelaar (1992)	Here, the efforts are focused on developing intellectual property that can be licensed to other manufacturers. Thus this model relies not on the realisation and utilisation of knowledge in the form of creating products, but attempts to transform these intangible assets into money. Licensing gives a company the freedom to focus on research and development and allows the provision to third parties of knowledge that would otherwise be left unused.
27	Lock-in	How Why	Gillette (1904), Lego (1949), Microsoft (1975), Hewlett-Packard (1984), Nestlé Nespresso (1986), Nestlé Special.T (2010), Nestlé BabyNes (2012)	Here, customers are locked into a vendor's world of products and services. Transferring custom to another vendor is impossible without incurring substantial switching costs. The Lock-in is effected either by technological mechanisms or a high level of interdependencies of products or services.
28	Long Tail	What How Why	Amazon Store (1995), eBay (1995), Netflix (1999), Apple iPod/iTunes (2003), YouTube (2005),	Rather than concentration on blockbusters, the main bulk of revenues is generated through a 'long tail' of niche products which, individually, neither demand high volumes nor allow a high margin. If a wide variety of these products is offered in sufficient amounts, the profits from the resulting accumulated small sales can add up to a significant amount.
29	Make More of It	What How Why	Porsche (1931), Festo Didactic (1970), BASF (1998), Amazon Web Services (2002), Sennheiser Sound Academy (2009)	Know-how and other assets available in the company are not only used to build its own products, but are also offered to other companies. Thus slack resources are used to create additional revenue besides those generated directly by the company's core value proposition.

<i>Model number</i>	<i>Pattern name</i>	<i>Affected BM components</i>	<i>Exemplary companies</i>	<i>Pattern description</i>
30	Mass	What	Dell (1984), Levi's	Customising products through mass production once seemed to be an impossible endeavour, but this has now changed with the development of modular products and production systems that enable efficient individualisation of products. As a result, individual customer needs can be met under mass production conditions and at competitive prices.
	Customisation	How Why	(1990), Miadidas (2000), PersonalNOVEL (2003), Factory121 (2006), mymuesli (2007), My Unique Bag (2010)	
31	No Frills	What	Ford (1908), Aldi (1913),	No Frills value creation focuses on the necessary minimum to deliver the core value proposition of a product or service, which will thus typically be very basic. Cost savings are shared with the customer, usually resulting in a customer base with lower purchasing power or purchasing willingness.
		How	McDonald's (1948),	
		Why	Southwest Airlines	
		Who	(1971), Aravind Eye Care System (1976), Accorhotels (1985), McFIT (1997), Dow Corning (2002)	
32	Open Business	How	Valve Corporation	In Open Business models, collaboration with partners in the ecosystem becomes a central source of value creation. Companies pursuing an Open Business model actively search for novel ways of working together with suppliers, customers or complementors to open up and extend their business.
		Why	(1998), ABRIL Moda (2008)	
33	Open Source	What	IBM (1955), Mozilla	In Open Source software engineering, the source code of a software product is not proprietary, but is made freely accessible for anyone. Generally, this could be applied to any technological details of any product. Others can contribute to the product, but also use it freely as solely user. Money is typically earned with services that are complimentary to the product, such as consulting and support.
		How	(1992), Red Hat (1993),	
		Why	mondoBIOTECH (2000), Wikipedia (2001), Local Motors (2008)	

34	Orchestrator	How Why	Procter & Gamble (1970), Li & Fung (1971), Nike (1978), Airtel (1995)	In this model, the company's focus is on the core competencies within the value chain. The other segments of the value chain are outsourced and actively coordinated. This allows the company to reduce costs and to benefit from suppliers' economies of scale. The focus on core competencies can enhance performance.
35	Pay Per Use	What Why	Hot Choice (1988), Google (1998), Ally Financial (2004), Car2Go (2008)	In this model, the actual usage of a service or product is metered, that is to say, the customer pays on the basis of what is effectively consumed. In this way the company attracts customers who wish to benefit from the additional flexibility, which might be priced higher.
36	Pay What You Want	What Why	One World Everybody Eats (2003), NoiseTrade (2006), Radiohead (2007), Humble Bundle (2010), Panera Bread Bakery (2010)	The buyer pays any desired amount for a given commodity, sometimes even zero. In some cases, a minimum floor price may be set, and/or a suggested price may be indicated as guidance for the buyer. The attraction for the customer is the ability to influence the price, while the seller benefits from a larger number of customers.
37	Peer to Peer	What How Why	eBay (1995), Craigslist (1996), Napster (1999), Couchsurfing (2003), LinkedIn (2003), Skype (2003), Zopa (2005), SlideShare (2006), Twitter (2006), Dropbox (2007), Airbnb (2008), TaskRabbit (2008), RelayRides (2010), Gidsy (2011)	This model (often abbreviated as P2P) is based on a cooperation among individuals belonging to an homogeneous group. The organising company offers a meeting point, normally an online database and communication service, which connects these individuals. Examples of transactions are the offering of personal items for rent, provision of certain products or services, or the sharing of information and experiences.

<i>Model number</i>	<i>Pattern name</i>	<i>Affected BM components</i>	<i>Exemplary companies</i>	<i>Pattern description</i>
38	Performance-based Contracting	What How Why	Rolls-Royce (1980), Smartville (1997), BASF (1998), Xerox (2002)	The price of a product here is based not on its physical value, but on the performance or valuable outcome it delivers in the form of a service. Performance-based contractors are often strongly integrated into the value creation process of their customers. Special expertise and economies of scale result in lower production and maintenance costs, that can be passed on to the customer.
39	Razor and Blade	What How Why	Standard Oil Company (1870), Gillette (1904), Hewlett-Packard (1984), Nestlé Nespresso (1986), Apple iPod/iTunes (2003), Amazon Kindle (2007), Nestlé Special.T (2010), Nestlé BabyNes (2012)	The basic product is cheap or given away for free, while the consumables are expensive and sold at high margins. The price of the initial product lowers customers' barriers to purchase, while the subsequent recurring sales cross-finance it. Usually, these products are technologically bound to each other to anchor this effect more firmly.
40	Rent Instead of Buy	What Why	Saunders System (1916), Xerox (1959), Blockbuster (1985), Rent a Bike (1987), Mobility Carsharing (1997), MachineryLink (2000), CWS-boco (2001), Luxusgabe (2006), FlexPetz (2007), Car2Go (2008)	Here, instead of buying a product, the customer rents it. This reduces the capital typically needed to gain access to the product. The company itself benefits from higher profits on each product, as it is paid for the duration of the rental period. Both parties benefit from greater efficiency in product utilisation, given that time of non-usage, which unnecessarily ties capital down, is reduced.

41	Revenue Sharing	What Why	CDnow (1994), HubPages (2006), Apple iPhone/App Store (2008), Groupon (2008)	Revenue Sharing refers to the practice of sharing revenues with one's stakeholders, such as complementors or even rivals. One party obtains a share of the revenue from another that benefits from the increased value of its customer base.
42	Reverse Engineering	What How Why	Bayer (1997), Pelikan (1994), Brilliance China Auto (2003), Denner (2010)	This pattern refers to obtaining a competitor's product, taking it apart and using the information obtained to produce a similar or compatible product. Because no great investment in research or development is necessary, these products can be offered at a lower price than the original one.
43	Reverse Innovation	What How	Logitech (1981), Haier (1999), Nokia (2003), Renault (2004), General Electric (2007)	Simple inexpensive products that have been developed within and for emerging markets are also sold in industrial countries. The adjective 'reverse' here refers to the difference from the usual process whereby new products are developed in industrial countries and adapted to fit emerging market needs.
44	Robin Hood	What Why Who	Aravind Eye Care System (1976), One Laptop per Child (2005), TOMS Shoes (2006), Warby Parker (2008)	The same product or service is made available to 'the rich' at a much higher price than to 'the poor', so that the bulk of the profits are generated from the wealthy customer base. While serving 'the poor' is not profitable per se, it creates economies of scale that other providers cannot achieve. Additionally, it has a positive effect on the company's image.
45	Self-service	What How Why	McDonald's (1948), IKEA (1956), Accorhotels (1985), Mobility Carsharing (1997), BackWerk (2001), Car2Go (2008)	Part of the value creation of the service or product is transferred to the customer in exchange for a lower price. This is particularly suited for process steps that add relatively little perceived value for the customer, but in fact incur high costs. Customers benefit from efficiency and time savings. Efficiency may even be increased, as in some cases the customer is able to execute a value-adding step more quickly and in a more target-oriented manner than the company.

