



Norwegian University of
Science and Technology

Successful business model innovation

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Industrial Economics and Technology Management
Submission date: June 2011
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NTNU – Trondheim
Norwegian University of
Science and Technology

“ Some men see things as they are and say, *why?*
I dream of things that never were, and say, *why not?*

– GEORG BERNARD SHAW
(1856–1950)

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Master's thesis

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Problem Description

In our pre-master project we studied the business model as a unit of analysis and applied it to four Norwegian media industries. The goal of this master thesis is to uncover further insight on factors for successful business model innovation.

We will study the relationship between business model innovation, strategy and change management with a focus on Norwegian industries and managers for context and application.

Assignment given: **17. Januar 2011**

Supervisor: **Øystein Moen, IØT**

Executive Summary

A global CEO study conducted by IBM in 2006 showed that business model innovation has a higher correlation with operating margin growth than any other type of innovation. It is therefore not surprising that business model innovation is a buzzword increasingly seen in business jargon and literature. However, the field is quite novel and finding ways of approaching and understanding the subject has been more elusive. This thesis presents a comprehensive and academically founded approach to business model innovation, including a framework that can be applied by managers to transform their business, and building capabilities that can become a source of competitive advantage.

Since the late 1990s, business models and business model innovation has received increasing attention from academic researchers and business practitioners. While a range of research has been conducted on the topic, there is little convergence in the field when it comes to definitions, tools, application of concepts and a common terminology. This makes it difficult for practitioners to approach business model innovation.

In order to develop a framework for successful business model innovation, this thesis includes a literature review on the topics of business models, business model innovation and relevant literature from adjacent fields like strategy, innovation and change management. Combined with eight case studies on how Norwegian companies understand and apply

these concepts, including two major consulting firms' experiences from multiple business model innovation projects, we have synthesized theory into a framework in order to help managers successfully achieve business model innovation.

The framework can largely be understood and approached through a process consisting of the following three phases:

1. **Impetus** – Trends, technology, competition or opportunities creates a situation where a business is not optimally aligned with the current or future market, which creates the impetus for business model innovation:

¶ *The organization needs to set up cross-functional information flows to solicit inputs, and design procedures so that management knows when to act and initiate business model innovation projects.*

2. **Ideation** – The impetus for change is handled with an ideation phase:

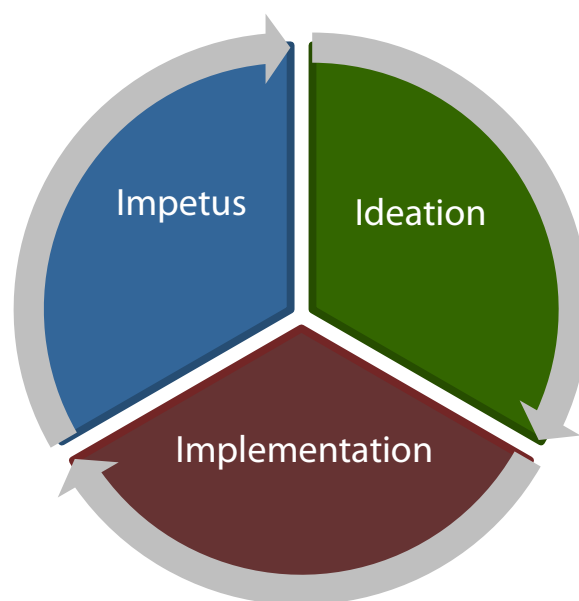
¶ *The organization selectively frames the impetus to create change momentum, staffs a cross-functional project team, collaboratively learns business model concepts and generates new models based on inspiration, prototyping and competitive criteria.*

3. **Implementation** – In order to really understand how a new model will work, the market must be enacted.

¶ *A business model is chosen for experimentation through implementation and an implementation strategy is built. Major adaptations and revisions are expected post-launch. Implementation costs are kept as low as possible in the start, and when the new model has adapted, it is scaled up and refined further.*

The business model innovation framework identifies both challenges and tools on how to solve them. It explains what needs to be done at different phases and how it should be done in order to be successful. As business model innovation has a higher correlation to operating margin growth than any other type of innovation, we argue that the framework helps companies create competitive advantage and superior enterprise performance.

The three phases of our business model innovation framework



Preface

This master thesis was written in the spring of 2011 as the final part of our M.Sc. degree in Industrial Economics and Technology Management at NTNU in Trondheim, Norway. The thesis is written for the specialization track in Strategy and International Business Development.

The thesis further examines some of the topics touched upon in our pre-project «New business models in the media industry – An analysis of the Norwegian media market», finished December 2010, regarding business models and business model innovation as increasingly emerging topics in academia. The goal of this thesis has been to propose guidelines on how practitioners should engage in business model innovation, based upon a literature review of academic research and case studies of Norwegian companies' approach and experiences on the topic.

We would like to thank interviewees Tore Ulstein from Ulstein Group, Stig Bjørkedal from STX OSV, Trond Leira from Rolls-Royce Marine, Heidrun Reisæter from VG, Rune Røsten from Schibsted Vekst, Gaute Engbakk from Creuna, Gustav Gotteberg from Boston Consulting Group and an anonymous contributor from «Large Norwegian Consulting Firm» for their valuable time spent on providing us with important experiences and insights.

We would also like to thank our academic supervisor, Øystein Moen at the Department of Industrial Economics and Technology Management, for valuable guidance, feedback and support throughout our work with this thesis.

About the authors

The authors are M.Sc. students **Eivind Breiby** (ebreiby@gmail.com) and **Magnus Wanberg** (wanberg@gmail.com). This master thesis is our final assignment of the 5-year Master's program in Industrial Economics and Technology Management at the Norwegian University of Science and Technology (NTNU) in Trondheim, Norway. The program is an integrated program combining technical and business oriented subjects. Eivind Breiby has technical specialization in production- and quality management. Magnus Wanberg has technical specialization in computer science and telecommunications. Both authors have economic/business specialization in Strategy and International Business Development.

Guide for the reader

Due to the scope of this master thesis we present different approaches to reading this paper depending on background and interest; the student approach, the academic approach and practitioner approach. These guides can be used in order to quickly siphon value from the thesis without having to read unnecessary sections. While we do recommend reading the whole thesis in order to fully grasp our contribution, we also recommend the following sections especially:

Student approach – to develop a broad academic understanding on the topics

A student or a newcomer to the field should first and foremost understand the research that has already been conducted, in addition to how our case studies further illuminated business model innovation. We also recommend reading our discussion to get a nuanced understanding of the status quo of the research. Thus we recommend parts:

1. Introduction
2. Literature review in its entirety
3. Case findings of the case studies
4. The discussion in its entirety
5. Concluding remarks

Academic approach – to obtain knowledge with academic relevance

Some readers might be familiar with the topic, and are interested in our contribution to the field. In this case, we recommend starting by reading the literature

summary. If any aspects here seem new or unfamiliar, we advise reading up on those topics before reviewing our literature findings and critique. Further, investigating our case findings and any cases of special interest is recommended, before reading our discussion and concluding remarks. Thus we recommend parts:

1. Introduction
2. Literature summary and unfamiliar topics in the literature review
3. Literature findings and critique
4. Case findings and cases of interest from the case studies
5. The discussion in its entirety
6. Concluding remarks

Practitioner approach – to extract the most relevant knowledge for practical use

A practitioner is more interested in the applicable parts of the thesis, and in these cases we recommend reading the literature summary and topics of interest, before reviewing our case findings, proposed framework for business model innovation and finally our concluding remarks.

1. Literature review summary and topics of interest
2. Case findings and cases of interest from the case studies
3. Proposed definitions and framework
4. Concluding remarks

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Introduction

In this introduction we will present the problem statement of the thesis, how this problem statement translates into research goals, and how we configure the thesis in order to reach those goals. We also outline some limitations of the thesis, as it relates to how we answer the problem statement, and the scope and shortcomings of inquiry.

1.1. Problem statement

The terms «business model» and «business model innovation» have in the last years seen a surge in academic research and business management attention, and a plethora of theory has been generated in the field that suggests how to be successful in applying these concepts to increase enterprise performance.

However, researches and practitioners disagree on almost all accounts on what a business model is, what kinds of business models can be said to exist and what in fact is meant by the term business model innovation (Zott et al. 2010). There has not yet emerged a dominating paradigm in the research field that can be used to understand how to apply these concepts successfully.

Based on this, we decided on the following problem statement for this thesis:

- Considering the current research on business models, contrasted against the strategic challenges faced by today's companies, what theories should be selected, adapted, synthesized or merged with other theories to help accomplish successful business model innovation?

This is our main research question that we will try to answer through our thesis. In addition, we will also address the following problem statements more briefly, in order to better understand and answer our main research question:

- To what degree do managers from a sample of companies:
 - › Know the concepts of business model and business model innovation?
 - › Focus on the concepts in their strategic processes?
 - › Have a receptive approach to the merits of business model innovation?
- What are a representative description of the strategic processes from a sample of companies, and how can business model innovation theory be selected, adapted, synthesized or merged with other theories to also become applicable and valuable in these processes?

In answering our problem statement, we will conduct a thorough literature review and critique of the field of business models and business model innovation, in addition linking these topics to neighboring fields of innovation management, change management and strategic management. This will create a conceptual platform that we use as an input in our approach to the empirical case studies, which will sample two industries in addition the strategic advisory industry.

We will attempt to view the literature on business model innovation through the lens of insights gained from the case studies in order to answer the thesis problem statements in the discussion and conclusion.

1.2. Goals

The aim of this thesis can be summarized in the following way, given our problem statements and approach:

- To develop a comprehensive and exhaustive understanding of the business model and business model innovation concepts and relate them to adjacent management literature.
- To understand how managers currently view business models and business model innovation, and how their strategic processes are structured.
- To understand the current limitations and challenges of the concepts as a tool for managers in their strategic work.
- To propose adapted or derived works of theory that aims to compensate for these limitations and challenges, and that help managers accomplish successful business model innovation.

Our main interest in this topic comes from a previous work we did on business models in the media industries (Breiby, Wanberg et al. 2010), where we did initial research into the concept. We found business model innovation to be a fascinating topic with widespread and valuable application, but also uncovered its nascent nature and divergent status quo in research. It is therefore our intention through this thesis to contribute on two different arenas; to structure a presentation of the current state of research on business models and business model innovation so that it becomes more accessible and understandable for newcomers to the field, and to produce new or derived works of theory that can create applicable tools for managers to accomplish successful business model innovation.

1.3. Configuration of the thesis

This thesis can largely be divided into three main sections. In the first section we present a literature review on the topic of business models and business model innovation. We also present theory in the related topics of change, innovation and strategic management and link it to business model innovation. This section ends with a summary, literature findings and critique.

The second section is an empirical part comprising of 8 case studies based on interviews with practitioners from the Norwegian maritime, media and advisory industries. In this section, experiences and insights from practitioners is presented in order to develop an empirical foundation for our discussion and further development of theory in the field of business model innovation. The section is ended with a summary of the case findings.

In the third section we start by discussing the most salient issues we have found when it comes to empirical and theoretical findings. We do this by presenting the issue, then its complications and possible resolutions. We then present and discuss a framework for business model innovation based on our empirical and theoretical findings. This section ends with conclusions and suggestions for further research.

1.4. Limitations of the thesis

There are some limitations to the scope and configuration of the thesis that should be noted.

One of the more important aspects is that we are taking an incumbent approach to the issue of business model innovation. While there are many other perspectives we could have taken, such as that of start-ups, we focus our efforts mainly on incumbents in the thesis. While that does not mean that start-ups and entrepreneurs cannot derive any value from our work, we feel that incumbent business model innovation is much more complex in nature and therefore poses a more valuable unit of analysis.

In our literature review, we have had a relatively comprehensive approach and tried to include the most salient works in the field so far. However, we do not

propose that our selection is completely exhaustive, especially considering that there have been books that have been published after we finished our review. In addition, we do outline some adjacent academic fields in management research like strategy, change management and innovation management, but in a much less comprehensive way. We assume that the reader will review the relevant literature from these fields in order to grasp the nuances needed for understanding and applying our framework.

In our case studies, we have selected 3 industries for interviews, in addition to completing 8 interviews in total. While this approach has illustrated and implicated a range of issues that would have been opaque without these case studies, and their value for our understanding of theory in real life have been invaluable, we do point to the limited degree of validity in such a small sample set. This relates to both the amount of industries sampled, and number of interviews from each industry. We mention these aspects further in our methodology section.

In our conclusion we outline the main issues we find through our literature review and case studies. We further discuss a sub-set of these issues in detail, leaving other issues to the section on «further research». Leaving some issues outside the scope of inquiry of our discussion might not give a complete picture to the reader, but in terms feasibility and time constraints, some priorities were made. We also propose a framework that can help businesses with business model innovation, but the framework has not been subject to empirical validation or verification. We hope that researchers in the field of business model innovation start to focus more on quantitative research strategy in the future, so that we can better understand what proposed theory works – and what does not work.

Taking these limitations into consideration, we still believe our thesis to have novel value in the field, and that our contribution might inspire both practitioner application and academic refinement of business model innovation.

Methodology

2.1. Introduction

This chapter describes the methods used for information gathering and analysis of which this thesis is based upon. The thesis is a follow up on a preliminary study in the fall of 2010 where we studied new and emerging business models in the Norwegian media industry (Breiby, Wanberg et al. 2010). The topic of business models and business model innovation was part of a broader literature review in the preliminary study, but the novelty and divergence of the topics intrigued us to study it more in-depth and make it more applicable for business practitioners. To be able to do this we sought to get a broad understanding of literature available on the subject and combine this with insights from practitioners, in order to propose theory and tools which are both relevant and founded in theory and practice. The field is developing fast and during the period of writing the preliminary report and the completion of this thesis, several important publications have been made in the field. This makes the topic both relevant and interesting, but at the same time practically difficult to keep up to date with.

2.2. Qualitative research strategy

Our preliminary study conducted in the fall of 2010 showed that the topic of business models in academia was quite novel and also diverging both in terms of semantics and application. According to Bryman (2008), qualitative research usually emphasizes words over quantification both in collection and analysis of data. Our intention of bridging the gap between

academia and practitioners, and inductively come up with new and relevant theory seemed best approached qualitatively and was therefore chosen as our research strategy.

In order to get a complete overview of the academic field, we wanted to conduct a thorough literature review in order to get the best possible understanding of state of the art in business model and business model innovation theory. This theoretical platform would then form the basis for further specification of research questions.

In order to meet our general research questions, we noted that a multiple case study approach would be most suitable in order get a broader understanding of how firms view business models and how they approach the topic.

On the basis of information gathered from practitioners and research found in academia, we wanted to inductively come up with both adapted and new theory relevant to practitioners. The research process is depicted in Figure 1 and closely resembles that of a classical qualitative research process presented by Bryman (2008).

2.3. Literature review

Our literature review can be seen to have a narrative approach. This is more wide-ranging and less focused than what can be seen in systematic reviews (Bryman 2008). The reason for choosing a narrative approach was largely due to our goal of developing a deeper understanding of the topic through a linking with

academic fields that seemed adjacent. More specifically the research topics that connects to how academia understands business models, business model innovation, and how these areas connect to adjacent fields like change management, innovation and strategy. The goal of the literature review was to connect these fields together so the literature could be used as platform for the empirical case studies, and further in the discussion. As the current research field on business models has not yet converged on a dominant paradigm, it has been important to evaluate the research critically as researchers draw the field in many different directions. On the other hand it also becomes difficult to uncover which researchers and theories that are more relevant than others.

One method we have applied is looking at how often different works has been cited by other researchers. As research builds on the previous insights uncovered in the field, thus citations could be used to reflect the relative importance of different papers and researches. This method immediately reveals a range of issues that can skew the results. First of all, as major works of theory come and go, and schools of thought emerge and decline, the number of citations remains as an aggregate number no matter its relevance in the field. Thus we cannot easily and directly infer the current relevance of a highly cited theory based on citation count alone. Due to a sharp rise in business model related literature in the recent years, numerous publications have come in the last few years. This has made it more difficult to use citations as an indicator as articles and other important works on the topic have been published in the last 12-18 months.

We have therefore relied on some seminal research papers in the academic arena of business models to guide our literature selection. The fact that the business model concept still has not yet converged into a structured field of knowledge is not lost on researches in the field, and therefore a few selected papers have been published that aim to synthesize current state of affairs on business models and business model innovation.

We have used several of these survey papers as a base for our literature review, most notably Zott et al. (2010) and Long Range Planning edition on business models (Long Range Planning volume 43) which have a thorough and exhaustive approach. While Zott, Amitt et al. (2010) has researched the field in the widest of the sense, screening all papers from a range of research databases with «business model» or similar terms in it. The Long Range Planning edition has used a more editorial approach and chosen seminal papers, putting together special edition with a clear editorial agenda to discuss the business model construct. Using these papers as a base, we have branched out through their references to read the most relevant research on business models. We have also used some parts of our previous work on business models by including sections from Breiby, Wanberg et al. (2010). We argue that this approach has given us a sample of the research domain

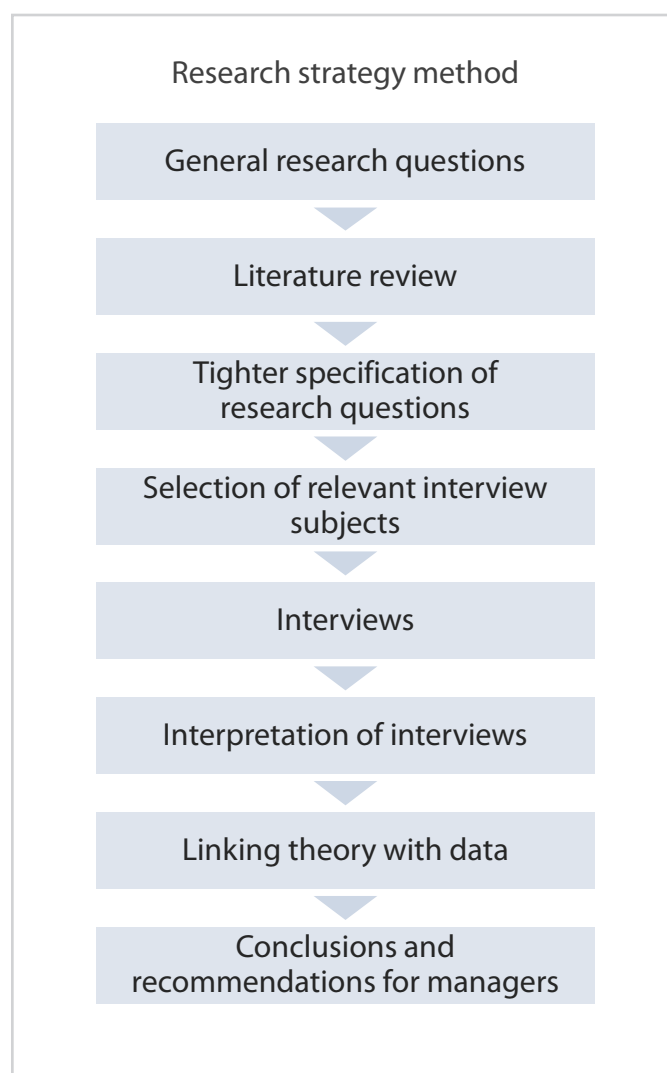


Figure 1: Research strategy method

that sufficiently covers the most important and applicable works, and we present what we consider the most salient work in the field in this literature review. We do not separate between academic papers and research done by practitioners, but we do of course note that there might be differences in approach and methodology. We have not made this a point of discussion in our literature review.

2.4. Empirical data

In order to develop an understanding of status quo among practitioners regarding business models and business model innovation, we decided to go for a multiple case study approach. In total 9 companies were studied to develop an understanding of their approach to the research topic. Data on each case was gathered by interviews with one representative from each company. The cases were selected by different types of non-probability sampling.

The first interview was set up due to Tore Ulstein's attendance at a conference in Trondheim and can thus be described as convenience sampling. The rest of our interviews were selected by an approach best described as purposive sampling. According to Bryman (2008), the aim of purposive sampling is to strategically select interviewees that are relevant to the research topics. We did this by choosing three industries, media, maritime and advisory firms and then selecting interviewees within these categories. This was done in order to get understanding within an industry, but also to be able to see across industries which are very different. The rationale for choosing the industries was also due to sampling convenience, as the authors have a contact network we could draw upon in order to solicit information from top management in a range of firms in these industries. Out of 11 contacted companies we achieved to set up interviews with 9 of them.

2.5. Interviews

The interviews were conducted in a semi-structured fashion. All interviewees, except Tore Ulstein, were sent an interview guide before the interview took

place. One interview guide was distributed to media and maritime interviewees, and another for advisory firm representatives. All interviews (except for the one with Tore Ulstein) were conducted over telephone with speaker function and were recorded using a computer. The choice of using telephone instead of in-person interviews was done based on time and resource constraints. According to Bryman (2008), telephone interviews differ little from face-to-face interviews when it comes to responses, but might be cut short since it is easier to break up a telephone call than a personal meeting. This problem was not experienced in our interviews and our interviews often lasted longer than the allocated time frame set in advance.

The approach of recording the interviews allowed us to have one person focusing on getting through the interview guide, while the other was preparing in-depth questions of interesting topics which surfaced during the interview. After the interview was conducted we discussed the interview with each other to ensure internal reliability. Each interview was then transcribed, translated, synthesized and presented in this thesis with a clear distinction between the interviewees' statements and our interpretations. All synthesizes, without our comments and interpretations were then sent to the interviewees for respondent validation. We received some corrections, deletions and additions from the interviewees, all of which were included in full in our thesis.

Unfortunately one of our interview recordings was lost due to technical error on two separate recording programs. The interview with Anette Mellbye from Aftenposten is not presented in this thesis because a new interview was not possible to arrange.

2.6. Evaluation of research methods

In order to evaluate our research we discuss research methods in light of Guba and Lincoln's (1994, as cited in Bryman, 2008) four criteria of trustworthiness:

Credibility

By recording the interviews, discussing the interviews internally afterwards and gathering respondent validation on the translated synthesis we believe that a degree of credibility has been ensured.

Transferability

Six interviews across the Norwegian maritime and media industry is somewhat limited in order to transfer our findings all Norwegian sectors. In order to increase the transferability we purposely asked the two advisory firms, which have worked with multiple clients on the topic, about their impressions regarding status quo among practitioners. This approach of using multiple observers can be seen as a triangulation and thus increase the transferability of our study regarding the topics where this triangulation was used. However, we do note that there are limits to what can be said to be true from this relatively small sample space.

Dependability

Recordings and transcripts from the interviews are not attached to this document for several reasons, including sensitive strategic information, different source language (Norwegian) and in one case the need for anonymity. In order to increase the dependability we have to a degree used our supervisor as an auditor by reporting on progress and discussing findings related to the interviews.

Confirmability

In order to increase the confirmability of our study we have structured and presented the interview synthesis in a way that clearly separates the interviewees' statements and our interpretations. Still, complete objectivity is difficult to maintain, but confirmability has been pursued by i.e. choosing our language carefully when discussing semantically difficult topics with practitioners.

Summary of method and evaluation

Our approach made us understand how practitioners in the maritime and the media industry approach the business model construct and have thus provided a solid foundation. More interviews could have been conducted with people from other industries, or more from the same industry in order to gain more transferability. The purposive approach of sampling made us able to follow up leads on interesting persons and cases, but also allowed us to stop the sampling in an industry when we felt that the marginal use of one more interview had declined sufficiently.

In hindsight we feel that the interviews with advisory firms were especially useful when it comes to supplementing academic theory, and gathering empirical data on the practical use of business model theory and frameworks. Due to the relatively low diffusion of business model theory among practitioners outside the advisory industry, we would have focused more on advisory firms. Unfortunately it was more difficult to obtain interviews with the advisory firms than other companies, and the fact that one of them chose to be anonymous may indicate that they view the discussion of their tools and practice a threat to their competitive position.

It is also important to mention that interviews have limitations as a data source. Situations and processes described are personal experiences. Dealing with persons' memories, retrospective rationalizations and collective reconstruction of the past can be at work. There is also a possibility of those interviewed presenting biased and/or incomplete representations of other members of the organization.



Literature review

Literature Review

3.1. Introduction and supporting literature

Structure and rationale for structure

We have structured our literature review in a manner that enables a sequential reading experience, such that definitions are reviewed before the literature descriptions apply them. By using each literature section as a building block for the following section, we aim to thoroughly build up an understanding of the business model construct.

The structure of the literature review can be described as follows:

1. Introduction and supporting literature
 - I. Introduction to the literature review: Short descriptions of systems theory, models, ontology and taxonomy/typology. These areas will be utilized in describing and classifying business models.
2. Business model literature
 - I. Business model approaches: We review the current state of business model research, and describe its diverging nature in the current academic discourse. We will use theory from systems to understand some business model approaches as perspectives on the business through the lens of value creation, delivery and capture.
 - II. Business model innovation: Being the main focus area of the literature review, we survey the seminal papers on business model innovation through several topics; definitions, classifications, processes and implementation.
3. Links to other academic fields
 - I. Innovation and innovation management: We briefly describe innovation and innovation management to be able to understand the innovation process in businesses.
 - II. Change management: We briefly review the most important dimensions of change management as it may relate to implementing business model innovation.
 - III. Strategy: We review the most important dimensions of strategy, and how these areas connect to business model innovation.
4. Literature findings, critique and research questions

In this section we outline some findings we have made when reviewing the different research, taking a cross-sectional perspective. We then briefly discuss and critique the research we have reviewed, finding issues we wish to uncover further insight on through our case studies.

Together, these steps aim to build up the necessary

understanding of business model innovation and build the research questions we need to further this understanding. In addition to enabling us to have a structured discourse on business models, this literature review approach is novel in the field in its structure, and hopefully can help more people understand the nascent field of business model innovation.

Supporting literature

Systems and models

In this part of the literature review we describe systems theory in order to better understand the structure and behavior of systems. This will be valuable in describing and understanding some of the business models we review later, as some of them rely on a systems approach to understanding businesses. We also review the concept of models as a tool in science, and how models can be used as system representations.

Systems

Skyttner (2005) claims that the more science becomes fragmented into disciplines and specializations, the more the need for a scientific approach that uses unifying principles. He claims system theories promote an understanding of the orchestration of individual parts, instead of the understanding parts in isolation, which gives a richer and more holistic understanding. In the most generic sense, a system can be described as

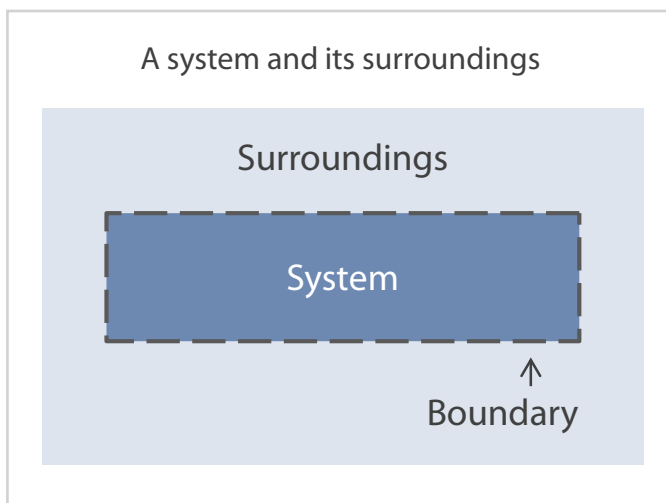


Figure 2: A system and its surroundings
Source: Thesis authors' illustration

integrated whole of different sub-parts that together forms an entity that has structure, behavior and interconnectivity. A system may have an arbitrary or specific boundary to its surroundings, and within the boundaries lays the internal domain of the system.

A generalized approach to systems (so called «general systems theory», GST) was pioneered in the 20th century where L. von Bertalanffy (1950) was a key contribution in defining the field. Using general systems theory to understand and solve problems is an approach based on a range of ideas, among others that phenomena can and should be viewed as a network of entities and their relationships. Thus, a system is distinguished from its parts through its organization (Skyttner 2005).

System concepts

Process

As systems perform some function (by definition), we can observe inputs, transformation processes, and outputs from the system that together form the throughput (Skyttner 2005). Both the inputs and the outputs cross the boundary of the system through interfaces, while the transformation process can often show both complex and non-linear behavior. Observing the processes over time can show the *dynamics* of the system.

System dynamics

System dynamics furthered system theory by focusing on the dynamic behavior of systems. Leaving the static representations of systems behind, system dynamics deals with the added dimensions that must be considered when input and system states change over time. Pioneered by Jay Forrester at MIT in the 1960s, system dynamics has found a wide audience around the world, in themes as diverse as political policy studies, operational research, and weather modeling tools (Forrester 1995).

System dynamics has a wide range of applications, focusing on a holistic and non-static view of cause and effect in systems. A key insight that has been

discovered when using system dynamics to model real world systems is that even very simple models can show baffling non-linearity, feedback loops and unexpected behavior. We will see these behaviors and loops described in some business models that focus on dynamic behavior.

When coupled with different kinds of models, system dynamics can be used as a tool for understanding how different parts of the system affect each other and the total state and throughput. An example from the business domain can be seen in Figure 3.

This model, which by some researchers would be described as a business model, tries to capture the main drivers and behaviors of an airline company viewed as a system. Using arrows to describe interconnectedness, the model focuses on behavior and less on the structure of the system. Feedback loops are denoted as minor arrow loops that drives larger behavioral patterns. The throughput and interfaces of the system is not visualized but lies implicit in terms like «profit» (net flow of cash out of the system). The model is an example of system theory and system dynamics applied to better understand a business problem or situation.

Systems and organizations

General systems theory assumes that all systems are purposeful and goal-oriented. Following this, organizations can thus be viewed as systems that achieve objectives through the joint efforts of individuals and groups in the system (Bowen and Allen-Mears 2004). Senge (2000) describes systems extensively in their work on the «learning organization», where managerial system thinking is seen as the organizational discipline that unifies all other learning disciplines into an organized structure. The understanding that businesses and humans are systems is promoted as paramount in understanding the whole of the organization in terms of capabilities and learning. Porter (1985) seminal piece on strategy furthers the idea of organizational value creation activities as an interconnected system. Different value chains exist together in what is described as value systems. Porter claims that the competitive activities cannot be decoupled from this system or the overall strategy.

This link between systems and organizations can be seen in a wide range of business research and literature, and it is especially apparent in the academic

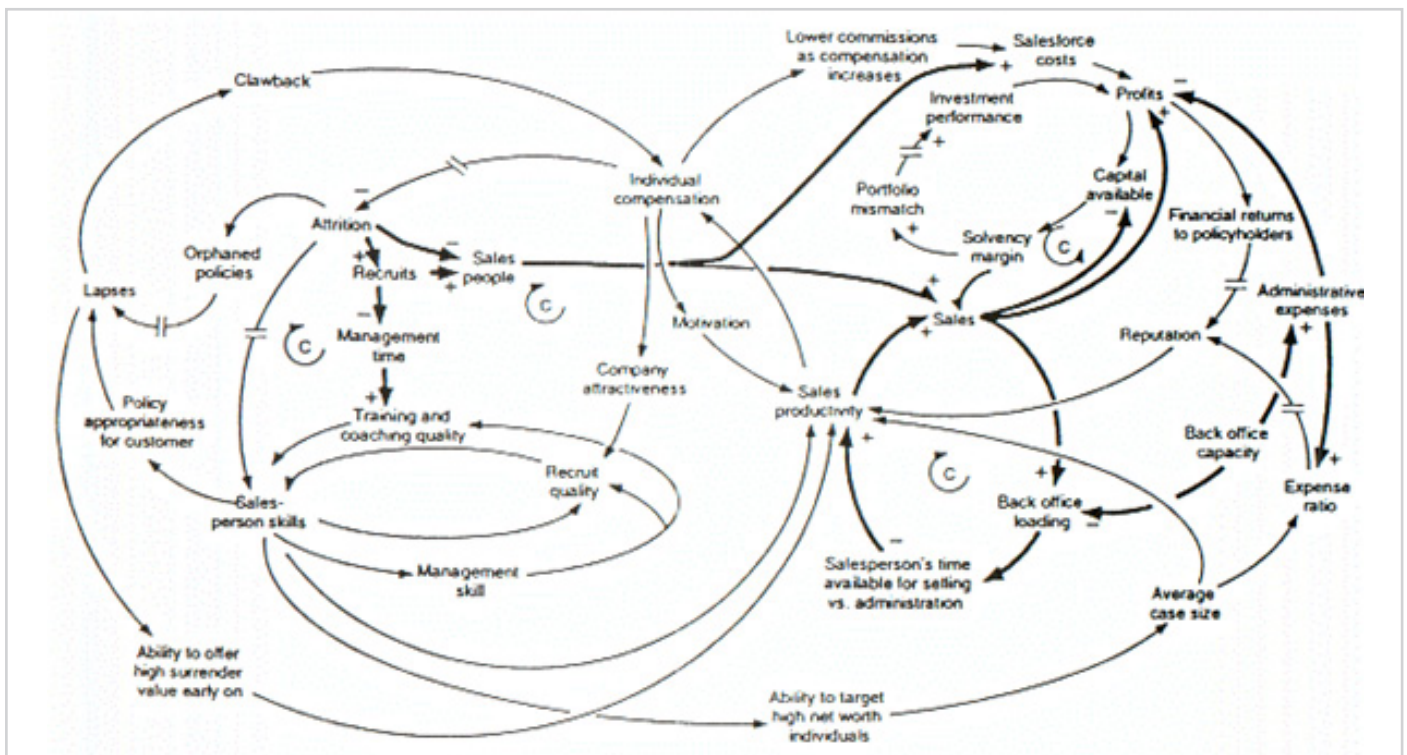


Figure 3: A model showing the system dynamics of an airline company
Source: Wikipedia article illustration

domain of business models (Zott et al. 2010). We will in the coming sections on business models refer to systems theory terminology where we find it applicable, in order to better understand some of the proposed theories.

Models

It is generally accepted that no part of the known world is so simple that it can be completely grasped and understood without some level of abstraction. In abstraction, the concept of models and modeling becomes important, in which only the most salient parts of the entity under study is included to simplify and foster comprehension (Rusenblueth and Wiener 1945). Models are therefore important parts of the scientific procedure. Models are simplified and conceptualized representations of the entity, in which a sub-set of the attributes can be depicted in various forms. Therefore, a model does not necessarily have to include all aspects of that which it seeks to depict. A model can be constructed to fit with different requirements, such as ease of comprehension, visual acuity, or other aspects that makes the model more applicable in understanding the modeled entity better.

Models in systems

A system model is a model that describes and represents the structure, behavior, or other views of a system. A view is defined as a representation of a particular aspect of the system, and a model can thus represent a sub-set of the system's aspects. In the section on business model ontologies we will see that many business models use multiple views simultaneously in their depictions of the business system, prevalently structure, activity and value views combined. In other words, business models are often argued to be models that show the structure of activities that create, deliver and capture value to the business system.

Ontology, taxonomy and typology

The Merriam-Webster dictionary defines ontology as «a branch of metaphysics concerned with the nature and relations of being». In terms of conceptions like the business model, we will adapt this definition in our review of business model literature to mean the explicating definition and specification of a concept, in addition to (if applicable) its related taxonomy or typology. Our business model ontologies will answer the questions of «what is it?» and «what does it consist

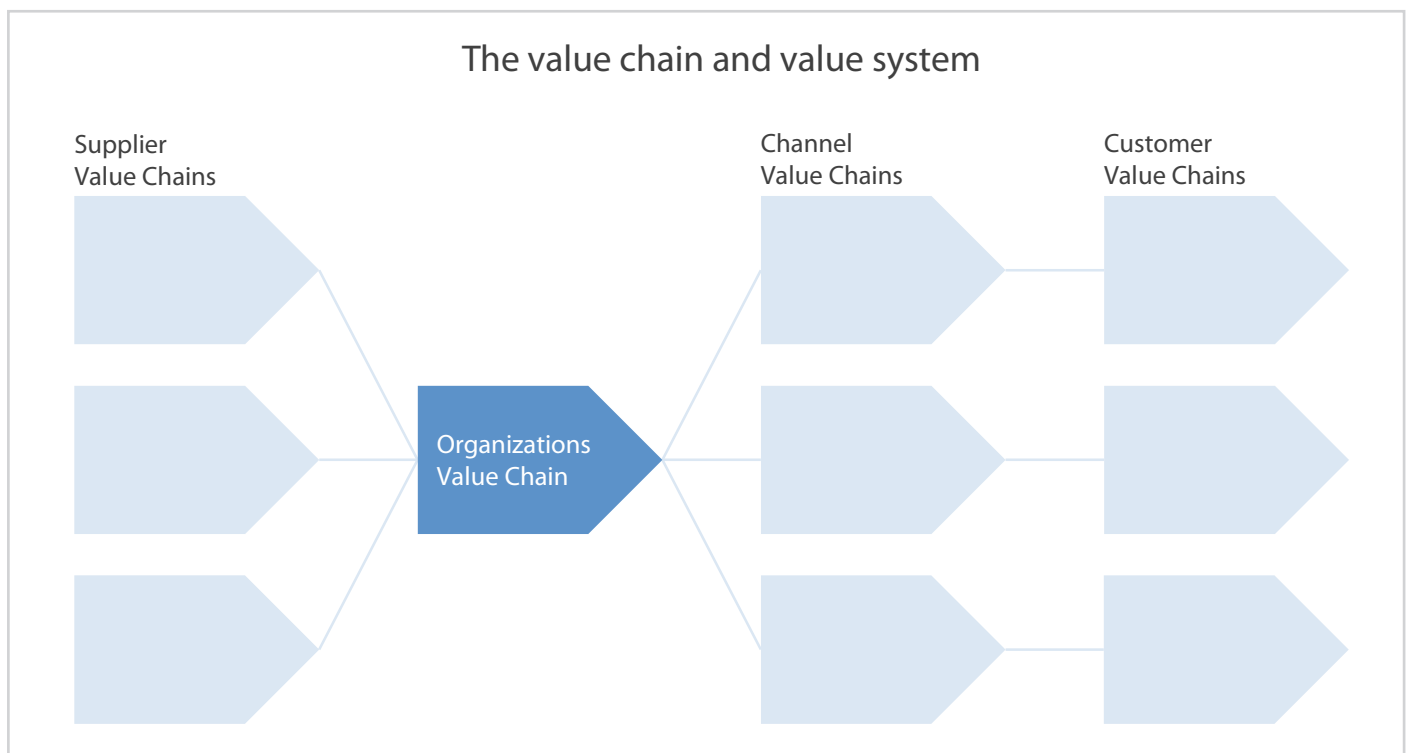


Figure 4: The value chain and value system
Source: Adapted from Porter (1985)

of?» in addition to its most important attributes and relations to the business itself.

