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We give you the Journal of Business Models (for free): The inaugural editorial

Christian Nielsen¹, Colin Haslam² and Romeo V. Turcan³

“Our business mission is to create an open source journal that is free of the ties that come along with a publisher. In turn we wish to develop a new type of profitable business model for an academic journal that sends more of the total value created back to the academic community and the strategic partners that enable its existence. This is a very clear value proposition.”

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Welcome to the Journal of Business Models

The research field of business models has gained a vast amount of momentum in the recent decade – a momentum that only looks to continue in strength in the coming years. Hence, the mission of this journal is to support the growing interest of researchers in the business model phenomenon and provide a rigorous platform for which researchers can develop and disseminate their research-based insights to the world of business scholars and executive managers. Up until now, business model research has found its home in numerous special issues in journals such as Long Range Planning, Journal of Management and a forthcoming issue of Strategic Entrepreneurship Journal, just to name a few. However, with the Journal of Business Models we now have a dedicated journal that can serve as a multidisciplinary platform for researchers interested in the business model phenomenon from all possible academic perspectives and disciplines.

The aim of the Journal of Business Models is to disseminate the newest research-based insight on business models globally. The Journal of Business Models will constitute a cross-disciplinary platform conveying multiple-type papers, i.e. both conceptual and empirical and also encouraging methodological pluralism. We plan to invite contributors in order to cover a wide array of the most popular perspectives on business models, like e.g. innovation, commercialization, entrepreneurship, internationalization, strategy, organization, accounting, performance measurement and finance. However, we also intend to provide space for less mainstream and alternative perspectives that may challenge existing practices of thought.

The key audiences of this journal are academics and dedicated consultants. As this journal aims at pushing the knowledge of the field to a higher theoretical level, and to becoming a core discipline in due course, the rigorousness of the review process and the quality of the published papers naturally lend themselves to an expert audience. However, policy-makers, politicians, entrepreneurs and students with high academic aspirations will also benefit substantially from the mix of articles in this journal.

The Journal of Business Models does not have a pre-planned publication schedule. This is one of the strengths of not being a part of a large publication corporation. Our aim is to publish at least two issues a year and a maximum of five issues. Rather than forcing papers through the submission process or leaving up to date knowledge sitting on the shelf waiting for critical mass, this journal can publish when the timing is best.

Therefore it is a good idea to register as a reader to this journal (<http://journals.aau.dk/index.php/IOBM/user/register>) while at the same time being a registered member of the Business Model Community (see www.businessmodelcommunity.com) in order to receive timely information on new publications.

The scope of the Journal

In this first issue, as well as the issues forthcoming in 2014, the papers are expected to cover a majority of the existing perspectives on business models and also to include a large number of major contributors to the field. The editorial panel is working hard to ensure that the literature provided and discussed covers varying perceptions of the field and how to progress the field of business models forward from this point. The various *major disciplines* or *schools* addressing business models, including strategy, management, organization, innovation, entrepreneurship, technology, internationalization, finance and communication, will all be covered during the first year and make lead way for a series of special issues digging deeper into such perspectives from a multi-method and interdisciplinary angle.

The array of perspectives present in the literature on business models leads to the identification of a number of themes on which the Journal of Business Models naturally will be focused. Some of the subjects expected (but not limited to) in the journal are:

- Definitions and concepts of business models; including archetypes, typologies, key components and building blocks
- Defining what business models are about: The epistemological and conceptual roots of business models and their differences with strategy, strategic management, organization and business planning

- Business Model Design: designing, rejuvenating, innovating and facilitating business models including the role of design thinking contra the business case
- Implementing business models and the execution process
- Commercialization and exploitation of ideas through business models: challenging entrepreneurial processes
- Seeking the true benefits of a globalized world: how internationalization of activities affects business models
- The strategic partnerships of business models: Roles and relationships within and among business models
- Business models and high-tech ventures
- The performance of business models: Dilemmas and paradoxes of performance measurement consequences
- Tools and techniques for analysing, designing, testing and implementing business models

The business model of the Journal of Business Models

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By this license authors retain the copyrights to their work and grant the journal the right of first publication with the work.

At the same time, we believe in academic rigour and the value-added of a double-blind review process. The Journal of Business Models runs on an Open Journal System platform that ensures the exact same work flow such as provided for example by the ScholarOne setup of Manuscript Central. There are well-established control mechanisms for ensuring anonymity of manuscripts as well as reviewers, and there is also a rating system on reviewers and their efforts.

Question: "So what is it precisely we are missing out on by not being part of a large publication house?"

Answer: "Apart from using academic colleagues as free resources for profit-making purposes we don't really know!"

While it is clear that large publishing houses may be able to offer some professional services in relation to marketing a journal like ours, when it comes to services for authors, these are typically not for free anyhow.

Our hypothesis is that in this era of Google-optimization it is possible to beat the existing marketing models of established publishing houses. We call this intelligent marketing. The following section analyses the potential business model of a journal doing just this.

At the present the customers of a standard journal are the universities themselves through their affiliated libraries. So in effect university employees are working for free to publish in journals the very same university pays for access to. Now that is a neat business model – at least if you are a publisher. With an open access journal, libraries are not charged. However, these open access journals typically do not have any marketing activities. Therefore, we need you – the readers, authors and reviewers – to go to your library directors and recommend them putting this journal on their resource list.

Despite the Journal of Business Models not having to send profit back to a publisher, there are still costs of running the business. Most of these costs are associated with the activities of the submission system and the publishing process (even if we do count entirely on your marketing effort). Our submission system is run by our strategic partner Open Journal Systems, and the website is sponsored by Aalborg University Library. Despite this, our business case estimates the costs of running the Journal of Business Models at €25.000-30.000 a year. We intend to launch an international case competition for the best business model for the Journal of Business Models in the beginning of 2014. We hope you and your students will join in. The above illustrates that a journal like this is short of a strong marketing partner. Let us take a look at how this could be solved.

Let's get a group on

Let's get a group on – Let's get a Groupon. This is a play with words for two reasons. Firstly, it stipulates that there is a need to activate the group of scholars interested in the field of business models and to work with creating and sending enough value back to them to ensure that they will keep on sending manuscripts to the journal and help out reviewing the papers of their peers. The Business Model Community can add value to the journal by submitting their best papers through the Journal of Business Models, which in turn will leverage the impact factor of the journal for their own good.

Secondly, leaning on Groupon as a metaphor of doing business, i.e. a business model, what we can learn from the above is that we have to be extremely intelligent in the way we take in strategic partners and utilize them in the value creation process of the journal.

Groupon's business model is unique not only in the way that the company "creates markets" by becoming a platform for building consumer buying power. Groupon's business model is also unique because the potential buyers become the most important strategic marketing partners to the company. Let us try to describe the Journal of Business Models (JOBM) in the light of this business model metaphor:

- The central company, Groupon, is the JOBM editorial board and reviewers
- The shops in the Groupon concept are the university libraries and universities themselves as well as independent researchers in the JOBM case
- The customers are the authors and readers of JOBM, including academics, corporate managers, policy-makers and students
- We need to persuade the customers to perform the marketing for JOBM
- JOBM then needs to set up a structure to do this (facebook button, LinkedIn button, Twitter button, and direct mail to the library director)

However, now comes the key question of how the JOBM can make enough money to sustain its operations. We expect to require revenues of €25.000-30.000 a year to reach break-even for a journal with this level of activity. A number of revenue streams make themselves avail-

able, for example, a few large sponsors, a crowd-funding approach, adds, an annual conference, book promotions and paid book reviews from publishing houses, or print on demand services for libraries world-wide.

The key question is therefore: Which mix of these is the best combination with the value proposition and strategy of this journal?

In reality, what we really need to facilitate is a strong academic and professional community around this journal. To do this, the Journal of Business Models needs to obtain a strong impact factor and a good ranking. Did we say Chicken-and-egg problem? We go about this by insisting on a rigorous and constructive peer review process. The next step will no doubt be left in the hands of the audience, who needs to cite the published work and send in papers that develop earlier work. The audience also needs to discuss the papers at conferences, in blogs etc. In other words, we just gave you, the readers, the authors and the reviewers, full responsibility!

Don't worry. We are confident in you. The Journal of Business Models already has a vast potential audience and a strong community. At the Business Model Community website there are close to 300 registered members at the present. The same goes for practitioners around the world and can be seen from the quantity of practitioner conferences and summits available.

The Editorial Team

In this initial phase of starting up the journal a big thank you goes out to the Editorial Advisory Board and the Editorial Review Board which have constituted the major part of the hard working reviewers on the papers that are either in the editing process or submission process at the present. The Editors-in-Chief also wish to thank the team at the Editorial office and at Aalborg University Library for their commitment to the project, their professionalism as well as patience with a team of newly designated reviewers and editors getting used to the submission system. The organization of the journal is as follows:

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The inaugural edition

In this inaugural issue we start to address the core themes that form the scope of the journal. However, we are humble towards the fact that it is difficult to come around all core themes in just one issue, also realizing that getting manuscripts that would fit into such a jigsaw puzzle would be difficult. Therefore, we do not claim to cover all key topics in this issue. However, we urge those of you who feel “left out” to get in touch as soon as possible.

Furthermore, we urge you as readers and potential authors to consider the merits of forming some of these core themes into special issues that you would wish to be the guest editor(s) of. Besides the already announced special issue from the NFF conference in Iceland, we have two other special issues in the pipeline at the present. One relates to the internationalization of business models, and the other to the financialization of business models.

This issue will be divided into four sections as described below:

Section 1: Definitions, concepts, schools and theory

A natural place to begin is by addressing issues of defining the concept of business models. In the literature there are to our awareness more than 70 definitions of what a business model is. Some of the most cited definitions include Porter’s 2001 take that:

“The definition of a business model is murky at best”,

and Magretta's 2002 neat and simplistic definition:

"A business model is a story that explains how the enterprise works"

Bell and Solomon (2002, xi) put a profit angle on the concept in stating that a business model is:

"[A] simplified representation of the network of causes and effects that determine the extent to which the entity creates value and earns profits",

while other authors such as Chesbrough and Rosenbloom (2002) provided more comprehensible, albeit complex, definitions, here in the form of their six necessary steps that constitute the description of a business model:

1. *Articulate the value proposition, that is, the value created for users by the offering based on the technology*
2. *Identify a market segment, that is, the users to whom the technology is useful and for what purpose*
3. *Define the structure of the value chain within the firm required to create and distribute the offering*
4. *Estimate the cost structure and profit potential of producing the offering, given the value proposition and value chain structure chosen*
5. *Describe the position of the firm within the value network linking suppliers and customers, including identification of potential complementors and competitors*
6. *Formulate the competitive strategy by which the innovating firm will gain and hold advantage over rivals*

In the middle of the last decade, it was almost as if every researcher needed to prove his/her right to contribute to the field by having his/her own definition of what a business model was. As such, one of the authors of this editorial also managed to jump onto that specific bandwagon stating that:

"A business model describes the coherence in the strategic choices which facilitates the handling of the processes and relations which create value on both the operational, tactical and strategic levels in the organization. The business model is therefore the platform which con-

nects resources, processes and the supply of a service which results in the fact that the company is profitable in the long term" (2006, reprinted in Nielsen 2011).

In recent years the definition by Osterwalder and Pigneur (2009) seems to encapsulate in a neat manner the focus of the field as it stands today:

"A business model is the rationale of how an organization creates, delivers and captures value"

In this issue the paper by Bille discusses the developments of business model definitions. This recap leads us to question the necessity of having a clear definition of what a business model is, i.e. to define or not, and the value added of discussing details of definition.

In much the same manner, in the last 10-15 years we have seen the development of numerous conceptualizations of business models, including frameworks for defining archetypes, typologies, key components and building blocks. Morris contributes with a seminal account of how the business model becomes a competitive advantage in this rejuvenated 2013 version.

With their Business Model Canvas, Osterwalder and Pigneur provided a relatively fresh surge to the field in 2009. Hence we are now seeing the same tendencies as with the definition game above that a lot of researchers and consultants are constructing their own canvasses. In this issue the paper by Fiel takes the temperature on the concepts, models, canvasses and archetypes discussion.

Many of the definitions and concepts that constitute the discussions above illustrate how the field of business models is grounded in a variety of different academic perspectives and backgrounds. It can be argued that there are several different *Schools of Thought* in this field and these are described and discussed in the paper by Ahokangas *et al.* Here the temperature on the dispersion of the field is taken, and the diffusion of the concept from the early roots of strategy in the 1960's and 1970's over the e-business assimilation of the turn of the millennium towards the design school movement of the last few years is depicted.

In a natural development from definitions, over con-

cepts to schools, the next step is to address the move towards theorization of business models. The paper by Lueg *et al.* hypothesizes that the choice of business model may be more dependent upon the specific challenges a company is facing and the lifecycle phase it is in, and not so much the industry segment within which it competes.

Lueg *et al.* develop the notion of analysing the role of business models across the four phases of the business lifecycle in order to generate coherent business model theory and thereby the ability to provide prescriptive theories of action, design, and implementation. Higher-level theories like this may provide a quantum leap for companies looking to optimize their business configurations and profit models.

Section 2: The influence of technology

The creation of wealth and new industries is often seen as a combination of technological, organisational and societal factors, and much the same can be said for the advent of business models where new technologies and new knowledge make possible the deliverance of new and novel value propositions. However, the preparedness of customer segments to take on board such value propositions is also a necessity for success. This was evident in the dot.com bubble that also boosted research into business models. Because e-business technologies were relatively young and customers not used to using the Internet as a retail channel, many companies ended up with unprofitable business models.

Together with the prospects of business models as activity systems and cost/revenue architectures, Zott *et al.* (2011) argue that e-business still is one out of three key issues in relation to business models that needs to be addressed. From a customer perspective the notion of e-business might merely be seen as a choice of distribution or communication channel, and therefore this research would need to explain the effects of e-business in relation to both value creation, value capture and value delivery. These aspects are covered by Rappa in his revision of his very influential paper from 2001.

The paper by Chae and Hedman articulates the interplay between the role of technology and a business model exemplified by the mobile payment ecosystem

and illustrates how the lack of sustainable business models has led to slow market penetration. This paper offers a framework that allows practitioners and academics to study current and future mobile payment approaches and thus a platform from which to address business model innovation.

Relative to other types of innovations, Taran and Boer argue that little is known about business model innovation, let alone the process of managing the risks involved in that process. Using the emerging enterprise risk management literature, they propose an approach through which risk management can be embedded in the business model innovation process and illustrate this through a case study. The results warrant continuation of the development of such a model and give rise to furthering the links between innovation models and models of doing business. This is taken one step further in Lecocq and Demil's paper which introduces a tool to design and innovate business models.

Section 3: Creating businesses and value

While it is possible to imagine a company without innovation, leadership and explicit strategy, it may be argued that no company exists without a business model, some form of organisation and a business idea as a starting point. The field of business models is therefore intricately connected with creating new companies as well as with the understanding of value creation. From the perspective of entrepreneurship, Verstraete and Jouison-Lafitte's paper posits the role of business models and the application of business model design tools on start-up companies. Commercialization and exploitation of ideas through business models and the challenging of entrepreneurial processes through this perspective receive a lot of interest in the natural and technical sciences and also from policy-makers seeking methods for increasing the probability that funding of the sciences leads to value creation.

The notion of organisation and the role of strategic management to business models, the final paper in this section, by Andersson *et al.*, illustrates through the case of Real Estate Investment Trusts how business models are affected by financialization. The paper discusses the evolution of the case business model and the extent to which it is dependent upon favourable legal and accounting regulations. Hence it raises aware-

ness of the intricacies of understanding profit models in more complex forms than previously suggested in the literature as merely being a term of cost/revenue models. Further steps may entail theorization relating to the performance of business models, including analyses of the dilemmas and paradoxes of measuring their performance.

Section 4: Strategy, and creating business model patterns around customer needs

In this fourth section we expect a series of papers that address the interface between business models and strategy and how business model patterns emerge around the need of customers and other strategic partners such as suppliers. The first of these is Seddon and Lewis' reprise of their seminal paper from 2004. This section will furthermore constitute a foresight section on the design of business models including aspects of designing, rejuvenating, innovating, testing and facilitating business models and business model execution.

We expect to see some contributions that will enlighten the dichotomous roles of design-thinking contra business-case thinking evident at the present and thus discuss the epistemological and conceptual roots of business models and their differences with strategy, strategic management, organization and business planning. Lastly, this section will address how companies, even SME's, could and should be seeking the true benefits of a globalized world through international partnering and micro-multinational structures through unique business model configurations.

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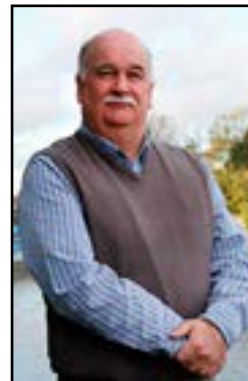
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Business Model Warfare

The Strategy of Business Breakthroughs

Langdon Morris¹

Abstract

There's a story behind every business success and every business failure, sometimes the story of a great idea; sometimes one that failed. Sometimes it's a story of insightful management, or management that failed. But almost always it's a story about change. Change in the market; change in the economy; change in a particular product or service that transformed a failure into a success, or vice versa. Hidden behind many of these changes, or sometimes as a result of them, there is change in what customers experience, and as a result, a change in their perceptions and attitudes, and then in their buying habits. Companies soar, or collapse, as a consequence. While we study the stories to learn about the specific changes, events, insights, and breakdowns in each case, we also look for broader and deeper explanations that show how change applies across industries and the whole of the economy. The broader patterns are often Business Model Innovations, the subject of this white paper. Here we propose a specific model explaining how large companies create and sustain market leadership in today's market, or the traps that they fall into that prevent them from doing so.

Keywords: business model, business model innovation, business model warfare, strategy, business strategy, business history, creative destruction, innovation, innovation targets, innovation labs, langdon morris,

1: InnovationLabs, innovationlabs.com

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Introduction

The average lifespan of a major corporation isn't very long. The rate of change throughout the economy is such that a surprising number of new companies are being born and then growing to be quite large very quickly. At the same time, many older and well established firms are falling by the wayside just as fast, or faster. Hence, just because a company is listed in the S&P 500 or the Fortune 500, or any other of the biggest and most powerful and influential firms does not mean that it can look forward to a long and happy life ahead, as the mortality rate is high, and increasing. Many companies that we today consider to be leaders will be gone by tomorrow, or the day after, while companies that we haven't yet heard of, and indeed which may not even exist today, may well in many cases become next week's industry giants.¹

This problem of accelerating change is one of the most challenging issues facing business and government leaders today, not only in the developed world, but everywhere.

In these turbulent markets where companies that were once dominant are struggling to survive, managers are constantly probing to understand what makes the difference between success and failure.

Looking at the recent past, for example, we might ask what happened to Nokia, or Blackberry, or Kodak, or Sony, Sears, Xerox, Blockbuster, Pontiac, Lehman Brothers, and so many other great brand names. Why was GM's Saturn subsidiary a breakthrough in the 1990s and 100% dead in 2008? At the same time, how did Google, Facebook, Amazon, Fedex, Charles Schwab, and Home Depot become so big so fast, so widely admired?

There's a story behind every business success and every business failure, sometimes the story of a great idea; sometimes one that failed. Sometimes it's a story of insightful management, or management that failed. But almost always it's a story about change. Change in the market; change in the economy; change in a particular product or service that transformed a failure into a success, or vice versa. Hidden behind many of these changes, or sometimes as a result of them, there is change in what customers experience, and as

a result, a change in their perceptions and attitudes, and then in their buying habits. Companies soar, or collapse, as a consequence.

While we study the stories to learn about the specific changes, events, insights, and breakdowns in each case, we also look for broader and deeper explanations that show how change applies across industries and the whole of the economy.

The broader patterns are the subject of this white paper. Here we propose a specific model explaining how large companies create and sustain market leadership in today's market, or the traps that they fall into that prevent them from doing so.

Part I: The Mortality of Companies

The capacity of organizations to adapt to rapid and unexpected change is frequently discussed, but managing for adaptability is a little understood and poorly practiced art even as the pace of change continues to accelerate. In reality more big companies are going out of business faster than ever before.

In searching for hard data about company mortality we found three sources: The Fortune 500 list, The Forbes 100 list, and The S&P 500 list.

From the first year the Fortune 500 was created, 1955, and continuing through 2001 we identified the companies that were on the list one year but not the subsequent year as living examples of what we might call the relentless progression of competition. Over this span of 46 years, an average of 30 companies per year left the list.²

In some years there were more departures, in some years fewer, but the overall trend showed consistent turnover of about 6% each year.

If the impact of decay was random among companies, then over a period of only about 17 years the entire list would turn over and an entirely new set of companies would be listed. But of course it doesn't happen that way. Instead, some companies are ephemeral visitors to the Fortune 500, while others endure for decades. A

study by planners at Shell found that by 1983, one-third of the companies listed among the 500 in 1970 had not only fallen from the list, but had gone out of business altogether.³ That's an average mortality rate of 12 very large companies per year, or one per month. They also found that a multi-national corporation comparable in size to a Fortune 500 company could only be expected to survive for between 40 and 50 years.

In 1917, Forbes magazine created its own list of the largest 100 US companies, and over the seventy-year span an average of about one company per year disappeared. Of the remaining 39 original companies, 18 were still large enough to remain on the list in 1987. However, of the 18 companies, only two had managed to perform better than the overall stock market during the seventy-year period. While the combined annual growth rate (CAGR) of US public companies from 1917 to 1987 was 7.5%, the 18 surviving companies managed a combined average of only 5.3%. In other words, an investor in market index funds would have done substantially better than an investor in these 18 companies. (This assumes, of course, that any investor would have had the incredible foresight to pick the 18 surviving big companies from the original list of 100.)

The S&P 500 list provides a third reference point. The mortality rate S&P 500 companies has been steadily increasing, and the average life span has steadily decreased from more than 50 years to fewer than 25 today.⁴

The three slices of history convey a clear pattern, and projecting the pattern forward suggests that about a third of today's major corporations will survive as significant businesses for the next twenty-five years. Richard Foster and Sarah Kaplan comment that, "Most will die or be bought out and absorbed because they are too slow to keep pace with change in the market."⁵

That's the key issue - keeping pace with change in the market; and of course it's very difficult to do. Where, then, to focus?

Part II: It's the Business Model

The context of business strategy is the marketplace in which it is played out, so discussions of strategy must

begin with reference to market dynamics. Today, the most external critical factors are accelerating change, increasing competition, new technology, and increasing complexity, while the two major internal drivers are innovation and corporate decision making.

While each of the external ones presents its own particular problems, the impact of all four acting together significantly compounds the problem, composing a "change conspiracy" that increases the danger exponentially. The results are a drastically compressed planning horizon for every company, the need for faster responses throughout the organization, and the accelerating rate of corporate failure as leaders simply fail to master these dynamics.

Indeed, these conditions are taking a heavy toll on companies, industries, and entire nations, and bringing severe stress to the business leaders who grapple with these issues day after day. On the news you'll hear a long list of struggling enterprises, notable not only for the steep slide that many have recently endured, but also because it was not so long ago that they were held in high esteem. Among them are, as mentioned, Nokia, Sony, Kodak, Sears, Xerox, and many others.

While these companies struggle to right themselves, even entire nations struggle to keep their economies viable in the new and demanding framework of global markets. A decade ago Argentina, Brazil, and their South American neighbors were caught in a deep decline; currently Greece, Spain, and Ireland are notable for their struggles, while Japan struggles with an economic restructuring that has already lasted nearly two decades.

The parade of failures makes for dramatic stories that are illustrated by the sad losses suffered by individuals and families struggling to survive the economic and emotional strains, but as more and more companies fail, it is becoming clear that these are no longer unusual events.

In spite of the attempts by governments, central banks, and multilateral organizations such as the IMF, WTO, and the World Bank to reduce the impacts of change, it's evident that the forces of change are far stronger than ever before. Turbulence continues to increase,

which means that business failures will continue to be common occurrences going forward. And managers wonder obsessively deep into the night, What should I be doing differently?

Creative Destruction

While the sense of crisis and the time compression caused by the change conspiracy is certainly real, the underlying dynamics of the competitive marketplace are not new. In the 1940s the brilliant economist Joseph Schumpeter described the overall capitalist process as “creative destruction,” and he pointed out that the natural behavior of capitalist systems brings revolution not as the result of vague external factors, but from within. Change, Schumpeter observed, is the common condition of capitalism, not stability. And in an utterly prescient comment about prevalent management practices at the time (and still today), he wrote, “The problem that is usually being visualized is how capitalism administers existing structures, whereas the relevant problem is how it creates and destroys them.”⁶

The significance of this comment is nearly impossible to overstate. While so many observers and leaders focus their attention on how businesses perform in today’s markets, Schumpeter points out that it is in the very nature of market evolution to weaken some companies while creating enticing opportunities for others. Therefore, just as important as today’s market structures, or today’s technologies, or today’s competitive advantage, is how the forces of change will affect a firm tomorrow and the day after.

But unfortunately, the instinctive habit of management is to look forward at a 90 day sales forecast and the next quarterly report, or backwards to the past, to guide a course into the future. Neither approach is adequate to the challenge that is the focus of this paper.

We call this short-term mentality the “logic of operations,” and it is characterized by a pattern of behavior whose goal is to create a stable, scalable enterprise that returns strong, steady profits to its stakeholders. The qualities that are important from this perspective include predictability, the capacity to

forecast future growth, revenues, and profits, and as a result tremendous emphasis is placed on management of today’s business. Standardization, policy, procedure, organization structure, and short-term decision making are tuned and fine tuned.

The problem, of course, is that the obsession with predictable scalability ignores the realities of external change, and in an era characterized by the nasty change conspiracy, the obsession with the short term cannot and does not succeed.

To take Nokia as a poignant example, it does no good to be far and away the globe’s leading cell phone maker, the firm with 9 of the top 10 selling phones worldwide, as Nokia was in 2007, when the iPhone comes along. Since the introduction of the iPhone, Nokia’s market capitalization has dropped from a nice high of \$150 billion in 2007, to a rather sad \$27 billion today (February 2014). That’s \$123 billion erased as its prospects transformed from bright to dismal. With top management looking backward instead of into the future, Nokia did not have a ready response to the iPhone. It quickly became a sad story for a lot of people.

Nokia’s 2007 Annual Report is written in glowing language that is highly optimistic. Military leaders are familiar with this problem, which they refer to as “preparing to fight the last war.” Such preparations, even fully implemented with rigor and discipline, consistently fail if the style of warfare has in the interim changed. Whether it’s armored knights slaughtered by the long bow, France’s Maginot Line, the 20th century’s iconic monument to backward thinking, the Polish horse cavalry that rode out to face Hitler’s blitzkrieg, the American army confounded by Viet Cong guerrilla fighters, civilian aircraft hijacked and turned into guided terrorist missiles, or a new class of weapon based on the cell phone, the “IED,” “improvised explosive device,” the history of warfare is the history of innovations that render past strategies ineffective. This is also the history of business.

Hence, the relevant question is, What is your strategy for dealing with accelerating change?

Part of the challenge with this type of thinking is that the misplaced focus is usually evident only in hindsight,

when wars, market share, jobs, or stock value have already been lost. You have to find a different way of thinking, and a different way of working.

When things are moving so fast, in fact it's a new kind of radar that you need, along with a different approach to making decisions. For business leaders as for generals, hindsight does not provide sufficient preparation, and it is therefore essential to have an effective way not only to look toward the future, but even better, to create it. It is on this imperative of innovation that this report will now concentrate.

Innovation

The term "creative destruction" gives us a warning, a name, and a general explanation for the waves of change that move continually through the marketplace, and "fighting the last war" warns us as well that we have to do it differently if we're going to survive. Both help us direct our attention toward understanding the forces of change rather than supporting the illusion of stability, and also remind us that the waves of change are themselves created, either intentionally or unintentionally, not by mysterious forces, but as a result of purposeful innovation in the competitive arena of the market. That's right ... your rivals in the marketplace or the battlefield are targeting you. There is a business, or more than one, whose innovative thinkers are working right now to take away your share of the market, for innovation is indeed the weapon of choice.

What is your best response?

