MASTER

Effectual business concept development and business model innovation

an effectual business concept development method based on the business model in the context of business development

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by

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in partial fulfilment of the requirements for the degree of

Master of Science

in Innovation Management

Supervisors:

I.M.M.J. Reymen, TU/e

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B. Van Oosterhout, Capgemini

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PREFACE

What I find interesting is making new combinations and creating new insights. However, structuring those combinations into rigorous ideas and communicating them is not always easy. Therefore, I wanted to learn about the structural realization of new ideas.

One area that is all about creating new combinations is entrepreneurship or in general, business development. The process of realizing a business from a business idea is therefore an interesting topic. The business model is the concept that can structure the business idea into a business. However, many questions on this topic are still open: a subject for my master thesis was found.

I would like to thank Isabelle Reymen for her valuable feedback and ongoing support, Sjoerd Romme for allowing me to pursue a topic that is very close to me and Bas van Oosterhout for his good advice and motivating Friday afternoon-talks!

I would also like to thank all those whom I have interviewed and my colleagues at Capgemini for their stories during coffee and lunch breaks. Finally, this project would not have been possible without the support of my parents, Robert, Merel and of course all my friends whom I will be joining as a member of the working class very soon.

MANAGEMENT SUMMARY

Today's world requires that companies are flexible enough to change fast and often (Osterwalder, 2004; Prahalad & Krishnan, 2008). In addition, shareholders ask that companies show sustainable organic growth by making the right decisions right. As doing business today is more complex than ever, managers have a myriad of choices and decisions to make.

The business model has been proposed to be the tool that creates the required insight into business decisions, so that companies can be (re-) developed and innovated to realize organic growth. Unfortunately, there is only one model (or template as it is called here) for the development of business models and that template is incomplete (Morris et al., 2005). The first objective of this project is therefore to complete this template and use it to describe a business model development method.

Creating or changing a business is usually part of some form of business development, like the creation of a new venture or the merger of two companies. However, changing or innovating a company from the viewpoint of its business model as part of business development, has not been described before (Pateli & Giaglis, 2004, p. 312). The second objective of this project is therefore to link the theories of business development and business model using the 'business concept' as connecting construct.

The requirements on businesses above can be summarized in 'the need to be entrepreneurial' (Sarasvathy, 2001a, p. 244). There is a theory that describes how entrepreneurs think, called effectuation. Applying this theory to business development is the third objective of this project.

The above results in the following project goal:

> *Design an effectual business concept development (BCD) method that embeds business model development in business development and supports business model innovation*

From this goal, the following research question is defined:

> *How to apply effectual thinking to a business concept development method for the (re-)design of potentially innovative business models?*

Besides looking into the literature, the research question is also answered by the design of a proof of concept, based on the relations found in the literature. This design should also support business development in practise. This proof of concept can be formulated as a design problem:

> *Design an effectual business concept development (BCD) method that embeds the business model in business development and supports business model innovation*

However, as there is no complete business model development method, such a method is to be designed as well resulting in a second design problem:

> *Design a business model template and accompanying design method*

The research question is answered by literature research in the areas of business models, business model innovation, business development and effectuation.

The design problems are answered with two designs: a business model development method based on a business model template and a business concept development method. Both methods are designed using the general design process of Van Aken (2007, p. 24). The designs are tested and evaluated in case interviews with five intra- and entrepreneurs and with eight business development and innovation experts.

In doing the literature research, several findings were made. It was found that a business models (a blueprint which describes the way a firms creates and captures value, resulting from strategic choices, in the context of its value network) can be developed, changed and innovated, as this is one of the functions of the business model template, which describes the business model.

The literature also showed that business development, regardless whether for a new venture or for an existing company, is based on linear steps (for example by: Bhave, 1994). However, empirical evidence

shows that in reality, this process is very iterative and feedback driven (Sarasvathy, 2001a, pp. 244, 245). Therefore a new way of devising a company within business development is proposed, which assumes a short and often repeated set of steps: business concept development. As the business model enables a fast and accurate way of describing what the business will look like it be repeated and improved upon often and therefore fits in business concept development. From the scope and goal of the business development process the 'business context' can be derived. A business context implies required change of the business model and thus links the business model to business development as well.

Sarasvathy empirically derived the theory of effectuation and contrasted it with causation: "Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means" and is contrasted with causation processes that "take a particular effect as given and focus on selecting between means to create that effect" (Sarasvathy, 2001a, p. 245). Entrepreneurship is usually an effectual process and traditional business development a more causal process. Because traditional business development assumes that firms already exist, which is not very realistic in business development, effectuation seems to fit business concept development better than causation. Additionally, both are iterative processes. To verify that effectual business development is possible in more business contexts than new venturing, both types of business development processes are compared. With the help of 'business development thinking diagrams', it is demonstrated that both approaches have limitations, but that it should be possible to construct a more general business development process that is effectual in nature. Though the use of effectuation in a prescriptive way looks like a contradiction, it is not as effectuation is only applied to business development and not imposed on it.

From the literature and the findings above, the business model development method and the business concept development method are designed.

The business model development method is based on an extended business model template of Morris et al. (2005). The extension is of the second 'Proprietary' and third 'Rules' levels of that template (out of three levels) as those had not been defined yet. The Proprietary level is structured by combining other business model templates (of Osterwalder (2004) and Shafer et al. (2005)) into **Error! Reference source not found.**. The Rules level is extended by giving a format for the business rules that make up this level. The extended template is turned into a business model development method by going through the template's levels step-by-step and by the introduction of visualizations of many of the elements in the template.

Foundation level *Questionnaire by Morris et al.*	
Proprietary level	
Strategic Choices: why Mission, Vision, Position, Distinguishing features	
Offering: what	Market: for whom • Customer Segment
Value Creation: how • Activities & Resources • Competences • Cost sources	Value Appropriation: how • Channels • Relationships • Revenue sources
Partners: with whom	
Rules level *Business rules*	

Table 1 – Business model template levels, with the layers of the proprietary business model level

I. Define starting point
II. Transform a set of business ideas into a set of business models
III. Opportunities and threats of the set of business models
IV. Set up prioritization criteria and prioritize the different business concepts
V. Finish up

Table 2 - Main BCD steps

The business concept development method encapsulates the business model development method. Its structure is based on the structure of effectual decisions and it uses the principles of effectuation as guidelines in its design. The application of effectuation has resulted in the inclusion of steps to make sure that the business concept is feasible, consistent and aimed at what can be controlled. In contrast to pure effectuation however, relevant future developments are not completely neglected. Additionally, the BCD method is quite modular. The steps of the method to utilize and the order in which that should be done, is dependent on the business context. This project therefore describes one specific (though complete) configuration of the method for the context of new venturing. The main steps and order of that configuration is shown in Table 2.

Both designs have been presented in interviews with eight experts. Several of those also explained their own experience in business development, which made a simple comparison with the BCD method possible. Additionally, five intra- and entrepreneurs have tested the method and gave feedback on it. The evaluations from the interviews have been used to improve both methods (64 changes were made from 201 comments) and to evaluate the following criteria: usefulness, whether it was found to be entrepreneurial, whether the resulting business concept was considered consistent and whether it was found future proof. Of these four criteria, especially usefulness scored very high. The other criteria scored moderately high. The evaluations show that there is still some room for improvement, but that especially its iterative nature and the way it forces people to think about the decisions and alternatives that form the basis of the business can be very useful. Thus, though no statistical proof can be given (mainly because of the small sample size) the methods seem to be successful.

Though the method has only been tested by intra- and entrepreneurs, the interviews with experts have shown that the method can probably be used in other business contexts as well. This however is still to be tested.

The conclusions of this research are formulated in hypotheses that are to be tested in future research. From the success of the two methods as proofs of concepts of the in this project related areas of the literature, the following four hypotheses are formulated:

H1: Business concept development is an intricate part of business development.

H2: Effectuation can be applied to business development if it considers future developments.

H3: Effectuation can be applied prescriptively.

H3: Developing the business model is a part of developing the business concept.

Additionally, from the successful use of the two designs, three hypothesized design propositions are formulated:

HDP1: To (re-) develop a business concept when doing effectual business development, use the business concept development method.

HDP2: To (re-) develop the business concept when a goal of business development is business model innovation, use the business concept development method and thereafter the innovation check to measure whether it is indeed innovative.

HDP3: To (re-) develop a business model, use the business model development method and the business model template

This project delivers, besides this report, also a workshop template to assist the use of the BCD method.

Thus, the increased complex world of business creates both complications, in making the right business decisions, and opportunities, in the almost unlimited range of potential markets and offerings. This project shows that the business model can be (re-) developed or even (potentially) innovated to exploit these opportunities. It also shows that creating and changing a business based on these insights is a part of business development (defined as business concept development). The application of effectuation to business concept development makes that this is an iterative and entrepreneurial process, which aids in realizing a consistent and feasible business concept with the potential to make the business grow.

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1 INTRODUCTION

Companies are continuously looking for ways to support and enable **growth**. Growth can be created by buying other companies or by growing from within, organically. The traditional options for keeping up organic growth are increasing market share, for example by introducing new or (somewhat) changed products and services, and improving operating performance, for example by cutting costs to become 'mean and lean'.

These two options operate are loosely coupled in a loop. First, new products or services are introduced to capture a share of the market. As competitors start offering the same product, choice becomes abundant and price remains as the sole differentiator in the market. This results in a need for a higher productivity to lower costs, which is achieved by introducing improved technology and (production) techniques or by laying-off a part of the company's workforce. At some point when the price has dropped too much to be able to make a profit, new products or services will then be introduced to (re-)capture the market (Hamel & Prahalad, 1994). For many years, these options have been enough to sustain businesses.

Recent years however have shown an "interaction between increasingly rapid technological change and globalization", which has changed the world and the world of business alike (Osterwalder, 2004, p. 11). Realizing growth using the traditional options in this changed world is more difficult, because it is more complex and therefore harder to control and predict (Hamel & Prahalad, 1994; Osterwalder, 2004). In other words, product, service and price develop in a way that is not as linear as they used to be and the loop generally goes faster.

These changes and the resulting increase in complexity are not vague or distant trends, but are very visible for businesses (Osterwalder, 2004, pp. 11-13), as:

- "coordination and transaction costs [falling] substantially" because of the internet,
- "industry boundaries [are] becoming increasingly blurred" and
- "business design choices [like partners, markets, products, technology and the way these are configured[1]] for managers [have] increased substantially" (Osterwalder et al., 2005, pp. 7,8).

Besides that these trends make it more difficult to apply the traditional options of creating growth, they also force firms to think and act differently to stay in the game, as firms have to simultaneously:

- remain flexible to adapt to new technologies and more diversified (and networked/ niche[2]) markets (Andriani, 2001; in Osterwalder, 2004, p. 13)
- withstand tougher, global competition
- change and keep up faster, because of a higher rate of change, or "industry clockspeed" as Charles Fine calls it (1998; in Osterwalder, 2004, p. 12), which makes that competitive advantages last shorter
- accept a general higher level of "environmental risk and uncertainty that organisations have to face" (Andriani, 2001; in Osterwalder, 2004, p. 13)

So is it possible for companies to cope with these changes, transform accordingly and be able to create organic growth at the same time? Hamel and Prahalad (1994) think it is, by 'regenerating' the strategies of existing companies with the goal of redefining industries or creating new ones. Less radical solutions are proposed by Markides (2006) and Chesbrough (2007), who suggest to change the rules of the game in an existing market, by trying to innovating a companies' business continuously (or at least periodically).

To be able to cope with the increased business complexity and thus to change the rules of the game, it is necessary to identify the business decisions to make. Otherwise, change and attempts for innovation (let alone new industry creation) will be based on guestimations at best, and on hope of being lucky at worst.

[1] An interesting new example is crowd sourcing: "the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call (Howe, 2006 (professional literature); in: Piller, 2008)"

[2] Piller (2008) refers to the idea of the Long tail, a large number of very small niche markets

The **business model** has been proposed to be the tool that can create insight in business decisions: a pair of glasses specifically made for enterprising people. It describes the core of a business by indentifying business decisions and their underlying rationale. A business model gives a different point of view than for example strategy does. (Chesbrough, 2007).

Because of the insight in business decisions it creates, the business model can be used to show what can be done differently and to show new ways of creating and capturing value. Therefore, **changing** or even **innovating** a company based on a modified or (radically) new business model therefore lies within the possibilities. Different authors have explained that this way of initiating change is a great way to find new paths towards organic growth, because:

- "A better business model often will beat a better idea or technology" (Chesbrough, 2007, p. 12),
- "most companies in an industry are pursuing the same business models" thus diversity might create competitive advantage(s) (Mitchell & Coles, 2003, p. 19)

Chesbrough also goes one step further, by stating that business model innovation is an intricate part of any well-defined innovation strategy, as other forms of innovation, like technology innovation, are not enough anymore. He states: "[as] shortening product lives mean that even great technologies no longer can be relied upon to earn a satisfactory profit before they become commoditized [...] innovation must include business models" (Chesbrough, 2007, p. 12; something similar is described by Mitchell & Coles, 2003, p. 19).

To realize business model innovation, companies thus have to understand how to describe, change, innovate and develop new business models. Unfortunately, existing business model toolkits have not been developed with the explicit goal of business model development in mind.

Additionally, most authors describe changing a business model as something that is independent of other projects and processes, whilst in practise, it is often part of a larger process of business development. Therefore, it is both interesting and useful to embed the business model as a business development tool in business development, as a way of changing and innovating businesses on route to growth. This embedded business model, together with its offering (product or service) and its users will be called the **business concept**.

If the above trends show one thing, it is that companies need to be fast pacing, fast changing, and flexible, or in one word: entrepreneurial (Sarasvathy, 2001a, p. 244). Applying an entrepreneurial way of thinking to business development, which the theory of **effectuation** provides, should aid in making the right decisions.

Concluding, this project focuses on the question:

> *How to (re-)design a business model as part of* ***effectual business concept development****, that is defined as being a part of business development?*

Figure 1 visualizes this question, by showing the process of business development graphically: first the motive for doing business development and the business development context, then the business concept development process with its three sub steps of formulating the business idea, (re-)developing the business model and the resulting business concept and finally, the implementation and running of that business concept development (which are outside the scope of this project).

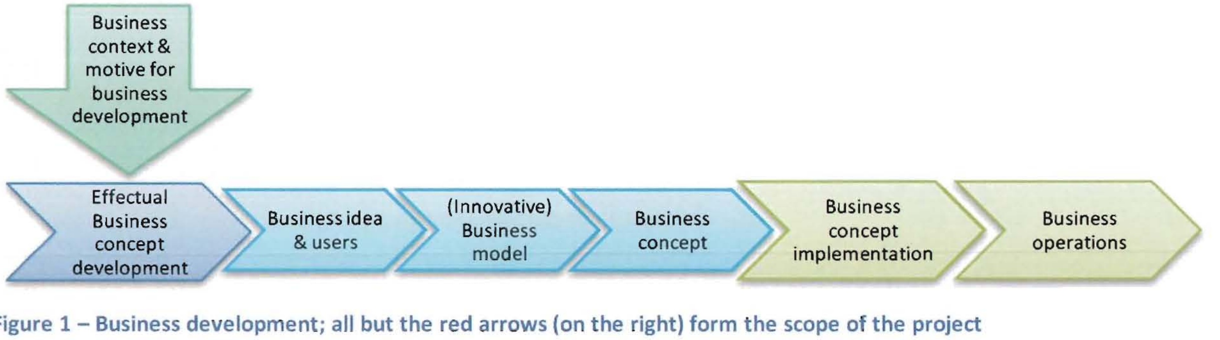

Figure 1 – Business development; all but the red arrows (on the right) form the scope of the project

The next section introduces the project goal, its justification and its translation into research goals, research questions and design goals.

1.1 Project goal

The goal of this is project is to:

> *Design an effectual business concept development (BCD) method that embeds business model development in business development and supports business model innovation*

The resulting design is accompanied by an instruction how it can be used in a workshop.

1.2 Project justification

The main reason to do this project is that a method, which applies effectuation, for the design of a business concept, based on a business model, does not exist. Its need lies both in practise and in science.

1.2.1 Practical relevance

The practical relevance of such a method is that it aids in understanding the assumptions, the function and workings of a business, which are required for building, changing and innovating that business (based on Chesbrough, 2007). Both the insights it can create and the openings for change it can show can give companies an advantage, as the increased complexity of business has resulted in an explosion of choices and thus decision to make, and in numerous opportunities to exploit and threats to counter (Osterwalder, 2004).

Even more, the practical relevance is increased in two ways. First, as many decisions can have outcomes that are highly uncertain or even ambiguous, entrepreneurial thinking seems to be more applicable to these decisions than causal thinking (Sarasvathy, 2001a, p. 250). Therefore, the method applies effectuation, which describes entrepreneurial thinking, making the method suited for these decisions. Secondly, it is recognized that changing or innovating a company is not some disconnected, one-time thing. The method therefore is explicitly embedding in business development.

1.2.2 Scientific relevance

What is interesting about this project is that it links several areas from the literature on management science and organizational theory, which makes that it is worth pursuing from an academic perspective. Next, each of these areas is discussed and the gaps in the scientific literature that this project focuses on identified.

The first area is **the theory of effectuation**, which describes an entrepreneurial way of making decisions and has been introduced by Sarasvathy (1999; 2001a; 2001b). However, she has not written about *how* a business should be developed, based on her ideas, prescriptively. This project tries to cover this literature gap by designing a method that shows that a prescriptive effectual business development **method** is conceivable, realizable and useful (even though it actually seems to be a contradiction in terms).

Very close to the **business development literature** lies the area of **business models**. Though it seems obvious to embed the development of a business model in the development of a new business, this gap, between the business development and business model literature, has not been closed yet. The need for closing this gap is also described by Pateli and Giaglis (2004, p. 312) and this contribution fits within the category: "... clarify the relevance between business models and related concepts", being in this case business development

To embed the business model in business development, a way to develop that business model is needed first. Even though there are authors who have described how to design business models (for example: Osterwalder, 2004), none have done so in a structured form or process. Therefore, a business model design method is proposed in this project to fill this gap.

As the introduction shows, one of the goals of business development nowadays is **business model innovation**. Therefore, the final gap that this project tries to close is to bring business model innovation in the context of business development.

Next, the resulting research goals and questions are discussed.

1.3 Project model

The project is modelled as shown in Figure 2. It is based on the regulative and reflective cycles of Van Aken et al. (2007).

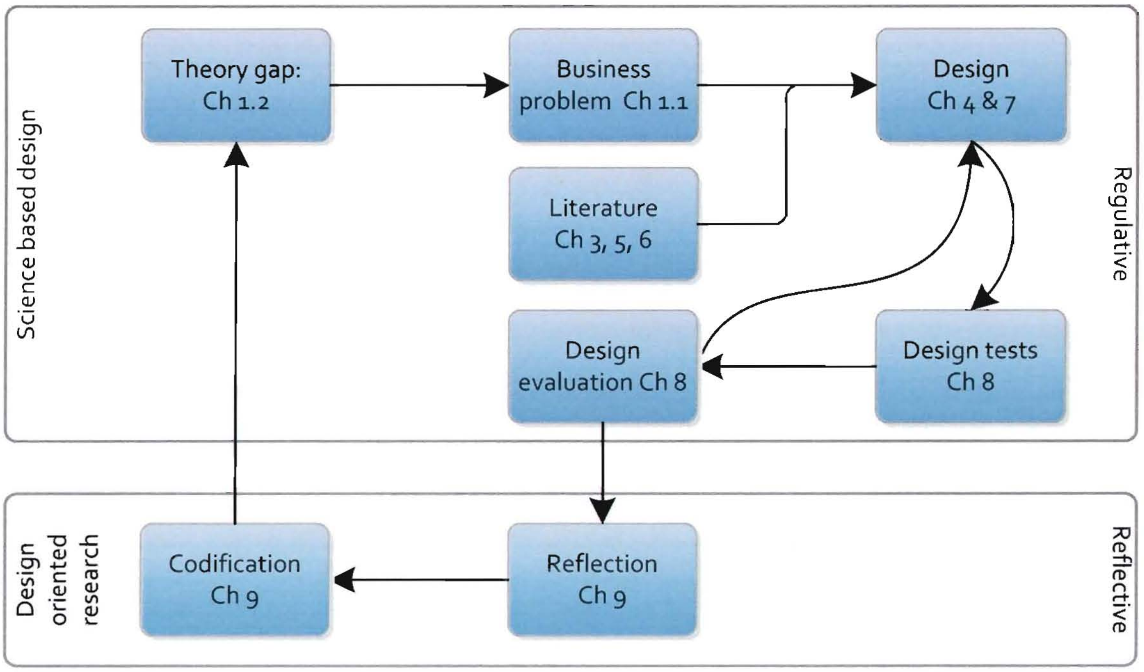

Figure 2 – Project model

The project model shows that the designs are *design solutions*, based on literature. This way of designing is called *science-based design*, as referred to by van Aken (2004, p. 239). The reflection on the designs also in the project model is called *design-oriented research* (Denyer et al., 2008).

The project approach is discussed in more detail in the next chapter.

1.4 Report structure

Figure 3 shows the structure of this project and the main subjects.

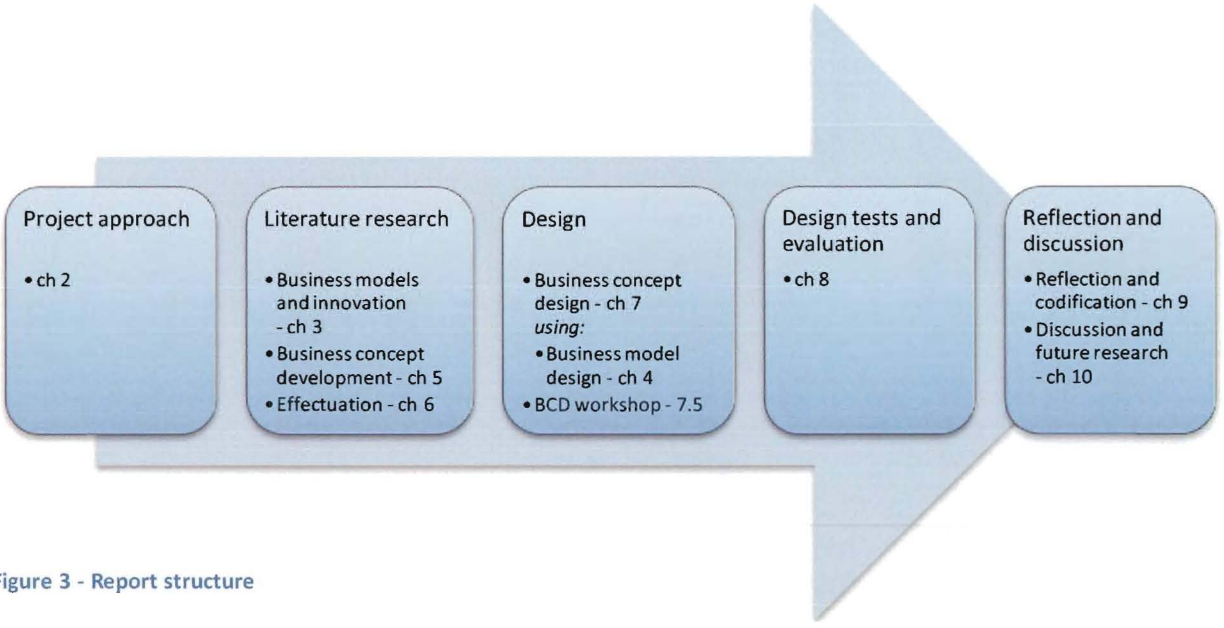

Figure 3 - Report structure

2 PROJECT APPROACH

The previous chapter described the need for and goal of this project. This chapter discusses the resulting research question and the research approach. Thereafter, the two design problems and the design approach are discussed. Additionally is explained how the designs, based on the literature, are tested and evaluated and how the results are used to reflect upon that literature. This chapter ends with a list detailing the research scope.

2.1 Research question

From the main project goal, the following research question is derived:

> *How to apply effectual thinking to a business concept development method for the (re-)design of potentially innovative business models?*

To answer this research question, first the literature on each of the concepts in the question is discussed. Next, the different concepts are related to each other theoretically. To demonstrate that these combinations are valid, an implementation in the form of a method is designed that is built on these relations. To show that this 'proof of concept' is useful, the method is tested and evaluated. A positive result implies that the design has contributed to the validation of the theoretically established relations.

2.2 Research approach: literature research

The basis of this project lies in scientific literature on the areas discussed in chapter 1. These areas are identified by searching for articles in the respective areas, mainly using the search engines of Picarta[3] Google Scholar[4], TU/e[5], ScienceDirect[6] and IEEE[7]. For professional articles, Google[8] is used. Articles should not be older than 1995, unless only older article can be found. The keywords used to find the articles are based on the subjects discussed in this thesis.

The following subjects are discussed in relation to business model development:

- Business models
- Business model innovation

In relation to business development, the following are described:

- Business development and business concept development
- The business development process and the business concept development process

The following subjects are discussed in relation to the combination of the above:

- The relation between business development and business model innovation: business development contexts
- The relation between the business development context and the business process

The following subjects are discussed in relation to embedding effectual thinking into business concept development:

- Effectuation and entrepreneurship
- The application of effectuation to business concept development
- Why effectual business concept development seems to be a contradiction in terms

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[3] www.picarta.nl
[4] scholar.google.com
[5] http://library.tue.nl/catalog/Vubis.csp?OpacLanguage=eng
[6] www.sciencedirect.com
[7] http://ieeexplore.ieee.org/
[8] www.google.com

2.3 Design problems

The main research question presents the following design problem:

1. *Design an effectual business concept development (BCD) method that embeds the business model in business development and supports business model innovation*

Part of the BCD method is the development of a business model. Because it based on different literature than the BCD method, a second design process is justified.

2. *Design a business model template and accompanying design method*

2.4 Design approach

For the design of the BCD method and the business model, the design process of Van Aken (2007, p. 24), shown in Figure 4, is used. It consists of the following phases: formulating the need, problem analysis, specifications, an outline, a high-level design, all resulting in the design itself. As the arrows in the figure show, designing is an iterative process (Figure 2 in the previous chapter also shows this). This is even taken a step further, as feedback from tests of the designs and their evaluations is used to improve the designs.

Note that Van Aken's sketching phase is left out, as just designing an outline design from the specifications brings enough differentiation in the design phases. Furthermore, an instruction how to use the designs is added as an additional design phase.

Figure 4 - Van Aken's generic design process

2.5 Testing and evaluation

The designs are tested by interviewing five entrepreneurs in case interviews. By going though the different steps of the method with the business (idea) of the entrepreneur, feedback is collected. In addition, eight additional experts on business development and innovation are asked for their opinion of the BCD method. If possible, the designs are also compared with real-life experiences in business development. The success of the BCD method is dependent on whether its design goals are met. This is verified by asking several direct questions to the participants after each interview. The interviews are structured based on the different steps of the BCD method.

The results from the test are evaluated and the designs are improved iteratively based on that evaluated feedback.

2.6 Reflection & codification

The generalizability of the designs is reflected upon by looking at the different contexts that the designs support and which have been evaluated in the interviews. Additionally, the scientific contribution of the designs (being proof of concepts of the linked theories) is examined and is codified in a set of hypothesis.

2.7 Research scope

In this research, the following choices have been made:

- The business concept development method is designed from a consulting perspective, as its intended users are consultants.
- This research is not about innovation in general, but about one specific form of innovation: business model innovation.
- This research is not about innovation processes. Strictly speaking though, one might consider business development with a goal of business model innovation an innovation process.

- This research is not about organisational change management or about the execution of change in organizations (though it might be part of a business development process).
- The level of analysis is the tactical, or business (unit) level, as existing business models are used and those are described on that level of analysis.
- It is chosen to focus both on entrepreneurship and on the transformation of an existing business (unit) and/or new venture, as the BCD method is to be used for the creation of disruptive business models. The implementation of the disruptive business model falls out of the scope of this research. Note that the main difference is thus that the starting point is different: an existing business model in an existing business or a 'green field' with neither. This is taken into account in the BCD method.
- The relation between the different elements of the business model itself is left as a topic for future research, as only a hierarchical relation between levels of the business model is designed in this study.

3 BUSINESS MODELS AND BUSINESS MODEL INNOVATION

To create insight into the businesses and business decision, the idea of the business model has been developed. This chapter discusses the literature on business models, business model templates and business model innovation. In the next chapter, a business model template based on the literature discussed here is designed.

3.1 Business models

A first reference to the words 'business model' was found by Osterwalder in a 1957 paper (Osterwalder et al., 2005, p. 6). However, the term only came into fashion at the end of the 1990's, coinciding with the rise of the internet. It meant something like 'what we, being a new internet start-up, are going to do and how we are going to make money'. Consequently, the Dot.com crash in 2001 gave the lightly used term a negative association, as Magretta (2002, p. 3) sarcastically describes: "A company didn't need a strategy, or a special competence, or even any customers-all it needed was a web-based business model that promised wild profits in some distant, ill-defined future." As she adds however: "the fault [of failed dot.com companies] lies not with the concept of the business model but with its distortion and misuse." The following sections describe what a business model is.