<i>Model number</i>	<i>Pattern name</i>	<i>Affected BM components</i>	<i>Exemplary companies</i>	<i>Pattern description</i>
46	Shop in Shop	What How Why	Tim Hortons (1964), Tchibo (1987), Deutsche Post (1995), Bosch (2000), MinuteClinic (2000)	Instead of opening new branches, the company finds a partner whose branches can profit from integrating its offerings, resulting in effect in a small shop within another shop (a win-win situation). The hosting store can benefit from a larger number of customers and a constant revenue in the form of rent, while the hosted company gains access to cheaper resources such as space, location or workforce.
47	Solution Provider	What How Why	Lantal Textiles (1954), Heidelberger Druckmaschinen (1980), Tetra Pak (1993), Geek Squad (1994), CWS-boco (2001), Apple iPod/iTunes (2003), 3M Services (2010)	A Solution Provider offers comprehensive coverage of products and services in a particular domain, consolidated at a single point of contact. Special know-how is provided for the customer to increase efficiency and performance. As a Solution Provider, a company can prevent revenue losses by extending the service it provides and so add value to the product. Additionally, close contact with the customer allows greater insight into customers' habits and needs, which can be used to improve the products and services.
48	Subscription	What Why	Blacksocks (1999), Netflix (1999), Salesforce (1999), Jamba (2004), Spotify (2006), Next Issue Media (2011), Dollar Shave Club (2012)	The customer pays a regular fee, typically on a monthly or annual basis, to gain access to a product or service. While customers mostly benefit from lower usage costs and general service availability, the company generates a more steady income stream.

49	Supermarket	What How Why	King Kullen Grocery Company (1930), Merrill Lynch (1930), Toys R Us (1948), The Home Depot (1978), Best Buy (1983), Fressnapf (1985), Staples (1986)	A company sells a large variety of readily available products and accessories under one roof. Generally, the assortment of products is large but the prices are kept low. More customers are attracted to the wide range of goods on offer, while economies of scope yield advantages for the company.
50	Target the Poor	What How Why Who	Grameen Bank (1983), Arvind (1995), Airtel (1995), Hindustan Unilever (2000), Tata Nano (2009), Wal-Mart (2012)	Here, the product or service offered targets the customer positioned at the base of the pyramid rather than the premium customer. The customers with lower purchasing power benefit from affordable products. While the company generates small profits with each product sold, it benefits from the higher sales numbers usually associated with the scale of the customer base.
51	Trash to Cash	What How Why	Dual System Germany (1991), Freitag lab. ag (1993), Greenwire (2001), Emeco (2010), H&M (2012)	Used products are collected and either sold in other parts of the world or transformed into new products. The profit scheme is essentially based on low-to-no purchase prices. Resource costs for the company are practically eliminated, while the supplier's waste disposal is either provided free of charge or with reduced associated costs. This pattern also addresses customers' potential environmental awareness ideals.

<i>Model number</i>	<i>Pattern name</i>	<i>Affected BM components</i>	<i>Exemplary companies</i>	<i>Pattern description</i>
52	Two-sided Market	What How Why	Diners Club (1950), JCDecaux (1964), Sat.1 (1984), Amazon Store (1995), eBay (1995), Metro Newspapers (1995), Priceline (1997), Google (1998), Facebook (2004), MyHammer (2005), Elance (2006), Zattoo (2007), Groupon (2008)	A Two-sided Market facilitates interactions between multiple interdependent groups of customers. The value of the platform increases as more groups or individual members of each group use it. The two sides frequently come from disparate groups, for example businesses on the one hand and private interest groups on the other.
53	Ultimate Luxury	What How Why Who	Lamborghini (1962), Jumeirah Group (1994), Mir Corporation (2000), The World (2002), Abbot Downing (2011)	This pattern describes the strategy of a company that concentrates on the upper end of society's pyramid, whereby it can distinguish its products or services strongly from others. High standards of quality or exclusive privileges are the main focus to attract this kind of customers. The investments necessary to achieve differentiations are met by the relatively high prices that can be charged and which generally allow very high margins.

54 User Design What In this pattern, the customer is both the manufacturer and the consumer.
 How As an example, an online platform provides the customer with the
 Why necessary support to design and merchandise the product, e.g. product
 design software, manufacturing services, or an online shop to sell the
 product. Thus, the company function is limited to supporting its customers
 in their undertakings and so benefits from their creativity. The customer
 benefits from the opportunity to realise entrepreneurial ideas without having
 to establish the necessary infrastructure. Revenue is then generated by the
 actual sales.

55 White Label What A White Label producer allows other companies to distribute its goods
 How under their brand name, which thus appear to be made by them. The
 same product or service is often sold by multiple marketers under different
 brands. In this way various customer segments can be satisfied with the
 same product.

Glossary

For the efficient conduct of business model innovation projects it is essential that all participants should be on the same page. This includes having the same understanding of the core concepts and the constructs used in business model innovation. Here is a brief explanation of the most important terms for your reference:

Analogical thinking Analogical thinking involves using seemingly unrelated knowledge to solve a specific problem. Doing so often brings entirely new solutions to light.

Blue oceans Uncontested market space that first needs to be accessed. While they do not yet exist, blue oceans are very appealing and have the potential to unlock new demand.

Brainwriting A group creativity technique similar to brainstorming, where in the first stage participants work individually, writing down their ideas.

Business ecosystem All the relevant players in the value creation process (customers, partners, competitors), the relationships between them and influencing forces such as technologies, trends and regulatory changes. A company is both affected by its ecosystem and actively affects it.

Business model A business model defines what customers are addressed, what is made available for purchase, how products and services are created and how profits are generated. These four dimensions – who-what-how-why – then define the business model.

Business model innovation For a true business model innovation to be effected, at least two of the four business model dimensions (who-what-how-why) have to be reconfigured. Successful business model innovation ‘creates value and captures value’ for a company.

Business Model Navigator The Business Model Navigator is a comprehensive business model innovation tool developed at the University of St Gallen. At the core of the Navigator methodology is creative imitation of existing business models in different industries. The Navigator has been developed on the basis of empirical studies of several hundred business models and practical applications in a large number of companies.

Confrontation principle In line with the confrontation principle, new business models are examined by intentionally confronting extreme options. In this process, a company’s current business model is set against business model scenarios found in unrelated industries.

Convergent thinking The reduction of a wide range of possible solutions to a few promising options.

Design thinking A method developed at Stanford University, design

thinking refers to a series of processes for the development of highly creative products inspired by the phases of the design process: understand-create-deliver.

- Disruptive innovation** A radical innovation that makes an existing technology, product or service obsolete.
- Divergent thinking** Exploration of the widest possible variety of solutions.
- Dominant industry logic** Each industry follows certain specific rules that are defined by the competitive environment and existing value chains.
- Go-to-market approach** Channels used to bring your products and services to your customers.
- Hidden champion** A small company that is the global leader in its market niche, but is relatively unknown beyond its limited sphere.
- NABC approach** 'Need, Approach, Benefits, Competition', a concept often used by venture capitalists. In the business model context, possible business models are analysed against these four dimensions.
- Network effects** It has been established that the value of a network increases as the number of users within it increases. With this it becomes more attractive and the number of users grows exponentially.
- New economy** Those sectors of the economy that deal, in particular, in web-based services. The value of goods here derives not from their scarcity, but from the potential inherent in their wide dissemination.
- NIH syndrome** The 'not invented here' syndrome, a phenomenon whereby individuals or even whole companies refuse to accept knowledge generated elsewhere.
- Old economy** The traditional sectors of the economy where the price of goods is determined by scarcity.
- Orthodoxy** A shared set of beliefs that influence the assumptions upon which we base our actions.
- Pattern adaptation** The application of interesting business models to one's own business model such that entirely new ideas for it come to light.
- Porter's Five Forces** A tool for market analysis, the chief goal is to analyse one's industry in great detail and use the findings to achieve a competitive advantage by improving one's positioning. The criteria considered are competitors, customers, substitute products, suppliers and the intensity of competition within the industry.
- Red oceans** Existing markets and industries which are relatively unattractive, highly competitive, offering small margins.
- Revenue-generating mechanism** The rationale of what makes a business model financially sound. It includes delineations of the cost structure and sources of revenue. This dimension is designed to answer the most central question for every company: How do we generate a profit?
- Similarity principle** An approach to business model pattern adaptation, going from the inside out. The adaptation process is begun by looking at the business models found in closely related industries and then considering an ever wider range of industries. The patterns found are then adapted to one's own business model.

Social media Digital technologies through which users can exchange information via online platforms and cooperate on projects, for example.

Social network The connection of a number of individuals by way of an online platform.