Innovations of your own.

In fact, innovation may be your only possible valid response.

However, innovation is a term that means different things to different people. Since it's a critically important concept to this report and to your business, we'll pause here to define it carefully.

We note, first of all, that the word "innovation" refers to an attribute, a process, *and* a result. Innovation is a

process that happens somewhere in your company, or perhaps in someone's mind. The result, in each case, can be an insight, a new idea, a product, a strategy, a new or improved business process, or perhaps a new business model (we'll get to defining "business model" shortly). It may be a question, a theory, or just a fear. But whatever it is, one of the qualities that will distinguish the new thing is its "innovativeness." This innovativeness refers to its distinctiveness, its originality, perhaps its usefulness, and most importantly its value.⁷

The label "innovation" also refers specifically to that new thing itself that the innovation *process* has produced. To be considered an innovation in business, the result must be increased value in the form of new or improved functionality, reduced cost, a price increase (good for the seller), a price decrease (good for the buyer), better margin for the seller, or some combination of these.

According to this definition not every new or different idea qualifies as an innovation. In fact only a small percentage qualify. Innovative ideas, by definition, create value for their users and valuable competitive advantage for their owners, as well as economic rewards.

However, even innovations that have only minor impact on the market can be significant and critically important, especially if they help a company to provide its customers with a superior experience. In this context innovation can be used to defend, to block competitors from gaining our share even as it can also be used to attack.⁸

Hence, the approach that Peter Drucker labeled as "fast-follower" is a useful defensive strategy employed by companies to block the growing effectiveness of a competitor's offering. For example, Netscape Navigator had a strong head start in the browser market, but Microsoft's Internet Explorer became a fast follower and quickly overtook Netscape, forcing it to seek refuge as a subsidiary of AOL. (AOL grew dominant for a short time, acquired Time-Warner, and then itself collapsed into near-irrelevance before being reinvented.)

In high tech and particularly software markets, a variant on this strategy is known derisively as “vaporware.” Here the defense consists of product *announcements*, not actual products. In the early days of the database market, vaporware announcements were prolific, while actual new products came trotting along sometimes years later. In the course of one of these transitions Borland died a quick death long before its promised software reached the market.

While these aspects of innovation and the innovation process occur in the life cycles of individual companies, innovation is also a significant factor in macroeconomics at the level of nations and the economy as a whole. Economists know that it is *only* through effective innovation that real economic growth occurs, because the underlying economic impact of innovation is to make resources more productive, which literally *creates* wealth for society. Hence, innovation is crucial to the economic viability of nations.

But when discussing innovation the focus must remain on individuals and individual companies because it is their work that drives the economy forward. Thus, just as innovators drive microeconomic change in specific markets and macroeconomic change in economies, it is innovators who trigger creative destruction in their search for commercial success and competitive advantage. Among the companies widely admired today - and we have so far mentioned Google, Amazon, Facebook, Charles Schwab, Home Depot, and Fedex - most have attained success precisely *because* they have innovated. Through their innovations they brought structural change to their markets; their motivation was to gain advantage within the capitalist process precisely as Schumpeter described, and they succeeded in doing so.

But the innovator's role is only half of the equation. Customers are the ones who determine the value of innovations, because they are the ones who pay for them. Market behavior is an aggregate reflection of each consumer's drive to find the most attractive offers, and to maximize value received for cost incurred. As innovation is the process of creating higher value offerings, buyers naturally gravitate to innovative products.

But perhaps “gravitate” is the wrong word. It is more accurate to say that capitalist markets devour innovations, hungrily consuming them the way a very hungry lion consumes a fresh kill. The capitalist system depends for its dynamism on the market's appetite for innovation, which has shown itself to be generally insatiable.

Inherent in the dynamics of market demand is the process that drives competition through innovation. The waves of change launched by innovators are countered by competitors who innovate in order to defend their existing positions, or to attack with ambitions of their own.

It's an endless cycles that serves only to drive the process of change still that much faster and more widely throughout the economy. Accelerating change and the convergence in the marketplace of many competing innovators results in greater complexity for all, a landscape of acute danger and astonishing challenge.

Any enterprise that intends to survive must somehow innovate, because innovation itself is the only defense against innovation. Through innovation you may catch up if you are behind, or even take the lead.

Thus, we see clearly that the future of each and every firm is determined largely as a function of its ability to innovate effectively. Innovation is therefore a mandate, an absolute requirement for survival.

And it is a problem. An enormous, thorny problem for enterprises, because managing the innovation process is one of the most challenging issues facing any of them. It is extraordinarily difficult to do well, in part because, as with top management, R&D organizations are often focused on the wrong objectives, as we will discuss below.

The Many Dimensions of Innovation

Creative destruction is fascinating from a macroeconomic perspective, and it raises tough microeconomic questions about change and change management in

individual firms. In particular, it brings focus to how leaders and managers handle change, and it highlights the necessity of constant regeneration of the business from within through the R&D process and other creative and innovation-seeking endeavors, that is, on activities that are directly intentionally at creating innovations.

While leaders of successful companies show a knack for reinventing their organizations in clever ways, among the failures we see repeatedly the consequences of not understanding or following Schumpeter's advice. Too many managers assume that change is the aberration, and they behave as if the market is stable. Perhaps the business school curriculum is partly at fault, for the very notion of a Masters in Business Administration assumes that the critical competence is *administration*, implying that continuing and well-controlled operation under managerial control is the focus, intent, and purpose of management.

For most managers, however, the ability to *create* is far more important to their companies than skills related to administrating and controlling. Furthermore, as Russ Ackoff points out, a serious flaw in the traditional MBA curriculum is that in the real world managers are not presented with tidy and objective "cases" to solve⁹ - they must first *figure out* what the problem is, which can itself require a great deal of insight and creativity. And for the most part, textbooks don't help.

In today's markets change is the norm and stability is an aberration. Leaders grapple with the disruptive forces of change and they figure out for themselves what lessons and challenges present in the current situation, and what responses will be most effective in harnessing change so that their organizations can survive. Somewhere in the competitive environment it's likely that a new innovation is about to appear that will dramatically impact on the current structures that your business depends on.

And yet the relentless day to day demands on every manager's time immerses them in a flood of pressing issues, and many simply fail to recognize important underlying factors that portend significant disruption. Consequently, they tend not to account adequately for systemic change, and they are surprised and unprepared when they should not be.

Did personal computers and networked workstations surprise the computer industry? Absolutely. Did the high performance sport shoe surprise the staid sneaker marketplace when Nike invented the category? Did efficient and high quality Japanese cars surprise the Detroit automakers? Did the cellular telephone shock the entrenched telcos? And did the smart phone radically disrupt the cell phone makers? The answer to all of these questions, of course, is "Yes." This can happen only because leaders are looking in the rear view mirror, gazing backwards at what they have accomplished, instead of forward at what must be accomplished.

Occasionally we even see a company whose leaders, judging by the evidence of their behavior, prefer to go out of business rather than do the work of adapting to change. It can be intellectually as well as psychologically difficult to shift the focus from the operations mentality and actually confront the need to do things in a very different way.

During his tenure as CEO of IBM, during which he turned the company from a disastrous decline, Lou Gerstner commented that, "Many successful companies that fall on hard times - IBM, Sears, GM, Kodak, Xerox - saw clearly the changes in the environment. But they were unable to change highly structured organizational cultures that had been born in a different world."¹⁰

Even today, the local Sears store appears to be caught in a time warp, its merchandising showing all the leading edge ideas of 1975. Have their merchandising directors never seen an Ikea store, much less an Apple store? I don't have much confidence that Sears will be around much longer. What, one wonders, could they possibly be thinking? But they're not alone, for as we noted at the very beginning of this paper, companies are dying every day, even big ones that you'd think would know better.

And as Mr. Gerstner points out, a primary reason seems to be that some leaders actually make the choice for their enterprise to fail, to die, rather than confronting the need to change and adapt, that is, to innovate.

And while it is imperative for organizations to be continually engaged in the process of innovation, an

important question concerns where those efforts to innovate should be focused. Because there are, it turns out, a great many possibilities.

To examine this we devised an imaginary and archetypal large organization with products and services in many different markets, extensive operations in numerous locations, and a predominantly internal support structure. We suggest that in such an organization there are at least 38 distinctive opportunities for innovation.

38 Possible Innovation Targets

The first thing that jumps out from this list is that the vast majority of these opportunities do *not* involve new technologies embedded in existing or new products. In

spite of the widely-held assumption to the contrary, “innovation” is by no means limited to “technology.” One of the lessons is that technology innovation by itself has rarely been sufficient to ensure the future, and it is certainly not today. Nokia, to go back to that sad story, has mountains of great new technology. In its halcyon days, it was one of the world’s greatest technology innovators, and its massive R&D budgets were the envy of companies worldwide.

But in fact, Nokia’s collapse was one of the most effective messengers of an important lesson, which is that it’s not a question of how much you spend on innovation, but rather the process you use to manage that effort. Booz & Co. has shown us through some great research that spending a lot on R&D is surely no guarantee of future business success:

Table 1: Possible Innovation Targets

business structure	customer service
alliances	service process
capital formation	communication
administration	supply chain
information flow	distribution system
automation	manufacturing
insourcing / outsourcing services	communication
organization	automation
structure type	product
facilities infrastructure	product offering
IT infrastructure	product availability
employee / contractor mix	technology (hidden)
employee experience	technology (evident)
decision making processes	manufacturing
facilities effectiveness	R&D
process to improve processes	user interface
customer experience	packaging
communication process	functionality
crm	life cycle model
brand / image	sales model
advertising	sustainability
feedback	after-sale service
	distribution

“Yearly R&D spending among the world’s 1,000 largest public corporate R&D spenders has hit a record high of US\$638 billion, according to global management consulting firm Booz & Company in its ninth annual Global Innovation 1000 study. However, despite the sustained overall increase in R&D budgets over the last decade, this year’s findings show once again that higher spending doesn’t guarantee bigger payoffs. Indeed, the 10 most innovative companies our study identified this year financially outperformed the world’s top 10 spenders, despite actually spending significantly less on R&D.”¹¹

Interestingly, this is the case even when innovative technology is at the core of the offering. A good example is Xerox. Chester Carlson’s technological innovation was a stunning breakthrough, and a testimony to his insight and persistence. The Xerox story is also testimony to the difficulties of forecasting the market for genuinely new products. Many industrial giants of the day, including IBM, Kodak, and GE each rejected the opportunity to acquire Carlson’s technology at bargain prices.

When he finally did find a partner, it was tiny Haloid Company that stepped up, and together they found that getting the technology to market entailed far more than simply building new machines. The success of Haloid-become-Xerox in its early years was largely due to its innovative approach to distribution - leasing the machines on a per-use basis, instead of selling them outright. This brilliant insight propelled Xerox into the top echelon of American business, where it remained, however, only for a few decades. Today Xerox is a company in difficulty, threatened by far more creative competitors whose own innovations in distribution and technology have largely surpassed Xerox’s. Again and again we see the inexorable power of creative destruction.

Did Xerox top management believe that the market was stable, and that their incumbent competitive advantages would persist? If so, they were clearly mistaken, and now another generation of top managers has the task of rebuilding the company.¹²

But the problem was not that Xerox failed to recognize the importance of innovation. In fact, they generously

funded technical R&D that surpassed the efforts of most other companies, creating the legendary Palo Alto Research Center, PARC, from which sprang an amazing string of enormous breakthroughs in many dimensions of technology. It was at PARC, in fact, that the personal computer as we know it today was invented. Not only was the investment substantial, but so were the results.

And even as the company entered its period of decline, it was still producing astonishing technological breakthroughs. Its Docutech system, for example, a self-contained digital printing plant and bindery, did what no copier had done before. But within a relatively short period of time, Xerox competitors had machines that matched or surpassed the Docutech.

This illustrates one of the most vexing problems associated with technological innovation: In today’s environment, technology is one thing that a determined and adequately-financed competitor may readily replicate or bypass. Patents offer limited protection, but sometimes they simply provide stimulus and insight for others determined to be still more inventive.

Thus, a focus on technology breakthroughs to the exclusion of other aspects of innovation is misplaced. Given the complexity inherent in today’s technologies, you simply can’t count on being able to out-R&D the market on a consistent enough basis to sustain a competitive advantage. Sooner or later, and probably sooner, every technology meets its match or its superior, and it’s probably coming from a competitor.

But for the brief interval while a particular technology is superior, it can be the basis upon which to build something of truly critical importance: strong relationships with customers. Innovation efforts must therefore include the creation of new approaches that help strengthen the bonds with customers, and they should draw from each of the 38 dimensions that might provide differentiation. Strong customer relationships help companies survive the inevitable periods when their technology will not be the best.

The experience IBM underscores the significance of innovation that is not just technological. Over the years, many of IBM’s successes have come not as a

result of technological leadership, but because of its close relationships with its customers. IBM was not actually a technology leader in many of its product areas, but for the decades of the 1970s, '80s, and '90s, IT managers struggled with the choice between leading edge technology offered by IBM's competitors, and IBM's own systems, which were often just slightly above average. Because even though its technology may not have been the best, IBM made sure that it was a "safe choice" for customers because the company made consistent and unsurpassed efforts to provide exemplary service. The adage among IT executives was that, "Nobody ever got fired for choosing IBM."

Over the years an increasing proportion of IBM's revenues and profits have come from its services organization, and the major transformation led by Louis Gerstner was a massive shift from product-based revenues to services. By 2002, services accounted for more than 50% of revenues. So is IBM a computer company? Well, yes. Its high profile research efforts in areas such as super high-density magnetic storage drives and the Deep Blue chess-playing supercomputer are well publicized initiatives that keep this idea in the public's mind.

But the IBM services organization is far more significant today because the relationships that are created and sustained through services are the real key to the company's future.

Ford provides another clear example. The original Ford cars of the early 1900s were certainly innovative for automotive engineering, but equally important to the company's success was the innovative production process (the first vertically integrated assembly line), the distribution system (the dealer network), and the company's pricing model that ensured affordability. All of these innovations enabled Ford to create an enduring relationship with American car-buyers and build a significant share of the market.

By the 1920s, however, GM had copied and largely caught up with Ford's innovations, and began introducing some of its own. A minor GM innovation with major impact was the availability of cars in colors other than black.¹³ Ford suffered steady decline thereafter, and was rescued from what might have been fatal demise

only by the enormous demand for military vehicles caused by World War II. After the war, the company soon staggered again, and was nearly bankrupt by the late 1950s.

The Ford story illustrates two important aspects of competition in nearly every market. First, each industry has its own rhythm of technical innovation, driven largely by advances in materials and methods. These advances often lead to cycles of changing market dominance. In the auto industry, Ford was supplanted by GM, and more recently GM by Toyota and Honda. Today, we wonder if Tesla will be a future industrial giant. And what new car company that we haven't heard of yet will be the leader in 2025, or 2035?

The second aspect, however, is what seriously complicates the focus on technology. Ford's choice of black paint was an economic one, part of a relentless strategy of minimizing costs. From 1903 through World War I, this strategy was a significant contributor to the company's growth. But in the 1920s, the nature of the market itself was changing, and Ford's success as a cost-cutting pioneer did not serve so well when market dynamics began to favor factors related to comfort and style.

The point is that within the framework of any given market cycle, a company can grasp and sustain leadership. But the greater challenge is managing what happens when a new cycle begins. As it turns out, very few companies sustain leadership positions beyond a single cycle because they don't grasp the significance of change. And this is what makes the work of Gerstner so significant at IBM. In the face of a major shift in the market, the company faced the choice to reinvent itself or collapse, and Gerstner in fact led the process of reinvention with great success.

Many of the negative examples already mentioned confirm how extraordinary this was.

Xerox led the copier market, but has nearly collapsed in the age of the PDF.

Kodak was the world's number one manufacturer of film, but collapsed when digital cameras displaced film cameras.

Nokia led the cell phone market, but was not prepared for the smart phone market.

Sears led American retail for decades, but lost out to Wal-Mart when discounting and supply chain management became the key differentiators.

Between 1995 and 2004, Coca-Cola dropped 50% of its share price when customers switched their preference to healthier beverages (and much as IBM did, it has since recovered).

There were many happy and charming bookstores all over America until Amazon.com undercut their prices by 20 or 30%, and now there are almost none.

So the point is clear – just because the current structure of the market favors your solution absolutely today, does not mean that the structure of the market tomorrow will also favor you. While one set of products and services may be exceptionally well-suited to the market at a particular point in time, it's surprisingly rare for a company to successfully adapt its products and services to changing market conditions quickly enough to sustain its leadership position.

Chances are they have positioned their defenses in a way that leaves them vulnerable, and indeed it is common for companies to cede market dominance when clever competitors attack them in areas where they are not prepared to defend themselves.

Sears, for example, allowed Wal-Mart to establish itself in smaller rural markets that Sears had thought unfeasible. Wal-Mart then applied innovation processes throughout its growing supply chain to significantly lower its overall operating costs, at which point it went after Sears and K-Mart in their urban markets. Sears became a second-tier player almost before it realized what had happened, while K-Mart soon found itself in bankruptcy. (And then, strangely, CEO Edward Lampert decided that a merger of the two failed companies was the best solution for both. So far the results have not been so good.)

Similarly, by focusing on annual style changes in their competition with one another, the Detroit automakers largely ignored the importance of underlying quality

improvements. When quality suddenly became an important attribute for American buyers in the 1970s, the Japanese manufacturers began taking market share. Before 1980, GM didn't take the Japanese seriously as competitors at all, and it didn't take the issue of quality seriously either. Today GM is still struggling to catch up to Japanese quality standards, and as a result GM's share of the American car market declined from 50% to less than 35% between 1980 and 2000, to 18 % today.

During his unsuccessful 10 years as CEO of GM between 1998 and 2008, Rick Wagoner saw the company's market valuation drop by 90%, and losses totaled more than \$80 billion. This, together with the story of Nokia, shows just how bad things can get when a company loses its fit with the market, and competitor innovations take hold in the market.

It takes exceptional discipline and clarity of vision to defend a competitive advantage and carry it through to a next generation of offerings, and not to be cruel to Mr. Wagoner, but in hindsight he just wasn't the right guy for the job.

The challenge, particularly for a board of directors, is to know who *is* the right guy, or woman, for the job, because the CEO must look after both the current business and also the future, and these two facets require quite different expertise and viewpoints.

With success comes growth, and as a company increases in size and scope, the nature of management's challenges change considerably. Managing Xerox at the start-up stage was an entirely different problem than steering the global copier colossus.

When a company is small, top managers are often in direct contact with customers as a natural part of their role in the company. But as they deal with the complexities of larger enterprises and multiplying layers of organization, they often become further and further removed from direct experience of the market. Without direct contact they are intuitively forced to rely on past experiences, and they have a progressively more difficult time hearing the voice a changing market that was different than the one they remember.

In addition, the need for extensive administration ultimately distracts management from the business of innovation. At the same time, dysfunctional and bureaucratic behaviors grow endemic inside of large organizations, and result in huge distortions to the flow of critical information about the changing external market. Corporate politics gets more and more attention, and emphasis shifts to internal events, while key external factors become obscured from view. Meanwhile, change waits for no organization, and innovations from competitors are introduced without sufficient response.

Hence, it's one thing to be an innovator in a small market, and quite a different matter to bring creative drive to a large operation. As a company grows and the stakes become higher, the risks that the small company has taken as a matter of course are now subjected to a lot more scrutiny, and reaction times slow. Sometimes they slow disastrously. More levels of management have a stake in major decisions; time lags in decision making are longer. In extreme cases, "analysis paralysis" sets in.

Smaller, more nimble competitors have less to lose, fewer people to convince, and often a sense of desperation that sharpens top management's perception of market needs. In fact, the well-tuned senses of entrepreneurial top managers become magnets for capital - small, new companies are founded specifically to attack new market niches that only their entrepreneurs and the capitalists that back them even recognize.

The result of this complex process is a pattern that repeats with astonishing regularity. As innovative companies grow, they tend to become followers rather than leaders. Nevertheless, their sheer size, combined with control of distribution channels, makes them formidable competitors even when their subsequent innovations are really copies.

Another factor heavily influencing market evolution is that at any given time in any given market, only a few critical value dimensions yield the key combination that proves most attractive to customers. Whichever company happens to have just the right mix available gains a temporary advantage, but the emphasis

remains on "temporary" because the market's need change and very few companies sustain leadership over a long period of time.

We find countless examples of companies that have distinguished themselves by focusing on one or another of the many dimensions of innovation, but then faded into obscurity when the dimension in which they were particularly strong became a secondary or tertiary concern, or a non-concern, of customers.

From a manager's perspective, however, 38 dimensions of innovation presents a daunting challenge. For old school giants such as GE, GM, or IBM and new school leaders such as Apple, Google, or Cisco, 38 arenas for innovation are clearly too many to address at once, which brings us to a critical dilemma that confronts managers every day: How to choose? In what aspects of a business should efforts at innovation be focused? Should a company apply itself to innovation in its products and services, or its brand, or its organization, its leadership team, its technology, its capital structure, or any of the others among the possible targets.

Or should it choose any of them?

Individual factors may explain the success achieved by this or that company in this or that market, but it's obvious that while any of the 38 areas may be important, no one of them consistently explains emerging success and failure. Wouldn't it be far more useful to have a robust explanation of the emergent successes as well as the astonishing failures, and thereby a better way to both examine the competition and to direct innovation efforts? Of course.

In search of such an explanation we could ask, What makes Apple, Apple? What makes Fedex, Fedex? Or, What makes Schwab, Schwab? Or, What makes Home Depot, Southwest Airlines, or any flourishing company successful? Is there a way to accurately describe success and to explain how success emerges?

If we take this question seriously, what we're really looking for is more than innovation localized to a particular dimension, but rather a comprehensive innovation framework.

The Business Model

When you look at our list of 38 possible innovation targets you see interesting potentials, but you also see a fragmented world. Viewed as a list of possibilities, each target stands separately, interesting perhaps, but alone. This may be useful for analytical purposes, but it's also fundamentally distorted, because by looking at an inventory parts you'll surely not get a real appreciation for the whole.

But what if you could look at the problem of innovation as a whole, as one process? What would you see?

You might see this: Yesterday a whole range of tough competitors were creating new products, services, distribution systems, brands, and infrastructures that are bringing change to the market today. Recognizing the imminence of the creative destruction that will result from this, we accept the absolute imperative of innovation.

And now we are confronted with the following question: How do we innovate with a clear focus not on the parts of the system, but the system as a whole?

To accomplish this we would first have to understand what the "whole system" is. It's not a particular department, a product, a service, or a brand. It is the entire organization together as one thing, working together to deliver value. For this new integrated whole to be a useful managerial concept we need to give it a name, and design a process through which it can help us manage the enterprise more effectively.

This whole is the "business model," a comprehensive description of business as an integrated system functioning in an intimate relationship with the broader market. In this concept, the individual components of an organization do not matter as much as the way they work together to enable the organization to create value and deliver it to customers.

A business model is therefore a description of a whole system, a combination of products and services delivered to the market in a particular way, or ways, supported by an organization, positioned according to a particular branding that, most importantly, provides experiences to customers that yield a particular set of

strong relationships with them. Further, a business model describes how the experiences of creating and delivering experiences and value may evolve along with the changing needs and preferences of customers.

To make this approach useful we will need to understand some critical characteristics of the whole. In particular, we need to know how this whole is different from the parts that comprise it.

A key insight is that the distinguishing characteristic of any system is that its outputs emerge not as a result of any single part, but as a result of the way the parts are connected together.

An excellent example of such connectedness is an airplane. Each of an airplane's component parts, and even its major sub-assemblies, has the absolute tendency to fall towards the ground. Take them up to 35,000 feet and let go, and they invariably tumble straight down. It is only - only, only, only - when all the parts are assembled just so, and working together properly, that the system we call the airplane manifests "airplaneness," and actually flies.¹⁴

Similarly, a system we call "a company" consists of many different parts. It participates in other systems we call "markets," which in turn are part of a still larger system we call "the economy."

If you take a part of a company - say the accounting department - and put it into a market by itself, what you have is approximately ... nothing (unless you want to run an accounting services company). The accounting department has no relevance outside of the larger company because accounting is only meaningful when there are transactions that have to be accounted for.

Similarly, manufacturing requires a sales force, distribution, and customers. Marketing has no purpose independent of a company's identity, its products and services, and the perceptions of outsiders.

This tells us that the success of a company is not attributable just to one or another part, even as the reality of flight is most assuredly not an attribute of any single part of the airplane.

There's another aspect of the airplane analogy that's also important, one that has to do with the process of optimization. Let's say we have a nicely functioning airplane and we want to improve it. We might want to make the engines more powerful so the plane can go faster. But that might put too much stress on the airframe, or the wings, or it might change the control properties of the plane, and make it unflyable. Hence, the ability of the system to function is entirely dependent on the mutual fitness of the parts. No part can possibly be optimized except in the context of all the rest. Instead, we must direct our efforts toward optimizing the system as a whole.

The product that cannot reach the customer provides no value; the service that cannot be delivered provides no value; distribution systems lacking effective products provide no value. Indeed, Coca Cola discovered this a decade ago, when the world's most proficient marketing machine lost half of its market valuation because ... the market for Coca Cola stopped growing. This misfit between product and market was devastating to stock price, partly because mired in its past, the company's leadership failed to notice what was happening. This oversight enabled Pepsi to shoot ahead in terms of market capitalization; it also cost the CEO of Coke his job.

Certainly the optimal approach to marketing depends on the actual products that you're manufacturing and the customers for whom they're intended. Product design, manufacturing, marketing, and sales have to fit together, and the definition of this fitness *is* the business model.

Consider another example of what happens when the parts don't fit together well. Imagine a company with an amazing breakthrough technology, but a sales force that is incapable of selling it and a senior management that is largely indifferent to prospective buyers. Actually, that's not so difficult to imagine; Xerox had this experience.

After all, Xerox is the company that literally invented the personal computer at PARC back in the early 1970s. Naturally, Xerox wanted to make money from this profound invention, but because Xerox management didn't actually understand who would use the product, or what for, they tried to push it through an entirely unsuited distribution

channel, to a market that was neither prepared for it nor able to understand it. It went nowhere.

Well, it went nowhere for Xerox that is. But a few other companies did make excellent use of Xerox technology, and in subsequent years they have made billions – yes, billions – by applying Xerox inventions to their own products and services. In particular, Apple and Microsoft were big beneficiaries.

Now imagine a company with a brilliant sales force that is also adept at bringing back news from the marketplace, but the company ignores the warnings? This happened to IBM, when it overlooked the emerging computer workstation market, a device occupying a market niche between the PC and the mainframe, and allowed Sun to become the market leader when IBM failed to even make an attempt to address the new client-server IT paradigm. (Sun, it should be noted, also subsequently faltered, and became part of Oracle.)

Or let's look at cars. GM has a vast dealer network that is deeply embedded in the commercial fabric throughout North America (and in fact the entire world), but the company somehow couldn't manage to produce an Oldsmobile-branded car that enough people actually want to buy. Although its headquarters was packed with thousands of very bright minds, GM was compelled by a persistent lack of innovation and a chronically worsening shortage of capital to shut down the Olds line. And then it did the same with Saturn, Pontiac, and Hummer; the death of these brands was another aspect of Rick Wagoner's unsuccessful legacy.

To repeat, then, a "business model" is a description of the entire marketplace and the relationship of the company to that commercial environment. It is a precise definition of who customers are, and how the company intends to satisfy their needs, both today and tomorrow. A business model also provides a specific assessment of today's competitors, and tomorrow's, and the technologies that are and will be embedded in various competing versions of products and services. If Xerox had been thinking about its personal computer technology in terms of a business model, perhaps the results would have been different. If IBM had understood that workstation computing was a new and important business model, perhaps Sun would never

have attained prominence. If GM had considered the business model underlying its Oldsmobile line, perhaps it would still be viable. In each of these examples it is impossible to know the root causes of the problem without knowing the actual people involved, but the results strongly suggest that top management was probably not asking the right questions, and they were probably not having the right kind of conversations about the future and how to adapt to it.