3.1.1 Definitions

Defining the business model is not straightforward because there are many different definitions in as many articles, as shown in Appendix F. However, even though the definitions are different, there is a common denominator, which Leung (2007, p. 16) points out: "Common to all these definitions of business and e-business models is the emphasis on how a firm makes money [...] out of their ideas, resources, and technologies [...] and how it is creating value [...]. This implies (1) that any definition should at least refer to a mechanism that generates money based on value created from several inputs and (2) also makes clear that the locus of control of a business model is the company's internals, which also limits the scope of a definition.

One way to come up with a definition that captures the core of the business model and adheres to the above conditions is to look at what the business model is in practise. Magretta expresses it in two practical and "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?" These practical questions have been condensed by Reuver's et al. in the definition that a business model is "a blueprint for the way a business *creates* and *captures* value from (new) services or products" (2007, p. 2) (italics and parenthesis added). It is based on the often cited, but to high-technology products limited, definition of Chesbrough and Rosenbloom's (2002, p. 532). Shafer et al. add to this idea, based on an aggregation of twelve business model related studies including those of Amit and Zott (2001), Margretta (2002) and Weill and Vitale (2001), that the specific *way* is determined by a set of *strategic choices* and is executed in the context of the *value network*.

The above results in the following definition of the business model which is used in this project:

> *a blueprint which describes the way a firms creates and captures value, resulting from strategic choices, in the context of its value network.*

Because the terms in the definition above have as many different meanings as there are articles in the organizational sciences and management literature, they are explained. First, value is "the amount buyers are willing to pay for what a firm provides them" (Porter, 1985, p. 85; in: Amit & Zott, 2001, p. 496) and value-creating activities are those activities "[that result] in products and services that lower buyers' costs or raise buyers' performance" (Amit & Zott, 2001, p. 496). For a firm to capture value is to: "appropriate some portion of [...] value for itself" (Chesbrough & Rosenbloom, 2002, p. 534). Finally, the value network is the network of suppliers, distributors, and partners. Consider that is different from Stabel and Fjeldstad's value networked firm, which organizes and facilitates the exchange between customers (Stabell & Fjeldstad, 1998, p. 427).

3.1.2 The business model's position in a firm and its relation to strategy

Mäkinen and Seppänen found that "Previous studies suggest that the business model concept could serve as an intermediate object of analysis between the resource configuration and strategy in venture creation [...]" ((Amit and Zott, 2001; Hedman and Kalling, 2003; Shafer et al., 2005) in (2007, p. 736)). Strategy thus serves as input for the business model, which is in line with the definition above. However, this view is not shared by all authors, a for example Zott and Amit (2006, pp. 28, 29) explicitly state that product market strategies and business models are interacting, but different variables and that it is therefore: "conceivable that product market strategy follows business model design, or vice versa."

Strategy, the input for the business model, is at its core and in the words of several schools of thought (Mintzberg et al., 2003, p. 28): a pattern ("consistency in behaviour" (p. 4)), a plan, a ploy or manoeuvre, a position ("strategy becomes the [...] "match," [...] between organization and environment" (p. 6)) and/or a perspective (a shared concept for "weltanschauung" (p. 7)). In all but the first, the core idea is that: "strategy is considered in a forward-looking sense" (Shafer et al., 2005, p. 203), resulting in a common element of "making choices". The business model should reflect those choices in its description of creating and capturing value (Shafer et al., 2005, p. 203).

As Mintzberg talks in his book on corporate strategy, the business model should reflect corporate level choices, making it a corporate level business model. However, business models are most often referred to in the context of entrepreneurship and new, small firms (for example in Leung (2007)), which is more comparable to the level of the business unit in a corporation. Therefore, it makes sense to define four levels of business models, in line with the three levels of strategy of Johnson et al. (Johnson et al., 2005; in: Leung, 2007, p. 17) plus a network level (resulting from the idea that the complete network can be viewed as having a business model as well). The first level is the corporate level, which "is concerned with the overall purpose and scope of an organization and how value will be added to the different parts (business units) of the organization", the second is the business level, which "deals with the question of how to compete successfully in particular markets", and thirdly the operational level. (Leung, 2007, p. 17) This notion of four levels of business models is different from the existing different uses of business models, as the business model is usually solely placed at the level of the business unit (as for example by Osterwalder, Pigneur and Tucci (2005) and by Zott and Amit (2006)). Also, Alt and Zimmerman (2001, p. 6) refer to some articles about sector and industry business models and market role business models, but these are left out of the scope of this thesis.

Finally, "a business model does facilitate analysis, testing, and validation of a firm's strategic choices" (Shafer et al., 2005, p. 203). This implies that there can be feedback from the business model to the strategy. Figure 5 summarizes this section. Because the main body of research analyzes and uses business models on the level of the business unit, the focus in this paper is on the business unit level. However, future research could bring interesting ideas on how the creation and capturing of value could be translated in a model for the corporate, network and operational levels.

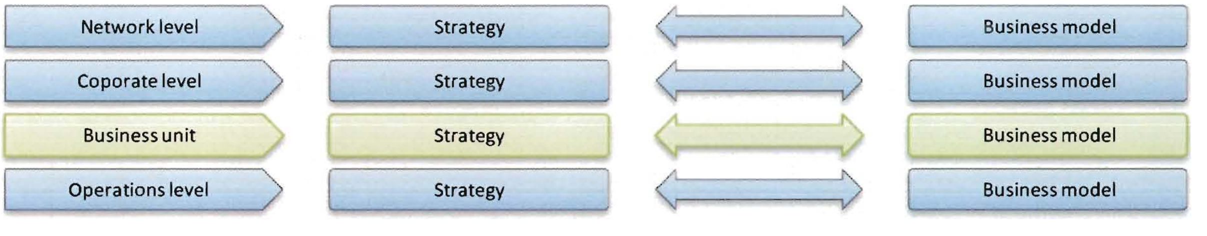


Figure 5 – Levels of analysis in relation to strategy and the business model

3.1.3 The function of business models

The main function of business models is to reduce the "complexity, high-risk and uncertainty" of business decisions (Osterwalder, 2004, p. 11), by creating insight in those "core business decisions and trade-offs employed by a company to ensure a profit" (Roberts et al., 2007, p. 150). This insight is created by showing a high-level overview of the value the business creates and captures and the strategic choices that underlie those activities in its specific context (Shafer et al., 2005, p. 203). Further insight can be created by analyzing, testing and validating the business mode, as is explained in the section 3.2.

Besides this view of the business model as a tool for reducing complexity, Zott and Amit found empirically that the business model "can enhance the firm's performance" and suggest that "competitive advantage can emerge [...] from the firm's business model" (2006, p. 29). However, their definition of business models only partially covers the one given above: "a unifying unit of analysis that captures the value creation arising from multiple sources" (Amit & Zott, 2001, p. 494) "prior to the revenue model" (2006, p. 7).

That business models as a subject of research has been very popular recently, as noted earlier, is understandable, as reducing the complexity of today's business world, referred to in the introduction, is the business models' main function.

3.1.4 Similar concepts

The business model should not be confused with other concepts, like *business process modelling*, which lie, according to Osterwalder, on the third level of the different "business layers" (2004, p. 14).

Andersson et al. (2006) explain the difference between business models and the second similar concept, that of the *business case*: "Business models are created in order to make clear who the business actors are in a business case and to make their relations explicit."

The third concept is the *business plan*, which in the words of Morris et al.: "deals with a number of start-up and operational issues that transcend the [business] model" (2005, p. 727), including financing, the team of entrepreneurs, competition and market 'guestimations'. A business model might be a part of a business plan, but nor a complete comparison based on scientific literature, nor an exact definition of how both could be related to each other exists. It can however be a topic of a future research.

3.2 Business model templates

A company's business model is different from what Hedman and Calling call a generic business model (2003) and Osterwalder et al. a meta-model (2005, p. 9). The former is a specific business model or blueprint of company X or Y. The latter is a generic or abstract model to describe and/ or prescribe that blueprint. To clarify the difference, the latter will be called a business model template.

3.2.1 Existing business model templates

Business model templates come in many forms. For example, the models of Osterwalder et al. (2005) and Morris et al. (2005) consist of a set of components, each describing an organizational aspect like resources or distribution channel. Weill and Vitale (2001) however for example present generic building blocks for modelling a business, like in a specification language as UML (Lethbridge & Laganière, 2001). No approach however has been accepted as a standard, which is not surprising. A study of Mäkinen and Seppänen for example found that no single template fulfilled the nine criteria of being a valid theoretical template.

One major distinction, which has not has been noticed in literature before, is the difference between internal and external focused business model templates. Templates like that of Weill and Vitale (2001) and Gordijn et al. (2005) model actors and the different flows of product, money, information or value between those actors. Templates like those of Shafer et al. (2005) and Osterwalder (2004) describe the components of a business model. This makes that the focus of the former is on the interaction between the business and its surroundings and of the latter on what the business looks like. Both however provide useful perspectives, though the former falls somewhat out of the definition used in this project as it does not go deeper into these kind of flows as the next chapter shows.

3.2.2 The functions of business model templates

Osterwalder et al. define the following possible functions of a business model template: understanding and sharing (capturing, visualizing, understanding and communicating), analyzing (measuring, tracking, observing, comparing), managing (designing, planning, changing, implementing, reacting and aligning), prospecting (innovating it, creating a portfolio, simulating and testing) and patenting business models (2005, pp. 19-25).

3.3 Business model innovation

Innovation, described by Schumpeter as creative destruction of incumbent firms' market position (Schumpeter, 1934; as in Dahlin & Behrens, 2005), is not just about technology or products. Business models can and should be innovated as well. Therefore, for many companies business model innovation is not just a reason to change a business model, but also its goal.

In this section business model innovation is defined and an attempt is made to measure it. Thereafter is discussed when and how often a company should take the initiative to try to innovate its business model, but also how it should respond to another company innovating their business model. The section ends with a short discussion on the challenges one will face while doing business model innovation.

3.3.1 What is business model innovation?

Markides (2006, p. 20) gives the following definition: "Business-model innovation is the discovery of a fundamentally different business model in an existing business." However, Markides adds: "To qualify as an innovation, the new business model must enlarge the existing economic pie", which can be done: "either by attracting new customers into the market or by encouraging existing customers to consume more" (2006, p. 20). *Economic pie* can be interpreted as 'market size'. To come to one clear definition, the next sections discuss innovativeness and additional indications of (radical) business model innovation.

3.3.1.1 Measuring innovativeness: inventions and incremental and radical innovations

As *fundamentally different* does not indicate *what* it should be different from, this section defines what this exactly means. The technology innovation literature discusses a measurement scale (shown in Figure 6) to differentiate innovations, ranging from incremental (or continuous or evolutionary) to radical (sometimes called discontinuous or disruptive) (Burgelman, 1983, pp. 441-455, 208 Reading 2.11 and II-3a; Chesbrough & Rosenbloom, 2002; Dahlin & Behrens, 2005; Brentani, 2001, p. 170). The former consists of minor changes relative to the existing products/services/business model and the latter of major changes. Unfortunately, no ways of measuring business model innovativeness have been proposed. However, the three criteria of radicalness of technological innovations of Dahlin and Behrens (2005), being novel, unique and adopted, might be transferable to business model innovation, which are discussed next.

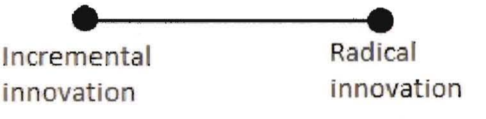


Figure 6 – Incremental and radical innovation

First, *novel* implies that the business model is new. It can however be new to that business, to the industry or to the world (Brentani, 2001, p. 170). As the business model is defined as being on the level of the business unit and novel apparently is a relative concept, it should be dissimilar from prior business models of that business or business unit. However, as that would make every change in business model a radical innovation, it makes more sense to compare it with those in the industry. This also implies that the *existing business* in Markides' definition should be interpreted as the industry the business model innovating company is in.

To establish whether a business model is novel, Mitchell and Coles' concepts of business model improvement and replacement can be used, as these are quite similar to the notions of incremental and radical innovation. They define business model replacement as the improvement of at least four (instead of only one) of the ""who", "what", "when", "why", "where", "how" and "how much" [questions] involved in providing customers and end users with products and services" (2003, p. 16). Even though their definition is different from the one used in this thesis, an estimation of novelty is that more than half of the business model has not been done before.

The second criterion of *uniqueness* requires dissimilarity of the business model from current business models in the industry. This is different from novel as a competitor might also adopt the novel business model, undoing its uniqueness. In line with and Behrens, a novel and unique business model will be called an inventive business model.

The third criterion of *being adopted* cannot be adapted directly to the context of business model innovation, because unlike technology innovation, there is no strict need for other businesses to adopt the innovative business model (see section 3.3.3) making this criterion impossible to measure and therefore unusable. Therefore, Markides' qualification of "[enlarging] the existing economic pie" (increased consumption by existing or new customers) (2006, p. 21) seems to be a viable alternative. It can be measured only in hindsight, just like the adoption criterion. Therefore, in the context of business model innovation, this third criterion will be called the *impact* of the innovation.

The *impact* of business model innovation has been researched before and has been expressed in several ways: the "effect [...] on consumer habits and behaviours", the "effect [...] on established firms' competences and complementary assets" (Markides & Geroski, 2004, p. 26), the market capitalisation of new businesses with innovative business models (Zott & Amit, 2006) and the Markides' above-discussed effect on consumption[9]. As the first two measures are rather similar to Markides' measure and the third only applies to new ventures, impact will be measured by looking at the market size. Thus, business models with impact are innovations. The size of the impact, thus the relative change of the market size, makes it an incremental (small) or radical (huge) innovation. No exact percentage is given as other that would require data analysis of many radical business model innovations, which is out of the scope of this project.

A business innovation thus satisfies all three criteria of novelty, uniqueness and impact. It is also radical if it creates a big impact and is otherwise incrementally innovative. Other novel and unique business models without impact are business model inventions. In practise, there will always be some impact and most business model innovations will thus be incremental innovations.

3.3.1.2 More indications of radical business model innovation

Markides' *fundamentally different* business model is thus a radical innovative business model that is novel, unique, and creates impact. He adds some practical implications that he found at companies doing radical business model innovation.

As a radically innovative business model is new to the specific company, "these innovations are considered disruptive to the established firm" (as well). This directly implies that "new ways of competing conflict with existing ways" (2006, p. 21). This is in line with Charitou's and Markides' original definition of what they now call business model innovation: "a way of playing the game that is both different from and *in conflict with* the traditional way" (2003, p. 56).

Moreover, radical business model innovation is not about developing new products or services, as "[innovators] simply redefine what an existing product or service is and how it is provided to the customer" (2006, p. 20). Initially, this results in "markets [...] to be composed of different customers and [having] different key success factors[10] than the established markets [do]" (p. 20).

3.3.1.3 Definitions

Combining the above definitions and implications with that of the business model in section 3.1.1, business model innovation is:

> *the discovery of a novel and unique way by which the business creates and/or captures value, and results in an increased market size of which a share is captured.*

To be considered a radical innovation, the following criteria also have to be met:

> *it emphasizes different attributes of the offering, it redefines the market's key success factors and increases the market size with a relative large share.*

[9] Even though Dahlin and Behrens define adoption as an impact criterion (2005, p. 726), they state earlier in their paper that impact-based measures might not only depend on the innovation itself, but also on other firm characteristics (p. 722) (note that their research is about technological innovation).

[10] Key success factors are "factors within the firm's market environment that determine its ability to survive and prosper" (Grant, 2005, p. 92)

Finally, Mitchell and Coles note that the name business model innovation is somewhat confusing, as it can also refer to the process of business model innovation (2003, p. 16). It refers in this thesis solely to an innovative business model.

Note that this definition excludes the creation of new markets or industries, which for example the Blue Ocean theory is all about (Kim & Mauborgne, 2005), even though its relation with business model innovation could be quite interesting.

Table 2 below summarizes this section.

An **inventive business** model: • Is novel and unique to the industry
An **innovative business model** also: • Enlarges the existing market, and captures part of it
A **radically innovative business** model also: • Emphasizes different product or service attributes • Redefines the market by defining new key success factors • Initially attracts different customers

Table 2 - Properties of an innovative business model

3.3.2 Difference with other types of Innovation

From an innovation perspective, business model innovation is another type (or viewpoint on) innovation, next to technology, product, service and process innovation (Brentani, 2001, p. 170; Mitchell & Coles, 2003; Markides, 2006). The article of Markides et al. presents an interesting comparison of three types of innovation, which is summarized in Table 3. Service and process innovation are therefore left out of this table as no specific reference could be found.

The table shows that the different types of innovation have different implications for all actors in the market and for ways how to deal with those implications.

Type of disruptive innovation	**Business model innovation**	**Product innovation**	**Technology innovation**
Description	"The discovery of a fundamentally different business model in an existing business" (Markides, 2006, p. 20)	A new to the world product	An new technology that is used in a product or service, or that facilitates a new product or service
Disruptive for	Incumbent firms; innovating firm	Consumers; incumbent firms; innovating firm	Incumbent firms; innovating firm
Often originates from	New entrants or from In- or outside of regular operations at incumbent firm	New entrants or from outside of regular operations at incumbent firm	New entrants or from outside of regular operations at incumbent firm
Customers focus	First: new customers, later: new and existing customers	First: new; Later: new and existing customers	First: new; Later: all
Relevant key success factors	Different from existing key success factors	First: different from existing key success factors (technical performance); Later: mainly price and good-enough technical performance	First: different from existing key success factors; Later: both new and original success factors

Required resources, capabilities and activities	New	New	New
Offering	Redefined	New	New
Product / service	Redefined, but existing product	New	New or existing, but then with different performance indicators
Technology	Existing	Based on new or existing	New
Market	Existing market	New or existing	new
Final outcome in the market	Firm's with new business model capture part of the market	Big players eventually grow to dominate the market	New technology eventually becomes dominant
When other innovate	See section 3.3.3	(not found)	Accept and exploit

Table 3 - Disruptive innovation types, based on Markides (2006), supplemented with findings from Burgelman et al. (2004, pp. 2-3, 203)

3.3.3 When to do business model innovation

As one can imagine, not all business models need to be innovative. Even more, radical innovation requires that the existing ways of doing business are discarded or at least put next to the new business model. However, Markides (2006) has identified several circumstances when business model innovation is necessary or just worth pursuing. In discussing this, a distinction has been made between when a company is taking the initiative in disrupting using a business model innovation and when someone else is the first mover, because both scenarios provide different reasons for business model innovation.

3.3.3.1 When taking the initiative

New businesses and new business units in corporate environments obviously need to design their business model when in the business concept development phase (as is discussed in the next chapter). However, in the following situations, an innovative business model is needed (Markides, 2006, p. 22):

- "When [...] attempting to scale up a new-to-the-world product to make it attractive to the mass market",
- "When entering "a new market where entrenched competitors have fist-mover advantages", thus "breaking the rules"",
- "When their current strategy or business model is clearly inappropriate and the firm is facing a crisis" (an example is IBM in 1993, in Chesbrough, 2007, p. 16).

The rationale for the first bullet can be found in literature on product innovation, as Markides (2006, p. 23) explains: "The eventual winners not only time their entry into the market to perfection, but they also undertake a series of actions that grows the market from a niche into a mass market." They do this by: "[shifting] the basis of competition away from technical performance to other product at- tributes such as quality and price by cutting the price of the product to a mass-market level while simultaneously improving the quality of the product to make it acceptable to the average consumer" (p. 23). Resulting is a huge shakeout leading to the end of many of the technology inventors (p. 23) (in other words, they are not able to cross the chasm (as originally described in Moore, 1996)).

An important aspect of the first two points is that they are both, rather aggressive, ways to achieve growth, while the third point is all about survival. The importance of the first and second bullets is supported by a McKinsey article (Baghai et al., 2007, professional literature), which stresses the importance of being able to choose to compete in different (they call it granular), growing markets. Though not strictly scientific research, their analysis shows that the corporate growth of "more than 200 companies" during the "two most recent business cycles" "is driven largely [for about 80%] by market growth in the industry segments where it competes and by the revenues it gains through mergers and acquisitions" (p. 42). In contrast, they could explain only about 20% of corporate growth by gains and losses in market share.

The crisis in the third point however might also lead to a radically changed business model that does not redefine the market. Chesbrough adds: "Ideally, of course, a company will figure out how to innovate its business model before it is compelled to act by financial stress." Furthermore, when another firm enters the market with a disruptive business model, a redesign of the current business model also might be needed. As this will sometimes lead to the need to copy the new entrants' disruptive business model, or to create a new business model, this specific situation is discussed in the next section.

For new ventures, there are other arguments for taking the initiative to explicitly design an innovative business model. After all, though they have the opportunity to be creative, recreating or copying an existing business model from another small or big company however is far simpler than inventing a new one. In the following situations though, the entrepreneur has to create an innovative business model:

- When the business model is the new business idea (obviously)
- When existing business models require too much resources and/or investments and/ or unavailable capabilities, which is in line with the second bullet point above
- When the value of the offering cannot be created or captured using existing business models (based on the definition of business models)

3.3.3.2 When responding to business model innovation

Additionally, competitors or new entrants might introduce innovative business models into the industry or market, requiring a response from the incumbent firm.

When a new entrant, active competitor or (potential) substitution introducing party (Porter, 1985), enters the market using an innovative business model, the incumbent firms might need to respond. In specific situations, a (re-)design of the business model is then needed. Markides and his colleague Charitou (2003) have written an elaborate article on how to respond to these disruptions. The different situations and responses are shown in Table 4.

When a company at first chooses not to respond to a business model innovation, it might do so later on without much risk of missing the boat. This is because the new way of doing business "fails to completely overtake the traditional way of competing". However, as "the new way of competing in the business grows—usually quickly—to a certain percent of the market", "the new business models improve to such an extent that they are able to deliver performance that is sufficient in the old attributes established competitors emphasize and superior in the new attributes". On that moment, the incumbent firm might want to begin to make the switch after all (Markides, 2006, p. 21).

As Table 4 shows, there are many situations in which the best response appears to be not to respond at all. This however should not be surprising, as Markides has found that "new business models are not necessarily superior to the ones established companies employ" and that "[no business model innovations are] expected to grow in the future to 100% of their markets", making that "most of these business-model innovations simply do not make economic sense for established companies" (2006, pp. 21,22). Furthermore, companies obviously have other ways of growing as well, like entering foreign markets.

Situation	Conclusion	Indicated response
Current business more important: • "Want to remain focused on our core business and existing way of competing" • "Invested a lot in existing business and want to capitalize on that investment" • "Top management not in favor of entering new business" Not ready to respond: • "Do not have time and resources to enter new business now" • "Have more important issues to deal with in existing business" • "Still analyzing the situation" • "Too difficult to enter new business now " • "Too expensive to enter new business now" • "Do not have necessary skills to compete" effectively in new business" Low expectations: • "Do not believe new business is viable" • "Do not believe new business is profitable" (p. 58, categorization by author)	"Appreciating that the new way is neither superior to the existing way nor destined to conquer the whole market" (p. 58)	Do nothing
• "the new way targets different customers, offers different value propositions and requires different skills and competences": "it might be viewed as a totally new business" (p. 59)	"If it is not your business", thus when: "the established competitors do not see the innovation as a threat" (pp. 60,62)	Ignore the disruption because: "adopting a disruptive innovation that only appears to be in its business, an established competitor is effectively diversifying in an unrelated market" (p. 59)
• "Over time, the innovators also become good enough at delivering the attributes that traditional customers value and thus begin to attract the customers that originally had remained loyal to the established companies" (p. 60)	The new business is a threat to your business	Disrupt the disruption: Introduce a third game, "by emphasizing still different product attributes" than in first or second game (p. 60)
• The business wants to capture the potential growth and thinks it can utilize existing capabilities and resources. Furthermore, a cost/ benefits analysis is positive. • The products/ services are (slightly) different, but the company thinks it can utilize existing capabilities and resources	The new business is a threat to your business but also brings great opportunities	Adopt the innovation next to your existing business (note: 68 out of 98 companies surveyed by Charitou and Markides choose this option), possibly in a separate unit because of the potential of internal conflicts

• A company has "the skills and competences to embrace a disruptive innovation introduced by another company and grow it into a mass market" as it is willing and able to invest heavily, has access to customers or is able to force a dominant design (p. 62)	The new business is actually your business completely (This scenario is very similar to the first initiative taking scenario in the section above)	Abandon the current business, embrace the new business and scale up

Table 4 – Responding to a competitor's business model innovation (based on Charitou & Markides, 2003)

Note from Table 4 that there are situations where it is necessary to create an innovative business model, even though the company does not have the initiative.

3.3.4 How often to innovate the business model?

It seems that according to Markides (2006), business model innovation is something that should not be done very often, as it is a big change. Mitchell and Coles however explain that business model innovation should be a continuous process, with both incremental and radical business model improvements, the latter around every two years (2003, pp. 15,16). They argue that: "continuing business model innovation can provide a path to prosperity for any company, because continuing business model innovation can overpower established advantages and size" and that "being opposed by competitors who are good at continuing business model innovation without upgrading one's own business model is also a prescription for competitive disaster" (2003, p. 17). Though these are not very clear arguments, there are markets in which new business models are introduced regularly. The authors give the example of bookstores, which faced "book clubs, then chains and chain megastores, and now [...] on-line competitors" (2003, p. 17).

3.3.5 Challenges in doing business model innovation

Several authors have identified challenges of *doing* business model innovation:

- no one with the "authority and the capability [or responsibility] to innovate the business model", which has to do with "too short a time frame to create new business models" (Chesbrough, 2007, p. 16)
- and: "business-model innovation clearly requires involvement of top leadership" (Chesbrough, 2007, p. 16)

When *implementing* an innovative business model, the following challenges have to be recognized:

- "tensions [arise] between the aspects of a business model that create value and those that help to capture a portion of that value." (Chesbrough, 2007, p. 12)
- "new business models attract different customers from those that established companies focus on" (Markides, 2006, p. 21)
- "[new business models] require different and conflicting value-chains from the ones established companies currently have" (Markides, 2006, p. 21)

Specifically in the case of two concurrent business models (an old and a new one), additional challenges arise:

- "[the new activities] are often incompatible with a company's set of activities because of various trade-offs or conflicts existing between the two ways of doing business."

When doing business model innovation, these challenges have to be taken care of. However, they do not have direct consequences for the process of designing a new or innovative business model, except maybe for the fourth bullet on the different attracted customers.

4 BUSINESS MODEL DESIGN WITH A NEW BUSINESS MODEL TEMPLATE

Before being able to change or innovate your business model, first you should know how to develop it. As described above, developing a business model is one of the functions of the business model template. Several business model templates have been explicitly created to be tools for business model development (for a rather complete overview of what templates are intended to be descriptive and prescriptive and the differences between those, see the unpublished article of Mäkinen en Seppänen (2007)). As is explained in the next section however, there are some problems with these existing templates when developing business models. Therefore, a business model template is designed in this chapter, specifically aimed at developing business models and based as much as possible on existing business model templates. Additionally, the process of developing a business model using this new template is described. In the next chapters, the method is put into the context of effectual business (concept) development and eventually is put to the test.

4.1 Designing a business model using a business model template

A business model template should provide a holistic perspective of the business model. Some business model templates, like those of Afuah (2004), Osterwalder (2004) and Shafer et al. (2005) are very good at providing an overview of what elements are in the business and (to some extend) which elements are related. Other business model templates, like those of Gordijn (2002) and Weill and Vitale (2001) present the relations between actors, but not the internal elements. Hence, none of the existing business model is complete in that it covers everything.

Besides being holistic, it should also show the important dependencies that naturally occur within the business model. After all, a traditional car manufacturer should manufacturer cars at some point and sell them at another point in the business model. Unfortunately, a thorough study on how different elements of a business and whole businesses interact has not been done yet, and also falls out of the scope of this study. A full list of dependencies is therefore not available. (For more on whether business model templates are proper models, see the unpublished article of Mäkinen en Seppänen (2007). For more on the differences between existing business model templates, see Pateli en Giaglis (2004) and Shafer et al. (2005)).

The above problems make business model development quite hard. Though one might be tempted to start developing a business model with any of the business model templates, problems relating to **interdependencies** will popup promptly and **inconsistencies** are likely to arise. Additionally, the existing templates do not seem to provide a **complete** or comprehensive overview of the business model. In other words, the existing approaches outlined above are more about **analyzing** a business model than about developing one.

One exception is the template of Morris et al. (2005), which explicitly has been created to develop business models. Unfortunately, they describe only how to design the first part of their template.

What therefore is needed is a business model template that actively assists in **developing** the business model, instead of only be able to analyze it. This assistance can be expresses in the need for knowledge creation and transfer between business model developers, which makes that introducing several **visualizations** is a good way to accomplish (Burkhard, 2005). It also should be as **complete** as existing templates are. Because every business model has internal dependencies, it should also introduce mechanisms to **avoid inconsistencies** in the resulting business model as to minimize the potential negative impact of dependencies.