Switching costs The costs that may be incurred when customers switch to a new provider or supplier.

TRIZ The Russian acronym for the ‘theory of inventive problem solving’ (*teoriya resheniya izobretatelskikh zadatch*). An analysis of approximately 40,000 patents showed that technical contradictions as they occurred in various industries can be solved with the use of a limited number of elementary principles. This research resulted in the creation of one of the most well-known and intuitive TRIZ tools for technical problem solving: the 40 innovative principles.

Value chain A description of all the processes and activities carried out by a business and the resources and capabilities involved.

Value proposition All the company’s products and services that create value for customers.

Further reading

Should you be interested in reading more about business models, we can recommend the following literature. As mentioned before, practitioners will find our most recent publications and some helpful tools on our homepage www.bmi-lab.ch. The list below includes practitioner-oriented texts and academic literature, classified by business model pattern. We hope they serve as a useful starting point for more in-depth study of the subject.

Add-on/No Frills

- Casadesus-Masanell, R., Ricart, J. E. (2011). How to design a winning business model. *Harvard Business Review*, 89(1/2), 100–107.
- Casadesus-Masanell, R., Tarziján, J. (2012). When one business model isn't enough. *Harvard Business Review*, 90(1/2), 132–137.
- Iveroth, E., Westelius, A., Petri, C., Olve, N., Cöster, M., Nilsson, F. (2012). How to differentiate by price: Proposal for a five-dimensional model. *European Management Journal*, 31(2), 109–123.
- Johnson, M. W. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2/3), 172–194.

Affiliation

- Akçura, M. (2010). Affiliated marketing. *Information Systems and E-Business Management*, 8(4), 379–394.
- Birkner, C. (2012). The ABCs of affiliate marketing. *Marketing News*, 46(10), 6.
- Duffy, D. L. (2005). Affiliate marketing and its impact on e-commerce. *Journal of Consumer Marketing*, 22(3), 161–163.
- Evans, P., Wurster, T. S. (1999). *Blown to Bits: How the New Economics of Information Transforms Strategy*. Boston, MA: Harvard Business Press.
- Goldschmidt, S., Junghagen, S., Harris, U. (2003). *Strategic Affiliate Marketing*. Cheltenham, UK: Edward Elgar Publishing.

Aikido

- Cotter, M. J., Henley, J. A. (1997). The philosophy and practice of Aikido: Implications for defensive marketing. *SAM Advanced Management Journal*, 62(1), 14.
- Pelham, A. M. (1997). Eastern and Western business tactics. *Journal of East–West Business*, 3(3), 45–65.
- Pino, R. (1999). *Corporate Aikido: Unleash the Potential Within Your Company to Neutralize Competition and Seize Growth*. New York, NY: McGraw-Hill.

Auction

- Dubosson-Torbay, M., Osterwalder, A., Pigneur, Y. (2002). E-business model design, classification and measurements. *Thunderbird International Business Review*, 44(1), 5–23.
- Magretta, J. (2002). Why business models matter. *Harvard Business Review*, 80(5), 86–92.
- Porter, M. E. (2001). Strategy and the Internet. *Harvard Business Review*, 79(3), 62–78.
- Shin, J., Park, Y. (2009). On the creation and evaluation of e-business model variants: The case of auction. *Industrial Marketing Management*, 38(3), 324–337.
- Timmers, P. (1998). Business models for electronic markets. *Electronic Markets*, 8(2), 3–8.

Barter

- Marsden, P. (2011). eBranding and social commerce. In E. Theobald, P. T. Haisch (eds), *Brand Evolution: Moderne Markenführung im digitalen Zeitalter* (pp. 357–372). Wiesbaden: Gabler Verlag.
- McGrath, R. G. (2010). Business models: A discovery driven approach, *Long Range Planning*, 43(2/3), 247–261.
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2/3), 172–194.

Cash Machine

- García-Teruel, P. J., Martínez-Solano, P. (2007). Effects of working capital management on SME profitability. *International Journal of Managerial Finance*, 3(2), 164–177.
- Johnson, R., Soenen, L. (2003). Indicators of successful companies. *European Management Journal*, 21(3), 364–369.
- Jose, M. L., Lancaster, C., Stevens, J. L. (1996). Corporate returns and cash conversion cycles. *Journal of Economics & Finance*, 20(1), 33–46.
- Kumar, S., Eidem, J., Perdomo, D. N. (2012). Clash of the e-commerce titans: A new paradigm for consumer purchase process improvement. *International Journal of Productivity and Performance Management*, 61(7), 805–830.

Cross-selling

- Akçura, M., Srinivasan, K. (2005). Customer intimacy and cross-selling strategy. *Management Science*, 51(6), 1007–1012.
- Li, S., Sun, B., Montgomery, A. (2011). Cross-selling the right product to the right customer at the right time. *Journal of Marketing Research*, 48(4), 683–700.
- Malms, O. (2012). *Realizing Cross-Selling Potential in Business-to-Business Markets* (Doctoral dissertation). Available from unisg EDIS (No. 3968).
- Malms, O., Schmitz, C. (2011). Cross-divisional orientation: Antecedents and effects on cross-selling success. *Journal of Business-to-Business Marketing*, 18(3), 253–275.
- Shah, D., Kumar, V. V. (2012). The dark side of cross-selling. *Harvard Business Review*, 90(12), 21–23.

Crowdfunding

- Gobble, M. M. (2012). Everyone is a venture capitalist: The new age of crowdfunding. *Research Technology Management*, 55(4), 4–7.
- Hemer, J. (2011). *A Snapshot on Crowdfunding* (Working Papers Firms and Region No. R2/2011). Karlsruhe: Fraunhofer Institute for Systems and Innovation Research (ISI).

Ordanini, A., Miceli, L., Pizzetti, M., Parasuraman, A. (2011). Crowdfunding: Transforming customers into investors through innovative service platforms. *Journal of Service Management*, 22(4), 443–470.

Crowdsourcing

Howe, J. (2008). *Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business*. London, UK: Random House Business.

Leimeister, J. (2013). Crowdsourcing: Crowdfunding, crowdvoting, crowdcreation. *Zeitschrift für Controlling und Management*, 56(6), 388–392.

Marjanovic, S., Fry, C., Chataway, J. (2006). Crowdsourcing based business models: In search of evidence for innovation 2.0. *Science and Public Policy*, 39(3), 318–332.

Customer Loyalty

Batra, R., Ahuvia, A., Bagozzi, R. (2012). Brand love. *Journal of Marketing*, 76(2), 1–16.

Duboff, R., Gilligan, S. (2012). The experience of loyalty. *Marketing Management*, 21(4), 16–21.

Griffin, J. (1995). *Customer Loyalty: How to Earn It, How to Keep It*. New York, NY: Lexington.

Reichheld, F. F. (1993). Loyalty-based management. *Harvard Business Review*, 71(2), 64–73.

Reinartz, W., Kumar, V. V. (2002). The mismanagement of customer loyalty. *Harvard Business Review*, 80(7), 86–94.

Digitisation

Bomsel, O., Le Blanc, G. (2004). Digitalization, innovation and industrial organisation: The pivotal case of the auto industry. *International Journal of Electronic Business*, 2(2), 193–204.

Grover, V., Ramanlal, P. (2004). Digital economics and the e-business dilemma. *Business Horizons*, 47(4), 71–80.

Hass, B. (2005). Disintegration and reintegration in the media sector: How business models are changing on account of digitalisation. In A. Zerdick, K. Schrape, J.-C. Burgelmann, R. Silverstone, V. Feldmann, C. Wernick, C. Wolff (eds), *E-Merging Media: Communication and the Media Economy of the Future*. New York, NY: Springer.

Jarach, D. (2002). The digitalization of market relationships in the airline business: The impact and prospects of e-business. *Journal of Air Transport Management*, 8(2), 115–120.

Direct Selling

Dutta, S., Segev, A. (1999). Business transformation on the Internet. *European Management Journal*, 17(5), 466–476.

Johnson, M. W., Christensen, C. M., Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review*, 86(12), 50–59.

Kim, W., Mauborgne, R. (2000). Knowing a winning business idea when you see one. *Harvard Business Review*, 78(5), 129–138.

Kopczak, L., Johnson, M. (2003). The supply-chain management effect. *MIT Sloan Management Review*, 44(3), 27–34.

Kraemer, K. L., Dedrick, J., Yamashiro, S. (2000). Refining and extending the business model with information technology: Dell Computer Corporation. *Information Society*, 16(1), 5–21.

Magretta, J. (2002). Why business models matter. *Harvard Business Review*, 80(5), 86–92.