Taxonomy, a term often used in conjunction with biologic classification of species, is defined as «the study of the general principles of scientific classification». This empirically based method is used to synthesize observations of different kinds of entities within a general class of beings, like different business models observed in the marketplace, into a hierarchy of different sub-classes that share some common traits and behaviors. This «bottom-up» approach tries to classify and systematize the various entities according to observable differences and group them together. An example from the biological world would be «lions» as an observable sub-class of «mammals». Some business model ontologies we review also feature taxonomies of business models, where the authors outline and group together the different kinds of models they have observed in industries. Examples of business model sub-classes could be «the razor-razorblade model», «the franchising model» and «the long tail model».

Another approach to classify different business models is through typologies. A typology is «a study or classification based on types or categories». This is a more abstract and theoretical approach where the class of beings that is sought to be categorized is *ex ante* split into different sub-categories and types according to some predefined criteria. This is a «top down» approach where observable sub-classes of the entity are

placed under type categories according to the schema. The hierarchy of different types of the entity is a construction that does not necessarily have anything to do with the seemingly most important attributes of the beings. An example from the biology would be a typology based on the number of limbs an animal has. While being mutually exclusive and displaying clear and concise distinction between classes, the division of the animal kingdom into a typology of «one-legged», «two-legged», «three-legged» animals may also show shortcomings in that other differences between the types are ignored.

In total, taxonomies are often applied to understand and classify what already is, while typologies tries to classify what is and could be according to some predefined attributes.

Synthesis of supporting literature

Here we briefly synthesize how the supporting literature relates to business models:

- Businesses can be viewed as systems, which enable us to use system theory and system dynamics to understand its structure and behavior better.
- System dynamics reveals that even simple systems may show surprising non-linear behavior.

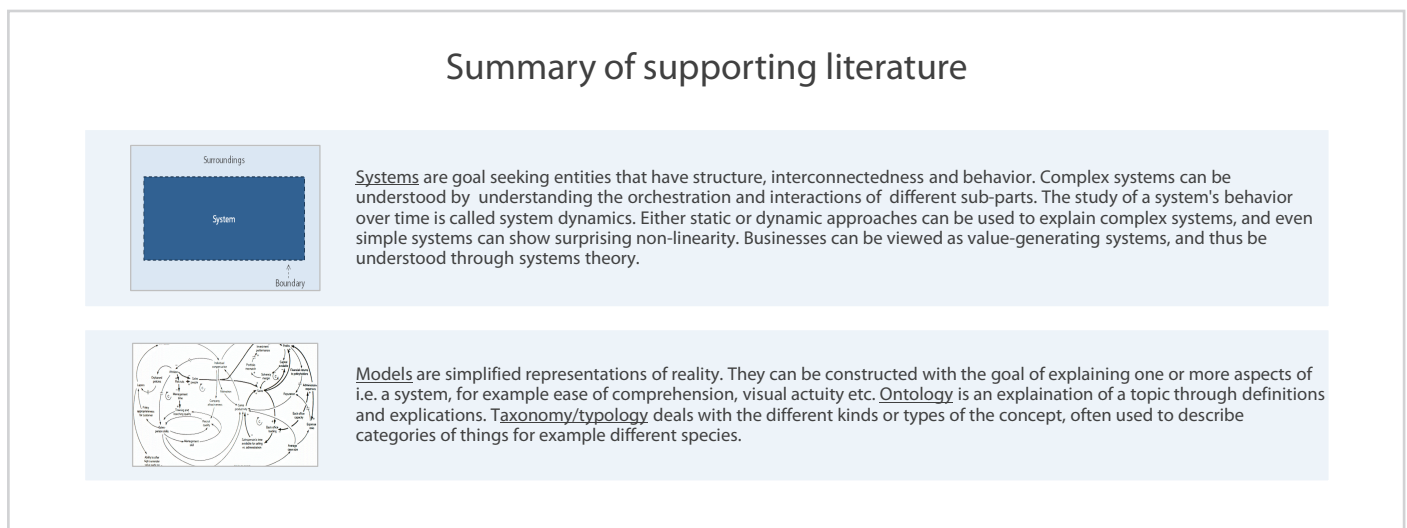


Figure 5: Summary of supporting literature

- System thinking in organizations and strategy is quite established, and is implicitly a holistic way of comprehending these complex entities.
- Models are abstractions and simplifications of more complex entities, and may be used to understand a sub-set of dimensions of a system.
- Ontologies are different explications of concepts, while taxonomies/typologies are two different strategies of classification. Both are used by researchers in order to understand business models better.

3.2. Business model literature

Introduction to the construct

History and concept development

Parts of this section are taken from Breiby, Wanberg et al. (2010).

In the paper «The power of business models» from 2005, Shafer et al. noted «no generally accepted definition of a business model has emerged to date». Five years later, Zott et al. (2010) released a working paper with the goal «to provide the most comprehensive and up-to-date literature review on business models», and searched through 1253 articles on the subject from a range of research databases and business publications. They state that «despite the overall surge in the literature on business models, scholars [still] do not agree on what a business model is».

Turning to the most simplistic view on the term business model – the definition of the word «business» and «model» itself – might give us some indication of the construct’s intention. Business is defined as «the activity of providing goods and services involving financial and commercial and industrial aspects» by the Princeton WordNet dictionary. Model is defined by the same source as «a hypothetical description of a complex entity or process» or «representation of something (sometimes on a smaller scale)», similar to our literature review on models. This indicates that a

business model is an attempt to break down business activities into something simpler and more tangible.

The lack of a common definition can be somewhat attributed to the fact that the term is quite novel in the academic literature. The advent of the personal computer and the Internet in the mid-1990s introduced the concept into the mainstream vocabulary (Amit and Zott 2001, Shafer et al. 2005, Magretta 2002). Zott, Amitt et al. (2010) has tried to sum up current state of research on business models, and they have found a rapid growth in the use of the term in both academic and non-academic papers since the mid-90s, as depicted in Figure 6.

Definitions

Even though no common definition of the business model construct exists, many authors have proposed definitions in their publications. Chesbrough and Rosenbloom (2002) defines the term as «the heuristic logic that connects technical potential with the realization of economic value», while Shafer et al. (2005) explains a business model as «a representation of the underlining core logic and strategic choices for creating and capturing value within a value network». Shafer et al. further looked at 12 different definitions, and identified 42 different components, or building

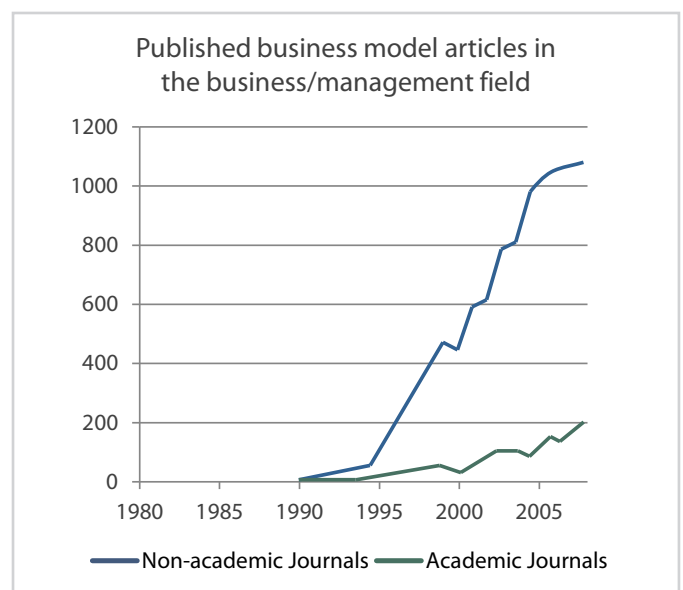


Figure 6: Published business model articles in the business/management field

Source: Zott et al. (2010)

Selected business model definitions

Author(s), Year	Definition	Papers citing the definition
Timmers, 1998	The business model is “an architecture of the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenues” (p. 2).	Hedman and Kalling, 2003
Hamel, 2000	“A Business Concept is a radical innovation that can lead to new customer value and change the rules of the industry” (p. 66). [...] The business concept is directly related to the business model since the latter is “nothing else than the business concept implemented in practice” (p. 66).	Patzelt et al., 2008
Amit and Zott, 2001	The business model depicts “the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities” (p. 511).	Morris et al., 2005; Zott and Amit, 2007, 2008, 2010; Santos et al., 2009; Bock et al., 2010; Hedman and Kalling, 2003
Weill and Vitale, 2001	A business model is “a description of the roles and relationships among a firm’s consumers, customers, allies, and suppliers that identifies the major flows of product, information, and money, and the major benefits for participants” (p. 34).	Seddon et al., 2004
Chesbrough and Rosenbloom, 2002	The business model is “the heuristic logic that connects technical potential with the realization of economic value” (p. 529).	Chesbrough et al., 2006, 2007a, 2007b
Dubosson-Torbay et al., 2002	“A business model is nothing else than the architecture of a firm and its network of partners for creating, marketing and delivering value and relationship capital to one or several segments of customers in order to generate profitable and sustainable revenue streams” (p. 7).	Osterwalder, 2004; Osterwalder et al., 2005
Magretta, 2002	Business models are “stories that explain how enterprises work. A good business model answers Peter Drucker’s age old questions: Who is the customer? And what does the customer value? It also answers the fundamental questions every manager must ask: How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?” (p. 4).	Seddon et al., 2004; Ojala and Tyrväinene, 2006
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).[...] It has six fundamental components: Value proposition, Customer, Internal processes/competencies, External positioning, Economic model, Personal/investor factors.	Calia et al., 2007
Shafer et al., 2005	A business model is “a representation of the underlining core logic and strategic choices for creating and capturing value within a value network” (p. 202).	
Johnson et al., 2008	Business models “consist of four interlocking elements that, taken together, create and deliver value” (p. 52). These are: Customer value proposition, Profit formula, Key resources, and Key processes.	Johnson and Suskevics, 2009

Table 1: Selected business model definitions

Source: Zott et al. (2010)

blocks, of a business model. Several other authors have tried to create typologies of business models (Timmers 1998, Mahadevan 2000, Dubosson-Torbay et al. 2002)

Some researchers claim that the business model is directly tied to the business since the business model is the business concept implemented in practice (Hamel 2000, paraphrased in Zott et al. 2010), and Johnson (2010) defines that business models «consist of four interlocking elements that, taken together, create and deliver value.» The four elements referred to are customer value proposition, profit formula, key resources and key processes.

Zott et al. (2010) found through their survey paper that the business model is defined and referred to in a diverse set of ways in current literature on the construct. It is claimed to be a:

- Statement
- Description
- Representation
- Architecture
- Conceptual tool
- Conceptual model
- Structural template
- Method
- Framework
- Pattern

In addition to these divergent references, the formal definitions themselves also outline many different directions that the authors wish to cover with the term «business model». Table 1 shows a sample of definitions uncovered by Zott et al. (2010).

Zott et al. (2010) concluded in their paper that «a common conceptual base is still lacking». Even though the definitions are diverse, they have suggested some important common ground between them. Taking a

cross-sectional approach and trying to find a common denominator, they propose the business model as «a new unit of analysis, a system-level concept, centered on activities, and focusing on value», where the business model is:

1. A new unit of analysis nested between firm and network levels
2. A holistic perspective on how firms do business
3. Emphasized on activities
4. An acknowledgement of the importance of value creation.

This definition is claimed to be a best-effort synthesis of the current state of business model conceptualization.

Business models as models

Role models, scale models and recipes

In the paper «Business models as models» by Baden-Fuller and Morgan (2010), an analysis of the different ways of using the concept is described. Baden-Fuller and Morgan notes that business models are often used as a taxonomy or a typology for describing different types of businesses. The «McDonalds business model» or «the franchising model» is both commonly used where the former can be seen as a role model while the latter is a scale model. While scale models are short descriptions or representations of businesses in the real world, role models can be seen as ideal types which are implemented and sought to be copied by others. Business models can also be used as *recipes* for managers when innovating and experimenting with business models in their organization, and to motivate and communicate strategic and organizational change. Baden-Fuller and Morgan conclude that business models are neither recipes, scale models or role models, but very often act as all of these, often at the same time.

Business model levels

Casadesus-Mansell and Ricart (2009) notes that business models can be viewed from different aspects and different levels of detail. This topic has also been discussed by Wirtz and further elaborated by Schallmo and Brecht (2010). Wirtz (2011) defines the four business model levels as *industry level*, *corporate (company) level*, *business unit level* and *product level*. Schallmo and Brecht (2010) add a fifth level which they call the abstract level. These levels can be seen in Figure 7 and are described below:

1. The abstract level is a generic and industry independent level which describes general principles on how to operate.
2. The industry level is also generic, but is more centered on how companies are able to operate in an industry (Schallmo and Brecht 2010). This could be exemplified by the advertising-based business model compared to a subscription-based model.

3. The corporate level is specific, firm centric, less focused on the environment and describes how the company operates.
4. The business unit level describes the business model of strategic business units within larger diversified corporations, where the corporate level is too abstract to capture the different business models at work (Wirtz 2011).
5. The lowest level is the product or service business model level where all the aspects regarding a product or service are illustrated. This can be exemplified by the iPhone from Apple, where both production, software and the software store «App store» is part of a product business model.

Synthesis of business model definitions

As we can see from the previous sections, business model research is in a state of flux and has yet to converge on a paradigm.

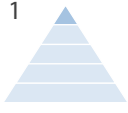
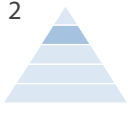
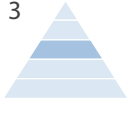
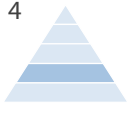
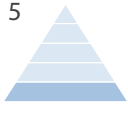
Business model levels					
Level	Name	Scheme		Characteristics	
Generic	1 	Abstract Level: Abstract Business Model Types	Abstract Business Model Types		<ul style="list-style-type: none"> • Defined independently from industries • Option space of elements • General principle how to operate
	2 	Industry Level: Industry Business Model Types	Industry Business Model Types	Industry Business Model Types	<ul style="list-style-type: none"> • Defined for an industry • Option space of elements • Principle how to operate in an industry • Examples: e-business models
Specific	3 	Corporate Level: Corporate Business Model Types	Corporate Business Model Types	Corporate Business Model Types	<ul style="list-style-type: none"> • Defined for corporate businesses • Fixed elements • Description of corporate business operation • Examples: Coca-Cola, Dell
	4 	Business Unit Level: Business Unit Model	Business Unit Model	Business Unit Model	<ul style="list-style-type: none"> • Defined for business units of a corporate business • Fixed elements • Description of business unit operating
	5 	Product and Service Level: Product and Service Business Model	Product and Service Business Model	Product and Service Business Model	<ul style="list-style-type: none"> • Defined for a specific product or service • Fixed elements • Description of product/service operating • Examples: car2go

Figure 7: Business model levels

Source: Adapted from Wirtz (2011)

- There is a general agreement on some key aspects like activities, value creation and a holistic approach to understanding the business.
- Researchers also explored dimensions like normative models (*recipes*) and levels of modeling.
- Also noteworthy is the growing interest in academia and management literature for its definition and application.

We will in the next section explore some approaches to defining business model in more detail.

Business model approaches

Introduction

In this section we will review six approaches to the business model construct from some of the most prominent researchers in the field. Simply stating that the business model is in a state of general flux in research does not really account for the significant efforts that have been made by authors to converge on a concept definition. We have therefore chosen to explicate some of these efforts to further illustrate business models as a construct, and their range of conceptualizations and intended applications.

The section is divided into two different parts: ontologies and taxonomies/typologies. The first part reviews definitions of the construct, while the second part reviews the different *kinds* or *types* of the construct is said to exist. The difference between these two parts is subtle but important, and we refer to the sections on these concepts in the supporting literature to contrast the differences.

Each ontology is outlined with the same structure, and we apply these ontologies to describe the business model itself – an attempt to describe in detail *what it actually is*. With that we mean that each approach is the authors discourse on the nature of the construct. As far as information is available, we will structure the ontologies as follows:

1. **Introduction** – a short introduction to the author(s).
2. **Definition** – if available, the author’s explicit definition of the business model.
3. **Explication** – a more detailed discourse on the concept, with figures and models where applicable.
4. **Synthesis** – a short summary of the approach.

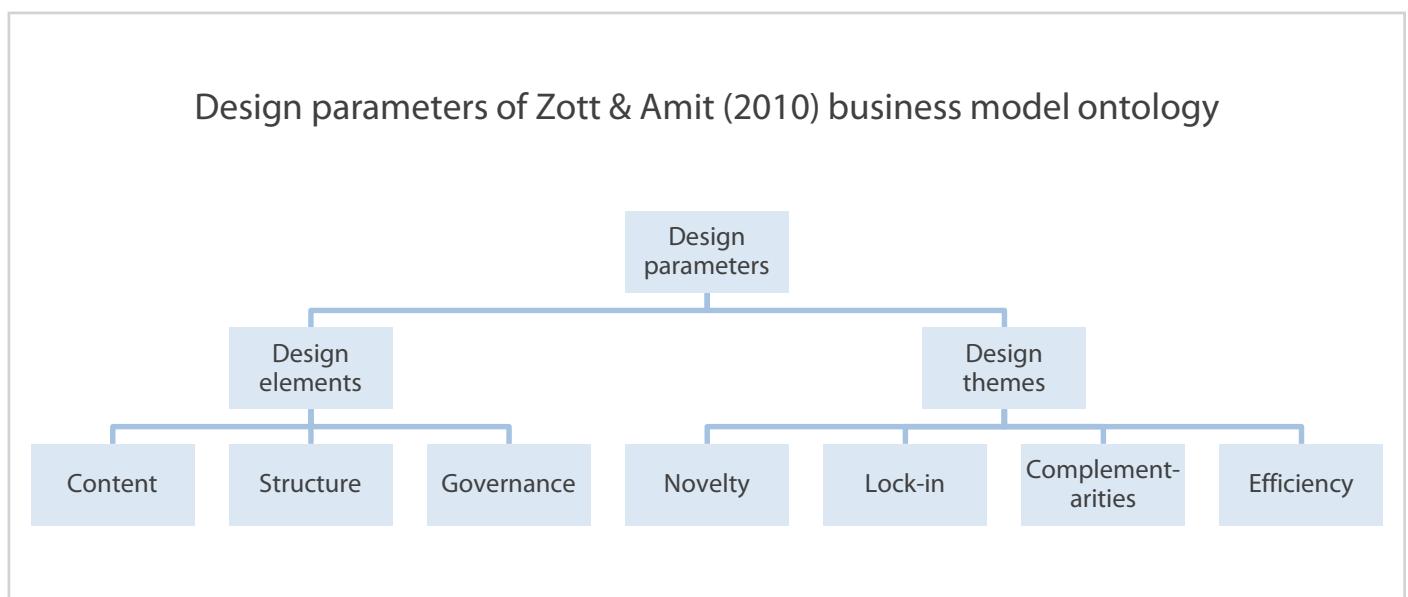


Figure 8: Design parameters of Zott and Amit (2010) business model ontology
Source: Zott and Amit (2010)

Not all of the chosen ontologies feature a related taxonomy or typology, but where they are available we will outline how the authors define and structure the different classes of business models. It might be particularly illuminating to remember the introduction to the construct where we outline business models levels, as these two topics combine to form an overview on both classes and levels of business models.

Business model ontologies

Zott and Amit (2010)

Introduction

The paper is written by Christoph Zott, a professor of entrepreneurship at the IESE Business School of the University of Navarra, together with Lorenzo Massa of the same school and Raphael Amit of the Wharton School of University of Pennsylvania.

Definition

Zott and Amitt (2010) define the business model as a depiction of «the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities».

Explication

Zott and Amit conceptualize business models as «a system of interdependent activities that transcends the focal firm and spans its boundaries». According to Zott and Amit, recent literature on business models supports an activity system perspective. When designing a new business model, Zott and Amit suggest two parameters for the activity system: *design elements* and *design themes*.

Design elements are divided into content, structure and governance. Design themes are the value creation drivers and are divided into *novelty*, *lock-in*, *complementarities* and *efficiency*.

On the left side of Figure 8 on page 21, we can see three elements in the business model activity system: content, structure and governance:

- **Content** – refers to *what* or *which* activities are to be performed. An example of a change in this element could be a traditional retail bank that is also starting to offer microcredit loans.
- **Structure** – describes *how* the activities are linked and how important they are for the business. An example of a structure element change could be the re-sequencing of activities or switching focus from products to services.
- **Governance** – describes *who* performs the activities. An example of a governance structure is the franchising model.

On the right side of Figure 8, we can see the design themes, summarized by the acronym NICE. These themes are configurations of the design elements and how they are orchestrated or connected by the themes:

- **Novelty** – an approach where the focus lies in adopting new content, changing the structure and/or the governance of activities. Zott and Amit exemplify this through Apple Inc. where they conceived the iTunes music player (content novelty) and connecting it to their iPod (structure novelty).
- **Lock-in** – a design theme where the design elements are structured in a way to enhance switching costs and/or keeping third parties as participants in the business model. The eBay online marketplace model is an example of a lock-in centered business model.
- **Complementarities** – a representation of value created by bundling activities together as opposed to doing them separately. An example is a bank which offer both loan and deposit services, thus generating liquidity from the deposits to loan activities.
- **Efficiency** – a system design aimed at greater efficiency through reduced transaction costs.

An example could be low cost airlines, where some activities are dropped, like seat assignment, while some are re-governed i.e. by having passengers print their own boarding cards.

a collaborative effort and is widely available in book-stores around the world. Osterwalder is co-founder of the Business Model Foundry, a business model innovation advisory company.

Synthesis

The Zott and Amit ontology is a relatively abstract approach to the construct, focusing on structure, content and governance of activities. By including «themes» they blend the ontology with a sort of typology in the design themes of the business model. They are in line with many other researches in that they follow the activity system perspective.

Definition

Osterwalder and Pigneur define a business model as: «the rationale of how and organization creates, delivers and captures value».

Explication

Osterwalder and Pigneur’s business model ontology is built up of nine components, which together give an approximation to a holistic view on the business model of a company. As this approach to the business model is widely applied, we will outline this model in some detail.

Osterwalder and Pigneur (2010)

Introduction

Parts of this section are taken from Breiby, Wanberg et al. (2010).

Osterwalder and Pigneur are a part of the group of practitioners behind the popular publication «Business Model Generation (2010)», which is a handbook in business models and business model innovation intended for management. The book was

Customer segment

Osterwalder and Pigneur claims that a firm’s understanding of the customer segment is instrumental for its survival and success, and has defined it as a compartmentalized part of the business model.

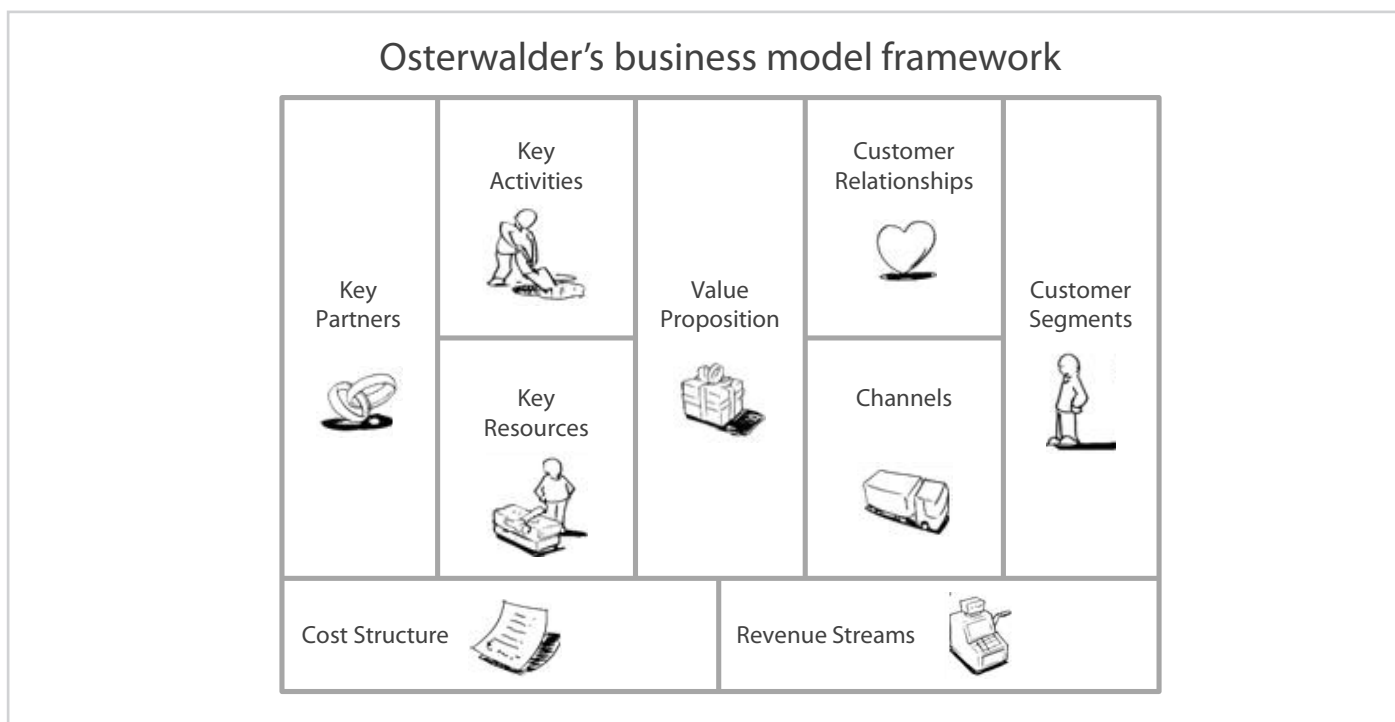


Figure 9: Osterwalder and Pigneur (2010) business model framework
Source: Osterwalder and Pigneur (2010)

Value proposition

Osterwalder and Pigneur explains this as the output from the activity system to the customer, and as «the bundle of products or services that create value for a specific customer segment.» This value can be either quantitative (e.g. price, performance, etc.) or qualitative (e.g. customer satisfaction, user friendliness, design, etc.), and the separate indicators may be weighted differently from one customer segment to another.

Channels

The channels describe the various means the company can use to reach the customer with its value proposition. This encompasses all the ways the business interacts with the customer, including distribution channels, sales channels, marketing and other forms of communication. The choice of and utilization of channels is claimed to greatly affect the way the customer values the product offering.

Customer relationship

Customer relationships are the types of relationships a company wants to build to its customers. Several different types of relationship may be present within one customer segment, ranging from personal to automated, self-service to dedicated assistance and individual to communities. Customer relationships can increase the number of customers through customer acquisition, keeping customers through customer retention or moving customers from one of the value propositions to another through customer transformation.

Key resources

The key resources are the most important assets needed in order to support the business model. This can be either human, intellectual, financial or physical assets, and they support for example the value proposition, keeping or building relationships with the selected customer segments and utilizing the channels in the best possible way. The key resources can either be owned by the company or leased or acquired through its strategic partners.

Key activities

This category describes the most important activities the company has to perform in order to fulfill the business model. These activities vary based on the kind of business model, but they should all support the other critical building blocks of the framework. Examples of such activities may be supply chain management, problem solving, or management of a business platform. Osterwalder and Pigneur categorize key activities into production related, problem solving related or platform/network related.

Strategic partners

The strategic partners are the key partners in your value network. Partnerships are founded in order to create alliances, optimize the business model or to reduce risks, and several methods exists to subdivide strategic partners further in granularity.

Revenue streams

For a for-profit organization to survive and prosper, it must find a way to monetize on its product offering, generating revenue streams to the business and paying its costs. For business models, this implicates that value capture is a required part of the model. Osterwalder and Pigneur claims that good business models have a novel way to capture value from the system.

Cost structure

This category includes all the costs incurred by the complete business model. Osterwalder and Pigneur introduces two broad classes of cost approaches, which is either the cost-driven business model – where all costs are minimized – or the value-driven business model – where costs are less important than increasing the value delivered to the customer.

Synthesis

Osterwalder and Pigneur (2010) have a focus of the structure of the business model and business system, and less on the behavior or dynamics of the system, leaving this to the business model generation process

itself. Osterwalder and Pigneur also produced very practitioner-oriented books on this model's approach, though it is complemented by extensive research and academic publications.

Casadesus-Masanell and Ricart (2009)

Introduction

Casadesus-Masanell of the Harvard Business School teaches business model innovation classes and has authored several papers and case notes on the subject of business models and strategy. Joan Enric Ricart is a professor of strategic management and economics and the IESE Business School.

Definition

The authors define business models distinctly from strategy and tactics: «Business model refers to the logic of the firm, the way it operates and how it creates value for its stakeholders. Strategy refers to the choice of business model through which the firm will compete. Tactics refers to the residual choices open to a firm by virtue of the business model it chooses to employ».

Explication

Casadesus-Masanell and Ricart have presented a business model ontology where they model the business system through a causal loop diagram, as seen in Figure 10. This representation seeks to explain how choices made by management are interacting, and how they affect each other in causal relationships.

These business model representations are made up of three main entities:

- **Choices** – strategic choices made by the top management of the firm
- **Consequences** – the causal result of the choices made
- **Theories** – the suppositions on how choices and consequences are linked together.

Since describing all choices and all consequences would only would be possible for the simplest of organizations and an analysis of a business model where every choice and consequence is depicted would be impractical, Casadesus-Mansell and Ricart suggest

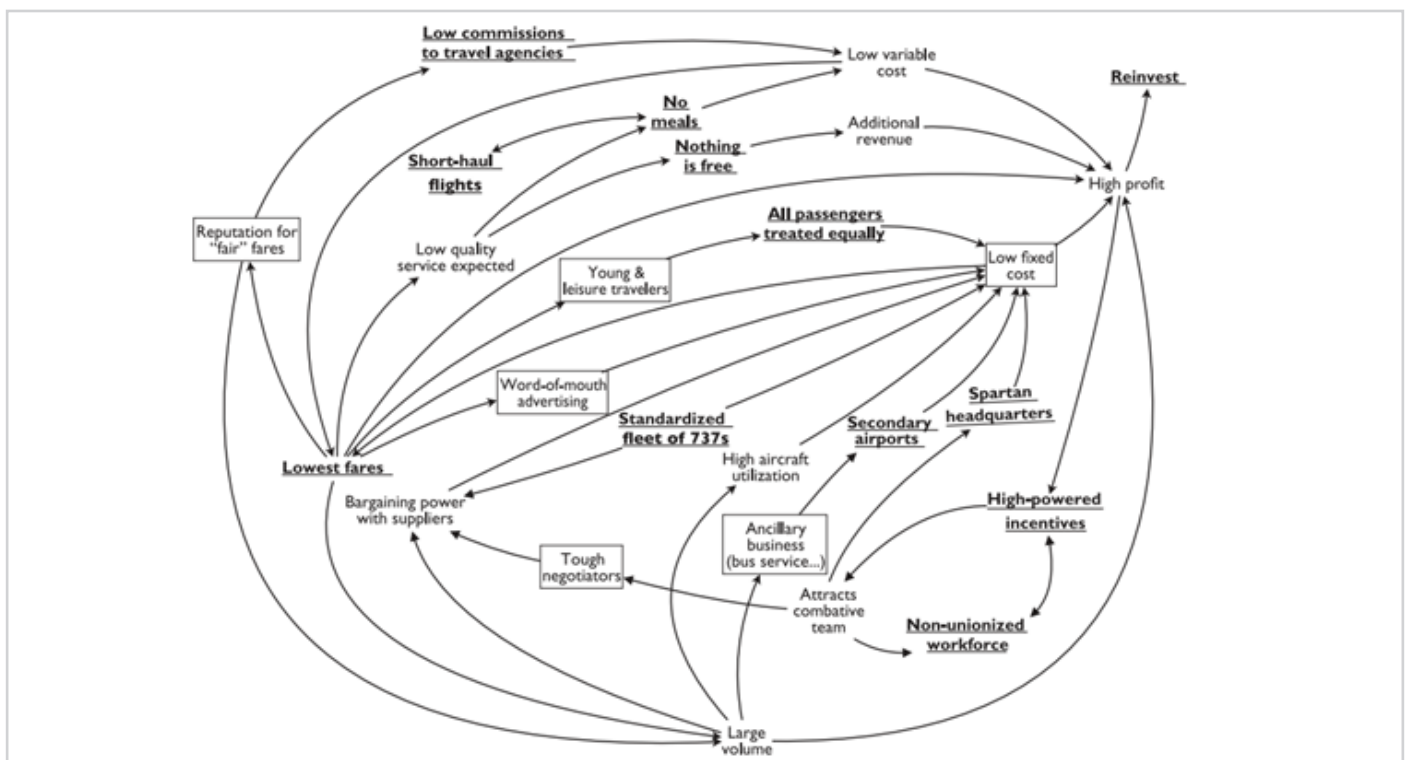


Figure 10: Example of a business model from Casadesus-Masanell and Ricart (2009)
 Source: Casadesus-Masanell and Ricart (2009)

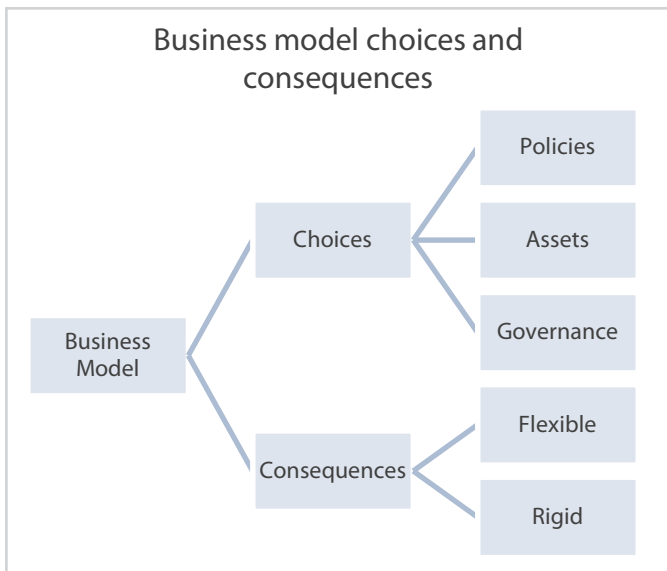


Figure 11: Business model choices and consequences
 Source: Casadesus-Mansell and Ricart (2009)

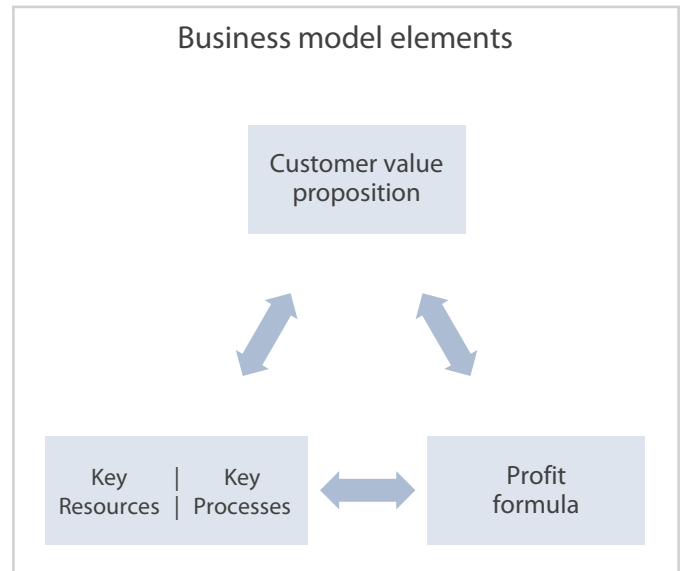


Figure 12: Business model elements from the Johnson (2010) ontology

two ways of reaching a tractable business model representation, either by *aggregation* or *decomposability*, but sometimes both.

Aggregation is achieved by grouping together consequences and choices into a larger construct. This action can be seen as «zooming out» to get a picture of the business model from a distance. The big picture can be revealed in this way, but zooming «too much» can result in missing the most important details.

Decomposability is another way of avoiding information overload when making business model representations. Since there often are groups of choices and consequences that do not interact with each other, these can be depicted separately. This can be used for example when explaining how airliner Ryanair’s car rental business works, but also explaining how different units of a multi-business organizations like General Electric works.

Synthesis

Casadesus-Masanell and Ricart (2010) represents a distinct approach to the business model with a focus on behavior, interconnectedness and causal loops, and less on structure of activities and organizational functions. Their approach is closely connected to systems theory in terms of system dynamics and explains why a business model works in more detail than the structural approach itself.