4.2 A newly recombined business model template

This section describes the design of the new business model template. The resulting design is an extension of the business model template of Markides, which consists of three levels, as shown on the left side in Figure 7. The newly designed areas are shaded. Also shown, on the right side of the same figure, is in detail the new, layered, Proprietary level.

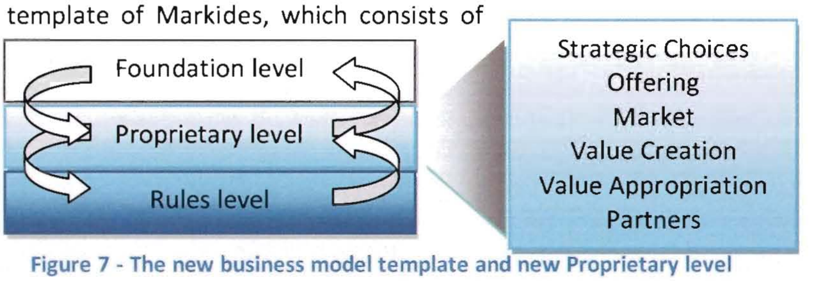


Figure 7 - The new business model template and new Proprietary level

4.2.1 Design goal

The goal of the design is a method, which can aid in developing a business model based on a business model template. This results in two designs:

- A business model template
- A business model development method

4.2.2 Specifications

Resulting from the problems of existing business model templates regarding business model design, the designable business model template should conform to the categorized[11] specifications in Table 5. Note that it also calls for several visualizations to aid in business model design.

Nr.	Spec. Type	Specification
1	Functional	The list of business elements in the template should be as complete as in existing business model templates
2	Functional	The resulting business model should be as consistent as possible
3	Functional	The focus of the template should be on designability of the business model and its elements
4	User	It should provide several visualizations of the business model and/or its elements
5	Design restriction	Use existing templates or ideas thereof as much as possible

Table 5 - Business model template specifications

There is only one specification for the business model development method, which is that it should be based on the newly designed template.

4.3 Outline of the template

The template of Morris et al. (2005) is a good template to build upon as it focuses on business model development. Additionally and as explained above, is not finished in the sense that it does not have specific content on two thirds of the business model and lacks a specific development process. Additionally, it is a hierarchical method, making it very suitable for the (top-down) development of business models. Therefore, the work of Morris' is used as point of departure towards a more complete, consistent and development centred the template.

Next, it is necessary to find out what needs to be added to the template of Morris et al. Therefore, the existing template is discussed first. Thereafter, the template is completed, resulting in the outline of the template. This outline will be further detailed in the section thereafter.

[11] There are four kinds of specifications, as described by Van Aken, et al. (2007, p. 24):

- Functional requirements: "the core of the specification in the form of performance demands on the object to be designed".
- User requirements: "specific requirements form the viewpoint of the user".
- Boundary requirements: "to be met unconditionally".
- Design restrictions: "preferred solution space".

4.3.1 Morris' business model template

The template of Morris et al. is a framework that "consists of three increasingly specific **levels** of decision making, termed the 'Foundation', 'Proprietary,' and 'Rules' levels" (p. 729). Each of the three levels consists of parts: "At each level, six basic decision areas are considered", which in this project will be called **business factors** (p. 729). In the next sections, each level is discussed in detail.

4.3.1.1 Foundation level and the business factors

The Foundation layer is about "generic decisions regarding what the business is and is not" (p. 729). It should "ensure [that] decisions are internally consistent" and "permits general comparisons across ventures and the identification of universal models" (p. 729). It is this level that Morris et al. created in detail. The questionnaire is included in Appendix E.

There are four main business factors: value proposition, the customer, internal processes and competencies, and how the firm makes money. These are derived "based on commonalities among the various [business model] perspectives found in the literature", resulting from their research which found nineteen different business models.

Morris et al. added two additional factors. The first is a competitive strategy factor, "reflecting the need to translate core competencies and the value proposition into a sustainable marketplace position" and the second "captures growth and time objectives of the entrepreneur". Note that these factors actually fall out of the scope of the definition of a business model used in this project.

The Foundation level provides a generic list of questions and accompanying answering options that are categorized in the six factors. The advantages of using this list, essentially a questionnaire, are thus that it controls the number of possible configurations and simultaneously gives direction to the business. In other words, it creates focus.

4.3.1.2 Proprietary level

Morris' et al. Proprietary level is about "the development of unique combinations among [... the business factors ...] that result in marketplace advantage" (p. 729). The business model is thus made specific.

Unfortunately, Morris et al. do not provide a way to actually design this proprietary business model: "At this level, the framework becomes a customizable tool that encourages the entrepreneur to focus on how value can be created in each of the six decision areas" (p. 729).

4.3.1.3 Rules level

The Rules level consists of "operating rules" that are described as a set of "guidelines [that] ensure that model's Foundation and proprietary [... business factors ...] are reflected in ongoing strategic actions" (2005, pp. 731-732). Unfortunately, as is the case for the previous level, Morris et al. are not clear as what it should consist of and how it should be developed.

4.3.2 Completing Morris' template

To give shape to the proprietary and Rules levels, other, existing and more detailed templates are used. First, for the Proprietary level, a new combination of these templates should create insight into what the business will be like and show the relations between the various parts of the business. However, it also uses the information from the Foundation level and be operationalizable in the Rules level (to ensure consistency). Therefore, several templates are combined with each other and with the template of Morris et al.

4.3.2.1 Selecting business model templates

As stated before, there are several studies that list and compare business model templates (Morris et al., 2005; Osterwalder, 2004; Pateli & Giaglis, 2004; Shafer et al., 2005). All authors but Pateli and Giaglis created a template based on other, *existing* business model templates. The Proprietary level is therefore compiled from those templates as they are grounded deeply in the literature. As the template of Morris has already been discussed, the remaining templates of Osterwalder and Shafer et al. is elaborated on briefly. Then, the templates are compared to form a new Proprietary level. This new Proprietary level also forms the basis for the Rules level, which is created after the Proprietary level.

4.3.2.2 Osterwalder's template

Osterwalder's business model (2004) is intended to be "a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams" (Osterwalder et al., 2005, pp. 17-18). It consists of nine building blocks, as is described in Appendix D. They consider it to be a reference model for business models (2005, p. 18).

4.3.2.3 Template of Shafer et al.

The template of Shafer et al. (2005)is based on a classification of components of business models, which they found in literature. Their classification consists of four high-level business model components, each having several sub components, a shown in Appendix D. It thus provides a view on the inside of a company. The template also links the business model with a company's strategy and network.

Next, the three templates (including (the business factors of) Morris et al.) are evaluated and combined to form the body of the new Proprietary level.

4.3.2.4 Comparing the business model templates to form a new Proprietary level

The three templates are compared on the level of their main elements, as not to get lost in definition problems of similar business concepts and to keep the comparison not too complicated. As to come up with a limited list of concepts that cover all relevant aspects of business models, these main elements are matched. The six factors of Morris form the starting point. As the different templates use different names for similar concepts (even on the highest level of aggregation), a choice in naming the resulting element is made. Additionally, some of the elements are so clearly hierarchically linked that they are used as sub-elements (depicted with '>'). The resulting comparison is shown in Table 6. It includes a column with the names of the elements chosen in the comparison (see also Figure 7).

ID	Morris's et al. business factors at the Foundation level	Shafer's et al. categories	Osterwalder's blocks	Zuurbier's (sub)-elements
1.	1, factors related to the offering: • offering: primarily products/primarily services/heavy mix • offering: standardized/some customization/high customization • offering: broad line/medium breadth/narrow line • offering: deep lines/medium depth/shallow lines • offering characteristics	Offering	Value proposition	• Offering
2.	• offering: direct distribution/indirect distribution (if indirect: single or multichannel)	Capture value	Distribution channel	• Value appropriation > Channels
3.	• offering: internal manufacturing or service delivery/ outsourcing/ licensing/ reselling/ value added reselling	Create value /Value Network	Value configuration & Costs structure & Relationship	• Partners • Value creation > Cost sources, Activities & Resources

4.	2, market factors: • b-to-b/b-to-c/ both • local/regional/national/international • broad or general market/multiple segment/niche market • upstream supplier/ downstream/ supplier/ government/ institutional/ wholesaler/ retailer/ service provider/final consumer	Market	Target Customer	• Market > Customer segment
5.	• transactional/ relational	Capture value	Relationship	• Value appropriation > Relationships
6.	3, internal capability factors: • source of competence	Strategic choices/ Create value	Core competency	• Value creation > Competences • Strategic choices > distinguishing features
7.	4, competitive strategy factors: • any of the strategy types	Strategic choices	-	• Strategic choices > Position
8.	5, economic factors: • pricing and revenue sources: fixed/mixed/flexible • operating leverage: high/medium/low • volumes: high/medium/low • margins: high/medium/low	Capture value	Part of Revenue model	• Value appropriation > Revenue sources
9.	6, personal/investor factors: • any of the aspiration models	Strategic choices	-	• Strategic choices > Vision & Mission

Table 6 - Relating the Foundation level of Morris et al. to Shafer et al. and Osterwalder

Beyond the obvious similarities, several findings in the above comparison are notable. To start with, and as can be seen in Table 6, the first and second factors of the template of Morris et al. have been split. This has been done because there is a difference in the level of abstraction between Morris's and the other templates. Therefore, the factors have been split to match the categorization of Osterwalder more closely.

Secondly, while in Osterwalder's template Channel and Relationship are market-related, they are here matched with Morris's Offering and Market factors and with Shafer's Create value category. The rationale for this is that Channel and Relation are created by the company and thus part of that company and thus not of the market. This is in line with the idea that a business model is created from the perspective of the business as explained before.

Thirdly, strategy is not part of Osterwalder's definition of a business model template and is therefore not in Osterwalder's column in Table 6. Morris' personal/investor factor is therefore brought under Shafer's category of strategic choices and is translated to a vision ("what the company wishes to become or where it seeks to go") and mission ("a statement of corporate purpose") (Grant, 2005, pp. 60-61). The other factor not in Osterwalder, competitive strategy, is translated into competitive position as defined by Porter (1996)), which lies very close to the description of Morris et al.: "How do we competitively position ourselves?" (2005, p. 730).

Fourthly, instead of following Osterwalder's separation of financial performance (consisting of profit, revenue model and costs), Shafer's logic of placing all things related to earning money in the Capture value block is followed, as that category is about getting a return from the market, which is where revenues are made.

Fifthly, in relating it to Shafer, Morris' internal capability factor is both a Strategic choice (of Shafer), in the form of the company's distinguishing features, and part of Create value, as it describes what the company does (to create the offering).

Sixthly, Osterwalder's concept of value configuration is translated in activities and resources, as part of value creation, based on the definition of the concept in Appendix D.

Next, in making the comparison, it became clear that most of Morris' Foundation level questions are related to Shafer's Strategic choices. Therefore, it was decided to split those Strategic choices into categories that are related to the Offering, Market and general Strategic choices.

Additionally, Morris's template does not explicitly name partners, except somewhat in part of the offering (element three). As the other templates do have partners in their models (Shafer even has the main element value network), it is included.

Finally, the comparison showed a striking difference between the templates. The template of Shafer et al. (2005) makes the distinction between the creation and capturing of value, which form the mechanism that drives the business, and the strategic choices that underlie this mechanism. The comparison shows that the other authors just list all elements without recognizing this dependency. That this inevitably results in strategy and the business model being intertwined and an incomplete coverage of strategic elements in those other business models, has also mentioned by Mäkinen and Säppanen (2007, p. 744 (unpublished)).

4.3.2.5 Creating a new Rules level from the new Proprietary level

To come up with a more structured approach of creating the rules, some examples of Morris et al. are discussed to get an idea of what is needed. Note that these rules can be used to measure the success of the business model.

The first example is of the offering factor: "Maximum one-way fare should not exceed US$___ Maximum food cost per person should be less than US$___" (p. 731, Table 3). The example consists of the variables one-way fare and food cost per person, which are given a maximum value. Most of the rules in the example of Morris et al. are similar. A second example is: "Specific guidelines for selecting cities to be serviced" (p. 731, Table 3). This example is different from the previous one, as it is about a set of to-be determined variables and (ranges of) values while the previous example is about specific variables and values.

Thus, the Rules level should result in a list of high-level business requirements[12] and specific (and measurable) business rules. The high-level requirements should define what specific rules are needed. Specific business rules are here variables, or key performance indicators, that should fall within some range of values, their targets. The specific requirements should be defined on in detail, as to use them in daily operations. All requirements should be derived from elements in the specific business model, which is explained at the end of the next section. The business model template design

In this step, the Proprietary and Rules levels are made specific. For the former, this means that the business model elements found above are put into hierarchical layers. For the latter, it means that the relation between the Proprietary and Rules levels are discussed. The Foundation level is not discussed as Morris et al. have provided its detailed design (2005).

4.3.3 Layering the Proprietary level

This section shows how the elements of the Proprietary level (in Table 6) are related. This is done by discussing how the elements are grouped and what would be a logical order of designing them. It results in four layers of elements that make up the proprietary level.

The elements and sub elements of Table 6 can be grouped together using the following questions: Why this business? What does it offer and for whom? How does it do that? And with who? This grouping is inspired by the definition of a business model of Mitchell and Coles (2003). Each group will, for purposes of visualization, be called a layer. The next sections describe the layers.

[12] Business requirements as used here do not refer to some specific definition of the terms in literature.

The first layer is the strategic choices layer, answering the question of *why* the business exists (Hougaard (2005) poses the same questions for this purpose). Note that the scope of the strategic choices are somewhat smaller than in other definitions of strategy. The strategic choices are input to the rest of the business. Its sub-elements are: mission, vision, position and distinguishing features.

The second layer, contains the offering and the market with its customer segment, answers the *what* and *for whom* questions. They are put onto the same layer as they are the direct resultant of the strategic choices.

The third layer contains the value creation and value appropriation elements. It is about *how* the business realizes the offering and *how* it will make a profit doing that. The first has the sub elements activities & resources, competences and cost sources. The second channels, relationships and revenue sources.

The fourth layer just contains the partners, who form the answer to the question *with whom* the new company will work together. This includes for example suppliers and third (outsourcing) parties. All these actors are related to the creation or appropriation of value, but have their own vision and mission. Note that one might argue that for example co-creation can also be done with customers, for example in new product development. As such, a co-creating customer has a producing role in this respect, he should be figuratively 'split' into a producing and consuming actor.

4.3.4 A new business model template

The resulting model is shown in Figure 8. It represents the new business. In the context of developing a business, the model should be read top down.

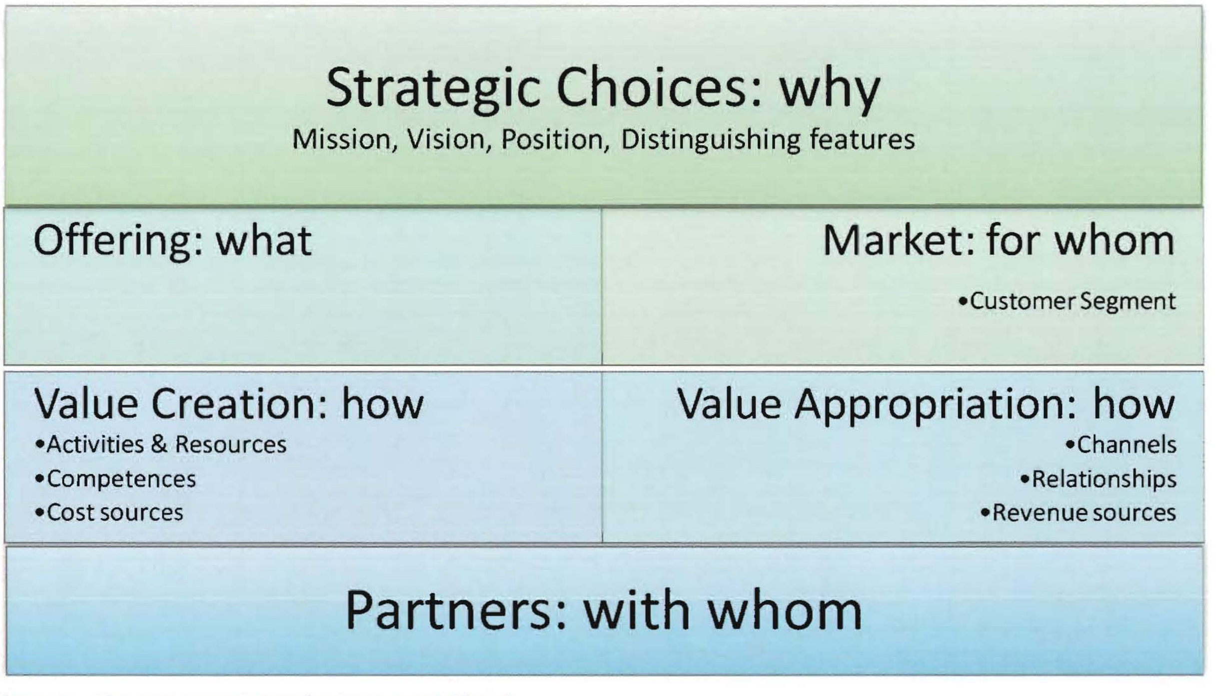


Figure 8 – The new proprietary business model level

4.3.5 Rules level

The previous section on the Rules level explained that there are different types of rules and that they should be derived from the elements of the Proprietary level shown in Figure 8. Therefore, multiple high-level requirements should be specified for each of the above elements. Each is then to be translated into multiple specific business rules with a key performance indicator and a value or range of values.

4.4 Business model development method: using the business model template

This method provides steps to develop a business model, based on the template designed above. Figure 9 clearly illustrates the steps of the method and its relation with the template.

By going through the steps, one is not just describing what already exists (in reality or in one's mind), but also finding out what choices and dependencies there actually are in developing a new business.

The point of departure is a business idea: an offering and a user of that offering who functions as first (potential) customer (Based on: Hougaard, 2005). Though there might be in reality a myriad of reasons why a business model is developed, a business idea provides a natural starting point.

Though the development process is linear, solving problems within the business model should be approached in an iterative way, thus going through the business model by making changes and adapting the other elements of the business model accordingly.

In the next sections is described how the different levels of the business model can be used. Additionally, several visualizations are proposed to create even more insight in business model development choices.

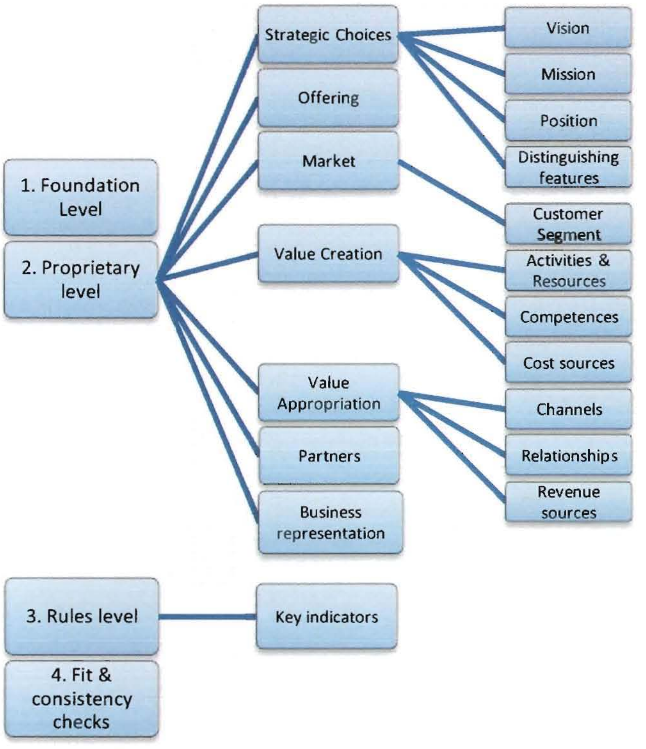


Figure 9 – the business model development method

4.4.1 Preparations: the business idea and its users

It is assumed that a business idea, consisting of an offering and some users (which do not have to be the intended customers), has already been defined. As for the first, the offering should be a (new) product or service. The intended users should be defined as a group of people that might be interested in the (new) product or service.

Preparation: define the business idea and it users

4.4.2 Step 1: Developing the Foundation level

Morris et al. provide detailed instructions on how to design the Foundation level, using the generic questionnaire.

Note that Morris et al. explain that the model should be internally consistent and that the factors should reinforce each other to achieve sustainability and internal fit. Unfortunately, no framework is given to analyze internal fit. Fit should therefore be established by logical reasoning and by comparing the different factors with each other.

Step one: answer all questions of Morris et al. to define the outline of the business model.

4.4.3 Step 2: Developing the Proprietary level

In this step, the Foundation level's questions are made specific for the business.

4.4.4 Step 2a: Strategic choices layer

The strategic choices underlie all other choices in the business model. First, a vision should be formulated that states what should is ultimate goal of the business. The mission is how the company will try to reach that vision. The position is how the company role is versus the competition: why is it different? Finally, the company's distinguishing features explain what the company does differently: what does the company do best?

Step two, a: When developing the remainder of the business model, the mission, vision, position and distinguishing features should be considered the goal of the business model.

4.4.5 Step 2b: Offering and Market layer

The offering is what the company will deliver to its customers, being the product or service from the business idea.

The market is obviously a description of the potential customers. Though it is tempting to think that the users of the business idea will be your customers, it is better to consider the question who wants to pay for your offering instead of who wants to use your offering. If the two groups do not match, try to think of ways of relating the two groups. An obvious example of this is advertising on TV or on the web.

Step two, b: Describe the offering and potentially paying customers

4.4.6 Step 2c: Creating and appropriating value layer

The next logical step in developing the business model is to develop an answer for the question how the business will provide the offering in a profitable, sustaining way and how it will realize a profit by offering the product or service.

Developing this layer is a somewhat creative, entrepreneurial process. During this process, one might realize that it is not this company that should be offering the product or service specified in the previous layer. Alternatively, it might be that many required activities, resources, competences or channels are simply not available. These then have to be brought in by a partner or supplier or by finding a way to finance the required investments. More on these decisions in the following sections, together with several useful visualizations.

4.4.6.1 Value Creation

In developing how the business will create the offering, it makes sense to first define the required activities and then to define the required competences and resources which are needed to execute the activity. The value creation process should be considered the main primary business process. A representation is shown in Figure 10. It consists of all activities necessary to create value by means of the offering (being the product or service). The required competences and resources are also included, as is the final offering (end product) which has a different colour.

Note that activities in this value chain are not limited to the new business: all required activities should be in it, as the executing actor will be determined in a next step (of the partners-layer).

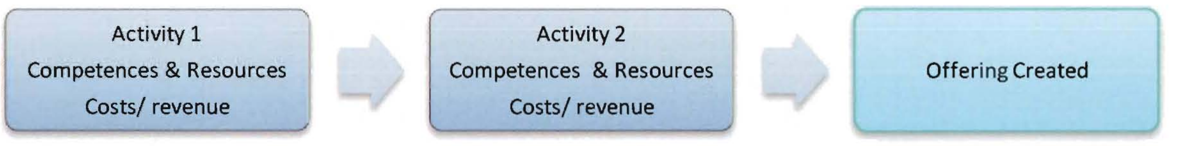


Figure 10 – Activity chain

An interesting example of using this visualization is when developing the process in such a way that the costs of producing are less than some predefined selling price. This is different from the usual practise of cost-based pricing, which determines the selling price as the (total) cost price plus some margin. To visualize this, the associated cost per activity has been added to Figure 10. The total (variable and direct) costs can be calculated by adding up the different costs.

Activities do not always have to cost money, they can also bring in money. For example, a paper product catalogue could be supplemented with advertisements and so bring in money. (The resulting question of how revenues should be shared among partners (if applicable) is not answered here.) In shown in Figure 10, revenues can be shown next to costs.

Another way of showing costs is by identifying the main sources of costs related to the activities, instead of the costs per activity. An example of this is given in Figure 13. It shows a low-cost airliner in the middle and the main cost sources around it. The size of the arrows gives an indication of the cost amount. The idea of this picture is that ways are sought to lower these costs and reduce the number of cost sources.

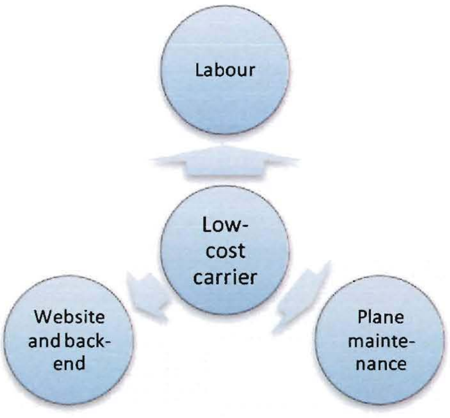


Figure 11 - Cost sources example

4.4.6.2 Value Appropriation

The approach to the market is developed in this step of step 2c. Assumed is that every contact with an external stakeholder essentially uses a channel and is part of a relationship, which both can be managed. In addition, the channel and relation together form the experience of the customer or partner. The different elements are discussed in the next sections.

4.4.6.3 Value Appropriation: Channels

A marketing channel, in the definition of Coughlan et al. (2006, p. 2) is a "set of interdependent organizations involved in the process of making a product or service available for use or consumption". Its key development questions are the need for producer coverage (the level of brand exposure), what the combination of channels types is (like stores and websites) and whether to access the market directly, via a third party or both (p. 113). The first and third questions result in the configuration of the channel and the second the medium of the channel. A fourth key question can be added to this list: who provides for the channel itself? This is relevant when for example a website it created and/ or delivered and/ or hosted by a third party even though the website itself is branded by the business and not by the third party (see for more on this section 4.4.7). For details on what a channel is made of, see Appendix B.

4.4.6.4 Value Appropriation: Relationships

McKenzie (2001, p. 88) presents a simple way to distinguish four types of relationships (which he defines as "a series of conversations"; which are "a series of economic exchanges" (pp. 46, 47). They are shown in Figure 12 and based on the dimensions of discovery (on the Y axis): "richness of the knowledge of a customer" and dialogue (on the X axis): "richness of the conversations and the degree to which they are conducted in real-time" (p88). A relationship can be anywhere on the matrix shown in Figure 12 and should be determined based the product and the customer segment. A type of relationship should be defined for each external actor.

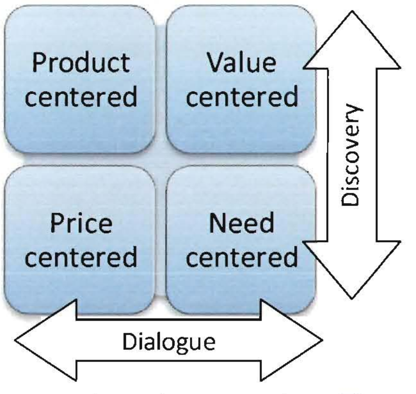


Figure 12 – Relationship types, adapted from McKenzie (2001, p. 88)

4.4.6.5 Value Appropriation: channel and relationship visualizations

A way to visualize the design of the different channels based on some type of relation is to show all interactions with customers. An example is given in Figure 13, which shows the customer segment and all activities that interact with that customer group. Next to it are the relationship and the media used. Note that the graphic shows a linear flow of activities from top through bottom, which does not have to conform to reality. This however is not a problem, as the main goal is representing interaction, not the different processes within in the company.

A similar diagram can be constructed for partner interactions.