The realization is that for the company it is the business model that matters, and which must drive any new approach the competitive marketplace as well as how it should organize itself to compete. This gives us a new way to think about adapting to change, or how to create it. Today and going forward what we're talking about is not just competition between companies, but competition between business models.

Or, in other words, *Business Model Warfare*.

Business model warfare characterizes the process of winning and losing that marks the creatively destructive marketplace, and enables us to define a set of principles and skills that will allow managers to be effective at this game. Not that it's a new game, however. This is the way business has always been; and for just as long, managers have been falling into the trap of focusing too much on today and not enough on tomorrow.

Winning and Losing at Business Model Warfare

As we have noted, in addition to erroneous assumptions about stability, managers also fall into the trap of focusing too much of their attention inside their own organizations. This is a particular danger with middle managers who are under pressure from upper levels in the hierarchy of organizational authority. Their instinctive and entirely logical sense of self-protection forces them to pay great attention to the behavior and desires of senior management, but sadly less attention is often paid to customers.

To engage in business model warfare, managers cannot be internally focused on products, services,

or administration to the exclusion of the critical relationships between these elements, and the even more crucial interactions between a company and its customers. Remember the metaphor of the airplane, and the critical role of the connections in its capacity to fly. Thinking about innovation in the business model as a matter of the *overall* relationship between the company and its customers, rather than innovation isolated in this or that aspect, may therefore yield greater insight and better management performance: it's not a coincidence that the winners in business model warfare are usually those who manage their customer relationships in the most effective ways possible, by creating compelling experiences across many different dimensions.

Some examples:

Japanese auto manufacturers are the source of many business model innovations, and when they applied their increasing expertise in manufacturing quality to create new, affordable high-end product lines, and now Lexus, Acura, and Infiniti, they created products among the most admired cars worldwide, and enormously profitable segments of their businesses.

They continue to steadily increase their share of the American auto market. Further, Toyota's innovations in alternative fuels with their hybrid Prius line, far in advance of American manufacturers, won it added market share as buyers develop a preference for fuels other than oil. The Prius was the best selling car in California in 2013.

Looking to Europe, retailing giants Auchan and Carrefour redefined the French grocery business in the 1960s by applying new cash register technology to create the hypermarket, and at about the same time Novotel introduced a new kind of hotel.

In the 1970s, Nike redefined the nature of competition in the sports shoe and sports apparel business by transforming star athletes into marketing icons, first with runner Steve Prefontaine and later with Michael Jordan. In so doing, Nike created new markets for its shoes and clothing, and surpassed Adidas to become the global leader in a ruptured market. Nike's core business model innovation was turning its own brand

into a key element in the self-identity of its customers, which comes pretty close to the ideal when we're talking about the company-customer relationship. Nike, in fact, elevated brand management to unprecedented heights, and has demonstrated how central the concept of brand management is in today's market.

American Express once dominated the credit card industry, and carefully cultivated an image of prestige and exclusivity. Visa entered into competition by creating a global network that was far more fluid, flexible, and low cost, and has far surpassed American Express. Visa charges lower rates to merchants, making its services more attractive, and built its brand on ubiquity – Visa cards are available and accepted everywhere. Visa's first forty years prior to its recent IPO were built on an organizational innovation of the first caliber, developed by Dee Hock and now articulated by him as an example of the "chaordic" organization, one that effectively balances chaos and order in service to continuous innovation and adaptation.

Dell created a commercial powerhouse by completely re-inventing the manufacturing and distribution process and building machines to order, rather than to inventory, thereby introducing an entirely new business model to the personal computer industry. Mass customization at a competitive price defined a new kind of customer relationship in the PC industry. But in an impressive display of changing market structures, the company's unique business model lost its charm, and founder Michael Dell took the company private in 2013 in his attempt to recreate the magic of its past.

Southwest Airlines developed an approach to the airline business unlike any of the airlines that were established when the company was founded, and has sustained its unique business model to become the most financially successful company in a highly troubled industry for the decades leading up to the systemic crisis in airline industry that resulted from the terror attacks of September 11, 2001.

One of the most interesting things about Southwest is that there isn't much technology evident in the business. What is apparent is that the leaders of Southwest thought through the air travel business in a comprehensive way, and avoided falling into traps that

hurt others. The company is not burdened by restrictive labor agreements that now weigh so heavily on its competitors; by design, the company did not operate out of airports that charged high fees; and it still does not participate in centralized reservations systems. The company has not attempted to be something that it is not, a mighty global airline, but has instead focused on understanding its niche and serving it profitably.

Exemplars

As we examine industry after industry, we see that wherever there is an exemplar, a company that stands head and shoulders above others, that company is almost always a business model innovator, and is applying creativity across many dimensions of customer experience to become that market leader. This does not, however, mean that every business model innovator is also a market leader, for innovation is a risky enterprise. Many new business models fail, just as old ones do.

Like Southwest, Fedex is most notable not so much for the pioneering idea of overnight delivery, nor for its innovative use of information technology to track packages, nor its positioning as a reliable, courteous, and service-oriented alternative to the post office. No, it is all of these factors, and more, integrated together, as a coherent system. The fusion of these elements into an effective organization is precisely what we mean by the business model. And when we compare the Fedex model with the US Post Office model, we see consistent innovativeness on one side and astonishing stagnation on the other. Fedex has a history of change and development that the post office lacks. Certainly the post office is hampered by its own history as a government agency, its rigid labor relations, and even by its extremely broad mission. Just as certainly we see a business model that is failing, one that is losing market share and buckets of money, and facing a host of competitors as it becomes marginalized on the fringe of economic viability.

It's interesting to see how the post office did attempt to defend itself from Fedex. In the mid-1990s the post office introduced a guaranteed 2-day delivery service in a package very similar to Fedex's, and available at just 25% of the cost. After a while, however, it became apparent that 2-day service wasn't actually a guarantee,

just an intention. While for many customers this may have been acceptable, it shows how little the post office management understood that FedEx's reputation for reliable execution was as important as the fact of its timely deliveries. Aside from its questionable notion of what constitutes acceptable delivery, it's probably a moot point until the post office realizes that another element of its business model is obsolete, namely the requirement that customers must wait in long lines to get service. If the post office ever wises up and solves either or both of these two problems, FedEx will have someone besides the brown trucks of UPS to worry about.

Home Depot also exemplifies the successful integration of numerous factors to create a business that is so appealing to customers and so devastating to competitors. Impressive scale on two dimensions – gigantic stores and a huge number of them – leads to high sales volume that enables the company to pay and charge the lowest prices. The local hardware store or lumber yard can't compete unless it, too, undertakes its own business model innovation and positions itself as something that Home Depot cannot be. Which would be highly personalized service, fast transactions, proximity, better selection, different products Ace has recognized this as its niche, in which it is doing quite well, positioned as the anti-Home Depot, and also demonstrating how the evolution of business models creates new opportunities.

So what we see consistently across all of these examples, and with widespread consistency across the entire history of business, is the following:

It's rarely, if ever, a single innovation that propels a business to success. It is, instead, a suite of innovations that complement one another and work together to provide a novel or distinctive value proposition that underlies success. The key is not necessarily the product or service itself – which could be highly innovative or even just acceptable – but something brought to market in an innovative way, supported in an innovative way, branded in an innovative way, and in the end always an approach that builds enduring relationships between the company and its customers.

Furthermore, the core of the innovation value proposition need not be built around a technology per se. In the examples cited above – Toyota, Honda, Nike, Visa, FedEx,

Home Depot, Southwest Airlines, and Ford (in the early days) – proprietary technologies do play a part in the company's success, but there is always much more later. The key to success is a focus not only on technology itself, but technology *applied in a business process* to optimize the relationship between the company and its customers.

In today's environment nearly any technology can be, has been, and will be copied, so the important competitive advantage is knowing how to *use* the technology in a way that adds the greatest value for customers. When enough people believe that a \$45,000 Lexus performs as well as or better than a \$65,000 Mercedes, it is then that the structure of the market undergoes a profound change.

With all of this in mind, we now have a better way to characterize marketplace competition, creative destruction, and innovation. We see that effective innovation is not a matter of exploiting individual technologies, nor of exceptional performance in any other individual element of a business, but rather a matter of harnessing the business model itself, which may but does not necessarily include technologies among its many possible dimensions.

To state it more simply, what's happening continuously in the marketplace is competition between business models themselves. The Lexus business model is different than Ford's business model, or that of Mercedes, etc.

What this means is that the winners at business model warfare have generally applied innovation to create competitive advantages, building stronger relationships with customers by developing business models that fit closely with customer needs and preferences across multiple dimensions.

Winners who have figured out these principles then seek to sustain their advantages through further business model innovations that defend newly-won territory and extend into new domains. It is therefore the business model itself that must be the focus of innovation, and innovation in any or all of the 38 possible dimensions must be undertaken in service to a larger framework that is defined by the business model itself.

Part III: Mapping the Future

As I mentioned above, during the last ten years we've had ample opportunities to explore business model innovation in our work with organizations in a great many industries, and to develop tools and models that our clients have used to help them chart their future course. One of those tools has proven particularly useful, and I would like to introduce it to you here. We like it because it is both an analytical and a predictive tool, and because it seems to explain a great deal of what's actually happening.

In particular, we wish to address these questions: Where are we today, where are our competitors, and in which direction lies our future? What business models will be successful in the future? In which direction should we direct our innovation efforts?

In response to these questions we have devised a market map as a simple matrix. We label the horizontal axis "market size," and the vertical axis "customization" (or "differentiation").

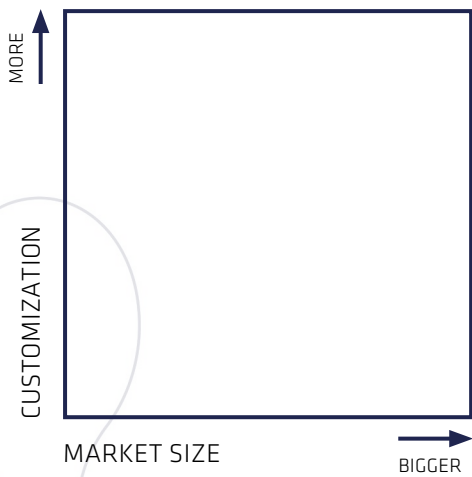


Figure 1

Moving from left to right means accessing more customers, which in turn implies that the price decreases. Hence, the business model intent of both Wal-Mart and Ikea is to move progressively to the right. "Lower prices every day" is not a Wal-Mart advertising slogan

by accident, but a central element of the company's value proposition. Hence, the lower right hand corner of the matrix designates the largest mass market, the one with the lowest prices and the least customization. In the US we have a company called "the dollar store" that occupies that spot. Everything in the store, predictably, costs \$1.

Moving from bottom to top, meanwhile, means increasing customization and differentiation. Therefore, the upper left corner is where you'll find the exclusive products that only the richest people in the world can buy. Private yachts and jets, Picasso and Van Gogh paintings, mountain-top estates and private islands.

The lower left corner of the matrix is a therefore a Dead Zone - if there were such a thing as high prices and no customization, this is where you would find it.

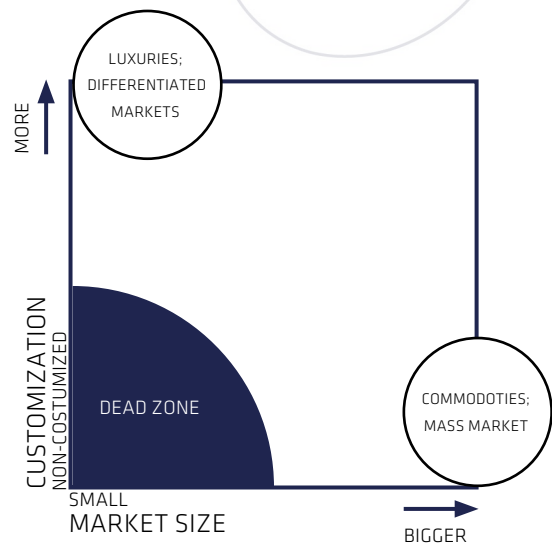


Figure 2

No business would consciously choose to occupy this spot.

What this map enables us to do, therefore, is to determine our relative place in the market, to study the behavior of our competition, and then to help us plot our future course.

As an example of how we can use the model, let's take the hypothetical example of Sears, which as I noted,

was at one time the dominant American retailer, an innovative company that grew to enormous size and influence. Sears did this by offering great value, and it was very specifically targeted at the core of the market.

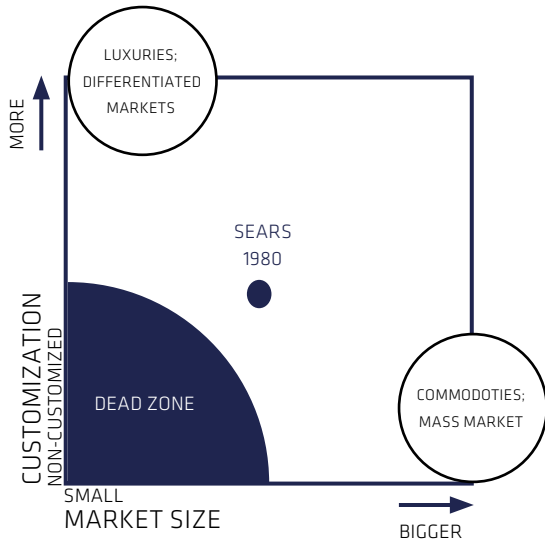


Figure 3

Both as a matter of its business design and its marketing, it strived to be the iconic American retailer. Headquartered in the center of the country, in Chicago, the company exuded confidence and reliably produced handsome profits for many years. Figure 3 shows Sears happily at core in 1980.

However, Sears had a young rival at that time, and within 20 years the rival had far surpassed it. Wal-Mart out-innovated Sears, and while Sears suffered significant declines, Wal-Mart grew very fast, both in the US and throughout the world.

Our market map of 2000 shows that the overall size of the market has grown significantly, which reflects the normal process of economic growth. The map also mentions a key factor, which is that overall customer expectations changed from 1980, and parts of the market that were quite viable in 1980 have been overtaken by the dead zone by 2000. Sears, which stayed resolutely where it was, and therefore did not adequately innovate its business, was simply swallowed up by the staying the same. Changing

customer expectations put it squarely in the expanding Dead Zone.

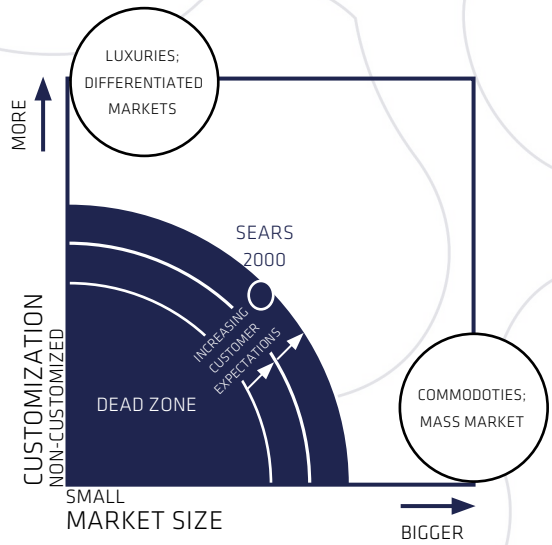


Figure 4

Wal-Mart, however, demonstrated the qualities necessary for continued success. By developing new innovations in its supply chain, product designs, and in fact across the entire scope of its business model, it succeeded in moving its business model both upward, with higher quality products, and to the right, with progressively lower prices. (figure 5) (It should be noted that Wal-mart's employment policies remain controversial, and one can argue that its success is based in part on a practice of under-paying its employees by manipulating the labor laws of the US. For the purposes of this paper we leave this issue aside, but we acknowledge the ethical problems associated with this practice, and the likelihood that future changes to its business model may be forthcoming as a result.)

Wal-Mart, and another successful business model innovator Ikea, both continue to aspire to move both up, toward more customization, and to the right, toward ever lower prices. And so do all of their competitors. Including, of course, Amazon.

By 2020 we can easily imagine Sears totally buried in the Dead Zone, and indeed with a massive infusion of innovation it's hard to imagine Sears surviving at all, while Wal-mart will probably continue to move up

and to the right, even as the Dead Zone chases it up and outward. Hence, the Wal-mart of 2020 will be the same as the Wal-mart of 1980 in name only, as creative destruction chases it ever forward.

So they will ask themselves how else they can customize the experience of shopping with them? Amazon does so through its delivery services, and its offer to get your purchase to you within two days, or a day, or even hours in some cases. Amazon also offers recommendations customized to your interests, based on statistical analysis of the behavior of millions of its customers. How will Wal-mart do that?

Netflix does the same thing, and because viewer recommendations are so important to its business, in 2009 the company Netflix sponsored a contest in which it paid a prize of \$1 million to the programmers that best improved the accuracy of user recommendations. It's quite obvious that the goal of the prize is also to move Netflix up on the map, toward still better customization.

You might also be able to use this map to help you think about the future of your business, and to compare your own company's performance to your competitors, as we have compared Sears and Wal-mart. As another example, let's look at Mercedes and Lexus. Earlier I mentioned that a \$45,000 Lexus competes successfully with a \$65,000 Mercedes, which on the map looks something like this.

The \$20,000 Chevrolet, meanwhile, purposefully sits in the center of the market, similar in brand identity and corporate culture to Sears. For a long time this was a profitable spot, but no more. So like Sears it was swallowed up by growing customer expectations. The failure of Chevrolet to innovate was indeed a big part of the problems that Rick Wagoner was unable to fix, and a significant contributor to the drastic decline of GM.

The point of all this is obviously that you can also use this framework to think about the aspects or dimensions of your business where customization can be offered, and where it can be improved by lowering prices, thereby moving your entire business model continually upward and to the right. This may not be optional, and indeed, when we look at the companies that have failed, we often see that their competitors offered either lower prices, or more customized solutions, or both.

For example, you may remember that in its early days, Google had a lot of search engine competitors, but over time they have all fallen away simply because the search results that Google provided were simply better, i.e., more customized to the specific requirements of searchers. Remember, though, that this does not mean that Google will forever be entrenched as the exemplary occupant of the g-spot (in which case the name of that spot on the matrix may have to be changed), because there is no end to the business factors that *could* become important in a future market, and which some firm other than Google may master. As I noted above, it is very often when the key drivers of competition change that old companies are pushed aside, and new ones take their places as leaders. And this happens precisely because it is the new firms that master then new competitive factors first.

To take the example of but one company, we may be looking at such a process right now with Microsoft. The company is a tech colossus, dominant in many fields, but still struggling to adapt to change. Sales of the PC are declining worldwide, down 10% from 2012 to 2013. Sales of tablets, on the other hand, increase, but Microsoft is not benefitting significantly from this because it did not foresee that market, and came quite late with its Surface. Microsoft Office and Microsoft Windows remain dominant software products for PCs, but if PC sales continue to fall, then the company will find itself fighting a rear guard action to preserve the past, rather

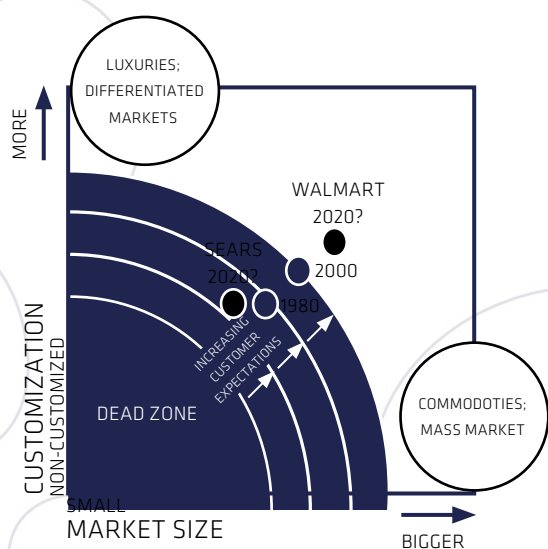


Figure 6

than a proactive one to create the future. We could well foresee that when PC sales drop below some currently-unknown threshold that Microsoft may follow in the footsteps of Nokia or Kodak, passing the threshold of non-sustainability below which the company implodes.

But the leaders of Microsoft are obviously very smart, and they see what's happening as well or better than us outsiders. So will they lead their company to create the next generations of products and services and business models to sustain Microsoft in the years ahead? Will they be able to create better business model and new products and services that move up and to the right on the matrix, faster and better than their competitors? The hypothesis of this paper, and the logic of business model warfare, suggests that this should be one of their overriding objectives, and perhaps a convenient (although certainly quite simplified) way to assess any given decision or proposed initiative.

We will follow this closely, but no matter what happens, it seems that concepts and principles explored here may be useful as we seek to understand the patterns of change in the marketplace, and to predict the outcomes of decisions yet to be made.

The upper right corner, meanwhile, remains an interesting sort of business Nirvana. Here you might find an entirely customized product, which is affordable by literally everyone, because it's free. But surely this could not be the location of any company, for how would it survive?

In fact, however, there are currently two companies occupying that corner, and their astounding success has been achieved precisely because their product (well, service really) is utterly free and yet totally customized to the uniqueness of your specific requirements.

One of these companies is Google, which is happy to provide you with a fully customized web search at any time, day or night. It takes only milliseconds, and it did this approximately 2 trillion times in 2013, or 6 billion times per day, 4 million per minute, and thus 70,000 per second. (I found that out by doing a Google search, of course.¹⁵)

It is in honor of Google that I have named the sweet spot in the upper right corner, somewhat tongue in

cheek, the "g-spot." (I hope they don't mind.) Google's business model has created a good number of billionaires precisely because it is so well and uniquely positioned, and also because they do seem to fully understand the extraordinary position they occupy, and because they are managing the firm to exploit and extend their significant advantage.

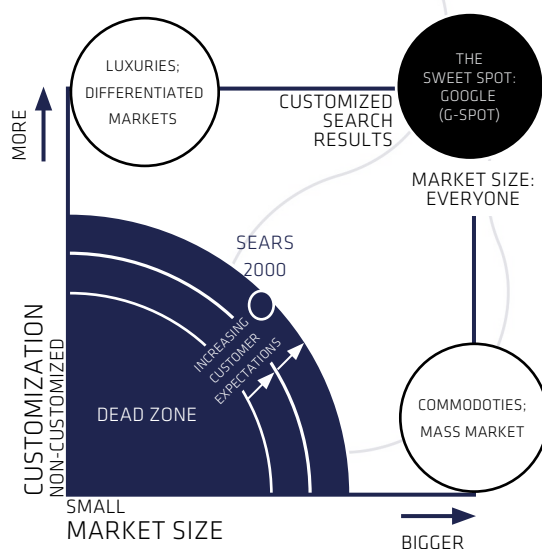


Figure 7

Microsoft's Bing, meanwhile, plays fast follower. (It is a position we are accustomed to seeing a Microsoft product occupy.)

The other company now occupying the g-spot, beside Google, is Facebook (the "f-spot"?), which is also free.

Interestingly, Facebook is also built entirely on the concept of total customization, but in Facebook's case, the customization is provided by you, the user. And nearly a billion of us are happy to oblige. Facebook has also created billionaire owners, and they also seem to understand their unique situation.

Actually, Google also relies on us to customize, as we are the one who are creating the 180 million + web sites that Google then searches for us, for free. This profound partnership between content creators (us), platform creators such as Facebook, and content locators such as Google and Bing, constitutes a hugely

significant phenomenon for future business model innovators to understand, exploit, and further develop. It is here that we can anticipate many surprises in the future, particularly as computers become faster, more powerful, and less expensive.

Oh, wait... there's another example where the model shows its validity. The PC itself, as a device, has gotten considerably less expensive, massively more powerful, and exceptionally more customizable, over the last 30 years. The entire PC industry has moved significantly up and to the right, especially if you consider your smart phone to be a PC, which would be an accurate characterization. Today's iPhone, for example, is the rough equivalent in computing power of a supercomputer from three decades ago. Now, if the folks at Nokia had been thinking about their product in these terms, rather than as "cell phone," then perhaps they would have been better prepared for what the iPhone did to their business model.

So you get the point. For the majority of companies that operate in the physical world of products and services, for which they must charge money to survive, the g-spot is an enticing destination that they will never actually attain, but toward which they must always strive. Although I have indeed tried, I have yet to identify any competitive advantage that cannot be represented on the map, which suggests that it may valid very broadly. (If you can think of counter-examples, I would be happy to learn about them from you.)

E-world companies, meanwhile, can and quite happily do occupy that coveted spot.

Summary of Business Model Warfare

There is of course a lot more that could be said, but we'll leave that for another time. For now, I'll summarize the concept of Business Model Warfare in these propositions:

One: A "business model" defines a broad competitive approach to business, and articulates how a company applies processes and technologies to build and

sustain effective relationships with customers. The experiences that customers have, and the relationships that companies build with customers, are the most critical factors. Creating them, understanding them, preserving them, enriching them, and extending them are the critical attributes of success. Everything that is done must be in service to these relationships; they are the point.

Two: Every successful business model earns some sort of competitive advantage to the extent that it serves successful relationships. However, any advantage may disappear overnight should a competitor devise a superior model, thereby displacing the company in the relationship with the customer. We can visualize that relationship by understand the market as a two-dimensional map, on which we plot market size (i.e., price), and product//service customization. These two dimensions tell us a great deal about the value proposition underlying any business model.

Due to competitive forces, the life span of every business model is therefore limited, and due to the general unpredictability of change, its time frame is indeterminate. Leaders who have the good fortune to preside over a successful business model should never lose sight of the ephemeral nature of their advantages, and must focus not only on administering the (illusory) stability of today, but on preparing for or precipitating the inevitable change of tomorrow by understanding how costs can be lowered while customization is simultaneously increased.

Three: Since business models themselves are a more comprehensive way of understanding the focus of competition, they must also become a focus of innovation itself. Relentlessly changing conditions means that business models evolve rapidly, and business model innovation is therefore not optional. While innovations in any area within an organization may be important, innovations that pertain broadly and directly to the business model will be life-sustaining.

Four: The model tells us that we must aspire to move upward and to the right, and that the dead zone is chasing us that way. If we stop, the dead zone threatens to swallow us, as indeed it has done for so many failed business models.

Five: Based on what we have discussed here, the pattern of company mortality is a real and significant phenomenon, a result of the acceleration of change throughout the economy that operates on both demand and supply. Demand is enormously influenced by innovation - new products and services coming into the market significantly affect the fate of all market participants.

The perspective from the supply side is a bit more complicated, but the pattern is also evident. Because the market is so transparent and the performance of every public company is subject to detailed scrutiny by investors and analysts, subtle changes in an organization's performance can lead to broad swings in stock price.

Improving performance and increasing stock price are both self-feeding cycles that create more favorable conditions for companies to develop and implement future innovations, both by improving stock currency for making acquisitions and by lowering the overall cost of capital. Conversely, declining performance and a falling stock price can lead to a downward spiral that makes it progressively more difficult for companies to compete for attractive acquisition fodder, and which can also increase the cost of capital that could be invested in innovation-related activities such as R&D and product development. Get ahead and push farther ahead; get behind and fall farther behind.

The data cited here show that over the medium term the majority of companies will get trapped in the downward spiral and one way or another most will disappear.

The prevalence of this trap suggests that while leaders may be thinking and worrying about change and its impact on their companies, about competition and about competitive advantage, many have been doing so in a way that is simply not effective. Hence, we suggest that thinking about and enacting business model innovation may be a productive exercise for established businesses.

And the need for good thinking about business models is as important for new businesses as it is for old ones, and among the many examples consider the spectacular rise and equally spectacular collapse of Webvan, in which more than a billion dollars of capital was invested ... and

lost. Its management team - including a renowned CEO who had formerly been the head of Andersen Consulting - was so confident of what they were doing (i.e., their business model) that they invested hundreds of millions of dollars of capital in a distribution infrastructure, even though market demand that would generate a return was completely unproven. They *believed* that they could make the business work, and apparently fooled themselves into thinking that their own belief was sufficient basis for betting massive capital on a business model that had never actually been fully tested. In the end, hundred-million-dollar warehouses were built but never used, never generating even a cent of return.

Thus, in spite of abundant talk about change, the temptation to build a business according to a fixed structure that is expected to endure for the long term remains strong. Never mind that the long term is completely unpredictable. Another way to say this is that such a management approach that remains unrepentantly focused on stability and continuity, instead of on disruption and change, will be unpleasantly surprised in the end.