Johnson (2010)

Introduction

Mark Johnson and Clayton M. Christensen are both co-founders of innovation consulting firm Innosight, which regularly advise on business model innovation. Johnson is the chairman of Innosight, while Christensen is perhaps better known for his work on disruptive innovation as a professor at the Harvard Business School.

Definition

In the article «Reinventing Your Business Model» from 2008, Mark W. Johnson, Clayton M. Christensen and Henning Kagermann presented a business model definition: «Business models consist of four interlocking elements that, taken together, create and deliver value».

Explication

The four elements of the business models are the customer value proposition (CVP), the profit formula, the key resources and the key processes. This model has later been adapted with minor changes by Moingeon and Lehmann-Ortega in 2010 and further elaborated by Johnson in his book «Seizing the white space» from 2010.

Figure 12 features the four elements of the business model in further detail.

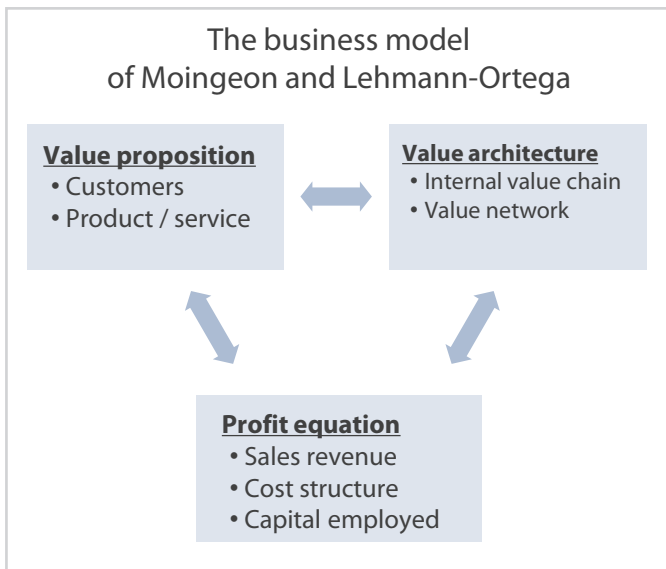


Figure 13: Business model elements from the Moingeon and Lehmann-Ortega (2010) ontology

The four elements can be described in further detail:

- **Customer Value Proposition (CVP)** – This element describes how the firm helps the customer to get an important job done. The more important the job is to the customer, the more attractive the CVP becomes.
- **Profit formula** – The profit formula describes how the firm creates value for itself. The profit formula consist of the following elements:
 - › Revenue model – Price times volume
 - › Cost structure – direct and indirect costs, primarily given by key resources
 - › Margin model – the contribution needed from each transaction to achieve desired profits
 - › Resource velocity – the necessary turnover rate of inventory and assets to achieve expected volumes and profits
- **Key resources** – Elements that are necessary to deliver the CVP to targeted segments; human resources, technology, products, services, channels and brand. The focus is on «key» elements and how these interact.

- **Key processes** – Companies that are successful have operational and managerial elements that allow them to repeat and increase their sales. This may also include training, recruitment, performance metrics, norms etc.

The authors argue that the power of this «framework» lies in the complex interdependencies of the different elements. The claim that successful firms devise stable systems of these elements, where there are consistent and complementary interactions. A change in one of the elements can affect the system as a whole, and conflicting aspects between elements can significantly impair total performance.

Synthesis

This ontology is also structurally oriented, and is quite similar to that of Osterwalder and Pigneur (2010) in defining their main elements. The authors also hint at a causal logic in their model through mentioning that changing one of the elements has effect on the system as a whole. In line with many other approaches to the business model, both system-orientation and value creation are pivotal design themes in this ontology.

Moingeon and Lehmann-Ortega (2010)

Introduction

Bertrand Moingeon is the Deputy Dean of HEC Paris and a professor in strategic management, while Laurence Lehman-Ortega is an affiliate professor at the same school. Their 2010 paper is named «Creation and Implementation of a New Business Model: a Disarming Case Study».

Definition

The authors define the business model as «the description of the mechanisms enabling it to create value through:

- The value proposition made to the clients
- Its value architecture

and to harness this value in order to transform it into profits (profit equation)».

Explication

Moingeon and Lehmann-Ortega's concept is basically similar to Johnson (2010), but consists of only three elements:

- **Value proposition** – Includes the customer segments and the product or service offered to the customer. Customer is in this sense the widest possible definition where everyone who derives value from the firm is included. The value proposition refers to «what» the firm offers their clients.
- **Value architecture** – Describes «how» the value proposition is delivered to the client and which activities and resources that are used in order to fulfill it. This element is a combination of the value chain presented by Michael Porter (1985) and the value network presented by Brandenburger and Nalebuff (1996), effectively explaining the way the firm «produces» the value proposition together with its partners and suppliers.
- **Profit equation** – The combined result of the two above. The success of the value proposition will affect customers' willingness to pay and what market share the firm can gain, while the value architecture dictates the cost structure and capital employed. The profit equation is clearly distinguished from revenue model, where the latter solely focuses on the revenues captured; the former is primarily aimed at return on capital employed.

The authors claim that the business model is a unifying construct in that it is a unit of analysis which combines many different paradigms: Porterian analysis, the resource based view of strategy (RBV), the theory of transaction costs and entrepreneurship.

Synthesis

This structural approach to the business model falls in line with Johnson (2010) in many ways. They have some novelty in their approach in that they quantify their business model innovation analysis with profitability and cost-structure aspects through a real-life case study. This, in addition to coupling business models to a number of other related strategic analyses, enables the authors to place the business model into the strategy process in an illuminating way.

Boston Consulting Group (2009)

Introduction

The Boston Consulting Group (BCG) is a management consulting firm focused on strategy and serving some of the largest corporations in the world. They have around 5000 consultants employed and advise on all major industries. They have set up a dedicated «Strategy Institute» in their organization where they pursue research into strategic management and related fields.

Definition

In the BCG paper, a business model is defined as the two elements «value proposition» and «operating model» joined together to form a firm's business model.

Explication

BCG has developed their business model ontology at the Strategy Institute and explicated it through the white paper «Business Model Innovation» from 2009. Lindgardt et al. there presents a business model representation consisting of two elements, *value proposition* and *operating model*.

The value proposition is divided into three dimensions, *target segment(s)*, *product or service offering*, and *revenue model*, aimed at answering the question «What are we offering to whom?» (Lindgardt et al. 2009). The operating model is divided into *value chain*, *cost model* and *organization*, which aims to answer «How do we profitably deliver the offering?».

The BCG Business Model Representation

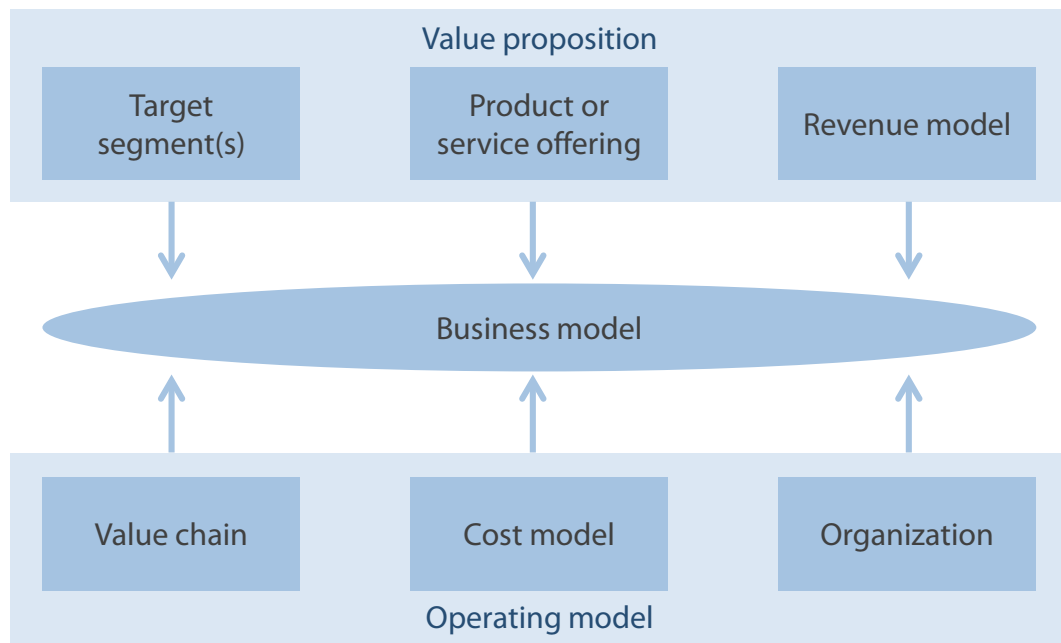


Figure 14: The Boston Consulting Group business model
 Source: Lindgardt et al. (2009)

These six elements in total describe which customers and needs are to be served (target segment), what is offered to satisfy this need (product or service offering), how are you compensated (revenue model), how is the offering delivered and how is activities sourced (value chain), how is assets and costs configured to deliver the value proposition profitably, and how are people deployed, organized and developed (organization).

The BCG business model representation can be seen in Figure 14.

Synthesis

This business model also follows in the structural school of thought, outlining the different elements of the business model as aspects to be reviewed and changed. The target of this ontology is assumed to be managers and other practitioners of strategy.

Synthesis of business model ontologies

- Some business model researchers have blurred lines between their definitions and their models of the business model concept; for some they are one and the same (Lindgardt et al. 2009), while others separate the terms (Osterwalder and Pigneur 2009).
- We can see that there are two main schools of thought when researchers have explicated their business model definitions into concepts: the structural and the behavioral approach.
 - › The structural approach focuses on structuring activities, functions and assets, and describing their interconnectedness.
 - › The behavioral approach focuses on the logic cause-and-effect relationship between decisions, consequences and feedback in the system as a whole.
- A common denominator between the ontologies is their focus on value.

Business model classifications

Introduction

As a business model ontology answers the question «what is a business model?», many authors have also tried to *classify* the different models that they observe or contrive generic types of models that they claim should be found in the marketplace. In this section we outline two different approaches to classifying business models, one taxonomy from the Osterwalder and Pigneur ontology, and a few selected typologies from Zott et al. (2010). This list is not by any means exhaustive, but it is illustrative in that it shows different ways that business models can be categorized.

Osterwalder and Pigneur taxonomy

Osterwalder and Pigneur present a business model taxonomy in their book «Business Model Generation» from 2010. These are business models with similar characteristics, similar arrangements of business model building blocks, or similar behaviors, which the authors call *patterns*. The kinds of patterns presented are not exhaustive and the authors assume that new patterns will emerge over time.

The five patterns presented by Osterwalder and Pigneur are *unbundling*, *the long tail*, *multi-sided platforms*, *FREE* and *open*.

Unbundling

A concept where corporations who often have different types of businesses within a single corporation can avoid undesirable trade-offs and conflicts by unbundling into separate entities. One example of this is telecommunications companies who divested their network operations either by outsourcing or spin-offs and started focusing on customers, branding and providing content.

The long tail

A concept which was first described by Chris Anderson of Wired Magazine in 2004, the long tail principle entails selling a small amount of each niche product,

but offer large amounts of niche products in the inventory, as opposed to only focusing on the bestsellers. These models are characterized by low inventory costs and platforms which can make a wide range of niche content available to consumers. An example of a long tail business model is the online self-publishing site lulu.com (2011) which allows niche authors and amateur writers to publish their work. The work can either be bought as an electronic version or as a print-on-demand copy. The website features thousands of authors, each selling very small volumes, but the total sales may still be high.

Multi-sided platforms

This model creates value by bringing different customer groups together and facilitating interactions between them. One prominent example of this is Google which provides consumers with a free online search engine and at the same time offer advertisers advertising space related to specific search terms. This model works best when the number of users is relatively high, given the domain and scope of the model.

Freemium

A pattern where one customer segment benefits from a free-of-charge offer, often financed by other customer segments or other parts of the business model that charges for an up-scaled or premium version of the same offering (Osterwalder and Pigneur 2010). An example here is Spotify (2011), an online streaming music service where consumers can listen to music for free, but are occasionally interrupted by advertising. For added value, consumer can switch to a premium version which requires a monthly paid subscription. The free segment works as both a marketing channel for the premium product and as a revenue stream from advertising.

Open

Open innovation, a term coined by Henry Chesbrough in the book «Open Innovation» (2003), can be implemented in a business model by systematically

collaborating with partners outside of the firm. This collaboration can either take the form of using idle ideas or assets from within the firm (inside-out) or by exploiting ideas from the outside (outside-in) (Osterwalder and Pigneur 2010). This pattern has been employed by Proctor & Gamble to increase the R&D activities by opening up research and inviting in three innovation sources: researchers at universities, problem-solvers at online platforms, and retirees of the company.

Synthesis

The Osterwalder and Pigneur taxonomy is an example of a classification scheme which is in line with many

other researchers' approaches. This bottom-up view divides business models into some main categories, but does not create a hierarchy or levels of business models, leaving an enumerated list of observed generic models in markets.

Zott et al. (2010) / Timmers (1998) typology

Surveying the entire field of research on business models, Zott et al. (2010) encountered many different classifications of the concept, especially from a school of thought related to «e-business» models. These researchers has looked at the business domain of electronic commerce and defined different types of

Timmers (1998) e-business typology

Definition

e-Shops	The Web marketing and promotion of a company or a shop and increasingly includes the possibility to order and pay.
e-Procurement	Describes electronic tendering and procurement of goods and services
e-Malls	Consists of a collection of e-shops, usually enhanced by a common umbrella, for example a well-known brand.
e-Auctions	The electronic implementation of the bidding mechanism also known from traditional auctions.
Virtual communities	This model brings together virtual communities that contribute value in a basic environment provided by the virtual community operator. Membership fees and advertising generate revenues. It can also be found as an add-on to other marketing operations for customer feedback or loyalty building.
Collaboration platforms	Companies of this group provide a set of tools and information environment for collaboration between enterprises.
Third-party marketplaces	A model that is sustainable when a company wishes to leave the Web marketing to a 3rd party (possibly as an add-on to their other channels). Third-party marketplaces offer a user interface to the supplier's product catalogue.
Value chain integrators	Represents the companies that focus on integrating multiple steps of the value chain, with the potential to exploit the information flow between these steps as further added value.
Value chain service providers	Stands for companies that specialize in a specific function for the value chain, such as electronic payment or logistics.
Information brokerage	Embraces a whole range of new information services that are emerging to add value to the huge amounts of data available on the open networks or coming from integrated business operations.
Trust and other third parties	Stands for trust services, such as certification authorities and electronic notaries and other trusted third parties.

Table 2: Timmers (2008) business model typology

Source: Zott et al. (2010)

Business model innovation focus and criteria

Process-result-novelty matrix		Criteria for change to be considered business model innovation:	
		Business model is significantly new to the firm	Business model must also be new-to-the-market
	Focus		
Business model innovation is mainly the <u>process</u> of conceiving and changing the business model	Process	BCG (Lindgardt and Reeves 2010) Johnson (2010) Osterwalder & Pigneur (2010)	Santos (2010)
	Result		Christensen and Raynor (2003) (focuses on disruption)
Business model innovation is mainly the <u>result</u> of an innovation process.			

Figure 15: Business model innovation and criteria

Source: Thesis authors

«e-businesses». We will use these types as examples of a business model typology, in order to illustrate possible ways of thinking about business model types.

Table 2 on page 31 shows an e-business model typology by Timmers (1998), which is adapted from Zott et al. (2010).

These generic types are outlined as a typology of the growing e-business sector at the date of writing. This top-down approach relies less on examples of business models observed in the marketplace, and more on general principles and distinctions between possible types of models.

Synthesis of business model classifications

Looking at our examples of taxonomies and typologies, there can be some difficulty seeing the difference between the two approaches. Two points are important to note:

- The value of creating these classification schemes is not necessarily in choosing a taxonomy or a typology approach, but in recognizing that there is in fact such differences between business

models that a wide range of literature has made an effort classify and structure the variances to better understand the concept.

- Moving from one class of business model to another class is the definition of business model innovation chosen by many researchers.

Business model innovation

Introduction

In this section we outline research literature on business model innovation, both in term of definitions, types, approaches, processes and implementation issues. The divergent nature of the business model concept in research is also reflected in this section, illustrating the difficulties of building new research and constructs on top of a poorly defined foundation. Despite this deficiency, this section attempts to show a range of the most salient issues in business model innovation.

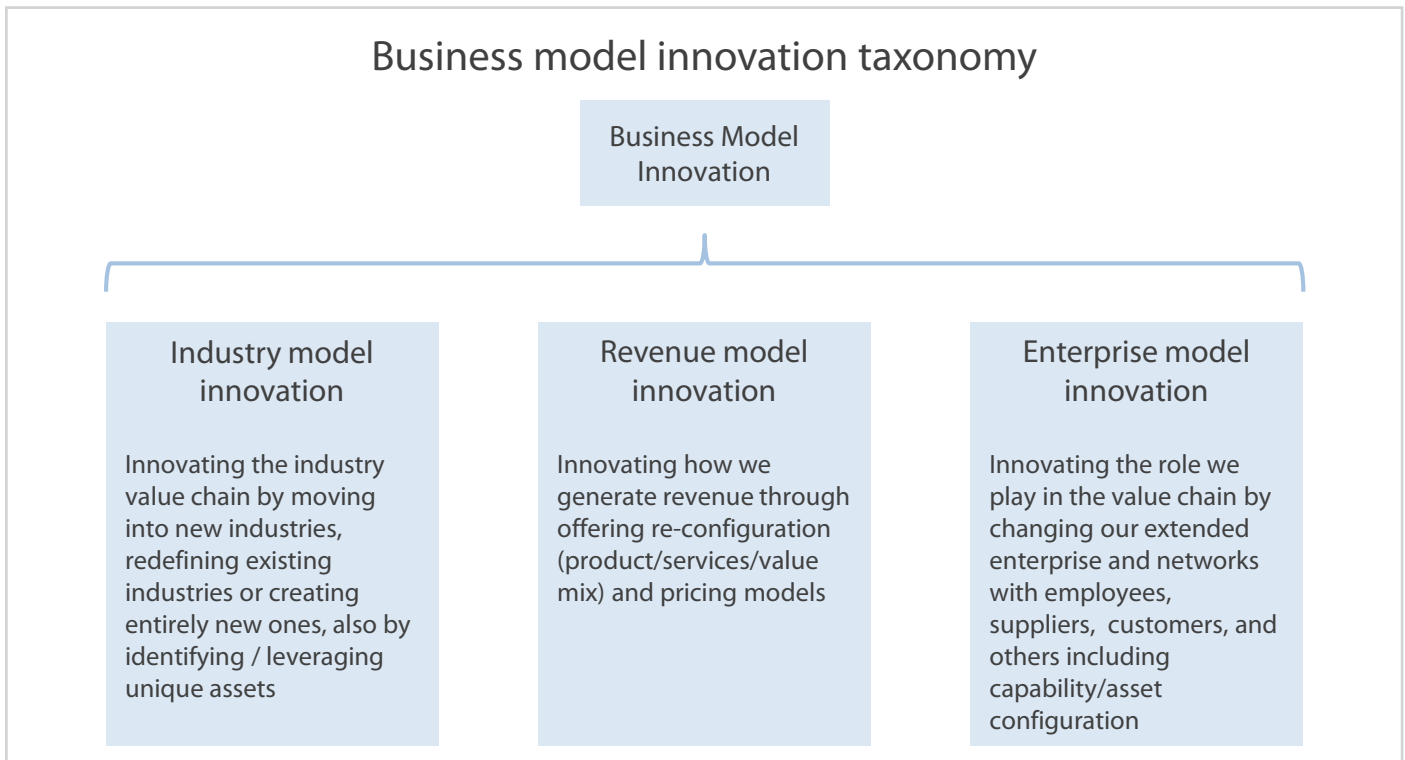


Figure 16: A business model innovation taxonomy
 Source: Giesen et al. (2007)

Definition

The term business model innovation, like the business model, has yet to achieve a common definition in academic literature.

The term has been used by several authors in explaining how technology is commercialized, e.g. by Chesbrough and Rosenbloom (2002). Christensen and Raynor (2003) also state the need for business model innovation in order to maximize the reach of a new technology.

Chesbrough (2007) states that technology development is becoming increasingly expensive and is causing new technology to be commoditized faster than ever. In order to succeed, he proposes one must therefore also focus on business model innovation. To underpin the importance of this kind of innovation, Chesbrough (2007) also states «a better business model will often beat a better idea or product». Comparing different types of innovation and their effects on financial performance, IBMs Global CEO study from 2006 (Giesen et al. 2007), showed that business model innovation drives profitability to a larger extent than other types of innovation.

Markides (2008) argues that disruptive business model innovations are different from disruptive technological innovations as argued by Christensen and Raynor (2003) in a few distinct ways. Business model innovations will not necessarily take over markets and topple incumbents as is often the case from literature on disruptive innovation. Online financial brokerage, a disruptive business model in the financial trading domain, is one example which will probably not overtake the market even though it has radically changed the lower end of the industry. This, according to Markides (2008), leads to the conclusion that applying the new business model is not automatically the best strategy for an incumbent.

In a working paper from 2009 titled «Toward a Theory of Business Model Innovation within Incumbent Firms» Santos et al. define business model innovation as «a reconfiguration of activities in the existing business model of a firm that is new to the product/service market in which the firm competes» (Santos et al. 2009). This definition emphasizes the aspect of going from an old business model to a new-to-the-whole-industry business model.

Business model innovation takes many forms

Value proposition	The product as service and outcome <i>General Electric</i>	The product as an experience <i>Apple</i>	Trust premium Whole Foods	Free (or nearly free) <i>Google</i> <i>Vélib'</i> <i>JC Decaux</i>
Operating model	Deconstruction <i>Li & Fung Limited</i>	Integration / acceleration of the supply chain <i>Zara</i>	Low cost <i>Tata Motors</i>	Direct distribution <i>Nestlé Nespresso</i>
Business system architecture	Open <i>Facebook</i>	Person to person <i>Paypal</i>	Adjacency <i>Ikea's mega mall division</i>	Serial <i>Virgin</i>

Figure 17: Business model innovation takes many forms
Source: Lindgardt et al. (2009)

Lindgardt et al (2009), following the Boston Consulting Group business model ontology, state that an innovation becomes a business model innovation when two or more elements of a business model are reinvented to deliver value in a new way.

As we can see, there are disagreements on what business model innovation is and what role it has in markets. In trying to structure the discourse on business model innovation, we will here use two figures. The first is a simple illustration of the steps necessary to move from one business model to another; you have an existing model (or no model, as is the case for new firms), you then undertake a planning process to find and implement business model changes, and finally you are left with the resulting new model.

In Figure 15 on page 32 we try to position the different authors under two dimensions of this process. The figure answers the question: what *level* of change is sufficient for the change to be labeled business model innovation? In addition, what part of the process is the most important aspect of business model innovation; the process or the result? In other words, is business model innovation the process or the resulting business

model? We attempt to plot the different research approaches into this matrix.

Business model innovation taxonomy

In the last years, several researchers have proposed different business model innovation taxonomies. Parts of this section are taken from Breiby, Wanberg et al. (2010).

Giesen et al. (2007) proposed three categories of business model innovation based on results from the IBM Global CEO study of 2006 where 35 best practice cases were studied. As seen in Figure 16 on page 33, the categories defined are *industry model innovation*, *revenue model innovation* and *enterprise model innovation*. The study further showed that business model innovation had a higher correlation with operating margin growth than other types of innovation. Among the types of business model innovation, enterprise model innovation was found to be most prevalent among the successful companies, while there was no significant performance difference between the other two categories (Giesen et al 2007).

The three types of business model innovation are described as follows:

Classification	Type	What changes	Examples
Relinking – altering the linkages between units performing activities	Regoverning	The governance of transactions among units	An arms-length relation with a supplier becomes an alliance
	Resequencing	The order in which activities are performed	Design and procurement activities become mutually reciprocal instead of sequential
Repartitioning – altering the boundaries of the focal firm by moving activities and the units that perform activities	Insourcing	Moving inside activities that were performed outside the focal firm	A manufacturer opens its own retail stores to supplement its dealers
	Outsourcing	Moving outside activities that were performed inside	A firm outsources its IT activities
Relocating – altering the (physical, cultural, and institutional) location between units performing activities	Off-shoring	Moving activities from a unit in the firm's home country to a foreign country	A bank moves back-office activity to a foreign subsidiary
	On-shoring	Moving activities from a foreign country unit into the home country of the firm	A call center is moved back to the original country
Reactivating – altering the set of activities performed by the firm	Augmenting	Adding a new activity to the firm	A free give-away newspaper hires people to hand out the paper at subway stops
	Removing	Removing an activity from the firm	An airline removes cooking hot meals from its service

Table 3: Overview of activity reconfiguration

Source: Santos et al. (2010) page 19

- **Industry model innovation** – Innovating the industry value chain by moving into new industries (diversification), redefining existing industries or creating new ones, by identifying and leveraging unique assets.
- **Revenue model innovation** – Innovating how revenue is generated by changing or re-configuring the offering: the product, service and value mix in addition to the pricing models.
- **Enterprise model innovation** – Changing the value chain position through the value network with employees, suppliers, customers in addition to capability/assets configuration.

Giesen et al (2007) conclude that when responding to change, managers should consider business model innovation and especially enterprise model innovation by focusing on collaboration and partnerships.

Lindgardt et al (2009) of the Boston Consulting Group categorize business model innovations into three main categories: value proposition, operating model, and business system architecture. The business model innovations within these categories vary greatly as can be seen by the examples in Figure 17. They further require that at least two elements in their business model ontology to be changed in order for the change to be considered true business model innovation.

These two taxonomies take two different approaches. The IBM study focuses on a mix of

internal business model element changes (revenue model, asset configuration), while at the same time including diversification and value chain repositioning such as «industry model innovation». Lindgardt et al. (2009) focus more on the internal aspects of their business model, like the value proposition and operating model, and sees business model innovation as the successful change from one business model to another through changing the individual elements.

Business model innovation typology

Santos et al (2009) have proposed a typology in which possibilities of business model innovation can be categorized. Given the widespread view of business models as an activity system, Santos et al. claim that all business model innovation is related to some form of activity reconfiguration. These can take the form of *relinking*, *repartitioning*, *relocating* or *reactivating* as can be seen in Table 3 on page 35.

Since Santos et al. define a set of business innovation types that focuses predominantly on activity reconfiguration, it focuses less on value and more on the activity that creates it. This activity focus probably makes the list less exhaustive as a typology for classes of business model innovation than a more holistic approach could have been.

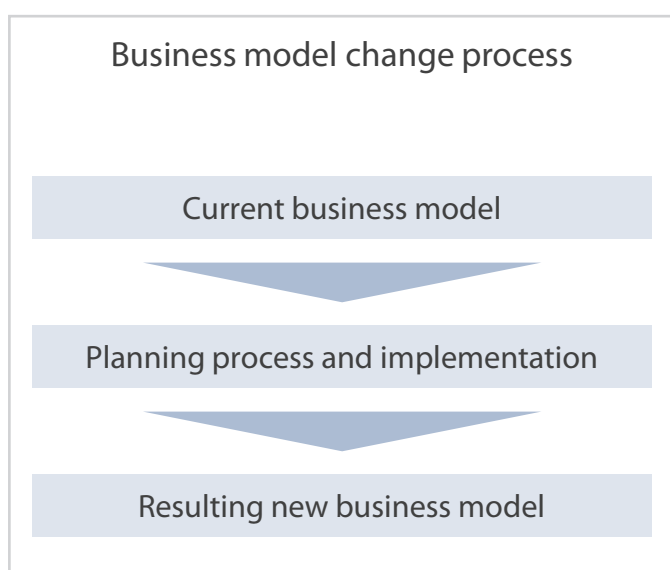


Figure 18: A depiction of the business model change process
 Source: Thesis authors

Synthesis of business model innovation definitions and classifications

- Business model researchers can be seen to distinguish between business model change and business model innovation, where the latter requires a significant alteration to the status quo.
- They also focus differently between the process of innovation and the resulting new business model as the innovation, and to what degree the model has to be novel in the market to be labeled a business model innovation in the first place.
- The unifying aspect that seems to be consistent in the definitions is that business model innovation ultimately is about moving from one business model to another. Whether the innovation is in the process, the result or in the novelty is still under discussion.

As business model innovation in itself is not well defined, we can see that there are divergent views on what classes of business model innovation can be said to exist. Being built on the concepts of business models and business model innovation, any classification scheme becomes even less uniformly defined than the two supporting concepts it rests on. However, some efforts have been made and we expect research on the area to become clearer as the two underlying concepts solidify in academia.

Processes and approaches for business model innovation

In this section we outline some authors' view on processes for successful business model innovation.

Chesbrough (2010)

Chesbrough (2010) propose three necessary processes in order to go from the current to alternative business models: experimentation, effectuation, and organizational leadership.

Experimentation

It is difficult to predict which models will work in the future, but seeing models which are not working is easier. In these circumstances, Chesbrough (2010) states that experimentation becomes important because it is the only way to identify and validate new business models. He further claims that business model innovation is not a matter of superior foresight before implementation, but rather something that requires trial and error, experimentation and adaptation. Chesbrough cites Thomke (2003) on principles on effective experimentation:

- Low cost – Related to the experiment itself and to the cost of a failed experiment.
- High fidelity – The experiment's validity as a representation of the actual market.

The best way to get high fidelity is trying out new models on real customers, and start-up firms are very well suited (Chesbrough 2010).

Effectuation

According to Chesbrough, ex-ante analysis is an ineffective approach to business model innovation. He claims that the data for thorough and sufficiently exhaustive analysis is lacking. It is therefore important to enact the market in order to reveal data, and this bias towards enacting instead analyzing is necessary in order to succeed.

Organizational leadership

Business model innovation will often lead to a period where two business models co-exist, which presents difficulties when it comes to management. This transition process from one model to the other and the direct impact on individuals by the result of the transition, require a strong organizational culture in order to succeed (Chesbrough 2010).

This third process presented by Chesbrough is supported by several researchers in business model literature. Doz and Kosonen (2010) state that the

accelerating business model change in markets requires a top management team willing to venture into new models and abandon old ones, the latter being the most difficult. Doz and Kosonen (2010) further points to the inherent risk involved in business model innovation. They state that it requires top management support to be able to create a commitment from the organization, in order to succeed. The emphasis on top management support is also supported by the consultants of the IBM Global CEO survey, as they conclude that it is a myth that innovation management can be delegated and that innovation must be orchestrated from the top.

Osterwalder and Pigneur (2010)

A business model design process is presented in Osterwalder and Pigneur (2010), which consists of five stages: *mobilize, understand, design, implement* and *manage*.

Mobilize

This phase is focused on the setting the stage, describing the motivation, and establishing a common language for business model design. Top management support, vested interests and cross-functional teams are all important aspects to consider in this stage.

Understanding

Osterwalder and Pigneur (2010) emphasize the importance of developing a good understanding of the context in which the business model will evolve. This includes gaining deep knowledge of customers, technological developments, sketching out competitors business models and seeing beyond the existing customer base and industry boundaries.

Design

In the design phase, ideas and information from the previous phase are converted to business model prototypes through brainstorming that later can be explored and tested. Allowing people to develop bold ideas, exploring multiple ideas while making sure not «falling in love» with ideas too quickly is critical. Participatory design with people from different departments

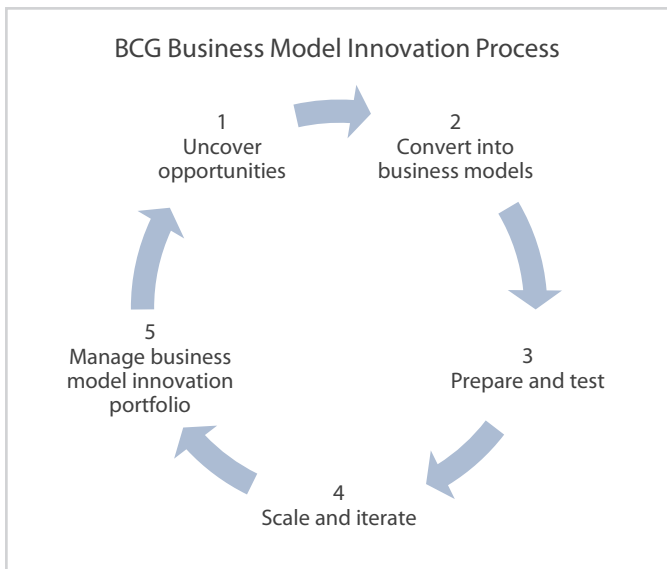


Figure 19: The BCG business model innovation process
Source: Lindgardt and Reeves (2010)

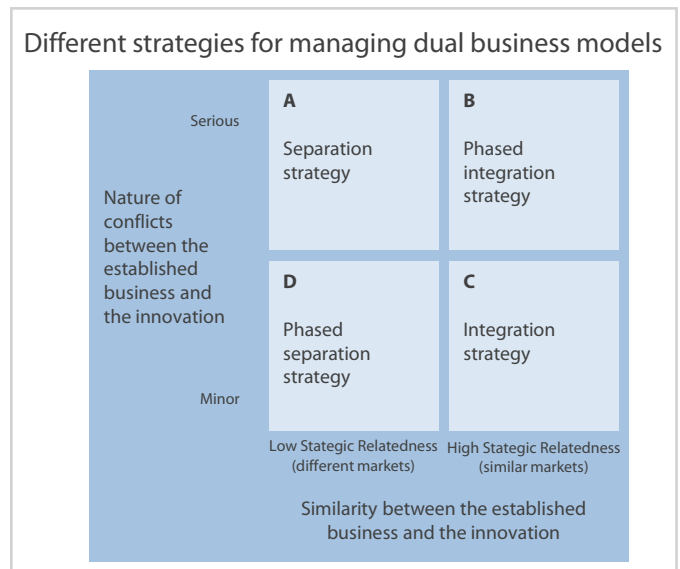


Figure 20: Different business model innovation strategies
Source: Markides (2008)

and levels can help both the process and prevent road-blocks in the next phase.

Implementation

In this phase, Osterwalder and Pigneur stress the importance of project sponsorship, translating the model into a project with milestones, deciding on a separate or integrated implementation and communicating the new business model throughout the organization.

Manage

Continually scanning the environment for factors that can affect the business model is important to stay successful. Osterwalder and Pigneur state that in this phase companies should also seek to adopt a portfolio of business models that should be managed with attention to synergies and conflict.

The Boston Consulting Group – Lindgardt and Reeves (2010)

The Boston Consulting Group has proposed a model which describes the different stages of a business model innovation process, as can be seen in Figure 19 (Lindgardt and Reeves 2010)

The model presents five distinct phases which loops on itself. The stages are described as follows:

1. The first stage consists of uncovering opportunities and includes a diagnosis of the current business model and an analysis of the pros and cons.
2. The second stage relates to converting opportunities or ideas into different business models and setting up evaluation criteria for the selection of these models.
3. The third phase is focused on the development and implementation of pilots.
4. In the fourth stage the selected business model(s) are scaled up, requiring performance metrics, a communication plan, etc. In this phase it is also important to iterate on the business model design.
5. The fifth stage is focused on the management of the business model portfolio when it comes to timing, risk, payback and similar issues. It is also important to make sure the models fit the broader strategic environment of the company. As can be seen from the process model, the business model innovation should be viewed as a continuous process and a platform.

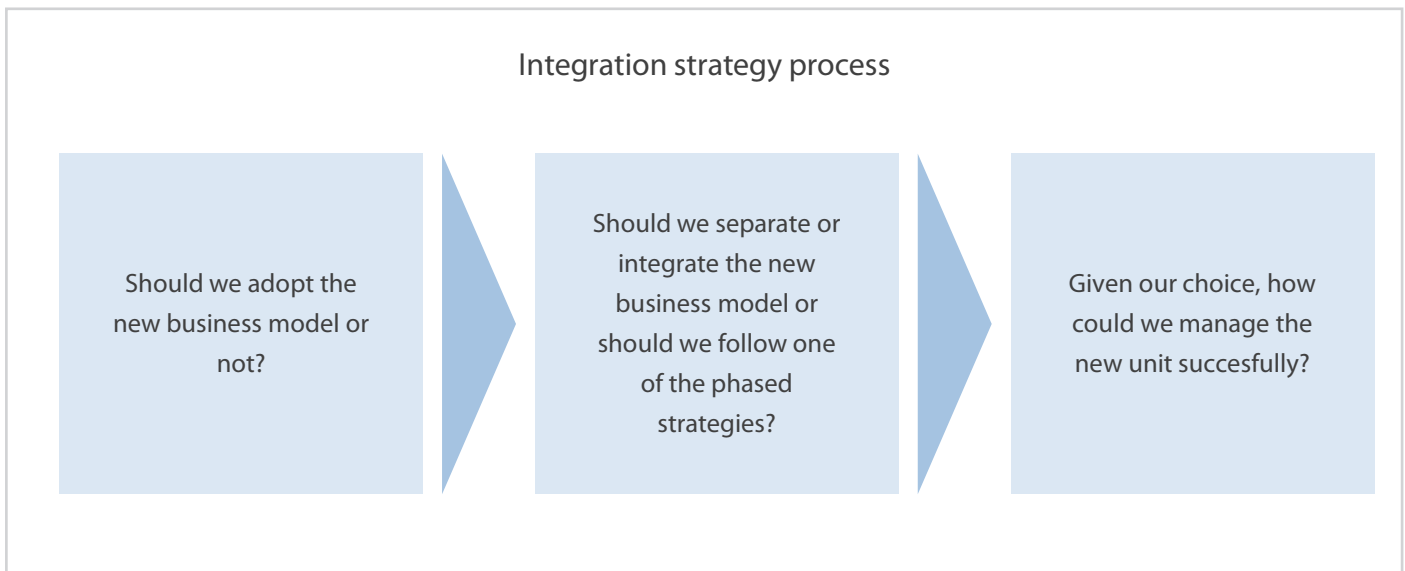


Figure 21: Integration strategy process
 Source: Adapted from Markides (2008)

Both Chesbrough (2010) and BCG’s proposed processes focus on the importance of experimentation and pilot programs, due to the uncertain nature of a new business model’s viability in a marketplace. In addition, both approaches require significant management support in tackling the challenges that surface when conducting business model innovation. We outline these kinds of challenges further in the next section.