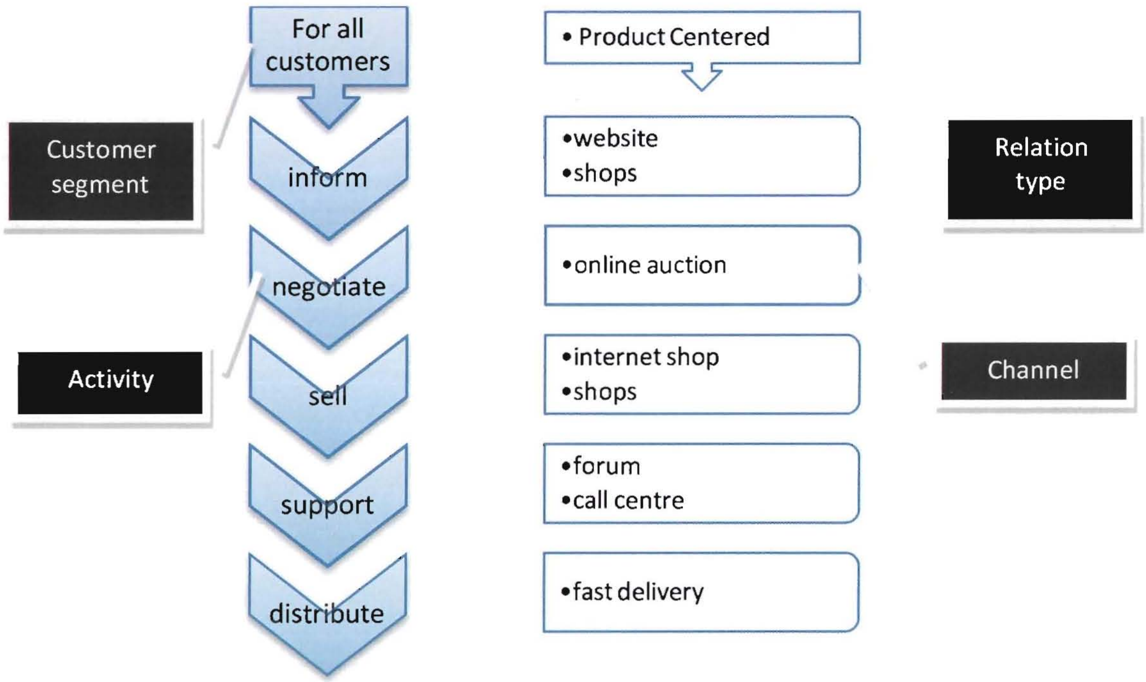


Figure 13 - Example: customer interactions tool

4.4.6.6 Value Appropriation: Revenue sources

To visualize the market and especially to enable representing new and innovative ways of making money, Figure 16 can be drawn, based on the business model representation used on the TU/e. The circles are revenue sources and the arrows toward the new business depict the revenue stream. The width of the arrows shows the relative amount of revenue that flows toward the firm. It is possible to include second and higher tier (being indirect) customers. The size of the circles shows roughly the relative size of the actor. A large competitor is included in the figure (in a different colour), which does not embrace the other sources because of various reasons. As one can imagine, being able to tap into different sources of revenue can be an important differentiator and source of added value. In this example, because of accessing multiple sources of revenue, the tickets for seats in airplanes can be lower for the low-cost carrier.

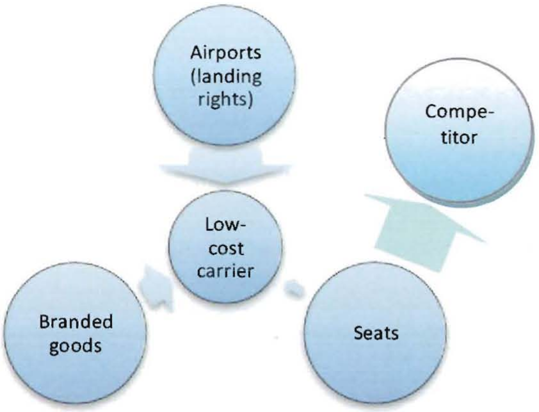


Figure 14 –Sources of revenue: an airliner example

4.4.7 Step 2d: Partners layer

Partners are available for activities of both value creation and value appropriation. Therefore, two of the diagrams from those sections will now be augmented with partner selections.

Figure 15 shows the same activities as in Figure 10 above, but now has additional boxes to list possible partners, who might execute that particular activity. The upper company is the one chosen (when possilbe) to perform the activity.

Figure 15 - Activity chain with partners

The separation of the development of activities and who will be performing the activity, is based on ideas of Prahalad and Krishnan. They say that it is not necessary to obtain everything yourself (which is of course the idea behind transaction theory's vertical integration (Williamson, 1971)), as the focus should be on obtaining *access* to resources (Prahalad & Krishnan, 2008). Note however that, according to dynamic capability theory, some assets should be considered strategic and therefore should be part of the firm. Strategic here is that it is unique, difficult to replicate and "honed to a user need" (Dosi et al., 1998).

Figure 16 below shows the activities and channels of section 4.4.6.2, but now with the performer of the activity. Alternatives can also be included here, as the final oval shows. Again, the first actor is the one chosen to perform the activity.

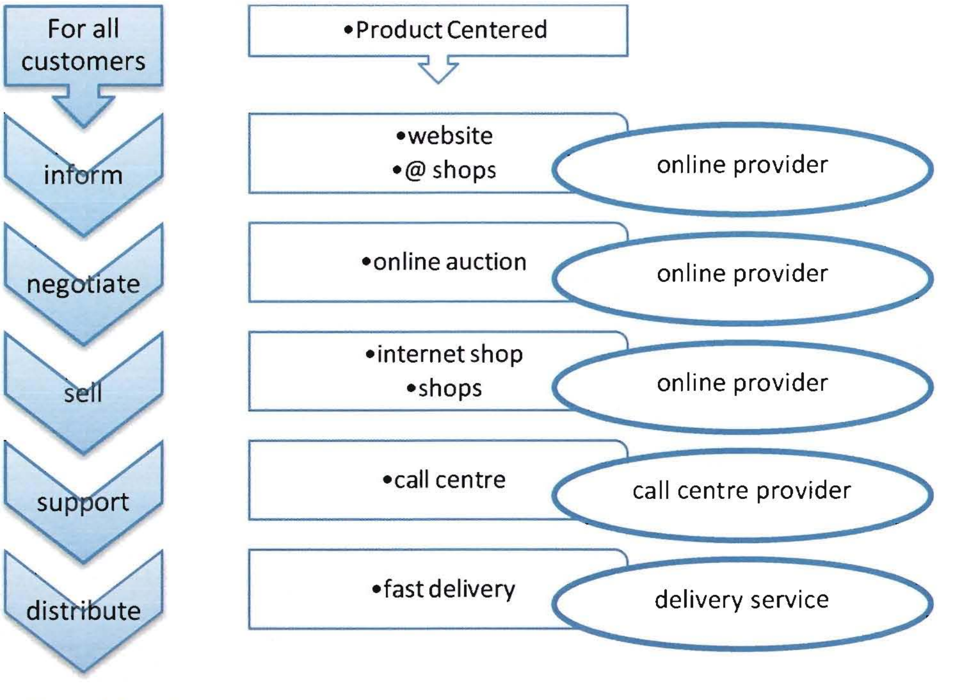


Figure 16 - Customer interactions with partners

As there are many types of partners, like suppliers, manufacturers, channel providers and intermediaries, it is not feasible to go into details on how to select specific (types of) partners here. In addition, many selection mechanisms have been developed, for example by De Man (2004) on selecting partners in a network. Furthermore, many decisions will be make or buy-like decisions, for which a management accounting book, like that of Drury (2000), can be consulted.

4.4.8 Step 2e: The business representation

Combining the information from above, a drawing can be created that matches Figure 17. It shows in a matrix the activities of the business, the resources/ competences required for those activities. On the other axis, it shows partners and customers. The direction of the arrows show who does what.

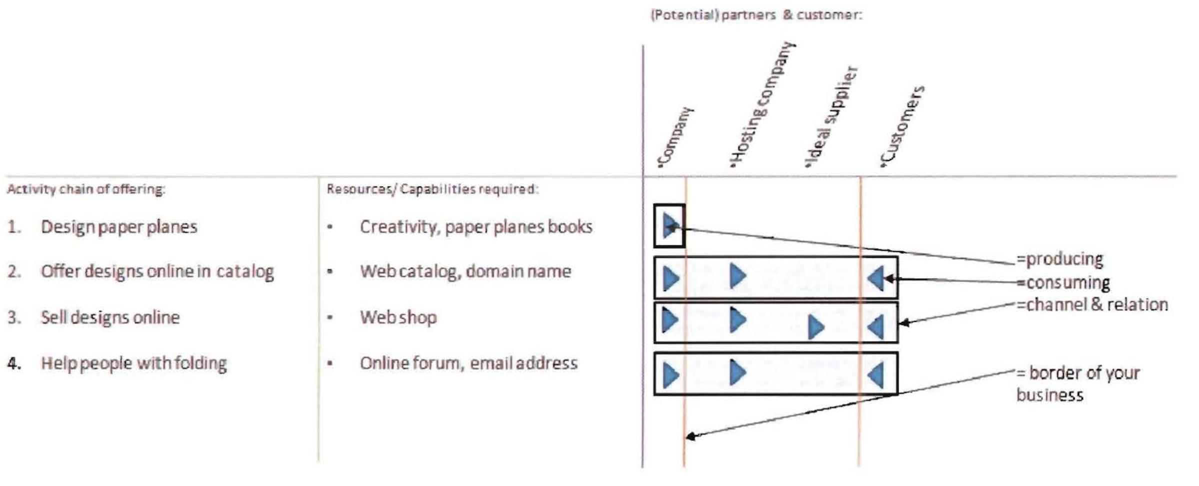


Figure 17 – example business representation (paper plane design and manufacturing company)

In developing the above drawing, the following design rules should be taken into account. They are based on the structure of the diagram and on comments and observations from the evaluations (see Appendix A).

- The list of activities should include both the value creating and value appropriating activities (this was found to be very effective in testing)
- All activities must be ranked in order of execution
- All activities must be executed by at least one producer
- Any activity does not have to have a consumer (in practice, there should always be a consuming party; however, because of its high abstraction level, internal consumers should not be included).
- All stakeholders should be in the business representation and the new business should be listed first
- A stakeholder does not have to have any consuming or producing activity
- All activities executed by the new businesses have resources and capabilities associated with it even when these are already listed (thus occurring more than once)
- Every channel links with the new business, even if it does not consume or produce anything or it should not be in the picture (for example when an activity is handled by a partner but offered by the new business)
- The choice of channels and relationships should be made for each activity that involves external actors, even though it might result in adding actors or even activities to the business model when the channel structure or relationship type demands for it

Step 2, c: define how value is created and appropriated. Be entrepreneurial using the activities, interactions, cost sources and revenue sources diagrams. Next, the decision to do specific elements of the business model yourself or have it done by partners can be made. Use the business representation diagram to combine all the above information in one picture.

4.4.9 Step 3: Developing the Rules level

In essence, the business rules are key performance indicators. Therefore, two steps are proposed:

Step 3, a: define, resulting from the business model and per element, the high-level business requirements.

Step 3, b: specify for each requirement a set of business rules and their required performance, by specifying a value or range of values.

These two steps complete the business model.

4.4.10 Step 4: Analyze business model consistency

Keeping consistency while developing a business model is not very easy with all the different levels and layers. As explained before, Morris et al. do note the need for internal consistency, but do not give a formal way to analyze it (2005, p. 731, Table 3).Fortunately, a first fit analysis has already been done, by means of the visual tools above, as they help to create an internally consistent business model.

There are more ways to establish fit, both between levels in the business model template and between the separate elements. An exhaustive way to analyze the fit between all elements and sub factors in the business model, is to create a fit matrix, with on both axes the (sub) elements so that for each can be shown whether they fit. It would be quite similar to the House of quality matrix (Mohr et al., 2005). However, it is imaginable that not all (sub) elements need to fit or only to some extent. This also implies that fit should be measured somehow, as to create levels of fit. In addition, about many of the fits between one or multiple elements, books and articles have been written, making that creating a comprehensive list with theories and tools is not viable here in terms of time and effort. For example, the relation between the offering and the market can be measured in many ways, for example by using QFD techniques or focus groups (Mohr et al., 2005). Finally, actually using the matrix would probably be quite time consuming while many fits are plain obvious.

However, some fits can be derived from the Foundation level directly, making them interesting to discuss here. To establish fit, several fit questions have been designed, which are discussed in the following sections. Ways to react to these questions have also been added. Though the number of fit questions might seem low, many other questions are just obvious. A question like whether there is a fit between the channels and the specified market is not included. Furthermore, the Foundation level questions that relate to one element can be derived from Table 6 (on page 22, which shows the combined business model templates), and are therefore not included as well.

The Foundation level questions should be used as input for the goal of the relationship with customers: should the emphasis lie on selling great numbers of offerings with a low margin, on highly profitable but low number of offerings, or on some other, innovative other combination. Also , offering pricing should be adjusted to that, unless some price range has already been established before. Finally, the Foundation level asked for several sources of revenue, which can be discussed next.

4.4.10.1 Internal capabilities factor versus value creation/ appropriation

The first fit analysis comes from the Foundation level's internal capabilities factor. That question specifies one or several capabilities, which should be visible somewhere in the business model. The fit question is:

- Is or are the specified source(s) of competence at the Foundation level used in value creation or value appropriation?

A negative answer could mean that, the intended competence is not necessary, or that it is not embedded in the current business model. Possible course of action are:

- Change the list of competences.
- Change the activities so that one uses the competence.
- Change the actors, making that the competence is needed by the new business, instead of by a partner.

4.4.10.2 Vision and mission versus the rest of the Proprietary level

The strategic vision and mission should set out what the company wants to be. The main fit question is thus whether the business model can realise that. The resulting question is:

- Does the business model enable the vision and mission?

A negative answer might be countered with the following:

- Change the mission/ vision; which however is an unlikely option
- Try to identify bottlenecks in the business model and create alternative business models with alternative solutions.

4.4.10.3 Competitive strategy versus the Proprietary level

The Foundation level has one question on competitive strategy. As discussed in section 4.4.4, the vision, mission, position and distinguishing features based on that should form the starting point of the rest of the business model. However, the following questions make sure that it is maintained throughout the development process:

- Starting from partners and then going up in the model: is the competitive strategy maintained?

If not, then try to 'debug' the model first. Find what parts of the business model deviate from the strategy and where it comes from. Start from the bottom up as to find the design error. Does that part also deviate from the strategy? Then use one of the following alternatives:

- Change business model part to support the strategy.
- Create a business model variant that does take into account the strategy.
- If the strategy is not maintainable: change it.

4.5 Reflection

Table 7 shows how each of the template's and method's design specifications have been met in the design. From the table can be concluded that the design has met all specifications. Whether it is also successful is described in chapter 8.

Spec. Nr.	Specification is met by:
1	Building on existing business model templates as much as possible
2	Explicitly linking elements in the business model and inserting several fit checks into the process
3	Stating a clear start of the process and introducing several layers of abstraction
4	Linking several existing or new visual models of (parts of) the business model
5	Building on existing business model templates as much as possible

Table 7 - Meeting design specifications.

5 BUSINESS DEVELOPMENT & BUSINESS CONCEPT DEVELOPMENT

The need for (re-) developing a business model does not come out of nowhere. Very often, the context will be some kind of business development effort. However, the relation between the business model and business development has not been looked into before. Therefore, this chapter looks at the new venture and new business development process literature for insights on this problem.

The chapter starts with an overview of the available literature, followed by a discussion on the business development process. It is demonstrated that existing business development processes have a fundamental flaw in their design: they are linear. Business concept development is proposed and its usefulness for business model design is shown.

5.1 Business development

Three different viewpoints emerge from the literature when searching for "business development": that of entrepreneurship and new venturing (Van Burg et al., 2008); that of corporate venturing (Burgelman, 1983; Fast, 1978; Bhave, 1994), strategy, and intrapreneurship, which provide internal viewpoints of incumbent firms (Vanhaverbeke & Peeters, 2005); and that of (technological) innovation (Burgers et al., 2008) and new product development (Brentani, 2001), which often form the start of new business development. Though the process of new product development (NPD) partially overlaps with that of business development, nor the NPD process nor its overlap is discussed in this research. Instead, the first two are the focus of this chapter. Besides these however, there are also articles on business development in specific industries and in the context of policymaking (Vuolaa and Hameric's (2006) article is an example of both), which fall out of the scope of this research.

The next section discusses how the processes of a setting up a new venture and new business, part of an existing business, looks like.

5.2 What does a typical business development process look like?

As described above, there is a difference in the literature on corporate business development and on new venturing. Both are therefore discussed separately.

5.2.1 Entrepreneurial literature: the new venture creation process

Liao and Welsch (2003) say: "despite the growing literature on this area, few studies have explored the venture creation process." They continue by defining new venture creation as a "process of uncertainty", which is driven by the entrepreneur. Wakkee, in her doctoral thesis, adds that: "The creation of value might be regarded as the outcome of the entrepreneurial process" and "The process of value creation ends when the opportunity is abandoned or does not longer add value to the entrepreneurial team or the market (2004, p. 68).

Studies of the new venture creation process provide different classifications of the phases the process goes through. In her dissertation, Wakkee (2004) summarizes several authors, by dividing the process in three parts: opportunity recognition, preparation and opportunity exploitation. In the first, "the entrepreneur develops an initial idea into a viable business opportunity by matching attainable resources and perceived market needs and then evaluating the opportunity before deciding whether or not and how to exploit this opportunity" (p. 67). In the second, "the business opportunity is translated in a concrete business concept leading to exchange with the market" and an organisation, a network and products or services and the business plan are created (p. 68). In the third finally, "processes between the firm and its customers begin to take place" (p. 68).

Another example is the process of Bhave (1994), who found three stages: "definition of business concept, creation and set up of production technology, and exchange of product". In her dissertation (1999, p. Part Two 11), Sarasvathy gives a schematic representation of the creation of a new firm, which is shown in Figure 18. Unfortunately, she has only filled in parts of it. Although there are other arrangements of activities, like that of Bhave (1994) and of Van de Ven et al. (1989), they are very similar in nature and therefore not discussed here.

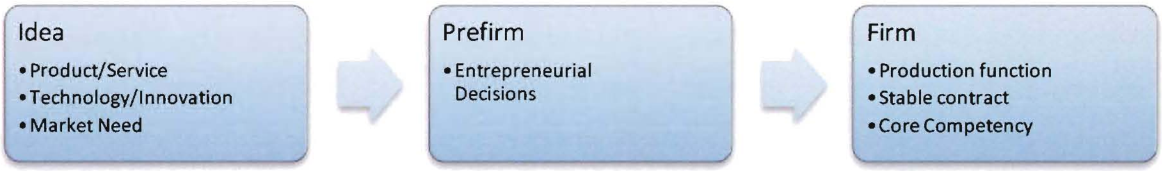


Figure 18 - Firm creation according to Sarasvathy (1999, p. Part Two 11)

5.2.2 Corporate business development

Though the literature on corporate business development is surprisingly thin, an older article of Burgelman (1983) provides ideas on how corporate business development should work, based on qualitative research. The internal corporate venture process, embedded in a new venture division, consists of four stages: "a conceptual, a pre-venture, an entrepreneurial, and an organizational stage" (1983, p. 28). This comes somewhat close to the new venture creation process as described by Wakkee above. Besides this time-based view however, Burgelman also used a process-model approach. Figure 19 shows the resulting flow of activities in the process (in white), as an overlap of the key and peripheral activities of the internal corporate venturing process model.

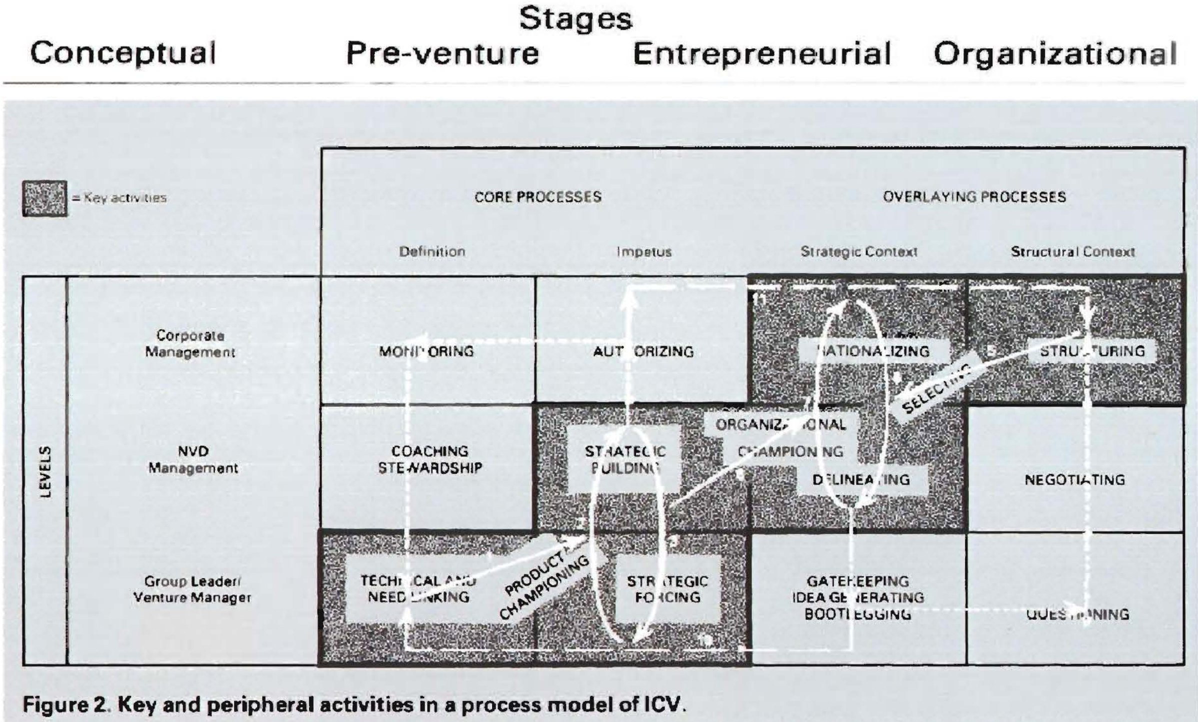


Figure 19 - Business development process, by Burgelman (1983)

Merwe (2002, p. 402) takes a managerial perspective and comes up with the following five tasks: "(1) Deciding what business the company will be in, and forming a strategic vision of where the organisation needs to be going, infusing the organisation with a sense of purpose, while providing a long-term direction and establishing a clear mission. (2) Converting the strategic vision and mission into measurable objectives and performance targets. (3) Crafting a strategy to achieve the desired end results. (4) Implementing and executing the chosen strategy. (5) Evaluating performance, while reviewing new developments that could lead to initiating corrective adjustments in the long-term direction, in light of actual experience, incorporating changing conditions, new ideas, and new opportunities".

5.2.3 Problems with the time-based approach

Table 8 shows the different time-based business development processes from the previous sections. Note that Merwe's process is mapped on to the others. Note also that only Burgelman mentions the transition from an entrepreneurial business to an organizational (institutionalized) business.

t	0	1	2	3
Wakkee	Opportunity recognition	Preparation	Opportunity exploitation	
Bhave	Definition of business concept	Creation and set up of production technology	And exchange of product	
Sarasvathy	Idea	Prefirm	Firm	
Burgelman	Conceptual stage	Pre-venture stage	Entrepreneurial stage	Organizational stage
Merwe	Strategic vision & strategy (stages 1,2,3)	Implementing (stage 4)	Implementing (stage 4)	
Van de Ven et al.	Business initiation processes	Business start-up processes	Business takeoff processes	

Table 8 - time-based business development processes

When developing a business with the intent of innovating business model, the business model seems to be developed somewhere in the phase 0, as that is where the new business is conceptually imagined. However, the following observations show that the business idea is often not stable when it exists that phase.

As Bhave indicated in his book (1994), the new venture creation process is not linear, but iterative and feedback driven. Wakkee supports this as well: "the process is highly dynamic and iterative [...] as the three stages may be more or less overlapping and many feedback loops exist both within the three stages and between them" (2004, p. 69). This was confirmed in Liao and Welsch' study (2003). Burgelman (1983) also shows similar processes in his process model, which he made visible using the circular arrows, representing the flow of activities.

On the other hand, Liao and Welsch also found evidence of what Van Den Ven et al. (1989) found as well: that start-ups "share a common set of core activities, and [that] the sequencing patterns for these core activities are highly similar" (2003).

Similar arguments were the reason for Sarasvathy to reinvestigate the entrepreneurial process empirically to come to a more accurate idea of how entrepreneurs actually start businesses (2001a, pp. 244, 245).

Thus, because the process of business development is apparently not linear, but on the other hand consists of a limited range of activities, it seems worthwhile to explore a different way of looking at the business development process, which is not time-based.

5.3 A different way of looking at the business development process: business concept development

As no seemingly serial process can thus be established, it is interesting to look at other ways of looking at the business development process. Liao and Welsch (2003) refer to Delmar and Shane (2002) who define that there are planning activities and operational activities. An analogous line of reasoning is used in the context of innovation in an ambidextrous organization by Van Assen et al. (2008, professional literature), who state that, in organizations, there are creative, implementation and capitalization processes. Though it is a different discussion whether these should be performed in parallel or in a serial way, it is an interesting way of looking at business development that all processes run intertwined in a new business (as established above). The main advantage of this approach is that the order of activities becomes less important (though the implementation and operational processes will obviously come in later). Note that it is not the idea that the same choices are made repeatedly: it is just a different way of approaching the business development process.

As Table 9 shows, the two different categorizations cannot be mapped on each other directly (the placing in the table shows a loose interpretation of the authors' intentions). Creative processes obviously consist of different activities than in Delmar and Shane's planning process. Therefore, the idea of the separation of creating the idea, implementing it and running it (proposed by Van Assen et al.) is interpreted slightly different here, as shown in the view on business development in the final row of Table 9.

Delmar and Shane		Planning activities	Operational activities
Van Assen et al.	Creative processes	Implementation processes	Capitalisation processes
P. Zuurbier	Business Concept Development	Business Concept Implementation	Business Operations

Table 9 - Different views on business development

The ideas above translate into the following definition:

Business concept development consists of all activities that are related to the invention of the business concept.

Business concept implementation consists of all activities that are related to realizing the business concept.

Business operations consist of all activities that are related to operating the realized business concept.

As described above, there can and in practice probably will be feedback loops between the sets of activities, from now on called layers. They are also not processes in the sense of activities that have to be performed in a specific order, though it might seem that way. However, even operations change in the life of a (starting) business, as the entrepreneur or manager for example finds out that the market entry fails and thus that a new or changed product is needed, requiring changes in operations which have to be thought out and be implemented, as are possibly more aspects of the organization. Figure 20 shows that the mapping of business concept development onto the business development process as defined by Van de Ven et al., but any other new venture or business creation process could have been chosen.

P. Zuurbier	Business Concept Development		
t	0	1	2
Van de Ven et al.	Business initiation processes	Business start-up processes	Business takeoff processes

Figure 20 - Business concept development in business development

Was it previously hard to define where exactly the business model is constructed, because of non-linearity of the business development process, now it is easily defined as being created in the business concept development layer.

What exactly has to be done in this layer is probably mostly a question of definition. Therefore, it is chosen that:

- It accepts new business ideas and feedback in an iterative way,
- It should be able to determine whether a new business idea should be pursued,
- It should be able to translate those business ideas into a plan of what the business should look like: the business concept.

5.3.1 Business concept development and business models

Business concept development has a strong link with the business models as a way of expressing the outcome. Wakkee describes the following which is needed when preparing for exploitation, which can be considered the same as business concept implementation: "building a resource base, developing (prototypes of) products and services, creating an organisation [, ...] developing the business plan or strategy [and must] the firm [...] start building a name and reputation for itself and its products." Besides the point whether strategy should be in- or output in the implementation, the business model as defined above fits apparently quite good with the needs of the business concept implementation layer.

Furthermore, a business plan does not fit this description very well as it also consist of the business case, which contains implementation details and is therefore considered to be part of that layer. It is also in line with what Sarasvathy describes on how entrepreneurs work with plans: there is hardly any, and even more, it changes often and rapidly: "People instead work using a mental picture or story of what is to be created" (2001b, p. 3), as the business model is not about elaborate planning but about insight into the business.

5.3.2 The context of business development, including business model innovation

There are many different reasons for a company for being engaged in business development. The need for business model innovation is one of those reasons. The contexts in which to business model innovation, listed in section 3.3.3, are therefore descriptions of reasons to do business development. Table 10 summarizes these different contexts and the reasons why to do business development.

Existing company		**New venture**	
Situation	Do business development to:	Situation	Do business development to:
Responding to business model innovation			
"Appreciating that the new way is neither superior to the existing way nor destined to conquer the whole market"	(Do nothing)		
"If it is not your business", thus when: "the established competitors do not see the innovation as a threat"	(Do nothing)		
The new business is a threat to your business	(Disrupt the disruptor)		
The new business is a threat to your business but also brings great opportunities	(Add the business model to the existing business)		
The new business is actually your business completely	Copy the disrupting business model and abandon the existing one		
Taking business model innovation initiative			
"When entering "a new market where entrenched competitors have fist-mover advantages", thus "breaking the rules""	Innovate the existing business model	The business idea is the innovative business mode	Design an innovative business model
"When [...] attempting to scale up a new-to-the-world product to make it attractive to the mass market"	Innovate the existing business model	Existing business models require too much resources and/or investments and/ or unavailable capabilities	Design an innovative business model
"When their current strategy or business model is clearly inappropriate and the firm is facing a crisis"	Innovate the existing business model	Existing business models do not support capturing value from the offering	Design an innovative business model

Table 10 – Business model innovation as a context for doing business development (green) or not (orange), derived from Marikides (2006)

Besides doing business concept development for business model innovation, there are other reasons why a company might start doing business development. They are shown in Table 11. The list is based on Markides (2006). The list has been supplemented by several business transformation and entrepreneurial experts (see chapter 8).