For these reasons it will remain imperative to discuss managing for change as an absolute requirement, but many (most?) business leaders nevertheless still aren't very good at dealing with it. Recognizing change in the marketplace, anticipating, and adapting to its turbulent evolution, these are the challenges that confront all executives, for although we remember periods that seemed stable, they are in fact long gone and never to return.

As markets continue to evolve and competition becomes ever more demanding, engaging in Business Model Warfare therefore becomes not just an interesting possibility, but perhaps a requirement. To survive, all organizations must develop comprehensive innovation frameworks, and perhaps the perspective offered by the Business Model Warfare framework can help leaders to be more effective.

In the end, when we look at the business world it's clear that the story of change is still the important story to tell, and the process of leading an organization in the face of change remains the critical skill.

Endnotes

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<http://www.booz.com/cn/home/press/displays/2013-global-innovation-1000-cne>
 - 12 A small, but important footnote to the Xerox story is that at one time in its history the company was so successful and so dominant that it was literally forced by federal government regulators to license its technology to competitors. With this strange turn of events, utterly not of its own doing, the company's downward slide began. Hence, some blame for Xerox's demise does fall on misguided US government regulators.
 - 13 A minor but interesting detail is that Fords were originally brown, until a company engineer pointed out to Mr. Ford that black paint covered better and would therefore be less expensive. The point for Ford was thus not the color, but the principle of cost control. He understood well that lowering the cost of manufacture was the key to developing the market in the early years, but when this changed in the more mature market of the 20s, his company lagged as its business model lagged.
 - 14 John Gall, *Systemantics: The Underground Text of Systems Lore*. 1986. P. 158.
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About the author

Since 2001, Langdon Morris has led the innovation consulting practice of Innovation-Labs LLC, where he is a senior partner and co-founder. His work focuses on developing and applying advanced methods in innovation and strategy to solve complex problems with very high levels of creativity.



He is recognized as one of the world's leading thinkers and consultants on innovation, and his original and ground-breaking work has been adopted by corporations and universities on every continent to help them improve their innovation processes and the results they achieve.

His breakthrough white paper, *Business Model Warfare* is a landmark in the field, and is used as a standard reference at universities and corporations worldwide. His book *Fourth Generation R&D*, coauthored with William L. Miller, is considered a classic in the field of R&D management, and his more recent works *The Innovation Master Plan* and *Permanent Innovation* are recognized as two of the leading innovation books of the last 5 years.

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Incorporating Enterprise Risk Management in the Business Model Innovation Process

Yariv Taran¹, Harry Boer² & Peter Lindgren³

Abstract

Purpose: Relative to other types of innovations, little is known about business model innovation, let alone the process of managing the risks involved in that process. Using the emerging (enterprise) risk management literature, an approach is proposed through which risk management can be embedded in the business model innovation process.

Design: The integrated business model innovation risk management model developed in this paper has been tested through an action research study in a Danish company.

Findings: The study supports our proposition that the implementation of risk management throughout the innovation process reduces the risks related to the uncertainty and complexity of developing and implementing a new business model.

Originality: The study supports the proposition that the implementation of risk management throughout the innovation process reduces the risks related to the uncertainty and complexity of developing and implementing a new business model. The business model risk management model makes managers much more focused on identifying problematic issues and putting explicit plans and timetables into place for resolving/reducing risks, and assists companies in aligning the risk treatment choices made during the innovation process with the company's corporate strategy and risk appetite.

Keywords: Business Model Innovation, Risk Management, Action Research

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Introduction

The demise of Lehman Brothers triggered a global chain reaction, the financial crisis of 2008 to 2011 – world stock markets collapsed, large financial institutions and industrial companies went bankrupt, were bought out, or are still (at the time of writing this paper) struggling to recover (e.g. GM, Chrysler, AIG). Worldwide, millions of employees lost their jobs, and governments have had to come up with rescue packages to save their own financial systems. As if it was not hard enough to adapt to the effects of hypercompetition (e.g. D’Aveni, 1994), many companies experienced the financial crisis as “the final straw that broke the camel’s back”.

In a business summit that took place at Harvard University in the early phases of the financial crisis (October 14, 2008), Professor Robert S. Kaplan linked the financial crisis with firms’ behavior, and argued that “*apart from the macro issues [such as] interest rates and regulatory problems, virtually all the failures at those firms were because of the failure of their risk management function*”. That is, CEOs were fired and companies collapsed because they took higher risks than they could afford, and were not prepared for, or failed to identify and respond adequately to, the magnitude of the crisis. Business today is more difficult to manage than ever – economic trends and market changes are hardly predictable, and globalization has created ever more complex business environments. Innovation is a key ingredient in the way companies (have to) react to external changes. While most innovation efforts have traditionally been focused on developing new products and, albeit to a lesser extent, process technologies, companies are increasingly considering their entire business model as an object for innovation. The IBM global CEO study 2006 held among 765 top CEOs indicated that competitive pressures had pushed business model innovation much higher than expected on industrial priority lists. According to that study, approx. 30 percent of CEOs were pursuing business model innovation initiatives and quite rightly so.

There is little theoretical understanding of how to manage that process adequately. The aim of this paper is to contribute to developing that understanding, with a specific focus on the role of risk and risk management.

While product and process innovations are not without risk (e.g. Keizer and Halman, 2007), business model innovation is potentially much riskier. Accordingly, our research question is:

To what extent and, especially, how can risk management help a company handling various risks effectively throughout its business model innovation process?

Risk and Risk Management

In simple terms, the term risk refers to “*uncertainty of outcome*” (Chapman and Ward, 2004). Risk management has been defined as “*the systematic application of management policies, procedures and practices to the tasks of communicating, consulting, establishing the context, identifying, analyzing, evaluating, treating, monitoring and reviewing risk*” (ISO/IEC Guide 73, 2002).

The evolution of risk management has come a long way in the past two decades. However, although companies have successfully adopted risk management in their internal audit, treasury, insurance, environmental health and safety, and legal functions, it has not yet been fully incorporated into core business processes related to future growth, such as strategic planning, capital allocation, and performance management (Deloitte & Touche, 2008). This seems to imply that *unrewarded risks*, in the sense that no premium is obtained from managing them – only the potential for loss is reduced, are the main driver in today’s risk management practices, while managing *rewarded risks*, which are part and parcel of decision-making processes associated with future growth, is not yet fully embedded in organizational change and innovation processes.

Furthermore, even if companies attempt to manage rewarded risks systematically, for example in project management (e.g. Kendrick, 2003; Chapman and Ward, 2004) or product innovation management (e.g. Keizer *et al.*, 2002; Keizer and Halman, 2007), they essentially assume that those risks can be managed in isolation from the entire system. Recent surveys and studies (e.g. Taplin, 2005; Deloitte & Touche, 2008; O’Connor *et al.* 2008; Kalvet and Lember, 2010; Guo, 2012, 2013), however, have shown that a growing percentage of

managers worldwide are interested in applying risk management in a much more comprehensive (i.e. proactive and holistic) manner.

A study by Accenture (2009) suggests that there are, roughly speaking, three risk management models that a company can adopt, namely:

1. Risk management for compliance, which involves a regulatory set of requirements focused on keeping the company complying with regulations.
2. Risk management for value protection, which is aimed at managing expected risks as well as reducing the degree of unforeseen risks..
3. Risk management for value enhancement, which is aimed at covering all dimensions of the business as well as increasing the protection against unforeseen risks

According to Accenture (2009), *“In choosing where to stand on the risk management spectrum, a company is deciding what kind of risk management culture it wants to embrace. Does it want to simply comply with regulations? Or does it want to be visionary and adjust risk manage-*

ment for the evolved company it will become as the business grows?”. This suggests that dynamic, i.e. innovative, companies will, or perhaps even should, adopt a risk management model that is more focused on value enhancement and helps them proactively to manage risks, pitfalls and surprises along the way (e.g. COSO, 2004).

Enterprise risk management

Enterprise Risk Management (ERM) attempts to capture and reduce the effects of today’s business complexity and uncertainty by providing a broad framework for managing risks (e.g. Moeller, 2007; Monahan, 2008; Olson and Wu, 2010; Wu and Olsen, 2010; Hoyt and Liebenberg, 2011; Kraus and Lehner, 2012). According to the Committee of Sponsoring Organizations (COSO), ERM deals with risks and opportunities affecting value creation, and helps an entity to get where it wants to go and avoid pitfalls and surprises along the way. Thus, they define ERM as *“a process, effected by an entity’s board of directors, management and other personnel ... designed to identify potential events that may affect the entity, and manage risks to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives”* (COSO, 2004). Table 1 gives an example of an ERM framework (CAS, 2003).

Table 1: Enterprise Risk Management framework (adapted from CAS, 2003)

Process step	Types of risks			
	Strategic	Operational & Cultural	Financial	Hazard
Establish Context				
Identify Risks				
Analyze / Quantify				
Integrate Risks				
Assess / Prioritize Risks				
Treat / Exploit Risks				
Monitor and Review				

ERM benefits – Applying ERM helps companies (e.g. COSO, 2004; Graham, 2004; Ernst & Young, 2006; The National Affordable Homes Agency, 2008, Deloitte & Touche, 2008; Olson and Wu, 2010; Wu and Olsen, 2010; Hoyt and Liebenberg, 2011; Kraus and Lehner, 2012):

- Improve their contingency planning by taking a proactive approach, so that managers can avoid surprises, and anticipate and influence events before they are happening.
- Make better decisions by aligning a company's risk appetite with its strategy.
- Enhance risk response decisions through risk avoidance, reduction, sharing, and acceptance.
- Identify and manage multiple cross-enterprise risks, segmented mostly to four core risk groups: strategic, operational & cultural, financial and hazard risks (CAS, 2003).
- Seize new opportunities based on identified risks.
- Achieve efficiencies – a structured and comprehensive risk management process built into existing activities generates better managerial processes; e.g. facilitating resource allocation, improving deployment of capital, avoiding unnecessary problems, or setting demanding performance targets.
- Improve their corporate governance – an efficient ERM process can assist with defining reporting and communication protocols, setting appropriate corporate ethics as well as securing compliance with regulatory requirements.
- Strengthen accountability by demonstrating that levels of risk associated with policies, plans, programs and operations are explicitly understood, and that stakeholder interests are optimally balanced.

ERM challenges – Despite the potential benefits suggested above, it has also been implicitly argued (e.g. Ernst & Young, 2006; Deloitte & Touche, 2008; Kraus and Lehner, 2012) that the understanding of how to in-

corporate ERM into future-oriented business processes is currently lacking. Companies that do apply ERM embed it within their system, but tend to focus on risks related to existing assets. In so doing, they miss the connection to business processes aimed at future growth (e.g. Deloitte & Touche, 2008), including business model innovation processes.

Demonstrating the benefits of the value of taking risk (and preventing their consequences) is one of the great challenges related to the adoption of ERM and using it in future-oriented activities. According to the Deloitte & Touche ERM survey (2008, p. 2), *“management is demanding proof of the value proposition of ERM, just as they did when quality initiatives were first being introduced. Unfortunately, such proof is usually most evident after a catastrophe”*. The aim of the study presented here is to demonstrate the usability and usefulness of risk management in one such future-oriented and, as the next subsection will show, potentially quite risky activity, namely business model innovation.

Uncertainty and complexity management

Risk is a function of the uncertainty and complexity related to innovation. Boer (1991) addressed uncertainty and complexity as follows.

Uncertainty – Several terms have been used to refer to this aspect of organizational reality. Some authors use the term predictability (e.g. Mintzberg, 1979); others prefer to call it uncertainty (e.g. Thompson, 1967; Galbraith, 1973; Mowery and Rosenberg, 1979). Inevitably connected with innovation, uncertainty refers to the extent to which individuals, groups or organizations are informed about the future (Galbraith, 1973). The level of uncertainty may vary along a continuum of certainty, risk, uncertainty and unstructured uncertainty (De Leeuw, 1982), is generally assumed to be highest at the initial stages of the innovation process, but should tend to decrease in the course of time. It may concern the objectives to be pursued, the activities to be performed in order to achieve desirable results, the people to perform the activities, the arrangements regulating their cooperation, and the influence of the organization's context (Simon, 1964; Galbraith, 1973; Mintzberg, 1979; Kickert, 1979; De Leeuw, 1982). Typical symptoms of uncertainty are failures being made, setbacks and surprises occurring, unforeseen barriers needing to be leveled, goals and objectives requiring re-

definition during the process, formerly elaborated ideas and accepted solutions being rejected and exchanged for new ideas leading to alternative solutions, implemented solutions appearing to be less effective than anticipated, and/or schedule and budget overruns (Galbraith, 1973; Sayles, 1974; During, 1984; Schroeder *et al.*, 1986).

Complexity – This factor has been referred to using different terms, such as comprehensibility (Mintzberg, 1979) and analyzability (Perrow, 1967). Still following Boer (1991), we use the term complexity to refer to the difficulty with which a process can be understood (*cf.* Mintzberg, 1979). The extent to which an innovation process is complex or, contrarily, easy to understand, depends on features such as the newness and radicality of the innovation. Furthermore, not all activities in an innovation process are complex. The greater the gap between the knowledge and skills required from the people involved, and the competences these people actually have, the more the organization has to rely on unanalyzed experience, intuition, chance and guesswork, rather than well-

known, standard methods of designing, developing and implementing solutions to the innovation problem (*cf.* e.g. Perrow, 1967). In other words, competence gaps increase uncertainty.

Uncertainty, complexity and risk – It is important to note that the success of a business model innovation depends on the company’s ability to recognize that it is about to perform activities that are more uncertain, complex and therefore also riskier than anything it has experienced in the past, and the ability to cope with these process characteristics. Figure 1 illustrates the relationships between uncertainty, complexity and risk and, implicitly, suggests that the higher the level of innovation uncertainty and complexity, the greater the need for risk management.

The question is: how? The next section will investigate that.

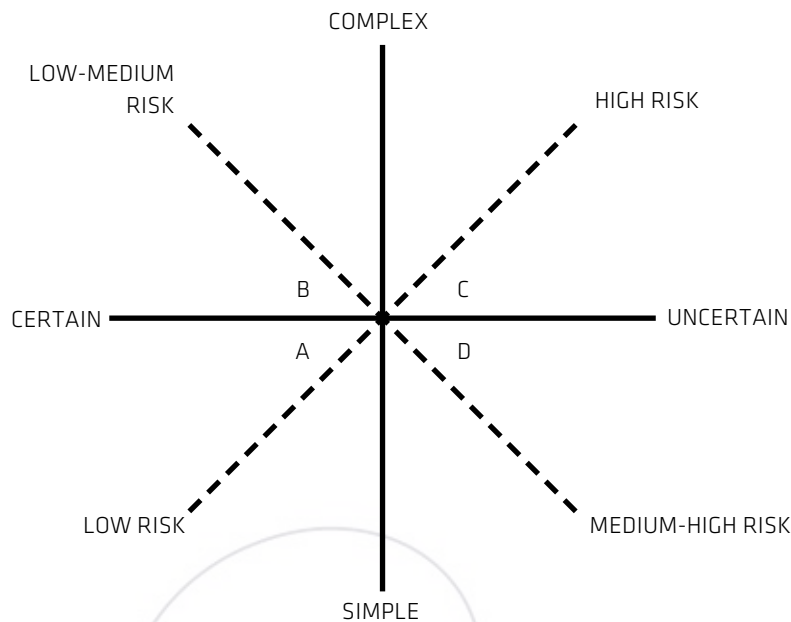


Figure 1: Complexity-uncertainty based risk scale

Managing Risk in Business Model Innovation

Business model innovation

Many authors have attempted to define the business model concept. Some authors took a narrow, more technological or financial focus (e.g. Stewart and Zhao, 2000; Chesbrough, 2007), others adopted a more general perspective (e.g. Amit and Zott, 2001; Osterwalder *et al.*, 2004). Some have incorporated corporate strategy in their business model definition (e.g. Timmers, 1998; Hamel, 2000), others have left it out (e.g. Selz, 1999; Weill and Vitale, 2001). However, put simply, most (if not all) authors agree that a business model is a model that explains how a company does business. The number of building blocks of business model canvases presented in the literature ranges from three to nine (Osterwalder *et al.*, 2004; Morris *et al.*, 2005).

There has been quite a debate in the literature on the question when a change can rightfully be called a business model innovation. Two approaches seem to prevail. The first approach defines business model innovation as a *radical* change in the way a company does business (Chesbrough 2007; Linder and Cantrell 2000). The second approach regards *any* change in *any* of the building blocks of a business model, or the relationships between them, as a form of business model innovation (Amit and Zott 2001, Osterwalder *et al.* 2004, Magretta 2002; Taran *et al.*, 2014). We adopt the second approach.

Risk management in business model innovation

Risk management in the context of business model innovation is “terra incognita” – unexplored territory (Taran, 2011). We will therefore rely on the (limited) research available on risk management in adjacent areas, namely project and product innovation management (e.g. Taplin, 2005; O’Connor *et al.* 2008; Kalvet and Lember, 2010; Guo, 2012, 2013), in particular the work of Keizer *et al.* (2002) and Chapman and Ward (2002), to develop a deeper understanding on how and when risk management could be incorporated into a company’s business model innovation process.

Keizer *et al.* (2002) clarified how Unilever, a world-leading company in fast-moving consumer goods, adopted the Risk Diagnosing Methodology (RDM) in its product innovation management. RDM was initiated, developed and successfully tested first in a division of Philips Electronics Company. Its aims were to identify and evaluate technological, organizational and business risks in product innovation. Similar to the Philips results, RDM proved to be a very useful method for Unilever for diagnosing product innovation project risks, promoting creative solutions, strengthening team ownership and building a knowledge base of potential risks in product innovation projects.

Keizer *et al.* (2002) argued that, in relation to Unilever’s innovation funnel (Figure 2), the RDM process should be applied at the end of the “feasibility” phase, i.e. at the “contract” gate. Since RDM was focused particularly on one of the gates of the company’s innovation funnel, the main issues addressed at that stage were consumer and trade acceptance, commercial viability, competitive reactions, external influential responses, human resource implications, and manufacturability.

Chapman and Ward (2004) proposed a framework for incorporating risk management in project management processes, called SHAMPU (Share, Harness, And Manage Project Uncertainty). In contrast to Keizer *et al.*’s (2002) study, which argues for applying the risk management process only once, at the end of the feasibility phase, Chapman and Ward maintain that the nine phases of the SHAMPU risk management process (define, focus, identify, structure, ownership, estimate, evaluate, harness, manage), should be presented as an ongoing process activity, followed by an iterative loop back to the “estimate” phase or even to the (first) “define” phase, to refine or redefine the basis of analysis of sources of uncertainty revealed to be important. However, similar to Keizer *et al.* (2002), Chapman and Ward (2004) also argued that the risk management process should start at the early phases of the project and end at the planning phase, before allocating and executing the project. This “planning” phase in the Chapman and Ward model can, to a great extent, be compared to the “feasibility” phase in the Unilever innovation funnel (Figure 2).

In translating the suggestions put forward by Keizer *et*

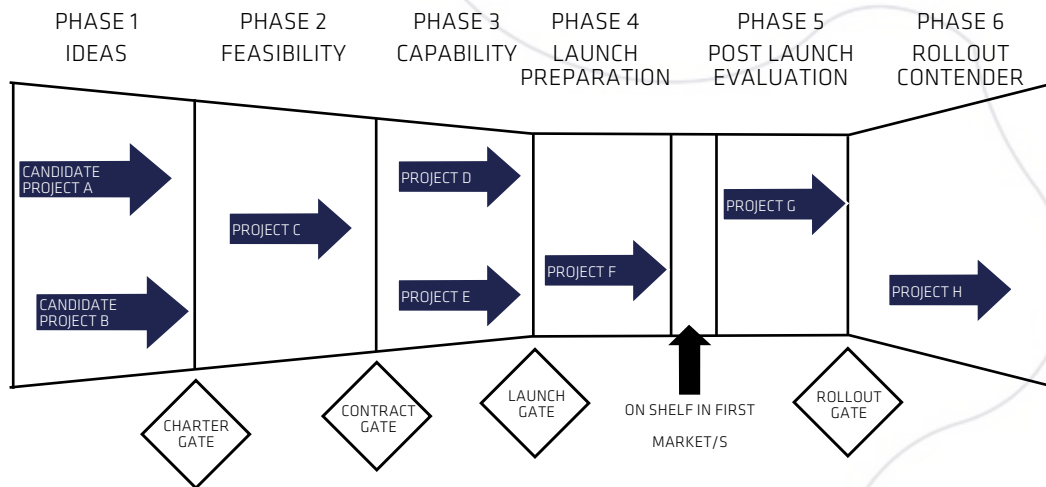


Figure 2: The Unilever innovation funnel (Keizer et al., 2002)

al. (2002) and Chapman and Ward (2004) to business model innovation, we make one important amendment, which follows from the question why risk management should only be applied early on in the innovation process. Why is it that other gates can be left out and, more fundamentally, how can risks be managed adequately at other (more progressed) gates, if risk management is not applied there? We believe that risk management should play a role throughout the entire innovation process and therefore propose:

The implementation of risk management throughout the innovation process reduces the risks related to the uncertainty and complexity of developing and implementing a new business model.

In order to be able to research this proposition, we put forward a generic process that illustrates the possible integration of risk management within the overall business model innovation process (Figure 3). The model adopts the widely used stage-gate model proposed by Cooper (1993). The rationale for adopting a stage-gate process is twofold. First, previous research (e.g. Taran, 2011) indicated that many companies have adopted this model and incorporated it, in one way or another, in their innovation processes. This makes logical sense: the stage-gate model is essentially a project manage-

ment tool, which is meant to increase the manageability of an innovation process by organizing it as a sequence of stages and gates. Second, adopting the stage-gate model allows us and, for that matter, companies using the model, to allocate risk management activities where they belong, namely at the gates, as also suggested by both Keizer *et al.* (2002) and Chapman and Ward (2004).

A business model innovation risk management model

We propose the model in depicted in Figure 3 to describe a practical, i.e. linear and systematic, implementation of risk management in the business model innovation process. Stage one focuses on visualizing the “as-is” business model of the company. Then, the process will continue by following a stage-gate procedure ending with the implementation of the new business model.

Each stage and gate provides an opportunity for a complete risk management process. Based on an extensive literature review (e.g. COSO, 2004; Graham, 2004; Ernst & Young, 2006; The National Affordable Homes Agency, 2008; Deloitte & Touche, 2008; Olson and Wu, 2010; Wu and Olsen, 2010; Hoyt and Liebenberg, 2011; Kraus and Lehner, 2012), we narrowed that process down to four core activities, namely:

	Stage 1	Gate 1	Stage 2	Gate 2	Stage 3	Gate 3	Stage 4
Innovation Risk management	As-is business model		New business model design		Prioritizing and milestones		Implementation
Identify risks	I		I		I		
Analyze risks		A		A		A	
Evaluate-prioritize		E		E		E	
Treat risks			T		T		T

Figure 3: Risk management integrated in the business model innovation process

1. **Identify** various risks – strategic, operational & cultural, financial and hazard risks.
2. **Analyze** each of the risks identified.
3. **Evaluate** those risks – determine the level of risk that a company is willing to accept.
4. **Treat** the risks – the four possibilities are: avoiding, reducing, accepting and transferring/sharing the risks (e.g. De Loach, 2003).

The purpose of the gates is to relax constraints, uncertainties and complexities throughout the business model innovation process, as well as to provide more certainty for managers regarding the path chosen. The first risk management phase is focused on the assessment of the current (“as-is”) business model. Identifying the risks at that stage can, for example, follow from a SWOT analysis, where the company is considering how to take advantage of opportunities and strengths and deal with weaknesses and threats. Then, through careful analysis and evaluation of each identified (strategic, operational & cultural, financial, hazard) risk, managers search for possibilities to treat those risks, which eventually results in three possibilities, namely: retrenchment (cost cutting), compliance with regula-

tions, or search for innovation solutions (e.g. a new product/service, process and/or market position).

The second risk management phase begins by identifying the risks of each business model innovation possibility that was proposed in the design phase. Here, too, users follow a systematic process of analyzing, evaluating and then treating those risks, which results, during the prioritization phase, in rejecting some business model innovation ideas, and selecting others for further processing.

Finally, the third risk management phase facilitates the identification, analysis, evaluation and treatment of risks related to each downstream milestone. The purpose of this gate is to systematically organize the anticipation and sense of urgency needed to prevent sloppy implementation processes by dealing with a large variety of strategic, operational & cultural, financial and hazard risks.

Thus, unlike Keizer *et al.* (2002) and Chapman and Ward (2004), who suggested that the risk analysis should take place (only) at the gates of the innovation process, in our model we propose that the risk management process should be applied through the *entire* business model innovation process i.e. during all stages and at all gates.

It should also be noted that unlike Cooper's (1993) stage-gate model, we chose not to include a testing and validation phase. Due to the nature of business model innovations, it would be quite impossible to test and validate a new business model prior to its implementation, as suggested for product innovations.

Research design

In the previous section we presented a business model innovation risk management model, which is based on the proposition that risk management should be implemented throughout the innovation process. This section describes the design of the pilot study we conducted to shed more light on the practical usability and usefulness of the model.

According to Christensen (2006), theory is built in two major stages:

1. A descriptive stage, which aims to inductively observe, classify and define various relationships to a

specific phenomenon.

2. A normative stage, in which the researcher moves beyond statements of correlation to define what causes the outcome of interest.

Given the "state-of-the-theory" of business model innovation, it would be too early to pursue normative theory. For that reason, this paper focuses on the first phase, i.e. the descriptive 'pyramid'. While the wide majority of business model innovation research has focused on the base (*observe, describe, measure*) of the pyramid, and some work has been conducted at the second level (*categorization*) (e.g. Koen *et al.*, 2011; Taran *et al.*, 2014), this paper moves business model innovation theory development to the third level (*models*) (Figure 4).

A business model innovation process conducted by a Danish company, Provital, provides the empirical basis for this paper. We decided to perform action research in order to:

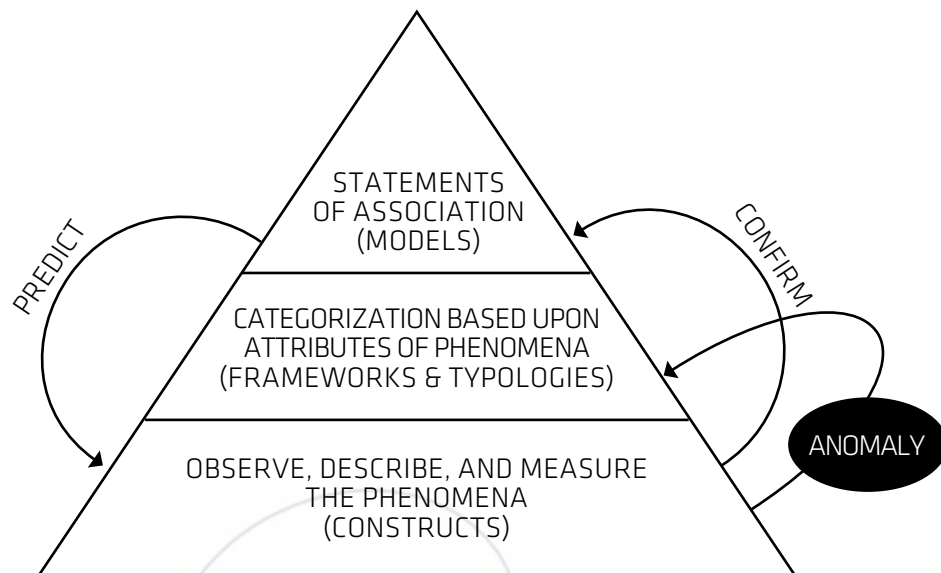


Figure 4: The process of building a (descriptive) theory (Christensen, 2006)

- Put the model developed (Figure 3) into a field test aimed at analyzing its usability and usefulness and, through that,
- Explore the extent to which and, especially, how risk management can help a company handling various risks throughout its business model innovation process (*cf.* our research question formulated in the introduction section).