Morris, M., Schindehutte, M., Allen, J. (2005). The entrepreneur's business model: Toward a unified perspective. *Journal of Business Research*, 58(6), 726–735.

- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2/3), 172–194.
- Weill, P., Vitale, M. R. (2001). *Place to Space: Migrating to eBusiness Models*. Boston, MA: Harvard Business School Press.

E-commerce

- Amit, R., Zott, C. (2001). Value creation in e-business. *Strategic Management Journal*, 22(6/7), 493–520.
- Amit, R., Zott, C., Center, E. A. (2002). Value drivers of e-commerce business models. In M. A. Hitt, R. Amit, C. E. Lucier, R. D. Nixon (eds). *Creating Value: Winners in the New Business Environment*. Oxford, UK: Wiley-Blackwell.
- De Figueiredo, J. M. (2000). Finding sustainable profitability in electronic commerce. *MIT Sloan Management Review*, 41(4), 41–54.
- Dubosson-Torbay, M., Osterwalder, A., Pigneur, Y. (2002). E-business model design, classification and measurements. *Thunderbird International Business Review*, 44(1), 5–23.
- Mahadevan, B. B. (2000). Business models for Internet-based e-commerce: An anatomy. *California Management Review*, 42(4), 55–69.
- Turban, E., King, D., Lee, J., Liang, T.-P., Turban, D. C. (2010). *Electronic Commerce 2010: A Managerial Perspective*. Upper Saddle River, NJ: Pearson Prentice Hall.

Experience Selling

- Pine, I., Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97–105.
- Pine, I., Gilmore, J. H. (2011). *The Experience Economy*. Boston, MA: Harvard Business Press.
- Poulsson, S. H., Kale, S. H. (2004). The experience economy and commercial experiences. *Marketing Review*, 4(3), 267–277.
- Sundbo, J. (2008). *Creating Experiences in the Experience Economy*. New York, NY: Edward Elgar Publishing.

Flat Rate

- Amberg, M., Schröder, M. (2007). E-business models and consumer expectations for digital audio distribution. *Journal of Enterprise Information Management*, 20(3), 291–303.
- Coursaris, C., Hassanein, K. (2002). Understanding m-commerce: A consumer-centric model. *Quarterly Journal of Electronic Commerce*, 3(3), 247–271.
- Kling, R., Huffman, D. L., Novak, T. P. (1997). A new marketing paradigm for electronic commerce. *Information Society*, 13(1), 43–54.
- Yuan, Y. Y., Zhang, J. J. (2003). Towards an appropriate business model for m-commerce. *International Journal of Mobile Communications*, 1(1/2), 35–56.

Fractional Ownership

- Esler, D. (2009). Looming cost burdens of aircraft ownership. *Business & Commercial Aviation Magazine*, 105(2), 32–39.
- Linder, J. C., Cantrell, S. (2001). Five business-model myths that hold companies back. *Strategy & Leadership*, 29(6), 13–18.
- Septiani, R. D., Pasaribu, H. M., Soewono, E. E., Fayalita, R. A. (2012). Optimization in fractional aircraft ownership. *AIP Conference Proceedings*, 1450(1), 234–240.

- Sinfield, J., Calder, E., McConnell, B., Colson, S. (2012). How to identify new business models. *MIT Sloan Management Review*, 53(2), 85–90.
- Srinivas, P., Alexander, P., Dan, D. (2008). Stated preference analysis of a new very light jet based on-demand air service. *Transportation Research Part A: Policy and Practice*, 42(4), 629–645.

Franchising

- Baden-Fuller, C., Morgan, M. S. (2010). Business models as models. *Long Range Planning*, 43(2/3), 156–171.
- Gillis, W., Castrogiovanni, G. J. (2012). The franchising business model: An entrepreneurial growth alternative. *International Entrepreneurship and Management Journal*, 8(1), 75–98.
- Kavaliauskė, M., Vaiginienė, E. (2011). Franchise business development model: Theoretical considerations. *Business: Theory & Practice*, 12(4), 323–331.
- Michael, S. C. (2003). First mover advantage through franchising. *Journal of Business Venturing*, 18(1), 61–80.
- Zott, C., Amit, R. (2010). Business model design: An activity system perspective. *Long Range Planning*, 43(2/3), 216–226.

Freemium

- Anderson, C. (2009). *Free: How Today's Smartest Businesses Profit By Giving Something For Nothing*. London, UK: Random House.
- Enders, A., Hungenberg, H., Denker, H., Mauch, S. (2008). The long tail of social networking: Revenue models of social networking sites. *European Management Journal*, 26(3), 199–211.
- Johnson, M. W. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.
- McGrath, R. G. (2010). Business models: A discovery driven approach. *Long Range Planning*, 43(2/3), 247–261.
- Osterwalder, A., Pigneur, Y. (2009). *Business Model Generation – A Handbook for Visionaries, Game Changers and Challengers*. Amsterdam: Osterwalder & Pigneur.
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2/3), 172–194.

From Push to Pull

- Baloglu, S. S., Uysal, M. M. (1996). Market segments of push and pull motivations: A canonical correlation approach. *International Journal of Contemporary Hospitality Management*, 8(3), 32–38.
- Brown, J. (2005). The next frontier of innovation. *McKinsey Quarterly*, 3, 82–91.
- Walters, D. (2006). Effectiveness and efficiency: The role of demand chain management. *International Journal of Logistics Management*, 17(1), 75–94.
- Weaver, R. D. (2008). Collaborative pull innovation: Origins and adoption in the new economy. *Agribusiness*, 24(3), 388–402.

Guaranteed Availability

- Johnson, M. W. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.
- Johnson, M. W., Christensen, C. M., Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review*, 86(12), 50–59.

Leavy, B. (2010). A system for innovating business models for breakaway growth. *Strategy & Leadership*, 38(6), 5–15.

Hidden Revenue

- Afuah, A., Tucci, C. (2003). *Internet Business Models and Strategies*. Boston, MA: McGraw-Hill.
- Amit, R., Zott, C. (2001). Value creation in e-business. *Strategic Management Journal*, 22(6/7), 493–520.
- Anderson, C. (2009). *Free: How Today's Smartest Businesses Profit By Giving Something For Nothing*. London, UK: Random House.
- Casadesus-Masanell, R., Zhu, F. (2010). Strategies to fight ad-sponsored rivals. *Management Science*, 56(9), 1484–1499.
- Dubosson-Torbay, M., Osterwalder, A., Pigneur, Y. (2002). E-business model design, classification and measurements. *Thunderbird International Business Review*, 44(1), 5–23.
- Enders, A., Hungenberg, H., Denker, H., Mauch, S. (2008). The long tail of social networking: Revenue models of social networking sites. *European Management Journal*, 26(3), 199–211.
- McGrath, R. G. (2010). Business models: A discovery driven approach, *Long Range Planning*, 43(2/3), 247–261.
- Rappa, M. A. (2004). The utility business model and the future of computing services. *IBM Systems Journal*, 43(1), 32–42.
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2/3), 172–194.

Ingredient Branding

- Boudreau, K. J., Lakhani, K. R. (2009). How to manage outside innovation. *MIT Sloan Management Review*, 50(4), 69–76.
- Carter, S. (2000). Co-branding: The science of alliance. *Journal of Marketing Management*, 16(1–3), 294–296.
- Ehret, M. (2004). Managing the trade-off between relationships and value networks: Towards a value-based approach of customer relationship management in business-to-business markets. *Industrial Marketing Management*, 33(6), 465–473.
- Kotler, P., Pfoertsch, W. (2010). *Ingredient Branding: Making the Invisible Visible*. New York, NY: Springer.
- Leuthesser, L., Kohli, C., Suri, R. (2003). Academic papers 2 + 2 = 5? A framework for using co-branding to leverage a brand. *Journal of Brand Management*, 11(1), 35.
- Linder, C., Seidenstricker, S. (2012). Pushing new technologies through business model innovation. *International Journal of Technology Marketing*, 7(3), 231–241.
- Norris, D. G. (1993). Intel inside: Branding a component in a business market. *Journal of Business and Industrial Marketing*, 8(1), 14–24.
- Srinivasan, R. (2008). Sources, characteristics and effects of emerging technologies: Research opportunities in innovation. *Industrial Marketing Management*, 37(6), 633–640.

Integrator

- Boudreau, K. J., Lakhani, K. R. (2009). How to manage outside innovation. *MIT Sloan Management Review*, 50(4), 69–76.
- Casadesus-Masanell, R., Ricart, J. E. (2007). Competing through business models (Working paper No. 713). Barcelona: IESE Business School.