Business model innovation implementation challenges

In this section we highlight research on the topics that surface when a company initiates a business model innovation initiative; specifically on the issues of dual business model management, organizational ambidexterity and first mover advantage.

Dual business models

There are several areas for potential conflicts between the old and the new business model, and this topic has been widely discussed in academic literature. One of the most cited participants has been Michael Porter and his positioning approach to strategy. Porter argues that companies that seek to follow multiple positioning strategies simultaneously risk ending up «stuck in the middle» which results in lower than average performance (Porter 1996). Christensen and Raynor

(2003) argue that disruptive innovations should be developed in a separate entity and organization to mitigate potential conflicts. The rationale for this is that the old culture, routines and systems will inhibit the new innovation, and thus the new business model accompanying the innovation, from developing to its full potential.

Markides (2008) contests these positions by pointing to the fact that companies which have chosen the integration approach have succeeded and companies choosing the separation strategies have failed. Companies within the same industry who have chosen different strategies have experienced both similar and different rate of success and Markides concludes that there is no one solution that fits all companies. He argues that the question should be reframed from «to separate or not» to «when to separate and when to integrate». Markides’ alternative strategies are presented in the matrix above.

The matrix consists of two axes where the vertical describes to which extent there are potential conflicts between the existing and new business model, while the horizontal refer to market similarities and the potential for synergies between the business models. Markides (2008) further recommends different integration strategies for the different scenarios.

- Separation strategy is starting the new business model as an entirely separate entity with no plans of re-integration into the old entity/business.
- Phased integration strategy is similar to the separation strategy, except that the entity is planned to be integrated into the old business with time.
- Integration strategy will grow the new business model in-house, alongside the old model, with no plans of spinning it out.
- Phased separation strategy incubates the new model within the existing business, and spins it out with time.
- Dynamic decision making: the ability to exhibit support for both parts of the tension, i.e. exploratory and exploitative business models, by «quick, frequent and flexible decisions, continually shifting resources, roles and responsibilities between the two» (Smith et al. 2010)
- Building commitment to overarching goals: Achieved by successful leaders through vision and goal setting at two levels:
 - I. Defining a vision which captures both exploratory and exploitative strategies and encourage the coexistence of competing agendas.
 - II. Articulate differentiated and clear goals, objectives and metrics for each agenda.
- Active learning on multiple levels: Achieved by focusing on one strategic agenda at a time through separate meetings, but also by organizing time for meetings or workshops where links between the two agendas could be explored and solutions on how to manage both could be developed and refined.
- Engaging conflict: Encouraging conflict in order to relieve the stress and tension which arise in organizations with contradictory strategies and competition for scarce resources.

The process can be summarized as seen in Figure 20 on page 38.

The process touches on important aspects of the business model innovation process, such as decisions regarding if and how a new model should be adopted, and how to manage it. This kind of nuanced approach to the relationship between the old and the new business model gives more strategic leverage than a pure in-or-out approach in considering where to initiate business model innovation.

Ambidexterity

For large and complex business models there are often strategic paradoxes or tensions inherent in the model. Examples of tensions are exploration vs. exploitation, cost vs. quality, stability vs. agility and profitability vs. social outcomes (Smith et al. 2010). Disruptive innovation is an example where cost is a central component, often balanced against quality or convenience. This is also to some degree the case when choosing a (phased) integration strategy for a new business model innovation. Smith et al. observed and interviewed 12 top management teams and found that in order to successfully execute these kinds of paradoxical strategies effectively, four processes were important:

- Dynamic decision making: the ability to exhibit support for both parts of the tension, i.e. exploratory and exploitative business models, by «quick, frequent and flexible decisions, continually shifting resources, roles and responsibilities between the two» (Smith et al. 2010)
- Building commitment to overarching goals: Achieved by successful leaders through vision and goal setting at two levels:
 - I. Defining a vision which captures both exploratory and exploitative strategies and encourage the coexistence of competing agendas.
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- Active learning on multiple levels: Achieved by focusing on one strategic agenda at a time through separate meetings, but also by organizing time for meetings or workshops where links between the two agendas could be explored and solutions on how to manage both could be developed and refined.
- Engaging conflict: Encouraging conflict in order to relieve the stress and tension which arise in organizations with contradictory strategies and competition for scarce resources.

Smith et al 2010 anticipate that complex business models will emerge more in the future and thus managing these strategic tensions successfully can be a source of competitive advantage.

Business model innovation and first mover advantages

Teece (2010) states in his article «Business Models, Business Strategy and Innovation» that business model innovation can be a source of competitive advantage if the model is differentiated and difficult to replicate for competitors and new entrants. Competitive advantage

from a new business model can then only be protected by coupling strategy with business model analysis.

Teece points to three factors which are important in order to impede copycat behavior:

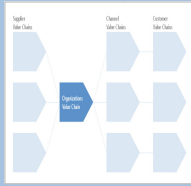
1. Implementing a specific business model may require certain capabilities which may prevent a second mover from successfully copying a specific model. Computer manufacturer Dell's model of direct sales of computers to consumers was copied by Gateway Computers, but their implementation did not match Dell's results. This points to the fact that capabilities matter.
2. The degree of how difficult it is for competitors to understand the implemented business model in detail. This opacity can hide what the actual drivers of customer acceptability are, thus making it difficult for competitors to successfully copy it.
3. Incumbents' reluctance to cannibalize existing sales and profits. This can give a first mover advantage, but it will not prevent new entrants from entering as these new actors are not bound by the same constraints.

Synthesis of business model innovation processes, approaches and implementation challenges

When looking at issues in the process of implementing a new business model, some key aspects can be noted:

- Usually there is not enough information ex ante to know if a new model will work. Therefore, experimentation and enacting the market is often necessary in order to get the necessary data.
- Processes that depict business model innovation can be found to focus on converting information and opportunities into business model concepts that can be evaluated and experimented with.
- Dual business models, where a new and an old model co-exists in the organization, requires special management skills to handle the inherent tension. The managerial capability to handle dual business model tensions can be a source of competitive advantage.
- A new business model can be set up outside or inside the parent organization, or be phased in/out at a later time.
- For a new business model to be able to create competitive advantage, some researchers point to the need for the model to be difficult to understand and duplicate.

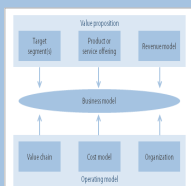
Summary of business model literature



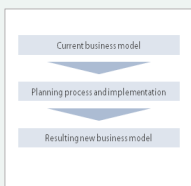
Business models are a new unit of research in academia and is not yet well defined. It is referred to and described in many ways. Common traits include an activity system perspective with focus on the creation, delivery and capture of value. Its scope is often broader than the firm, but more narrow than a network level approach. Business model can be used as role models, scale models and recipes.

Level	Name	Schema	Characteristics
Abstract level	Abstract level	Business Model Canvas	<ul style="list-style-type: none"> Industry independent Generic Focus on value creation, delivery and capture
	Industry level	Business Model Canvas	<ul style="list-style-type: none"> Industry specific Focus on value creation, delivery and capture
	Corporate level	Business Model Canvas	<ul style="list-style-type: none"> Corporate specific Focus on value creation, delivery and capture
Business unit level	Business unit level	Business Model Canvas	<ul style="list-style-type: none"> Business unit specific Focus on value creation, delivery and capture
	Product/service level	Business Model Canvas	<ul style="list-style-type: none"> Product/service specific Focus on value creation, delivery and capture
	Individual actor level	Business Model Canvas	<ul style="list-style-type: none"> Individual actor specific Focus on value creation, delivery and capture

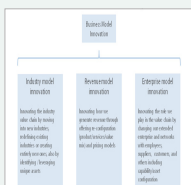
Business models can viewed from different levels. The abstract levels is generic and industry independent. The Industry level is generic, but centered on how a company can operate in an industry. The corporate level seek to explain how a large firm operates. The business unit level describes the core logic of value creation at business unit level where a corporate level is too broad. The product/service level describes the lowest level, for example the iPhone describing its links to AppStore etc.



Different business model ontologies focus differently on the elements, structure, scope and behavior of the business models. Two schools of focus dominate, structural and behavioral. They describe different elements or the cause and effect relationships, respectively. Classifications of business models into taxonomies and typologies uncover different kinds and types of business models in the markets, and can be used to describe common traits of firms' business models.



Business model innovation is a business model change above some change threshold. There are different views on what constitutes a business model innovation: the process of innovation, the resulting new business model or the novelty of the model itself. Business model innovation have been found the correlate to a higher degree with operating margin growth than other types of innovation, like products or services.



Business model innovation classifications include different kinds and types of innovation, according to which main dimensions in the model are changed. There are many approaches to business model innovation; aspects like experimentation and management support are recurring themes. New business models can have different levels of integration with the old business model, usullay as a separate entity or an integrated part of old firm.



Some researchers view business model innovation as an iterative process going through different stages of designing and implementing business models. Different management capabilities are important in order to succeed with business model innovation, for example being able to handle the aspects of having dual business models in an organization. Business models are seldom perfect when implemented and often need multiple alterations. For new business models to be successful, they should be difficult for competitors to understand and copy.

Figure 22: Summary of business model literature

3.3. Links to other academic fields

Innovation and innovation management

Introduction

The term innovation has a broad use in business literature. It can either be the action or process of innovating, or it can be something new or different introduced as such (Oxford 2011). In order to separate the term innovation from invention, Harvard professor S. Thomke propose that innovation is both novel and has value. Innovations can either be *incremental*, *radical*, *open* or *disruptive* (Thomke 2010). This position is also supported by Trott (2008), where innovation is invention translated into the economy. Trott further elaborates that «Innovation is the management of all activities involved in the process of idea generation, technology development, manufacturing and marketing of a new (or improved) product or manufacturing process or equipment». This definition implies that the innovation is a process to be managed, while a new product or service is the result of the former.

There have been two schools of thought when it comes to how the process of innovation should be viewed, the linear model and the simultaneous or interactive. The linear model can both be seen as a push and pull sequence of activities which are clearly separated as can be seen in Figure 24.

The impetus for the innovation is clearly distinct in this model, but fails to explain how the innovation is fostered, according to the proponents of the simultaneous coupling view. They emphasize the mutual linkages between activities as seen in Figure 23 (Trott 2008).

The simultaneous view was further elaborated by Rothwell and Zegveld (1985) into an interactive model which still simplified «can be regarded as logically sequential, though not necessarily continuous, process that can be divided into a series of functionally distinct, but interacting and interdependent stages» (Rothwell and Zegveld 1985, as cited in Trott 2008). Figure 26 on page 46 emphasize the need for organizations to seek input both from the technology base,

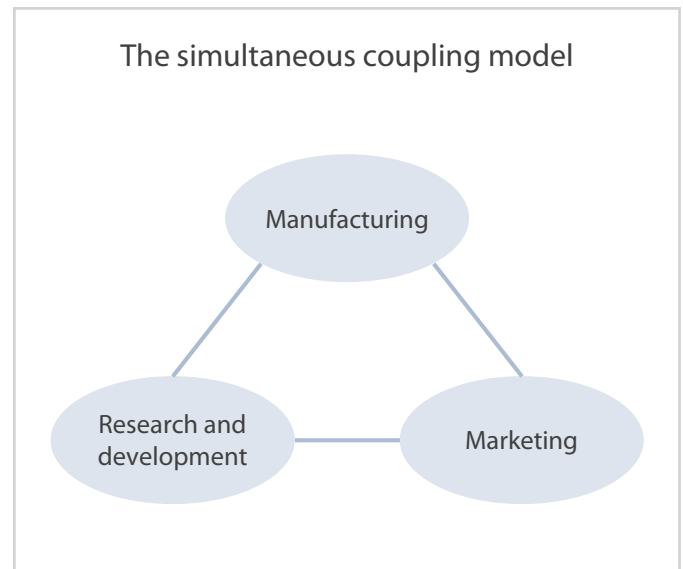


Figure 23: The simultaneous coupling model
Source: Trott (2008)

like universities, and the market side in order to be successful at innovation. The model also try to explain how the impetus for innovation may come from either the internal activities, the market side or the technology side, while all the internal activities may be interfacing with the external (Trott 2008).

The model may appear linear, but there is an assumption that there are feedback loops between the activities and that communication between them is not necessarily linear (Trott 2008). As can be seen from the model and its description, the process of innovation is not straightforward and thus poses a management challenge.

Trott (2008) state that historical studies have identified the interaction of different business functions, in Figure 27 on page 47 marketing, R&D and business leadership, and the flow of information between these as the main task in order to successfully manage innovation. As the figure shows, the interaction between each business function and their respective external environment is an important source for the organization to gather information. In sum, the process for successful innovation management is to encourage the gathering of information from the outside of the organization and to facilitate the flow of knowledge between the internal departments and activities (Trott 2008).

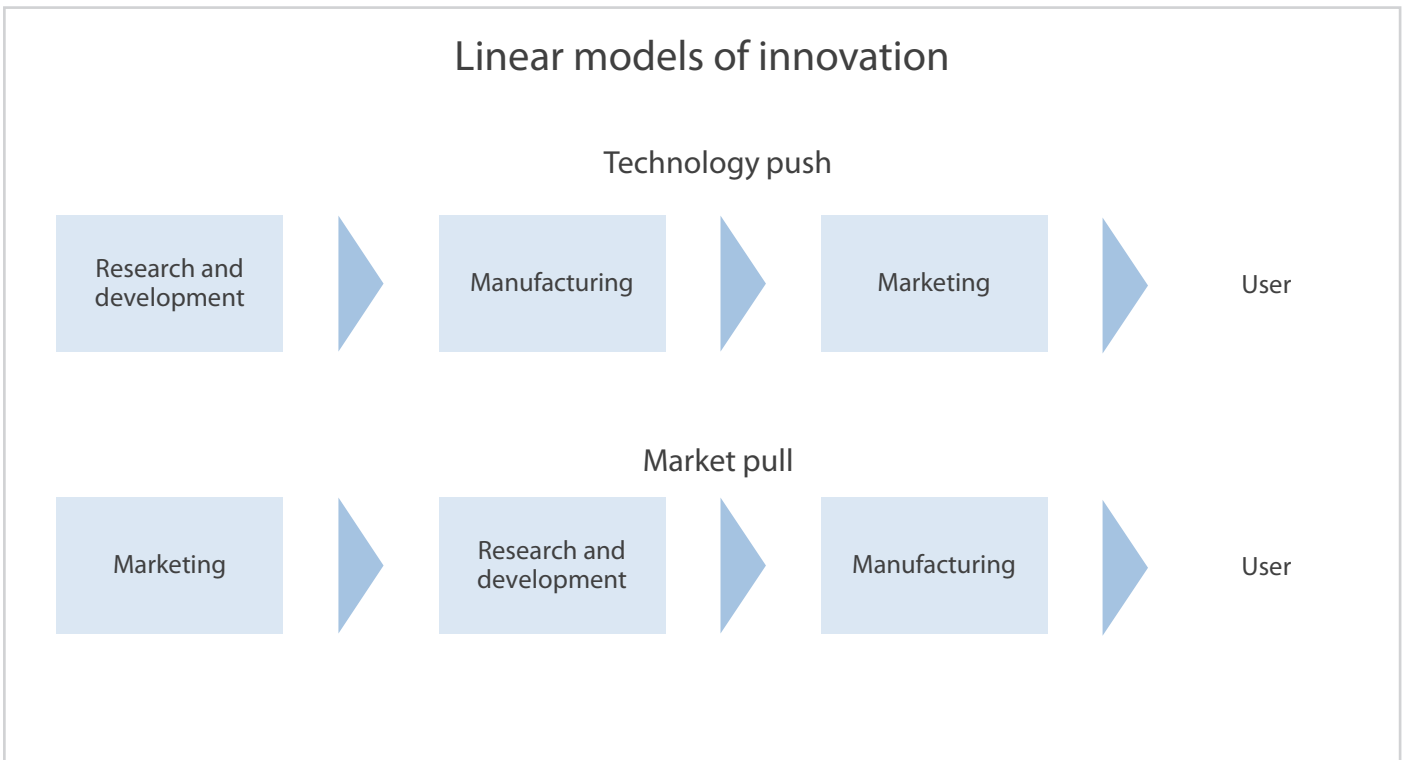


Figure 24: Linear models of innovation
 Source: Trott (2008)

The Dubberly Innovation model

Dubberly et al. (2007) have developed a conceptual map for innovation which links theories and propose how innovation emerges. The innovation model assumes that innovation is about changing paradigms and that innovation is a process in which insight inspires change and creates value. The model was developed and conceptualized as a part of a project with Alberta College. Although quite complex, the main aspects are presented in a simplified way below in order to understand the main aspects of the process.

Either *pressure* (external) or *decay* (internal) will inevitably lead to *change* (disturbance) between a *community* (organization) and its context. This change disturbs the relation and creates a *misfit* (pain). When this misfit, manifested through pain in the form of *cost* (physical, mental, social or financial) on members of the community grows large enough, *recognition* (definition) is gained. This recognition comes from both experience and observation and must be defined and agreed to. When definitions are constructed they frame the possibility for *insight* (seeing opportunity). Insight is a tricky part of the innovation process and to

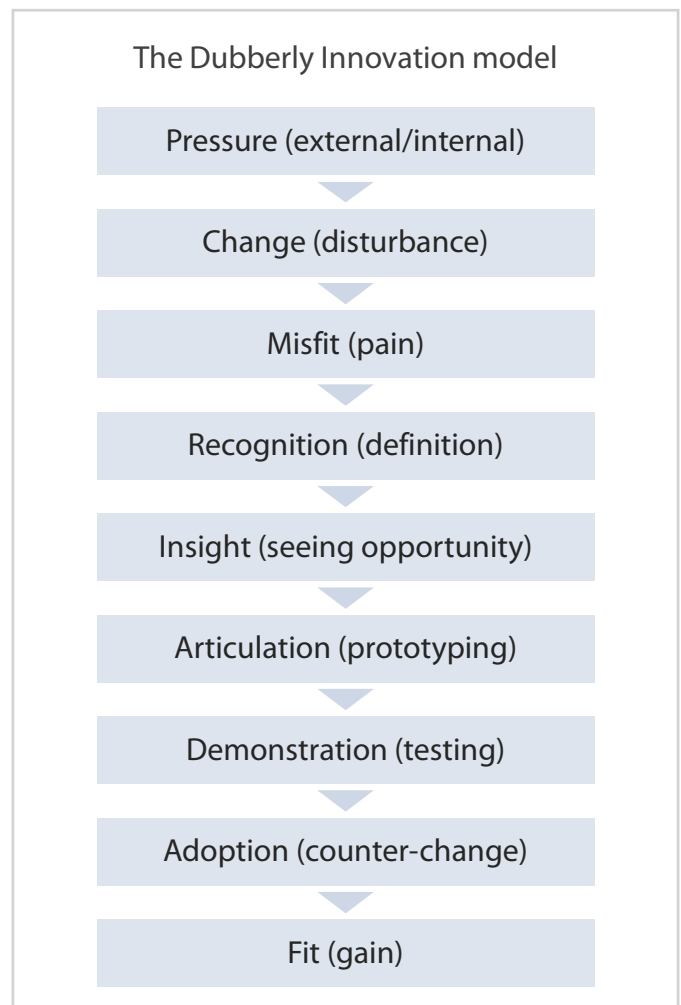


Figure 25: The Dubberly Innovation model
 Source: Adapted from Dubberly et al. (2007)

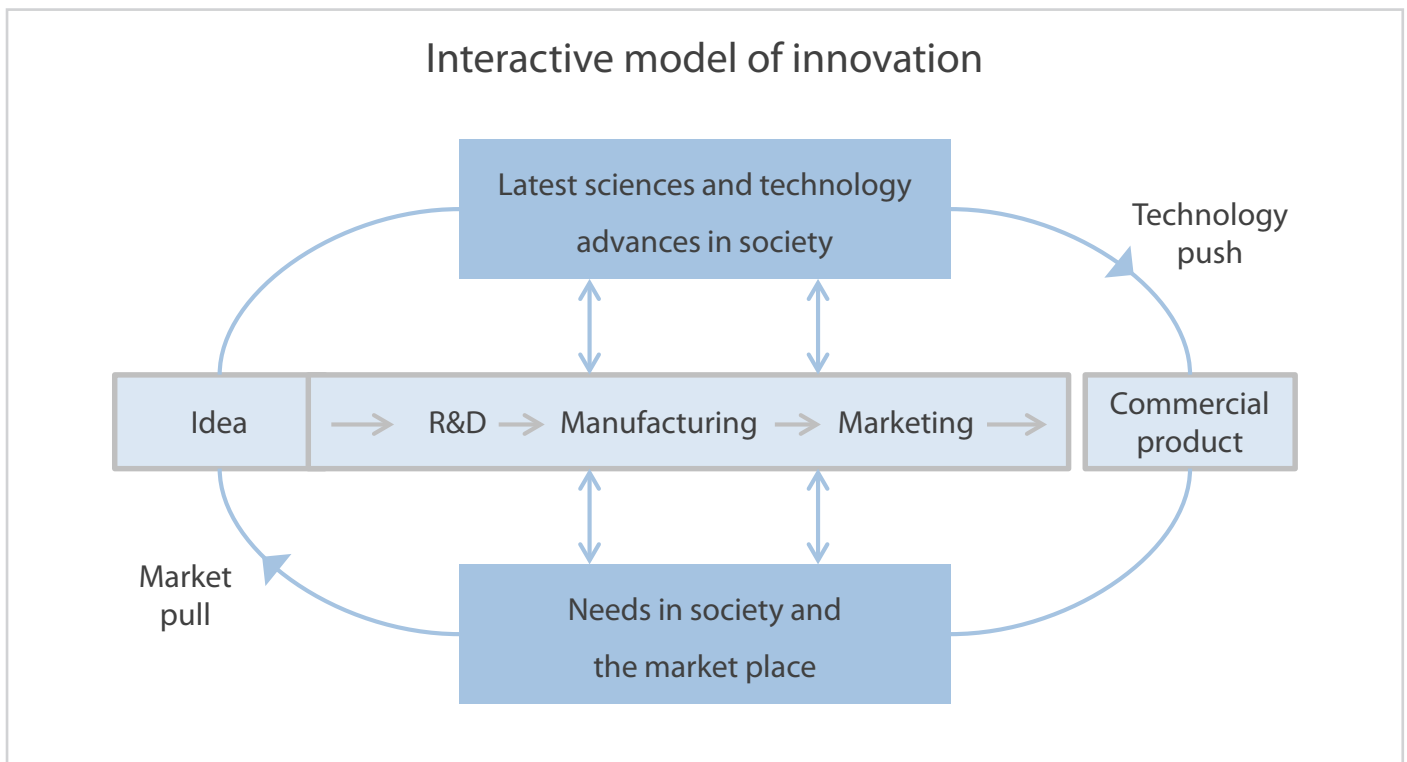


Figure 26: Interactive model of innovation
 Source: Trott (2008)

help it, immersion in the context or experience from other fields may help solve problems.

When insight is gained a process of restoring fit begins. This is done by first sharing the insight through *articulation* (prototyping). This articulation can be in the form of a hypothesis, a sketch, a prototype or a pilot. The articulation must then be proved through *demonstration* (testing). As no innovation is fully formed in its inception, demonstration enables evaluation and a basis for iterative improvement. As risk is reduced, *adoption* (counter-change) is encouraged. The scale of change can vary and take several forms, but they reform the relation and can thus again create *fit* (gain). This innovation model is a synthesis of the main phases often observed in innovation.

Innovation management and business model innovation

- Taking a semantic perspective, the definition of innovation can both be seen as a process and as a result where the former is most supported in the academic field of innovation.

- This ambiguity might be the root of some of the divergence seen when it comes to different views and definitions on business model innovation as either a process of business model change, as an implemented result of business model invention or as both the process and the result. The academic field of innovation seems to have converged on a view of innovation as a process over the years, and a similar convergence might be seen in the field of business model as it matures.
- Taking the perspective of business model as an innovation process, the normative of innovation management theory implies that fostering and supporting the acquisition of external information from all functional activities and the facilitation of information flow between these is essential for successful business model innovation.
- The holistic nature of business models as a concept further strengthens this rationale. In

Innovation as a management process

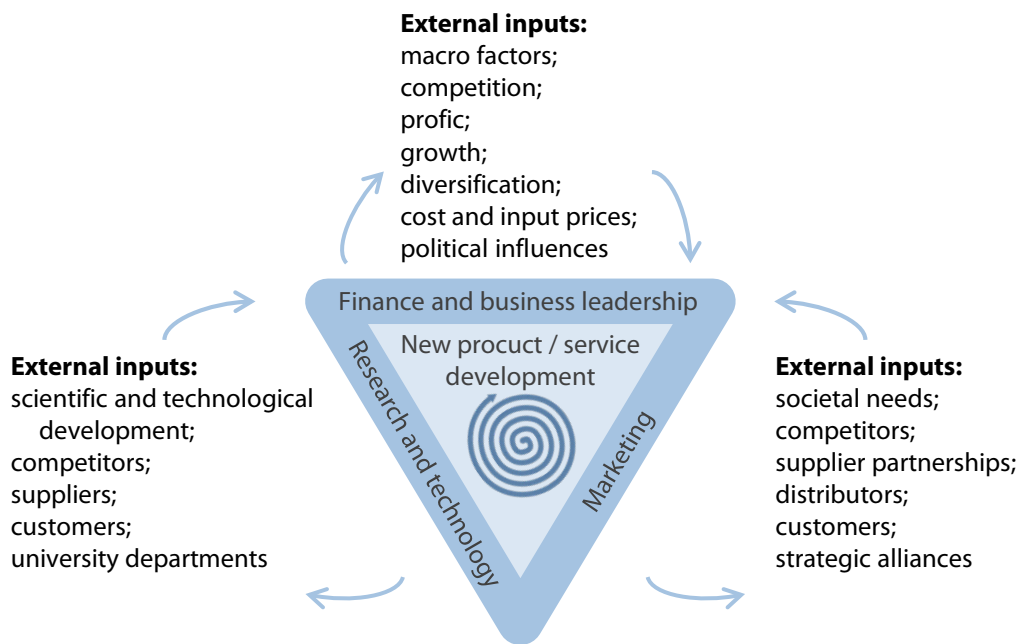


Figure 27: Innovation as a management process
Source: Trott (2008)

addition, insight, prototyping and testing are noted as important in finding the best innovation solution.

Change management

De Wit and Meyer (2010) outline and describe the «business system» as the value creating architecture of a company, and refer to a range of literature on the importance of alignment between the business system and its environment. When a business moves away from its environment, this misalignment can cause serious impediments to enterprise performance. In order to change the business system so that it again is aligned with its markets and external stakeholders, strategic change programs are often implemented in a company. Examples are new product launches, in/out-sourcing and cost reductions. These strategic changes can enable a business to not drift too far away from the demands of its environment (Johnson 1988, as cited in De Wit and Meyer (2010)).

A distinction can be made between the business system and the *organizational* system that supports it. This «human» dimension refers to the organizational

aspects of implementing the business system in practice, and can be divided into different parts: structure, processes and culture (Morgan 1986, Bartlett and Ghosal 1995, as cited in De Wit and Meyer 2010). These three parts constitute three different dimensions of the organizational system:

- Organizational structure refers to the dividing of people and resources into units, the division of labor and responsibilities and the integration of information flows and structure of authority.
- Organizational processes refer to the procedures and routines that control and coordinate people and processes.
- Organizational culture refers to the attitudes, values and behaviors of the members of the same organization or organizational unit.

When attempting to change the business system, a topic directly associated with business model innovation, a corresponding change in the organizational system might be necessary. Changes can come in a

range of magnitudes, scopes, timing, speeds and paces:

- Magnitude refers to the relative size of the change in reference to the current status quo of the system
- Scope refers to the breadth of change in the system: it can be narrow or completely systemic
- Timing relates to when the change is initiated
- Speed refers to how much change is induced in within a timeframe
- Pace refers to how the speed of change varies between timeframes to generate a total change pace in the system

Different change initiatives can have the same end-result, but have different change paths as seen in Figure 29.

The paths in Figure 29 can be seen as representatives of two different classes of change: disruptive and gradual. These kinds of changes have been widely studied in academia, like Greiner (1972, as cited in De Wit and Meyer) and Tushman and O'Reilly (1996). De Wit and Meyer (2010) state that these two approaches to change are at a tension with each other, and there are researchers and practitioners that argue on both sides of the argument as to which approach is inherently best to accomplish organizational change.

When initiating change in a business, managers often encounter organizational rigidities and resistance (De Wit and Mayer 2010). The sources of resistance can be varied and multifaceted, and there has been extensive research into these sources of inertia in organizations, such as psychological, cultural and political resistance. In addition, the business can be locked-in to resources or relationships that create path dependence, like specific competences, systems or platforms, and stakeholder relationships.

The management of change is a systemic activity which requires different focus at different points in the change process, as discussed in Krüger (1996):

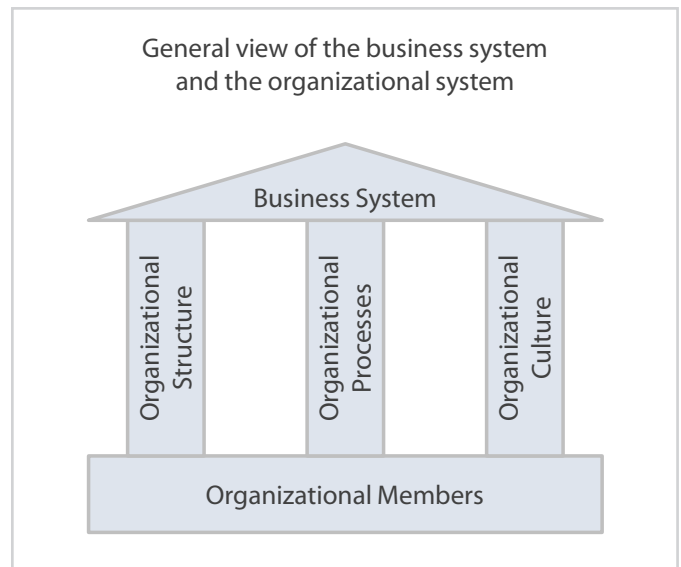


Figure 28: The business system and organizational system
Source: De Wit and Meyer (2010)

management of perceptions and beliefs, power and politics management, and issue management. These «phases» of management focus have as a goal to ensure acceptance for the change in the organization:

- Management of perceptions and beliefs aims at attitude acceptance in the organization, and is the first phase of change management. The goal is to prepare the organizational stakeholders for change through management of values and beliefs to ensure a supporting attitude towards the change.
- Power and politics management aims at behavior acceptance for the change, and is the second phase of the process. It involves using authority, incentives, and sometimes even coercion to drive the change in the organization. The goal is to create support for the change in the behavior of the organizational members, not just in the intentions and attitudes, and to create promoting agents for the change.
- Issue management relates to the more transparent and visible part of the change management process, where factual barriers to the change (cost, time and quality) is in

Example of two alternative change paths

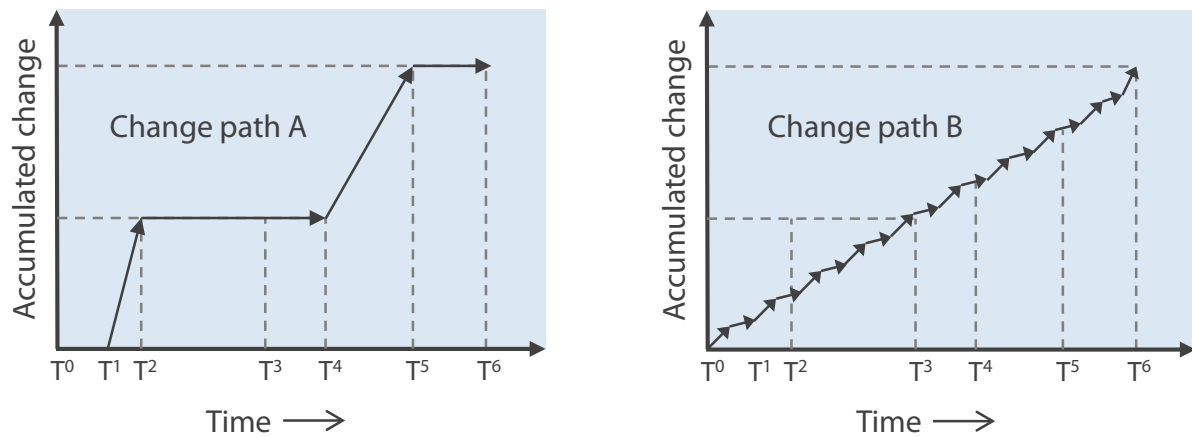


Figure 29: Examples of change paths
Source: De Wit and Meyer (2010)

focus. Processes are organized, information about the change is given to avoid personnel change barriers, and organizational members can to different degree collaborate in the change process. The change process is more controlled and supervised in this part of the process, deadlines are set up and the results of the change is measured and managed.

These three phases are also known as «unfreezing, changing, freezing», where the change is prepared, executed and solidified in the organization.

Gilbert and Bower (2002) press the need for framing the impetus in order to gain the most organizational momentum behind a change initiative. They claim that manager's perceptions influence how they respond to it; if the impetus is viewed as a threat, managers tend to overreact, but if they see it as an opportunity they are unlikely to react sufficiently. By first interpreting the impetus as a potential threat, then reframing it to be an opportunity, they claim that the reaction will be more balanced in terms of resource allocation, in addition to soliciting both «adrenaline and creativity». This framing and interpreting of the innovation impetus according to different stages of the change process, is another aspect of how change management can be applied to business model innovation.

While there are many approaches to change management, it is widely associated with and focused on the human aspect of the change that is being initiated. This division between the business system and organizational system is a key point in understanding how to innovate both the former and the latter.

Change management and business model innovation

- If we consider the business model to be a representation of the business system, business system change and business model innovation relate to the same theme: a change in how a company does business.
- Depending on the definition of business model innovation, the scope and magnitude of change can be different, but most literature focuses on major alterations to the business system when discussing business model innovation.
- If business model innovation is chiefly concerned with systemic changes to the business system, companies that attempt business model innovation will encounter resistance and organizational rigidities. The management

Dimensions of strategy and the organizational purpose

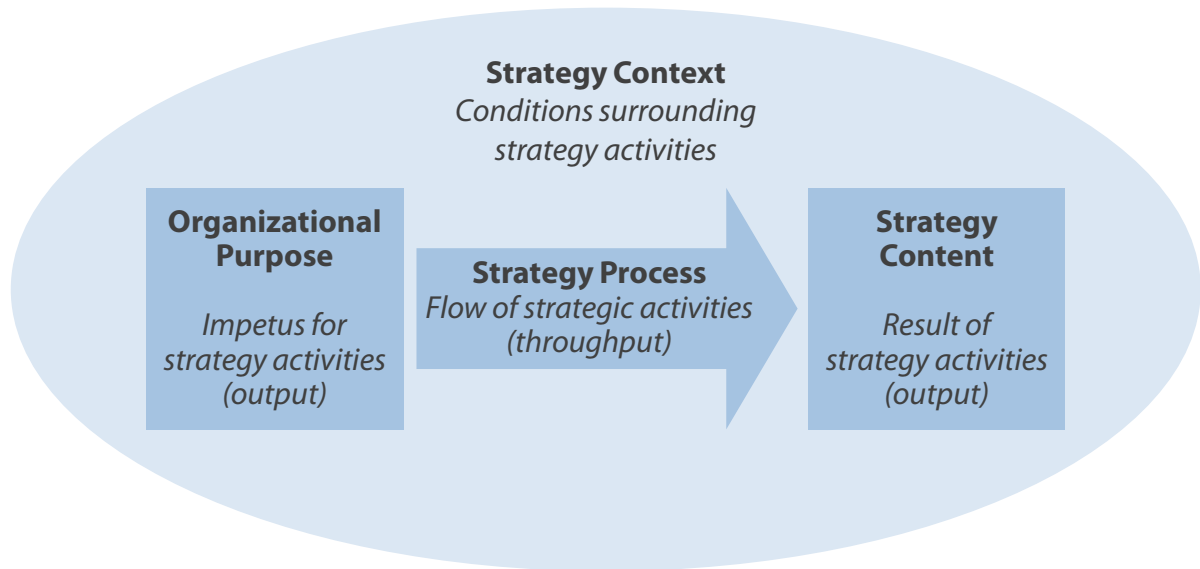


Figure 30: Dimensions of strategy
Source: De Wit and Meyer (2010)

of attitudes, behaviors and change issues then becomes instrumental in successful business model innovation, and literature on change management becomes relevant both in planning and implementing new business models.

- A key insight is that change management starts before the implementation phase. In addition, interpretation of the impetus for change can help in creating momentum behind the change initiative.