Entrepreneur and intrapreneur related
Entrepreneurial idea for an: Innovative prod/ Innovative market/ Innovative technology
Existing business unit transformation related, potentially initiated by an intrapreneur
Other, internal change of business unit
Spun off (sold) business unit
Spun out business unit (as a daughter company)
Business unit with spun-out/off part
Business unit which is spun-in
Business unit with spun-in part
Upgrade business unit part to business unit
Downgrade business unit to business unit part
Merger of existing business units
Separation of existing business units

Table 11 – More contexts for doing business development, based on Markides (2006)

5.3.3 The business context and the different usages of business concept development

It is not hard to imagine that the different contexts listed in the previous section and resulting business development processes require a somewhat different path in developing the business concept. For example, in merging two business units, the existing business concepts or at least part of those, will have to be taken into account in creating the new business concept. An analysis of the difference between the original and new concepts might then show overlapping or abundant resources. For a new venture however, the there will be only the new business concept.

To allow for a fitting business concept development process (in the next chapter: method) for each different context, a distinction is made not in the development process itself, but in its use. This approach should make it easier to apply it in the different contexts, without the need for introducing a full process for each.

Several different uses of the BCD method can be distinguished. Its first use is for describing an existing business concept. Secondly, it can be used for developing a new business concept. Three, to redevelop an existing business concept, or to make a copied business concept specific for a business, first describe the existing (as-is) or to-be copied business concept, and then develop the desired (to-be) business concept. A comparison can be made between the two to find gaps and synergies to bring the old and desired business concepts together. Note that there is no use that describes how to directly change an existing concept as that would require a different approach of business concept development. Instead, a 'greenfield' approach is used in which a to-be concept is developed.

Additionally, when business model innovation is desired, some way of measuring its success, an *innovation check*, is needed: it is after all impossible to design for innovation (as the impact can only be established in hindsight).

The above contexts and the business concept development uses they require, are summarized in Table 12.

Reason to do business development	Business develop-ment goal	Business development scope	Business concept with business model that is	Use method to:			Tools:	
				Describe the to be copied business concept	Describe as-is business concept	Develop to-be business concept	Compare business concepts to create synergies/ gaps	Innovation check
Entrepreneur or intrapreneur related								
1. Entrepreneurial idea for an: Innovative prod/ Innovative market/ Innovative technology	Create	New venture, New business unit	New			X		
			Copied and made specific	X		X	X	
2. Entrepreneurial idea for: An innovative business model	Create	New venture	Innovative			X		X
Existing business model- innovation related								
3. Business model innovation initiative	Transform	Existing business unit	Innovative		X	X	X	X
4. Adopt an innovative business model	Transform	Existing business unit	Copied and made specific	X	X	X	X	
Existing business unit transformation/ intrapreneurship related								
5. Other, internal change of business unit	Transform	Existing business unit	Changed		X	X	X	
6. Spun off (sold) business unit	Create	New venture	New, based on what was taken with the spinout		X	X	X	
7. Spun out business unit (as a daughter company)	Create	New venture	New, based on what was taken with the spinout and what the mother has available		X	X	X	
8. Business unit with spun-out/off part	Transform	Existing business unit	Updated		X	X	X	
9. Business unit which is spun-in	Transform	New business unit	New, based on synergies		X	X	X	
10. Business unit with spun-in part	Transform	Existing business unit	Updated, based on synergies		X	X	X	
11. Upgrade business unit part to business unit	Transform	New business unit	New		X	X	X	

12. Downgrade business unit to business unit part	Transform	Existing business unit	Updated		X	X	X	
13. Merger of existing business units	Transform	Existing business unit	Updated		X	X	X	
14. Separation of existing business units	Transform	Existing business unit	Updated		X	X	X	

Table 12 – BCD method business development usage contexts

The next goal of this research is to design the business concept development layer in more detail. However, to prevent creating a rigid, single business idea orientated, on prediction instead of freedom of imagination based set of activities (ie.: a less entrepreneurial process), elements of Sarasvathy theory on effectuation will be used.

6 EFFECTUATION AND ITS APPLICATION TO BUSINESS CONCEPT DEVELOPMENT

As explained in the introduction, a more complicated world creates more knobs to turn (or decisions to make) in modern businesses. Making the right (combination of) decisions is therefore becoming more difficult. One way to manage this is by trying to predict everything. A completely different way is instead to focus on what aspects of the future can be controlled (Wiltbank et al., 2006). Sarasvathy found that the second line of thinking is employed by entrepreneurs and she coined it effectual thinking (1999). As effectuation assumes "dynamic, nonlinear, and ecological environments" (Sarasvathy, 2001a, p. 251), this entrepreneurial way of thinking fits very well in the complex world of modern business.

This chapter starts with a description of effectuation and its difference with causation. Then, more arguments for applying aspects of effectual thinking to business concept development are given. Sarasvathy's own experience with effectual new venturing is explained next and it is compared to traditional business development as to come to effectual business concept development. Finally, the actual application of effectuation to business concept development is performed. The next chapter uses this application of effectuation to design the business concept development method. As it is recognized that designing an effectual (thus goal *finding*) development method (which is after all goal *setting*) seems contradictory, this is discussed at the end of the chapter.

6.1 Causal and effectual decision processes

Sarasvathy gives the following definitions of causal and effectual decision processes (2001a, p. 245):

> *"Causation processes take a particular effect as given and focus on selecting between means to create that effect"*
>
> *"Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means."*

There is thus a distinct difference in starting point in a decision making process. Instead of looking of what *should* be done to reach some goal, it looks at what *can* be done, without having some pre-existing goal in mind.

Looking deeper in the two decision processes, more differences surface. Sarasvathy gives four principles of effectuation underlying effectual decision processes that show these differences (2001a, p. 259):

"1. Affordable loss, rather than expected returns;

2. Strategic alliances, rather than competitive analyses;

3. Exploitation of contingencies, rather than preexisting knowledge; and

4. Control of an unpredictable future, rather than prediction of an uncertain one."

Using these four principles, effectual decisions themselves are also structured differently than causal decisions. This is what they consist of (2001a, pp. 249,250):

- "A given set of means (that usually consists of relatively unalterable characteristics/ circumstances of the decision maker).
- A set of effects or possible operationalizations of generalized aspirations (mostly generated through the decision process),
- Constraints on (and opportunities for) possible effects (usually imposed by the limited means as well as by the environment and its contingencies), and
- Criteria for selecting between the effects (usually a predetermined level of affordable loss or acceptable risk related to the given means)."

Table 13 shows what means, referred to above, are.

	Individual level	Firm level	Level of economy
Who I am	Traits, tastes, and abilities	Physical resources	Demographics
What I know	Knowledge corridors	Human resources	Technology regimes
Whom I know	Social networks	Organizational resources	Sociopolitical institutions

Table 13 - Sarasvathy's interpretation of means (2001a, p. 250)

6.2 Why apply aspects of effectuation to business concept development?

Besides the argument in the introduction above (that effectual thinking is better suited for the increased complexity in the world of business today), there are several other arguments why applying aspects of effectuation to business concept development is a good idea.

6.2.1 The problem of causal reasoning in a business (development) context

Sarasvathy argues that the traditional *causal* way of thinking, employed by for example Bhave (described above), is not very well suited for business development (2001a). The reason is that the assumption on which causal business development is build, that "central artifacts and contexts of business within which [...] decisions take place" *exist*, is not realistic in the context of "the *creation* of [those] artefacts" (being firms and markets) (p. 243). For example, designing a firm is not possible when "all the entrepreneur knows when he or she starts out is something very general such as the desire to make lots of money or to create a valuable legacy like a lasting institution, or, [...] to simply pursue an interesting idea that seems worth pursuing" (p. 244). In more general terms: "In current theories based on causation, scholars have a tough time explaining some of these phenomena and, particularly, suggesting courses of action for particular individuals in creating particular economic artifacts" like new businesses (p. 258).

6.2.2 Effectuation's fit with business concept development

A very different reason why applying effectuation to business concept development is a good idea is that business concept development is a process in which the end-goal is not predefined. Effectuation fits this better than causation, as explained in section 6.1.

As effectuation is rooted in the literature on entrepreneurship, non-linearity is taken for granted in this way of thinking. This is reflected in the freedom of creation it provides in the form of allowing alternatives to be developed without setting a predefined goal: "to imagine and implement possible effects that can be created with them" (2001b, p. 3).

Overall, effectuation seems to be a promising foundation for business concept development.

6.3 From descriptive effectual new venturing to prescriptive effectual business concept development

Sarasvathy ideas of effectuation in business are based on her research on entrepreneurship. A business concept development method however is not just about entrepreneurship, but about business development in general. Even more, her ideas are descriptive in nature, while business concept development is in this project formed into a method, which is prescriptive by definition.

To give shape to effectual business concept development, the effectual new venture process as described by Sarasvathy's is described first, which is then compared to causal business development, from which is concluded how aspects of effectuation, with several additions and changes, can be used for business concept development.

6.3.1 Roots of effectuation: describing new venturing

Sarasvathy's ideas are based on interviews with entrepreneurs (1999).

She describes that a new business usually starts with the aspirations of the entrepreneur, who tries to create one of many possible 'effects' (being potential new businesses) within the constraints of who he is, what he knows and whom he knows. Thus, instead of some idea that needs loads of financing (and thus hard to convince investors), he focuses on what he *can* do within for the budget he has.

When the business (the 'effect') has actually started, the next step is to *listen* to customers to "identify a workable segment profile" (2001a, p. 247) and find out what that customer really wants. This continuous feedback from customers thus drives the new business, which is completely different from selecting a target group of potential profitable customers from a "potential universe of customers" (2001a, p. 248) .

Note that Sarasvathy explains that effectual build businesses can also use causal methods (like customer segmentation) and that it is certainly not so that either one or the other method (not) should be used. However, as in effectuation, the end goal is not fixed which it is in causation, the effectual entrepreneur probably has a more flexible mindset, which allows for exploiting unforeseen opportunities, effectively giving room for serendipity.

6.3.2 Comparing effectual new venturing to causal business development: what can be learned from both?

A different way to visualize effectual new venturing and to compare it to traditional, causal ways of business development, is depicted in Figure 21 and Figure 22. These *business development thinking diagrams* show six circles in perspective. The lower three circles in Figure 21 represent the now or near future (when the new business starts operating) and the upper three a further-away future, in which the business has been running for some time. The double circle represents the start of the flow, the dark circles the end. Read in columns, the left most column is about possibilities, or in Saravathy's words, *means*. The middle column is about activities, labelled *do*. The final column is about *want*: the aspirations of the entrepreneur in the Figure 21 and the more common concept of *strategy* in the Figure 22.

The difference between the two approaches is very clear. Effectual business development departs from possibilities (means) and goes through what the entrepreneur wants (aspirations) to choose what the entrepreneur actually will be doing (the intended effect). There is also a feedback loop that leads to a next cycle of business development in which everything is reassessed and choices are again made. Causal business development first gathers information about what the future to find out what it may look like and from that describes what the company should do in that future. The resulting strategic and operational gaps are then to be closed, for example by restructuring the company. Note that the numbers and continuing lines in the diagrams refer to the order of the circles. A dotted line indicates that information from the circle the line originates, is used in the circle to which the line points.

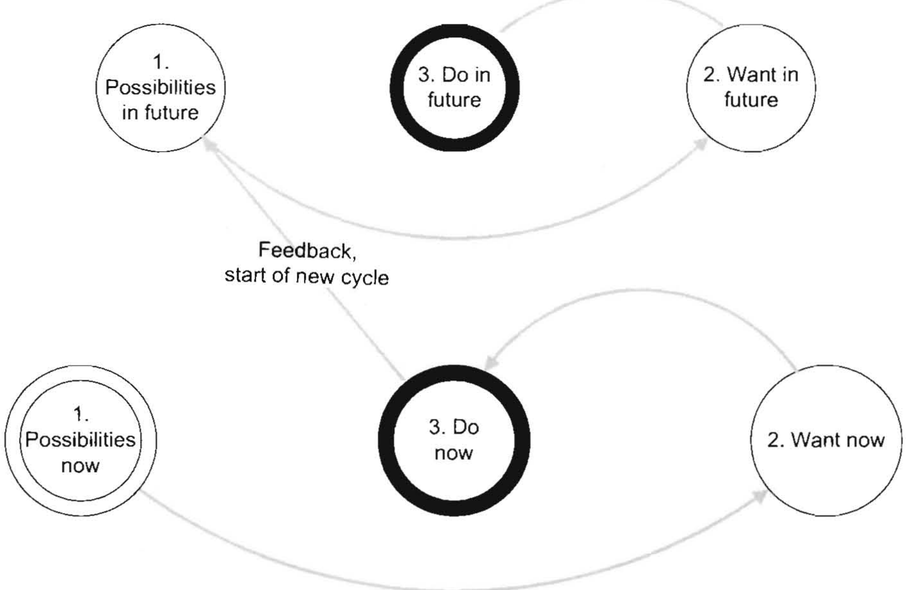


Figure 21 – Effectual business development thinking

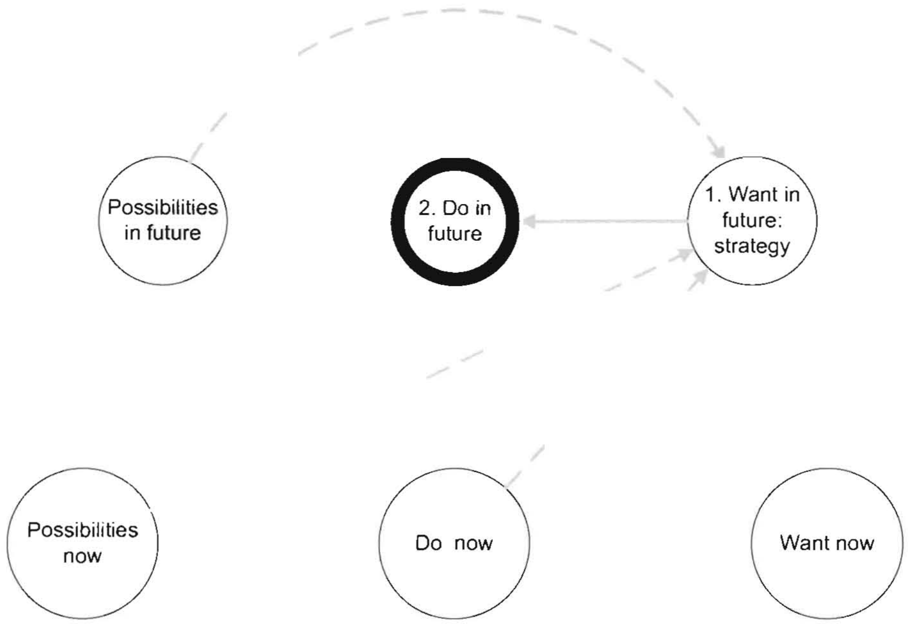


Figure 22 – Causal business development thinking

The diagrams also show other important differences between effectual and causal business development. First, (strict) effectual business development is limited to what the possibilities are now, as depending on not available possibilities results in hoping for a lucky day. Causal business development on the other hand can also look at what might be tomorrow. For example, in the former, any unknown customer will never be a customer (in this cycle), while in the latter, an unknown customer might be actively sought for, so that even not yet known customers can be included in the business strategy. Every cycle in effectual business development is therefore not just path-dependent but also self-contained.

Additionally, the causal business development diagram shows that it is unclear whether the strategy actually can be realized as there are several unknowns. The first unknown is the correctness of the prediction of future possibilities. The second is whether the company current activities can be changed towards what it should be doing in the future (thus, whether it is able to close the operational gap). Thirdly, whether it is able to cope with or exploit contingencies (which are unknown unknowns and might turn the strategy upside-down). Effectuation does not have these troubles.

Finally, the diagrams also show a severe limitation of effectuation. The problem is that, while an effectual entrepreneur alone or in a small team can indeed do very fast iterations between cycles (and thus business concepts), an existing company usually does not have that luxury. This is because resistance to the proposed changes will pop-up, which requires time and effort of managers to overcome. This besides the time it takes for organizational, jurisdictional and financial systems (among others) to adapt. Even more, the causal way of working creates proof of correctness of the strategy as it uses rational analyses, which creates legitimacy for managers to initiate the change. The iterative nature of effectuation therefore seems thus less suited to business development in existing organisations then the one-future of causal business development.

From the comparison can be concluded that effectual business development has distinct advantages over causal business development, but that the future should be taken into account if it is to be applied in existing companies to realize effectuation's advantages as described in section 6.2.

6.3.3 Towards prescriptive business concept development

Business concept development effectual can be made effectual by basing it on effectual new venturing, described above. A more formal notation of this is Sarasvathy's effectual decision structure (2001a, pp. 249,250). An additional advantage of this structure is that it stimulates the creation of alternatives and includes a prioritization step. Furthermore, the principles of effectuation should be taken into account as well.

The previous section described the need for taking the future into account, even though that might result in business concept development being not completely effectual (which is actually not a problem as Sarasvathy herself stresses the need for both). In the case of a new venture, this can be done by looking in advance into the next effectual cycle. In the case of an existing company, this can be done by projecting the effectually changed business into the future instead of into the now. Besides a (maybe new?) effectual change management (which might be a topic of future research), this leads to a somewhat different effectual approach, of which one possible variant is proposed in Figure 23.

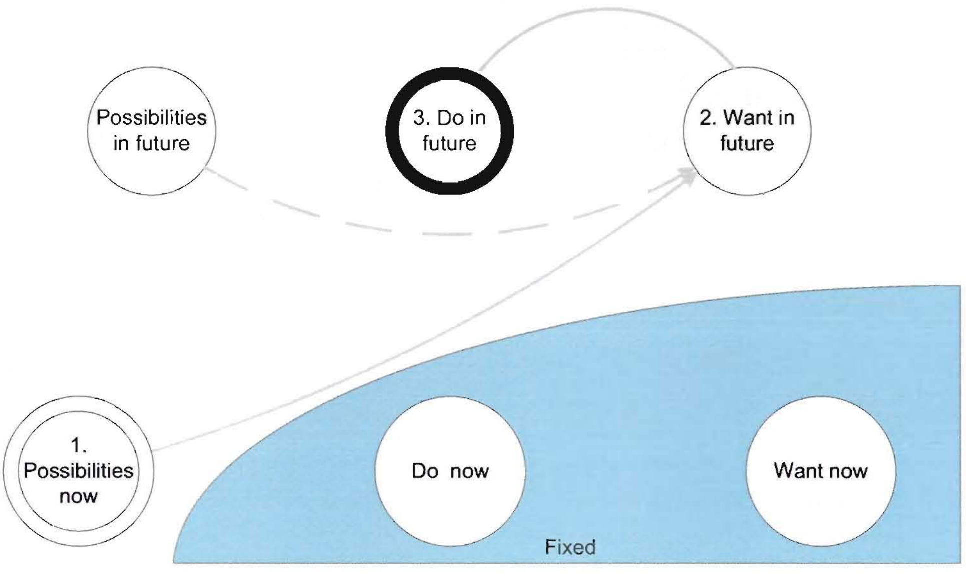


Figure 23 - Proposed effectual business development thinking for existing businesses

6.4 Applying aspects of effectuation on business concept development

While the previous section described what aspects of effectuation are to be applied, this section applies them to business concept development. First, the principles of effectuation are put in place as the guideline for business concept development. Secondly, Sarasvathy's structure of effectual decisions is used to design the structure of business concept development.

6.4.1 Principles of effectuation

The effectual principles cannot be applied directly, but they can be used as guideline for the design, as is shown in Table 14.

Principle	Application: BCD guidelines
"1. Affordable loss, rather than expected returns"	• List what is available • Do not 'guestimate' expected returns
"2. Strategic alliances, rather than competitive analyses"	• No competitive analysis, start from current strengths • Take into account all actors that might be relevant for constructing and operating (parts of) the new business
"3. Exploitation of contingencies, rather than preexisting knowledge"	• Accept new ideas and feedback on existing ideas • Do not forego of opportunities
"4. Control of an unpredictable future, rather than prediction of an uncertain one."	• No predictions: create as an entrepreneur and continue think towards future possibilities

Table 14 - Application of effectual principles

To prevent a rigid process, Sarasvathy's ideas on iterative design should also be incorporated.

6.4.2 Effectual decisions

The structure of business concept development is derived from Sarasvathy's effectual decision structure. Table 15 shows the effectual decision structure of Sarasvathy (2001a, pp. 249-250) and its application into different steps of business concept development. A one-on-one conversion is made because business concept development should be considered a decision, made in an effectual way.

Sarasvathy's effectual decision structure	Application: BCD method structure
I. "A given set of means"	Define starting point: available means, aspirations (2001a, p. 253)
II. "A set of effects or possible operationalizations of generalized aspirations"	Transform a set of business ideas into a set of business models (the operationalizations of the business ideas)
III. "Constraints on (and opportunities for) possible effects"	Opportunities and threats of the set of business models
IV. "Criteria for selecting between the effects"	Set up prioritization criteria and prioritize the different business concepts

Table 15 - Mapping of Sarasvathy's effectual decision structure (2001a, pp. 249,250) on BCD method steps

The final step is about the prioritization of alternate business concepts and not about selecting one, as selecting implies that one business concept is measurably better even before the actual business has started. This of course is not effectual thinking (it is predicting or maybe even fortune telling), as many business concepts might work out just fine. A prioritized list of business concept gives the choice of pursuing a second or even third option if the first one does not live up to its expectations.

6.4.3 Is an effectual method not a contradiction in terms?

In the next chapter of this report, business concept development is shaped into a method that applies the aspects of effectuation discussed in this chapter. However, that effectuation, which states that there is no predefined goal, is applied to a development method resulting in a specific outcome, which in turn becomes the goal of the further development of the to-be business, seems to be a contradiction in terms. This is acknowledged in this project. Therefore, it is not the intention to come up with a fully effectual method, but instead with a method that is based on effectual ideas. This is not unlike examples of Sarasvathy herself, which describes that entrepreneurs think of many business ideas, try some of them and eventually come up with one business, which is shaped by experience and has been tested on the market.

Though it could be argued that a predefined process like in a method might limit entrepreneurial creativity, it is still preferable to stage gate models, like that of Burgelman (1983), which limits creativity from the start of the new business creation process and kills of most ideas while giving little room for change and improvements. It is also preferable to not having any kind of control over the process of business concept development, as there are many good but also many bad business ideas, which should be filtered out.

7 DESIGNING AN EFFECTUAL BUSINESS CONCEPT DEVELOPMENT (BCD) METHOD

The introduction explains the need for creating insight into the increased complexity in today's business world. It illustrates that the business model, described in chapter 3, is a helpful way of looking at companies to understand this complexity. In chapter 4, a template is designed that shows what a business model looks like. However, the introduction also explains that it is not only necessary to understand the business model, but also to change or even try to innovate it. Therefore, chapter 4 also goes a step further by describing how a business model can be (re-)developed using this template. A company will however not just start (re-)developing. Chapter 5 therefore makes clear that the usual context in which this is done is business development, being it for a new venture or an existing company. To give business model development a place in this process of business development, the business concept is introduced. It is also noted that the business model is a subset of the business concept. How the business concept encapsulates the business model is defined by the application of effectuation.

The previous chapter discusses how several aspects of effectuation can be applied to business concept development, to make it the entrepreneurial development process that is needed to cope with today's trends in business. In the same chapter, the limitations of this approach are also given, including ways of getting around these. This chapter describes the actual application of effectuation to the BCD method. Its construction is based on the structure of effectual decisions and on a variant of an effectual thinking diagram that breaks down the effectual decision's steps into sub-steps.

The different sub-steps are filled in by the different layers and levels of the business model template and the different critical examinations and evaluations that the effectual structure dictates.

In addition, the context of business development is taken into account in the method, because the BCD method should not always be used in the same way. A very visible result of this is split in three methods, as the method is somewhat different for existing companies than it is for new ventures and because describing an existing business concept does not require a full-blown development method. However, as the steps of the three different methods are similar and only their order is different, only the business concept development for a new venture is designed in detail (it includes all steps). This is discussed in more detail at the appropriate moment in the method's design process.

The completed design is a proof of concept of effectuation applied prescriptively in business development. Whether it also works as expected is discussed the next chapter. However, feedback from those evaluations has already been incorporated in the design of the method discussed here.

Summarizing, this chapter describes the design and intended use of the BCD method, which can be used to aid the development of a business concept as part of a business development process. The chapter starts with the goal and intended users of the method are explicitly stated. Then, a complete description of the BCD method's design is given, based on the phases of Van Aken's generic design process (see Figure 4 in section 2.4).

The first phase of the design process is about specifications, which are the input for the outline of the design. In that outline, steps and sub-steps are defined using business development thinking-diagrams, for the various business development contexts. Based on that are all steps described in detail and linked with business model development, completing the design of the BCD method.

Finally, how to use the completed design is described as well. Because the BCD method is considered a consulting tool, its use is put in the form of a workshop.

7.1 Problem analysis - Goals and Audience

The goal of the BCD method is to come up with at least one business concept that is as consistent as possible.

Likewise, the goal of the design of the BCD method is a method that supports the development of a business concept with the above properties, is entrepreneurial in nature and encapsulates the business model template of chapter 4.

The intended users of the BCD method are consultants that aid or support entrepreneurs, intrapreneurs or business development managers in the various business development contexts, which are discussed later in this chapter. The method is to be used in a workshop format, which is a commonly used consulting format. Though some business or management knowledge is assumed (the workshop leader can assist if needed), common sense is the main driver of using the method.

7.2 Specifications

From the previous chapters, a list of specifications can be derived for the design of the BCD method. This list is shown in Table 16.

The specifications are categorized in the four kinds of specifications described by Van Aken, et al. (2007, p. 24):

- Functional requirements: "the core of the specification in the form of performance demands on the object to be designed".
- User requirements: "specific requirements form the viewpoint of the user".
- Boundary requirements: "to be met unconditionally".
- Design restrictions: "preferred solution space".

The specifications are further grouped into those that specify inputs or outputs of the BCD method, that specify the need for a particular step in the method or that specify something that should apply to all steps.

Spec. Type		Specifications	Resulting from
1. Boundary	Input:	It should use business ideas and potential users	Business model template (Chapter 4) Definition of business concept development (Section 5.3)
2. Boundary	Input:	It should use a list of means and aspirations	Application of effectual decision structure (Section 6.4.2) Effectual principles (Section 6.4.1)
3. Boundary	Input:	It should use a lists of possible partners	Application of effectual decision structure (Section 6.4.2)
4. Boundary	Input:	It should use a list of opportunities and threats	Effectual principles (Section 6.4.1)
5. Boundary	Output:	It should result in at least one business concept	BCD method goal, based on the definition of business concept development (Section 5.3)
6. Functional	Step:	There should be at least one step for transforming business ideas into one or more business model(s)	Application of effectual decision structure (Section 6.4.2) Business concept interpretation (Section 5.3.1)
7. Functional	Step:	There should be at least one step for defining business concept prioritization criteria	Application of effectual decision structure (Section 6.4.2)
8. Functional	Step:	There should be at least one step for prioritizing the business concepts	Application of effectual decision structure (Section 6.4.2) Definition of business concept development (Section 5.3)
9. Functional	Step:	There should be at least one step assesses opportunities and threats	Effectual principles (Section 6.4.1)

10. Functional	All steps:	It takes into account the different business development contexts	Business concept development in business development (Section 5.3.2)
11. Functional	All steps:	It should support iterative development (while developing the concept)	Definition of business concept development (Section 5.3)
12. Functional	All steps:	The resulting business concept should be as consistent as possible	Design goal
13. Design restriction	All steps:	It handles multiple business concept alternatives	Application of effectual decision structure (Section 6.4.2)
14. Design restriction	All steps:	It does not make predictions	Effectual principles (Section 6.4.1)
15. Design restriction	All steps:	It does not perform any analysis of competitors	Effectual principles (Section 6.4.1)

Table 16 - BCD method specifications.

The finished BCD method is verified on whether the specifications are met.

7.3 Method outline

From the specifications, a general outline of the BCD method can be constructed. The main structure of the BCD method is based on Sarasvathy's effectual decision structure (in Table 15), resulting in a list of steps. These steps are broken down in sub-steps, based on the, on effectuation based, business development thinking diagrams in chapter 6. Each of these sub-steps is filled-in in section 7.4.

7.3.1 The BCD method sub-steps in business development thinking diagrams

Chapter 6 shows several business development thinking diagrams and their limitations. As they are all quite different from each other, it is not possible to come up with one set of steps that can cover both new ventures and existing companies. More precise, the former can make faster iterations, while the latter can make hardly more than one iteration. Even more, an existing business concept does not need all the steps described by the diagrams. Therefore, the method is now split in three separate methods: one developing method for new ventures, one developing method for existing companies and one simpler method for describing a business concept. This matches the three uses of business concept development shown in Table 12 in section 5.3.3 on page 38.

The three diagrams with sub-steps are shown in Figure 24, Figure 25 and Figure 26. Each circle represents one sub-step in the method. Note that these diagrams show the complete business concept development methods, including several 'checks', which are introduced and discussed later.