- Ghemawat, P., Luis Nueno, J. (2003). Zara: Fast fashion (Case study No. 9-703-497). Cambridge, MA: Harvard Business School.
- Giesen, E., Berman, S. J., Bell, R., Blitz, A. (2007). Three ways to successfully innovate your business model. *Strategy & Leadership*, 35(6), 27–33.
- Hedman, J. (2003). The business model concept: Theoretical underpinnings and empirical illustrations. *European Journal of Information Systems*, 12(1), 49–59.
- Markides C. C., Anderson, J. (2006). Creativity is not enough: ICT-enabled strategic innovation. *European Journal of Innovation Management*, 9(2), 129–148.
- Sorescu, A., Frambach, R. T., Singh, J., Rangaswamy, A., Bridges, C. (2011). Innovations in retail business models. *Journal of Retailing*, 87(1), 3–16.
- Zott, C., Amit, R. (2010). Business model design: An activity system perspective. *Long Range Planning*, 43(2/3), 216–226.

Layer Player

- Sabatier, V., Mangematin, V., Rousselle, T. (2010). From recipe to dinner: Business model portfolios in the European biopharmaceutical industry. *Long Range Planning*, 43(2/3), 431–447.
- Schoettl, J., Lehman-Ortega, K. (2011). Photovoltaic business models: Threat or opportunity for utilities? In R. Wüstenhagen, R. Wuebker (eds), *Handbook of Research on Energy Entrepreneurship*. Cheltenham, UK: Edward Elgar Publishing.
- Schweizer, L. (2005). Concept and evolution of business models. *Journal of General Management*, 31(2), 37–56.

Leverage Customer Data

- Afuah, A., Tucci, C. (2001). *Internet Business Models and Strategies: Text and Cases*. Boston, MA: McGraw-Hill Irwin.
- Rappa, M. A. (2004). The utility business model and the future of computing services. *IBM Systems Journal*, 43(1), 32–42.
- Wirtz, B. W., Schilke, O., Ullrich, S. (2010). Strategic development of business models: Implications of the Web 2.0 for creating value on the Internet. *Long Range Planning*, 43(2/3), 272–290.

Licensing

- Cesaroni, F. (2003). Technology strategies in the knowledge economy: The licensing activity of Himont. *International Journal of Innovation Management*, 7(2), 223–245.
- Chesbrough, H. (2007). Business model innovation: It's not just about technology anymore. *Strategy & Leadership*, 35(6), 12–17.
- Chesbrough, H. (2010). Business model innovation: Opportunities and barriers. *Long Range Planning*, 43(2/3), 354–363.
- Gambardella, A., McGahan, A. M. (2010). Business-model innovation: General purpose technologies and their implications for industry structure. *Long Range Planning*, 43(2/3), 262–271.
- Garnsey, E., Lorenzoni, G., Ferriani, S. (2008). Speciation through entrepreneurial spin-off: The Acorn-ARM story. *Research Policy*, 37(2), 210–224.
- Huston, L., Sakkab, N. (2006). Connect and develop. *Harvard Business Review*, 84(3), 58–66.
- Rappa, M. A. (2004). The utility business model and the future of computing services. *IBM Systems Journal*, 43(1), 32–42.

Lock-in/Razor and Blade

- Amit, R., Zott, C. (2012). Creating value through business model innovation. *MIT Sloan Management Review*, 53(3), 41–49.
- Bowonder, B. B., Dambal, A., Kumar, S., Shirodkar, A. (2010). Innovation strategies for creating competitive advantage. *Research Technology Management*, 53(3), 19–32.
- Giesen, E., Berman, S. J., Bell, R., Blitz, A. (2007). Three ways to successfully innovate your business model. *Strategy & Leadership*, 35(6), 27–33.
- Johnson, M. W. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.
- Johnson, M. W., Christensen, C. M., Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review*, 86(12), 50–59.
- McGrath, R. G. (2010). Business models: A discovery driven approach. *Long Range Planning*, 43(2/3), 247–261.
- Osterwalder, A., Pigneur, Y. (2009). *Business Model Generation – A Handbook for Visionaries, Game Changers and Challengers*. Amsterdam: Osterwalder & Pigneur.
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2/3), 172–194.

Long Tail

- Anderson, C. (2006). *The Long Tail: Why the Future of Business Is Selling Less of More*, New York, NY: Hyperion.
- Brynjolfsson, E., Hu, Y. J., Smith, M. D. (2006). From niches to riches: Anatomy of the long tail. *MIT Sloan Management Review*, 47(4), 67–71.
- Elberse, A. (2008). Should you invest in the long tail? *Harvard Business Review*, 86(7/8), 1–9.
- Enders, A., Hungenberg, H., Denker, H., Mauch, S. (2008). The long tail of social networking: Revenue models of social networking sites. *European Management Journal*, 26(3), 199–211.
- Gladwell, M. (2000). *The Tipping Point: How Little Things Can Make a Big Difference*. Boston, MA: Little, Brown and Company.
- Johnson, M. W. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.
- Osterwalder, A., Pigneur, Y. (2009). *Business Model Generation – A Handbook for Visionaries, Game Changers and Challengers*. Amsterdam: Osterwalder & Pigneur.

Make More of It

- Isckia, T. (2009). Amazon's evolving ecosystem: A cyber-bookstore and application service provider. *Canadian Journal of Administrative Sciences*, 26(4), 332–343.
- Marston, S. (2011). Cloud computing — The business perspective. *Decision Support Systems*, 51(1), 176–189.

Mass Customisation

- Bullinger, H. J., Schweizer, W. W. (2006). Intelligent production-competition strategies for producing enterprises. *International Journal of Production Research*, 44(18/19), 3575–3584.
- Choi, D., Valikangas, L. (2001). Patterns of strategy innovation. *European Management Journal*, 19(4), 424–429.
- Fisher, M. L. (1997). What is the right supply chain for your product? *Harvard Business Review*, 75(2), 105–116.

- Fogliatto, F. S., da Silveira, G. C., Borenstein, D. (2012). The mass customization decade: An updated review of the literature. *International Journal of Production Economics*, 138(1), 14–25.
- Morris, M., Schindehutte, M., Allen, J. (2005). The entrepreneur's business model: Toward a unified perspective. *Journal of Business Research*, 58(6), 726–735.
- Piller, F. T., Moeslein, K., Stotko, C. M. (2004). Does mass customization pay? An economic approach to evaluate customer integration. *Production Planning & Control*, 15(4), 435–444.
- Pine, I., Buddy, J. (1993). *Mass Customization*. Boston, MA: Harvard Business Press.
- Ramaswamy, V., Gouillart, F. (2010). Building the co-creative enterprise. *Harvard Business Review*, 88(10), 100–109.

No Frills

See Add-on.

Open Business

- Busarovs, A. (2011). Crowdsourcing as user-driven innovation, new business philosophy's model. *Journal of Business Management*, 4, 53–60.
- Chesbrough, H. W. (2007). Why companies should have open business models. *MIT Sloan Management Review*, 48(2), 22–28.
- Gassmann, O., Enkel, E., Chesbrough, H. (2010). The future of open innovation. *R&D Management*, 40(3), 213–221.
- Huston, L., Sakkab, N. (2006). Connect and develop. *Harvard Business Review*, 84(3), 58–66.
- Idelchik, M., Kogan, S. (2012). GE's open collaboration model. *Research Technology Management*, 55(4), 28–31.
- Pisano, G. P., Verganti, R. (2008). Which kind of collaboration is right for you? *Harvard Business Review*, 86(12), 78–86.

Open Source

- Bonaccorsi, A., Rossi, C. (2003). Why open source software can succeed. *Research Policy*, 32(7), 1243–1258.
- Chesbrough, H. W., Vanhaverbeke, W., West, J. (2006). *Open Innovation: Researching a New Paradigm*. Oxford, UK: Oxford University Press.
- Gassmann, O., Enkel, E., Chesbrough, H. (2010). The future of open innovation. *R&D Management*, 40(3), 213–221.
- Goldman, R., Gabriel, R. P. (2005). *Innovation Happens Elsewhere: Open Source as Business Strategy*. San Francisco, CA: Morgan Kaufman Publishers.
- O'Reilly, T. (2007). What is Web 2.0: Design patterns and business models for the next generation of software. *Communications & Strategies*, 1, 17–37.
- Weber, S. (2004). *The Success of Open Source*. Boston, MA: Harvard University Press.