Strategy as it relates to business models

Introduction

An introductory chapter on strategy and strategic management has many similarities with that of the introduction to the business model construct. A review of the current state of research on strategy reveals many of the same issues that are found in literature on business models and business model innovation. Both terms are quite novel in academia and have yet to produce dominant paradigms. In the first chapter of the widely used

strategy textbook De Wit and Meyer (2010), where the strategy concept is introduced, the authors point out that there are strongly differing opinions on most of the key issues that relate to strategy. They claim that conflicting interpretations are common and that there exist diverging schools of thought, thus their relevance and application can be hard to validate *ex ante*.

It might then seem an arduous task to then try to link the fields of business model innovation and strategy together, given their divergent nature and lack of clear definition. As such, it becomes necessary to define how these fields will interface with each other so that research on business model innovation can be used in conjunction with strategy in handling strategic challenges.

The link between business models and strategy, like research into strategy and business models themselves, is a relationship that is still under dispute by researchers. Since both terms lack a clear definition, coupling them together to see how they interact becomes difficult. Some researchers claim that leading thinkers in the field believe that these terms are roughly the equivalent of each other (Seddon et al. 2004). Others



Figure 31: Strategy dimensions, topics and tensions
Source: De Wit and Meyer (2010)

have also investigated this relationship and found evidence on both sides of the argument. They claim that even though the relationship may be interpreted in many ways, it is important to distinguish between the two as many business model ontologies have different intentional attributes and applications from strategy, as seen in Santos et al. (2010). There is a section in their paper titled «A business *model* is not a business *strategy*», which discusses these nuances between the terms.

We have chosen the strategic dimensions proposed by De Wit and Meyer (2010) as a framework for interfacing business models and strategy. It is meta-framework that outlines four basic dimensions that can be used as a lens to view and categorize strategic issues. In this section we will attempt to connect the main dimensions of strategy with business models as described in the previous sections.

Strategy dimensions, aspects and tensions

De Wit and Meyer outline three main dimensions of strategy, and one supporting dimension that relates to strategy but originates from the organizational purpose in itself. The organizational purpose will not be

discussed in this section as it is assumed as the implicit impetus for strategy.

- **Strategy process** – The processes that create strategy. Deals with strategic thinking, formation and change.
- **Strategy content** – The strategy content itself. Deals with different levels of strategy and relations with the external environment.
- **Strategy context** – The environment that shapes and is shaped by strategy. Deals with the endogenous variables of strategy.

Looking across the key issues of strategy, and then again at the main aspects of strategy, De Wit and Meyer map out how different strategic issues fit with the different strategic aspects and dimensions. This is an attempt to create an overview of the field of strategy, by looking at the tensions that each aspect gives to the issues that are most salient (Figure 31).

Each strategy dimension i given in the leftmost part of the figure. Each dimension has further aspects

that belong to it, and each aspect a key tension that is the main issue of discussion. In total, this figure tries to give the reader a structure to the main topics and issues in strategic management.

We do not argue that this structure proposed by the authors is the only way to frame strategy, but it is a starting point to organize both thoughts and interfaces to other research fields. By coupling this structure with business models, we try to gain insight the relationship between the two constructs and further enable us to position business models vis-à-vis strategy.

Strategy dimensions

Strategy process

This dimension relates to *how* strategies are made. It is concerned with who is participating in the strategy process, when does the process occur, and how and through which tools and processes strategy is formulated, implemented, changed and managed.

Some literature on strategic processes outlines the shaping of strategy as a linear process with distinct phases and output, a rational and analytical step-by-step methodology that yields a deterministic set of strategy documents. De Wit and Mayer claim that such a linear view on the strategy process has been widely challenged in the academic community. Especially, the view that strategic processes are rational and analytical, and not significantly influenced by creative and intuitive input, has been a main arguing point from opposing researchers. Many claim that these «softer» aspects play an equally important role in formulating successful strategies. The linear and phase-like categorization of activities into analysis, formulation and implementation phases has also met resistance, where strategy researches argue that strategy can be equally non-linear, emergent and iterative.

Strategy process and business models

Viewing strategy along the process dimension, the business model can be seen to take on many roles. As business models in the most generic sense describes *how* a

business creates, delivers and captures value from its markets, strategists can use different kinds or types of models in their strategy processes for inspiration, replication and experimentation (Baden-Fuller and Morgan 2010).

When business models are used for inspiration or replication, strategists can review different companies in the competitive landscape and in other industries for different *kinds* of business models. It is also potentially valuable to look at typologies of business models where different *types* of models can be used as recipes for viable value creation. This can be used as an input to the strategy process; an inspiration or a template to be joined together with more classical strategic analysis to form a strategy and a new or replicated business model (Baden-Fuller and Morgan, 2010). Taking this role, the business model shapes strategy both as an input and an output in the process, for all businesses implicitly or explicitly employs a business model.

When business models are used for experimentation, the model takes on a more traditional approach as seen in classical economic models. The strategist can generate a range of different business models and cognitively simulate their suitability according to its alignment with the marketplace and internal aspects of the organization. Using tacit knowledge of both the external and internal environment, the strategist then can estimate which kind or type of model is best suited for his organization. In this instance, it becomes difficult to discern what comes first – the strategy formulation or the business model. This again supports the notion of the strategy process as a non-linear exercise. This is an approach we can see in popular business model literature like Osterwalder and Pigneur (2010). We can also see, in the same literature, business model innovation as a creative process, which may further the support for the importance of «softer» inputs to strategy.

Strategy content

This dimension relates to the output from strategic processes – the strategic content itself. The strategy for the organization is a dimension of strategy apart from the process which creates it.

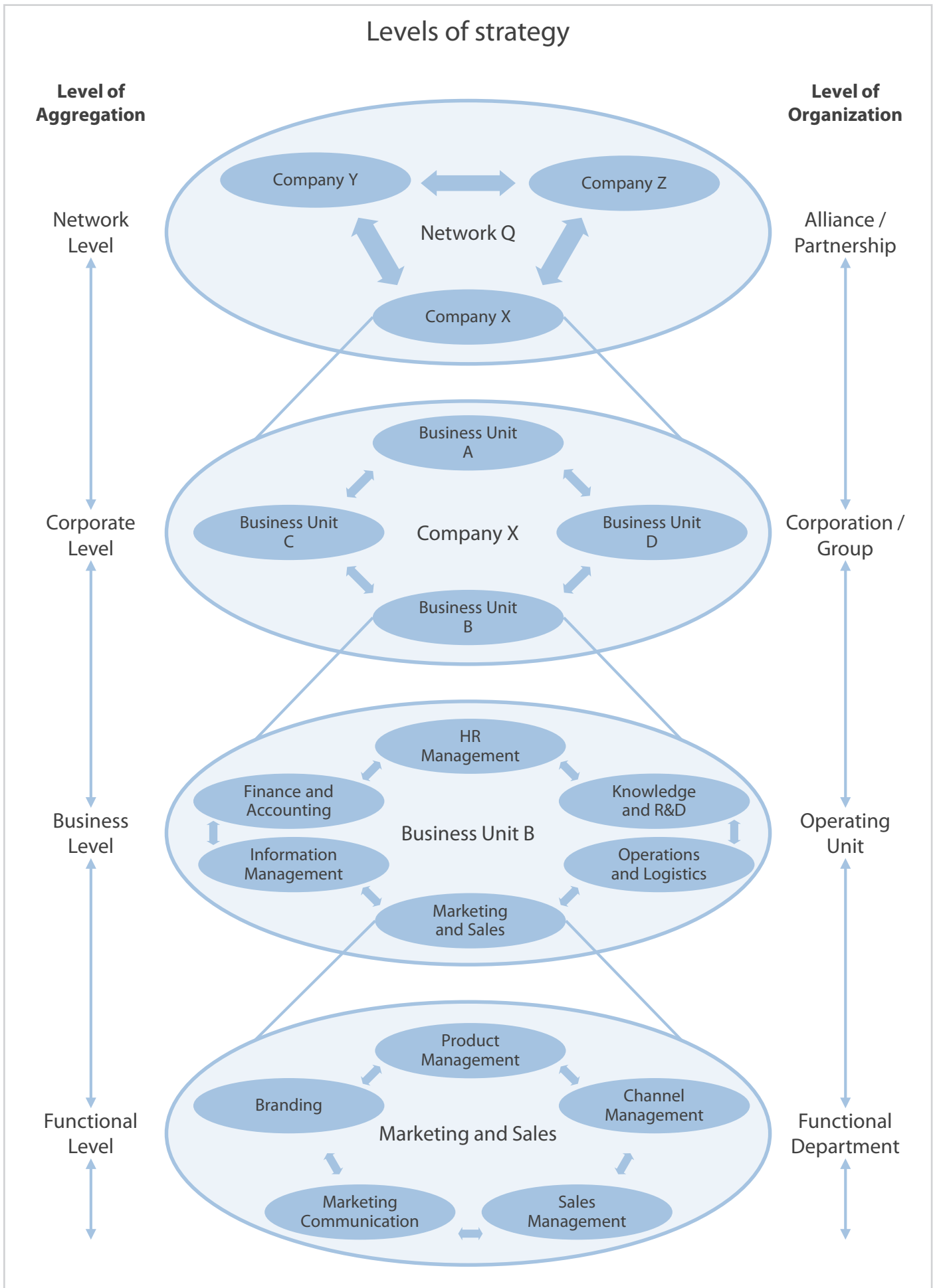


Figure 32: Levels of strategy
 Source: De Wit and Meyer (2010)

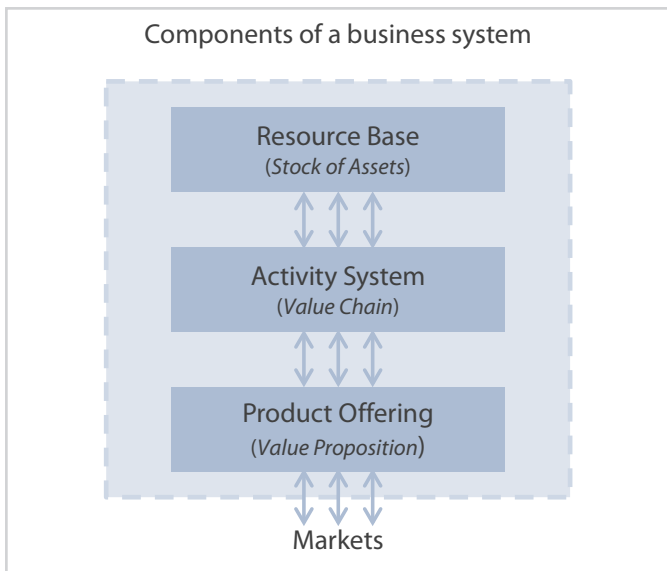


Figure 33: Components of a business system
 Source: De Wit and Meyer (2010)

De Wit and Mayer comment on the fact that most strategy researchers and practitioners agree that each strategy produced is essentially unique. As each organization has a different set of strategic positions, overall goals, processes, assets and markets that their strategy must relate to, it is not surprising that each strategy is unlike that of other organizations. That there are general traits that are common between strategies is not disputed, but in its detail each strategy is company specific and unique. Where researchers again disagree is on what principles that the strategy should adhere to, and some main topics are at the center of the dispute. These topics focus on different strategic levels which are outlined in Figure 32 on page 53.

Strategy content and business models

Strategy can relate to many levels of aggregation depending on the organizational scope, from functional to network-level strategies, but business models are most often found in research to be placed approximately at the organizational level, a so called «firm-centric» focus (Zott and Amit 2010). It is noted, however, that business models sometimes includes some aspects that spans beyond the organization itself, like activities in distribution channels and supplier logistics. We can also see from Wirtz (2011) that there has been conducted research into different business model levels as well, which map to levels in Figure 32.



Figure 34: Aspects of the strategy context
 Source: De Wit and Meyer (2010)

In finding the interface between business strategy and business models, De Wit and Meyer (2010) argue that it is the task of business strategy to design and maintain a business system that is both internally and externally aligned. By this, they mean to say that business strategy describes where a business should compete (scope), what it should compete with (value propositions), how it should create this value (activity system or value chain) and what resources or assets are necessary to perform those activities (resource base). These aspects are gathered in a system that has structure, behavior and interconnectedness, see Figure 33. When these aspects are aligned, it enables the creation of competitive advantage.

We recognize the activity system perspective on business models from Zott et al. (2010) extensive survey into a common definition of business models, and the system descriptions from our review of systems theory. A system model is a specific view on a system, and a business model can therefore be seen as a view on the business system. Different business models ontologies have different scopes on what parts of the system they represent, and to which degree it focuses on structure or behavior. In the broadest sense, business models represent a model or view on how the business system creates, delivers and captures value. Thus the business model in strategy content is a depiction of the formulated strategy that focuses on value creation, delivery

and capture in the business system.

Strategy context

The dimension that relates to the external circumstances of strategy is defined as the strategy context. In the same manner as the strategy content, the strategy context is generally agreed by researchers to be unique for every strategy, of course dependent on the level of detail. De Wit and Mayer define many aspects of strategy context, as can be seen from Figure 34. While this view, along with the other views on strategy in this chapter, is in some way generic and reductionist, it still outlines important aspects of the strategy dimensions that help guide and sort different strategic issues. While there is agreement that the strategy context is unique for each company, there is again wide disagreement on whether a context is mainly exogenous or endogenous in nature. For some firms and markets, the context under which strategy is formed and executed deals with external factors that are immutable, and adaptation and flexibility becomes key capabilities for strategic success. In other cases, companies have the ability to form their context and environment with their actions, making the context mutable and determinable – not deterministic.

How context influences strategy is a key issue in strategic management research. Clearly, the different aspects of the strategy context have different influences on the strategy. From organizational aspects to international factors, there are a wide range of different drivers that can shape and determine strategy, and conversely, where executed strategy could shape and change the context itself. In the literature sections on business model innovation we will review research where changing and creating new business models can influence industries and even create entirely new marketplaces.

Strategy context and business models

An often observed phenomenon in industry development is the convergence or divergence of business models applied in the competing organizations.

The authors of this thesis discussed the relationship between industry evolution and business models in Breiby, Wanberg et al. (2010), in which convergence and divergence of observed types of business models was an indicator of changing industry context. Convergence of business models types, revealing a dominant business model design that leverages the most competitive advantage, was often a sign of consolidation of the industry into fewer, bigger players. Conversely, business model experimentation and divergence is found in the earlier stages of an industry development, or between industry cycles when disruptive innovations changes the marketplace. In this manner, business models interface with strategy by being indicative through its presence and heterogeneity in the market context.

As argued by disruptive innovation researchers like Clayton Christensen, disruptive changes in industries are often accomplished by coupling a new, simpler and more affordable technology with a disruptive business model (Christensen and Raynor 2003). Disruptive business models are defined as models that disrupt the existing value propositions in the market by profitably delivering seemingly inferior, but more convenient and affordable products or services. This kind of business models can reshape entire industries, and are often difficult or impossible for incumbent firms to react to before it is too late to respond. The interface between business models and the strategic context of industry change can therefore also be seen through these pioneering models changing the structure of the industry itself.

In terms of the organizational context, literature on strategy and business model show one especially important interface related to that of path dependence, which is also linked to the aspects of disruptive innovations and incumbent firms mentioned above. In short, it is often very difficult for organizations to change their existing business model or allow multiple business models to co-exist in the same business unit, as new business models might undermine or cannibalize existing sales and threatened the status quo of the

business (Chesbrough 2010). In the same way, disruptive business models might feature different margins than that of the existing model, or requiring a completely different asset base, creating resistance with management to implement the new model.

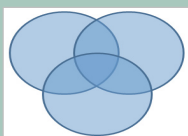
We also recognize that most business model ontologies neglect some parts of the strategy context, for instance focusing more on collaborators than competitors.

Strategy and business models in total

As we can see in the sections above, strategy and business models have a complex relationship that intertwines along many dimensions. Owing to the fact that neither field has a clear convergence on their respective scope and definitions, it can be observed the literature that they are intensely interconnected, even to the extent that they partially overlap along some dimensions. Business model innovation is intensely connected with strategic management; by definition it includes systemic changes to the way business is conducted as is therefore inseparable from strategy.

- Business models can be seen to be a strategy process input, a recipe for replication through strategic change in the organization, a creative tool in strategy formulation and even an output of the process itself.
- In some cases, a business model can be a depiction of a realized strategy, and observing business models in an industry can say something about the industry maturity.
- As there are different context levels for strategy, research has also been done on corresponding levels of business model. Thus business models can be seen to follow strategy from the industry level, through the corporate and business units, all the way to the product level.

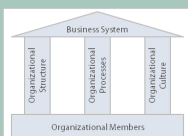
Summary and linking the fields together



Business model innovation is strongly integrated with other management disciplines like innovation management, change management and strategy. Together these fields form the necessary theoretical platform to facilitate, initiate, and implement business model innovation processes successfully. Innovation management helps in understanding how to best facilitate the innovation process through cross-functional information flows and innovation teams. Change management deals with creating change acceptance in the organization and mitigating rigidities that hinders the process. Strategy couples business model innovation with competition and markets, making sure that any initiative increases enterprise performance.



Innovation management stresses the importance of information and idea flows from both internal and external sources, and focuses on processes more than innovation results. Ideas and information should be facilitated to flow between functions, both in terms of internal information in the functions but from also their external interfaces, like marketing's connection with customers. This gives the organization the ability to sense both innovation opportunities and markets threats.



Change management is focused on changing the organizational system that supports the business model, and includes management of attitudes, behaviors and issues related to the change. A key insight is that change management is an integral part of business model innovation from the start of the process. Acceptance of the organizational change is the ultimate goal. In addition to acceptance of the change, momentum behind the change can in some cases be generated by framing the impetus first as a threat, then as an opportunity.



Strategy and business model innovation are tightly integrated. Business models can be an input, a process tool, a roadmap in strategy process or seen as an implementation of realized strategies. Different business model levels can be mapped to different strategy levels, and strategic context plays an integral part in the input to generating new business models. By analyzing existing business models in an industry, important information can be gathered one the current and future competitive landscape, as business models can be viewed as depictions of realized strategy. Business model innovation entails such systemic changes to the business that it cannot be decoupled from strategy.

Figure 35: Summary and linking the fields together

3.4. Literature summary

In this section we gather the different summaries of the academic fields together in one figure. This figure can be used to get an overview of the different fields we have looked at, or used as a starting point for those wishing to sample only parts of the literature review.

While the summary represents some of the main points presented in the sections above, it is by no means a substitution to a full reading. The coming sections in the thesis, especially the discussion, assume knowledge of the aspects covered in our literature review.

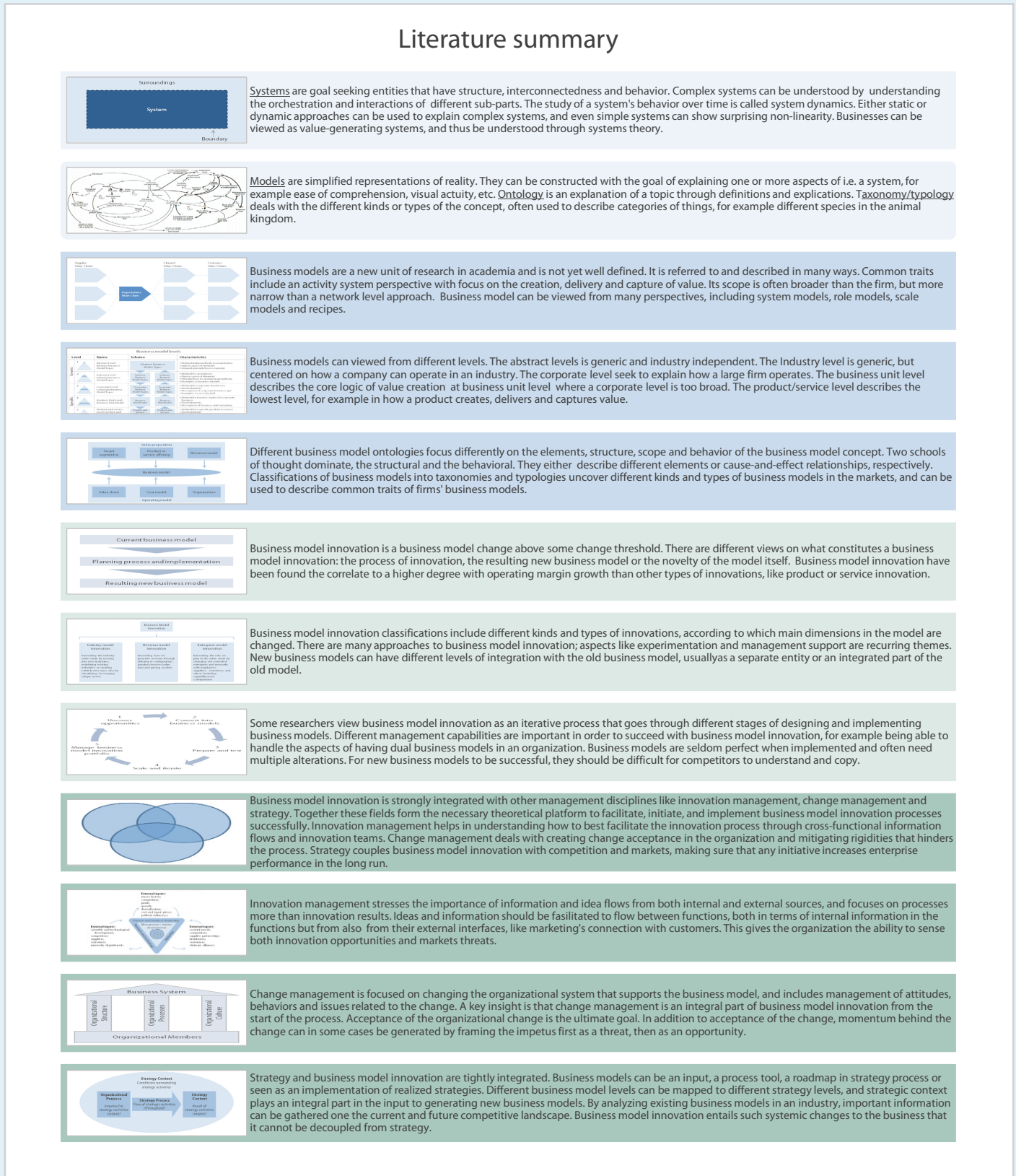


Figure 36: Literature summary

3.5. Literature findings and critique

Literature findings

In our review of the current state of affairs of business model research, we have made some observations as we have worked through a wide range of research material. We will in this section briefly note some insights we have made when working on this literature review. These insights can be seen as the authors' comments when taking a cross-sectional approach to the material.

- There is a growing interest in the topic with several articles and books being published in the recent years, and there is still a lot of novelty being introduced into the field, indicating that a lot of creative research on the topic is still being conducted.
- There seem to be an overweight of definitions focused on describing the interrelatedness of the customer value proposition, the activities needed to deliver the value proposition and a way of capturing value from these activities.
- There is a difference between a business model definition and a «business model model»; the first defines it and the second tries to model aspects of it. This distinction is important but lacking in many ontologies we researched.
- Using systems theory, we could more easily understand and compare some business model approaches, especially in terms of structure vs. behavior in models.
- Business models can be viewed from several angles and different levels of aggregation; both horizontally across firms as parts of a taxonomy of generic models, and at different levels of vertical aggregation at corporate, business unit or product/service levels.
- Business model innovation is viewed differently by researchers and can be seen both as a process and an output from a process. We believe the process focus is underestimated by many researchers.

As business models relate to other business disciplines, we have made the following observations:

- Business model innovation is closely related to the fields of strategy, change management and innovation with several topics directly related:
 - › Innovation management has moved to focus more on processes instead of the resulting innovations. A similar development might be found in future business model innovation literature, as these initiatives are so closely connected. Innovation management has normative theory that is very relevant in achieving successful business model innovation.
 - › Change management deals directly with so many areas of business model innovation that the two fields should be even more connected than we have observed so far in the literature, to ensure acceptance of new business models in the organization. The human aspects of change become especially important, since business model innovation usually entails systemic change to the business.
 - › Strategy and business model innovation is inseparable as processes and tools for managers. Used in tandem with strategic tools, business models can spur creativity and systemic thinking in strategic analysis and help create competitive advantage.

Several of the business model concepts and ontologies presented here are quite novel and therefore have a relatively short application history. Research into the effects and usefulness of business models in businesses is lacking and there are reasons to believe that the frameworks proposed so far will be revised as they have been tested further. Empirical studies on the effects of these frameworks and their overall usefulness is also lacking. This makes it difficult if not impossible to choose one framework of choice for application going forward in this thesis.

Literature critique

We conclude our literature review with a brief critique of the research field in general. These comments are based on shortcomings we have observed during our review of the literature, and create the foundation for our empirical case studies. A more explicated empirical approach strategy is outlined in the next section.

Our literature critique of current business model research is described as follows:

1. Empirical data on the application and prevalence of business model tools and concepts among practitioners are lacking. This is also the case for semantics regarding business models and business model innovation.
2. Empirical data related to the usefulness of business model ontologies when it comes to business management is also lacking. This makes it difficult to recommend one ontology over another as preferred tools in strategic processes.
3. The link between implemented business model innovations and revenue has been studied somewhat, but the actual innovation processes have been subject to less scrutiny. This is the case for both the description of actual business model innovation processes, but also normative statements regarding how to conduct successful business model innovation.
4. Business models, business model innovation and their current role in strategic processes in companies have yet to be fully mapped and understood.

We believe that the diverging and fragmented nature of the academic field of business models and business model innovation is difficult and overwhelming for practitioners to fully grasp and synthesize at this point in time. This confirms our initial hypothesis regarding the fields' current maturity and applicability, fueling the initial impetus for this thesis to begin with. The breadth and depth of new literature in the field is large and no dominating paradigms have been formed, and our goal to make successful business model innovation theory more applicable still remains relevant after reviewing the status quo of business model research.

Research questions from the literature review

After reviewing literature on business model innovation, we revisit the relevant research goals related to answering the thesis' problem statements, in order to form research questions for our case studies:

1. To understand how managers currently view business models and business model innovation, and how their strategic processes are structured.
2. To understand the current limitations and challenges of the concepts as a tool for managers in their strategic work.
3. To propose adapted or derived works of theory that aims to compensate for these limitations and challenges, and that help managers accomplish successful business model innovation.

Based on these goals and our literature critique, we propose the following empirical research questions for our sample of companies:

Research questions for companies

- How aware and knowledgeable are managers of business model concepts and tools?
- What types of innovations or strategic initiatives have they conducted that relates to the business model?
- What is the relationship between their strategic processes and business model changes?
- What are their experiences on implementing business model innovations and changes?
- To what degree is business model innovation a topic in their strategic processes?

We argue these questions illuminates the first empirical research goal, in addition to giving us some initial data on literature critique point 1 and 4. This is done by mapping management knowledge and experience of the business model concepts, business model innovation initiatives, and mapping their strategic processes as it relates to business models.

Research questions for advisory agencies

- How do the agencies define and explicate business model innovation?
- What are the applications of business models in strategy?
- What are their clients' perspectives on business models?
- What are their observations from business model innovation processes?
- What are their experiences from implementing business model innovations?

We argue these questions help us gain some insight to the first and second empirical research goals, in addition to initial data on literature critique point 1–4.

Together, these two sets of research questions in addition to a thorough discussion of the findings will help us in achieve the third and final research goal: to propose new theory that helps managers accomplish successful business model innovation.



Case studies

Case studies

4.1. Research approach

By sampling two main data sources, maritime/media companies and advisory agencies, we hope to uncover the necessary insights into the respective domains' understanding and application of business models. Together they should provide a foundation that enables a coupling between the research questions, the literature findings and the research goals, in order to synthesize and suggest new or adapted theory on how to conduct successful business model innovation.

Research questions to be applied to sampled maritime and media companies

The research goal in this sample class is to understand the status quo of knowledge of and focus on business model innovation among practitioners, in addition to understanding their current strategic processes and thinking. We have further outlined the research questions from the literature review with some relevant dimensions that we can discuss with our interviewees, and cast the questions as topics for discussion:

- Awareness and knowledge of business model concepts and tools
- Innovations and strategic initiatives related to the business model
 - › If so, what type of business model innovation, i.e. radical or incremental?
 - › What is the impetus for these activities?

- Relationship between strategic processes and business model changes
 - › Conscious or unconscious?
 - › Deliberate or emergent?
 - › Reactive or proactive?
 - › Experimental or analytical?
 - › Which tools are used in these strategies?
- Implementations of innovations and changes
 - › Integration or separation of new business units?
 - › How were these changes grounded in the organization's members?
- Business model innovations as a topic in strategic processes

Research questions to be applied to sampled advisory agencies

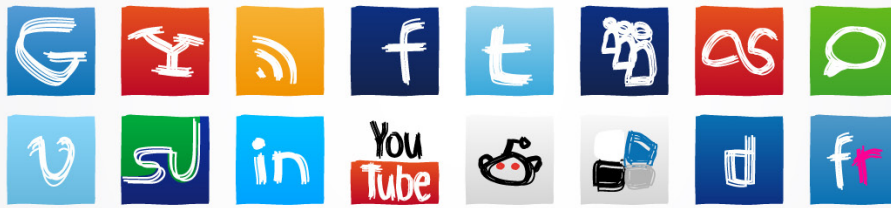
The research goal in this sample class is tap into the wealth of data gathered by advisors who have worked on a range of business model innovation cases with clients. We gather data on the agencies understanding of business model innovation, how business model innovation is used and how it is perceived by clients. In addition, we review some cases they have had to see business model innovation applied to real world challenges.

- Definitions and explications on business model innovation
 - › Which definitions are in use?
 - › How does business model innovation relate to strategy and operations?
 - › Is it a new innovation dimension, a tool or a process?
 - › Which kinds or types of business models can be said to exist?
 - › Which kinds or types of business model innovation can be said to exist?
- Applications of business models in strategy
 - › What possibilities and opportunities can be found with business model innovation?
 - › What challenges and threats can be solved with business model innovation as a tool?
- Client perceptions on business models
 - › Do clients have a general awareness and knowledge of business models?
 - › Do they actively consider it an innovation dimension or a source of competitive advantage?
 - › Do what degree is management occupied with and focused on business models and business model innovation?
 - › How are the terms used and referred to?
- Observations from business model innovation processes
 - › What are some cases where business models have been instrumental in solving challenges?
 - › Which (if any) business model tools and models were used?
 - › What is the relation between these tools and other strategic or analytical tools and processes?
 - › Is business model innovation used to:
 - Discover new opportunities for the company?
 - Verify and develop ideas and innovations?
 - Further develop the company in itself?
 - › Did the resulting actions from a business model process include:
 - The entering of new markets?
 - Changing the value chain position?
 - Changing the revenue capture mechanism?
- Experiences from implementing business model innovation

In the coming sections, we display our findings from the media industry, the maritime industry, and the advisory agencies. In conclusion we will synthesize our findings from all three sections before initiating our thesis discussion.

¶ *Comment: Interviewee replies are denoted with normal typefont, while our analyses and interpretations are denoted in blue – like this.*

4.2. The Media Industry



We interviewed three media companies to solicit their take on business model innovation:

- **Creuna AS** is a digital communication agency with presence in the Nordic countries. They use multi-channel digital media to communicate brands, and were a first-mover in Norway in becoming a fully integrated digital communication agency.
- **VG NETT** is Norway's biggest online newspaper in terms of numbers of users, and was recently merged with VG AS, one of Norway's biggest newspapers.
- **Schibsted Vekst** is an investment unit in the Schibsted AS media conglomerate, one of Europe's biggest media companies. They seek out and acquire investment opportunities in start-ups with novel and sustainable business models.



creuna®

Introduction to the company and interviewee

Creuna is a communication and media agency with 330 employees and offices across the Nordics. They have a novel value chain position in that they are one of the few agencies that offer services from initial communication concepts all the way to implementation, mostly in digital media. They were a first mover in being this kind of a full-service digital communication agency, and were interviewed on their perspectives on business model innovation in digital media.

The interviewee was CEO Gaute Engbakk – who is an NTNU alumnus and has a background from the consulting firm Accenture and the software company SAS Institute.

Brief strategic history of the company

Originally founded in 2001, Creuna was started as a web design agency. Initial growth was mainly due to one major client and about 45 people were employed at one point. When the client relationship ended, and following the dot-com bubble burst of the time, employee numbers fell to about 15 people. Between this time and leading up to 2007, the company rebuilt itself and enjoyed growth, and in 2007 there was a merger with the communication agency Cobra.

Cobra was initially focused on branding, advertising, communication and digital media. Creuna was still into web development and interaction design. The merger was a strategic move in that it created a unique position for the merged company; it now had competences in both creative communication and technological implementation. This position in the digital

media domain was unique, and many in the industry did not believe in its potential.

Interview findings

Awareness and knowledge of business model concepts and tools

Engbakk refers to research done on the types of strategic innovation available to a business, which he states can be divided into three main categories:

1. What are you selling?
2. To whom are you selling to?
3. How are you selling it?

He claims business models relate mostly to the final point, which also includes the value chain. The best players manage to innovate on all these three categories, and Creuna currently has initiatives in all three. Engbakk further elaborates on the relationship between what parts of the value chain you are positioned in and your strategic position. Some strategic positions are claimed to require a special set of activities and competences in the business system of the firm, like a product leader positioning requiring a high level of innovation and ability to capture higher margins than competitors in other positions. This position is currently being pursued by the company.

Innovations and strategic initiatives

related to the business model

In addition to the merger with Cobra, Engbakk states that Creuna has started technology divisions in lower-cost countries like the Ukraine in order to stay cost-competitive. There have been given thoughts to renew the revenue model, currently consisting of fixed price or pay by the hour, to try different forms of capturing value. An example would be for Creuna to take a cut of the client's profits linked to the work Creuna has performed, but this pricing scheme has been difficult to implement as it is hard to link particular revenue to one specific initiative.

In terms of the impetus for these strategic moves, Engbakk states two main strategic reasons for the merger and the new technology division, respectively:

- **Market opportunity:** Creuna saw that the market was heading in a «digital direction» and that being a full-service digital agency would be value-adding in the form of being able to deliver cross disciplinary services. Being a first mover could give an advantage in terms of experience and ability to hold a product leader position.
- **Pricing and capacity:** Some parts of the technology implementation are commodity based, in that there is more implementation than innovation in the processes. Considering the competition from low-cost countries on this kind of technological implementations, Creuna saw the need to create a division in a country with comparable costs. In addition, more technology capacity was needed to support the Nordic operations.

Relationship between strategic processes and business model changes

Engbakk has a managerial focus predominantly involved with strategic positioning and goal management. Creuna has a 3-year plan where the goal is to have a product leadership position in their markets

(including financial, market, HR and organizational goals). This position is associated with leading edge innovation and product development. To be able to reach this goal, Engbakk says he utilizes a goal management system with a level of granularity that enables each employee to see his or hers own goals in relation to the top-level goal of becoming a product leader. Forming a clear vision and grounding it among the workers is also important in order to succeed with this transition.

«If you asked the guy mopping floors at NASA in 1968 what he did for a living he wouldn't answer that he was cleaning floors, he would say we was working to put a man to the moon».

¶ *Creuna seems most focused on strategic processes that support and refine the desired road map towards becoming a product leader. If we consider this strategic effort as a business model change in that it may require system-wide changes to be accomplished, Creuna can be said to have a conscious and deliberate approach. Their proactive and top-down move in becoming a first-mover in digital marketing and media was perhaps an experiment in itself, but the rationale seems analytical in its goal to pursue a market opportunity. Clear positioning and goal management are the main tools used in the implementation phase of this strategic initiative.*

Implementations of innovations and changes

In terms of the merger between Creuna and Cobra, the companies joined together to form the new business in the merged company. In the strategic initiatives in becoming a product leader, Engbakk says the company initiated a planning collaborative with its employees where goals were «voted for» in workshops together with management. If a goal had too many «dislikes» it was taken out or altered. Employees were also encouraged to help identify the changes and actions needed to reach the goals. To follow up, a new incentive structure was put in place to measure and give feedback to

employees according to a set of criteria, among others value, people development and quality of their work. Performance is then linked directly to compensation; the best performers will reap the highest rewards. Creuna's strategic direction of an integrated digital marketing company is seen trying to be copied among its competitors according to Engbakk, but the successful transition is difficult and something he thinks few players will manage.

Business model innovations as a topic in strategic processes

Engbakk states that it is difficult to separate out one strategic tool from another in the process of planning the future of the company, because tacit information, market analysis and common sense plays an integrated role in the decision processes. However, a clear goal for Creuna, he says, is to focus more on the larger companies and establish long term customer relationships with them. «We want our 20 largest customers to stand for 80% of our revenues within 2014», he states. He further states that un-organic growth is also a possibility in the future, dependent on the progression and viability of the product leader strategy.

¶ *Though not conclusive, it seems that the biggest business model change for Creuna was initiated through recognizing a market opportunity and deciding to follow it through a drastic change to the business model. Thus business model innovation was implicitly employed to pursue the opportunity.*

¶ *In terms of sequencing, we recognize that there was an initial focus on the business model change (the merger, a radical change), which later diminished in its scope of change towards less drastic business system changes (positioning and new technological divisions, moderate changes) and implementing management systems (goal management, a sustaining change). This sequencing dictates the dynamics of change for the company in its evolving business system.*

¶ *The open-mindedness towards future opportunities in un-organic growth indicates that a business model innovation is an innovation dimension actively considered by Creuna management.*

Concluding remarks on findings

Creuna is an interesting case in that it has had both radical and sustaining changes to its business model in recent years, while management has had a very conscious and deliberate approach to the process. The dynamic of change in the company was supported by change management initiatives like collaborative planning and goal granularity, so that each employee understands its role in the strategy of becoming a «product leader».