The study began in early 2008 and ended in 2011. We were involved in the company's attempt to develop an innovative business model from its inception, and participated actively in the development and screening of new business model ideas, as well as in the strategic decision making and change processes implemented later on.

Short case description

Provital was established in 2008 as a joint venture between two medium-sized Danish companies. Provital's value proposition involved a new and revolutionary filtration system, which can be assembled in various ways and applied in multiple industries (e.g. pools, car wash, marine boats, drinking water). One of the strengths of the products resided in the fact that they offered higher quality for a lower price and lower life-cycle cost to target customers, regardless of their industry.

Taking the changing focus of customers and countries towards environmentally friendlier products, and given the fact that there were few competitors to their offering in the global market, Provital expected that its cleansing system had the potential to revolutionize the market for water purification and would help the company become a large and global player in a relatively short period of time.

However, due to the potentially wide array of applications of, and target markets for, their products, Provital had difficulties in understanding how to manage the development of a business model supporting the company's ambitions and, particularly, how to mitigate the risks involved in that process. Each industrial focus required its own manufacturing methods and technologies, ways to organize the company's core activities, and selection of key suppliers as well as target mar-

kets, including choices such as customer types (e.g. B2B versus B2C) and geographical areas.

Data collection and data analysis

The company gave us a lot of freedom in experimenting with the business model innovation risk management model. In order to keep track of our interventions, we developed a project definition report that systematically described each phase we went through. After we completed that report, the R&D manager was interviewed in order to assess the risk management process in light of the criteria benefits, timing and functionality (see below).

Data collection – In order to develop that report we used participant observation and, in addition, conducted ten semi-structured in-process interviews, an ex-post interview with the R&D manager, and seven meetings with the company managers. We designed the meetings as workshops, which systematically followed the business model innovation process depicted in Figure 3. This helped us to test the risk management process while it was implemented, and explore its effects on the innovation process. All notes taken at the meetings and workshops were uploaded to the project extranet. The managers had free access to those files and were encouraged to comment, correct and/or simply accept our interpretations of these events.

Data analysis – Similar to the procedure reported by Keizer and Halman (2007), the data was analyzed in three successive steps:

1. Risk management literature review – to develop a list of key risk factors.
2. Analysis of the interviews – to develop a better understanding of disparities between the expected and the actual contribution of applying risk management, and of the importance of applying risk management in the business model innovation process.
3. Content analysis – to draw valid case conclusions and check the risks identified by Provital's managers during the workshops against the potential risks outlined on the basis of our previous literature review.

Through that process we developed a list of risks, separated into four categories (strategic, operational & cultural, financial and hazard) with 22 critical risk issues.

Additionally, given that our intention with the action research was to put the model developed (Figure 3) into a field test to analyze its application and effects, we decided to select the following criteria for assessing whether the application of the model should be considered as successful, partly successful or a failure:

- **Benefits** – so that we could learn whether the application of risk management throughout the business model innovation process was, indeed, beneficial for the company, not only in terms of the “success” or “failure” of the innovation, but also as regards the extent to which uncertainties, complexities and consequent risks were reduced throughout the business model innovation process.
- **Timing** – so that we could learn whether risk management activities should be applied only once (e.g. Keizer *et al.* 2002), several times, but still only at the early phases of an innovation process (e.g. Chapman and Ward, 2004) or, as our model suggests, ongoing, throughout the entire process.
- **Functionality** – akin to the clinical test of a new medicine, we developed a new model (i.e. new medicine) but can only confirm whether the model actually functions as expected and if there are any “side-effects”, by trying it out in practice.

The “benefits” criterion tests the usefulness of the model. The “timing” and “functionality” criteria test the model’s usefulness as well as its usability.

According to Popper (1963), every genuine test of a theory is an attempt to falsify or to refute it. Testability, according to him, is falsifiability. Accordingly, a successful case would only suggest that the model is not refuted – further research would be needed to develop arguments for its usefulness and usability in similar contexts and its transferability to different contexts. The second scenario (i.e. partly successful), would sug-

gest that the model has been partly disproven. Further investigation would be needed in order to learn what went wrong in which stage(s) and/or gate(s) of the model, and which aspects of the model need to be revised before testing it again. The third scenario (i.e. failure) would indicate that the model has to be rejected.

Validity and Reliability – as recommended by Fielding and Fielding (1986), Duffy (1987), Dick (1993), Lewis (1998), Greenwood and Levin (2000) and Maxwell (2005), we used the following tactics:

- Data triangulation – multiple sources of evidence were used, namely primary and secondary data, face-to-face interviews, mediated interviews, and group and third party interviews.
- Two action research cycles were performed – this increased our understanding, and facilitated us in refining the initial conceptual framework (e.g. Lewis, 1998).
- Data gathering process – as mentioned above, in-process and ex-post interviews were conducted for understanding better the disparity between the expected and the actual contribution of applying risk management, as well as the importance and seriousness of applying risk management in the business model innovation process (e.g. Keizer and Halman, 2007).
- Iterative triangulation – is recommended in situations where the research topic is novel and underdeveloped, but at the same time a body of relevant literature exists (Lewis, 1998). Accordingly, the business model innovation risk management model, was developed based on existing studies, rather than on data collected directly from the company.

Analysis and Discussion

The aim of this section is to analyze the results in view of the research question, give more concrete details on the process applied to identify, evaluate, analyze and

treat various risks, and present initial findings regarding “how” and the “extent” to which risk management can help a company in the complex and uncertain process of business model innovation.

Process description

As shown in Table 2, the risk management process involved four phases. First, for each risk criterion (strategic, operational & cultural, financial and hazard), potential risks were identified. Then, each risk was analyzed qualitatively by assessing both the probability of the risk to occur and the relative impact that risk would have. For those risks that were rated as “medium” or “high”, i.e. misfit to the corporate risk appetite level of the firm, an “action needed to be taken” description was made, focused on a possible solution, i.e. avoiding, reducing, accepting, transferring or sharing the risk (e.g. De Loach, 2003), along with appointing a person in charge and determining the expected target date of completion. Finally, residual risks were assessed against the risk appetite level of the firm.

Benefits

Our observations and experiences from the workshops and interviews suggest that Provital has gained valuable benefits from experimenting with risk management. The company’s managers report that risk management assisted them in managing various risks across the enterprise efficiently and effectively, as well as in prioritizing their strategic, operational and financial choices throughout the business model innovation process.

According to Provital’s R&D manager, many of the risks identified were not new to them, but through the process of analyzing these risks they realized that they had not really known how to manage them effectively but learned to do so. Furthermore, rating risks as low, medium or high helped them to better understand, systematically prioritize and organize what needed to be done in order to deal with the risks identified. By explicitly describing how to treat each risk expected in the course of the process, they were better prepared for and more aware of the risks they were willing to accept, which reduced the risk level (inherent versus residual risks) and, with that, also the overall uncertainty and complexity associated with the business model innovation process.

Furthermore, according to Provital’s R&D manager, risk management also served as a compass that kept the company on track with its strategic goals and, for himself, to prioritize his work tasks. Running daily operations is hard enough, and focusing on small issues can distract attention from the bigger and more urgent ones. Keeping an “action needed to be taken” table for the risks that were rated as “medium” or “high” kept him focused and certain that he would find the time to address them.

Additionally, he also found risk management to be a very efficient tool. Dividing the larger problem into different criteria and steps that are relatively easy to understand guided him through the business model innovation process.

All in all, Provital’s managers were very satisfied with experimenting with the risk management process, and the R&D manager in particular stated that he intended to continue working with risk management in future innovation processes, as well as with prioritizing his daily, weekly and monthly activities.

These findings confirm previous publications (e.g. COSO, 2004; Graham, 2004; Ernst & Young, 2006; The National Affordable Homes Agency, 2008; Deloitte & Touche, 2008), which propose many benefits that company may gain from applying risk management in their innovation processes.

Timing

When the R&D manager was asked whether risk management should be applied once or, rather, as an ongoing part of the innovation process, he argued for the latter. He felt it is particularly important to apply risk management at the early phases of the innovation process, but since competition today is so dynamic, today’s certainties can very easily become tomorrow’s new challenges – e.g. their bank crashed during the global financial crisis.

Thus, as strategies and innovation plans may need to be changed frequently and occasionally perhaps even radically, new risks may emerge, which need to be analyzed all the time, both with respect to new innovations and also in different phases of a single innovation process. According to the R&D manager, Provital will be

Table 2: Example of evaluation and treatment of risks at Provital

Qualitative risk analysis				Action plan		Post-hoc evaluation		
Medium and high risks identified	Likelihood (1-5)	Impact (1-5)	Inherent risk	Risk treatment	Person in charge, and milestones	Residual risk	Fit to the company's risk appetite	Further action planned
Strategic risks								
S1 - Provital's lack of sales, leads to a shutdown of the joint venture.	5	5	High	Primary focus is on insuring the company owners' satisfaction through improving web visualization, aggressive marketing, achieving <i>immediate</i> sales and revenues, and securing IPR on the system.	Top manager and R&D manager are responsible, already working on solving the problem. They continue more rigorously after receiving funding.	Low	Fit	No further action needed. But keep monitoring closely the owners' expectations.
S2 - New competitor enters the industry with a competitive solution.	4	3	Medium	Monitoring the industry for potential competitors.	R&D manager	Medium	No fit	Keep monitoring the industry for potential competitors on a monthly basis.
Operational & cultural risks								
O1 - No professional sales people. Low marketing skills and practice.	1	5	Medium	Need to get funding for employing high quality sales and marketing people. Also, considering outsourcing the marketing function and selling to a third (expert) company.	All company managers. Partly already in progress, and to be applied more rigorously after receiving funding.	Low	Fit	No further action is needed.

Table 2: Example of evaluation and treatment of risks at Provital

Qualitative risk analysis				Action plan		Post-hoc evaluation		
Medium and high risks identified	Likelihood (1-5)	Impact (1-5)	Inherent risk	Risk treatment	Person in charge, and milestones	Residual risk	Fit to the company's risk appetite	Further action planned
02 - Tests fail to show that the system is successful also in other industrial settings.	2	3	Medium	Insure that the system operates successfully <i>before</i> sales. The system will not sell if the pre-stress tests show that the system fails to operate successfully.	R&D manager. Already working on the problem.	Low to medium	Poor fit	No further action needed.
03 - One of Provital's suppliers choose to stop working with the company.	1	1	Low (many suppliers available)	-	-	-	-	No further action needed
Financial risks								
F1 - Lack of investment money.	3	4	Medium	Looking for potential investor.	All managers (and owners). Already working it.	Low to medium	Poor fit	No further action needed.
F2 - One of the mother companies goes bankrupt.	1	5	Medium	Cannot be controlled by the company.	-	Medium	No fit	Tolerate.

Table 2: Example of evaluation and treatment of risks at Provital

Qualitative risk analysis				Action plan		Post-hoc evaluation		
Medium and high risks identified	Likelihood (1-5)	Impact (1-5)	Inherent risk	Risk treatment	Person in charge, and milestones	Residual risk	Fit to the company's risk appetite	Further action planned
Hazard risks								
H2 - Global financial crisis affects the company's performance and sales.	5	3	High	Each financial investment will be carefully analyzed and decided on jointly with financial experts.	Top manager and R&D manager are responsible. Already in progress.	Low to medium	Poor fit	No further action needed.

able to stay ahead of its competitors, be more flexible and cope better with changing conditions that are both internal and external to the organization, by continually analyzing various risks systematically.

Thus, contrary to Keizer *et al.* (2002), but partly in line with Chapman and Ward (2004), the Provital case suggests that risk management cannot only be beneficially applied in the early stages but actually during all stages and at all gates of an innovation process.

Functionality

The study shows that risk treatment choices need to be considered in a comprehensive manner when looking for appropriate and holistic solutions. Every change may create new problems, challenges and risks. If each risk is handled individually, treating one strategic risk may very well result in a new operational challenge. For example, sales volumes in the local markets Provital served so far were low and in order to grow the company was eager to enter the US market. However, the entire supply chain was comprised of local players only. The high operational and (particularly) logistical costs

involved in setting up a global supply system forced the company to consider alternative, more cost effective, operational solutions such as licensing and a joint venture.

Thus, in addition to managing strategic, operational & cultural, financial and hazard risks individually, keeping a bird's eye (i.e. systemic) view on the entire business model innovation process is also recommendable.

However, Provital's R&D manager also observed that an over-abundance of risk management can be problematic, too, as this overloads the organization with too many activities, which are not only time consuming but can also be confusing for staff members to cope with. For example, when Provital's managers were asked to list what they thought would be significant risk factors (Table 2), they realized that their list was getting longer and longer, to a point that it simply became impossible to manage it effectively, and decided to reduce the list to the 22 most critical risk factors.

This observation touches on previous research, which has reported the negative impact of bureaucracy on

innovation (e.g. Burns and Stalker 1961), especially during the early phases of an innovation process (e.g. Zaltman *et al.*, 1973; Kelly and Kranzberg, 1975; Pierce and Delbecq, 1977; Boer and Doring, 2001). Thus, although managing risks throughout the business model innovation process is important, finding the right balance so as not to suffocate the process is a serious challenge.

Additionally, we also identified that by incorporating risk management in business model innovation processes, starting at the stage prior to a gate, followed by risk analysis at the gate, and treatment choices that take place in the stage following that gate, Provital could significantly reduce many of the uncertainties and complexities they were facing in the course of the business model innovation process. They were much more clear about the treatment initiatives in terms of “what to do”, “how to do it” and “when to do it”, and address the most urgent ones first with full commitment from the management team.

These findings correspond with Courtney *et al.* (1997), who argued that if a company underestimates or fails to manage uncertainties adequately, it will lead the company to develop strategies and operational processes that:

- Neither defend against threats nor take advantage of opportunities.
- Assume that the world is entirely unpredictable, which will then lead them to either abandon planning processes (i.e. too uncertain – too risky), or simply follow their gut instinct (i.e. “just do it”). In the latter case, the innovation process will be perceived as nothing less than a gamble..

Finally, we observed that the company did not always implement initial treatment choices made at the gates in full. If new problems emerged (e.g. financial constraints), the CEO occasionally decided to re-prioritize. This raises the question whether risk treatment decisions made at the gates should always be carried out “as planned”, or, alternatively, that they should be regarded as suggestions for action during the next stage(s).

Evaluation and Propositions

The application of the model in the Provital case should be considered a success:

- **Benefits:** Provital gained multiple benefits from applying the model. It has reduced the risk level (inherent versus residual risks), and with that also the overall uncertainty and complexity of the entire business model innovation process. Consequently, they could proceed with the innovation process with more certainty. Additionally, by mitigating (mostly) known risks, they became more actively aware of their risk appetite and the volume and types of risks they were willing to accept.
- **Timing:** it appears to be important to apply risk management through the *entire* innovation process i.e. during all stages and at all gates. By continually analyzing potential risks, the company was able to act more flexibly and cope better with changing conditions both internal and external to the organization.
- **Functionality:** the approach proposed in Figure 3 works (for Provital). One issue remains: too little risk management creates unforeseen risks and effects; too much risk management creates bureaucracy and reduces flexibility and creativity. Finding the right balance is crucial, but how to achieve that is an open question.

Thus, the business model innovation risk management model proposed in this paper was not rejected. However, it is too soon to conclude that the model is generally valid – more research in similar and different contexts is needed. Table 3 translates the findings reported above into testable propositions.

Table 3: Generalization of action research findings into propositions

Category	Action research case analysis - related text	Proposition
Benefits	“By explicitly describing how to treat each risk expected in the course of the process, they were better prepared for and more aware of the risks they were willing to accept, which reduced the risk level (inherent versus residual risks) and, with that, also the overall uncertainty and complexity associated with the business model innovation process.”.	Proposition 1: <i>The implementation of risk management into a business model innovation process reduces the level of risk related to the uncertainty and complexity of, or associated with, developing the new business model.</i>
		Proposition 2: <i>Managing risks throughout the entire business model innovation process will assist a company in aligning risk-treatment processes with the risk appetite level of the firm.</i>
Timing	“When the R&D manager was asked whether risk management should be applied once or, rather, as an ongoing part of the innovation process, he argued for the latter. He felt it is particularly important to apply risk management at the early phases of the innovation process, but since competition today is so dynamic, today’s certainties can very easily become tomorrow’s new challenges ...”.	Proposition 3: <i>The likelihood of launching a successful new business model is increased if risk management is applied throughout the entire business model innovation process, i.e. in all stages and at all gates.</i>
	“Provital will be able to stay ahead of its competitors, be more flexible and cope better with changing conditions that are both internal and external to the organization, by continually analyzing various risks systematically”.	Proposition 4: <i>Embedding risk management process in business model innovation process promotes organizational learning and flexibility, and creates more focus on strategic choices made at the gates.</i>
Functionality	<p>“...in addition to managing strategic, operational & cultural, financial and hazard risks individually, keeping a bird’s eye (i.e. systemic) view on the entire business model innovation process”.</p> <p>“...an over-abundance of risk management can be problematic, too, as this overloads the organization with too many activities, which are not only time consuming but can also be confusing for staff members to cope with”.</p>	<p>Proposition 5: <i>The likelihood of launching a successful new business model increases by securing:</i></p> <ol style="list-style-type: none"> 1) <i>An adequate alignment of various (strategic, operational & cultural, financial and hazard) risks treatments choices with one another.</i> 2) <i>A sufficient and effective volume of risk management activities overall.</i>

Conclusion

Contribution

In this paper we investigated the application and success potential of risk management in business model innovation processes, and formulated the following research question: *To what extent and, especially, how can risk management help a company handling various risks effectively throughout its business model innovation process?* Accordingly, we integrated findings reported in the risk management literature and Cooper's stage-gate process in the business model innovation risk management model depicted in Figure 3, and tried that model in a business model innovation process undertaken by the Danish company Provital.

Given the limited research available on business models and risk management (associated with innovation processes), and the lack of research on understanding how to incorporate risk management within the overall business model innovation process, this research was largely explorative study – entering “terra incognita”. In addition, the research is based on the study of a single case. Yet, some valuable lessons can be formulated.

First, the study supports our proposition that *the implementation of risk management throughout the innovation process reduces the risks related to the uncertainty and complexity of developing and implementing a new business model*. The operational use of the business model risk management model suggests that it makes managers much more focused on identifying problematic issues (“know what to do”), and on putting explicit plans and timetables into place for resolving/reducing identified high and medium rated risks (“know how and when to do it”). Furthermore, the study indicates that risk management assists a company in aligning the risk treatment choices made during the innovation process with the company's corporate strategy and risk appetite. In effect, managers are more confident about the strategic choices made during the innovation process, and it is also relatively easier for them to share their vision and future plans with their staff members, and to prioritize their operational plans.

So, risk management is “good”, but the case study also suggests that too much risk management is not. An

overload of risk management leads to time-consuming bureaucracy and reduces flexibility and creativity. How to find the optimal “volume” of risk management in a business model innovation process remains a question for further research.

Further Research

Carlile and Christensen (2005) suggest that the descriptive part of theory building (Figure 4) is a preliminary stage, which researchers generally must pass through in order to develop more advanced normative theory. According to them, “the ability to know what actions will lead to desired results for a specific company in a specific situation awaits the development of normative theory in this field” (Carlile and Christensen 2005, p. 4).

The action research reported in this paper should be considered as a pilot study (e.g. Lancaster et al., 2004; Ruxton and Colegrave, 2006), aimed at pre-testing or “trying out” (Baker, 1994) the approach proposed in Figure 3. Thus, although the action research failed to falsify the proposed generic business model innovation process (Figure 3), the results drawn from this research should be considered as tentative theory. Consequently, further research is needed in order to validate and test the generalizability of the model. In order to eventually arrive at normative theory, further research will involve the following consecutive steps:

- Test the approach in different *situations*, through a multiple action research study aimed at testing the approach through business model innovation initiatives of various companies, preferably SMEs and larger firms, representing different industries. In that respect, it should also be recognized that practitioners should not only measure the operational use of the approach by the “success” or “failure” of a business model innovation, but also in terms of the extent to which uncertainties, complexities and consequent risks are reduced throughout the innovation process. The reason for doing so is the understanding that innovation is a “risky business” – risk will never be eliminated completely. The application of the model in various circumstances may also validate, or alternatively falsify, the suggested linear nature of the model and, particularly, the risk management activities applied throughout that process.

- Measure *long-term effects* of applying the model – once the application of the model has been tested in various industrial settings, and still assuming that it has yet to be falsified, we propose to proceed with a questionnaire-based survey to analyze, retrospectively, not only the short term effects of applying the model, but also the long term effects of its application in terms of, for example, avoiding cannibalization and securing sustainable growth.

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Do we need one business model definition?

Anders Bille Jensen¹

ABSTRACT

Purpose: Different applications and conceptualizations of the business model concept have created discussions on what it actually is. The purpose of this paper is twofold: 1) to establish an overview of current usages of the business model construct, its nature and role in theory building, and – building on this – 2) to derive guiding principles applicable for achieving better clarity of the business model construct in future research.

Design/methodology: Variances in roles, nature and forms of current and diverse applications of the business model concept are discussed from a vertical and a horizontal dimension. Based on the analysis, key issues for achieving construct clarity are proposed.

Findings: This paper 1) demonstrates that there are at least three levels of understanding business models (general, conceptual and as a research construct), 2) that the business model construct is heavily influenced by the research view, 3) that the establishment of specific constructs can be informed by the existing literature, and 4) discusses how the emergent business model concept can be strengthened.

Implications

Different and complementary business model perspectives may provide a better understanding and reflection of reality than a single, general and detailed definition. For specific applications, definitions need to explicitly clarify the particular role, nature and boundaries of the business model.

Originality/value

The paper provides a methodological contribution in the discussion on business model definitions by adding clarity on the value of the multi-levels and multi-views of current understandings as well as contributing on how to create specific constructs.

Keywords: Business model, strategy, value capture, value creation, innovation, definition

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Introduction

What is a business model? This question is of relevance for anyone considering applying the business model construct or just reading the diverse contributions in the field.

Although the business model idea addresses general, fundamental and familiar challenges of strategic nature (Sandberg, 2002; Verstraete and Jouison-Lafitte, 2011), there is still discussion about what business models are, and, consequently, their usefulness (most recently Arend, 2013; and a direct response, Zott and Amit, 2013). The business model concept was initially important for understanding e-business (Amit and Zott, 2001; Zott et al., 2011; Wirtz et al., 2010) and commercialization of technology and innovation (Chesbrough, 2006, Chesbrough and Rosenbloom, 2002, Johnson, 2010). However, Porter (2001) described the unclear nature of the business model as an “invitation for faulty thinking and delusion” as he analyzed unhealthy business practices related to the internet. On the other hand, Pohle and Chapman (2006) found that business model innovation, i.e. defined as innovation incorporating both product and service generated comparatively better returns than isolated initiatives, which has been partly supported by Aspara et al. (2010).

By tracking the application of the business model term in the literature (Ghaziani and Ventresca, 2005), it has been possible to see how it has been diffusing into new communities during the internet expansion in the 90ties with new meanings related to value creation (and delivery). At the same time, however, older meanings of the business model co-existed in old environments, albeit often in tacit versions. In this way the term business model has become a keyword, with a global meaning as well as local meanings. Business models appear to be a complex and multifaceted phenomena which “integrates a variety of academic and functional disciplines, gaining prominence in none” (Chesbrough and Rosenbloom, 2002), and Shafer et al. (2005) talked about an identity crisis for the business model. Others claimed that the confusion resulted in the lack of progress of business model research. This wave of criticism apparently culminated around 2010-11. In a review, Schneider and Spieth (2012) summa-

rized the situation as: “*academic research on the topic is blamed to lag behind practice and in particular to lack formalization and structure (Zott et al., 2011, Casadesus-Masanell and Ricart, 2010; Plé et al., 2010). Furthermore, the concept is argued to miss sufficient theoretical grounding (Sahu and Marko, 2007; Morris et al., 2005; Teece, 2010; George and Bock, 2011; Nenonen and Storbacka, 2010) and to be based on a multitude of differing and inconsistent theoretical approaches (Camisón and Villar-López, 2010; Zott et al., 2011; Casadesus-Masanell and Ricart, 2010)*”. It has recently been questioned if some of the energy going into this definition discussion may have been applied for more useful purposes (Baden-Fuller and Haefliger, 2013).

Some of the above and other academics have explored the background and implications of the differences in business model understandings. This approach seems to be in line with the multidisciplinary presence and the inclusive nature of the business model field, pointing in the direction of seeing business models as a boundary object playing an important sense-making and sense-creating role for various stakeholders, despite their individual approaches and understandings of the term. Empirically, this has been addressed by Verstraete and Jouison-Lafitte (2011) and Doganova and Eyquem-Renault (2009) seeing business model as important in the mobilization of resources in the entrepreneurial process. Further, Verstraete and Jouison-Lafitte (2011) propose a conventionalist approach arguing that business model definitions - despite the variety in terms and language - addresses the same type of problems which is why there is some homogeneity of the concept. On a broader scale, while addressing the criticism in their review, Zott et al. (2011) also found emergent common ground in the business model literature. It has also been suggested that business model research exhibits the features of “progressive science” by Lakatos (Lecocq et al., 2010) in which science develops as a series of progressive research programmes. But this raises the general critical questions about how we identify what the research programmes are and in particular when and how we identify “progressive shifts” in problems. This perspective, however, emphasize that - putting frustrations aside - these discussions are related to how science learns and build knowledge in the business model field.

A central thesis of this paper is that much of the discussion and confusion is due to lack of clarity of more fundamental aspects in the different applications of the concept. In general definitions assist us in understanding the topic of interest – i.e. for classification and guidance of activities. But definitions (the content) and how we arrive at them (the process of defining) is complex. First of all, there is the actual content and what we accept as a general definition. Several reviews have addressed this in different ways, but the result is often consolidating the findings, restating the problem, and providing no real solution. Secondly, the actual process of defining depends on the audience and how definitions make sense and contribute to learning. There are substantial, traditional issues of different scientific and methodological approaches between different areas of business research, which is often neglected and not discussed in the calls for definitions. In addition it is rarely discussed if it is necessary, useful and possible to have a general definition accommodating and transcending different disciplines, their paradigms and traditions.

Understanding the nature of the business model concept has important implications for researchers and practitioners in

1. establishing and maintaining an overview of its meaning and
2. for dialogues about and positioning of their research, both within and between different communities and disciplines, and
3. in theory building, as this depends on constructs and the ability to establish ties between these constructs.

As already stated, there have been many attempts to define business models. It is beyond the scope of this paper to add new dimensions to actual definitions. However, there have only been few – if any – contributions on how we can arrive at definitions which simultaneously capture the broad meaning as well as the focus for specific applications which may indicate that the role, the process and context of definitions, may deserve more attention than what has been the case in the current literature, especially as the business model field is cross-disciplinary.

The purpose of this paper is therefore twofold:

1. to establish an overview of current usages of the business model construct, and in particular its nature and role in theory building, and – building on this –
2. to derive guiding principles applicable for achieving better clarity of the business model construct in future research.

Some of the fundamental questions we explore are: How can we apprehend, measure and discuss a construct with multiple understandings? How precise definitions do we need – and when?

The paper proceeds as follows: First part presents the methodology and key terms. Second part explores the central understanding of the business model from different levels and views, trying to understand its role, nature and format. Finally, this understanding is being discussed in relation to the need for a definition in specific contexts.

Methodology and Key Terms

This paper suggests that business model understandings can and must be explicated for specific purposes of knowledge creation, including the communication with different audiences. The paper takes an eclectic and pragmatic approach as it builds on existing contributions, and it does not, in general, claim that one view or definition is superior compared to another. To support this view and to provide some pragmatic guidance as to determine what type of definition is needed in different situations, it is proposed that business model definitions can be seen as a semantic field which can be described in a vertical as well as a horizontal dimension:

First part examines the vertical, hierarchical level of understandings with different degrees of abstraction which may be relevant for different purposes and audiences, by “unpacking” the literal meaning of business models. This is followed by a (brief) review of the literature and the apparent common ground which paves the way for a conceptual definition. This part also proposes the existence of three levels of understandings (as a general reference, as a conceptual definition and as a specific construct).