Orchestrator

- Fung, V. K., Fung, W. K., Wind, Y. (2007). *Competing in a Flat World: Building Enterprises for a Borderless World*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Möller, K., Rajala, A., Svahn, S. (2005). Strategic business nets – Their type and management. *Journal of Business Research*, 58(9), 1274–1284.
- Ritala, P. P., Armila, L. L., Blomqvist, K. K. (2009). Innovation orchestration capability – Defining the organizational and individual level determinants. *International Journal of Innovation Management*, 13(4), 569–592.

Pay Per Use

- Brynjolfsson, E., Hofmann, P., Jordan, J. (2010). Cloud computing and electricity: Beyond the utility model. *Communications of the ACM*, 53(5), 32–34.
- Javalgi, R. G., Radulovich, L. P., Pendleton, G., Scherer, R. F. (2005). Sustainable competitive advantage of internet firms: A strategic framework and implications for global marketers. *International Marketing Review*, 22(6), 658–672.
- Johnson, M. W. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.
- Kley, F., Lerch, C., Dallinger, D. (2011). New business models for electric cars – A holistic approach. *Energy Policy*, 39(6), 3392–3403.
- Prahalad, C. K., Hammond, A. (2002). Serving the world's poor, profitably. *Harvard Business Review*, 80(9), 48–57.
- Sako, M. (2012). Business models for strategy and innovation. *Communications of the ACM*, 55(7), 22–24.
- Weinhardt, C., Anandasivam, A., Blau, B., Borissov, N., Meini, T., Michalk, W., Stöber, J. (2009). Cloud computing – A classification, business models and research directions. *Business & Information Systems Engineering*, 1(5), 391–399.

Pay What You Want

- Chesbrough, H. (2010). Business model innovation: Opportunities and barriers. *Long Range Planning*, 43(2/3), 354–363.
- Kim, J., Natter, M., Spann, M. (2009). Pay what you want: A new participative pricing mechanism. *Journal of Marketing*, 73(1), 44–58.
- Kim, J., Natter, M., Spann, M. (2010). Kish: Where customers pay as they wish. *Review of Marketing Science*, 8(2), 1–12.

Peer to Peer

- Berry, L. L., Shankar, V., Parish, J., Cadwallader, S., Dotzel, T. (2006). Creating new markets through service innovation. *MIT Sloan Management Review*, 47(2), 56–63.
- Hughes, J., Lang, K. R., Vragov, R. (2008). An analytical framework for evaluating peer-to-peer business models. *Electronic Commerce Research & Applications*, 7(1), 105–118.
- Jeon, S., Kim, S. T., Lee, D. H. (2011). Web 2.0 business models and value creation. *International Journal of Information and Decision Sciences*, 3(1), 70–84.
- Karakas, F. (2009). Welcome to world 2.0: The new digital ecosystem. *Journal of Business Strategy*, 30(4), 23–30.
- Kupp, M., Anderson, J. (2007). Zopa: Web 2.0 meets retail banking. *Business Strategy Review*, 18(3), 11–17.
- Lechner, U., Hummel, J. (2002). Business models and system architectures of virtual communities: From a sociological phenomenon to peer-to-peer architectures. *International Journal of Electronic Commerce*, 6(3), 41–53.

Performance-based Contracting

- Chesbrough, H., Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies. *Industrial & Corporate Change*, 11(3), 529–555.
- Hypko, P., Tilebein, M., Gleich, R. (2010). Clarifying the concept of performance-based contracting in manufacturing industries: A research synthesis. *Journal of Service Management*, 21(5), 625–655.

Lay, G., Schroeter, M., Biege, S. (2009). Service-based business concepts: A typology for business-to-business markets. *European Management Journal*, 27(6), 442–455.

Razor and Blade

See Lock-in.

Rent Instead of Buy

Barringer, B. R., Greening, D. W. (1998). Small business growth through geographic expansion: A comparative case study. *Journal of Business Venturing*, 13(6), 467–492.

Johnson, M. W. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.

Knox, G., Eliashberg, J. (2009). The consumer's rent vs. buy decision in the retailer. *International Journal of Research in Marketing*, 26(2), 125–135.

Osterwalder, A., Pigneur, Y. (2009). *Business Model Generation – A Handbook for Visionaries, Game Changers and Challengers*. Amsterdam: Osterwalder & Pigneur.

Stevens, J. D., Roberts, M. J., Hart, M. M. (2003). Zipcar: Refining the business model (Case study No. 9-803-096). Cambridge, MA: Harvard Business School.

Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2/3), 172–194.

Wessel, M., Christensen, C. M. (2012). Surviving disruption. *Harvard Business Review*, 90(12), 56–64.

Revenue Sharing

Cachon, G. P., Lariviere, M. A. (2005). Supply chain coordination with revenue-sharing contracts: Strengths and limitations. *Management Science*, 51(1), 30–44.

Pigliapoco, E., Bogliolo, A. (2012). Fairness for growth in the Internet value chain. *International Journal on Advances in Networks and Services*, 5(1/2), 69–77.

Smith, M., Kumar, R. L. (2004). A theory of application service provider (ASP) use from a client perspective. *Information & Management*, 41(8), 977–1002.

Tang, Q., Gu, B., Whinston, A. B. (2012). Content contribution for revenue sharing and reputation in social media: A dynamic structural model. *Journal of Management Information Systems*, 29(2), 41–76.

West, J., Mace, M. (2010). Browsing as the killer app: Explaining the rapid success of Apple's iPhone. *Telecommunications Policy*, 34(5/6), 270–286.

Xiao, T., Yang, D., Shen, H. (2011). Coordinating a supply chain with a quality assurance policy via a revenue-sharing contract. *International Journal of Production Research*, 49(1), 99–120.

Reverse Engineering

Canfora, G., Di Penta, M., Cerulo, L. (2011). Achievements and challenges in software reverse engineering. *Communications of the ACM*, 54(4), 142–151.

Kessler, E. H., Chakrabarti, A. K. (1996). Innovation speed: A conceptual model of context, antecedents and outcomes. *Academy of Management Review*, 21(4), 1143–1191.

Teece, D. J. (1998). Capturing value from knowledge assets: The new economy, markets for know-how and intangible assets. *California Management Review*, 40(3), 55–79.

Reverse Innovation

- Blandine, L., Gilliane, L., Denis, L. (2011). Innovation strategies of industrial groups in the global crisis: Rationalization and new paths. *Technological Forecasting & Social Change*, 78(8), 1319–1331.
- Chang-Chieh, H., Jin, C., Subramian, A. M. (2010). Developing disruptive products for emerging economies: Lessons from Asian cases. *Research Technology Management*, 53(4), 21–26.
- Govindarajan, V., Trimble, C. (2012). Reverse innovation: A global growth strategy that could pre-empt disruption at home. *Strategy & Leadership*, 40(5), 5–11.
- Immelt, J., Govindarajan, V., Trimble, C. (2009). How GE is disrupting itself. *Harvard Business Review*, 87(10), 56–65.
- Kachaner, N., Lindgardt, Z., Michael, D. (2011). Innovating low-cost business models. *Strategy & Leadership*, 39(2), 43–48.
- Talaga, P. (2010). The future of pharmaceutical R&D: Somewhere between open and reverse innovation? *Future Medicinal Chemistry*, 2(9), 1399–1403.

Robin Hood

- Bhattacharyya, O., Khor, S., McGahan, A., Dunne, D., Daar, A., Singer, P. (2010). Innovative health service delivery models in low and middle income countries – What can we learn from the private sector? *Health Research Policy and Systems*, 8(1), 24–35.
- Dobbs, R., Remes, J., Manyika, J., Roxburgh, C., Smit, S., & Schaefer, F. (2012). *Urban world: Cities and the rise of the consuming class*. McKinsey Global Institute.
- Florin, J., Schmidt, E. (2011). Creating shared value in the hybrid venture arena: A business model innovation perspective. *Journal of Social Entrepreneurship*, 2(2), 165–197.
- Mintzberg, H., Simons, R., Basu, K. (2002). Beyond selfishness. *MIT Sloan Management Review*, 44(1), 67–74.
- Prahalad, C. K. (2010). *The fortune at the bottom of the pyramid: Eradicating poverty through profits*. Upper Saddle River, NJ: Wharton School Publishing.

Self-service

- Den Hertog, P., van der Aa, W., de Jong, M. (2010). Capabilities for managing service innovation: Towards a conceptual framework. *Journal of Service Management*, 21(4), 490–514.
- Michel, S., Brown, S. W., Gallan, A. S. (2008). An expanded and strategic view of discontinuous innovations: Deploying a service-dominant logic. *Journal of the Academy of Marketing Science*, 36(1), 54–66.
- Sorescu, A., Frambach, R. T., Singh, J., Rangaswamy, A., Bridges, C. (2011). Innovations in retail business models. *Journal of Retailing*, 87(Supplement 1), 3–16.