This case is illustrative through the proactive nature that management has taken in the effort to gain advantages by being first to change its business to seize a market opportunity. By becoming an integrated communication and digital marketing service provider, Creuna has been able to deliver value to their customers, which is supported by the fact that 88% of their projects are now cross-disciplinary. At the same time it is highlighted that the transition to the new business model is a difficult task, but Creuna believes that those who can manage this successfully will gain a competitive advantage in their market.



Introduction to the company and interviewee

Verdens Gang (VG) is one of Norway's biggest newspapers, with circulation over 200 000 copies a day and headquarters in Oslo. They also manage VG Nett, the biggest Norwegian online newspaper, previously through the fully owned subsidiary company VG Multimedia, but the entities are now merged together. Their revenues in 2010 totaled 1909 MNOK.

The interviewee was head of business development Heidrun Reisæter. She has been at VG for two years, and started as product manager for commercial services before moving to her current position. Before joining VG she has worked internationally for Schibsted.

Brief strategic history of the company

When VG established its online newspaper service, it was initiated as a separate business unit apart from the traditional paper publishing. They employed a dual approach, where the new business unit had complete autonomy to develop, publish and manage the online newspaper even though they both used the VG brand. With time, the new unit grew to rival its sibling company from the paper domain in size and profit margins, even though they were separated in their daily operations.

An initiative recently finished that integrated the two units, 15 years after the start of VG Multimedia alongside VG (paper).

In addition, VG has pursued ventures into the mobile online market through the establishment of subsidiary VG Mobil, and founded social communities like «Nettby». They have also started an online

tender web site for professional services «www.mittanbud.no», and started membership clubs like «Vektklubb.no» that feature membership fees.

Interview findings

Awareness and knowledge of business model concepts and tools

Reisæter mentions that she is aware of the business model approach of Osterwalder and Pigneur (2010), but has not extensive knowledge of the field. As a business developer, she and her team is responsible for developing new revenue streams to the company, both through innovation and acquisitions. In addition, they are often contacted by entrepreneurs who have novel ideas and initiatives they wish to collaborate on.

As part of having some students visiting on her team, she developed a process document with a few selected theories from business academia to aid in understanding which initiatives her team should pursue or not and how they should produce a basis for investment decisions. Beyond this, the team does not yet use any specific theories or models as a standard part of a process.

When asked about business models, Reisæter states that the main business model employed in VG Nett is «advertising», but that they also want to increase the share of user payment.

¶ VG refers to revenue capture mechanism as the determinant for the type of business model employed, an interpretation of the concept which probably is quite common.

Innovations and strategic initiatives related to the business model

Two major initiatives of innovation with business model implications can be observed at VG, according to Reisæter. The first was the founding of VG Multimedia as a separate unit, pursuing an opportunity in the digital domain of editorial publishing. The second is the smaller projects started to monetize on the volume of online and paper readers.

In terms of the first initiative, the opportunity surfaced with the advent of the Internet, and a decision was made to start a separate unit with the intention of offering online editorial content. Reisæter is uncertain as to the details of the decision process that settled on separation instead of integration of the new unit, but claims there has been a range of benefits to this approach. Firstly, the new unit had the freedom to pursue growth in the online space without regarding cannibalization of their newspaper sales. Secondly, the unit could build their capabilities around online publishing, including a culture of fast journalism that was radically different from that of the paper editorial. This unit was a radical change to the old business model of VG as a corporation.

The second initiative is the range of smaller innovation projects that have been started at VG and VG Multimedia, exemplified here briefly:

- The creation of an online weight club «Vektklubb.no» co-hosted with VG Nett, with a paid membership policy.
- Publishing on new tablet computer devices through an application called «VG+», featuring a mix of an online and paper experience.
- Launching a separate web platform for connecting service providers like car repair shops with customers through a tender approach, «www.mittanbud.no».
- Founding another multimedia subsidiary company called «VG Mobil», which focuses on online editorial content for smartphones.

Reisæter's team is in part responsible for this kind of innovation to the product portfolio.

«We hunt for the money which doesn't come from advertisement».

¶ *These initiatives have a common denominator in that they aim to monetize on the large user traffic generated from running Norway's largest online newspaper. The goal of the efforts seems to be more focused on new revenue streams than new value propositions.*

¶ *VG Multimedia can be seen as a new business model, and due to the radical difference compared to the old business model, a deliberate choice was made to separate it. The other projects' degree of innovation is more difficult to assess, but they are all indicative of a corporate culture intent on experimentation.*

Relationship between strategic processes and business model changes

Reisæter's team employs some analytical tools in their planning processes, but states that she and her team rely more on tacit knowledge of the industry when planning new projects.

In terms of their focus, VG has a history of both minor and major projects that can be said to be innovative. Reisæter states that there was a strong desire in VG to monetize on existing operations and user volumes through new projects that had different revenue models than advertisement.

As to the deliberate or emergent nature of their innovation efforts, there are two main points that Reisæter mentions. The first category involves VG's approach to both online newspapers and mobile content through their subsidiary companies. These brand-extended startups illustrate an intention to seize new growth areas in the online and mobile space, respectively. The second category can be said to be their experimental value-add services and product extensions, which seem to have a more experimental nature and attempts a trial-and-error approach. When

looking at VGs innovation efforts in general, Reisæter claims that VG has been known for its no-nonsense approach to innovation. She states that there has been a culture of «getting it out there», and rather adjust a product after launch than analyzing every possible contingency before launch.

¶ *The two categories of projects make up the portfolio of business model innovation initiatives in VG, which is both deliberate and emergent in nature. In the same manner, they are also both reactive and proactive at the same time. They were proactive in their efforts to create an online newspaper, but reactive in their value-add services where they responded to declining profits in their existing operations.*

¶ *This approach seems to indicate that VG has a conscious approach to innovating their business model.*

Implementations of innovations and changes

Reisæter has many examples of innovation projects that have started outside VG, like VG Multimedia and VG Mobil, in addition to several other projects like www.mittanbud.no. The decision was to start these units as separate entities in order to give them creative freedom, the ability to focus on their core capabilities and to develop a culture away from the parent organization. While Reisæter was not a part of these decisions herself, it was to her knowledge no initial thoughts on if and when the units should be integrated back into VG.

As VG Multimedia grew, Reisæter states that situations would occur where there could be two journalists from VG at the same event; one from the paper version and one from online. It became more and more apparent that there would be benefits in integrating the two companies.

For the preparation of the re-integration of VG and VG Multimedia, Reisæter states that they are aware of the culture differences between the units, and almost half a year was spent in talking and planning before the integration was set in motion. Another newspaper in the Schibsted system, the Swedish

Aftonbladet, has had a similar process earlier so VG could draw on the experiences they had made. While VG and VG Nett companies were separate, they were not completely autonomous as they did have common ownership.

¶ *The initial separation of the two companies, and later the reintegration, is an illustrative example of an emergent and phased approach to new business model units.*

Business model innovations

as a topic in strategic processes

Ræiseter states that there is a high level of focus on generating new revenue streams at VG. She says VG Nett has conducted internal workshops with both editorial and commercial managers in the company, and set goal as to how much money should be generated from user payments. She further says that the company has not yet been able to create more [revenue generating] initiatives like «Vektclubb.no», and that she would have liked to see this happen.

¶ *In VGs strategic processes there seems to be a predominantly revenue-focused orientation, where revenue goals are set and ideas are generated as to how to achieve these goals. There seems to be less focus on a systematic review of how to create, deliver or capture value.*

Concluding remarks on findings

Combining some observations across VG, we can see an interesting pattern emerge:

- VG seems to have fostered a culture where experimentation is encouraged in their innovation efforts. There is more focus on trial-and-error than in analytically trying to establish success criteria *ex ante*.
- There seems to be few standardized processes and management tools in place, instead relying on tacit knowledge of the businesses and actively seeking out opportunities.
- In many of the major innovation initiatives, VG has decided to start separate units outside the parent organization – while exhibiting control through ownership.
- The impetus for many of the projects has been both opportunities and threats, but most of all the need to monetize on existing resources.

It can also be noted that VG operates in one industry that has great maturity (paper newspapers), in another that is younger but not nascent (online newspapers), and has projects in newly established markets as well (rich mobile newspaper, service editorials). This portfolio of activities has both synergy and management aspects which are interesting to note.

SCHIBSTED VEKST AS

Introduction to the company and interviewee

Schibsted Vekst is a company founded to identify, invest in and develop new online business ventures. It is owned by Norwegian newspaper VG (40%), online marketplace Finn (40%) and by media alliance Media Norge (10%), all of which are partially or fully owned by Scandinavian media conglomerate Schibsted ASA, which holds 10% of equity. It was formed in January 2011 and currently has three employees. The company identifies start-ups and interesting business models which they can market through Schibsted's broad media presence, with to goal scale the ventures up and possibly launch them internationally.

The interviewee was Investment Manager Rune Røsten, which has been CEO of online newspaper Dagbladet.no and online web community Nettby Community AS before being on the founding team of Schibsted Vekst.

Brief strategic history of the company

Røsten states that Schibsted ASA has traditionally not invested in startups, but rather bought larger companies or organically started new ventures. Schibsted Vekst was based on a model from similar venture Schibsted Tillväxtmedier, from Schibsted's Swedish branch. This venture consists of 10-15 people with a portfolio of 15-16 companies, and was started in the early 2000s to capitalize on the excess ad-capacity of Swedish online newspaper Aftonbladet.

Interview findings

Awareness and knowledge of business model concepts and tools

Schibsted Vekst is a newly established company, so frameworks, systems and reporting structures are not fully in place yet according to Røsten. He continues by noting that they are seeking ways to visualize the business model aspect when analyzing potential investment prospects, and also how to report these findings to the board. They have yet to find and employ such tools.

Innovations and strategic initiatives related to the business model

Schibsted ASA and its subsidiary companies have a long track record of trying out new business models and starting new ventures, according to Røsten. For example, online marketplace finn.no which sprang out of Schibsted-owned newspaper Aftenposten has become an enormous success. Other initiatives include the search engine Sesam, where hundreds of millions NOK were spent before the project was terminated. This failure has led to the conclusion that Schibsted should seek opportunities and new business models outside the conglomerate, while each subsidiary company simultaneously seeks to develop initiatives that fit into their existing activities. Røsten further notes that they are focusing on companies that have different revenue models than what Schibsted ASA companies have today, which are mainly based on advertisement.

The possibility of bundling multiple new ventures together to increase their potential, and to see the new ventures' potential synergy with existing activities,

is also aspects Røsten say they are actively reviewing. The effects of marketing and the potential for internationalization are key factors when analyzing prospects and shareholder agreements, which usually involve an option for buyout in order to be able to rapidly scale up and internationalize if the business model is proven viable.

¶ *Schibsted ASA have explored a range of strategic initiatives related to new ventures, and are using Schibsted Vekst as a market seeking entity in order to find new business opportunities. This is heavily based on their marketing capacity as a media conglomerate, which requires the selected business models to scale accordingly to their media exposure.*

Relationship between strategic processes and business model changes

Røsten states that the choice of creating Schibsted Vekst was based on the success of Schibsted Tillväxtmedier in Sweden. Tillväxtmedier was in turn created in order to exploit the excess capacity in ad-space.

Røsten further hopes that they through Schibsted Vekst will be able to spot possibilities like that of finn.no, and convince other business units and corporate headquarters that these kinds of initiatives are worth testing. Røsten further elaborates on their growing focus on experimentation. It is better to launch a test project for a few months and see if it works rather than relying on extensive feasibility analysis conducted beforehand. This experimental approach is often less expensive and can provide entrepreneurs with convincing arguments about joining forces with Schibsted. Røsten continues by noting that very few business ideas are fully developed from start and often need revisions. An example is online coupon service Groupon which has a very different concept today than it had when it started out. This experimentation is easier to do in the digital economy because of relatively low startup costs compared to physical products or services. Even though Schibsted Vekst is a separate entity, there is close cooperation with business developers at

the M&A section at the corporate level and with other business units.

¶ *The initial founding of Tilvekstmedier which subsequently led to Schibsted Vekst can be seen as a resource driven choice, and a deliberate action to leverage available assets.*

¶ *Experimentation, revision/adaptation of new models and ownership are noted as important success criteria.*

Implementations of innovations and changes

The choice of establishing Schibsted Vekst as a separate entity was done in order to provide autonomy in their activities, and to overcome internal obstacles in finding new business models that may compete with the existing. Many of the operational parts of Schibsted also have intense operational pressure and cost-focus, and are less inclined to support initiatives like business model innovation. To secure access to marketing and advertising space for the ventures in their portfolio, the owner structure was designed with marketing channel buy-in. Røsten say that this was a deliberate move, so when Schibsted Vekst presents new ideas to its owners at finn.no, they would be more willing to back them up with marketing initiatives, and financial or technical support. Schibsted Vekst has ownership agreements with the acquired ventures to buy full ownership of the stock, if it so desires.

«In many of the existing companies in Schibsted, there are clear profitability demands and focus on efficiency and cost-cutting. In Schibsted Vekst we focus on growth, not costs».

¶ *Schibsted points to an especially interesting notion with the importance of autonomy and ownership in finding and supporting new business models.*

Business model innovations

as a topic in strategic processes

Røsten states that they especially consider business model innovations in their strategic processes, in that they actively seek out possible business models in many different markets and forums. In terms of ventures they find that could be an investment opportunity, they look for complementary aspects with existing business models in the Schibsted system, in addition to considering the value of bundling one or more of these new business models together. In terms of business models they find that could be potential threats, it becomes considerably more problematic to consider an acquisition.

¶ *By using Schibsted Vekst to actively scan different arenas for new business models, they also implicitly provide Schibsted ASA with a sensing tool for potential threats as well. We also note the problematic nature of new business models that are disruptive to the old business models in an organization.*

Concluding remarks

The Schibsted Vekst case is an illustrative case in two main ways. Firstly, it is by its very nature a business model innovation tool for the parent corporation Schibsted. Secondly, it considers itself a business model innovation portfolio company in its investing in new and complementary models. This is a form of open innovation that enables the corporation to both find new business models and sense threats in the marketplace at an early stage.

4.3. The Maritime Industry



We interviewed three maritime companies to solicit their take on business model innovation:

- **Rolls-Royce Marine** delivers maritime equipment systems around the world, and is a subsidiary of Rolls-Royce Plc.
- **STX OSV AS** builds offshore ships and specialized vessels used in oil and gas exploration. They are partially owned by STX Europe, the biggest shipbuilding group in Europe.
- **Ulstein Group ASA** is a holding company with several subsidiaries, with activities in shipbuilding, ship design, power and control, repair and maintenance, and shipping.



Rolls-Royce

Introduction to the company and interviewee

Rolls-Royce Marine is a subsidiary of Rolls-Royce Plc. and delivers design, development, supply and support of products and systems for commercial and naval customers around the world. They focus on power, propulsion and motor control solutions for ships, and have three main business units: merchant, naval and offshore. In 2010 they had equipment on over 30 000 vessels through 2500 customers, and employed 9000 people with a presence in 34 countries.

The interviewee was Trond Leira, which is Head of Engineering Business Management and Improvement at Rolls-Royce Marine.

Brief strategic history of the company

Rolls-Royce Marine history goes back to 1849 through the activities of its acquired companies. More recently, Rolls-Royce has in the last 10-15 years grown in the marine sector, an initiative based on the vulnerability from being in just one industry, which historically had been in aeronautical propulsion. In 1999, Rolls-Royce made an acquisition of marine player Vickers, which itself recently had acquired a range of smaller Nordic marine companies, like some parts of Ulstein and other marine equipment manufacturers.

Leira states that Rolls-Royce had air and gas turbines from aeronautical markets that it had intentions of introducing to the marine sector, but it became more difficult than anticipated. The sector did experience high levels of growth and the acquired companies had surprisingly good products, which together gave Rolls-Royce both revenue streams and diversification

benefits. The current strategic trajectory is to deliver mission critical equipment as core components in airplanes, ships, power plants and off-shore applications.

Interview findings

Awareness and knowledge of business model concepts and tools

When talking about examples from different revenue models that can be applied when selling engines in the aeronautics industry, Leira states that he is certain that the revenue models of products in the marine industry is going to change. He claims that «uptime» is a crucial and costly part of ship operations, and that a change in the way companies charge for and guarantees operational availability is likely to happen in the industry. Through the interview he also talks on issues of strategic acquisitions, diversification, outsourcing, core products and product pull-through, and possible drivers and inhibitors of changing the way you get paid for products and services. The top-level strategy for the company is issued from corporate headquarters in the UK, but in reviewing the interfaces between the sectors, a dialogue is initiated between the corporate teams and marine sector management. The strategy has been consistent over a longer time period, Leira states.

¶ *A wide range of business model jargon is observed in the interview, and Rolls-Royce clearly has had a range of strategic initiatives that has had major effect on the business. Due to different levels of management, it is unclear to what degree top-level strategists in*

the company are aware of and apply business model concepts and tools. Leira can be seen to use many terms that implicitly relate to business model change, for example to move revenue model capture from product to possible «uptime» as a service.

Innovations and strategic initiatives related to the business model

According to Leira, Rolls-Royce has been engaged in a range of strategic initiatives in the last 10 years. The move for Rolls-Royce to enter the marine sector in itself is one of the major moves, and provides the backdrop for a range of subsequent acquisitions and innovation efforts. The core of Rolls-Royce strategy is as mentioned to deliver mission critical products in core components and systems, with lifetime support of the equipment. Leira states that due to globalization and low cost competition on commodity parts of the value chain, Rolls-Royce has in the marine section chosen to focus on the parts of the value chain that is not commoditized, in addition to managing an increasingly global supply chain. He further mentions both organic and un-organic growth as possible strategic avenues, in addition to joint ventures with other key players. In terms of the rationale behind these efforts, Leira claims that it is a corporate goal to double revenues in the next 10 years.

¶ *Rolls-Royce Marine can be seen to actively pursue a range of different strategic initiatives that implies different degrees of change to the business. Their focus on revenue growth seems to lead them to shift their business in the value chain, outsourcing the commoditized parts and integrating along the lines of systems, integration and design.*

¶ *We can see that the strategy and acquisitions have been focused around delivering systems and sub-systems, including lifetime service. Systems inherently enable a degree of lock-in through service agreements and special parts, and Rolls-Royce is attempting to build up an international network these of services and equipment partners.*

¶ *By building the capability to deliver systems and system service worldwide, it might later pave the way for further business model changes, such as selling system up-time or other new ways of delivering and capturing value.*

Relationship between strategic processes and business model changes

Leira has some key observations on strategic processes at Rolls-Royce, most notably on some of the inputs that are considered. First of all, corporate headquarters rolls out 10, 5, 3 and one-year strategic plans. In this planning process, Leira claims that a cross-sectional, cross-product view is taken. The goal was to double revenues in the next 10 years, and then each sector was reviewed as to how this could be achieved. The process also includes looking at megatrends in the markets, such as environmental requirements, new materials, arctic activities, etc. We also have groups of people working on ships of the future; what will things look like in the years 2020-2030? Leira says that there is «a command and control culture» in the company, which is probably inherited from the English parent company. This culture is something that is challenged in some areas, such as innovation and business development.

¶ *Rolls-Royce seems to employ a very deliberate strategy with financial performance as the key goal. By considering trends in the markets and having a long-term perspective, in addition to having workgroups on future scenarios, they employ a proactive approach which is inherently analytical.*

¶ *It is more difficult to estimate to what degree they are conscious of business model innovation as an innovation dimension, like reviewing how a systemic change in the way they create, deliver or capture value can help them achieve their goals. Their approach in selling systems of products and services could later perhaps be leveraged to enable this systemic change, but to what degree this is a conscious strategy is unknown.*

Implementations of innovations and changes

Leira states that Rolls-Royce Marine has conducted several acquisitions and a joint venture. Rolls-Royce has also recently purchased a majority of shares in Odim, a major Norwegian manufacturer of equipment for the marine sector. According to Leira, Odim has recently been fully integrated into the offshore segment.

In their efforts to deliver complete systems to their customers, Leira says that there is a range of acquisitions and growth projects related to accomplishing this goal on a global scale. There are hard challenges related to coordination and quality in this effort, and in making the manufacturers understand that their products are parts of systems. Leira claims that this global presence they are building will be difficult to imitate, and may create a competitive advantage.

«Going from a range of factories with competences, spread all around, from selling spare parts in the aftermarket, to selling services and up-time – that is a quantum leap».

¶ *Rolls-Royce is a complex entity with a range of initiatives across many sectors, and it becomes difficult to map how different strategic choices relate to possible business model changes and their implementations. Considering their systems approach, Rolls-Royce at least seems to be committed to moving their product offering towards a more holistic and service-oriented value proposition.*

Business model innovations as a topic in strategic processes

There was little information in the interview on this topic.

¶ *We do recognize that Rolls-Royce has made some strategic decisions that have implications for their business model in many ways, especially in their efforts to build a global presence, but to what degree this is deliberate or not is unknown as these type of processes are corporate-specific.*

Concluding remarks on findings

The Rolls-Royce case is an interesting take on how an industrial conglomerate organizes its activities and conducts major strategic projects that have ramifications for the business in total. As a metaphor, a machine bureaucracy could be applied: a central corporate strategic decision process guides its divisions according to long-range goals, leaving mostly short-term tactics in the hands of the lower divisions. With other observations from this case, Rolls-Royce Marine raises interesting issues on the topic of business model innovation in large corporations.

The case also casts an interesting light on the challenges of changing the business model from products to systems, and perhaps ultimately to services or «up-time». On the customer side, we see resistance in that the value proposition of delivering global «up-time», as the complexity of it might seem unfeasible, and thus unbelievable. On the operational side, the challenge of actually creating the organization that understands and delivers its value as service instead of products on a global scale is by far an easy task.



Introduction to the company and interviewee

STX OSV AS is a subsidiary of STX OSV Holdings Ltd, listed on the Singapore stock exchange. STX Europe AS, formerly known as Aker Yards ASA which again is a subsidiary of South Korean STX Corporation, is the main shareholder in STX OSV. STX Europe is the largest shipbuilding group in Europe and the fourth largest in the world. STX OSV was noted on the Singapore stock exchange as of November last year, and employs 9000 people globally. They build ships, especially offshore and specialized vessels used in oil and gas exploration, through five yards in Norway, two in Romania, one in Brazil and one in Vietnam.

The interviewee was Stig Bjørkedal, head of business development and strategy at STX OSV. He is educated as ship's engineer and holds a master degree from the Norwegian School of Management, and has previous experience from a range of maritime positions and companies.

Brief strategic history of the company

Norwegian industry entrepreneur Kjell Inge Røkke founded what would become Aker Yards in the 1990s, through a range of acquisitions in Norway, Finland, Germany and the USA. The yards were in different maritime sectors, including the offshore, merchant and cruise sectors. Aker Yards was noted on the stock exchange as a public company, excluding the US operation. In 2008, STX Europe bought Aker Yards, and re-noted the offshore parts of the company on the Singapore stock exchange as STX OSV. The merchant part of Aker Yards was sold to Russian players, leaving the offshore and cruise operations in STX.

As a note to the history of the company, Bjørkedal notes three major strategic moves that has shaped today's situation. The first occurred during the early 1990s when a wave of consolidation in the Norwegian shipyards consumed many of the once family-owned yards along the Norwegian coastline into few, major players. The second was the choice to move labor-intensive commodity steel welding to low cost countries in Eastern Europe, and using the Norwegian yards to complete the steel hulls delivered from these countries. The third was unique to Aker Yards, which included a decision to control the value chain by acquiring a total of two yards in Eastern Europe. This was very different from the competition, which has chosen to source these kinds of hulls without direct ownership.

Interview findings

Awareness and knowledge of business model concepts and tools

Bjørkedal states that they do not utilize very advanced processes and tools in their planning, and that a more simple approach often is better. In looking at market opportunities, they do use some analytical tools. Further, he says that to be able to seize opportunities in light of the globalization of the industry, it becomes important to build business models and processes that can catch market signals and create value for the customer. In their strategic processes, he claims they look at the holistic view of operations and ask the «big questions», even those that imply large structural changes to the business model.

¶ While Bjørkedal does not explicitly mention any formal models or processes, he uses the business model innovation term throughout the interview. He refers to the «building» of models (generation), and that business models can have structural changes (implies structural elements). He also uses the term in a holistic and «big picture» way, aligned with findings in theory on the systemic nature of the business model.

Innovations and strategic initiatives related to the business model

Bjørkedal mentions the early history of the company which consisted of a range of acquisitions in a different set of marine sectors. He further states the decision in the mid-1990s to source labor intensive steel hull production from lower cost countries, and later to acquire a yard in Eastern Europe in order to control the value chain. In 2001, an in-house design office was established using existing competences, which again enabled more control of which equipment and services to be used on the ships. He claims that in doing these strategic moves, a large part of the value chain was controlled, giving a range of benefits, including better quality control, production flexibility, and the ability to design ships to specification from concept to completion. In addition, he says the cost base becomes more flexible, and it enables further organic growth.

STX OSV also has its own subsidiaries, like a dedicated electro-engineering company that delivers services to ship constructions. According to Bjørkedal, this is a further initiative to control the value chain which can enable the company to innovate on what kind of value it delivers to its customers, and how they do so. He states that in this manner, STX OSV solves customers' problems, and is not just a builder of ships.

¶ We see that STX OSV has a range of initiatives both backwards and forwards in their value chain. Through acquisitions, outsourcing and subsidiary companies, they attempt to deliver value by controlling quality and giving their customers flexibility in the purchasing process.

¶ By having control of the value chain, they are enabled to think systemically and holistically as to how they create and deliver value to their customers. This opens up the possibility for both radical and incremental business model changes.

Relationship between strategic processes and business model changes

Bjørkedal states that there is a corporate culture that allows failures, in that it is acceptable to try something and be wrong. He points out that they attempt to have an open and direct dialog between employees and management, and a flat structure in terms of decision processes, and hands-on management. He claims this enables STX OSV to solicit and find and process good ideas fast, and get them to market quickly.

Some of the strategic initiatives have been very deliberate in their execution, according to Bjørkedal. The choice to increasingly control the value chain from hull production to delivery was made to be able to more easily seize business opportunities, among other things. He further states that the more «heavy» projects and major turnarounds are backed by strategic analysis that is firmly grounded in top management.

Lastly, Bjørkedal mentions their intimate relationships with their customers, and the insights gained from these relations as an important input to their strategic processes.

¶ STX OSV seems to have a very conscious approach in their strategic processes when it comes to both experimentation and analysis. In the smaller innovation initiatives, there seems to be an inclination to experiment and use an emergent approach in order to learn and adapt what works best. In the more systemic, larger projects or changes, top-level strategic management is heavily grounded in the process and the approach seems much more analytical and deliberate. This is probably due to the higher risk associated with big business changes in capital-intensive industries.

¶ *Some initiatives, like the outsourcing of steel hull production to lower-cost countries, seems reactive in that it probably cost less at one point and the decision was made to stop this activity in-house. Their later strategic moves that enabled them to control their value chain seems more proactive, where the impetus seems to be less driven by outside threats or forces and more related to future opportunities in the industry.*

¶ *Customer intimacy as an information source in the strategic processes, and their impact on new business initiatives, is also an interesting point to note.*

Implementations of innovations and changes

As mentioned, STX OSV a separate unit from STX Europe, and Bjørkedal explains that STX OSV itself also has many fully owned subsidiaries themselves; an example is an electro-engineering company that is contracted to do servicing on ships build by the parent company. He further states that this separation from the parent company is done to enable the subsidiary to have autonomy and focus in order to build up capabilities and competitiveness. Even these companies have to compete with other partners on internal projects; no monopoly is given in these internal markets. Bjørkedal stresses the importance of this due to the sum of the subsidiary companies' competitiveness defines the total competitive level of STX OSV.

¶ *STX OSV seems to consistently separate new business units and make them compete in markets to become focused and competitive. How they attempt to gain synergies with this organization is less clear given the data in the interview.*

Business model innovations as a topic in strategic processes

Bjørkedal mentions that while they consider «radical» business changes in their strategic processes. He does not mention any ideas from these kinds of processes that have been implemented, however. He also states that he feels reluctant to make changes to the business that might interfere or integrate toward the customers' domain of value creation – the importance of not «stepping in the flowerbed» of your customers.

«You must at all times be willing to change the business model you have built».

¶ *STX OSV self-proclaims to review the «big picture» in their strategic processes, and notes some challenges with changes that might interfere with customer's value domains. This kind of inhibition can be a force in defining the direction of business model changes for the company, in contrast to examples where forward integration can create more value for the customer.*

Concluding remarks

The STX OSV case is an illustrative case along many dimensions as it balances many tensions at the same time; deliberate vs. emergent, experimental vs. analytical, reactive vs. proactive, etc. They chose a strategic direction that backwards integrated them into low-cost yards in Eastern Europe, giving them a position in the value chain than enables a great deal of control. They claim to actively utilize this control in innovating how they create and deliver value to the customer, in addition to seizing opportunities in the marketplace. They employ few management tool or models and rely more on more classical industry analysis, but at the same time try to ask «the big questions».



ULSTEIN®

Introduction to the company and interviewee

Ulstein Group ASA is a holding company with several subsidiaries, with activities in shipbuilding, ship design, power and control and shipping. It is mainly focused on advanced offshore vessels. The group has 800 employees predominantly in Norway, with activities in Brazil and Turkey amongst others.

The interviewee was Tore Ulstein, deputy CEO of Ulstein Group. He is also Head of Design and Solutions, Managing director in Ulstein International and part-owner of the company.

Brief strategic history of the company

Their activities started in the 1917 with modification of local fishing boats, and continued to grow both in size and activities as a family owned company until it went public in 1997. Ulstein was acquired in 1998 by Vickers, with the exception of the shipbuilding operations which was bought back by the family and included mainly the shipyard Ulstein Verft AS in Ulsteinvik. Vickers was later acquired by Rolls-Royce in 2000.

Since 1998 the company has invested close to 250 MNOK in a new dock in Ulsteinvik and Ulstein Group ASA has grown to include design activities in Turkey, ship electronics activities in Brazil and further activities in Poland, Croatia, the Netherlands, Singapore and China.

Interview findings

Awareness and knowledge of business model concepts and tools

Ulstein stresses the importance of understanding the fundamentals of a business, especially how the market is functioning. The ability to simplify things and know the core drivers of the business you are in is emphasized, in addition to the importance of abstracting and thinking outside the box.

¶ *While not mentioned specifically, Ulstein mentions some core aspects that relates to the business model, like fundamentals and abstractions.*

Innovations and strategic initiatives related to the business model

The building of a new dock hall was a move which enabled Ulstein Group to continue building world class vessels for longer periods than would have been possible without. A decision was also made from the start to deliver design, construction, equipment trading, training and maintenance, which have proven to be a valuable combination, and several projects have been sold because of this integration. The decision to invest in shipbuilding infrastructure in Norway was perceived by others as «crazy» because of the growing cost pressure from Asian ship builders. In hindsight, the decision to build a new dock hall and having activities in selected and strategic parts of the value chain has proven valuable, and has probably prolonged the ship building activities in Norway, according to Ulstein.

In order to cut costs, Ulstein states that labor

intensive activities have been outsourced to low cost countries. The hull of the vessels are now mostly built in low-cost countries in Eastern Europe and then towed to Norway. This trend is likely to continue and Ulstein has also developed design capacities in Turkey, design of heavy offshore ships in the Netherlands, engineering in Poland and Croatia, and design/engineering of standardized offshore ships in China.

Another strategic move made by Ulstein Group has been to go into the shipping industry. When the ship building activity is low, the shipping unit can order ships itself mainly as a co-investor, and thus use the excess capacity. As long as the right type of vessel is built, the shipping unit may rent or sell the vessel when the cycle is coming up from the bottom. This has been done several times and has mostly been successful, according to Ulstein.

¶ *Ulstein has a range of strategic initiatives that relates to business model changes, including some key acquisitions of shipyards that enable them to become an integrated player in the value chain.*

¶ *By changing their role in the value chain, and by going into other areas like shipping, Ulstein is oriented around an experimental approach in what is to be a part of their business model.*

Relationship between strategic processes and business model changes

Ulstein states the importance of taking risks, and that the company tries to be innovative and explore new ideas. He claims that they are experimental in their approach, and that opportunities might arise which are impossible to predict beforehand. An example is the X-BOW hull line design, which was conceived when the in-house designers were allowed to pursue more unconventional ideas. Ulstein also states that they use the Board as a sparring partner with initiatives they are considering to pursue.

«The biggest risk you take is taking no risk».

¶ *Ulstein seems to take on an emergent and experimental approach with projects and initiatives that may change their business model. While this inherently includes some risks, Ulstein claims that this is necessary. It is more uncertain to what degree they are conscious of the business model innovation changes in these kinds of experimental projects.*

Implementations of innovations and changes

After the company was sold to Vickers, Ulstein states that they invested in a few new areas, but even though the business models seemed plausible Ulstein Group did not succeed in many cases.

«We didn't know the market ourselves and had to rely on others. This didn't work, and it proves that you must have an understanding of how the market works and what the customer wants and is willing to pay for».

¶ *While good business model may be pursued, the example from the Ulstein Group could indicate that a good model is not enough in itself – the model must be supported by an organization that has the necessary capabilities and market know-how to implement and execute the model.*

Business model innovations as a topic in strategic processes

Ulstein states that competence is expensive in Norway, and that they must pay a high price to get skilled people, a price relative to the competence which is not sustainable in the long term. In addition, he states that a lot of the competence at Ulstein is experience-based and not yet systematized into knowledge systems. He therefore claims that it becomes a challenge to move from being a shipbuilding-oriented player to a service-knowledge-oriented player.

¶ *While not used explicitly, strategic directions which may change both value proposition and operational focus are reviewed and pursued by Ulstein. In that way, business model change is a topic observed in the strategic processes of the company.*

Concluding remarks

The Ulstein case is illustrative in that they have an experimental and open-minded approach, even though they are in a capital-intensive industry where failures might be very expensive. Their appreciation of the importance of risk-taking may increase their chances of successfully finding and implementing changes to their business model, as they are willing to venture into it with the necessary management support and resources. They have learned an important lesson in their experiments with outside-of-known-market projects, and today remain true to the importance of knowing the market in which you employ a business model.

4.4. Advisory Agencies



We interviewed two advisory agencies to solicit their take on business model innovation:

- **The Boston Consulting Group** – a global management consulting firm that advises on business strategy
- **A large Norwegian consulting firm** (anonymous), which have completed several business model innovation cases for large Norwegian companies.

BCG

THE BOSTON CONSULTING GROUP

Introduction to the company and interviewee

The Boston Consulting Group is a global management consulting group with approximately 4800 consultants employed and \$3,050M in total revenues (2010). They advise clients in all industrial sectors and regions on strategic issues and challenges. BCG is responsible for many concepts and ideas utilized in the field of business academia, and claims to be one of the world's leading advisors on business strategy. They have 74 offices in 42 countries, among them an office in Oslo.

The interviewee was Gustav Gotteberg, which holds the position of Principal in BCG. He has worked there for 8 years, and is originally an NTNU alumnus with a background in telecommunications. He has experience from business model innovation projects through his work with clients in BCG.

Interview findings

Definitions and explications on business model innovation

Gotteberg states that BCG has a problem solving methodology that utilizes frameworks which are developed through internal projects or in collaboration with clients. The BCG framework on business models and business model innovation was the result of an internal research project that was later revised based on experiences with clients. Even though the framework has guidelines in how it should be applied, BCG always uses a customized approach to problem solving and may use these kinds of frameworks as a starting point. Gotteberg claims that the BCG business model

definition is one of the better definitions in that it has most of the important elements and aspects that can be relevant to consider.

Gotteberg thinks that the consultancy industry differs somewhat from work in academic research when it comes to finding different kinds of business models. They work bottom up, observing different kinds of business models in the market and synthesize findings based on what can be seen.

In terms of the BCG business model, Gotteberg says that changing just one of the elements in the model would not be considered business model innovation. Both the client (value) side and the operational side have to be altered or recombined for it to be called a business model innovation project.

In terms of business model innovation, Gotteberg states that there are many approaches that can be used when implementing or finding new business models in an industry. Examples could be looking at academic research for «archetypes» of business models, or reviewing other industries for models that could be applied successfully in the market at hand.

Gotteberg states that business model innovation and tools will always be used in conjunction with other strategic tools and processes, since it is so fundamental in its nature and how it relates to the business.

¶ *BCG used their own ontology on business model, which they claim is relatively comprehensive in terms of what aspects are included in the model. We can also see that they use a distinctive taxonomic approach in their classifications of business models, though they also review research «archetypes» for inspiration.*

¶ *BCG further defines business model innovation quite explicitly; the changing of one or more elements on both the value and the operational side of their model. These kinds of innovation processes are used in tandem with other strategic tools, and not in isolation.*

Applications of business models in strategy

Gotteberg states that all companies must have some sort of innovation processes. Some of these efforts will be conducted in silos in the organization, but someone must also drive innovation across silos as well, through business model innovation.

Gotteberg outlines a typical business model innovation project as follows:

1. Mapping and understanding the business model that the client has today. Often it can be seen that the client does not always know their own business model that well.
2. Benchmarking of existing business models in the marketplace, in other industries and other «archetypes».
3. Generating ideas based on the business models uncovered in the benchmarking phase, together with an understanding of the market that the client is in. This is a process that is all about finding the truly good ideas based on good background data and inspiration from other players and industries.
4. Based on the results from the idea generation, an idea or model is chosen to be used in the project. This idea can be either revolutionary for the business (or the industry), or more incremental in nature. It might also be a pilot project that has low scale to start, but that might come to dominate over time.

«Business model innovation is an innovation process centered on finding the really good ideas».