The diagram showing the method for an existing company, Figure 24, shows several differences with the diagram in chapter 6, Figure 23. Most importantly, it explicitly incorporates future possibilities as well as current possibilities and also takes into account what the company does now. Furthermore, an additional business thinking diagram-circle has been added: operationalization. This represents how 'do' is operationalized (It is added to make an explicit link to the business model's rules level, later on).

The second diagram, Figure 25, shows the method for a new company. It shows one effectual cycle, but explicitly also uses information from the next cycle, which in pure effectuation cannot be used. This has been done to get around the different limitations as discussed in the previous chapter. (See Figure 21 for more on effectuation and cycles.)

The third diagram, Figure 26, shows how an existing business concept can be described. It only describes what the company is doing now in terms of strategy ('want') and activities ('do' and 'operationalize).

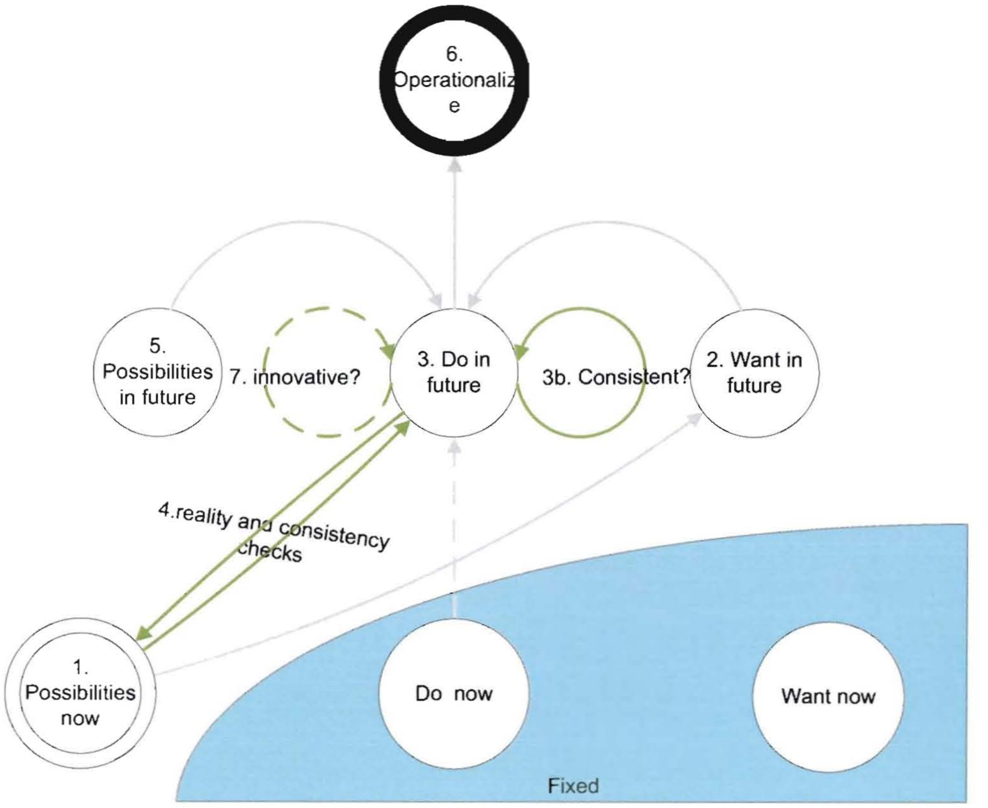


Figure 24 – Developing a new business concept for an existing company

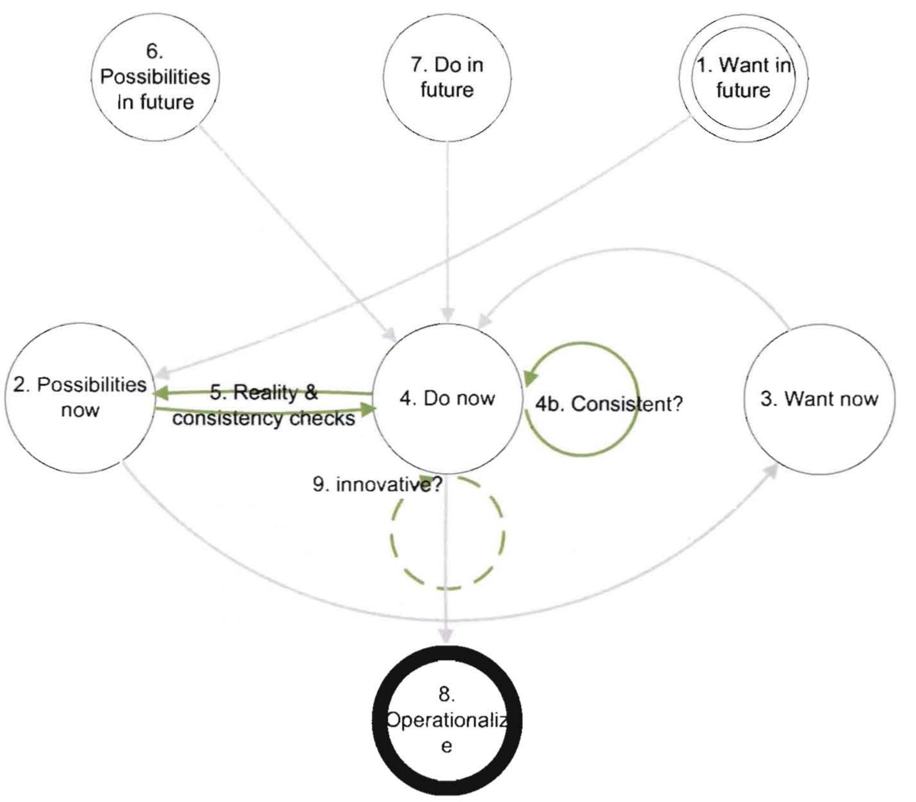


Figure 25 - Developing a new business concept for a new company

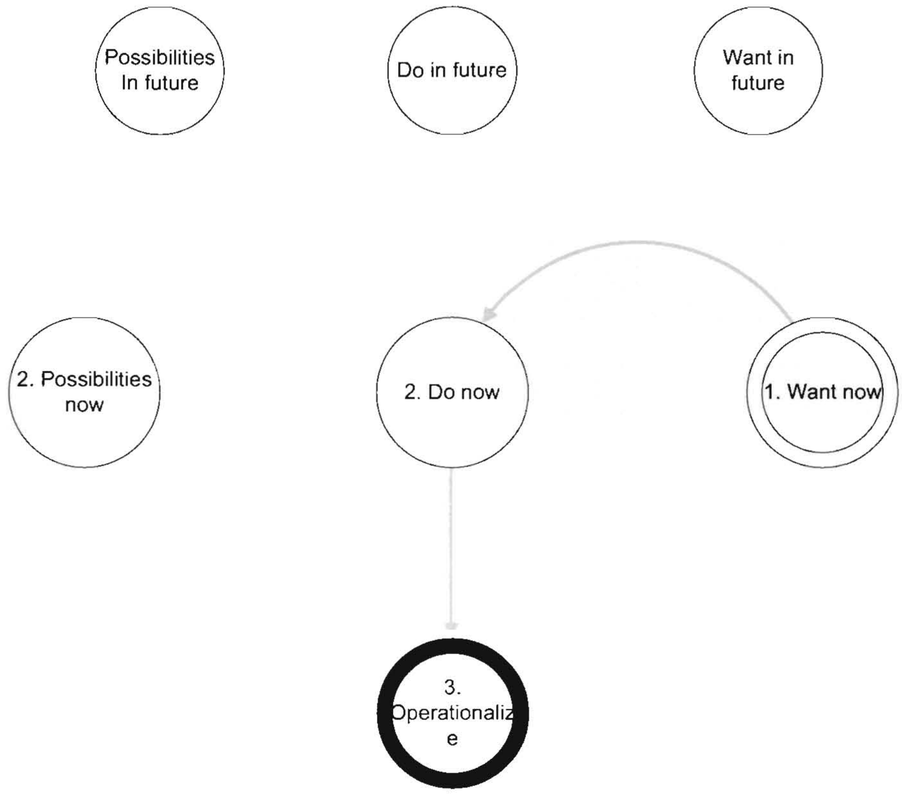


Figure 26 - Describing an existing business concept

As the three different diagrams show, the steps themselves are all the same and the only differences lies in what steps are to be performed when. Therefore, it is unnecessary to discuss the design of the three methods. Instead, the remainder of this chapter is about the method that develops **the business concept for a new venture** (Figure 25) as this one includes all the different steps.

7.3.2 Outlining the BCD method steps and sub-steps

To link the sub-steps of Figure 25 (which shows the development process of a new venture's business concept) to the structure of effectual decisions as applied to the BCD method in Table 15 in 6.4.2 on page 45, a simple table is used: Table 17.

Left are the steps of the structure of the BCD method (from Table 15). Note that a fifth steps is added, *finish up*, that refers to the 'tools' in Table 12 in section 5.3.3 on page 38, that describes the different uses of the business concept development. The tools are the *innovation check* and the *synergy/ gap analysis*.

On the right hand side of the table are the sub-steps, here phrased as questions. These are classified as much as possible according to the original meaning of the effectual decision step. To be complete, several different checks are already in the table, even though they have not bee discussed yet. Additionally, prioritizing the different business concepts, which step IV proposes, is only necessary when developing multiple business concepts and obviously not shown in Figure 25, which only represents the creation of one business concept.

Step (based on Table 15)	Sub-steps (based on Figure 25)
I. Define starting point	1. What do you want in the future?
	2. What are your possibilities now?
II. Transform a set of business ideas into a set of business models	3. What do you want to do now?
	4. What do you do now?
III. Opportunities and threats of the set of business models	5. Is the model feasible?
	6. What are your possibilities in the future?
	7. What are you going to do in the future?
	8. Operationalize the business concept development
IV. Set up prioritization criteria and prioritize the different business concepts	9. Define prioritization criteria
	10. Prioritize the business concepts
V. Finish up	11. Is your business concept development innovative?
	12. Synergy and gap analysis

Table 17 – Steps and sub-steps of the BCD method

Based on these steps and sub-steps defined in this section, the BCD method is designed in detail in the next sections.

7.4 The BCD method – design

The previous sections described the method's goals and audience, its specifications and how its structure is split up in steps and sub-steps. This section describes the design of the sub-steps.

Many sub-steps of the BCD method relate to one or several steps of the business model template designed in chapter 4. To link the sub-steps one-to-one to the steps of the business model development method of chapter 4, the sub-steps are broken down into smaller steps. This way, many sub-sub-steps are the actual business model template development steps. The remaining sub-sub-steps are a translation of the sub-steps, are derived from the input-specifications, or have been added as these proved necessary or value adding in the test-session (described in chapter 8).

The resulting business concept development method for a new venture, is shown in Figure 27 (on page 53).

Next, all steps are discussed. The numbering is based on the steps and sub-sub-steps (Ia IIb, ...).

7.4.1 BCD Step I: Starting point

This first step is about setting the stage for the development of the new business concept.

7.4.1.1 I a: What do you want in the future?

From the tests, it became clear that an intra- or entrepreneur often has already has some ideas about what the new business should be. It also became clear that these ideas are often not fully though through. However, as these ideas are 'top-of-mind', it is sensible to describe them directly at the start of the method. The steps thereafter will show the ideas' good and weak points and aid in their further development. These ideas are called the *intentions* of the intra- or entrepreneur.

Besides intentions, the intra- or entrepreneur also has *aspirations*; what he or she wants the business to be. From a traditional, causal perspective, these aspirations come close to strategic goals.

7.4.1.2 I b: What are your possibilities now?

This sub-step corresponds to the starting point of effectuation: the means the intra- or entrepreneur has available for the new business and the network of people he or she has. From these, the business will be build. Sarasvathy's table (2001a, p. 250), shown in section 0 (Table 13), is used to list both (the network goes in the lower left box of whom he or she knows).

I. Starting point

- 1. What do you want in the future?
  - a. List aspirations, intentions
- 2. What are your possibilities now?
  - b. Identify means & potential partners

II. Transform a set of business ideas into a set of business models

- 3. What do you want to do now?
  - a. Describe Business idea(s), intended users
- 4. What do you do now?
  - Develop Foundation level of the business model:
    - b. Questionairre
  - Develop Proprietary level of the business model:
    - c. Strategic choices
    - d. Offering and market
    - e. Value creation and value appropriation
    - f. Partners
  - g. Check business model for consistency

III. Opportunities and threats of the set of business models

- 5. Is the model feasible?
  - a. Do the reality check
- 6. What are your possibilities in the future?
  - b. List opportunities & threads
- 7. What are you going to do in the future?
  - c. Building on your successful business: describe growth paths
- 8. Operationalize the business concept development
  - d. Develop Rules level of the business model
  - e. Story telling: create the story of your business

IV. Set up prioritization criteria for the different sets of business models and prioritize

- 9. Define prioritization criteria
  - a. Develop criteria
- 10. Prioritize business concepts
  - b. Prioritize the concepts

V. Finish up (mandatory depending on business development context)

- 11. Is your business concept development innovative?
  - a. Do the innovation check
- 12. Synergy and gap analysis
  - b. Analysis differences

Figure 27 - The BCD method, for a new company

7.4.2 BCD Step II: Transform a set of business ideas into a set of business models

In this step, a variety of business models is developed, based on the business idea and its intended users. The business model template, designed in chapter 4, describes how to do this. It also provides several visual tools. However, for now only the Foundation and Proprietary levels of that template are used. Only after these levels have been developed, improved and checked, the Rules level will be developed in step III. As the tests have shown that most iterations happen during the development of the levels, this approach prevents the need for continuously updating the Rules level.

The reason to develop a set of business models instead of just one, is that in effectuation, multiple alternatives of possible effects (thus business models) should be imagined (2001a, p. 253). In practise, this happens when a critical design choice has several valid options worth looking into. It is in those cases recommended to fork a business model into alternative business models.

7.4.2.1 II a: on business ideas and intended users

The intention of the intra- or entrepreneur of step I, is now reformulated into a business idea. A **business idea** is an insight in the market, based on a discovered need resulting from a problem of one or more people, which the entrepreneur identified using his creativity in the context of his background and competencies (Hougaard, 2005, p. 50). A business idea can turn into an **opportunity** when there is a window of opportunity, which links timing to the business idea. It is the moment at which the business idea should be transformed into something more grounded (based on Hougaard, 2005, pp. 69, 83-87). As the timing of an opportunity is not within the scope of this project, the business idea is used as input.

Hougaard explains that a good way to define the business idea is to start with the **need** that the business idea satisfies. From that, an **offering** (a product or service) can be defined.

For a high-tech product, the need might not be very clear upfront. In this case, more traditional marketing tools can be used to pinpoint the need, like customer visit programs, lead user feedback and prototype and beta testing (2005, pp. 134-153). Note that the actual development of the offering is not within the scope of this project.

Prahalad and Krishnan (2008) propose a different way of establishing the offering. They say that it should be based on the price customers are willing to pay for the product, not just on the need itself.

Note that an intra- or entrepreneur might want to start a business based on a unique capability or resource instead of a business idea. However, as a capability or resource themselves are not something that other people need, one should come up with a business idea that puts the resource or capability to use if one wants to start a business. Otherwise, it is probably wiser to sell the resource or utilize the capability while being on someone else's payroll. (based on Hougaard, 2005)

An offering also has potential **users**. Note that these users do not have to be the actual customers of the business, as the users might not be the ones buying or paying for the offering.

From the offering and users, which Hougaard describes as the function of the business (2005), the Foundation level of the business model can be developed.

7.4.2.2 II b, II c, II d, II e, II f, II g: developing the business model using the Foundation and Proprietary levels

As the business idea has been established, the first two levels of the business model can be developed. First, the business model template's Foundation level questionnaire (II b) is filled in and based on that, the Proprietary level's layers can be developed.

The Proprietary level's layers are used in the order described in section 4.4 and as shown in Figure 8 and repeated here at the right side of this page. Therefore, the strategic choices (II c) are made first. Then, the offering and market are specified (II d). As noted before, the market can correspond with the users from step IIa, but that does not have to be the case. If it turns out that it is hard to define customers, the

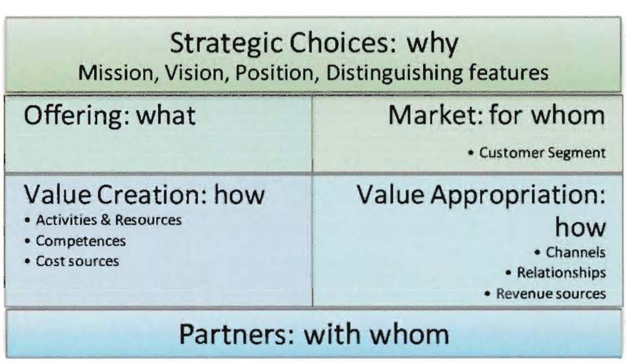


Figure 28 - The layers of the proprietary business model level

traditional (causal) marketing tools like segmentation can be used as described by Mohr, et al. (2005, pp. 185-194).

Next, the value creation layer is defined by identifying costs sources and setting up the activity chains. The value appropriation layer is developed by defining revenue sources, channels and relationships (II e). The partners' layer is defined using the business representation diagram (II f). Finally, the template's consistency checks are performed (II g). See for more information on these topics the business model template design in chapter 4.

7.4.3 BCD step III: Opportunities and threats of the set of business models

The division in sub and sub-sub steps of this step is based on the business development thinking diagrams, on the effectual background of the step, on the Rules level of the business model and on the test sessions.

This step starts by verifying whether the alternative business models are feasible and thus whether they can be executed using the available means of the entrepreneur and/ or his partners. This is thus a reality check based on means defined in step I. Then, relevant future possibilities of the business are identified, by looking at future opportunities and threats. What the future next steps of the business are when it is operating, answers the question what the intra- or entrepreneur will be doing in the future. It is also verified whether this matches the aspirations of the entrepreneur. Finally, based on the above, the business models can be updated or discarded, or new business models can be added.

7.4.3.1 III a: reality check

Sarasvathy introduced this step in her effectual decision structure to find "Constraints on (and opportunities for) possible effects" (2001a, pp. 249,250), which are: "usually imposed by the limited means as well as by the environment and its contingencies". This can be split into two questions regarding business concept development:

- Can the business model be run with the means available?
- What limits does the environment put on the business model and what opportunities does it provide to support the business model?

Though the first question cannot be answered using a financial profit and loss statement (as the design principles of the BCD method state that it should not use predictions like future profits), it can be answered by checking whether it is based on the means available to or at least in reach of the entrepreneur. The business model's feasibility is thus estimated by comparing it with the means table of step Ib.

The second question will be answered in the next sub-sub-step.

Additionally, the test sessions showed the need for more consistency checks. The following questions should therefore also be asked:

- It the model still in line with your intentions?
- Does the business model enable or support your aspirations?

7.4.3.2 III b: opportunities and threats

This sub-sub-step is an interpretation of the question from the business development thinking diagrams 'What are your possibilities in the future?' It is, because opportunities and threats are about the future environment of the business and because it is very hard, if not impossible (and above all, not allowed by the specifications), to predict what possibilities might lie ahead.

The question what limits the environment puts on the business model and what opportunities it provides to support the business model, can be answered by listing possible limitations (here interpreted as threats) and expected opportunities. These lists can then be used to verify that the business model is able to cope with these.

7.4.3.3 III c: building upon the new business

A limitation of just looking at the (future) business environment, lies in the fourth principle of effectuation "Focus on the controllable aspects [like available means] of an unpredictable future" (2001a, p. 251). This implies that the intra- or entrepreneur is only allowed to look at the *current* business and not at possible future extensions of that business. This however, is important as well, as several of the interviews showed. Additionally, it might limit the creativity and creational capacity of the intra- or entrepreneur.

However, the simple way of overcoming the above limitation, by designing future business models based on those developed now, quickly violates that same the fourth principle. Therefore, instead of developing future business models based on those developed in the previous step, only the potential of the business models will be taken into account. This is done by verifying whether expected future business extensions (consider these future commitments of means (Wiltbank et al., 2006, p. 992) at least do not disable the potential of those business models[13].

Describing the potential of the business models is somewhat similar to road mapping in the sense of "plans that articulate a course of action" (Kappel, 2001, p. 39) (and not the traditional: "forecasts of what is possible or likely to happen") and to scenario planning (Van der Heijden, 2004). As one can imagine, for each of the business model alternatives, multiple of these 'growth paths' can be imagined. This way, developing additional future business models is prevented. Recall that, because business concept development is an iterative process, the ones designed now will probably change somewhat anyway.

One interview participant remarked that a business potentially might be sold at some point. Therefore, a potential option can be an exit strategy.

Note that the above is different from the traditional strategic question whether the business will fit the environment, as there is no search for a perfect competitive position. Instead, the current business is only optimized or hardened for the position the entrepreneur has envisioned for it.

In this sub-sub-step, the intra- or entrepreneur described how he envisions what his business might become. This is comparable to the business development thinking diagram question 7, what the business is going to do in the future. It is therefore placed in this position in the method.

7.4.3.4 III d: rules level

Together with the next sub-sub-step the business model is prepared for actual operations, which is shown in the business development thinking diagrams as step 8.

As the Rules level of the business model had been skipped in the previous step and because the business concept should now be mature enough, the new business's rules should be developed now. As one of the participants in a case interview noted, these rules can also be defined to deal with risks.

7.4.3.5 III e: storytelling

An interesting technique to make the business concept come alive is by means of storytelling. According to Burkhard, this technique has been described in the nineteen seventies (Baker & Greene, 1977; in: Burkhard, 2005, p. 178) and is still used today. Stories are "imaginary (non-physical) visualizations that are efficient in disseminating knowledge across time and space" and "help to establish a shared vision, which can motivate and activate individuals" (Burkhard, 2005, p. 178).

This sub-sub-step finishes the business concept(s).

7.4.4 BCD Step IV: Develop business concept prioritization criteria and prioritize

If multiple alternative business concepts have been developed, they are to be prioritized as to determine which will be further developed and which will be develop further if the first one seems to fail.

[13] Note that these are especially relevant for the rules level of the business model, as future potential can be guarded there

7.4.4.1 IV a: develop criteria

The goal of this sub-step is to come up with criteria for prioritization the business concepts. The reason that the intra-/ entrepreneur should be setting up his own criteria is based on the idea that effectual decision are: "Actor dependent: Given specific means, choice of effect is driven by characteristics of the actor and his or her ability to discover and use contingencies" (2001a, p. 251).

The inputs for listing the prioritization criteria are therefore the aspirations of the intra-/ entrepreneur, current company culture (if applicable) and current strategy (if applicable). Sarasvathy explains that effectual criteria are: "based on affordable loss or acceptable risk" (2001a, p. 251). This implies that it is important to find out whether the intended or imagined business concept will deviate from the culture, strategy and aspirations defined in the criteria. It is then up to the entrepreneur or manager to decide how much risk or affordable loss he is willing to accept. Thus, this step has two outputs, first the criteria and secondly the maximum deviation or range that is acceptable.

This step can be supported by all kinds of tools, which have been created to classify company or even industry culture. Tools for classifying personal or team aspirations are also useful.

Two tools from literature which give an indication of the intended culture fits with the new business are Miles & Snow's strategy typology and Loewe's et al. innovation management styles (both discussed in Mäkinen & Kotilainen, 2006). It gives an indication what kind of company you are from two different perspectives. Interesting is also Mäkinen and Kotilainen's combination of the two tools that shows viable combinations (even though the paper is from a conference proceedings). It is also included in the appendix.

7.4.4.2 IV b: prioritize the business concepts

This sub-step prioritizes the business concepts, using the criteria above. To do this, all business concepts should be evaluated on the different criteria, after which they can be put in order of potential success.

There might be a set of business concepts left which are all acceptable alternatives and are therefore hard to give a specific prioritization. These can be evaluated using more conventional methods, like for example a cost/benefit analysis. Note that these kinds of analysis are more causal in nature, as they are: "criteria based on expected return" (2001a, p. 251). Eventually, one business concept should remain at the top of the list.

It is possible to iterate and go back to the previous steps, especially when none of the business concepts works out. Changing the selection criteria however is obviously not recommended unless there are good reasons for that.

Very important to note is that the criteria and their accompanying ranges used here are not proven success factors. They are what the entrepreneur or manager thinks makes a good business.

7.4.5 BCD step V: finish up

This step presents two optional sub-steps (see Table 12 for their usage contexts). The first is only needed when the goal is to develop an innovative business model, the second one only when two business concepts have to compared to find synergies and gaps between them.

7.4.5.1 V a: check for innovativeness

As described in section 3.3.1, there is a range of properties a business model must have to call it innovative. By going though the summary of that section, shown in Table 2, the level of innovativeness of the business model can be determined. Note however that the business model can only be called truly innovative if it eventually shows its success in the market.

7.4.5.2 V b: synergy and gap analysis

This sub-step compares the existing business model with a (for example) newly designed business concept.

To compare multiple business concepts, all the previous steps should be looked at. This can be done by creating a matrix of all the descriptions, lists and diagrams, in which the differences can be marked.

Depending on the goal of the analysis, the newly developed business concept can be changed to use for example resources or capabilities of the other concept.

This completes the steps of the business concept development method.

7.5 Using the BCD method in the context of a workshop

The BCD method is quite straightforward when understood. However, as it is also quite elaborate, using in it in a workshop requires some thinking in advance. This section discusses the preparations the consultant needs to make, the workshop itself and several notes on the steps of the method including opportunities to be creative and entrepreneurial. All information in this section is based on the test sessions discussed in the next chapter and has been further improved based on the evaluated feedback from the participants in those sessions. The workshop template can be found in Appendix F. Please do note that the BCD method has not been tested in all business development contexts (see chapters 8 and 9 for more information).

7.5.1 Preparations

The customer should bring several people to the workshop at least, as, according to several consultants in the test sessions, people need to be challenged and different people have different perspectives.

It is important to make good arrangements on how to deal in the workshop with confidentiality and intellectual property.

First, the correct business development context should be determined by the consultant. Then, the correct variant of the BCD method can be used to aid in business concept development of the customer of the consultant. If multiple business concepts are to be developed, than that should be done preferably by different groups of people, to prevent for example that the newly developed business concept is solely based on the existing business concept. The synergy and gap analysis can then be performed by (a subset of) both groups together.

7.5.2 The workshop

The BCD method's steps should be used in the form of assignments for the participants. The consultant leading the workshop should explain how the assignments work. It is also the role of the consultant to ask questions, challenge the participants and especially indicate what can be done differently if the participants have trouble coming up with alternatives.

The assignments can be made using the workshop booklet included in Appendix F. An onscreen version is also available to support larger groups, but in that case, several exercises should be done on a whiteboard or with the help of post-it notes. In the next sections is explained for several assignments what the preferred way of doing them is.

By going through the steps, the business concept is slowly developed. This should be done iteratively. After each assignment, the previous assignments should be glanced through to check its consistency (this is done explicitly in the consistency checks). If a participant brings up something that is to be dealt with in an assignment, which not yet has been done, that comment should be 'parked' as not to forget it.

Preferably, several business concepts are developed in the workshop. Some participants in the test sessions even stressed the need for at least two concepts and one additional 'wildcard' concept to stimulate explicitly out-of-the-box thinking.

In the next sections, notable remarks about the steps are discussed. It is recommended to keep the workshop template of Appendix F near while reading the next section for a better understanding.

7.5.3 BCD Step I: Starting point

On step I a. By starting with the business intentions of the business concept of the participants and their aspirations, they get the chance to put down their own thoughts about the concept. Furthermore, as step sub-sub step has the label 'What do you want in the future', the participants should go more easily into the next assignments (see also Figure 25).

On step I b. All items in the means table should be at least related to the new business. Do not forget to include 'bad' traits of people as the tests showed that participants usually only commented on their good habits.

Potential partners can be listed in the 'whom I know' section of the table. Note that there are several categories of partners, like family, people that know about the market/technology/offering and investors.

Though the means table is intended to be filled with currently available means, it is tempting to list means that will become available soon, or even include means that are still to be acquired. Though this is not supported by the method (and therefore not tested), a second table might be added to list these soon-to-be means. However, when in a business development context that requires an as-is and a to-be business concept, future means are already part of the to-be concept making such a second table redundant.

Note that the tests showed that the means table requires quite some clarification by the consultant.

7.5.4 BCD Step II: Transform a set of business ideas into a set of business models

On II a. The need, business ideas and users can easily been defined on a whiteboard. If there are several business ideas, create a business concept for each or decide (with the participants) to focus on a sub-set of ideas.

On II b. The Foundation level questionnaire should be made on a large paper that all participants can see. Put the paper on a wall afterwards to make sure that it continuous to be available during the remainder of the workshop. Alternatively, participants can fill-in the questionnaire for themselves (possibly before the workshop), as to compare different views on the concept.

On II c. Just filling in the strategic choices on the spot has proven to be quite hard, so give an explanation beforehand. Explain that these choices are the 'raison d'être' of the new business.