Shop in Shop

- Eisenhardt, K. M. (1988). Agency- and institutional-theory explanations: The case of retail sales compensation. *Academy of Management Journal*, 31(3), 488–511.
- Geuens, A., Brengman, M., S'Jegers, R. (2003). Food retailing, now and in the future. A consumer perspective. *Journal of Retailing and Consumer Services*, 10, 241–251.

Solution Provider

- Berman, S. J., Battino, B., Feldman, K. (2011). New business models for emerging media and entertainment revenue opportunities. *Strategy & Leadership*, 39(3), 44–53.

- Brady, T., Davies, A., Gann, D. (2005). Creating value by delivering integrated solutions. *International Journal of Project Management*, 23(5), 360–365.
- Kessler, T., Stephan, M. (2010). Competence-based strategies of service transition. *Advances in Applied Business Strategy*, 12(1), 23–61.
- Kumar, S., Strandlund, E., Thomas, D. (2008). Improved service system design using Six Sigma DMAIC for a major US consumer electronics and appliance retailer. *International Journal of Retail & Distribution Management*, 36(12), 970–994.
- Osterwalder, A., Ben Lagha, S., Pigneur, Y. (2002). *An ontology for developing e-Business models*. Proceedings of IFIP Decision Systems and Internet (DsiAge), Cork.
- Stremersch, S., Wuyts, S., Frambach, R. T. (2001). The purchasing of full-service contracts: An exploratory study within the industrial maintenance market. *Industrial Marketing Management*, 30(1), 1–12.
- Weill, P., Vitale, M. R. (2001). *Place to Space: Migrating to eBusiness Models*. Boston, MA: Harvard Business School Press.

Subscription

- Johnson, M. W. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.
- McGrath, R. G. (2010). Business models: A discovery driven approach. *Long Range Planning*, 43(2/3), 247–261.
- Pauwels, K., Weiss, A. (2008). Moving from free to fee: How online firms market to change their business model successfully. *Journal of Marketing*, 72(3), 14–31.
- Rappa, M. A. (2004). The utility business model and the future of computing services. *IBM Systems Journal*, 43(1), 32–42.
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2/3), 172–194.
- Weinhardt, C., Anandasivam, A., Blau, B., Borissov, N., Meinel, T., Michalk, W., Stößer, J. (2009). Cloud computing – A classification, business models and research directions. *Business & Information Systems Engineering*, 1(5), 391–399.

Supermarket

- Grosse, R. (2005). Are the largest financial institutions really 'global'? *Management International Review*, 45(1), 129–144.
- Magretta, J. (2002). Why business models matter. *Harvard Business Review*, 80(5), 86–92.
- Osterwalder, A. (2005). Clarifying business models: Origins, present and future of the concept. *Communications of the Association for Information Systems*, 16(1), 1–38.
- Rainbird, M. (2004). A framework for operations management: The value chain. *International Journal of Physical Distribution & Logistics Management*, 34(3/4), 337–345.
- Seth, A., Randall, G. (2001). *The grocers: The rise and rise of the supermarket chains*. London, UK: Kogan Page.

Target the Poor

- Anderson, J., Markides, C. (2007). Strategic innovation at the base of the pyramid. *MIT Sloan Management Review*, 49(1), 83–88.
- Hammond, A. L., Prahalad, C. K. (2004). Selling to the poor. *Foreign Policy*, 142, 30–37.
- Pitta, D. A., Guesalaga, R., Marshall, P. (2008). The quest for the fortune at the bottom of the pyramid: Potential and challenges. *Journal of Consumer Marketing*, 25(7), 393–401.

- Prahalad, C. K. (2012). Bottom of the pyramid as a source of breakthrough innovations. *Journal of Product Innovation Management*, 29(1), 6–12.
- Prahalad, C. K., Hammond, A. (2002). Serving the world's poor, profitably. *Harvard Business Review*, 80(9), 48–57.
- Sanchez, P., Ricart, J. (2010). Business model innovation and sources of value creation in low-income markets. *European Management Review*, 7(3), 138–154.

Trash to Cash

- Georges, A. A. (2009). *From trash-to-cash: A case study of GLOBAL P.E.T.* Global Plastics Environmental Conference, Orlando, FL.
- Higgins, K. T. (2013). Trash-to-cash. *Food Engineering*, 85(1), 103–112.
- Johnson, S. (2007). SC Johnson builds business at the base of the pyramid. *Global Business & Organizational Excellence*, 26(6), 6–17.
- Müller, L. (2001). *Freitag: Individual Recycled Freeway Bags*. Baden: Lars Müller Publishers.

Two-sided Market

- Casadesus-Masanell, R., Ricart, J. E. (2011). How to design a winning business model. *Harvard Business Review*, 89(1/2), 100–107.
- Eisenmann, T., Parker, G., Van Alstyne, M. (2006). Strategies for two-sided markets. *Harvard Business Review*, 84(10), 92–101.
- Lin, M., Li, S., Whinston, A. B. (2011). Innovation and price competition in a two-sided market. *Journal of Management Information Systems*, 28(2), 171–202.
- Mantena, R., Saha, R. L. (2012). Co-opetition between differentiated platforms in two-sided markets. *Journal of Management Information Systems*, 29(2), 109–140.
- Osterwalder, A., Pigneur, Y. (2009). *Business Model Generation – A Handbook for Visionaries, Game Changers and Challengers*. Amsterdam: Osterwalder & Pigneur.

Ultimate Luxury

- Fionda, A. M., Moore, C. M. (2009). The anatomy of the luxury fashion brand. *Journal of Brand Management*, 16(5/6), 347–363.
- Hutchinson, K., Quinn, B. (2012). Identifying the characteristics of small specialist international retailers. *European Business Review*, 23(3), 314–327.
- Kapferer, J., Bastien, V. (2012). *The Luxury Strategy: Break the Rules of Marketing to Build Luxury Brands*. London, UK: Kogan Page.
- Moore, C. M., Birtwistle, G. (2004). The Burberry business model: Creating an international luxury fashion brand. *International Journal of Retail & Distribution Management*, 32(8), 412–422.

User Design

- Hienerth, C., Keinz, P., Lettl, C. (2011). Exploring the nature and implementation process of user-centric business models. *Long Range Planning*, 44(5/6), 344–374.
- Prahalad, C. K., Ramaswamy, V. (2004). Co-creating unique value with customers. *Strategy and Leadership*, 32(3), 4–9.
- Robertson, D., Hjulær, P. (2009). Innovating a turnaround at LEGO. *Harvard Business Review*, 87(9), 20–21.
- Wulfsberg, J. P., Redlich, T., Bruhns, F.-L. (2012). Open production: Scientific foundation for co-creative product realization. *Production Engineering*, 5(2), 127–139.

White Label

- Chan, M. S., Chung, W. C. (2002). A framework to develop an enterprise information portal for contract manufacturing. *International Journal of Production Economics*, 75(1/2), 113–126.
- Chung, W. C., Yam, A. K., Chan, M. S. (2004). Networked enterprise: A new business model for global sourcing. *International Journal of Production Economics*, 87(3), 267–280.
- Gottfredson, M., Puryear, R., Phillips, S. (2005). Strategic sourcing from periphery to the core. *Harvard Business Review*, 83(2), 132–139.
- Pousttchi, K., Hufenbach, Y. (2009). *Analyzing and categorization of the business model of virtual operators*. Eighth International Conference on Mobile Business (ICMB), Dalian.