Gotteberg also states that while business model innovation is a process, the result from the process often forms the base for an implementation project. As such, business model innovation is a tool used in the process, in that it generates ideas that can be considered for implementation. On the other side, Gotteberg also notes that dramatic business model innovation ideas are rarely implemented in the old model – there is considerable organizational resistance to these amounts of changes. These ideas are often implemented as separate units. In either case, ownership above the functional units is necessary – oftentimes at the CEO-level. In addition, Gotteberg notes that new business models are seldom perfect and must be refined and revised. In the process, the idea might change away from the initial starting point.

¶ *BCG states the importance of business model innovation, and sees the concept as a tool in strategic processes to get across-silo innovation.*

¶ *When an innovation process ends in an implementation project, some patterns seem to emerge. When the implementation is drastic in nature, it is rarely set up in the organization and through the organization's old model. Change resistance is a force which seems to drive drastic changes to happen outside the old business model.*

¶ *Gotteberg also notes an important point regarding the adaptive nature of a new business model, as it is refined through feedback when moving from conception to implementation.*

Client perceptions on business models

Gotteberg says that when he hears clients use the term «business model», it is rarely aligned with existing definitions. The term has in fact no standard definition or framework, so when working with a new client, BCG uses their framework as a starting point.

Gotteberg notes some important aspects of business model innovation in an organization. He feels

that the human aspect is often forgotten in academic research. A strategic department might say that there is an opportunity for business model innovation, but the rest of the organization is usually organized by operational responsibility and are inclined to focusing on doing their own jobs better within a functional area. Business model innovation is cross-sectional and the operational functions must therefore understand each other's jobs in order to see the business model opportunity. The process is [ultimately] about changing both the value side and the operational side to better meet a need, which requires a holistic understanding across the functional units.

Gotteberg states that he believes business models and business model innovation is becoming increasingly popular with management and strategists in companies. However, when they approach us to do a business model innovation project, they will often not know what exactly it is that they are asking for.

¶ *BCG observes diverging perceptions on definitions of the business model, in line with findings from academia.*

¶ *Understanding the human aspects of business model innovation, even before implementation, is noted as an important aspect of creating change drivers in the organization. The employees must see beyond their own responsibilities in order to understand the business model innovation initiative.*

Observations from business model innovation processes

When asked about the application of business model innovation, Gotteberg states that while it can be used to both solve challenges such as profitability issues or market threats, and used as a growth initiative. However, he claims that business model innovation will rarely be the only answer in business «survival» cases. In those cases, short-term strategic levers will be considered first, and when the business has relative operational control, business model changes can be considered. In growth scenarios when the existing business model is working, Gotteberg claims that clients often initiate

business model innovation projects as an operation on the side, next to the old model. This new model often helps you to understand the old model better, and what focus each model has and should have.

In terms of dedicated «business development» positions in companies, Gotteberg states that they may come in two different extremes: one is where a business developer helps top-management to focus and be prepared for business model innovation processes. As such, the business developer rarely has power to implement changes, but instead supports management in their processes. The other type is the salesperson with «extended power», for example a business developer being responsible for a complex sale where a business model must be designed around the sale and the relationship with the customer.

Gotteberg further points out how different incentives in the business model can create very different organizational behavior, which can either benefit or inhibit further value creation to the customer. When the company creates more value for itself when it creates more value for its customers, incentives are aligned and it can be observed that new business models changes organizational behavior.

Gotteberg notes that after a pilot project on business model innovation has been completed in an organization, the periodic strategic processes of management should revise and review the business model and business model components. This capability is something BCG tries to leave behind after they do these kinds of projects with their clients.

Experiences from implementing business model innovation

«Business model innovation projects are generally difficult to implement because they in their nature change the underlying business model and is thus at odds with the current way of doing business».

Gotteberg states their business model concept is so open-ended that it is *how* you implement the process

that matters. With regards to framework, he mentions that results are contingent on three main factors:

- The caliber of the people involved in the process.
- Internal ownership of the project in terms of top-level management support.
- To what degree the client is rigged for these kinds of changes in the first place.

Gotteberg presses that no matter how perfect the framework is, these three factors are still necessary to have in place in order to succeed.

¶ *BCG notes an important point regarding the normal scope of change in business model innovation, and the available timeframe the organization has to see results. Due to this, business model innovation is not considered an easy source of a «quick fix» in pressed situations.*

¶ *Incentive structure and business models are claimed to have a relationship with organizational behavior. When incentives induce behavior that creates more value for the company and for the customer, the business model may have some sort of value alignment with its market.*

¶ *The importance of people in the process and top-management support is pressed as key success factors.*

At the end of the interview, Gotteberg notes that BCG is working on a concept called Adaptive Advantage, which relates to the capability in an organization to continuously innovate, especially related to business models. In the end, the business model of the company could be that they do business model innovation.

Concluding remarks on findings

It is interesting to note that BCG seems to have put considerable resources into their business model innovation efforts. By developing their own framework and working together with clients, they have discovered a range of attributes related to these kinds of processes. The human aspects of business model innovation is pressed as critical, as the frameworks are mostly considered starting points and tools in processes that have many other inputs and facets. Incentives and organizational behavior are considered important aspects of a business model in practice, in addition to employees' understanding of the whole business beyond their functional levels. Top management support is also noted as a critical success factor.

BCG is an illustrative case in their process-oriented and human-centric approach to business model innovation.

LNC

Introduction to the company and interviewee

The company is a large Norwegian consulting firm, focused on management and technology consulting. Due to internal policies, the company wished to remain anonymous.

The interviewee has an education from the Norwegian School of Economics and Business Administration, and has five years' experience from management consulting. Working as a project leader, the interviewee has been assigned to several business model and business model innovation related projects with major players in the Norwegian business sphere.

Interview findings

Definitions and explications on business model innovation

The interviewee states that there are many definitions out there, but it comes down to how a firm is put together in order to make money. It is possible to break it down further, and one approach which is good is using Alexander Osterwalder's [business model ontology] nine building blocks in order to describe business models. He further says that business model innovation is a radical change in the business model, and a description of something new to the marketplace. Being consultants, the interviewee states that they are not that preoccupied with taxonomies and typologies, but usually map the competitors' business models to look at similarities and differences, and how to one can position a company accordingly.

The interviewee further claims that business

models as a tool is best used in strategy development, for operational applications it becomes to overarching. It is best suited to trigger or stimulate innovation, and see new opportunities in the existing business model. They experience that it can be a challenge to create an understanding of the current business model, and when they work with management they often see a diverging understanding of how the company is put together. This can especially be the case with people from different functional departments. The business model as a tool can generate common understanding and agreement about the current business model, and form a platform for new thinking.

«It can be a challenge to create an understanding of the current business model».

¶ *LNC uses an established framework in their understanding and application of business models. When it comes to classifications of business models, they seem to be less reliant on frameworks and more interested in mapping competitive models in the market to understand positioning dynamics.*

Applications of business models in strategy

The interviewee states that they are hired in to help with strategic processes, and often use the business model framework as a supplement to other strategic frameworks. The framework is used in order to discuss around the model, and its simplicity is both a strength and a weakness. With a top-management group, it can be easy, but when they want to operationalize it becomes more complicated.

In terms of using business models to uncover possibilities, the business model can be used to uncover where in your model you can differentiate yourself, and enhance or establish a competitive advantage. When it comes to handling potential threats, the interviewee mentions two main approaches. The first is to do a range of analyses, map the business model and look at problems internally or forces that affect the model. Then one can work on improving the model. Secondly, you could scratch your existing model and try to conceive a new model for inspiration, which builds up an understanding that the company is not necessarily bound to the current model.

The interviewee states that they have experiences some limitations to the business model as a tool in strategic processes, particularly related to competitive aspects, macro-trends and conjecture, and technological shift. What are the effects of these aspects on the business model? In addition, companies might want to employ complex segmentation and pricing strategies, which is difficult to model with the Osterwalder framework.

¶ *Business models are mostly used as a tool in strategic processes, and LNC uses it both to uncover possibilities and to understand how threats affect the current business model.*

¶ *Some limitations to the business model are seen through its (lack of) modeling of external forces and trends.*

Client perceptions on business models

The interviewee states that there are very different levels of awareness of business models with their clients. An approximation could be 20/80, where 20% of them know the concept while 80% are not familiar with the topic. This requires that the process has to start with creating a common understanding of what a business model is. This is different from other tools like SWOT-analysis and Porter's five forces, which is far more known.

The interviewee states that there is varying degree

of skepticism when business model innovation is suggested as a possible strategic direction, probably due to the scope of change that such an innovation implies. It can sound like you need to «throw everything around in your store», at which point risk aversion might set in. All in all, the impression is that there is more skepticism than enthusiasm when the topic is discussed, probably due to the fact that people put different things into the concept.

¶ *In line with other findings, definition divergence can be observed with LNC clients, and the processes must therefore start with building an understanding of the concept. The process may also trigger risk-aversion, a key aspect in understanding the business model in strategic work.*

Observations from business model innovation processes

The interviewee mentions two cases where LNC used business model a tool.

The first case involved a major player in the Norwegian travel industry with offices in Europe. LNC were hired to facilitate a larger management summit as part of the yearly strategic process. The Osterwalder framework was used as a base to do that seminar, which lasted three days. The first day was focused on describing and understanding today's model, the second day on analyzing the model, and the third day was spent on outlining changes, actions and goals related to the model. This approach grounded the changes with management, and was more than just a PowerPoint seminar.

The second case was the establishment of an entirely new business model. A large Norwegian company was affected by a new kind of competition, and the framework was used to establish a new business model for a new, subsidiary company. The model was the basis of how the whole organization was put together, what to do in-house and what to out-source, defining core processes and competences, designing the value proposition, etc. We build multiple business model alternatives and review them in terms of their

possibilities and limitations.

The interviewee states that the case was inherently incremental, while the second case was more radical.

¶ *These cases illustrate the business model as a tool in a strategic process. It can be used in range of ways, both incremental and radical in the scope of change, but common traits are its role as an experimental and collaborative facilitator.*

Experiences from implementing business model innovation

When asked about different levels of business models in a corporation, the interviewee states that it can become difficult to define an overarching business model in a company that owns other business units with different business models, like a conglomerate. The models do not easily accumulate into a corporate «business model» in the interviewee's experience.

In terms of experiences on the value of business model innovation tools, the interviewee states that business models are good at generating ideas for initiatives.

He further states that some companies have had negative experiences with implementing disruptive business models inside the organization, as these kinds of models requires a different flexibility, faster decision processes and a unique culture. He presses that new business models require a separate unit to have the autonomy to develop. In the development and launch of new models, it is often observed that external factors change and the business model is forced to adapt.

¶ *The aggregation of business models is described as difficult, a point contrasted with the finding of product business models as well. This implies a hierarchy of models as seen in some of the reviewed literature.*

¶ *Disruptiveness and autonomy is pressed as being important when launching a business model through a new unit in the company.*

Concluding remarks on findings

The LNC case is an illustrative case in its richness of describing managerial strategic processes, from the inside as a consultant hired to help, but still from the outside with regards to management perceptions. LNC uses an established framework, and has uncovered both strengths and weaknesses associated with this approach, in addition to range of insights related to business models' place in the process and how the organization reacts to implementations of business model innovations.

4.5. Case Findings

Maritime

The general impression after talking to three actors in the maritime industry is that there were implicit knowledge about the business model and business model innovation. None of the actors employ business model frameworks or tools, or work systematically with business model innovation as a strategic topic. Although business model innovation has been employed by several actors, this is not presented explicitly. We observe a trend of moving from products to services and the topic of selling «uptime» is to some degree mentioned by all actors, a form of business model change. When it comes to implementation, several actors mention difficulties in persuading customers to join this transition and difficulties in realigning the organization. It is also stressed that it can be difficult to build the necessary capabilities in order to implement a new business model. The importance of experimentation and trial and error is also stressed by the interviewees, but given the cost of experimentation and issues regarding path dependence (especially when it comes to infrastructure), a thorough analytical approach is often claimed to be necessary.

Media

There was a varying degree of knowledge of business models in the sampled companies; some have little knowledge of established frameworks while others implicitly use the concepts in their strategic processes. All three companies have conducted innovation and strategic initiatives related to a change to how the company conducts business, either through mergers, spin-offs, acquisitions or new activities and value propositions. The relationship between strategic initiatives and business model innovation has many different impetuses; some change their businesses to pursue a desired position in the market, others to capture more revenue from their operations, while other actively seeks to acquire new growth through a portfolio acquisition strategy of buying new businesses (and their

applied models). Their approach is scattered between deliberate and emergent, analytical and experimental, reactive and proactive. All companies have some business model related topics in their strategic processes, but they are rarely formalized or standardized in their expression.

The interviews also uncovered a range of insights into the application and implementation of business model innovation. Many of the interviewees note the importance of autonomy and separation when a company launches a new business model, in addition to the need to adapt and revise a new business model after launch. Building capabilities with the new model is also an aspect that is considered challenging.

Consulting

Through our interviews with the advisory agencies, we have learned that business model innovation is a topic that many companies are concerned with. Both agencies we interviewed employ standardized frameworks, either self-developed or taken from academia. Business model levels are mentioned as troublesome to aggregate between corporations and business units. Through conducting business model projects with large Norwegian firms, the agencies have described business model innovation mainly as a process more than a result, and mastering this result can be seen as a capability. There seems to be widespread confusion and divergence with clients as to what a business model actually is, and so the business model innovation projects usually starts with developing a common understanding of the concept. After this understanding has been founded, business models is often used as a cross-functional tool that generates ideas that can be reviewed for implementation, oftentimes in tandem with more classical strategic tools and processes. These implementation projects can be so intimidating to the old business that it is often launched as a separate entity. Both interviewed agencies stress the human

aspects of successful business model innovation, especially through understanding change resistance in the client firm.

Synthesis

Our case studies have shown that there is a widespread interest in business models and business model innovation among practitioners, but there is semantic confusion regarding both terms. Business model innovation is not a new concept to the companies, but it is mostly done implicitly and unsystematically. We have uncovered both deliberate and emergent approaches to strategic initiatives that relate to business model change, in addition to a different weighting between analytical and experimental strategies.

Our findings imply that business model innovation can largely be seen as an innovation process aimed at developing novel ways for firms to operate. Business model frameworks, when employed, have proved useful in order to create a common understanding of the current business model, especially among management from different functional departments. This common understanding and language works as a platform for the development and discovery of incremental or radical changes to current business models.

We also found evidence of change resistance in organizations when faced with business model innovation, especially when it entails a radical change to the status quo. Many companies note the difficulty of developing the necessary capabilities needed to implement a new business model. Due to the often contradictory nature of new business models compared to the existing model, implementation of new models is often done in separate entities.

Concluding remarks on case findings

Through our case studies we have uncovered a range of insights and issues that relates to how practitioners understand and apply business model innovation. In our discussion, we will review and discuss some of the most salient issues we have found, and propose a framework that tries to mitigate some of the limitations to current theory by drawing on the insights we have gained.



Discussion

Discussion

5.1. Introduction and structure of discussion

The goal of the discussion is to have a discourse on the limitations of the theories we outlined in the literature review through the lens of our empirical findings. By reviewing theory in this manner, we aim to propose new theory and insights that attempts to compensate for the shortcomings we have uncovered, and aid in understanding how to achieve successful business model innovation.

The structure of this discussion consists of three main elements.

1. The first element is a discussion of the current limitations on business model theory, given our empirical insights.
2. The second element discusses and proposes new theory and approaches to business models and business model innovation, which aims to compensate for some of the limitations we have uncovered.
3. The last element is a conclusion, where we review the significance of our findings and link it back to the problem statement and goals of the thesis. We will also propose limitations we encourage other researchers to look at in order to further the field of knowledge on business models.

5.2. Linking literature and cases – limitations of today's theories

Issues

After an extensive review of the business model concept and eight case studies of how some Norwegian companies understand and apply the concept, we have uncovered a range of issues that illustrate possible limitations and short-comings of business model innovation theory.

From the literature review, we uncovered some main findings and limitations from the status quo of theory today:

- The two diverging schools of thought on business model ontologies, in terms of structural models and behavioral models.
- The close relationship between business model innovation and strategy, change management and innovation management.
- The lack of empirical data on the prevalence and application of business model tools and concepts among practitioners, in addition to lack of precise semantics around the terms business models and business model innovation.
- The lack of empirical data on the usefulness of different business model ontologies.

- The lack of research on business model innovation processes, including normative theory on conducting successful business model innovation.
- The lack of understanding on the role business model innovation plays in strategic processes.

In our empirical case studies, we uncovered both some insights and new limitations on business model innovation theory today:

- Widespread interest in the topics of business models and business model innovation, but semantic confusion regarding both terms. Business model innovation seen in activities, but approached in an implicit and seemingly unsystematic manner.
- Different business model levels is found in practice (corporate vs. business vs. product), but little normative understanding of how to handle these aspects.
- Business innovation viewed as a process and a capability, especially with the advisory agencies that help companies through business model innovation projects.
- Competitive aspects mentioned as difficult to couple with business model analysis.
- Business model related challenges when it comes to customer resistance, organizational rigidities and capabilities and resources.

While our discussion should optimally have included a thorough review of all these issues, we will limit our scope to what we consider the most salient issues. This limitation is based on our experiences so far with the topic, and where we ultimately feel we can deliver the most value to the research field.

We will in this discussion review the following main issues:

1. Business model innovation as a process or a capability
2. The confusion of business model semantics among academics and practitioners
3. The divergence of structural and behavioral/ logical business models
4. The lack of depth of research on business model levels
5. The lack of focus on business model innovation related challenges

By discussing these main issues in more detail, we will better understand how to propose new theory to the field of business model innovation.

Business model innovation as a process or a capability

Issue

The term business model innovation (BMI) has diverging definitions in academia. Our literature review identified two dimensions, process vs. result and degree of novelty as the main differentiating factors among academics, where BMI can be seen as a process, a resulting novel business model, or both. This confusion is further emphasized by the fact that some BMI definitions are related to specific business model ontologies, like the one presented by BCG which states that BMI is changing at least 2 out of 6 elements (Lindgardt et al 2009).

From our case study we have seen that several case companies have performed business model innovations according to the most common definitions, but this is done implicitly and with little systematic approach. This is the case even though research indicates that business model innovation is to a larger extent related to operating margin growth than other types of innovation (Giesen et al. 2007).

Business model innovation research has mainly

been focused on the development of business models in new companies or in separate entities. Research into success factors for BMI and especially in incumbent firms has been scarce, and the links to related topics such as innovation and change management only briefly mentioned.

Implications

Business model innovation needs to be defined order to be discussed as a topic and to further advance research in the field. This research should also more tightly integrate research already done in related fields like innovation and change management which have been subject to more scrutiny than BMI, in order to develop deeper an understanding of BMI and its success factors.

Due to the operating margin growth associated with BMI (Giesen et al. 2007), it should be an innovation dimension of focus for Norwegian companies, similarly to product and service innovation. The case studies of BCG and LNC reveal that they approach BMI as an innovation process when conducting BMI projects for clients. This view on BMI implies that BMI shares some common characteristics with other innovation processes. Important aspects are likely to be associated with facilitation of information flows between all functional departments within and organization as mentioned by Trott (2008). The process view also indicates that successful execution of BMI is a capability companies can foster and refine.

Resolution

An exhaustive structuring of current literature should be done in order to develop normative theory around how companies should conduct BMI, how to structure the BMI process, and which tools and frameworks should be adopted at different phases for use in this process. In short, we argue that a consolidation of the fragmented literature is necessary, where application aspects should be weighted heavily.

Semantic confusion of business models

Issue

Several academic researchers have discussed the topic of business model definitions and concluded that there is lacking a common ground (Shafer et al. 2005, Zott et al. 2010). The lack of a common definition is further supported by our literature review findings. Our case studies revealed that practitioners also use the business model term differently, with predominance of focus on how a firm captures revenue as opposed to the more holistic approaches seen in academia. This focus on revenue capture is especially seen among companies from the media industry like VG and Schibsted Vekst, which can be assumed to be linked with the focus on countering declining advertising revenues. Our impression of the confusion related to the business model term is supported by statements from both of the interviewed consulting firms, who have conducted several projects related to the topic.

Implications

The divergence when it comes to the definition and understanding of what a business models is seems to hinder academic research in several ways. First, when a common definition is lacking, every researcher needs to develop, define or adopt and explain a definition before contributing research to the topic can be presented. This makes it difficult to build on others' work and can thus slow down academic advances on the topic. Secondly, the semantic confusion may be one of the reasons for slow diffusion of the concepts among practitioners. This confusion among practitioners has negative implications both when it comes to conducting business model innovation projects (BCG 2011, LNC 2011), and when it comes to qualitative and quantitative research on the topic. The lacking common language and low degree of diffusion of business model frameworks and normative theory makes it difficult to gather empirical data on both business model innovation processes and practitioners' experiences with different tools.

Resolution

In order to advance research on the topic, promote adoption of paradigms and create normative theory and frameworks for practitioners, a common definition of what a business model is should be formalized and agreed upon by business model researchers. Common definitions and scope will hopefully strengthen diffusion of theory among practitioners and thus create more empirical data which can be used for further study. A common language will probably make it possible to use more research methods, for example questionnaires, to a larger extent than what is useful when a common language is lacking.

Structure vs. behavior in business models

Issue

Our literature review revealed that there are two academic approaches which dominate when it comes to the modeling or visualization of business models. The first is a structured approach, where focus lies in explaining the main structural and functional attributes of a business model, while still being holistic in describing how a firm creates, delivers and captures value. This approach can be seen adopted by Osterwalder and Pigneur's (2010) canvas of 9 elements, BCG's 6 elements (Lindgardt et al 2009), Johnson's (2010) 4 elements and Moingeon and Lehmann-Ortega's (2010) 3 elements. These business model ontologies are quite similar in focusing on the holistic aspect of a business, but differ when it comes to granularity in their presentations. All of these authors stress the importance of how these elements interact, but an explication of how these elements interact is lacking.

The approach chosen by Casadesus-Mansell and Ricart (2009) is different from the structured approach in its focus on the cause and effect relationship of strategic choices in the business. Clearly inspired by system dynamics in their visualization, Casadesus-Mansell and Ricart's approach is much more focused on how different elements interact than on being exhaustive in their representation of the elements. Both schools follow a

reductionist approach in trying to simplify as much as possible without losing the core logic. The difference lies in whether the *interaction* between elements or an *exhaustive representation* of the business model is at the center. The structured approach ensures a holistic modeling by «forcing» the user to review all presented elements and leaving the interaction between elements to a separate process. The behavioral approach visualizes the important interactions in the business, their cause and effects, but leaves it up to the user to choose which strategic choices and aspects that should be modeled and making sure that the model is exhaustive in capturing all relevant aspects of the firm.

Implications

Exhaustiveness in representation and business model interactions are both important aspects when visualizing business models. The structured and the behavioral approach cover each of these aspects but none manage to fully depict both. This point was emphasized by the interviewee from LNC, which claimed that one of the shortcomings of using Osterwalder and Pigneur's framework was the lack of modeling of how changes to one element affected the others. On the other hand, Casadesus-Mansell and Ricart's (2009) approach can quickly become very complex when trying to be exhaustive and seem more difficult for practitioners to use.

Resolution

Until a new framework which captures both aspects is developed, practitioners are advised to adopt both perspectives in tandem when working with business model visualizations. Normative theory on which business model ontology to use is difficult to state, due to the lack of empirical data on the usefulness of the different ontologies.

Business model levels

Issue

The academic discussion around business model levels is relatively limited, but this is an important aspect when defining the scope of business model visualizations and a topic touched upon by several interviewees (BCG 2011, LNC 2011, Schibsted Vekst 2011). BCG (2011) explained that a business developer working extremely close with one customer might create a specific business model for that customer in regards to defining a specific service, setting up specific activities to deliver this service and creating a unique pricing model. The topic of levels was also touched upon by LNC when it came to larger corporations and especially conglomerates with widely different activities, and the difficulty in visualizing these by using Osterwalder and Pigneur's framework. The interaction between levels and different business models within a large corporation was also mentioned as an interesting topic by Schibsted Vekst, and something they were actively focusing on in regard to «bundling» business models.

Implications

The empirical findings indicate that the issue of business model levels is something that is considered implicitly and is briefly touched upon by several practitioners. There is a lack of precision and structure when the topic is mentioned, which indicate a need to structure the scope and understanding of business model levels and their interactions among practitioners. The five levels of business models presented by Schallmo and Brecht (2010) can thus form a basis for understanding the scope of a business model and clarify some of the confusion found among practitioners. This could prove useful when it comes to decomposing the business model of larger conglomerates or investigating the dynamics of business units or specific products or services. Extensive research into the value of visualizing complex organizations like conglomerates through decomposition is lacking and only briefly mentioned by Casadesus-Masanell and Ricart (2009).

Osterwalder and Pigneur (2010) mention unbundling as a pattern that can be applied in business model generation in order to find activities that can be separated or removed from a business model. The idea of bundling is not discussed in the same manner.

Resolution

The adoption of a clear understanding of business model levels can form a common basis when going into business model discussion, especially when it comes to defining scope. This seems particularly relevant for larger corporations and conglomerates. Further research and theory should also be developed when it comes to the idea of bundling business models and management of business model portfolios.

Barriers to business model innovation

Issue

During our interviews we have seen several interviewees mention difficulties or challenges when it comes to business model innovation. Some have experienced that plausible and good business models have been rejected by their customers for various reasons (Ulstein 2011, Rolls Royce 2011, Creuna 2011), while others have feared that business model innovations may result in venturing into the customers turf resulting in negative consequences (STX OSV 2011). Organizational adoption of the business model innovation has been expressed as challenging (Creuna), and something that that not all organizations are set up to be able to handle (BCG 2011, Creuna 2011). Others have felt that resource constraints have hampered business model innovation activities (VG 2011).

Implications

Three main topics seem to emerge from these issues: *Customer resistance*, *organizational rigidities*, and *capabilities and resources*. Customer resistance to business model initiatives has been seen by multiple actors, especially in the maritime sector, where initiatives like delivery of «uptime»-services instead of products

have been met with skepticism. This has involved low perceived value by the customer and customer skepticism towards the companies' ability to deliver such a value proposition. Even though the business models have been refined and seemed to be profitable for both parties, the adoption on the customer side has been missing.

Organizational rigidities have been mentioned by some as a challenge when trying to realign the organizations' members to delivering a new value proposition. Creuna's attempt to merge two companies and make people work cross-functionally has posed difficult challenges and required special attention and extensive management focus in order to succeed. We expect these kinds of rigidities to be a common factor in aligning the organizational system to the new business model.

Capabilities and resources is another topic which has been emphasized as a challenge by several companies. Coming up with a valid and good business model is one aspect, but the ability to successfully implement it is another matter. This might imply that a company's ability to create new capabilities is a prerequisite for some types of business model innovation.

Resolution

The pitfalls of business model innovation have been given little consideration in academia, but it is an important aspect practitioners face when it comes to business model innovation. Early enactment of the market has been stressed by Chesbrough (2010) in order to reveal potential flaws with the model, especially regarding customer reception, and Osterwalder (2010) have proposed to involve customers in business model generation workshops. This could help mitigate some failures of getting customer adoption, and save time and money of «doomed» projects. Thorough calculations as to what cost savings or increased value the customers can achieve could also increase adoption (BCG 2011).

Another important aspect to consider when examining or selecting new business models is the

aspect of capabilities when it comes to implementing, and actually delivering, the value proposed. If these capabilities are not present or can be developed or acquired, attempting to transform the whole organization in a new direction may prove fatal. This is also the case when it comes to lack of resources put into launching a new or transforming the old model.

There has been little empirical research into the most common business model failures. This is important research when it comes to reducing the risks of engaging in business model innovation.

5.3. Proposed definitions and framework

Introduction

In order to fulfill one of this thesis' goals and to answer our main problem statement, we will in this section propose new theory that we argue will help in understanding and achieving successful business model innovation in incumbent organizations. This theory is based on current research on the topic together with empirical findings from our case studies, and aims to overcome some key literature and empirical limitations we have uncovered through our thesis.

We will deliver this new theory through a framework for business model innovation. This framework is the synthesis of our findings from both the academic and empirical domain. In addition to the framework, we will conclude the discussion section of our thesis with some key success factors when applying the framework, in addition to outlining the managerial implications of our findings in total.

Definitions

One of the major limitations to the field of business models and business model innovation is the lack of definition of the concepts. While we recognize this, we will not propose a definition ourselves in an attempt to overcome this limitation. The field has a plethora of overlapping and explicating definitions, so there would be little value in suggesting another one. Researchers in the field must themselves either agree on a definition through a collaborative effort, or agree to disagree and suffer the limitations. However, in order to propose the new theory with some precision, we will here adapt a working definition based on some of the most prominent researchers in the field.

Business model: The core logic of how an organization creates, delivers and captures value through its activities and relationships in a value network

Business model innovation: A process that causes a systemic change in the core logic of how an organization creates, delivers and captures value through its

activities and relationships in a value network.

These definitions are based on Osterwalder and Pigneur (2010) and Shafer et al. (2005), and will be used in the following sections. We clearly separate between a business model definition and a «business model model», in that we define the concept abstractly but will not propose visualization or a model to accompany it.

Framework for business model innovation

The concept in brief

Figure 37 depicts a simplified model of our framework. The framework centers around a generic process that can be implemented in an organization where management wishes to accomplish business model innovation. We will use this simpler model as a starting point to further discuss and describe the rationale of the framework's core logic, structure, goals and output. The full framework can be seen at the end of the section, where we sum up the most relevant aspects discussed.

The framework connects our literature, empirical and discussion findings to a process in a sequenced manner, in that it orders our findings according to when it is most relevant in a business model innovation process. The framework helps an organization maneuver the process towards successful business model innovation by maneuvering it through theory in the right order with the right context. The process it describes is normative in nature; it does not attempt to classify different business model innovations found in business or academia, it tries to state a best-practice approach to be followed. The sequence is based on a simplification of the innovation model proposed by Dubberly et al. (2007), in addition to aspects from the business model innovation processes of Osterwalder and Pigneur (2010) and Lindgardt and Reeves (2009).

As can be seen, the framework has 3 different phases, which depict the three main stages of business model innovation. The phases can be described as follows:

1. **Impetus:** The reason for business model innovation initiatives. Theory and case findings indicate a range of impetus for business model innovation, driven by both internal and external forces. As we have seen from our case studies, these forces can be as diverse as competitive threats or perceived market opportunities that need to be seized. The forces cause the business to not be optimally aligned with its context; either internally or externally. The misalignment causes a pressure for management to act to realign the organization with its context.

2. **Ideation:** The reaction to the impetus through an ideation process. If the business' misalignment with its context is recognized as so severe that action is required, the ideation phase is initiated by management. The type of impetus creates the initial input to the idea generation process, which is framed to ensure organizational momentum. The goal of the phase is to generate consensus behind the coming change and insight on the best possible implementation initiative, based on collaboration, conceptual experimentation, testing and analysis of new business models. The ideation phase usually does not generate enough insight to be sure of a course of action – experimentation and low-scale implementation is often necessary to get enough information of the model's suitability.

3. **Implementation:** The realization of the ideation phase through a business model experiment. The result of the experiment creates insights of what actually works, which again gives the choice of adapting the business model innovation – or going back and attempting another implementation candidate. With time, internal or external forces may drive the business model to again be misaligned with its context, re-creating impetus for business model innovation.

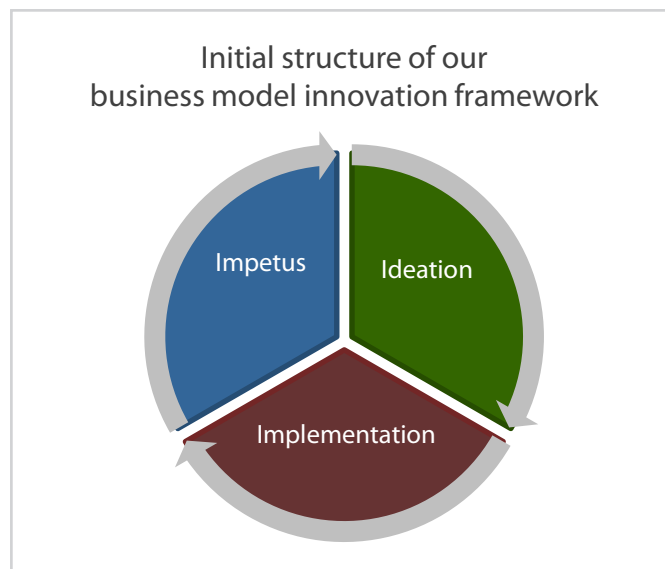


Figure 37: Initial structure of our business model innovation framework

In short, the framework facilitates a process that induces a business model change to take place. This business model change is the final output of the process. When reviewing the phases further, we will go into depth on further aspects of the framework, like the relationship between the old and the new business model in the organization, and management imperatives.

The framework contributes to the fields of business model research in that it structures, simplifies and synthesizes the most salient aspects from the field in a sequenced framework that can be applied in organizations. This approach is, to our knowledge, novel in both its structure and scope. As seen in IBM Global CEO study (2006), business model innovation has a higher correlation with operating margin growth than any other types of innovation, which merits its use in strategy. In this manner, the framework becomes a potent strategic tool to create competitive advantage.

Rationale and limitations remedied by framework

The rationale for building a framework can be argued as follows. While we might have simply depicted a business model innovation process, we wanted our proposed theory to extend beyond a normative process sequence. Our framework is a normative process, a toolbox for further review, and a description of the

key issues in each phase of business model innovation. While a semantic discussion of the term «framework» in business academia could result in a (probably imprecise) definition, we argue that the richness of the approach constitutes something more than a process in itself, and that it produces a more valuable strategic tool in this manner.

As we noted in the first part of the discussion, we wanted to mitigate some limitations in the fields of business model innovation with our proposed theory. We further evaluate our contribution in the section «Problem statement revisited».

Limitations

While our framework attempts to gather the most salient findings from a range of theoretical sources, in addition to our empirical findings, it is by no means a completely exhaustive approach. The novelty and value in the framework can be seen in that it shows a depiction of a generic business model innovation process, proposing questions, theory and findings under

way as tools to solve the challenges one is likely to encounter in the order they are likely to appear.

Two main limitations should be known before attempting to use the framework. The first is that the process has a sequence that proposes a certain chain of events. While some processes might follow these steps linearly, most cases in real life will probably be less linear and more random and iterative. We therefore propose that the order of things should not be interpreted blindly. The second limitation is in how the framework links to theory in and outside the academic field of business model innovation. While we have had a thorough literature review in this thesis, we do not propose that we have synthesized the whole fields of business model innovation, strategy, change management and innovation management in a single thesis. Where we refer to theory, the reader should view this as a link and an encouragement to investigate the material further before enacting.

We will now detail the framework through its 3 phases.

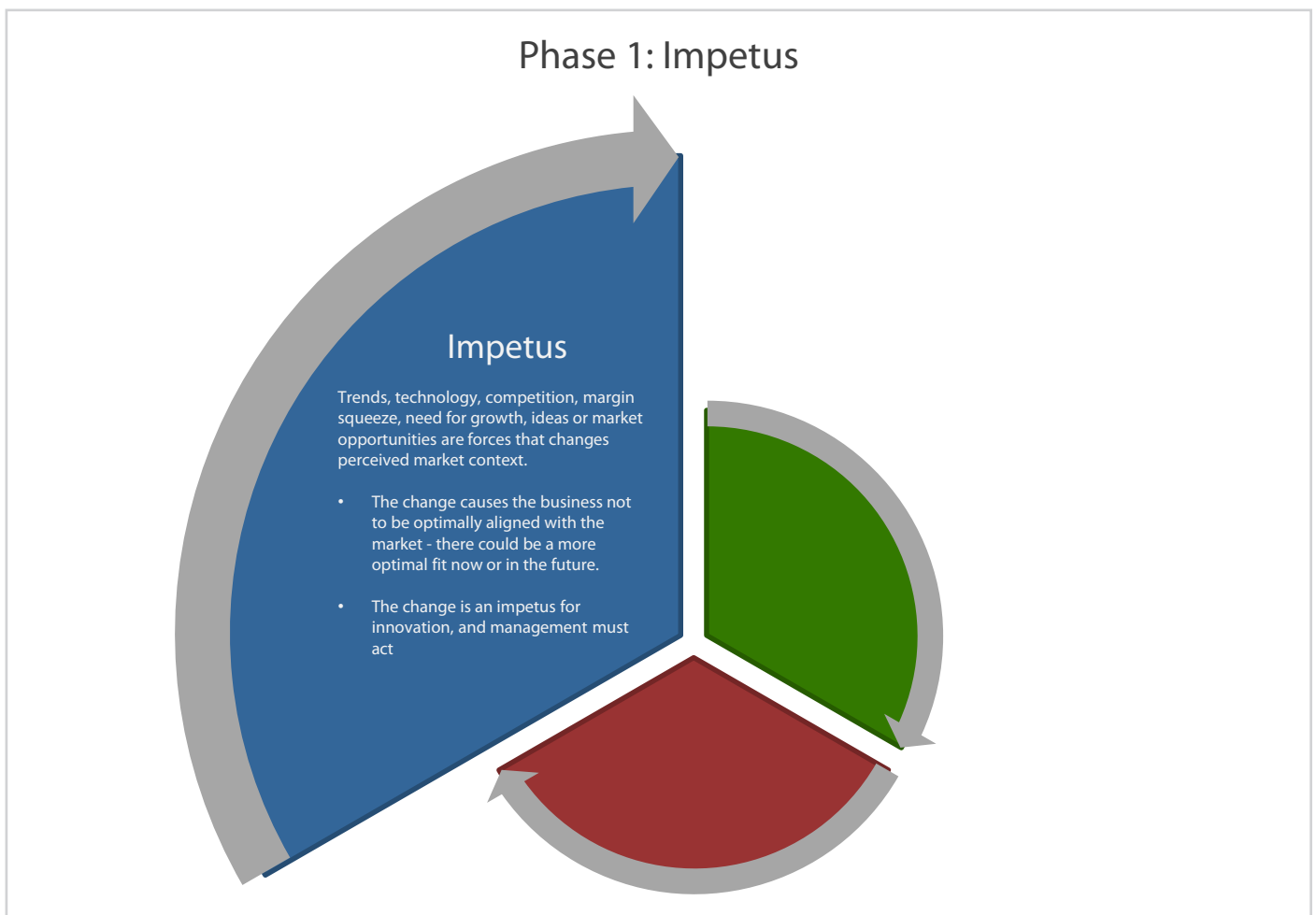


Figure 38: Phase 1. Impetus

Phase 1: Impetus

The impetus is the reason for initiating a business model innovation process. Through our empirical findings we uncovered a range of forces or drivers that was linked to business model innovation; trends (Ulstein 2011 and STX 2011), profitability (VG 2011), desires to grow (Schibsted Vekst 2011) or simply the recognition of a future market opportunity (Creuna 2011). We argue that these kinds of forces or events drive the impetus for business model innovation.