On II d-f. The revenue and cost sources diagrams can be easily created using post-its. The business representation diagram can be constructed by first listing all activities on post-its, then listing the required resources and capabilities, listing all partners and customers and then filling in who does what (partners & customers). The same technique can also be used to construct customer and partner interaction diagrams. If necessary, differ in the business representation diagram between 'creating' customers and consuming customers.

Make sure that the answers to the strategic questions are visible during this exercise to keep focus on what the company should do and do best.

The diagrams mentioned above create many opportunities for being entrepreneurial and showing how decisions can be made differently. They are listed per diagram type in Table 18.

Revenue/ cost sources diagrams
Transfer or delegate cost/ revenue sources to/ from partners
Try making cost/ revenue sources smaller/ bigger
Try changing a cost source into a revenue source
Try increasing/ decreasing the number of revenue/ cost sources
Representation diagram
Try eliminating not (much) used resources/ capabilities
Try limiting the number of activities performed by you: can a partner or customer take or participate in an activity?
From a strategic perspective: do you have
Interaction diagrams
Try changing the channel configuration
Try limiting the number of interactions, while still realizing the intended relation

Table 18 – being creative and entrepreneurial in the BCD method

Note that it might turn out that the offering and intended users, defined in the previous step, do not fit the company entirely. This can also be changed iteratively in the previous assignments.

7.5.5 BCD Step III: Opportunities and threats of the set of business models

The first three sub-steps of step III are about verifying the business models' feasibility and its readiness for the future. However, it if turns out that the model is not good enough, action has to be taken by the consultant to correct it. The next sections describe how to do these sub-steps and how to deal with potential problems. Thereafter, the final sub-steps are discussed (III d and e).

7.5.5.1 On III a, b and c

Several checks are made to verify the business model. They are summarized in Figure 29. How to act on problems is explained after the discussion of these checks.

First, it should be checked whether the means available to the entrepreneur are sufficient to run the business model alternatives. As explained in section 7.4.3.1, this cannot be done using financial projections, so instead, it should be checked whether the capabilities and resources used for activities in the business models are based on the means available to the business or to a partner.

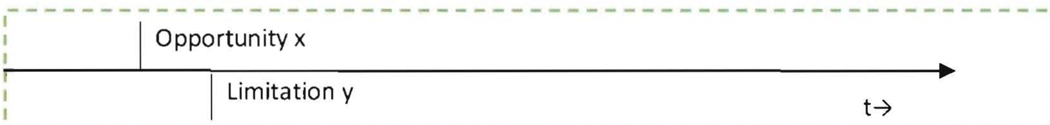
Secondly, current and expected future opportunities and threats are to be listed on a simple timeline. The idea is that the business model developed in steps I and II is able to handle these limitations and threats.

Third, the imagination of the intra- or entrepreneur is called upon to think about what could be done next if the business actually succeeds. This should be based on the aspirations, mission and vision of each business model alternative and result in simple statements of next (potential) steps: the growth scenarios. The business models should be able to support or at least not hinder these growth scenarios.

Reality check:

The capabilities and resources needed for each of the activities should be part of the list of means, or should be executed by a partner. This implies that the column 'Resources/ Capabilities required' is not empty (unless the activity is performed by one or more partners).

Current and expected future limitations and opportunities:



Future potential businesses/ business models and exit strategies:

Future potential or exit strategies of the business model: what's next when the business succeeds?	
Option 1	
Option 2	

Figure 29 - BCD step 3

7.5.5.2 How to deal with problems: assessing the business model

The above findings have to be assessed on their impact on the business model. For each of the checks above, Figure 30 shows the questions to ask and the actions to take. Note that potential interactions are not taken into account.

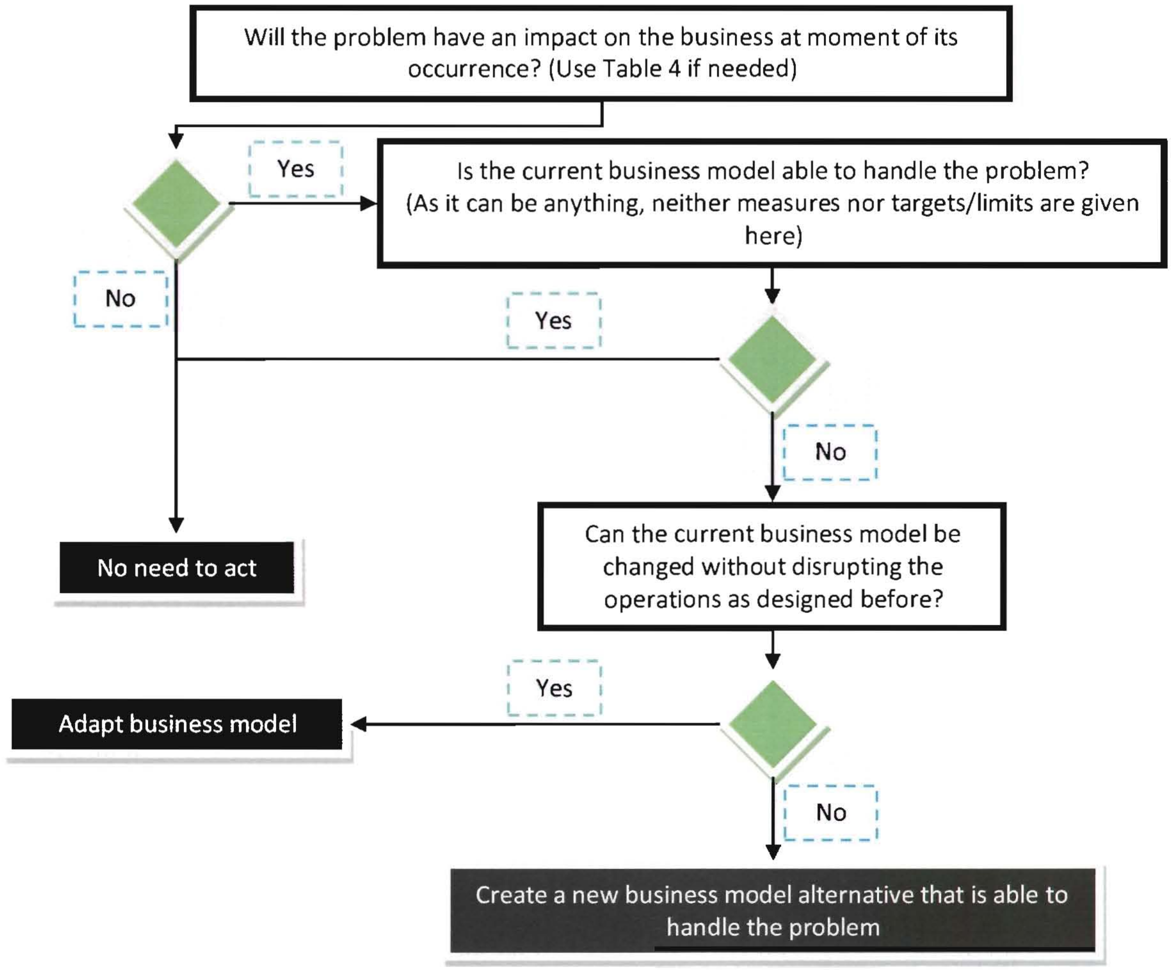


Figure 30 - Assessing business models: how to deal with feasibility, opportunity, threat or future related business problems

7.5.6 Operationalizing the business model: the Rules level and storytelling

On III d. How to develop the Rules level is explained in section 4.4.9.

On III e. The idea of creating a story is to put the entire business concept into a form that is easy to communicate, in as few words as possible. The dream, vision and mission of the strategic choices of the Proprietary level can be used as the basis for the story. The activities in the business representation diagram can help to structure a simple explanation of how the business works. Finally, the aspirations from the first step can be used as panoramic view of the future. Note that the story can be fine-tuned to the intended audience, like investors, customers or a board.

7.6 BCD Step 4: Set up prioritization criteria and prioritize the business concepts

In defining criteria for business concept selection (if applicable), the two frameworks in Appendix C can be used. Though these tools can be considered somewhat subjective in nature as they focus on company culture, they actually provide another way of looking at the new business next to those in the previous steps.

Additionally, participants might want to make calculations based on the different models and base their decision on those. That however is out of the scope of this project.

7.7 BCD Step 5: Finish up

On V a. This step consists of two optional sub-steps. The first one, the innovation check, is useful only in certain circumstances, but can also be used as a fun way to close the workshop on a cheerful note: "so how innovative have we actually been this afternoon?!". On a more serious note however, the criteria of the innovation check can be used as overall goal when trying to develop an innovative business model.

On V b.: As for the second sub-step, the synergy and gap analysis, it is a good way to provide relatively quick an overview of the difference between two businesses. However, it should only be used as a starting point for a much more thorough analysis unless working with very small companies.

7.8 Reflection on the design of the BCD method

Table 19 shows how the specifications of the BCD method have been met.

	Specifications	Specification met
1.	It should use business ideas and potential users	In step I b
2.	It should use a list of means and aspirations	In step I a, b
3.	It should use a lists of possible partners	In step I a
4.	It should use a list of opportunities and threats	In step III b
5.	It should result in at least one business concept	In step I - IV
6.	There should be at least one step for transforming business ideas into one or more business model(s)	In step II
7.	There should be at least one step for defining business concept prioritization criteria	In step IV a
8.	There should be at least one step for prioritizing the business concepts	In step IV b
9.	There should be at least one step assesses opportunities and threats	In step III b
10.	It takes into account the different business development contexts	Method structure (sub-steps) See sections 7.3.1, 7.3.2
11.	It should support iterative development (while developing the concept)	Method wide
12.	The resulting business concept should be as consistent as possible	The different consistency checks
13.	It handles multiple business concept alternatives	Creation: steps I-III Prioritization: step V
14.	It does not make predictions	(none)
15.	It does not perform any analysis of competitors	(none)

Table 19 – Verification of BCD method's specifications

8 TESTING AND TEST EVALUATIONS

To test and evaluate the BCD method, twelve people have been asked to give their opinion on the method or use the method and give feedback on it. After each interview, the designs of the method and the business model template were improved, after which they were tested again.

Besides asking for their feedback, the participants were also asked for their opinion of the method regarding: its usefulness, whether the method creates room for entrepreneurship and whether they thought the resulting business concept would be consistent and future proof.

The next sections describes how these interviews have been done, how they have been coded and their generic results. Thereafter, the expert interviews and results are discussed in detail, followed by the case interviews. The interviews are included in Appendix A.

8.1 Interview structure and codification

This section describes the approach taken in doing the interviews, the main results and a short reflection.

8.1.1 Interview structure

The interview structure is based on the steps of the BCD method.

An interview started with an introduction of the goals and structure of the BCD method, after which each of the steps were discussed with the participant. Thereafter, the participant was asked four direct questions. The first is the usefulness of the method. The second is whether the method creates room for entrepreneurship, meaning that the method creates insight in decisions and because of that in alternatives. The third is whether the result (thus the business concept) is consistent. Finally, the fourth question is whether the result is future proof, meaning that the participant thinks that the resulting business concept will make a chance of surviving in the market place. The final two questions were most relevant for the case interviews.

This method was used for both the case and expert interviews. The main difference is that in the expert interviews, the method was discussed, while in the case interviews, the participant's business (the case) had the focus of attention.

8.1.2 Sample group

Participants were chosen from two main sources: a large consulting firm and a university. For the expert interviews, people were chosen who have a background in business development or business innovation. As some of the experts had explicit experience in business development, that was discussed as well to compare it with the BCD method. For the case interviews, different entrepreneurs in different stages of developing their business were chosen. As the group of entrepreneurs available in both sources was somewhat limited, no further selection was made. Table 20 shows a summary.

Group	Number of participants	Business development experience compared to BCD method
Experts(from university)	2	Both
Experts (consultants)	6	Two out of six
Case interviews with intra- and entrepreneurs	5	None

Table 20 - Sample group summary

8.1.3 Codification

The codification of the interviews is based on notes taken during the interviews on questions and comments of the participant. These notes have been used to fill in the tables in Appendix A, of which Table 21 is an example. This table shows the steps of the BCD method and comments of the participant on that step. Each comment is categorized in two steps: first whether it is workshop or method related and then whether it is an explicit indication of: usefulness (U), room for entrepreneurship (E), consistency of the business concept (C), future proofness of the business concept (F), a question (N), or an idea for an improvement (I). C and F were only used to codify notes from the case interviews and a comment or question can have multiple categories. Note that for some interviews, the structure of the interview does not match the structure of the tables in Appendix A exactly, as the BCD method at the time of the interview was different from the final BCD method.

The four direct questions on the method and resulting business concept were given a score to measure them: 1 for 'yes', 0,5 for 'maybe' or 'probably' and 0 for 'no' or no answer.

Interview type: Expert	*Participant: former business development consultant*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention	V			
	Means & partners	V			
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	"Do not ask for customers, but for users of the offering as they experience the need for it"	M	I	V
	Foundation level business model design: questionnaire	"Call the slide [of the workshop template] differently"	M	I	V
		"These questions can be considered the choices the entrepreneur has"	M	-	-
		"Some choices should not be made here already, like for example those on outsourcing"	M	I	X (derived from literature)
	Specific business model design: strategic choices	"The questions on the right side of the sheet about distinguishing features and 'what you will do best' are very important and give a direction to the business"	M	U	-
		He however added these questions are in practise very difficult for participants to answer	W	I	V (in workshop description)
		"The position [as in that version of the workshop template] is more applicable to a product than for a business"	W	I	V (now an open question)
		A lot of time was spend on this slide of the workshop template	W	-	-
	Specific business model design: Revenue & cost sources	Very conceptual: nice	M	U	-
		"Perform this exercise before the business representation assignment"	M	I	V
	Specific business model design: activities & business	"The relation with the strategic choices seems to be quite limited"	W	I	V (in workshop description)

	representation	"Fill this diagram in by first listing the activities, then the required capabilities and resources and only then start talking about partners"	W	I	V (in workshop description)
		"Stimulating the creation of multiple alternatives is very good and should be done"	W	U, E	-
	Specific business model design: interaction diagrams	"Introduce additional diagrams for interactions with other parties like partners"	M	I	V
		"The added value of these diagrams is limited as they overlap with the business representation diagram"	M	I	X
		"An additional perspective on the business, like these diagrams show, is however excellent"	M	U	-
		The diagram can be improved like this: add all interactions to each of the activities in the business representation diagram, check whether they fit with the 'distinguishing features' in the 'strategic choices' and add a description of those interactions depending on their importance	M	I	-
	Consistency checks	The participant referred many times to the distinguishing features and was content that an explicit reference to that is included	M	U	-
III. Opportunities and threats of the set of business models	Reality check	"Should be part of the step II"	M	I	X
	Opportunities & threats	"Very useful"	M	U	-
		"In practise, you would like to wait for a week or so to give the opportunity to the participant to think about it a bit more, before going into this kind of future related questions."	W	U	X
	Building on your successful business: growth paths	"You might want to give some idea of growth dimensions to focus this assignment"	M	I	X
	Rules level business model	Was considered part of the implementation plan as to make the business concept operational	M	U	-
	Story telling	Nice	M	U	-

IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria	V			
	Prioritize the business concepts	V			
V. Finish up	Innovation check	Very nice, "a fun tool to end the workshop with"	M	U	-
	Synergy and gap analysis	V			
Method evaluation	Useful	Yes (especially for entrepreneurs)			
	Room for entrepreneurship	Quite some			
Result evaluation	Consistent	Yes			
	Future proof	Probably			
General comments and observations	The interview was preceded by a interesting conversation about the potential of technology and its actual use and on cultural differences in business.		-	-	-
	Before giving advice on possible improvements, the participant often tapped his foot impatiently, eager to give a reaction.		-	-	-

Table 21- Codified interview

8.1.4 Main results

In total, the tables show 210 comments and questions, of which 153 are about the method and 57 about the workshop. Of these, 57 indicated usefulness, 0 about futureproofness, 3 about room for entrepreneurship and 15 about the consistency of the resulting business concept. Additionally, there were 94 ideas for improvements and 21 questions about things that were not clear.

For each of the comments and questions is indicated whether some action was undertaken to change the method, change something about the workshop, or otherwise. In the tables, an action is indicated with a v, no action taken with an x, and not relevant with -. For most actions and non actions, an explanation is also given.

The 210 comments and questions have led to 67 actions, thus changes. On 51 comments and questions no action was taken for various reasons. Table 21 shows several examples of action that were taken or not.

The direct question show the following scores out of thirteen interviews in total: usefulness: 11, futureproofness: 4, room for entrepreneurship: 9 and consistency of the resulting business concept 6,5.

8.1.5 Reflection on results

First, the interviews have produced much feedback on the method, including quite some ideas for improvements and additions. Secondly, the number of business contexts in which has been tested is limited to new ventures only.

Thirdly, comparing the direct questions show with the indications derived from the comments, the results vary. It is striking that usefulness scores much points, that futureproofness scores quite low, that both scores for 'room for entrepreneurship' are very different and that consistency scores rather good.

Though hard conclusions cannot be drawn from these data, as they cannot be tested statistically, the following is visible. It seems that the method is found useful and/ or has quite some useful elements in it. 'Room for entreprneurship' and 'futureproofness of the business concept' are not topics the participants starting talking about unless asked directly, but it seems that, especially for the second, there is some room for improvement. As there are quite some consistency checks in the BCD method, it is no surprise that consistency scores quite good, (note that praises for the consistency check are categorized under 'Usefulness' and that therefore the number of comments could have been even higher).

The next section go in more depth on the two types of interviews and the participants.

8.2 Expert interviews

Six interviews have been conducted with consultants from various backgrounds, including business innovation, business transformation and new business development. Another interview has been done with an advisor of entrepreneurs and one with a student entrepreneur coach. The total number of expert interviews is eight.

All interviews were structured, discussing each step of the method one by one. After each step, feedback was collected. The method was presented in the form of a workshop template that describes the core of the method and then goes through the steps and the assignments. The template was shown on a laptop or on paper.

With four participants (out of the eight), their experience with business development and related activities was discussed. It was attempted to direct these stories towards a structured overview of activities, as to compare it with the BCD method's steps.

8.2.1 Some results

The interviews showed a range of comments, but the following topics were referred to often:

- Developing alternative business models is considered by most participants as very valuable
- Visualizations: create insight and show possibilities
- The checks on feasibility and consistency was considered very useful
- The idea of listing available means (especially the 'whom I know' row) was found useful, though the table was rather unclear (explaining the idea helped most participants however)
- Looking at how future opportunities, threats and the future business (growth paths) might affect the current business was found interesting by many of the participants.
- Distinguishing features: was added after several inquiries why it was not in the method
- Some Foundation level questions were unclear (several have been expanded)
- A visualization of 'competitive position' in the form of a triangle (Hax & Wilde II, 2003) was considered unclear and not very useful
- The customer and (later also) partner interaction diagrams were found to be a bit redundant next to the business representation
- Several people also had comments on the order of the steps of the method, especially in relation to what is now ('as-is') versus what will be in the future ('to-be')

Comparing the several participant's stories on their own experience in business development with the BCD method, gave the following differences.

It was found that the BCD method was in most cases quite different from the business development stories of the participants. However, most could relate (part of) their experience to the method. An important finding was that the development of the business concept was a very long process for new entrepreneurs and a very short one for companies that start a new business (one consultant said it takes one afternoon). Most participants added that the personality of the intra- or entrepreneur is a decisive factor in business success. That some aspects of this, like aspirations and intentions, are taken into account in the method was considered by most as a good thing. Additionally, investments, investors and revenues are in reality very important and drive many decisions, but are left out of the scope of this project. Also found to be very important is what a company distinguishes from all other companies (it is taken into account in the current version of the method).

8.2.2 Evaluating the results

As discussed above, the tables in Appendix A shows a column with the label 'action', to indicate whether action has been taken based on that specific comment. In general, the method has only been changed if:

- Something is unclear and it can easily be changed
- The theory is compatible with the feedback
- It does not contradicts (too many) other participants

Fundamental changes have not been made, except for the order of some sub-steps, which has been resolved with the invention of the business development thinking diagrams.

8.3 Case interviews with entra- and intrapreneurs

Five interviews have been done on entrepreneurial or intrapreneurial activities. Several of the interviewers were consultants describing a new venture and internal business they are (thinking of) starting up and one described his current client's business. The final participant is entrepreneur.

The interviews were conducted by going through the method's steps. During and after each step, feedback was collected. Observations were also noted. Two workshops were performed on a whiteboard, one with post-its and a booklet (with the workshop's assignments), one on paper and the final one on the laptop, in the workshop template directly. All were at least supported with the template on a laptop. Of all these methods, the post-it/ booklet was the most practical. Note that the cases themselves are not included in the report.

8.3.1 Some results

The cases resulted in a wealth of feedback, but the following topics were referred to often:

- Iterative design of the business concept: very nice
- Consistency checks: very useful
- Means table: unclear
- Business representation: very nice and helpful
- Revenue and cost diagrams: very insightful
- Interaction diagram: not very useful
- Lack of references to investments etcetera
- Missing element of a time scope

8.3.2 Evaluating the results

The same tables of the interviews above are used for the evaluating the cases.

8.4 Evaluating the general questions

Of all the participants, only one openly questioned the usefulness of the method, as he thought it was too complicated for a simple brainstorm session and too simple for deciding on the future of a business. The other participants liked it and found it useful.

As for the other general questions, most participants thought that the method creates room for entrepreneurship. All participants thought that the resulting business concept would be consistent and most of the participants thought the business concept would be future proof.

9 REFLECTION & CODIFICATION

The previous chapter shows that the design of the business concept development method has proven its use. This chapter discusses what the implications of this successful design are.

The designs of the business model development method (including the design of the business model template) and the business concept development method have, next to their practical usefulness, a second goal of reflecting on the existing literature on business models, business development and effectuation. This idea of reflection on design with the goal of developing scientific knowledge is referred to as design-oriented research. It is based on the reflective cycle, which reflects on a tested design as to generalize its use and derive theoretical relevant findings. Therefore, first the generalisation of the designs is discussed resulting in formal formulations of what the designs can do. Thereafter is discussed what the designs have contributed the scientific literature by analyzing how they help answering the main research goals formulated in the project approach.

9.1 Generalization of the designs

The BCD method is developed to be used in various contexts (the business model template is part of the BCD method and therefore not discussed separately). The case interviews discussed in the previous chapter however were only been performed in one of those contexts, being new venturing resulting from an entrepreneurial idea. Formally, the BCD method has only proven its usefulness in that context. The expert interviews, also discussed in the previous chapter, shows that the BCD method can be used in a broader range of contexts. Further testing in other contexts will have done to establish this.

9.2 Scientific contribution of the designs

To show that the success of the proofs of concept designed in this project (being the two development methods) also implies that the theoretical relations between the business model, business development and effectuation, are valid, the application of these theoretical concepts in those designs is analyzed. This is done by describing how the theoretical concepts and their mutual relations are used in the designs, or in other words, why this project is design-oriented research.

9.2.1 The use of effectuation in the business concept development method

To show that the BCD method is firmly based on existing ideas on business development and effectuation, those theories are now derived from the design of the method.

The BCD method is an implementation of business concept development, which in turn is defined as a process that is part of business development. Though the definition of business concept development as a separate process is new, the activity of developing a business concept is not (as every business is im- or explicitly based on a concept).

Sarasvathy derived the theory of effectuation from how entrepreneurs built their businesses. Developing the business concept effectually is thus a logical (and in practise often repeated) step in that process. As the method prescribes how to develop that concept, effectuation is applied to the design of the method in the following ways:

- A number of specifications are derived from the principles of effectuation, to make the method as effectual as possible.
- The main steps of the method are based on the structure of effectual decisions.
- The sub-steps of the method are based indirectly on Sarasvathy's interpretation of effectual new venturing (through the business development thinking diagrams).

Note that the method is not the same as Sarasvathy's interpretation of the new venturing process, as several modifications have been made (as described in section 7.3.1) and because the business model is introduced in it. Additionally, it is not completely effectual, as the BCD method takes the effects of future developments on the business concept into account, while effectuation is only about what is now.

The success the method, especially in the case interviews, shows that the application of effectuation works in the tested contexts. However, as no traditional method has been designed and tested, it cannot be concluded that a not-effectual BCD method is worse or better.

9.2.2 The use of the business model in business concept development and business development

The business model template designed in this project is, just like the business concept development method, based on existing theories. In this case, the business model template of Morris et al. (2005) is used, which has been supplemented with an additional framework (in the Proprietary layer) based on the business model templates of Osterwalder (2004) and Shafer (2005). From this template, a step-by-step business model development method has been derived.

The business model is related to business development by defining it a part of the business concept. This is demonstrated by the integration of the business model design method into the BCD method, as shown in Figure 27 in section 7.4.4 on page 56. The success of the BCD method shows that this is a successful way of relating these concepts.

Additionally, a list of business development contexts has been defined in Table 12, in which business concept development and thus the BCD method can be used. Though not all of those contexts have been tested, most expert opinions recognized the value of the BCD method for those contexts.

Several of the business development contexts are about business model innovation, making business model innovation part of business development.

9.3 Research codification

From the above can be concluded that the business concept development method and embedded business model developed method show that the relations established between business development, the business model and effectuation can work. As not all business contexts have been tested and because the number of actual tests is still limited, the codification of this research is in the form of hypotheses.

The first hypothesis is about business concept development, which is introduced in chapter 5 as a new way of looking at activities within business development that revolve about defining the assumptions, function and intended workings of a business. The design of the BCD method shows what it consists of and relies on it being embedded in business development, as its business context determines the steps and their order. From this, the following hypothesis is derived:

H1: Business concept development is an intricate part of business development.

The BCD method includes steps that look into the future (see section 7.4.3), though that results in the method not being completely effectual. This fundamental choice is made because the tests and especially the expert interviews showed that at least considering the future is a necessity (one example is the consideration of potential risks by an entrepreneur). Interestingly, it also showed that comprehensive predictions were not deemed (as) necessary. Therefore, the second hypothesis is:

H2: Effectuation can be applied to business development if it considers future developments.

The tests and evaluations of the BCD method (in chapter 8) have demonstrated the usefulness of the method and thereby shown that, even though effectuation has been derived from empirical evidence, it can also be used prescriptively. Thus, the third hypothesis is:

H3: Effectuation can be applied prescriptively.

The design of the BCD method is based largely on the business model development method (which in turn is a step-by-step outline of the business model template designed in this project). Especially the expert interviews have shown, that developing the concept of a business, resulting in a business concept, requires that all the questions the business model template asks, are answered. Simultaneously, the business model development method benefits much from the application of effectuation in that it makes the process (at least somewhat) more entrepreneurial, makes the resulting concept more consistent and future proof and adds several elements like the boundary of available means. In other words:

H3: Developing the business model is a part of developing the business concept.

The BCD method is designed to support many different business contexts. Some of those contexts have a goal of developing an (potentially) innovative business model, for the various reasons shown in Table 12. This connection, which the introduction of this report explained is needed by today's businesses, enables the following hypothesis:

H4: A business model invention is a possible goal of business development and might result in business model innovation.

Additionally, as the BCD method is based on existing literature (as shown in the previous section), has been tested (see chapter 8) and has shown to be useful in at least one business context (being new venturing, see section 8.3). Therefore, the *use* of the BCD method and the embedded business model development method can be formulated directly in the form of design propositions (Romme & Endenburg, 2006). A design proposition is "prescriptive knowledge" that links "interventions to outcomes" (Denyer et al., 2008, p. 394). However, as with the hypothesis above, these design propositions have not been fully tested and are therefore presented as hypothesized design propositions:

HDP1: To (re-) develop a business concept when doing effectual business development, use the business concept development method.

HDP2: To (re-) develop the business concept when a goal of business development is business model innovation, use the business concept development method and thereafter the innovation check to measure whether it is indeed innovative.

HDP3: To (re-) develop a business model, use the business model development method and the business model template

10 CONCLUSIONS, LIMITATIONS, FUTURE WORK & PRACTICAL IMPLICATIONS

This final chapter discusses what this project has brought.

10.1 Conclusions

From the increased global business complexity, the need has arisen to be more flexible, tougher and faster and accept more risk. A different way of looking at organisations has therefore been introduced: the business model. Transforming or innovating a company at this level of analysis is a great way to find new paths towards organic growth. Unfortunately, a tool to (re-) develop business models had not been designed yet, nor have business models been placed in context of broader business development that is needed to initiate these kind of changes. Therefore, a new business model design method is needed that is embedded in business development.

This project proposes a business model development method, which extends the existing business model template of Morris et al. (2005) by combining it with the templates of Shafer (2005) and Osterwalder (2004).

To relate this method to business development, a new layer on top of the regular business development processes is introduced: business concept development. This layer is implemented in the form of an additional method. This BCD method embeds the business model development method and has been designed to be used in many different business development contexts, ranging from new ventures needing an innovative business model, to a business unit that is spinned-off.

As the increased complex world requires that businesses are truly entrepreneurial, multiple aspects of the entrepreneurial theory of effectuation have been applied to the design of the BCD method.