Additional literature on business models

- BCG (2009). *Business Model Innovation: When the Game Gets Tough, Change the Game*. Boston, MA: BCG Perspectives.
- Berns, G. (2008). *Iconoclast: A Neuroscientist Reveals How to Think Differently*. Boston, MA: Harvard Business Review Press.
- Boutellier, R., Gassmann, O., von Zedtwitz, M. (2008). *Managing Global Innovation: Uncovering the Secrets of Future Competitiveness* (3rd edn). Berlin: Springer.
- Chesbrough, H. (2006). *Open Business Models: How to Thrive in the New Innovation Landscape*. Boston, MA: Harvard Business School Press.
- Choi, D., Valikangas, L. (2001). Patterns of strategy innovation. *European Management Journal*, 19(4), 424–429.
- Christensen, C. (1997). *The Innovator's Dilemma*. Boston, MA: Harvard Business School Press.
- Christensen, C., Raynor, M. (2003). *The Innovator's Solution: Creating and Sustaining Successful Growth*. Boston, MA: Harvard Business School Press.
- Christensen, C., Grossman, J., Hwang, J. (2009). *The Innovator's Prescription: A Disruptive Solution for HealthCare*. New York, NY: McGraw-Hill.
- Cisco IBSG (2011). *The Internet of Things: How the Next Evolution of the Internet is Changing Everything*. Study written by Dave Evans.
- Collins, J. (2001). *Good to Great: Why Some Companies Make the Leap . . . and Others Don't*. New York, NY: Harper Business.
- Gassmann, O., Beckenbauer, A., Friesike, S. (2013). *Profiting from Innovation in China*. Berlin: Springer.
- Gassmann, O., Reepmeyer, G., von Zedtwitz, M. (2008). *Leading Pharmaceutical Innovation: Trends and Drivers for Growth in the Pharmaceutical Industry* (2nd edn). Berlin: Springer.
- IBM (2012). *Leading Through Connections: Insights from the IBM Global CEO Study*. Somers, NY: IBM Institute for Business Value.
- Johnson, M. W. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.
- Johnson, M. W., Christensen, C. M., Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review*, 86(12), 57–68.
- Kotler, P., Pfoertsch, W. A. (2010). *Ingredient Branding: Making the Invisible Visible*. New York, NY: Springer.
- Land, G., Jarman, B. (1993). *Breaking-Point and Beyond*. San Francisco: Harper Business.
- Leifer, L., Steinert, M. (2011). Dancing with ambiguity: Causality behaviour, design thinking, and triple-loop-learning. *Information, Knowledge, Systems Management*. Volume, 10, 1–4.
- Pine, B. J., Gilmore, J. H. (2011). *The Experience Economy*. Boston, MA: Harvard Business Press.
- Popper, K. R. (1968). *The Logic of Scientific Discovery*. New York, NY: Columbia University Press.

- Porter, M. E. (1996). What is strategy? *Harvard Business Review*, 74(6), 61–80.
- Seidler, C. (2006). Web-Händler Spreadshirt: Leipziger Klamotten-Kombinat. In: Spiegel Online – 23.02.2006. Available at www.spiegel.de/wirtschaft/web-haendler-spreadshirt-leipziger-klamotten-kombinat-a-402238.html, Accessed June 2014.
- Shapiro, C., Varian, H. R. (1998). *Information Rules: A Strategic Guide to the Network Economy*. Boston, MA: Harvard Business School Press.
- Sosna, M., Treviño-Rodríguez, R. N., Velamuri, S. R. (2010). Business model innovation through trial-and-error learning: The Naturhouse case. *Long Range Planning*, 43(2/3), 383–407.
- Vernon, R. (1966). International investment and international trade in the product cycle. *Quarterly Journal of Economics*, 80(2), 190–207.

Further resources

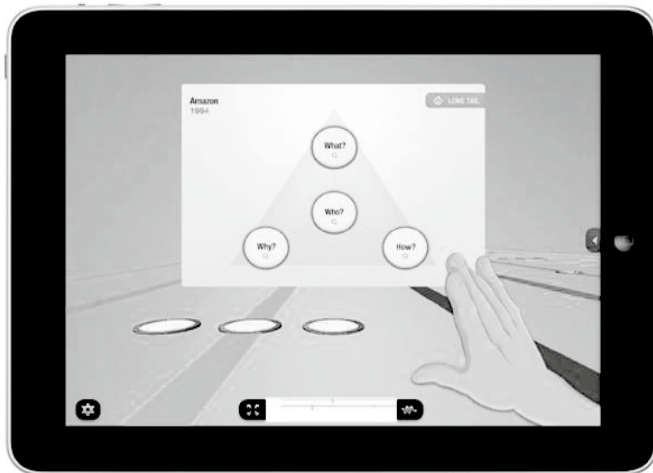
Our work with industry partners has taught us that implementation is the most challenging step in business model innovations. To support you in this endeavour, we have developed a full range of tools that includes interactive software for working with the Business Model Navigator methodology company-wide, an online course to help you prepare for workshops, pattern cards for use during your workshops, our homepage where we publish our most recent findings, and various workshops that we lead personally.

All services, information and products are available from our homepage www.bmi-lab.ch.

Interactive Business Model Navigator (iBMN)

Our interactive software (iBMN) was designed in cooperation with SwissVBS, a leading learning Solution Provider, and Buhler, the Swiss specialist for plant, equipment and related services in the food processing and advanced materials manufacturing industries (see Figure A). The iBMN makes it possible for all your employees to participate actively in ideation and so significantly improve your creative potential. iBMN can be used as an accompanying tool in face-to-face workshops and becomes an essential part of the innovation process in your global enterprise that will also serve to expand employees' mindsets. The software is available for iPads, PCs and Mac computers.

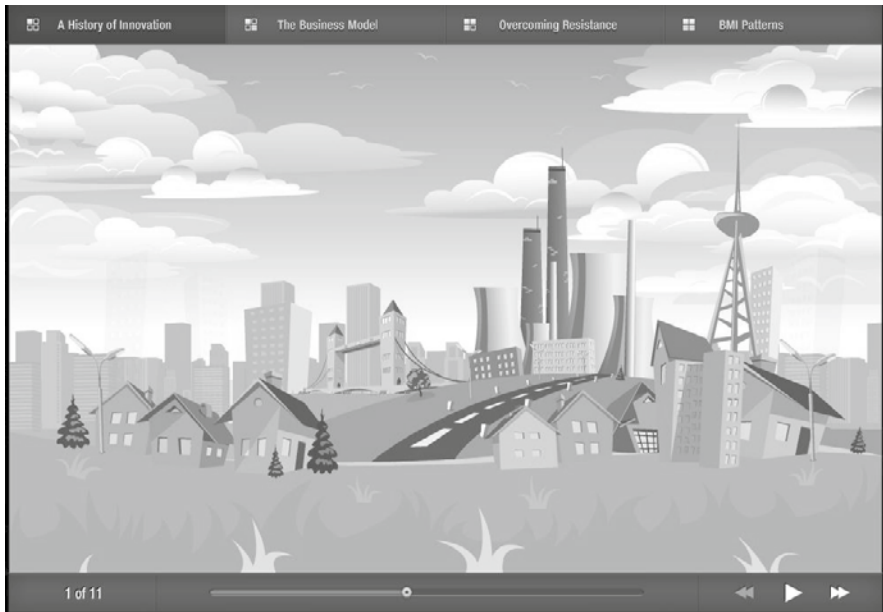
Interactive Business Model Navigator (Figure A)



Business Model Navigator Online Course

The Business Model Navigator Online Course, which was also developed in cooperation with SwissVBS, comprises a twenty-minute exposition of the methodology employed (see Figure B). As more and more of your employees learn to think in terms of business models, their willingness and ability to implement change will automatically increase. The online course serves as a preparation to workshops or to the iBMN. It can also be used independently to foster the culture of innovation within your company.

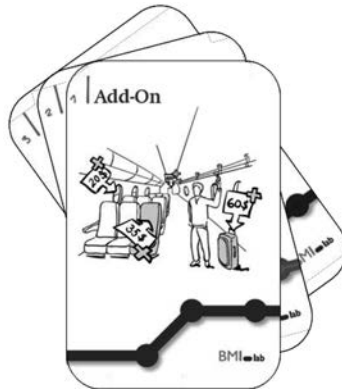
Business Model Navigator Online Course (Figure B)



Business Model Navigator Pattern Cards

Several of our industry partners have asked us for copies of the pattern cards depicting the 55 basic business models, leading us to develop a professional version of the pattern cards for business model innovation (see Figure C). From our work with the Design School at Stanford University we know that the professional pattern cards enjoy wide acceptance and support creativity in the process, but it goes without saying that the descriptions of the 55 business models given in this book can also be used for the same purpose.

Business Model Navigator Pattern Cards (Figure C)



Business Model Navigator – Publications

Researchers, students and interested professionals will find an updated list of our publications on our homepage, www.bmi-lab.ch.

Accompanying the project

It can be very helpful to get external support when devising and implementing business model innovations, and BMI Lab is set up to do so. Additionally, our partners at the innovation consultancy BGW can also assist you in this process. Three different workshop formats are available:

- 1 Customised company workshop:** This workshop is a venue to discuss the Business Model Navigator methodology in the context of your own industry and company. We will work with you to generate some initial ideas for new business models.
- 2 Deep dive projects:** The deep dive is an ongoing series of workshops with the objective of developing one or two specific business model innovations.
- 3 Cross-industry workshops:** In this unique workshop, you work together with other companies to innovate your business model:
 - *Advice and implementation:* Our team is also available to guide you through the entire business model innovation process from development to selection and implementation.

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