Part two provides a horizontal dimension, i.e. different views, of business model understandings and their role in theory building. The analysis is based on contrasting business model understandings, sometimes in a stylized way, according to dimensions of classic characterization of scientific work, such as inductive versus deductive, nomothetic versus ideographic etc. Contributions were selected from databases, conferences, consulting reports, and books based on the key word "business models". For the contrasting analysis, diversity of the contributions was important. The number of papers analyzed was determined by the saturation principle, i.e. the process was stopped when no further insights appeared (some, but not all, of the contributions are referred to in the text). Two brief examples can serve as an illustration of the analysis: A deductive approach (from the general to the applied) would require a predefined understanding (construct) in the research design, whereas a more inductive approach allow a more open construct. A nomothetic understanding would indicate some kind of broader, normative (objective) generalization, whereas a more ideographic approach would indicate a more local understanding of business models. This process generated insights with implications for the construct in terms of e.g. content, scope, ability to deal with dynamics etc.. In addition, the insights were also evaluated in various paradigmatic views (Lincoln et al., 2011; Scott and Davis, 2007; Arbnor and Bjerke, 2009; Skyttner, 2006; Teddlie and Tashakkori, 2009; Gioia and Pitre, 1990), but for presentation purposes in this journal, the insights are organized according to four views identified in the business model literature: The representational, the functionalist, the pragmatic and the systemic view.

The findings are applied in the discussion and implications section to address the "do we need one business model definition" question in contexts of designing constructs in research projects, when communicating with practice and when communicating with colleagues. As definitions, concepts and constructs are not used consistently in the literature we initially focus on the role of definitions and how we arrive at them.

Key terms: Definitions, concepts and constructs
Understanding the "essence" of things (Aristotle) has been a major question debated in philosophy and science since ancient Greece. Without being entangled in

a philosophical debate this is not without problems. A definition is the outcome of an activity which explains to an audience the meaning of an expression (Longworth, 2006). This sentence is in itself a definition consisting of a definiendum (what we define, i.e. definition) and definiens (how we do it – in this case by activity). Defining imply the usage of definiens i.e. other constructs which may be more or less precise. This may be especially challenging in new areas and in social science as definiens may be ambiguous and vague.

The process of gaining acceptance and usage of a definition, i.e. "the activity of explaining", can take several forms, depending on the context. In academia we rely to a heavy extent on writing. In practice oriented settings other senses may be involved. As such, the activity and validation of definitions may differ in form and process, including formal techniques emphasizing logic and rigor; convention logics; peer reviews; coercive power; opinion leaders; study of literature; empirical evidence; exemplary cases etc.. Central to this, however, is the definition's capacity to provide meaning (in some cases classification) and eventually guide the behavior of its audience. Audiences, however, may differ and their preconception and knowledge of the area may also be heterogeneous. Therefore, the context – the audience – is central, as the audience validates and eventually applies a successful definition, i.e. what is a "necessary and sufficient" description in a classic sense of definitions.

As shown by Ghaziani & Ventresca (2005) the business model has achieved both global as well as local meanings in different communities. As the business model concept reflects a complex reality and has a large and diversified audience, it is no surprise that we find different perceptions and applications of the term. The calls for definitions are often rooted in the particular disciplines of the specific researcher(s). These are deeply rooted in different scientific traditions and approaches (ontologically, epistemologically and methodologically). For the same reason we see different uses of the terms definitions, construct and concepts in different fields. For the sake of clarity we establish the following definitions to be applied for the remainder of the paper: A *lexical definition* is used to describe a general understanding of a term to a wide audience. A *theoretical definition* uses explanations which have

(potential) theoretical and/or empirical underpinnings. It is often used in science as part of *theory*, which – in this paper – is seen rather broadly as a coherent description or explanation of observed or experienced phenomena (Gioia and Pitre, 1990). To describe and investigate phenomena of interest we use concepts and constructs. *Concepts* are used to describe ideas, in their own existence, without necessarily being connected to specific measures or facts, although we specify them through conceptualization or *conceptual definitions* which have the potential to become theoretical definitions whether these are based on empirical research, reasoning, disciplined imagination (Weick, 1989) or yet more flexible terms (Astley, 1985). Concepts may have looser or tighter structural characteristics i.e. embracing different features and/or some kind of hierarchical structure (Laurence and Margolis, 1999). *Constructs*, albeit embracing both objective and subjective dimensions, are more explicitly (defined and understood) related to facts and measures of inquiry. A major part of theory building and verification is the linkage of constructs as theory can be seen as a “system of constructs in which the constructs are related to each other by propositions” (Bacharach, 1989). Achieving clarity on constructs is therefore essential for achieving validity (traceability) and reliability (replication) (Van Maanen et al., 2007). Lack of construct clarity is a typical cause of rejection (Suddaby, 2010) why we return to characteristics of high quality constructs and concepts later.

A Vertical Dimension: Levels of Business Model Understandings

This section argues that business model understanding has a vertical dimension, with different degrees of abstraction which may be useful for different purposes. This is demonstrated by the literal meaning of the business model term as well as some major trends in the current literature.

Business model = “business” + “model”

The “business model” is from its inception a two-dimensional construct. The “business model” (definiendum) – what we try to define – is dependent on the definiens – the terms “business” and “model”. Both terms can be used as nouns and verbs and have been discussed extensively in the literature. For this

reason we will constrain ourselves to summarize some of the major points indicating the challenges.

“Business” – and doing business

To do business is to perform activities (such as transactions) to exchange valuables. Traditionally, a business is related to an entity labeled as “organization”, “firm” or “company”. More recently, however, a major claim in the literature is that business is based on opportunities and activities across organizational entities, thereby partly disconnecting it with the organizational entity.

+ “Models” - and modeling

Literally a “model” is a representation of reality² or an example (role model) to follow. A model can be expressed more or less accurately, with different levels of details, as a pattern, image, physical 3-dimensional model of some fabric, descriptions, mathematical formulas or the like.

Similar to other concepts in social sciences, business models are not physical objects, but social constructs which may be communicated in words or pictures. As business models are embedded in the organization “The actual business model is a highly complex entity that can only be represented through abstraction – so when we talk about a real, objective business model, we are really working with its abstraction” (Casadesus-Masanell and Ricart, 2010). In order to understand a model we apply words, frameworks and tools view grounded in specific disciplines or contexts and we use different levels of aggregation and decomposition depending on the purpose and the audience. At the highest level and without the possibilities to see the details and specification this model may only make sense to a few. On the other hand, a very detailed level may result in a very precise and exhaustive model at the risk of losing the overview of the model. For a cross-disciplinary concept, there may be good reasons to reflect on what influences our perception of models as this may range from ideographic understandings to general and prescriptive (nomothetic) formats of “what constitute a business model”. Further, the different perspectives of models are likely to be present simultaneously thereby posing a potential source of discourse.

Models are the outcome of the activity of modeling. This particular aspect is important as modeling begins with an idea or object which is articulated in the mod-

eling process. Modeling, especially in unknown areas, may also contain an element of learning – some parts may not be possible to realize, linkages or causal relations may be different from what was first anticipated. These processes may actually feedback into the original idea of the model, and as a result the model changes during under the process. Business models can therefore be seen as both static and dynamic entities in addition to being viewed by biased (subjective) individuals.

This literal unpacking of the terms gives us a lexical level of understanding, which make sense and appeals to a broad range of audiences in academia and practice, but it is still a polysemous construct, which meaning can differ – even within communities. Additional definiens in the construct can provide the basis for a more exact positioning.

A brief review of the development of the business model field

This brief review focuses on the major tendencies as well as adding further definiens to establish a definition for the discussion to follow.

Business model definitions grew out of new developments in businesses such as the commercial application of the internet. These new ways of doing businesses seriously challenged the established literature e.g. as a result of challenging organizational borders, transparency in markets, connection of markets (complementary and multi-sided) etc.. Early definitions, however, were heavily influenced by idiosyncratic perceptions of business models (ostensive type of definitions) or stereotyped (archetypical) ways of doing business. However, simple definitions such as a “statement of how a firm will make money” (Stewart and Qin, 2000) have proved to be incomplete, focus only on partial components and ignoring the depth of the business model concept. It also neglects the social impact - or even promise - of business models (Yunus et al., 2010; Thompson and MacMillan, 2010; Seelos and Mair, 2007) and the emphasis on a broad range of stakeholders which has been a theme in the some parts of the literature.

In a few years perception of business models expanded to emphasize its systemic, boundary spanning nature,

reflecting that competition was not just about position, resources or technology (Chesbrough, 2007). It was everything in a dynamic blend. The business model became both a vehicle of change and subject to change it self, thereby raising the question of how it could be understood. Afuah (2004) focused on the value dimensions of business models and provided a framework linking it to established methods in strategic management. The change related aspects of business models led Linder and Cantrell (2000) to suggest avenues of change between existing and latent business models. In addition, it was proposed that business models were also narratives tied together with numbers in “stories that explain how enterprises work” (Magretta, 2002). The systemic properties of the business model became focus of attention. The original definition of Osterwalder and Pigneur (2005) stresses the systemic nature of business models: “A business model is a conceptual tool containing a set of objects, concepts, and their relationships with the objective to express the business logic of a specific firm. Therefore we must consider which concepts and relationships allow a simplified description and representation of what value is provided to customers, how this is done and with which financial consequences”.

In this variety of definitions, Zott et al. (2011) found similarities and emerging common ground:

1. The business model is emerging as a new unit of analysis,
2. business models emphasize a system-level, holistic approach towards explaining how firms do business,
3. organizational activities play an important role in business model conceptualizations,
4. business models explains both value creation and value capture.

As they mainly addressed peer reviewed publications it is a bit surprising that 37% of the reviewed contributions (n=103) had no definition of the business model at all (19 % used that of others, and the remaining 44% had its own definition (Zott et al., 2011)).

Some of the common ground identified by Zott and colleagues is also present in a series of comparative studies around 2005 aiming to identify common characteristics of existing definitions (Osterwalder, 2004, Scheer et al., 2003). Often cited is Shafer et al. (2005) who examined 12 definitions by assigning 42 different and unique attributes. They concluded that definitions embrace 4 general categories:

1. strategic choices,
2. value creation,
3. value capture and
4. value network.

They propose to “define a business model as a representation of a firm’s underlying core logic and strategic choices for creating and capturing value within a value network” (Shafer et al., 2005). They explicitly stated that the “core logic” element is to emphasize the strategic choices on cause-effect relationships.

Since 2005 there seems to be a convergence around this core understanding of business model. The labelling, however, differs and this is not without significance due to the semantic change of meaning. In particular, the “logic” dimension appears ambiguous. Teece (2010) suggests that business models are a “design or architecture of the value creation, delivery, and capture mechanisms”. Casadesus-Masanell and Ricart (2010), sees business models as a result of “a set of committed choices that lays the groundwork for competitive interactions”, and Zott and Amit (2010) maintain a transaction and activity view. Despite these differences it seems plausible to conclude that there are not an infinite number of possible meanings at the conceptual level.

For the following discussion we apply a conceptual definition of business models as “a focal firm’s core logic for creating, delivering and capturing value within a stakeholder network”. The different conceptions of value remain key in this definition. To maintain a firm perspective, the “focal firm” is included. Similarly, the boundary spanning nature of business models is included in the “network” aspect, which is further

emphasized by the “stakeholder” term rather than the narrower “value network”. “Strategic choices” is left out to apply business models “as unit of analysis” and manipulation, e.g. strategy. “Core logic” is maintained in order to emphasize the systemic nature, related to governance, strategic decision, activities or something different. This conceptual definition is not exhaustive, but it represents the general features in the literature as well it has an underlying cognitive coherence providing us with an understanding of what a business model is (the criteria of necessary and sufficient). It also provides a starting point for more operational definitions as we will see.

Three vertical levels of business model understanding

The analysis moved us from a highly abstract two-dimensional to a more specific multi-dimensional construct which can be summarized in three levels (see also table 1):

Level 1: The literal meaning of business models are about describing ways, realities – current or to be, of how to do business. The level of abstraction is high and so is the range of potential meanings and audiences. At the best, this first, two-dimensional construct can point to the domain of the business model field and invoke already present associations and knowledge. Further explication is needed in order to provide a clearer understanding.

Level 2: A conceptual definition is achieved by assigning more dimensions to the above definition. This brings us a step further toward a theoretical definition. It is suggested to apply the convergent understanding of business models as “a focal firm’s core logic for creating, delivering and capturing value within a stakeholder network”. This core understanding is apparently able to embrace the many variants of definitions. It is also a conceptual understanding which refers to theoretical constructs, indicating a potential of increasingly establishing itself as a theoretical definition. This conceptual definition requires much more of its audience than the level 1 definition.

Level 3: Consists of an operational explicit, construct with a domain of defined observable dimensions and measures for a specific undertaking, such as a research

Table 1: The vertical levels and properties of the business model concept

Definition	Application, nature and scope	Definition type	Coherence and semantic relations
(Level 1) “Business model”	General understanding Pointing to domain Two dimensional construct Linking with practice - simple	Literal, polysemous	Not explicated Ambiguous – key word with global as well as local meanings
(Level 2) “a focal firm’s core logic for creating, delivering and capturing value within a stakeholder network”	Template for operationalizing Multi-dimensional construct indicating domain such as content/features, systemic structure and linkages Advanced linking with practice	Lexical, wide audience appeal Conceptual definition and/or theoretical definition with scientific underpinnings	Intuitively connected, indication of specifics Bridging options with established literature, discourses Bridging with practice
(Level 3) Compliant with level 2 and/or dependent on research objective	Operational construct for specific research Multidimensional construct – with explicit focus and delimitation of domain	Theoretical Stipulative	Explicated Bridging with established literature, discourses (research gaps)

project in academia or a managerial model in practice related situations. A major part of the remaining paper is dedicated to how this can be created and informed by the existing literature.

A Horizontal Dimension: Four Views in Business Model Understanding

This section presents four different views which may be perceived as a horizontal dimension of business model understanding. The four views represent different perspectives on business models identified in the literature. The four views are; the representational view (as depicting what they are); the functionalist view (how they work); the pragmatic view (as a result of practice); the systemic view (how they are linked internally and externally). For each view the aim is to understand the role, perception and nature of the business model construct.

The representational view

The representational view reflects an ideal of business models as a perfect, general, objective (and ultimately true) representation of reality. The business model concept is given denotative meaning by adding dimensions and characteristic attributes. Removing attributes will lead to corresponding loss of meaning.

The representational view provides a core understanding incorporating important features such as the components, configurations and boundaries. It emphasizes a business model understanding as the core unit of analysis, applicable both at macro and micro level. At the macro level this view can provide a general and often decontextualized understanding of platforms of current and potential/latent dimensions and configurations which may be theoretically underpinned and/or operationalized for more specific applications, for instance to

develop typologies of business models (Zook and Allen, 2011; Malone et al.; 2011, Gassmann et al., 2012). At the micro level, a business model may be viewed as the result of past behavior (Casadesus-Masanell and Ricart, 2010; Tikkanen et al., 2005) as well as a platform, or “template” of initiatives (Zott and Amit, 2010)

The brief introduction clearly shows that a representational view – to the extent that it claims a global and stable view – is challenged by the complexity of the real world, such as connotative understandings (e.g. related to industry contexts), as well as threats to the stability of the construct in periods of change in which unknown or latent dimensions of the construct may become visible and critical. For instance, in the early entrepreneurial phases it is evident, that the emergent business model changes significantly as a result of learning, new customers, changes in power balances etc. The current debate in the financial community on the use of narratives and business models in reporting can also be seen as an attempt to “repair” on the shortcomings of a single perspective providing a “true and fair view” of a firm (Beattie and Smith, 2013).

Although an objective representational view is more of an ambition than a reality, it has a strong history and roots in hard (nature) sciences, which still influence our thinking – often implicitly without reflection. As it always strives for perfection, a “better way”, it tends to be elitist – driven by theory and historically with a tendency to deny other perspectives (Deetz, 1996). New knowledge is created on top of existing in a cumulative way, and builds on an advanced, consistent and stable system of language and methods which emphasize generalizations / de-contextualization, validity, rigor, causality, validity and replication. The research process is linear and constructs are determined before data collection. In general, it is silent on actors and the sense-making and narrative character of business models.

The functional view

The functional view focuses on the role of the business model in an institutionalized context. It is a classic foundation for organization and management literature. We briefly explore 3 business model themes within this view: The commercialization of technology, the role in strategy, and an expansion of this with more dynamic perspectives.

The first view is that business models act as means of commercializing technology and ideas into new businesses (Chesbrough, 2006; Chesbrough and Rosenbloom, 2002; Morris et al., 2005; Yunus et al., 2010). As a demonstrative example, Chesbrough (2007) specifically assign the following roles to business models:

1. *Articulate the value proposition, that is, the value created for users by the offering.*
2. *Identify a market segment, that is, the users to whom the offering is useful and for what purpose.*
3. *Define the structure of the value chain required by the firm to create and distribute the offering, and determine the complementary assets needed to support the firm's position in this chain. This includes the firm's suppliers and customers, and should extend from raw materials to the final customer.*
4. *Specify the revenue generation mechanism(s) for the firm, and estimate the cost structure and profit potential of producing the offering, given the value proposition and value chain structure chosen.*
5. *Specify the revenue generation mechanism(s) for the firm, and estimate the cost structure and profit potential of producing the offering, given the value proposition and value chain structure chosen.*
6. *Formulate the competitive strategy by which the innovating firm will gain and hold advantage over rivals.*

Chesbrough and Appleyard (2007) also provide a framework for assessing the business model awareness of companies, ranging from the unarticulated to sophisticated situations of establishing and nurturing own ecosystems, thereby covering both planned as well as emergent approaches to business model dynamics.

A second functionalist view addresses business models fit with strategy processes. Examples of this is the “design” and instrumentalist type of literature such as Osterwalder and Pigneur's (2010) business model canvass, Wirtz's (2011) discussion on organizational roles of business models and Chatterjee's (2013) “simple

rules of business model design". These contributions address the questions of "who has the responsibility for the business model" and the "how and when" it can be applied.

An extension of this adds dynamics to the discussion, incorporating process, cognitive, and structural elements, position, resources, and knowledge dimensions. As already stated business models can be seen as outcomes of strategic decisions (Casadesus-Masanell and Ricart, 2010; Tikkanen et al., 2005), which still leave many manifestations at the tactical and operational level open. In particular, some of these options may create mutually reinforcing virtuous circles of actions and processes (Casadesus-Masanell and Ricart, 2011), thereby opening an discussion on the balance between replication and innovation of business models (Dunford et al., 2010; Aspara et al.) and evolution of business models (Demil and Lecocq, 2010; Morris et al., 2005).

Common for these is an ambition to look for patterns in the development. The underlying consistency view also becomes apparent in potential synergies and conflicts when multiple business models are present (Zott and Amit, 2008; Velu and Stiles, 2013; Casadesus-Masanell and Tarzijan, 2012; Markides and Charitou, 2004). The functionalist view does not necessarily require a very precise ex ante definition of a business model but it does assign an, ex ante, often deterministic role to business models and what type of questions they address. This classic functionalist view contributes more to theory refinement and improvements of (instrumental) knowledge than in more radical types of change with less predictability and un-linear nature. Further, the classic functionalist view emphasizes the institutional context and it is silent on the role of actors as they act within the institutional frames.

The pragmatic view

As the research community failed to identify a generally accepted definition, it was suggested to "trust the practitioners" and their use of business models (Doganova and Eyquem-Renault, 2009; Lecocq et al., 2010). The pragmatic view assigns value to concepts by their successful practical application, i.e. it assigns greater value to the connotative than the denotative meaning of business models, and tends to avoid the definition challenge. In this view the business model

is the solution to a problem and a result of entrepreneurial activity. The view is supported by observing the activities of entrepreneurs in the process of taking an idea and turning it into a new business. The emergent business model circulates in various and shifting manifestations (business plans, elevator pitches, budgets etc.) among actors in different worlds. In doing so it exhibits the capacity as a boundary object being simultaneously robust enough to maintain meaning while adapting in a process which answers questions related to the balance of resource contributions and rewards (Doganova and Eyquem-Renault, 2009; Verstraete and Jouison-Lafitte, 2011). Similarly, Ahokangas and Myllykoski (2013) show us that business models change in content and risk, and Lund and Nielsen (2013) that the role, contribution and value capture dimensions may change significantly during the process, following the "effectuation" behavior of entrepreneurs (Sarasvathy, 2001) and pointing to the limits of the functionalist and essentialist view.

The business model works both as a narrative and calculative device (Magretta, 2002), thereby linking sense-making literature and actors (e.g. entrepreneurs, managers) in what Perkman and Spicer (2010) describe as elements of a theory of performative representation, providing three core roles of convincing, legitimizing, and guiding social action. This is also an important aspect in periods of significant change in established organizations and this could link the business model field and "strategy-as-a-practice" field (Johnson et al., 2007). The pragmatic view is not limited to new businesses or organizations in isolation. Lindgren et al. (2010) examines innovation of business models in networks, and Wikström et al. (2010) demonstrate how business models in project based firms are influenced by actors, and Heikkilä and Heikkilä (2010) discuss alignments and conflicts in establishing joint business models.

In the pragmatic view the business model is a result of problem solution. There are possible, but no exact pre-defined formats, roles or functions assigned to the model. The business model serves as a boundary object but it has no ex ante predefined format as this is created and changed in the process between the actors. The business model has a fundamentally subjective nature, due the linkages with the surrounding actors. Existing

theory and reviews are therefore playing a less dominant role than in the other views but may provide first input (e.g. frameworks) for initiating a process. The research process is likely to be shifting between practice and theory (abduction) and is often very close to the field. Although research in this view is basically local and emergent of nature, the final model and findings can still be mirrored against more general definitions or used for analytical generalization (Yin, 2014).

The systemic view

The development of systems theory – although dating further back – accelerated after 2WW. It is worth noting that especially biologist Bertalanffy saw systems thinking as an important way to link different disciplines and avoid compartmentalization of science (Scott and Davis, 2007). There have been many applications of a systems perspective in business research, including operations, it and organizational learning (Skyttner, 2006; Scott and Davis, 2007) and the systems perspective is also clearly present in various management methodologies and representational models of business activity, including the previous views.

Although the systemic nature of business models has been stressed consistently, it is rarely addressed more explicit. Amit and Zott (2012) apply a systems view by elaborating on their original business model definition Amit and Zott (2001) as “content, structure and governance of transactions designed so as to create value through the exploitation of business opportunities”. Business model innovation can therefore be seen as either directed inwards or adjusting to the environment. They also draw on their previous empirical research to show how business models can generate competitive advantage from novelty, lock-in, complementarity or efficiency effects. Also applying a systems view Berglund and Sandström (2013) focus on the relation between a focal firm and its environment and develop hypothesis of development on the interaction. In a larger perspective this connect the business model to the relative importance of the firm based business model vs. multisided markets, complementarity of business models, networks or eco-systems in competition and development dynamics (Hamel, 2002; Chesbrough, 2006). Sánchez and Ricart (2010) specifically address the openness/closedness dimension of business models and the relation to low income markets. These per-

spectives may be important in understanding whether business models can “create” new markets by turning latent demand into actual demand.

The systems perspective and the business model concept can be seen as compatible concepts as they both deal with purpose oriented input-output relations directed at stakeholders and with transformative mechanisms in-between. Since a system is more than the sum of its parts, removing one or more dimensions will make it incomplete and incoherent. Other characteristics are shared with the business model concept:

1. the specific content / conceptualization is not pre-defined and potentially rich in aspects,
2. the level of abstraction is not pre-defined,
3. an open system is in principle without boundaries,
4. systems are rich on relations (logic, architecture ...), and
5. they can both be manipulated by agents.

Both systems and models can be broken down in subsystems which can be analyzed in further depth (e.g. ecosystem, industry, stakeholders). For instance each of the possible dimensions of the business model construct may be perceived as a system on its own (e.g. value creation system, value delivery system etc.). Also complexities such as system dynamics, system “fits” i.e. interactions (alignment and misalignment) of systems applies equally well for both models and systems. It should be noted, however, that the systems perspective has received critique similar to the business model concept. At the general level, systems are not easily defined and too open for some audiences (see e.g. (Skyttner, 2006)). It is also evident that the systemic nature is present in the background of the other views (e.g. organizations as rational systems to attain specific goals in the functional view).

Applying an explicit system view provides a more general approach to business models – it applies equally well to entrepreneurial as well as more “established” settings, although still bounded by the context of the defined systems. By linking business models, the sys-

tems perspectives and connecting to the disciplines and nomological worlds of business research and management it becomes less abstract and offers new opportunities for bridging across disciplines. Additionally, in the academic environment a systems view may provide a potential platform for mapping, coordinating and operationalizing research projects which may also include new methods and fields (e.g. complex systems theory).

Business models - the horizontal views

As we have shown there are several ways to understand business models, but the call for definition may - intended or not - be rooted in the representational and influenced by a functionalist view. The definitions and constructs generated by these views may not be equally relevant or appropriate in all cases. Some common themes across the views are:

First of all, the purpose, the origin of the research question, and the type of data needed, has important implications for establishing a proper business model construct and when this can take place. This may sound obvious, but reflections on the deeper scientific aspects and the current practice so far, reveal that the cross-disciplinary and multi-view nature has been a source of confusion when researchers try to understand contributions from other views. This aspect is also related to issues of general validity and generalization, i.e. whether these apply at a local level, relativist level, within particularities of the specific study, within the related disciplines, or a general (universal) level of claims.

Secondly, a large part of the discussion is centered on how business models relate to actors, processes, and outcomes, i.e. whether they are part of or "external" to the model. For purposes of understanding, analysis and theory building it will be useful if this is explicated. For instance, business model dynamics may change from being dependent on a visionary entrepreneurial leader to being embedded and institutionalized in organizational structures and processes. This has clear implications for how actors should be included or related to the business model definition. In fact, business models are not always the main subject of analysis, but a vehicle to understand other phenomena.

Thirdly, the stability and format of business models and constructs are not given. Businesses change both in terms of resources, relations and "logic". This challenges the possibility of having an accurate depiction of reality. A too narrow construct may not be able to capture empirical observations and therefore not be able to explain causality, especially in longitudinal research. A broad construct will generally be able to capture a broader scale of change. A possibility is to define latent dimensions of business model change.

Fourthly, it should also be noted that the views are often mixed in practice: For instance, research conducted in the pragmatic view may have conclusions delivered as "tools" which may have the character of functionalist determinism. The views can be seen as competing, but probably a better way is to see them as complementary, especially when dynamics are present (see also discussion and implications).

Fifthly: Although the systemic point of view is embedded in the other views, it is worthwhile to separate it out, to understand its potential benefit for both single research purposes but also as a perspective on business model research at a more general level.

The findings are summarized in table 2 and 3. Table 2 provides a general overview, and table 3 provides details of the business model constructs. These are ideal representations of the views for the purpose of establishing completeness, pointing to meaningful differences rather than exclusive classification, and with a note that they may not be without internal challenges.