We draw on De Wit and Mayer (2010) and the concept of misalignment between the business system and its market as a concept in this phase of the process. They claim that it is the role of business strategy to create alignment both internally and externally, and that this alignment enables the creation of competitive advantage. If the optimal alignment of the business and the market requires a systemic change to the business model to be achieved, the misalignment is per definition under the domain of business model innovation. Ideas and market opportunities are forces of misalignment in the same manner, in that they depict that the business system could be even better aligned with the market, given the successful seizing of the idea or opportunity.

Key issue

Trott (2008) states the importance of information flows between different business functions and their external environments as an impetus for innovation. The key managerial aspect in this part of the process is to facilitate and manage these information flows in order to understand if and when a business model innovation process needs to be initiated. The failure to recognize the forces that should have caused necessary impetus for reaction could cause the organization to be blind to both threats and possibilities in the marketplace, and erode competitive advantage.

The Schibsted Vekst case shows that Schibsted ASA has employed this information sensing capability through Schibsted Vekst, which continuously scans relevant markets for both novel business models that

can be acquired, and potential threats that Schibsted ASA should know about.

Managerial implications

1. **Create information flows** – The organization needs to set up, facilitate and manage information flows from the whole of the organization, in addition to their external environments, with the explicit imperative to filter for forces that may cause the business to become misaligned with the current or future market. This includes both external and internal threats and opportunities.
2. **Design decision procedures** – When the necessary information is flowing to management, decision procedures need to be set up in order to understand if and when different kinds of forces should create a reaction in the form of business model innovation initiation. These information flows can be periodically reviewed, for example in yearly strategy workshops with top management.

This phase does not end at a specific time per se, as information sensing is a continuous capability, but it may initiate a business model innovation process in the organization.

Phase 2: Ideation

The ideation phase of the process is the organizational response to a business model innovation impetus. This phase starts with the initiation of the internal activities and staffing. We gained especially interesting insights on this part of the process from our interviews in the advisory industry; most prominent was the confusion of the business model concept found in business that initiate these kinds of processes (LNC 2011, BCG 2011), the collaborative nature of business model idea generation (LNC 2011), the need to understand the current model (BCG 2011), and the importance of involving the right people (BCG 2011). This is also the phase which is most richly covered by research. Relevant theory includes aspects from business model innovation, change and innovation management, and strategy. This phase does not have a clear-cut transition into the next phase as there are many nuances between them, but it is mainly concerned with the conceptual and cognitive part of the process of generating new business models that can be considered for implementation.

Key issues

Preparation

The first part of the ideation phase is to prepare for business model idea generation. The preparation includes framing the impetus, selecting personnel that are to be included and developing a common understanding and language. The goal is ensure that the later stages of the process are optimized in terms of momentum, quality and organizational acceptance of the proposed implementation.

- Gilbert and Bower (2002) press the need for framing the impetus in order to gain the most organizational momentum behind a change initiative. By first interpreting the impetus as a potential threat, then reframing it to be an opportunity, they claim that the reaction will be more balanced in terms of resource allocation, in addition to soliciting both «adrenaline and creativity».

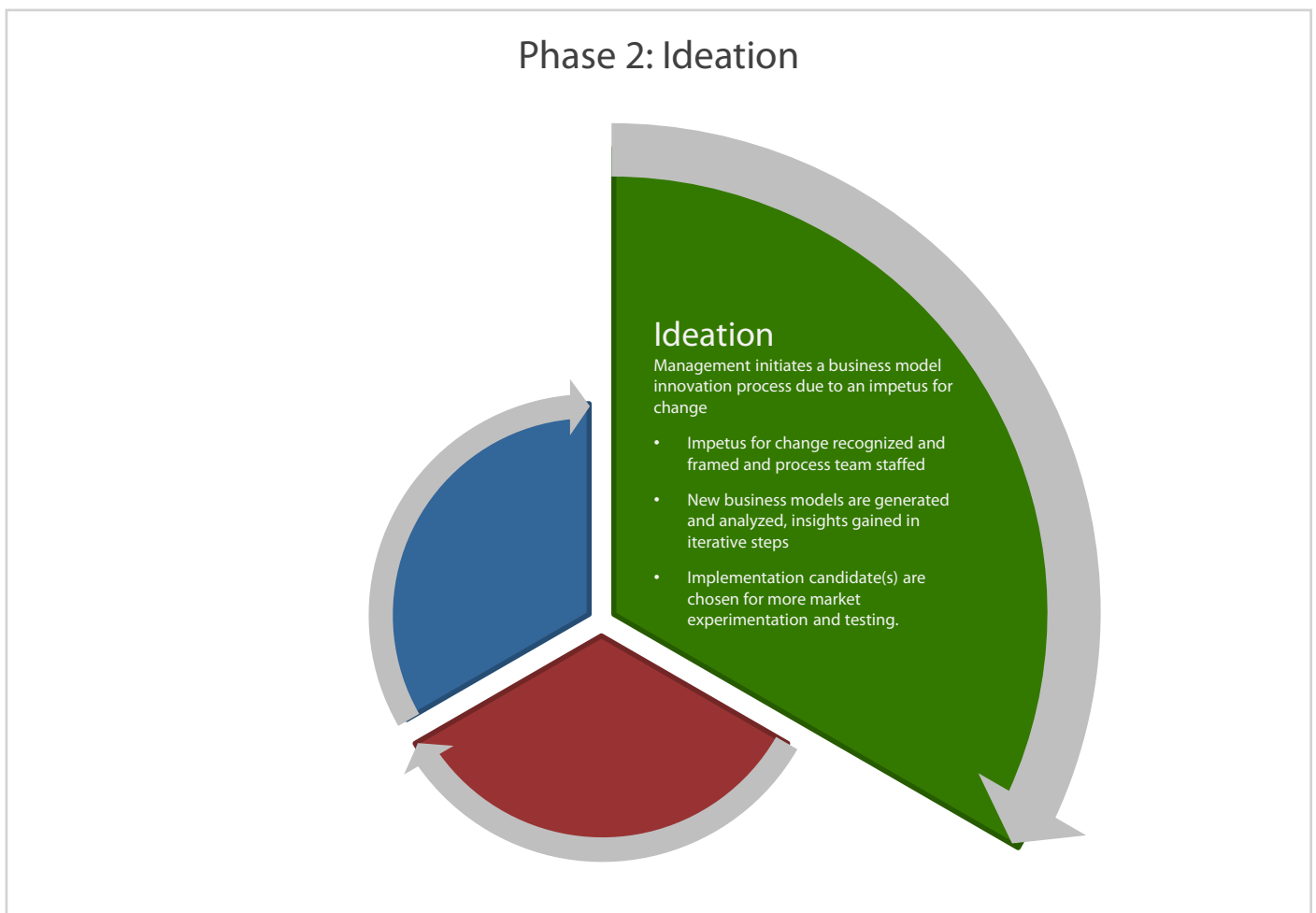


Figure 39: Phase 2. Ideation

- De Wit and Mayer (2010) press the need for management of attitudes and beliefs in change processes. By selectively choosing the framing of the impetus, and picking which groups get to collaborate in the ideation phase, changes can be grounded with the people that will be affected by it. Further, power and politics can be actively used to ensure behavior compliance in the process and implementation, in addition to other best-practice management imperatives from change management. BCG states that top-management support is essential at this point in the process.
- Both Trott (2008) and our BCG case interview stresses the importance of people in the business model innovation process. Trott and BCG press the need to include all functional levels or silos in the organization, respectively, but BCG also claims that the quality of the process is directly dependent on the capabilities of the people involved. Osterwalder and Pigneur (2010) also claim the importance of cross-functional teams.
- Osterwalder and Pigneur (2010) also emphasize the importance of understanding the context of the new business model, such as customer insight and technological developments.
- LNC and BCG both stressed the degree of semantic confusion when starting a business model innovation process. By introducing the concept early, and mapping the current model together (the as-is model) with their clients (LNC 2011), they defined the concept and developed a common language to use consistently for the remainder of the process.
- Understanding and clarifying the level of aggregation before the process begins, both in terms of business model levels (Wirtz 2011), and strategy content level (De Wit and Meyer 2010), to mitigate confusion in later phases. This sets the possible change scope as the team starts to

generate ideas, but it is important not to limit the change scope too much (Osterwalder and Pigneur 2010).

Generation

When the impetus has been framed, the initiative has momentum and the idea generation team has been chosen, the next step is using available tools to generate new business model ideas that can be considered for implementation. This step is iterative with the next step, in that there is a back-and-forward operation until a single implementation candidate has been identified. This is a topic discussed in depth in Osterwalder and Pigneur (2010).

- Using structural frameworks like that of Osterwalder and Pigneur (2010) in tandem with behavioral frameworks like that of Casadesus-Mansell and Ricart (2009), it is possible to create new business models based on two different starting points.
- Two generation strategies can be used: either generating new business models based on an element-by-element review of the current model (BCG 2011, LNC 2011), or a more visionary approach where you start from complete scratch (Osterwalder and Pigneur 2010, LNC 2011).
- Business model taxonomies, typologies and competitors' business models can be used for inspiration:
 - › Taxonomies can be used as a starting point in an idea generation on how to operate in a novel way in the industry. Many taxonomies are industry-independent, and might bring new value creation paradigms that could be feasible. Examples can be found with Lindgardt et al. (2009) and Osterwalder and Pigneur (2010).
 - › Typologies like that of Timmers (2008) can also be used, where stylistic types can be converted to more applicable models relevant

in the industry at hand.

- › By mapping competitors' business models, and business models in other relevant or similar industries, further inspiration can be found.
- Business model innovation typologies can also be applied in the same manner. Santos et al. (2009) has developed a typology that consists of a number of possible business model innovation maneuvers:
 - › Relinking: changing the order or governance of activities.
 - › Repartitioning: Outsourcing or insourcing activities.
 - › Relocating: Off-shoring or on-shoring units geographically.
 - › Reactivating: Adding or removing activities from the business.
- As ideas are generated in the process, they must be adapted into «to-be» models; models that are adapted to the impetus and market context at hand.

Selection

In an iterative approach with the previous step, new business models ideas must be evaluated for feasibility and implementation suitability. The stepping between generation of ideas and selection/evaluation of ideas generates insight when ideas fail to meet implementation criteria, which can again be used to generate new and better ideas. The result of this process is an implementation candidate that is most suited to the challenge at hand.

- BCG (2011) states the importance of capabilities in implementing a new business model. The organization may not be rigged for major changes, which affects which model can be chosen for implementation. Creuna (2011)

and Rolls-Royce Marine (2011) case studies further points to the challenges of building organizational capabilities in new business models.

- More classical strategic analysis and strategic alignment must not be forgotten in the process:
 - › Reviewing existing strategy in the organization on different levels to check for new business models' alignment.
 - › Reviewing how the new business model fits with any other existing business models in the organization, and how they might interact.
 - › If the new business model changes the organizational context, reiterate market research to understand the important aspects of the new context and apply frameworks like Porterian industry analysis.
- Evaluate how the new business model fits with the business model of the competition, and how any competitive responses will affect your model (Casadesus-Masanell and Ricart 2009).
- By using structural frameworks like Osterwalder and Pigneur (2010), the structural elements of the business model can be used as a checklist, where each element is reviewed against possible implementation issues. The same feasibility check can be done through a behavioral framework as well (Casadesus-Masanell and Ricart 2009), to thoroughly check the choices, theories and consequences in the new model.
- Teece (2010) presses the advantage of a business model being differentiated and difficult to replicate, in terms of capabilities, its comprehension and degree of first mover advantage through its potential cannibalization of existing sales. These are important evaluation criteria in selecting the most promising business models for further evaluation.

Managerial implications

1. **Frame the challenge** – Choose an appropriate framing of the challenge at hand, according to what creates the right kind of momentum in the organization.
2. **Choose the team selectively** – The team included in the process should have representatives from all functions in the organization, in addition to key personnel that needs to have ownership and relevant capabilities for the implementation. Management support from a level above that of the relevant functions is essential.
3. **Utilize change management principles** – Further prepare the organization for change through reframing the initiative and managing interpretations and attitudes. Use power and politics to incentivize behavior that is aligned with the new model.
4. **Teach concepts and language through today's model** – The business model concept is riddled with confusion. Teach the concept by collectively mapping the model the company applies today.
5. **Clarify business model levels** – Avoid further confusion by defining and stating relevant levels of aggregation, so that everyone has the same change scope going forward. For example, there is less need for «product model innovation» when the corporation is the unit of analysis.
6. **Collect market insight** – Utilize frameworks for gathering relevant market information on customers, competitors, technology, industry forces, etc.
7. **Generate and evaluate ideas iteratively** – The creative exercise of the whole process. Use available tools in tandem, work collaboratively and lose inhibitions. Bad ideas create more insight, so encourage quantity over quality.
8. **Be inspired** – Use both element-by-element approaches and «starting from scratch». Use existing models from academia, competitors and other industries as inspiration.
9. **Select implementation candidates** – Thoroughly review the most relevant new business model ideas, and choose based on strategic feasibility, capabilities and its competitive edge.

At the end of this phase, the organization has decided upon a set of one or more new business model for further experimentation and testing. The next phase, while difficult to separate clearly from the late stages of the ideation phase, is more concentrated with enacting customers in the market in order to learn and adapt the new model(s).

This phase can be re-iterated from the start if the proposed change requires further grounding with a larger part of the organization as collaborators, or if other change management and strategic aspects demands it. In some scenarios, top management can iterate the phase once and then stage another ideation phase with a larger part of the organization, where the goal is to ground the pre-developed business model.

Phase 3: Implementation

The implementation phase starts with applying a range of theories that states how a new business model best should be realized in terms of its relationship with the old model. This phase is considered experimental; most research points to the necessity of adaptation and learning when a new business model is nascent in the market. This is backed by our case studies, where both Schibsted Vekst (2011), VG (2011), Ulstein (2011) and STX (2011) points to the importance of learning in the beginning of a new business model implementation. We divide the phase into two different parts; choosing implementation strategy and market implementation.

Key issues

Choosing implementation strategy

- In terms of the new business model in relation to the old one, Markides (2008) uses different strategies according to the nature of conflicts and the similarities between the two. He proposes that separation, integration, or phased strategies can be applied when deciding where to operationalize.
- Smith et al. (2010) claims that strategic paradoxes are inherent in large and complex business models. A range of management processes become important to master, and while this may be difficult this mastery can be a source of competitive advantage. Depending on the managerial capabilities in the organization, a complex business model can be employed if there is sufficient advantage in mastering

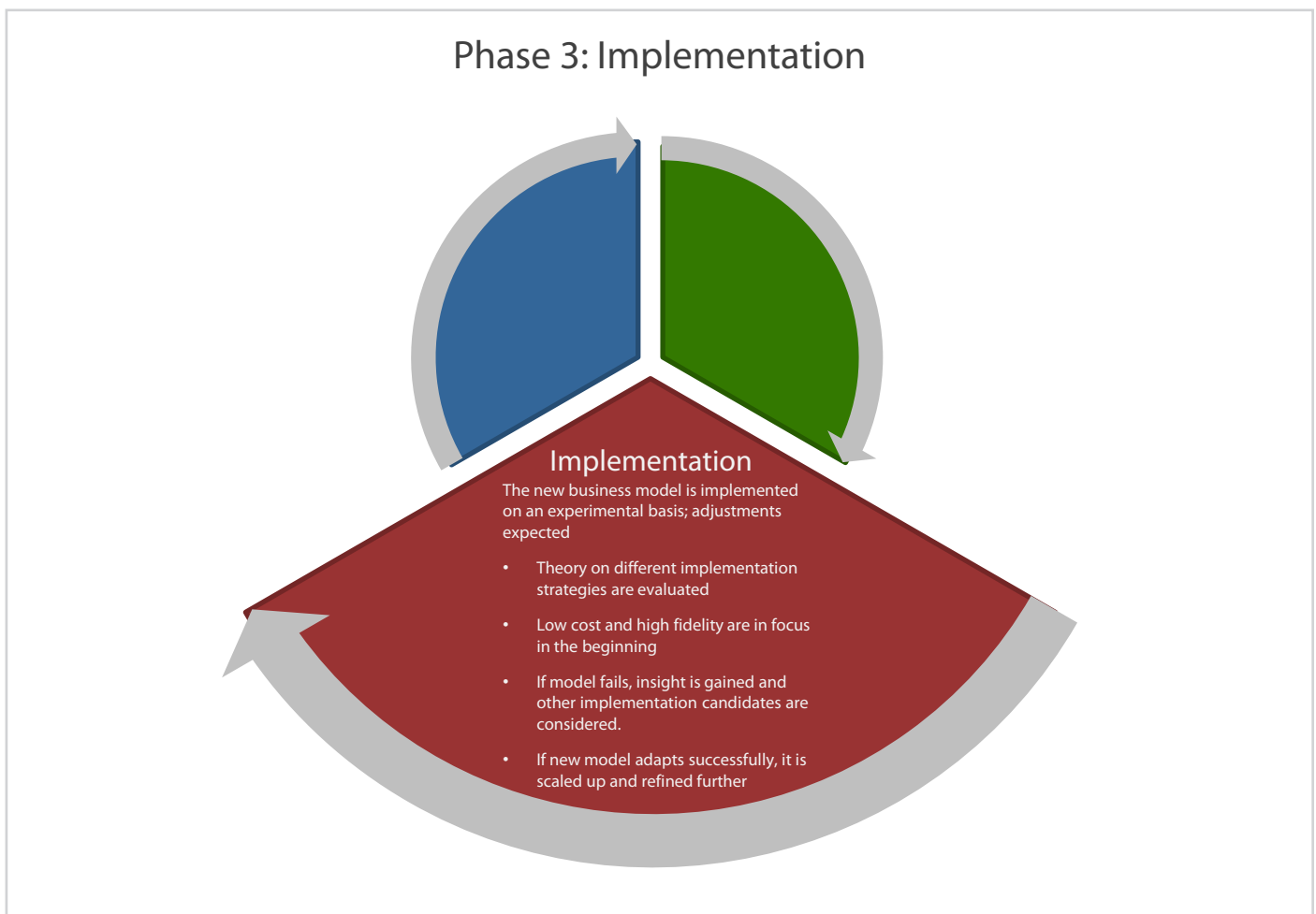


Figure 40: Phase 3. Implementation

the complexity. Creuna is a case study that exemplifies this; the combination of a creative and technological work culture post-merger was a managerial challenge that Creuna handled, and believes is difficult to replicate for competitors.

- According to Creuna (2011), Creuna employed a new strategic direction in trying to become a product leader in digital communication, Creuna employed a new employee incentive structure is an example of an attempt to align employees with a strategic change process.

Market implementation

- Chesbrough (2010) points to the need to experiment with the new business model. He refers to Thomke (2003) in terms of effective experimentation, including aspects such as low cost and high fidelity. This is also supported by case studies Schibsted Vekst (2011) and Ulstein (2011). He further stresses the need enact the market in order to effectuate data on what works in the business model. A strong organizational culture is also noted as important, especially committed top management (Doz and Kosonen 2010).
- BCG (2011), Osterwalder and Pigneur (2010) and others press the need to learn and adapt the business model before scaling it up in the market through more resources and commitments. The sensing and information capability built in the impetus phase of the process become important in detecting how the new business model is aligning with the market.

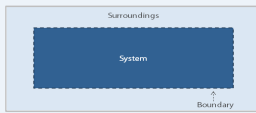
Managerial implications

1. **Beware of the requirements of integrated models** – having the new model implemented in your existing organization is a dangerous path that requires exquisite management skills and a strong organizational culture supporting the change. Incentive structures can be implemented to further manage behavior that is aligned with the change. If you succeed, you may have gained a competitive advantage through your mastery of the change.
2. **Decide carefully on level of integration** – There are more possibilities than pure separation or integration; consider a phased strategy where the new unit slides into or out from the old model with time.
3. **Be cheap, learn and then scale** – The new business model has a lot to learn in terms of what works and what doesn't. Invest lightly in the beginning, let the model adapt and then scale to reap the benefits of a more mature business model.
4. **Failures are necessary steps on the path to success** – If the new business model fails, learn as much as you can and try again. Use your information flow capabilities from the impetus phase and initiate a new process that adapts to the insights gained.

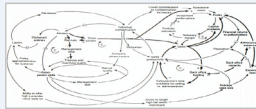
After implementing a business model innovation process, management must again solicit the information flows from the organization to reevaluate the alignment with the market. In simpler terms, success must be measured to which degree the organization now is aligned and enabled to create competitive advantage – the pinnacle of any major strategic initiative.

Successful Business

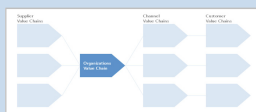
The Theoretical Foundation



Systems are goal seeking entities that have structure, interconnectedness and behavior. Complex systems can be understood by understanding the orchestration and interactions of different sub-parts. The study of a system's behavior over time is called system dynamics. Either static or dynamic approaches can be used to explain complex systems, and even simple systems can show surprising non-linearity. Businesses can be viewed as value-generating systems, and thus be understood through systems theory.



Models are simplified representations of reality. They can be constructed with the goal of explaining one or more aspects of i.e. a system, for example ease of comprehension, visual acuity, etc. **Ontology** is an explanation of a topic through definitions and explications. **Taxonomy/typology** deals with the different kinds or types of the concept, often used to describe categories of things, for example different species in the animal kingdom.



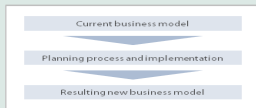
Business models are a new unit of research in academia and is not yet well defined. It is referred to and described in many ways. Common traits include an activity system perspective with focus on the creation, delivery and capture of value. Its scope is often broader than the firm, but more narrow than a network level approach. Business model can be viewed from many perspectives, including system models, role models, scale models and recipes.

Level	Name	Substrate	Characteristics
Global	Business Model	Business Model	Business Model
Industry	Business Model	Business Model	Business Model
Corporate	Business Model	Business Model	Business Model
Business Unit	Business Model	Business Model	Business Model
Product/Service	Business Model	Business Model	Business Model

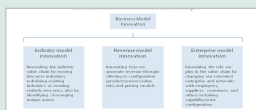
Business models can be viewed from different levels. The abstract level is generic and industry independent. The industry level is generic, but centered on how a company can operate in an industry. The corporate level seek to explain how a large firm operates. The business unit level describes the core logic of value creation at business unit level where a corporate level is too broad. The product/service level describes the lowest level, for example in how a product creates, delivers and captures value.



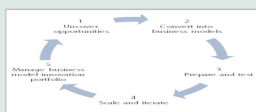
Different business model ontologies focus differently on the elements, structure, scope and behavior of the business model concept. Two schools of thought dominate, the structural and the behavioral. They either describe different elements or cause-and-effect relationships, respectively. Classifications of business models into taxonomies and typologies uncover different kinds and types of business models in the markets, and can be used to describe common traits of firms' business models.



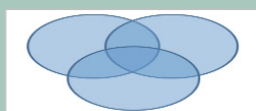
Business model innovation is a business model change above some change threshold. There are different views on what constitutes a business model innovation: the process of innovation, the resulting new business model or the novelty of the model itself. Business model innovation have been found to correlate to a higher degree with operating margin growth than other types of innovations, like product or service innovation.



Business model innovation classifications include different kinds and types of innovations, according to which main dimensions in the model are changed. There are many approaches to business model innovation; aspects like experimentation and management support are recurring themes. New business models can have different levels of integration with the old business model, usually as a separate entity or an integrated part of the old model.



Some researchers view business model innovation as an iterative process that goes through different stages of designing and implementing business models. Different management capabilities are important in order to succeed with business model innovation, for example being able to handle the aspects of having dual business models in an organization. Business models are seldom perfect when implemented and often need multiple alterations. For new business models to be successful, they should be difficult for competitors to understand and copy.



Business model innovation is strongly integrated with other management disciplines like innovation management, change management and strategy. Together these fields form the necessary theoretical platform to facilitate, initiate, and implement business model innovation processes successfully. Innovation management helps in understanding how to best facilitate the innovation process through cross-functional information flows and innovation teams. Change management deals with creating change acceptance in the organization and mitigating rigidities that hinders the process. Strategy couples business model innovation with competition and markets, making sure that any initiative increases enterprise performance in the long run.



Innovation management stresses the importance of information and idea flows from both internal and external sources, and focuses on processes more than innovation results. Ideas and information should be facilitated to flow between functions, both in terms of internal information in the functions but from also from their external interfaces, like marketing's connection with customers. This gives the organization the ability to sense both innovation opportunities and markets threats.



Change management is focused on changing the organizational system that supports the business model, and includes management of attitudes, behaviors and issues related to the change. A key insight is that change management is an integral part of business model innovation from the start of the process. Acceptance of the organizational change is the ultimate goal. In addition to acceptance of the change, momentum behind the change can in some cases be generated by framing the impetus first as a threat, then as an opportunity.

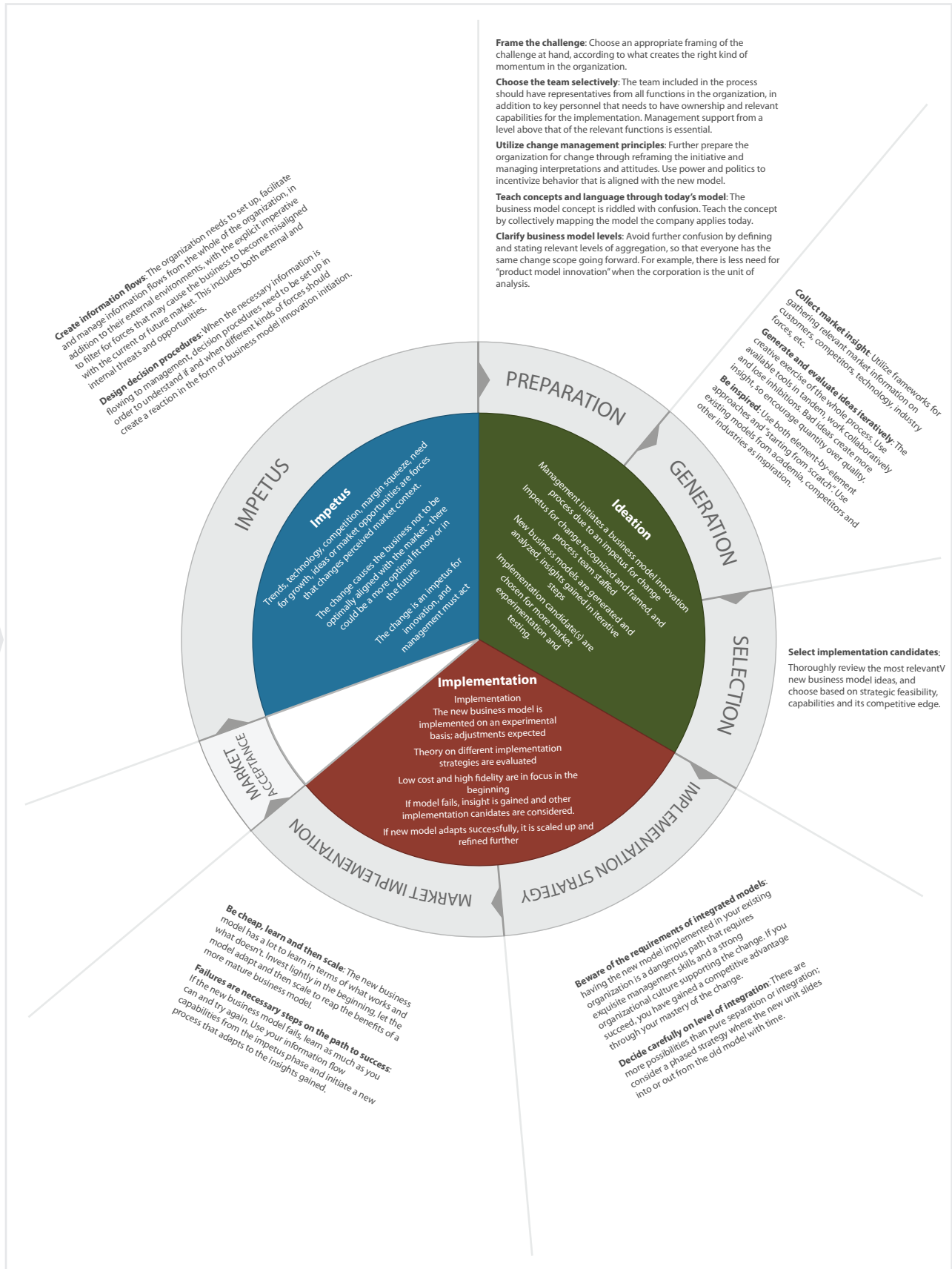


Strategy and business model innovation are tightly integrated. Business models can be an input, a process tool, a roadmap in strategy process or seen as an implementation of realized strategies. Different business model levels can be mapped to different strategy levels, and strategic context plays an integral part in the input to generating new business models. By analyzing existing business models in an industry, important information can be gathered on the current and future competitive landscape. Business model innovation entails such systemic changes to the business that it cannot be decoupled from strategy.

Understanding

Model Innovation

Business Model Innovation Framework



5.4. Concluding remarks

Conclusion and significance

We have in this thesis constructed a framework for business model innovation which aims to help managers achieve successful business model innovation. The framework is novel in its structure, exhaustiveness, and in linking to other relevant academic fields to further its applicability and value. We believe it is the most academically grounded framework developed so far. It has also been illustrated and further illuminated through case studies. In conclusion, we argue that the framework can and should be used as a starting point for practitioners that wish to initiate successful business model innovation.

In addition, we have structured the diverging academic field of business models and business model innovation in a novel way, which we believe can help newcomers to the field in understanding its main dimensions and applications. Our approach hopefully also has value for researchers that are looking for ways to structure the field themselves.

As we believe business model innovation to be a topic in strategy that will become increasingly dominant, we feel our contribution is a small but important step in furthering the understanding of the concept and its applicability.

Problem statement revisited

In this section we briefly revisit our main and secondary problem statements, and argue to what degree we have answered them through the course of our thesis.

Our main problem statement is as follows:

- Considering the current research on business models, contrasted against the strategic challenges faced by today's companies, what theories should be selected, adapted, synthesized or merged with other theories to help accomplish successful business model innovation?

By thoroughly reviewing the field of business model research we have developed a substantial literature review which covers the topics of business models, business model innovation and the related fields of innovation, change and strategic management. We then conducted eight case studies through qualitative interviews with company management, which shed light of the challenges and strategic processes of a sample of Norwegian companies. We concluded the thesis with a discussion of some core issues that surfaced in our research that relates our literature and empirical findings, and proposed a framework for business model innovation that is academically grounded but simplified in order to be applicable for practitioners. It revolves around three phases that a company is likely to encounter when attempting business model innovation, where each phase couples together challenges and normative tools to solve them. It is also built in such a manner that it can be used as both a process and a toolbox in managers existing strategic processes. Based on these findings and our proposed framework, we argue that we have fully answered our main problem statement.

In addition to the main problem statement, we had two secondary problem statements that were to be more briefly answered.

- To what degree do managers from a sample of companies:
 - › Know the concepts of business model and business model innovation?
 - › Focus on the concepts in their strategic processes?
 - › Have a receptive approach to the merits of business model innovation?

We conducted eight case qualitative case interviews in three Norwegian sectors: maritime, media and advisory. Our studies found that business models and business model innovation is a topic of great interest among

Norwegian practitioners, but semantic confusion was prevalent and diffusion of recent academic findings low. Several companies actively undertake business model innovation processes but these are implicit and done with low levels of systematic approach. The interest in normative tools, frameworks and theory was seen with all the companies we interviewed. While our sample size of eight by no means creates a general validity of the findings, they can be illustrative and indicative to our main problem statement. Especially we point to the fact that the advisory agencies we interviewed have a range of experiences from business model innovation projects, and that they therefore represent an especially rich data source. Based on our findings, we argue that we have answered this problem statement.

- What are a representative description of the strategic processes from a sample of companies, and how can business model innovation theory be selected, adapted, synthesized or merged with other theories to also become applicable and valuable in these processes?

After developing an understanding of the strategic processes among practitioners, and attempting to understand their need for business model innovation tools, we developed a framework which synthesizes the most relevant theory in a way that it could be applied in existing processes through a «toolbox»-approach; it does not force the user of the framework to apply it in its entirety, and may be used as a reference to find relevant theory on what to do in different kinds of scenarios. While we have not tested *ex post* if the framework indeed became valuable and applicable, this was not the initial intention, and we therefore argue that we have answered this problem statement.

While the field of business model innovation still has far to go in becoming an established strategic tool or paradigm, we claim that our contribution has added value to the field and that our problem statements were relevant and sufficiently answered through our discourse.

Further research

Through our work with this thesis we have encountered several issues which could be of interest for business model innovation researchers and practitioners. However, due to time constraints, we have not discussed all of these issues in depth. We will present some of them here to entice other researchers to follow up on them and thus bring the academic field forward:

Empirical studies:

- The academic field of business models and business model innovation has a shortage of quantitative and empirically based and verified research. This is especially true for mappings of success factors, diffusion of concepts and understandings of processes.
- The linkage between strategic/competitive analysis and business model innovation tools is still poorly understood, and creates a chasm between strategy and business models. We feel this chasm is due to a lack of definition and understanding how these two fields interact, which is a topic we feel merits more attention.

Links to other fields:

- Business model innovation often involves a systemic change in how the whole of the business functions, which implies a corresponding change in how the organizational system functions. This «human» aspect of business model innovation is often mentioned in research, but few draw on the field of change management for normative theory on how to succeed with change acceptance. Through our interviews with the advisory agencies, we learned that this is an underplayed and important part of the process.

- The change pace of business model innovation is an area needing normative theory. When should business model innovation be a radical change process, and when should it be an incremental change? The balance of radical and incremental change, and its effect on both the business model and the organizational system, is an interesting aspect we feel merits more attention.
- There is a difference between a great business model idea and the necessary capabilities needed in order to succeed with the corresponding business model innovation. We would like to see more research into how capabilities and feasibility plays into the selection and implementation of business models.

New concepts and research:

- A concept which surfaced through some our interviews relates to which degree value creation activities and employee incentives are aligned with customer value creation, and how this is a factor in business model innovation. This «value alignment» is accomplished when the value creation function of a business model is aligned with the utility function of the customers. An example is Rolls-Royce selling jet engine up-time instead of selling engines and services. When the customer enjoys value creation (the propulsion works), Rolls-Royce

captures revenue. The moment the engine stops working, the customer has no value creation, but neither does Rolls-Royce. Thus they enjoy value alignment. This concept is an interesting notion we would like to have researched further.

- The aggregation of business models from products/services to corporations and industries has not been sufficiently addressed in research. If such an aggregation was understood better, portfolio theory could be applied in how to better understand businesses with multiple business models of multiple levels.
- Is business model innovation a top-down or bottom-up activity? In research and through our empirical studies, top management support is pressed as important, but «business developer» positions are becoming diffused in companies. How and where does business innovation belong in the organization in order to both solicit ownership and change acceptance from employees, while at the same time having managerial focus and the necessary resource allocation? And how does the Board of the company play into the process? We further point to theory on intrapreneurship in enterprises as an adjacent field that may become relevant in this topic.

Final thoughts

As we conclude our thesis, we want to come back to a theme which we also briefly covered in our earlier work Breiby, Wanberg et al. (2010). When we reviewed strategy literature in that thesis, we looked into the concept of dynamic capabilities from the resource-based view of strategy, and noticed its similarity with business model innovation. While it is out of scope of this thesis to study the depth of the relationship between different schools of strategy and business model innovation, we feel that the link between the fields is a very fascinating one. The idea of setting up capabilities in the organization that senses, seizes, transforms and manages both opportunities and threats in a dynamic way is enticing – and perhaps a little utopian. However, we do want to entertain the notion that strategy and business model innovation will converge along these lines to form a new paradigm in strategy.

Looking into the distance

Business model innovation is thinking about the whole before the parts of a business. We hope that in the long run, managers will increasingly shift their focus from efficiency to effectiveness, and start with the big questions before answering the smaller and easier ones. Business model innovation has been indicated to produce larger operating margin growth than any other type of innovation, but its process is riddled with risk and challenges. It is not for the faint-hearted, but its rewards lure in the distance for those brave enough to seek it.

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