Table 2: Business model views, their purposes and examples of presence

View	Business models as representations of reality	Business models serves specific functions	Business models as outcomes of relations between actors	Business models as (open) systems
Purpose	Objective representations, "snap shots" Search for general and causal relations – grand theory	Theory refinement - fit with role, hierarchies and consensus Insights and/or normative	Understand practice of problem solution Challenging established theories, new insights Understand interplay between actors	Holistic understanding of different systems, their components, interactions and dynamics at macro and micro level Integrative platform
Examples of presence and usage	Theoretically driven research, business model frameworks, business model typologies	Theoretically based research on existing, renewed and new business models in established companies	Grounded research in entrepreneurial and change oriented situations Exemplary cases for inspiration	Understanding of interplay between businesses and their environment, e.g. ecosystems, clusters, complementarity, multisided markets

Table 3: Variations in the business model constructs in the 4 views

View	Business models as representations of reality	Business models serve specific functions	Business models as outcomes of relations between actors	Business models as (open) systems
Role of theory	Theory driven / testing Linear, planned, deductive, causality	Theory testing / driven, causality, deductive, linear	Theory creation / application / challenging - Looking for the unfamiliar Abduction	Integrative views / dependencies Integrative platform for research programmes
Context	De-contextualized	Contextualized by disciplines and institutional frames	Contextualizing within stakeholder environment	Contextualizing and contextualized within focal system(s)
Nature of business model construct	Unit of analysis - objective, measurable, depicting (actual and possibly latent) components and configurations Exact, stable construct and identifiable causal linkages	Construct fulfills objective (real), general functions Flexible construct within boundaries of generic purposes	Boundary object Frameworks and facilitation may guide business model conceptualization Dynamic construct under transformation	Emphasis on part-systems, components, linkages, and feedback Boundaries / open-closed / levels / Static-dynamic Multiple business models

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Table 3: Variations in the business model constructs in the 4 views

Timing: Availability of construct	Construct ready before research – desk	Predefined assumptions on function – desk Business model becomes conceptualized in process	Business model becomes conceptualized and/or modified in interactive processes in field	Ex ante perception or creation through explorative investigation
Actor role	External (silent)	Silent - adapting to institutional regime	Actors as creators	Self-regulating or actor influenced systems
Risks	Too narrow - lack in comprehensiveness and practical applicability	Too constrained by existing knowledge	Reinvention of existing knowledge	Too general, losing relevance and meaning

Discussion and Implications

To discuss the implications we initially discuss the issue of not having a definition at all, the benefits and challenges of multiple views, and then proceeds with a discussion of different situations where we need definitions: when establishing research projects, communicating with practice, and finally, when communicating with colleagues.

Advantages of not having a definition?

In general it can be argued that a grounded – or feyerabendish – approach with no or limited prior concepts and methodology is appropriate in contexts with no or limited prior knowledge or if a fresh approach is needed. The business model field is not virgin territory as there is currently a wide range of perceptions of business models, ranging from more systematic approaches to more intuitive approaches. Typically, all kind of actors will have some kind of prior bias, assumptions and predefined ideas about business models which cannot be ignored. Consequently, it can be argued that having no definition imply the risks of

1. being misunderstood as readers base their judgment on their own business model perceptions,
2. insufficient positioning of – and weak constructs in the research, and

3. bad “research economics” by not building in existing knowledge.

All risks are latent in the 4 different views, but highest when ex ante designs are needed. It generally seems appropriate to apply a reflexive approach to the existing body of knowledge and explicate the definition.

Business models understandings as a semantic field embracing a core understanding with multi-levels and multiple-views

The business model field can be seen as a large semantic web of multi-levels and multi-views with a common, core understanding. Based on Astley (1985) this situation may be ascribed to three causes:

1. the business model field is immature and the core definition will develop as our knowledge accumulate,
2. the business model field is a multi-view field and cannot be embraced from a single view,
3. the popularity of the business model field is due to publication driven need for “newness” and interesting stories.

A call for a single, all-embracing definition rooted in the essentialist tradition mirrors a specific view on science as progressing linearly by building cumulatively

on prior knowledge. Although valuable as a platform of potential dimensions of more operational definitions, the underlying “consistency view” of such a position is not without problems as reality is difficult to embrace in one view. Further, it may lead to incremental and insignificant findings with limited application (Astley, 1985). Instead of trying to force-fitting other perspectives into one view, with potential side effects of rejecting other perspectives, it seems more productive to allow multiple perspectives to co-exist and inform each other: Multiple perspectives generate more complete knowledge for a complex construct phenomena as business models, just as it is characteristic that a multidimensional construct is more than the sum of its parts (Suddaby, 2010). In addition to this, the interest in the business model as well as the different perspectives may be seen as a result of necessary additions to the established knowledge. As it will be noted, the above arguments are based on complementarity and does not suggest that the views are necessarily (fully) comparable or compatible (the debate of the paradigms and compatibility – incompatibility theses).

In specific projects, a combination of views could be seen as a way of triangulating. This may provide further insights of inspiration (in case of variance in findings), strengthening findings (parallel findings), or – especially in dynamic settings – tracking changes and shifts in relevance across the views.

Another part of the critique is related to the theoretical underpinning and the theoretical maturity of the business model. Rather than trying to connect it exclusively to one specific theory, it may be possible to connect it to more theories due to its cross-disciplinary nature. It may be argued that the relevance of the business model concept is related to its holistic nature and embracement of multiple views. All research carries limitations and we always view business models with only a partial view. However, the limitations and focus of a specific research project may reduce the relevance of the business model concept to a point where the project may be approached in a traditional “silo”-way by established disciplines. This touches on a related question of “what is business model research?” Key elements of an answer may include elements of its systemic nature, involving multiple levels, components and perspectives across disciplines. Allowing multiple perspectives on

business models to co-develop may be the best way to inform the understanding of the core definition.

Definitions for research projects: Need for construct clarity (level 3 definition)

Construct development in the business model field is challenging due the scope of the concept.

In general it is recommended that academics should define their purpose and usage of the business model concept and avoid implicit definitions which have been the case in the past (Zott et al., 2011; Zott and Amit, 2013). To facilitate knowledge accumulation, it is suggested - for the lack of better – that academics join the emerging core understanding (level 2 conceptual definition) or at least explain plausible deviations (such as challenging it) from this. This level of understanding may be sufficient for cases of general references and discussions when the business model is not the main unit of analysis. For other purposes it needs operationalization, by clarifying what aspects of the business model concepts are investigated as well as clarifying the relation to the conceptual definition.

Suddaby (2010) argues that clarity of a construct can be assessed by four characteristics which mutually reinforce each other:

1. clear definition,
2. a clear sense of the scope,
3. semantic relation to other constructs,
4. coherence.

Specifically, our analysis point to the importance of the origin of the research question in combination with a view, or mix of these, with implications in relation to the research design and the research process, the static/dynamic aspect, the focal area of the business model, the components and their linkages, and the level of operationalization. Finally, the semantic relations to the involved disciplines and the business model field must be explained to ensure relevance and theoretical underpinning. Building on the previous analysis and discussion – this can be integrated in five steps as suggested in table 4.

Table 4: Five steps to achieve clarity of business model construct for specific research project

Key questions	To consider
1. What is the origin of the research question?	Theoretical or empirical origin of research question Timing of conceptualization of business model
2. Which perspective(s) are relevant?	The role of the business model: Depicting reality, general causality – a representational view Understanding role – managerial and organizational – a functional view Understanding motivation, actors and outcome – a pragmatic view Understand feedback, regulation and dynamics – a systems view A mix of above – fit with research design
3. What content is needed?	Required breadth/focus of business model component/functions Required level / depth of each component / function Static / dynamic, stable or flexible – prior, current and latent components Boundaries (to other systems, levels, actors etc.)
4. Which ties are important?	Ties between content elements Static / dynamic, stable / flexible - e.g. new prior, current, latent ties
5. What are the semantic relations and position of the research?	Semantic relation to high level business model concept Semantic relations and potential discourses with established management research and practice areas Position and relation to business model research

Definitions when dealing with practice

One reason for the popularity of the business model is quite simple: Business models may be good stories, providing cases for inspiration. They constitute good bridging options between academia and practice, whether this is at the more general level on the role and utility of science, general communication or in specific engagements (Clegg and Starbuck, 2009). In both cases, however, academics face two audiences: Their academic peers and practitioners. These may have different prior knowledge on business models, why it may be necessary with simultaneous and dual constructs. A practice oriented audience cannot be expected, at least initially, to have the same in-depth knowledge of state of the art definitions and perspectives as academics. Therefore simpler (lexical), abbreviated definitions or exemplary (ostensive) definitions may be useful for such audiences to convey the meaning of the concept.

Depending on the circumstances, the initial understanding can be enhanced / deepened over time, possibly by the application of various frameworks. In such situations the researcher uses a level 2 definition in the communication with practice and a level 3 definition in the actual project. In practice this may require considerable attention in the communication and analysis in order to achieve precision and avoid confusion (e.g. by mixing definiens and definiendum).

Definitions when communicating with colleagues; improving business model understanding

The business model literature has been able to capture many of the recent ways of doing business related to new opportunities, new technologies and the increasing awareness of other stakeholders than sharehold-

ers. In this way, the business model literature has challenged established theories. This is still reflected in special journal issues where it is common to see very broad research agendas covering customer responses, eco-systems, scalability, internal processes, competition, and organizational linkages with business models (Björkdahl and Holmen, 2013; LaPlaca, 2013; Robins, 2013). Responses, however, are often – and naturally – unorganized and fragmented.

The holistic characteristics of business models create a potential to bridge management research across disciplines. The business model concept has different theoretical status and maturity in different fields. The semantic and nomological relations of the business model construct are critical for bridging the business model field and these disciplines, across deeply institutionalized meanings of the terms. For instance, “value” has different meaning in marketing and finance. This sort of linguistic ambiguity is not unusual in administrative science, it can be a source of fruitful insights, and often theory development actually depends on it (Astley, 1985). A second aspect of bridging is the motivation, ability and potential conflicts of joining a more holistically based perspective rather than pursuing a strong disciplinary and narrow path. This may require adaption of research practices and terms in the disciplines involved. For instance, the perceived importance of empirical evidence and more conceptual thinking (disciplined imagination) may differ between disciplines. Therefore, such initiatives as reviews seen from special disciplines, such as Industrial Marketing (Coombes and Nicholson, 2013), or suggestions for positioning the business model in an extended strategic research domain (Priem et al., 2013), or open research agendas (e.g. Zott and Amit, 2013, Baden-Fuller and Mangematin, 2013) must be welcomed. Bridging would probably create a win-win situation: Our understanding of the business model concept may be improved, theoretically underpinned and individual disciplines may achieve a better understanding of their contributions to the holistic idea of a business. This may facilitate both inspiration, better positioning and focus of research and maybe even provide a kind of more elaborate Lakatonian style research programmes. Systematically organized programs with a portfolio consisting of multiple views may be one practical way of doing this. Other ways

could be to include researchers from different disciplines in specific project teams.

It may be a relevant to ask if anyone – and in that case, who – should take responsibility of the concept and its development? Should the concept be reserved for the strategy field? Or should it have its own domain or be incorporated / diffused into specific fields. Where will it have its greatest value and impact? Is there a need for “middle layers” of business model definitions between the general definition and specific disciplines reflecting the strategic dimensions of these (strategic marketing, strategic IT, etc.)?

Concluding Remarks – Do We Need One Business Model Definition?

Definitions – to some extent – share purposes and characteristics with models. They help us understand and classify constructs, and they guide us in situations where we have to orientate our behavior. Neither definitions nor models are necessarily exhaustive, precise and static and heavily dependent on the audience.

The relevance of the business model concept must be judged on its ability to reflect the real world of business in a better way than alternative approaches, i.e. whether we better understand the reality of 5, as 5 itself or by seeing it as the sum of $3+2=5$ or $I+I+III = V$. Reflecting this, the business model literature is wide spanning, cross-disciplinary, cross-organizational, boundary spanning and systemic by nature. At the higher level we find the broad understanding pointing to the domain of the business model. We also find a multi-dimensional concept indicating the business model components and their potential linkages, sharing an understanding of business models as embracing critical elements of the “logic” of value creation, value delivery and value capture and the ways these are organized in a stakeholder network. This concept maintains its meaning but takes different forms depending on perspectives such as depicting reality, element of process, its outcome or as a part a system. Rather than trying to achieve one single, generally applicable and exhaustive definition, these complementary and different views may be applied to build and elaborate on this core business model understanding. In sum,

the views provide an understanding on the “what, why, how and when” of business models as a holistic and dynamic concept.

In conclusion: We need – not one – but more – definitions building on a shared understanding. The current and shared convention may be sufficient for the general understanding; in many cases a more explicit definition is needed, important determinants being the

audience and the purpose. As such, it may be argued that the real value of the business model construct lies not in the precision of its definition, but in its role as a boundary object between different disciplines and between academia and practice. At least for a period, a more systematic approach to coordinating business model research around the emerging core understanding may be more fruitful than trying to develop new definitions.

Endnotes

- 1 Websters dictionary (1989) offers more than 17 definitions on business and 21 on models. Only the relevant and central ideas are provided here.
 - 2 Many more aspects of models in the introduction to Long Range Planning, April 2010 issue, Baden-Fuller & Morgan
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About the author

Anders Bille Jensen holds a M.Sc. in Business Administration from Copenhagen Business School. He has a professional background from the fast moving consumer goods, the venture industry, the “green energy” industry and has a strong interest in the maritime sector. He has also been an entrepreneur and served as a consultant. For the last decade Anders has been teaching courses in marketing; strategy; organization & management; innovation and entrepreneurship, as well as turnaround management. Anders is currently finishing his ph.d. on business models at the Department of Leadership and Corporate Strategy at University of Southern Denmark, Slagelse.



Conceptualising Business Models: Definitions, Frameworks and Classifications

Dr. Erwin Fielt

Abstract

The business model concept is gaining traction in different disciplines but is still criticized for being fuzzy and vague and lacking consensus on its definition and compositional elements. In this paper we set out to advance our understanding of the business model concept by addressing three areas of foundational research: business model definitions, business model elements, and business model archetypes. We define a business model as a representation of the value logic of an organization in terms of how it creates and captures customer value. This abstract and generic definition is made more specific and operational by the compositional elements that need to address the customer, value proposition, organizational architecture (firm and network level) and economics dimensions. Business model archetypes complement the definition and elements by providing a more concrete and empirical understanding of the business model concept. The main contributions of this paper are (1) explicitly including the *customer* value concept in the business model definition and focussing on value creation, (2) presenting four core dimensions that business model elements need to cover, (3) arguing for flexibility by adapting and extending business model elements to cater for different purposes and contexts (e.g. technology, innovation, strategy) (4) stressing a more systematic approach to business model archetypes by using business model elements for their description, and (5) suggesting to use business model archetype research for the empirical exploration and testing of business model elements and their relationships.

Keywords: business model, business model classification, business model concept, business model definition, business model element, business model framework, customer value, value creation.

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Introduction

Every company has a business model, whether that model is explicitly articulated or not (Chesbrough, 2006; Teece, 2010). Examples of companies with well-known business models are SouthWest Airlines' low-cost carrier model, Rolls Royce's 'power-by-the-hour' model and Threadless' 'customer is the company' model. Business models matter; the same idea or technology taken to market through two different business models will yield two different economic outcomes (Chesbrough, 2010). Business models are required because of the features of market economies where there is consumer choice, transaction costs, heterogeneity amongst consumers and producers, and competition (Teece, 2010). According to Ghaziani and Ventresca (2005) the public talk about 'business models' commenced in the early 1970s and rose to prominence halfway the 1990s, at the same time as the digital economy.

Academic research on business models started appearing late 1990s with early work from, for example, Timmers (1998), Weill and Vitale (2001) and Afuah and Tucci (2001). However, related concepts have appeared earlier such as Drucker's 'theory of business' (Drucker, 1994). The business model concept has been applied in studies as a basis for enterprise classification, as a factor for enterprise performance and as a focal point for innovation (Lambert & Davidson, 2013). Business models have received attention from different disciplines, such as e-business, information systems, management, entrepreneurship, innovation, strategy and economics (Amit & Zott, 2001; Bouwman & Fiel, 2008; Hedman & Kalling, 2003; Morris, Schindehutte, & Allen, 2005; Pateli & Giaglis, 2004; Teece, 2010; Zott & Amit, 2013). However, while many researchers stress the importance of business models, the concept is still fuzzy and vague and there is little consensus on its definition and compositional elements (Al-Debei & Avison, 2010; Morris et al., 2005; Shafer, Smith, & Linder, 2005). While defining the business model concept has been among the first tasks of early researchers in the area (Osterwalder, Pigneur, & Tucci, 2005), the definitions themselves have been subject to much debate (Pateli & Giaglis, 2004) and a general accepted definition has not yet emerged (Morris et al., 2005; Zott, Amit, & Massa, 2011).

The objective of this paper is to increase our foundational understanding of the business model concept by addressing three areas of research: business model definitions, business model frameworks and elements, and business model classifications and archetypes. These three areas are important for the conceptualisation of business models and have been a core focus of research (Osterwalder et al., 2005; Pateli & Giaglis, 2004). We conclude that a business model can be defined as the value logic of an organization in terms of how it creates and captures customer value and can be concisely represented by an interrelated set of elements that address the customer, value proposition, organizational architecture and economics dimensions. Moreover, we argue that the three areas of business model research complement each other in advancing our understanding of the business model concept. The business model definition can provide us with a generic and abstract conceptualization. Specifying the compositional elements of a business model can make the business model concept more specific and concrete and makes it suitable for different purposes and contexts (e.g. e-business, strategy, or innovation). Business model classifications and archetypes provide a more empirical and practical perspective and can provide insights into the relationships between business model elements. A better understanding of the business model concept can improve the quality of business model research and enable a more cumulative research tradition in this relatively young field of research.

While we will intensively relate to business model literature, this paper does not use a systematic literature review as main approach as we think that the further advancement of the business model concept benefits more from the underlying reasoning than from the systematic canvassing of a still developing and murky field. Moreover, when relevant we will make use of existing literature reviews on business models (e.g., Al-Debei & Avison, 2010; Morris et al., 2005; Shafer et al., 2005; Zott et al., 2011). The remainder of this paper is organized as follows. Firstly we discuss the business model definitions in more details. Thereafter, we address business model frameworks and elements. Next, we discuss business model classifications and archetypes. Finally, we present some concluding remarks and identify opportunities for future research.

Business Model Definitions

While defining the business model concept has been among the first tasks of early researchers (Osterwalder et al., 2005), the definitions have been subject to much debate (Pateli & Giaglis, 2004) and a general accepted definition has not yet emerged (Al-Debei & Avison, 2010; Morris et al., 2005; Shafer et al., 2005; Zott et al., 2011). Table 1 provides an overview of some of the prominent definitions over time. We will first explore these definitions and highlight some of the similarities and differences to increase our understanding of the business model concept. Thereafter, we will specific zoom into the notion of value creation. We will end this

section with a working definition explicitly targeting customer value and some specific considerations that need to be taken into account when developing or using business model definitions.

Researchers have come up with different definitions in an attempt to explain what the essence and purpose of a business model is (Pateli & Giaglis, 2004). Definitions have had different foci and have been more and less inclusive. Timmers (1998, p. 4) provides one of the first business model definitions. This definition influenced the definition of Weill and Vitale (2001) and is quite similar to the definitions of Mahadevan (2000) and Tapscott (2001). These definitions see the business model as an architecture and address the busi-

Table 1: A selective overview of business model definitions (ordered by year and author name).

Author(s)	Definition
Timmers (1998)	Definition of a business model: (a) an architecture for the product, service and information flows, including a description of the various business actors and their roles; and (b) a description of the potential benefits for the various business actors; and (c) a description of the sources of revenues. (p.4)
Mahadevan (2000)	A business model is a unique blend of three streams that are critical to the business. These include the value stream for the business partners and the buyers, the revenue stream, and the logistical stream. (p. 59)
Rappa (2000)	In the most basic sense, a business model is the method of doing business by which a company can sustain itself -- that is, generate revenue. The business model spells-out how a company makes money by specifying where it is positioned in the value chain.
Afuah and Tucci (2001)	A business model is the method by which a firm builds and uses its resources to offer its customers better value than its competitors and make money doing so. It details how a firm makes money now and how it plans to do so in the long-term. The model is what enables a firm to have a sustainable competitive advantage, to perform better than its rivals in the long term. (p. 3-4)
Amit and Zott (2001)	A business model depicts the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities. (p. 511)
Tapscott (2001)	A business model refers to the core architecture of a firm, specifically how it deploys all relevant resources (not just those within its corporate boundaries) to create differentiated value for customers. (p. 5)

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Table 1: A selective overview of business model definitions (ordered by year and author name).

Author(s)	Definition
Chesbrough and Rosenbloom (2002)	The business model provides a coherent framework that takes technological characteristics and potentials as inputs, and converts them through customers and markets into economic inputs. The business model is thus conceived as a focusing device that mediates between technology development and economic value creation. (p. 532) It “spells out how a company makes money by specifying where it is positioned in the value chain” (p. 533)
Morris et al. (2005)	A business model is a concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create sustainable competitive advantage in defined markets. (p. 727)
Shafer et al. (2005)	We define a business model as a representation of a firm’s underlying core logic and strategic choices for creating and capturing value within a value network. (p. 202)
Chesbrough (2006)	At its heart, a business model performs two important functions: value creation and value capture. First, it defines a series of activities that will yield a new product or service in such a way that there is net value created throughout the various activities. Second, it captures value from a portion of those activities for the firm developing the model. (p. 108)
Johnson, Christensen, and Kagermann (2008)	A business model, from our point of view, consists of four interlocking elements that, taken together, create and deliver value. The most important to get right, by far, is the customer value proposition. The other elements are the profit formula, the key resources and the key processes. (p. 52-53)
Demil and Lecocq (2010)	Generally speaking, the concept refers to the description of the articulation between different BM components or ‘building blocks’ to produce a proposition that can generate value for consumers and thus for the organization. (p. 227)
Osterwalder and Pigneur (2010)	A business model describes the rationale of how an organization creates, delivers, and captures value. (p. 14)
Teece (2010)	In short, a business model defines how the enterprise creates and delivers value to customers, and then converts payments received to profits. (p. 173)
Zott and Amit (2010)	A business model can be viewed as a template of how a firm conducts business, how it delivers value to stakeholders (e.g., the focal firms, customers, partners, etc.), and how it links factor and product markets. The activity systems perspective addresses all these vital issues [...]. (p. 222)
George and Bock (2011)	[...] a business model is the design of organizational structures to enact a commercial opportunity. (p.99) [...] three dimensions to the organizational structures noted in our definition: resource structure, transactive structure, and value structure. (p.99)

ness network with a focus on the different roles of the actors and their interactions and relationships. Another early definition comes from Rappa (2000) who emphasises the monetary aspects, which is also prominent in some other definitions (e.g., Afuah & Tucci, 2001; Mullins & Komisar, 2009; Teece, 2010). This often comes with a stronger emphasis on the organization and strategic aspects (e.g., Afuah & Tucci, 2001; Morris et al., 2005). Most authors do stress that a business model does not cover the full strategy (e.g., Chesbrough & Rosenbloom, 2002). Others quite explicitly differentiate between business models and strategy (e.g., Magretta, 2002; Mansfield & Fourie, 2004). More comprehensive definitions combine the ideas of an architectural representation of the business network and the generation of revenues for the focal organization (Dubosson-Torbay, Osterwalder, & Pigneur, 2002; Morris et al., 2005). However, others are less inclusive in their business model definition and explicitly differentiate it from other concepts (e.g. strategy) or exclude some specific elements. For example, Timmers (1998) differentiates the business model from the marketing model, which addresses the commercial viability via the competitive advantage, positioning, marketing mix, and product-market strategy. Amit and Zott (2001) see the revenue model as a distinct, yet complementary concept to the business model.

There is quite some confusion about the organizational entity as business model definitions refer to the firm level (e.g., Afuah & Tucci, 2001; Osterwalder et al., 2005; Rappa, 2000) as well as the network level (e.g., Mahadevan, 2000; Tapscott, 2001; Timmers, 1998; Weill & Vitale, 2001). While some position it as a new level of analysis nested between the firm and the network level (e.g., Amit & Zott, 2001). Some definitions do not include an explicit reference to the organizational entity (e.g., Chesbrough & Rosenbloom, 2002; Morris et al., 2005). Most authors do include both levels in their conceptualization based on their further discussion, operationalization and application of the business model concept (see also the discussion below on business frameworks and elements). Most firm level definitions do not differentiate between the corporate entity and the business unit although most seem to imply the business unit. A notable exception is Chesbrough and Rosenbloom (2002), who explicitly relate the business model to the business unit strategy.

Some definitions follow from, or are influenced by, the specific context in which the business model concept is used. For example, Amit and Zott (2001) focus on value creation in e-business and see the business model as depicting the design of transaction content, structure, and governance transactions. Chesbrough and Rosenbloom (2002) focus on technological innovation and position the business model as mediating between technology development and economic value creation. The business model concept is also applied for organizations that have less of a profit focus such as socially-oriented organizations (e.g., Yunus, Moingeon, & Lehmann-Ortega, 2010) and government organizations (e.g., Janssen, Kuk, & Wagenaar, 2008). This use of business models for different purposes and in different contexts, such as start-ups and established companies, different types of innovation, different kinds and varying importance of technology, for-profit and not-for-profit, etc. may also explain why there is no widely agreed upon definition.

Some researchers have tried to address the problem of different business model definitions by identifying categories or themes reflecting the different origins or meanings of the concept (Table 2). Osterwalder et al. (2005) distinguish between an activity/role-related approach, which is more inward looking and a value/customer-oriented approach, which is more outward looking. The categories of Morris et al. (2005) represent a hierarchy where the perspective increases in comprehensiveness as one progressively moves from the economic to the operational to the strategic levels. Wirtz (2011) suggests that definitions developed from a technology orientation to an organization orientation to a strategic orientation. Given this wide variety of origins and meanings of the business model concept, it is not surprising that a general accepted definition has not yet emerged. Therefore, it will be important for the definition to provide a generic and abstract conceptualization that can be applied for different purposes and in different contexts (e.g. technology, innovation, strategy).

Many (earlier) definitions summarize what a business model is made off (e.g., Bouwman, De Vos, & Haaker, 2008; Osterwalder et al., 2005; Timmers, 1998); these definitions are very close to the frameworks and ele-

Table 2: Categorizations or themes for business model definitions (ordered by year and author name).

Authors	Categories/themes
Morris et al. (2005)	<ul style="list-style-type: none"> • Strategic level • Operational level • Economical level
Osterwalder et al. (2005)	<ul style="list-style-type: none"> • Activity/role-related approach (inward looking) • Value/customer-oriented approach (outward looking)
George and Bock (2011)	<ul style="list-style-type: none"> • Organizational design • The resource-based view of the firm • Narrative and sense-making • The nature of innovation • The nature of opportunity • Transactive structures
Wirtz (2011)	<ul style="list-style-type: none"> • Strategy-oriented approaches • Organization-oriented approaches • Technology-oriented approaches
Zott et al. (2011)	<ul style="list-style-type: none"> • E-business and IT • Strategy • Technology and innovation management

ments discussed below and are less useful for deriving a generic and abstract definition. Other (later) definitions are more formulated around the value logic in terms of creating, delivering and/or capturing value (e.g., Chesbrough, 2006; Johnson, 2010; Osterwalder & Pigneur, 2010; Teece, 2010). For example, Chesbrough (2006, p. 108) states that a business model performs two important functions: value creation and value capture. 'First, it defines a series of activities that will yield a new product or service in such a way that there is net value created throughout the various activities. Second, it captures value from a portion of those activities for the firm developing the model.' Ghaziani and Ventresca (2005) concluded that the business model discourse is mostly framed around value creation. Even if the meaning is framed differently, these frames still

embody the same idea, namely, 'the question of how to create value in the face of a changing business environment' (p. 545). 'The different frames emphasize different aspects of the same problem. Generating revenues and managing relationships, although ostensibly different, both have something to say about the challenge of creating value in the unsettled Digital Economy' (p. 545).

While most authors are not very explicit about what they mean with value, most definitions seem to refer to customer value (i.e. value for the customer) (e.g., Afuah, 2004; Dubosson-Torbay et al., 2002; Osterwalder & Pigneur, 2010; Tapscott, 2001; Teece, 2010). Because most authors do not discuss what they mean with 'value' and 'customer value,' it is hard to compre-

hend a definition of business model without a better understanding of the value concept. The concept of value has a long history in axiology or 'the theory of value' (Holbrook, 1999) and has been of interest to many different fields in the social sciences, including economics, strategic management and marketing (Khaliifa, 2004; Sanchez-Fernandez & Iniesta-Bonillo, 2006). We will take a closer look at the value concept in marketing literature (and related management literature) as this is the most obvious source for customer value. In addition, we will briefly discuss the ideas on value creation in strategic management as this is the field where most business model authors rely on for their theoretical foundation. However, as will follow from the brief overview below, there are no straight answers to be found here either as customer value is a complex and multi-dimensional concept and value creation is still ill understood from a strategic perspective.

Conceptualizations of customer value range from more simplified, uni-dimensional to more complex and holistic, multi-dimensional approaches (Sánchez-Fernández & Iniesta-Bonillo, 2007). Woodruff (1997) defines it as 'a customer's perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations' (p. 142). Woodruff's definition reflects the richness and complexity of the concept, but may not be readily translated into an effective operational definition (Parasuraman, 1997). Holbrook (1999) emphasizes that consumer value is an 'interactive relativistic preference experience' (p. 5). An 'interactive' approach entails that 'value depends on the characteristics of some physical or mental object but cannot occur without the involvement of some subject who appreciates these characteristics' (p. 6). It is 'relativistic' because it depends on relevant comparisons, it varies between people and it changes among situations. And 'experience' means that consumer value resides in the consumption experience rather than in the product purchased. Customer value in the use context is also described as use value (or value-in-use), which is value created with and determined by the user during the consumption process (Bowman & Ambrosini, 2000; Dixon, 1990). This is differentiated from exchange value (or value-in-exchange), which is value embedded in the product itself (i.e. added during the production pro-

cess) and determined at the point of exchange process (Bowman & Ambrosini, 2000; Dixon, 1990). Bowman and Ambrosini (2000) see use value as being defined by customers, based on their perceptions of the usefulness of the product on offer. In monetary terms it is the amount the customer is prepared to pay for the product. They explicitly refer to *perceived* use value to stress that it is subjectively assessed by the customer. Exchange value is realized when the product is sold and it is the amount paid by the buyer to the producer.

In general, (strategic) management literature has not paid a lot of attention to consumers (Brief & Bazerman, 2003). The emphasis has traditionally been on the supply side where the producers (solely) create value as reflected in the common term 'added value' (Priem, 2007). So far there is little consensus on what value creation is and how it can be achieved in the management literature (Lepak, Smith, & Taylor, 2007). A notable exception is Priem (2007), who introduces an orientation on consumers and value creation – the 'consumer benefit experienced' viewpoint – as an alternative for the dominant orientation on producers and value capture in strategic management approaches based on firm positioning, transaction cost, and resource-based view. One of the fundamental ideas behind this perspective is that consumers experience value during their consumption activities. So products and services are not 'value laden' as they are without value when they are unconsumed. In subsequent work, Priem, Li, and Carr (2012) refer to 'demand-side' research that looks at explaining and predicting managerial decisions that increase value creation within a value system based on product markets and consumers (downstream from the focal firm) instead of factor markets and producers (upstream of the focal firm). A demand-side approach recognizes that consumer's heterogeneity of demand contributes to firm heterogeneity and emphasizes that firms first must compete to create more consumer value (to join the value system) and only then compete to capture that value. Adner and Zemsky (2006) also argue that value creation presents a distinct set of challenges and stress the role of demand-side factors in sustainable competitive advantage. Following the discussion of the business model definition and the value concept, we conclude that from a generic and abstract perspective a business model provides an integral view on the value logic of an or-

ganization by bringing together customer (use) value and value creation with business (exchange) value and value capture. We propose the following definition: ***a business model describes the value logic of an organization in terms of how it creates and captures customer value.*** This definition is similar to most of the more recent definitions of other authors, in particular Osterwalder and Pigneur (2010), Chesbrough (2006), and Johnson (2010), except our explicit reference to *customer* value. Moreover, we excluded 'delivering' value from our definition as we see the separation of creating value and delivering value as a supply-side perspective focussing on producers adding value. Customer (use) value cannot be created without involving the user and considering the use context.

Our business definition is abstract and generic enough to cover the use of the business model concept for different purposes and in different contexts and to cater for the evolution of the business model concept over time within this relatively young and emerging field. This is facilitated by not including a comprehensive list of elements but leaving that to more specific and operational frameworks (as discussed below). Our definition reflects the current business model discourse, which is mostly framed around value creation (Ghaziani & Ventresca, 2005). The core reasoning of the business model is about the creation of customer value and linking this to the capture of customer value (for the creation of business/exchange value). This aligns well with the ideas of Peter Drucker who states that 'There is only one valid definition of business purpose: to create a customer' and 'It is the customer who determines what a business is' (Drucker, 2007, p. 31). While most business model authors nowadays emphasise value creation this does, however, not mean that value capture is ignored (Zott, Amit, & Massa, 2010). But while there is some attention to capturing the customer value created, business value and sustainable competitive advantage are stressed in strategy (Chesbrough & Rosenbloom, 2002). Our definition model focuses on the firm level, but this does not exclude taking the network level into account. The specific firm can be the focal organization of a business network that plays a prominent role in creating and capturing customer value. In this way the business model can become a new level of analysis positioned between the firm and the network level (Zott et al., 2011).

Based on the discussion of the business model definition, we also see opportunities for further developing the definition. Because most authors do only limitedly address what is meant with customer value and value creation, we suggest that business model research pays more attention to other literature in this area, in particular from marketing and strategic management. However, the current literature on customer value and value creation will not provide any straight answers either as customer value is a complex and multi-dimensional concept and value creation is still ill-understood, in particular from a strategic perspective. Moreover, there is an opportunity for business model research to contribute to the strategy literature as the business model can contribute to an expanded boundary model that includes value creation and integrates a demand side perspective (Priem, Butler, & Li, 2013)

Business Model Frameworks and Elements

Closely related to the business model definitions are the compositional elements describing what a business model is made-off. The elements are also referred to as, for example, building blocks (e.g., Osterwalder & Pigneur, 2010), components (e.g., Pateli & Giaglis, 2004), (key) questions (e.g., Morris et al., 2005), or functions (e.g., Chesbrough & Rosenbloom, 2002). Business model elements are sometimes presented as part of the definitions and other times described in separate lists, frameworks or ontologies. Gordijn, Osterwalder, and Pigneur (2005) state that this kind of research has evolved from 'shopping lists' of components, to components as building blocks, to reference models and ontologies. This means the description of elements has become more explicitly conceptualized, shared and formal. Business model frameworks and ontologies do not only define the elements, they also define the relationships between the elements (e.g., Gordijn et al., 2005). They often also introduce some hierarchal structure, in particular a two-layered model with higher-level and lower level elements (e.g., Johnson et al., 2008; Morris et al., 2005; Osterwalder, 2004). Table 3 presents a selective overview of business model frameworks to briefly introduce the topic by describing a few prominent examples and highlight

some communalities and differences. Note that it is not our intention to be comprehensive here but to mainly focus on a representative set of well-known frameworks from different origins (in particular e-business, innovation, and entrepreneurship). See for more complete overviews, for example, Shafer et al. (2005) and Zott et al. (2011).

The most well-known and widely used framework is the Business Model Canvas (Osterwalder & Pigneur, 2010). The Business Model Canvas is presented as a shared language for describing, visualizing, assessing and changing business models. It is focussed on design and innovation, in particular by using visual thinking which stimulates a holistic approach and storytelling. The Canvas is a follow up of the Business Model Ontology (Osterwalder, 2004). In this ontology the elements are grouped into four pillars: customer interface (segments, relationships and channels), product (value proposition), infrastructure management (activities, resources, and partners) and financial aspects (revenues and costs). Osterwalder (2004) shows how the ontology synthesizes most of the other business model frameworks and elements at that time (e.g., Afuah & Tucci, 2001; Hamel, 2000; Magretta, 2002).

The Four-Box Business Model (Johnson, 2010; Johnson et al., 2008) has many similarities with the Business Model Canvas. Johnson stresses the interdependencies between the boxes in terms of consistency and complementarity and sees this as the way in which a simple framework can become quite complex. However, there is not much further discussion of these interdependencies or support for dealing with them. The main difference between the Business Model Canvas and the Four-Box Business Model is that the former has a customer pillar while the latter does not have a separate customer box but covers customer aspects to some extent in the value proposition box. Moreover, while the Business Model Canvas has key partnerships as a separate element, the Four-Box Business Model puts it under key resources. The Four-Box Business Model includes more detailed operational (business rules, behavioural norms and success metrics) and financial (target unit margin and resource velocity) aspects than the Business Model Canvas.

Chesbrough and Rosenbloom (2002) discuss business models in relation to technological innovation. They position the business model as a heuristic logic and focusing device that mediates between technology development and economic value creation. Chesbrough and Rosenbloom state that 'the business model provides a coherent framework that takes technological characteristics and potentials as inputs, and converts them through customers and markets into economic inputs' (p. 532). The elements of Chesbrough and Rosenbloom are quite similar to the Business Model Canvas and the Four-Box Business Model. They do explicitly mention the value network as one of the elements, which includes customers, suppliers, complementors, and competitors. Moreover, Chesbrough and Rosenbloom also see the competitive strategy as an element in the business model, which is not the case for the Business Model Canvas and the Four-Box Business Model. However they do stress that this does not cover the full strategy and that there are differences between the business model and strategy, such as the fact that the business model emphasizes value creation while the strategy emphasizes value capture.

Morris et al. (2005) approach the business model from an entrepreneurship perspective. Similar to the Four-Box Business Model, they also include more details on the financial aspects (operating leverage, volumes, and margins). In line with Chesbrough and Rosenbloom, Morris et al. also include competitive strategy as an element in the business model. Moreover, one of their elements addresses the personal factors of the entrepreneur or investor in relation to their time, scope, and size ambitions, which they also refer to as 'the investment model.' This takes into account that there are different venture types possible such as the subsistence, income, growth and speculative models. In addition, Morris et al. also stress the importance of internal and external fit with respect to the six elements. While internal fit (consistency and reinforcement between the components) is required for a working model, a strong internal fit can undermine adaptability and result in a poor external fit when the environment is turbulent. Morris et al. also note that the components interact with each other and that the investment model (component 6) effectively delimits decisions made in all other areas.

Table 3: A selective overview of business model frameworks and elements (ordered by year and author name).

Author(s)	List/Framework and Elements
Weill and Vitale (2001)	<p><i>Business Model Schematics</i></p> <ul style="list-style-type: none"> • roles and relationships (electronic and primary – including the firm of interest, its customers, suppliers and allies) • major flows of product, information, and money • revenues and other benefits each participant receives <p><i>Atomic E-business Model</i></p> <ul style="list-style-type: none"> • Strategic objectives & value proposition • Sources of revenue • Critical success factors • Core competencies <p><i>E-business Initiative</i></p> <ul style="list-style-type: none"> • Combination of atomic models • Targeted customer segments • Channels to the customer • IT infrastructure capability
Osterwalder (2004); Osterwalder and Pigneur (2010)	<p><i>Business Model Canvas</i></p> <ul style="list-style-type: none"> • Customer Segments • Customer Relationships • Communication, Distribution & Sales Channels • Value Propositions <ul style="list-style-type: none"> • Key Resources • Key Activities • Key Partnerships • Revenue Streams • Cost Structure
Chesbrough and Rosenbloom (2002)	<p><i>Technology-market mediation</i></p> <ul style="list-style-type: none"> • Value proposition • Market segment • Value chain <ul style="list-style-type: none"> • cost structure & profit potential • value network • competitive strategy
Morris et al. (2005)	<p><i>Entrepreneur's business model</i></p> <ul style="list-style-type: none"> • How do we create value? (factors related to the offering) • Who do we create value for? (market factors) • What is our source of competence? (internal capability factors) <ul style="list-style-type: none"> • How do we competitively position ourselves? (strategy factors) • How we make money? (economic factors) • What are our time, scope, and size ambitions? (personal/investor factors)

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Table 3: A selective overview of business model frameworks and elements (ordered by year and author name).

Johnson et al. (2008);	<i>Four-Box Business Model</i>	
Johnson (2010)	<ul style="list-style-type: none"> • Customer Value Proposition <ul style="list-style-type: none"> • Job-to-be-done • Offering • Profit Formula <ul style="list-style-type: none"> • Revenue Model • Cost Structure • Target Unit Margin • Resource Velocity 	<ul style="list-style-type: none"> • Key Resources • Key Processes <ul style="list-style-type: none"> • Processes • Business Rules & Success Metrics • Behavioural Norms

Weill and Vitale (2001) introduce E-business Model Schematics for describing e-business models. This Framework uses the elements in Timmers' definition (Timmers, 1998) as starting-point and adds a visual representation to it. Moreover, Weill and Vitale differentiate between atomic e-business model and e-business initiatives that are based on combinations of atomic models and identify specific elements for both. What is notable about the approach of Weill and Vitale is its focus on e-business, which comes with special attention for information flows, electronic relationships, and IT infrastructure. Some other frameworks even have a separate, higher-order element addressing technology (e.g., Bouwman et al., 2008; Mason & Spring, 2011). Moreover, the network perspective on the organizational architecture is very prominent in E-business Model Schematics with a description of roles, relationships and flows.

Business model frameworks address what a business model is made-off. As the framework overview above shows, there are significant similarities in terms of the elements that can be used to represent how an organization (in a network setting) creates and captures customer value. From a comparison of 18 frameworks and lists, Morris et al. (2005) state that the number of elements mentioned varies from four to eight and that a total of 24 different items are mentioned as possible elements, with 15 receiving multiple mentions. They conclude 'that the most frequently cited are the firm's value offering (11), economic model (10),

customer interface/relationship (8), partner network/roles (7), internal infrastructure/connected activities (6), and target markets (5). Some items overlap, such as customer relationships and the firm's partner network or the firm's revenue sources, products, and value offering' (p. 727). Al-Debei and Avison (2010) suggest a unified business model conceptual framework with the dimensions value proposition, value architecture, value network, and value finance. Based on our description and discussion of business model frameworks, the findings of Morris et al. (2005) and the unified model of Al-Debei and Avison (2010), we suggest that the core elements of a business model should address the customer, value proposition, organizational architecture and economics dimensions.

The customer dimension identifies the target customers and articulates their problem (a difference between the current and desired situation). This problem (or opportunity) is sometimes also described as the job-to-be-done (Johnson et al., 2008; Ulwick, 2005). The value proposition dimension presents the organization's solution to deal with the customer problem often in terms of an offering and its potential benefits. The value proposition is the first amongst equals and can be seen as the central dimension of the business model, as also argued by, for example, Zott et al. (2011). The organizational architecture dimension addresses how the value proposition can be effectuated by the capabilities and resources of the focal organization and the other actors in the busi-

ness network. There can be differences between the representation of the organizational architecture at the organizational and network level, for example the value chain and the value system (Porter, 1985). The economics dimension focuses on financial considerations (how to make money) in terms of the revenues and costs and their drivers (e.g. margin, economies of scale). Economics can also include non-financial considerations related to social and environmental considerations (e.g. the triple bottom line). Together these business model dimensions cover the core questions about creating and capturing customer value in terms of who, what, why and how. The identification of four dimensions advances our understanding of the business model concept from the earlier discussion on definitions and moves the conceptualisation from abstract and generic to more concrete and specific. ***A business model describes the value logic of an organization in terms of how it creates and captures customer value and can be concisely represented by an interrelated set of elements that address the customer, value proposition, organizational architecture and economics dimensions.***

We suggest to include the business model dimensions as high-level core elements and to make use of business model frameworks as multi-level structures specifying a (limited) number of higher-order elements (or pillars, boxes, questions, etc.) and elaborating these in more detail as lower-level elements (or building blocks, components, factors, etc.). This means that depending on the specific purpose, context and/or theoretical foundations of a business model study, a more specialised framework can be used that may have additional higher-order elements and/or more specific lower-order elements. In this way business model research can, on the one hand, build on a cumulative body of knowledge and, on the other hand, be flexible enough to adapt to specific purposes and circumstances. For example, some frameworks may have additional higher-order elements addressing strategy or technology. Or some frameworks may cover the economics dimension by a financial higher-order element and revenues and costs as lower-order elements while others add volume, growth and resource velocity as additional lower-order elements. This flexibility does mean that when developing or using a business model framework, it is required to address the origin and foundation of

the framework and elements and discuss assumptions and limitations.

A business model framework should not only define the elements, but also define the relationships between the elements. According to Morris, Minet, Richardson, and Allen (2006, p. 47) 'a useable business model framework captures the ways in which key decision variables are integrated, including the need for unique combinations that are internally consistent.' It is important to recognize that a business model framework 'more than the sum of its parts, the model captures the essence of how the business system will be focused' (Morris et al., 2005, p. 727). This is in line with suggestions that the business model is a system (Afuah & Tucci, 2001) with complex interdependencies between its elements (Johnson, 2010). Moreover, there should be a blend (Mahadevan, 2000) or balance (Bouwman et al., 2008) between the different dimensions. We suggest to take this one step further, more than a consistency or fit between the business model elements, the strongest business models create synergies between them going beyond tensions and trade-offs between customer and business perspectives and between value creation and capture. However, while the importance of the relationships and consistency between the elements in a business model framework is recognized, this topic is hardly addressed by literature so far except at the even more concrete level of business model archetypes. Moreover, there is also a lack of empirical testing of the business model frameworks and elements. Here also research on business model archetypes can be of great value as this research is often based on empirical studies.

Business Model Classifications and Archetypes

Business model research has been addressing the identification and description of different types of business models. These archetypes are discussed individually or collectively as part of a classification (Hedman & Kalling, 2003; Osterwalder et al., 2005; Pateli & Giaglis, 2004). An archetype can refer to a full business model, often an exemplar based on a specific company such as the 'low-cost carrier model' of SouthWest Airlines, or a simplified, basic model, such as the 'full service pro-

vider' atomic business model (Weill & Vitale, 2001), or a specific aspect or element of a business model, for example, the 'free' business model pattern (Osterwalder & Pigneur, 2010) for the revenue model. In this section we will discuss a number of these archetypes and classifications to get an impression of this area of research and link it to the business model conceptualization. It is not intended as being comprehensive with respect to the full range of archetypes or classifications but is representative and in particular covers e-business research, which has been most prolific in this area.

Authors in academic literature as well as popular press identify and discuss generic representations of specific types of business models and/or specific instantiations of these specific types. Common examples are the 'razor-and-blades model' of Gillette, the 'power-by-the-hour model' of Rolls Royce, the 'low-cost carrier model' of SouthWest Airlines, the 'direct sales with build-to-order model' of Dell, and the 'the customer is the company model' of Threadless. The in-depth descriptions of business model archetypes often address interesting business models of well-known firms or innovative business models of upcoming firms based on empirical studies. For example, With the rise of the Internet, there was a lot of attention for e-business models, which later on got refined to pure-play and clicks-and-mortars models (e.g., Afuah & Tucci, 2003). Another example, Anderson (2009) discusses how companies can be successful by giving away things for free and using more indirect revenue sources like cross-subsidies or freemium. The in-depth descriptions of business model archetypes are often presented as engaging stories of real world examples or in-depth case studies. This makes the business model concept very concrete and practical.

While some authors focussed on individual business model archetypes, others started producing classifications of multiple business model archetypes in the form of lists or typologies (Table 3). The rise of the Internet resulted in an increase in business model choices (Pateli & Giaglis, 2004) with new e-business models and adapted versions of traditional 'bricks-and-mortar' models. There were many authors trying to describe and understand different e-business models, for example Timmers (1998), Rappa (2000) and Weill and Vitale (2001). Later the specific focus on e-business models

lessened, although many of the newer models are still associated with technology as driver or enabler. Osterwalder and Pigneur (2010) and Johnson (2010) are examples of newer lists that are not e-business focussed. Sometimes classifications make use of business model frameworks to systematically describe each business model archetype, as abstract presentation or exemplary instantiation, with the help of a business model framework. This is, for example, done by Weill and Vitale (2001), Afuah and Tucci (2003), and Osterwalder and Pigneur (2010).

While most business model classifications are lists that present an unordered set of business model archetypes, some provide business model typologies that position archetypes relative to each other based on underlying criteria. For example, Timmers (1998) uses 2 criteria for classifying his Internet business models: (1) functional integration (from single function to multiple functions/integrated) and (2) degree of innovation (from lower to higher). While the typologies provide insights into different types of business models and their relative positioning, there is little integration or consolidation of the different criteria and model types presented by different authors. Moreover, the criteria used to classify business models overlap to some extent with the elements in the business model frameworks, for example, Weill and Vitale (2001) and Afuah and Tucci (2003). It is unclear what the relation between the criteria and elements is. Moreover, there is no holistic and exhaustive business model taxonomy available yet (Lambert, 2006; Pateli & Giaglis, 2004). Whereas a typology is an arbitrary/artificial classification that suits a specific need with categories that are conceptually derived and based on a limited number of variables, a taxonomy is a general/natural classification providing a basis for generalisation with categories that are empirically derived and based on a large number of variables (Lambert, 2006).

The classifications and archetypes can be applied for the design and management of business models, for example, business model composition (Weill & Vitale, 2001), business model decision-making (Morris et al., 2005) and business model maturity (Chesbrough, 2006). Moreover, this kind of research is also important for business model innovation as it can help assessing the novelty of a business model. Weill and Vi-

Table 4: A selective overview of business model classifications (ordered by year and author name).

Author(s)	Classification	Comments
Timmers (1998)	<i>Internet business models</i> <ul style="list-style-type: none"> • e-shop • e-procurement • e-auction • 3rd party marketplace • e-mall • Virtual communities • Value chain integrator • Information brokers • Value chain service provider • Collaboration platforms 	Classified by 2 criteria: (1) functional integration; (2) degree of innovation
Rappa (2000)	<i>Business models on the web</i> <ul style="list-style-type: none"> • Brokerage model • Advertising Model • Infomediary Model • Merchant Model • Manufacturer Model • Affiliate Model • Community Model • Subscription Model • Utility Model 	
Weill and Vitale (2001)	<i>Atomic e-business models</i> <ul style="list-style-type: none"> • Content Provider • Direct to Consumer • Full Service Provider • Intermediary • Shared Infrastructure • Value net integrator • Virtual Community • Whole of Enterprise/ Government 	Described by 4 elements (see atomic e-business model in Table 3)
Afuah and Tucci (2003)	<i>(Internet) Business models (based on dominant revenue models)</i> <ul style="list-style-type: none"> • Commission • Advertising • Mark-up • Production • Referral • Subscription • Fee-for-service 	Described by 4 elements: (1) profit site (role in value network), (2) revenue model, (3) commerce strategy and (4) pricing model
Johnson (2010)	<i>Business model analogies</i> <ul style="list-style-type: none"> • Affinity club • Brokerage • Bundling • Cell phone • Crowdsourcing • Disintermediation • Fractionalization • Freemium • Leasing • Low touch • Negative operating cycle • Pay-as-you-go • Razors-and-blades • Reverse auction • Reverse razors-and-blades • Product-to-service • Standardization • Subscription club • User community 	
Osterwalder and Pigneur (2010)	<ul style="list-style-type: none"> • Unbundling • Long tail • Multi-sided platforms • Free (Freemium, Bait & Hook) • Open 	Described by 9 elements (see Business model Canvas in Table 3)

tale (2001) discuss how atomic e-business models can be seen as pure types or as building blocks for more complex compositions in business model design and innovation. They also address how compositions need to take the synergies and conflicts between atomic e-business models into account, for example, while direct-to-customer and virtual community go well together, direct-to-customer should not be combined with content provider. The business model framework of Morris et al. (2005) includes 3 levels: foundation, proprietary and rules levels. The business models archetypes can be used at the foundation level to help making generic decisions regarding what the business is and is to ensure that such decisions are internally consistent. Chesbrough (2006) presents different business models archetypes as part of a maturity model for open innovation. It moves from very basic models with little advantages for the company to highly sophisticated models that drive the innovation activities of a company and form a platform for leading its industry.

Business model classifications and archetypes are important for the conceptualisation of business models, as they are more concrete and empirical than the definitions and frameworks. However, research into classifications and archetypes is very fragmented and not yet well developed, often lacking a systematic approach. Business model archetypes can benefit from more rigorously applying business model frameworks to systematically describe an archetype and specify its scope (i.e. does it cover the complete business model or only certain elements). An archetypical description of a complete business model should at least address the customer, value proposition, organizational architecture, and economics dimensions to provide a holistic understanding of how a certain way of doing business creates and captures customer value. Research into classifications and archetypes can also be used to validate and enrich our understanding of business model definitions and frameworks; in particular it can help to empirically test the business model frameworks and explore the relationships and consistency between business model elements. This also means that research into business model archetypes can make contributions that go beyond identifying and describing a particular archetype.

Concluding remarks

The business model concept is still criticized for being fuzzy and vague and lacking consensus on its definition and compositional elements. In this paper we set out to advance our understanding of the business model concept by addressing three areas of research: business model definitions, business model elements, and business model archetypes. ***We conclude that a business model describes the value logic of an organization in terms of how it creates and captures customer value and can be concisely represented by an interrelated set of elements that address the customer, value proposition, organizational architecture and economics dimensions.***

Business model definitions are converging around describing how organizations can create and capture customer value. These kinds of definitions are abstract and generic enough to cover the use of the business model concept for different purposes and in different contexts (e.g. technology, innovation, strategy). We explicitly include the *customer* value (or use value) where other definitions are less clear by referring to value in general or include business value (or exchange value). The focus is on the value creation from the customer perspective and linking value creation to value capture. However, a more strategic perspective is required to fully understand value capture and business value. Moreover, while the focus is on the organization, the business network needs to be included as well when it plays a critical role in creating and capturing customer value. Advancing the business model definition will require further research into customer value and value creation and needs to address related research in marketing and strategic management. Moreover, there is an opportunity for a unique contribution of business model theory focussing on the integration of customer (use) value and value creation with business (exchange) value and value capture.

While the business model definition is abstract and generic, business model frameworks and elements can make the business model concept more specific and operational. We suggest that a business model framework needs to include four dimensions that address the customer, value proposition, organizational architecture and economics. The value proposition can be seen

as the central dimension. Organizational architecture can be both at the firm and network level. Economics can also include non-financial considerations. Together these dimensions cover the basic who, what, why, and how questions about creating and capturing customer value. We suggest using a multi-level structure, which is used by many business model frameworks, and include the business model dimensions as high-level core elements. Additional high-level elements (e.g. technology, competitive strategy) can be included depending on the purpose and context. Also the elaboration into low-level elements can provide additional flexibility. However, there should be a minimal agreed upon set of low-level elements for each high-level (core) element (e.g. revenues and costs for economics). Future research should empirically test the business model framework and elements. Moreover, the development of theory or guidelines about when and how to extent or adapt a framework could greatly contribute to the quality and consistency of the development and application of business model frameworks. In addition, research into the relationship between the business model elements is needed to further advance the frameworks.

Business model classifications and archetypes describe different types of business models more fully or partially (i.e. covering only certain elements or aspects). While some authors have focussed on specific archetypes, others have developed lists or typologies. This research is of great value for better understanding the business model concept due to its empirical nature and practical approach. The classifications and archetypes can be applied for the innovation, design and management of business models. However, research on business model classifications and archetypes has so far been not very systematic and is quite fragmented. This research can benefit from the systematic use of business model frameworks for describing business model archetypes and determining their scope. Moreover, a better understanding of the use of typologies and their underlying criteria is also required. The development of a more holistic and exhaustive business model taxonomy is also seen as an important area of future research. Research into business model archetypes can also help to empirically test the business model frameworks and to further explore the relationships and consistency between business model elements.

Our understanding of the business model concept advanced greatly from the foundational research into business model definitions, business model frameworks and elements, and business model classifications and archetypes. Moreover, we argue that these three areas complement each other in advancing our understanding of the business model concept and creating consensus on its definition and compositional elements. The business model definition can provide us with a generic and abstract conceptualization. Specifying the compositional elements of a business model can make the business model concept more specific and operational and can offer the flexibility to cater for different purposes and contexts. Business model classifications and archetypes can benefit greatly from the use of business model frameworks. Business model definitions and frameworks can be validated and enriched by the empirical research into classifications and archetypes.

As we did not use a comprehensive, systematic literature review, there are limitations to the paper in terms of it covering all business model definitions, business model frameworks and elements, and business model classifications and archetypes in academic literature. However, we did make use of the insights from systematic literature review by others (e.g., Zott & Amit, 2013) to complement the papers that we included in our selective overviews. Moreover, we left a discussion of the theoretical foundation of the business model concept out of this paper. For a full understanding of the concept this should also be addressed. Different theoretical perspectives are indirectly included by their influence on the business model definitions and the business model frameworks and elements.

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