The BCD method has been designed iteratively. During the project, the method has been discussed in interviews with experts on business development, innovation and entrepreneurship. It has also been tested with intra- and entrepreneurs and proven its usefulness as a proof-of-concept. The method has consistency and reality checks built-in, as well as forward looking mechanisms, to make sure the resulting business concept is solid and future proof, which has also been verified in the interviews as much as possible.

The research question "How to apply effectual thinking to a business concept development method for the (re-)design of potentially innovative business models" has also been answered, because the prescriptive method is a successfully tested application of effectuation and because it supports business model innovation (among other business development contexts).

Finally, from the methods, four theoretical hypothesis and three hypothesised practical design propositions have been derived.

10.2 Contributions of this project

The first contribution of this project is a proposed way of relating the theory of **business development** to the concept of **business models**. This is a new development, as even authors who have described how to design business models (though none in a structured form or process as for example Osterwalder does (2004)), do not explain how the business model should be used in business development. It falls within one of the research challenges described by Pateli and Giaglis on business models and this contribution fits within the category of definitions (2004, p. 312): "... clarify the relevance between business models and related concepts", being business development.

Business development and business models are related by the introduction of **business concept development**, which is an iterative and repeated process that is part of business development. It is implemented in the form of the business concept development method and has been tested and evaluated to be useful and generate consistent and future proof business concepts.

In the relation between business development and business models, the need for **business model innovation** is recognized and taken into account. This contribution fits within Pateli and Giaglis's challenge to create "change management methodologies to guide business model evolution, transition, and/or innovation" (2004, p. 312), though the aim here is to design the future business model and not to make a complete transformation. This has been done by defining a list of **business contexts** of business development, including several related to business model innovation.

The existing business model template of Morris et al (2005) has been extended by linking several business model templates to it. Though different business model templates have been compared by authors like Osterwalder (2004), Gordijn et al. (2005) and (Shafer et al., 2005), no attempt has been made yet to actually **link different templates**. From a design perspective, it is useful not just to link several models, but also try to find out whether they can be linked **hierarchically**. In addition, a distinction is made between an **internal and extern** focus of business models templates. One approach to "improve knowledge transfer, knowledge communication, and knowledge creation" (Burkhard, 2005, p. 170) is the use of visualizations of knowledge. In this project, several existing and new **visualizations** of (parts of) the business model are linked to business model design. It also helps answer the challenge of Pateli and Giaglis on business model design tools, which states: "Develop business model representational formalisms and notational constructs". It also helps to answer to two integrative challenges of Pateli and Giaglis (2004, p. 312): "Visualization of conceptual layers and components of business models through computer-aided methods and tools (business model modelling)" and "Development of abstraction layer specific modelling tools (hierarchical decomposition of business model models)". This part of the project thus falls within the research stream on business model design methods and tools (Pateli & Giaglis, 2004, p. 309).

The application of **the theory of effectuation** to **business concept development** is another contribution. While Sarasvathy (1999; 2001a; 2001b) analyzes actual business development, this project does the opposite, by taking her ideas and applying them to create a causal/effectual method for business development. The **method** is new as well. The resulting contradiction of effectuation as basis for a method that creates something has been addressed as well. In addition, a new type of diagram has been constructed, the **business development thinking diagram**, which shows the difference between effectual and causal business development.

Additionally, using business model templates to explicitly support the creation of business models *as part of business development* is new.

The final contributions are four **hypotheses** and three **hypothesized design propositions**, described in chapter 9.

10.3 Limitations

The most important point of discussion is the test and evaluation method. Because of the iterative design approach, the participants did not all have the same BCD method to test. To increase the internal validity, more tests need to be done with the final BCD method.

It is on the other hand mainly the selected range of participants that strengthens the internal validity. The very diverse backgrounds introduced exposed the BCD method to different views on business development, which very much helped improving the method's design.

Additionally, the construct validity of the BCD method and its parts are high. Most elements are based directly on the different sources of literature. The few articles from professional literature and unpublished papers are specifically marked in this report as they are probably not peer-reviewed.

It is the generalizability, thus the external validity, which is not so strong in this project. The number of participants is relatively low and especially the number of tests with intra- and entrepreneurs has to grow to increase the external validity. Furthermore, as the method proposes to be applicable in many different business development contexts, many more of those have to be tested.

Another way of improving the external validity can be to let other people lead the BCD method's workshop, as the author of this report was present at the tests to help and explain the BCD method and the method has thus not been tested independently. Alternatively, a comparison can be made between one group of participants doing another way to create a business concept (or something similar) and a second group of participants using the BCD method.

The reliability of the testing is not a point of discussion. Each test has been performed along the same line, going through each step of the method, one by one.

The points of discussion above do not make the overall research less strong in its approach, as the discussion points result from the nature of this project. However, to fully demonstrate its generalizability, more testing needs to be done.

What the tests did show was that the BCD method is recognized by participants to add value, as it not only helps designing a business concept that it is feasible and internally consistent, but also shows the available choices to be entrepreneurial. The combination of effectuation and business models in business development seems to be a promising one.

10.4 Future work

The report refers to many opportunities for future research. They are summed up in this section.

10.4.1 Relating to effectuation, business development and the BCD method

First, the BCD method has to be tested by more intra- and entrepreneurs in other different business contexts, as now only a few entrepreneurs in a new venturing context have tested different versions of the BCD method.

There is a definitive need for a way to establish whether a business concept will work in reality, as the BCD method only has one reality check that refers to the means available to the entrepreneur, not to the market success. This will probably require that quantitative tools are added to the BCD method, for example to understand how cash flows will look like in the company.

Very interesting could be to research what the role of the business concept (and business model) is or could be in the remainder of the process of business development. One might assume that for example its communicative abilities are very important. Also, the exact relation with for example a business case (thus the financial calculations on which the business will run) has not been looked at.

Finally, there is room for improvement of the (visual) tools that support the (re-) development of business concepts, as many other existing tools have not been discussed in this report.

10.4.2 Relating to business models, business model innovation and the business model development method

One of the participants came up with the idea for a portfolio of business concepts (or business models). The fit of these concepts can for example be determined by looking at the Foundation level of the concepts as these are comparable. However, further research is necessary.

Further research is also definitely required on the area of the dependencies within the business model (remarked in section 4.1). Would it be possible to create topologies of instances of business model elements and investigate successful combinations? Additionally, would it be possible to measure the fit between business model elements? And what about business model topologies like that of Malone, et al. (2006).

Section 3.1.2 explained that business models are analyzed on the level of the business unit/ new venture. However, why can there be no a similar model on the corporate level? Or likewise, on a project, operational or even network level?

The business model takes a rather internal perspective on businesses. One might ask whether this is desirable as the market changes rapidly and is global, making that companies have to be flexible instead of focussed on their capabilities, resources and own aspirations. (Based on a discussion with a consultant.)

Section 3.3.1.3, on (radical) business model innovation, described the need for enlarging and conquering some part of the market. However, to fully make this definition operational, percentages of how much larger and how much additional market share should be conquered, are needed.

In the same section 3.3.1.3 is described that some business model innovations can create *new* markets. This however has not been researched yet, except somewhat in the book 'Blue ocean strategy' (Kim & Mauborgne, 2005), which is however professional literature. A question could be: should a market be ready for a specific business model (for instance in relation to technology) or can a business model create a new market as well? (Video ads and consumer internet bandwidth come to mind.)

This project features a comparison of innovation types. Related to one of those, technological innovation, are the S-curves, described by Christensen (2002). Might something similar exist for business model innovation? Moreover, might there be a level of business model performance that is sufficient or too much, just like increasing technology performance?

A not supported business development context is that of having two business models in one company at the same time (described by: Markides & Geroski, 2004). How to develop two business models simultaneously (or adapting one to enable a second one), could be an interesting question.

Finally, section 6.3 asks the question why there is no 'effectual change management' yet, whilst the ideas of effectuation might just as well be applied to change management as they do to business development.

10.5 Practical implications

The practical implications of this project lie mainly in the hypothesised design propositions. The first relevant practical implication is that the business model can be designed and that this can be done using the business model development method. Secondly, because a relation between business development and business model has been established, designing the business model should be considered part of the business development process. Thirdly, the project has shown that it is possible and useful to develop a business concept using the business concept development method. Finally, the BCD method has shown to add value in a number of business development contexts and might be useful in several more.

Besides this report, a template has been created to aid in giving a workshop business concept development. A reference to this file can be found in Appendix F.

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Appendix A TESTS

Participants in random order:
Eric Bun, Capgemini
Peter Verdaasdonk, TU/e Innovationlab
Hans Nollet, Capgemini
Claude Mansell, Capgemini
Ard Jan Vethman, Capgemini
Frank de Jong
Arjen van Oostrum,
Thijs Bredius, Capgemini
Bram Broersma, Capgemini
Bart de Jong, TU/e Innovation Lab
Marieke Schoenmaker, Capgemini
Herman-Jan Carmiggelt, Capgemini
Idzarda Lindenbergh, Capgemini

Legend of the interview codifications
'Remarks and observations' columns
- Performed but no comments
'Category' column
U Indications of usefulness of the method
E Indications of room for entrepreneurship of the method
C Indications of consistency of the business concept
F Indications of future proofness of the business concept
N uNclear
I Improvement proposed
'On' column
W workshop related
M method related
'Action' column
x no action taken
v action taken
- No action needed

Interview type: Case	*Participant: business innovation consultant*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention				
	Means & partners				
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users				
	Foundation level business model design: questionnaire	Some questions unclear	M	N	V
		Strategy factor useful	M	U	V (kept in method)

		Make dependencies between concepts clear	M	I	X (impossible within project's time frame)
	Specific business model design: strategic choices	-			
	Specific business model design: Revenue & cost sources	Low number of actors	M	I	X
		Arrow thickness is a clear but a relative indicator	M	I	-
		Adding competitors is useful	M	U	-
		Adding financial numbers might be nice	M	I	X (out of scope)
	Specific business model design: activities & business representation	Should be done before revenue sources diagram	M	I	X
	Specific business model design: interaction diagrams	What about multiple customer groups?	M	I	X (out of definition)
	Consistency checks				
III. Opportunities and threats of the set of business models	Reality check				
	Opportunities & threats	Seemed to impact multiple elements of the concept simultaneously	M	-	-
		Has impact on all aspects of the business concept	M	-	-
	Building on your successful business: growth paths	How big is the market?	M		X
	Rules level business model				
	Story telling				
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria	-			
	Prioritize the business concepts	-			
V. Finish up	Innovation check				
	Synergy and gap analysis				
Method evaluation	Useful	Nice			
	Room for entrepreneurship	Improvements were made during the entire workshop on different parts of the concept			
Result evaluation	Consistent	The workshop leader was constantly checking the consistency			
	Future proof	-			
General comments and observations	Missing: what is unique about what you are going to do?		M	I	V (added)
	Method takes quite some time		W	-	-

Interview type: Case	*Participant: business consultant*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention	'Intention' at start of workshop worked well as the participant was very eager to talk about his idea	W		-
	Means & partners	The participant started defining risks and restrictions	M	I	V (include them in rules level)
		Words in table not very clear	M	I	X (from literature)
		The participant only summed up his good attributes	W	-	V (in workshop usage description)
		A question came up: what will be the consequences of starting up, girlfriend wise?	W	-	-
		Participant talked about 'access' instead of ownership of some resources	M	I	V (in workshop template)
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	Define 'business idea'	M	I	V (in report)
	Foundation level business model design: questionnaire	Several concepts unclear	M	N	V
		Takes quite a lot of time	W	-	-
		Referred quite often those these questions later in the workshop to point out inconsistencies	W	C	-
	Specific business model design: strategic choices	Definitions needed	M	I	V (in report)
		Triangle did not provide much insight	M	N	V (removed)
	Specific business model design: Revenue & cost sources	Very useful, as the participant came up with much more revenue sources	M	U	-
		An explicit list of stakeholders might have resulted in even more revenue sources	M	I	X (part of means table)
		Idea for the cost sources diagram born	M	I	V
	Specific business model design: activities & business representation	Referring back and forth to the Proprietary level questions resulted in additional insight	W	C	-
		"What if there are two or more main processes?"	M	I	X (out of scope)
		Abstraction level of activities varied	W	-	-

		Many decision seemed to be directed by financial considerations	M	-	X (out of scope)
		Visualization of cash flows might be useful	M	I	X (out of scope)
		Participant: "started thinking about making optimal use of his resources"	M	U	V (in workshop usage description)
		It helped to visualize who was helping in what part of the value creation process	M	U	-
	Specific business model design: interaction diagrams	Turned out to be very much like the business representation list of activities	M	I	X (no better representation found)
		Separation between value creation and value appropriation was very thin for some activities	M	N	X
		Adding partners to the different channels was useful, as it showed who was actually going to implement and/or execute parts of the interface with customers	M	U	-
		The diagram also helped in finding partners and customers who might be part of the creation of one of more activities	M	U	-
	Consistency checks				
III. Opportunities and threats of the set of business models	Reality check				
	Opportunities & threats	Participant did not expect any changes	M	-	-
	Building on your successful business: growth paths	Defining an exit strategy should be included	M	I	V (added in method)
		Participant began to talk about the need to become more professional and concluded that he should do the concept development process again	W	-	-
	Rules level business model				
	Story telling				
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria				
	Prioritize the business concepts				
V. Finish up	Innovation check				

	Synergy and gap analysis				
Method evaluation	Useful	"Playful way of setting up a business plan" "The method links different aspects of a business, making it a whole" "it is a very pragmatic approach"			
	Room for entrepreneurship	"Combinations [of the business] become visible"			
Result evaluation	Consistent	Yes, quite some iterative improvements of parts of the concept were made			
	Future proof	-			
General comments and observations	"Include a systematic way of approaching workshop participants"		W	I	V (in workshop description)
	The method needs more standardized consistency checks		M	I	V (many introduced)
	There was not very much room for alternatives, as there was already one business idea		W	-	-

Interview type: Case	*Participant: consultant*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention				
	Means & partners	Expand this to support the development of an offer	M	I	X
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	Idea born to separate this step from the first step.	M	I	V
	Foundation level business model design: questionnaire	-			
	Specific business model design: strategic choices	-			
	Specific business model design: Revenue & cost sources	-			
	Specific business model design: activities & business representation	More depth on how to select partners might be useful	M	I	X (not in scope)
	Specific business model design: interaction diagrams				
	Consistency checks				
III. Opportunities and threats of the set of business models	Reality check				
	Opportunities & threats				
	Building on your successful business: growth paths				
	Rules level business model				
	Story telling				
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria				
	Prioritize the business concepts				
V. Finish up	Innovation check				

	Synergy and gap analysis				
Method evaluation	Useful	Yes			
	Room for entrepreneurship	Yes, especially looking for partners and uses for them			
Result evaluation	Consistent	Probably			
	Future proof	Probably			
General comments and observations	Conceptual		M	U	-
	Multiple, clear steps		W	U	-
	Aimed at concept *design*		M	U	-
	Language not to difficult		W	U	-
	Some discussion on the level of abstraction		W	N	-
	Participant was looking for how to come up with business ideas (not part of the method)		W	-	-
	Participant thought that even copying an existing business model requires that it has to be made specific: additional usage context for method		M	I	V

Interview type: Case	*Participant: consultant*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention	“Good to start with idea” (now: intention)	M	U	-
	Means & partners	“a bit vague”	M		-
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	“how specific should the offering be?”	M		X (depends on participant)
	Foundation level business model design: questionnaire	“at first not quite clear what its purpose was”	M	N	V (is: What do you want to do now?)
		“quite useful for creating focus”	M	U	-
	Specific business model design: strategic choices	-			
	Specific business model design: Revenue & cost sources	“Useful and visually attractive”	M	U	-
	Specific business model design: activities & business representation	Several alternatives were found “Activities are to be identified on a high abstraction level”	M	U, E	- -
	Specific business model design: interaction diagrams	“Integrate this diagram in the business representation"	M		X
	Consistency checks	The participant recognized inconsistencies himself	M		-
III. Opportunities and threats of the set of	Reality check				
	Opportunities & threats	Useful addition	M	U	-

business models	Building on your successful business: growth paths				
	Rules level business model				
	Story telling				
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria				
	Prioritize the business concepts				
V. Finish up	Innovation check				
	Synergy and gap analysis				
Method evaluation	Useful				
	Room for entrepreneurship				
Result evaluation	Consistent				
	Future proof				
General comments and observations	What is the idea of the method: offering specific or company specific?		M	N	V (company specific)
	New idea: "create a portfolio of business concepts and compare their Foundation level business models for compatibility"		M	I	X (not in scope)
	"The iterative approach is good"		M	U	-

Interview type: Case	*Participant: entrepreneur*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention	-			
	Means & partners	About partners: list groups or persons?	M	N	V (both possible)
		How to know whether someone is relevant to list?	M	N	X (entrepreneur dependent)
		The 'whom I know' box should be bigger	W	I	V (in workshop template)
		Listing partners is useful	M	U	-
		The 'level of economy' is most useful for putting in trends	M	U	-
		The table requires quite some explanation	W	N	V (in workshop template)
		The row titles seem to reflect mainly the 'individual level' column	W	N	X
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	-			
	Foundation level business model design: questionnaire	Component 6 depends very much on your timeframe	M	N	X (is derived from theory)

		Each of component 3's sub-options should be an option (thus: no sub-options)	W	I	X (is derived from theory)
		Component 5 is important	M	U	-
		Becoming aware of all these things is useful	M	U	-
	Specific business model design: strategic choices	Some overlap with step I	M	N	V (business idea and users are now only in the first sub-sub-step of II)
	Specific business model design: Revenue & cost sources	Because of using post-its, not the thickness of arrows, but the closeness to the centre of the notes was used as an indicator of source-size	W	I	-
		Defining a time-frame was deemed necessary	W	I	X (out of scope)
	Specific business model design: activities & business representation	-			
	Specific business model design: interaction diagrams				
	Consistency checks	Make connections between the different assignments more clear	W	I	X
III. Opportunities and threats of the set of business models	Reality check	"you only have time as long as you have money" (on the need for a consistent cash-flow	W	I	X (out of scope)
	Opportunities & threats	-			
	Building on your successful business: growth paths	-			
	Rules level business model				
	Story telling				
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria				
	Prioritize the business concepts				
V. Finish up	Innovation check	-			
	Synergy and gap analysis				
Method	Useful	Yes			

evaluation	Room for entrepreneurship	Yes			
Result evaluation	Consistent	Yes			
	Future proof	Yes			
General comments and observations	"Makes one conscious of decisions and brings structure into those"		M	U	-

Interview type: Case	*Participant: entrepreneur*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention	V			
	Means & partners	Several categories of (potential) partners can be established, including: family, knows about market/technology/product, investor	M	I	V (in workshop description)
		Difficult to fill in	M	N	V (in workshop template)
		Participant had the feeling that it did not included everything, but could not give examples of this	M	I	X
		"Maybe this is an exercise to do when you have started the business."	W	I	X
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	"formulating the business idea is not straightforward: it is a summary of the offering, users, intention and aspirations"	M	N	V (several questions have been re-ordered)
		There were several business ideas, offerings and users. It was decided to elaborate on two of these.	W	I	V (in workshop description)
	Foundation level business model design: questionnaire	In component 5, the meaning of 'operating leverage' was unclear.	W	N	V (in workshop template)
		In component 2, the last question had to be rephrased	M	I	V
		The participant really reasoned from a 'money' perspective	W	-	-
	Specific business model design: strategic choices	Summarized as: the business' raison d'être	W	I	V (in workshop description)
		The participant made several small diagrams to make clear how his business will work	W	-	-
	Specific business model design: Revenue & cost sources	V			

	Specific business model design: activities & business representation	Split it in what you have and what you need	M	I	X (not the goal of the diagram)
	Specific business model design: interaction diagrams				
	Consistency checks	From this point on, the workshop turned into a conversation in which the workshop leader used the remaining tools implicitly to challenge the participant.	W	-	-
III. Opportunities and threats of the set of business models	Reality check	V			
	Opportunities & threats	V			
	Building on your successful business: growth paths	Was considered a useful question	M	U	-
	Rules level business model				
	Story telling				
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria	V			
	Prioritize the business concepts	The main tool were several calculations that the participant made vigorously and fast	M	-	-
V. Finish up	Innovation check				
	Synergy and gap analysis				
Method evaluation	Useful	Yes			
	Room for entrepreneurship	Yes, but: “it is just amateurism until you have started for real”			
Result evaluation	Consistent	Yes			
	Future proof	Yes			
General comments and observations	“The workshop template should aid more in the process as there are too many open questions. This might be done by giving an example or by giving more explanations”		M	I	V (in workshop template)
	“Give an background in the theory that explains the way of working”		W	I	V (in workshop template)
	“You are forced to make choices and stay in line with those”		M	U	-
	“explain that everything is confidential”		W	I	V (in workshop description)
	Afterwards: "We don’t know anyone who knows the sector we want to be in" and "we do not know the actual need in the market "		M	U	-

Interview type: Expert	*Participant: former business development consultant*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention	V			
	Means & partners	V			
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	"Do not ask for customers, but for users of the offering as they experience the need for it"	M	I	V
	Foundation level business model design: questionnaire	"Call the slide [of the workshop template] differently"	M	I	V
		"These questions can be considered the choices the entrepreneur has"	M	-	-
		"Some choices should not be made here already, like for example those on outsourcing"	M	I	X (derived from literature)
	Specific business model design: strategic choices	"The questions on the right side of the sheet about distinguishing features and 'what you will do best' are very important and give a direction to the business"	M	U	-
		He however added these questions are in practise very difficult for participants to answer	W	I	V (in workshop description)
		"The position [as in that version of the workshop template] is more applicable to a product than for a business"	W	I	V (now an open question)
		A lot of time was spend on this slide of the workshop template	W	-	-
	Specific business model design: Revenue & cost sources	Very conceptual: nice	M	U	-
		"Perform this exercise before the business representation assignment"	M	I	V
	Specific business model design: activities & business representation	"The relation with the strategic choices seems to be quite limited"	W	I	V (in workshop description)
		"Fill this diagram in by first listing the activities, then the required capabilities and resources and only then start talking about partners"	W	I	V (in workshop description)
		"Stimulating the creation of multiple alternatives is very good and should be done"	W	U, E	-
	Specific business model design: interaction diagrams	"Introduce additional diagrams for interactions with other parties like partners"	M	I	V

		"The added value of these diagrams is limited as they overlap with the business representation diagram"	M	I	X
		"An additional perspective on the business, like these diagrams show, is however excellent"	M	U	-
		The diagram can be improved like this: add all interactions to each of the activities in the business representation diagram, check whether they fit with the 'distinguishing features' in the 'strategic choices' and add a description of those interactions depending on their importance	M	I	-
	Consistency checks	The participant referred many times to the distinguishing features and was content that an explicit reference to that is included	M	U	-
III. Opportunities and threats of the set of business models	Reality check	"Should be part of the step II"	M	I	X
	Opportunities & threats	"Very useful"	M	U	-
		"In practise, you would like to wait for a week or so to give the opportunity to the participant to think about it a bit more, before going into this kind of future related questions."	W	U	X
	Building on your successful business: growth paths	"You might want to give some idea of growth dimensions to focus this assignment"	M	I	X
	Rules level business model	Was considered part of the implementation plan as to make the business concept operational	M	U	-
	Story telling	Nice	M	U	-
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria	V			
	Prioritize the business concepts	V			
V. Finish up	Innovation check	Very nice, "a fun tool to end the workshop with"	M	U	-
	Synergy and gap analysis	V			
Method evaluation	Useful	Yes (especially for entrepreneurs)			
	Room for entrepreneurship	Quite some			
Result evaluation	Consistent	Yes			
	Future proof	Probably			

General comments and observations	The interview was preceded by a interesting conversation about the potential of technology and its actual use and on cultural differences in business.	-	-	-
	Before giving advice on possible improvements, the participant often tapped his foot impatiently, eager to give a reaction.	-	-	-

Interview type: Expert + BD Comparison	*Participant: Entrepreneur coach and entrepreneurship program manager on a university*				
Comparison	Background: In the entrepreneurship program the participant has created, new businesses are created by students based on promising (technology) ideas coming from the university. The students receive courses and workshops in entrepreneurial skills and business knowledge and can get coaching based on an entrepreneurial skills-assessment.				
	Business Development Process: The process the students go through while developing a new business in this program, is as follows: start with a business idea based on a technology, find out the demand for the product in the market and try to make the first sales. However, coming up with a working business idea takes a lot of time and is a very iterative process. The participant supports the students mainly by giving feedback on their business ideas and the way those are executed.				
	Evaluation: The process as described by the participant seems to be quite traditional in terms of business development. It is also not very much structured in a standard way, though there is a lot of support for those in the program.				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention				
	Means & partners				
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	"If the offering is established beforehand, a lot business development choices already haven been made: is this a problem in the method"	M	N	- (it is not a problem)
	Foundation level business model design: questionnaire				
	Specific business model design: strategic choices				
	Specific business model design: Revenue & cost sources				
	Specific business model design: activities & business representation				
	Specific business model design: interaction diagrams				
	Consistency checks				
III. Opportunities and threats of the set of business models	Reality check				
	Opportunities & threats				
	Building on your successful business: growth paths				

	Rules level business model				
	Story telling				
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria				
	Prioritize the business concepts				
V. Finish up	Innovation check				
	Synergy and gap analysis				
Method evaluation	Useful	Probably			
	Room for entrepreneurship	Yes			
Result evaluation	Consistent	- (not tested)			
	Future proof	- (not tested)			
General comments and observations	The participant did not give many comments, but instead said: "I would like to see it in action and examine whether it works".		W	-	-
	The method will be appealing because of the visualizing of a business		W	U	-
	"Doing this in a half a day would be ok"		W	-	-
	"Depending on the phase of business development you are in can it add value"		W	-	-
	"The real added value of the method lies in the structure it creates"		W	U	-

Interview type: Expert	*Participant: Business transformation professional*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention	-			
	Means & partners	-			
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	-			
	Foundation level business model design: questionnaire	-			
	Specific business model design: strategic choices	The participant is of the opinion that the strategic choices and the Foundation level questionnaire should both be answered twice, first for who you are now, and again for who you want to be in the future.	M	I	X (is vs. to-be is defined at level of the business context)
		The participant found the Foundation level questionnaire and the strategic questions not very well formulated	M	I	V (improved where necessary)

		"There is a relation between the questions about 'distinguishing features and 'what you will do best', thus introduce a check on whether these two align"	M	I	X (as they are naturally close)
		"When using the method for a to-be business, the strategic choices sheets should be done first"	M	I	X (the 'intentions' cover this somewhat plus it would make the method less effectual)
	Specific business model design: Revenue & cost sources	"An example would be helpful"	W	I	V (in workshop template)
		The participant proposed to recreate the diagrams to show one or two lists of the costs and revenue sources and put (for example) coins after each item to indicate its value or cost.	M	I	X (visualizations are preferred)
	Specific business model design: activities & business representation	The participant recognized the activity to resources/ capability line of reasoning and added	M	U	-
		The participant proposed to add a step before listing all activities: listing the deliverables, which the activities should output.	M	I	X
		"'Customers' as a group in the diagram should be split into consuming and producing customers, as the latter are actually partners."	M	I	V (in workshop description)
		The participant noted that the whole of partners and customers is usually called an eco-system.	M	-	-
		The participant found the title 'realizing the offering' sound like an implementation process, instead of like the activities to offer the offering	W	I	V (title changed)
	Specific business model design: interaction diagrams	"The channel executing partner should be positioned on the right, to make the relation between the channel and the activity more clear."	M	I	V
		The relational aspects are only relevant in the to-be situation.	M	I	X

		"The diagram should be on a slide of its own"	W	I	V
		"The relation is already in the generic business model and that is actually enough"	M	I	X
		The participant interpreted the channel as how the product will be put into the market	M	U	-
	Consistency checks	The checks were found useful	M	U	-
III. Opportunities and threats of the set of business models	Reality check	""	M	U	-
	Opportunities & threats	-			
	Building on your successful business: growth paths	-			
	Rules level business model	The participant was of the opinion that the Rules level should be an intricate part of the business model (as it is shown here and not earlier).	M	I	X (it is)
		The function of the Rules level is not only the operationalization of the business model, but also to measure the success of the operationalization of the business model!	M	I	V (recognized in text)
		"The Rules level should be put right after the Proprietary business model layer"	W	I	X
	Story telling	-			
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria	-			
	Prioritize the business concepts	-			
V. Finish up	Innovation check	"The innovativeness checks can also be formulated as specific goals."	M	I	X
		"However, as people then might be limited in their scope and creativity, let them create one 'wildcard' business concept, in which they might be completely free"	W	I	V (in workshop description)
	Synergy and gap analysis	-			
Method evaluation	Useful	Yes			
	Room for entrepreneurship	Quite			

Result evaluation	Consistent	Probably		
	Future proof	Probably		
General comments and observations	Many concepts had to be explained, especially because quite some words had different and or multiple associations with the participant resulting from her work.	W	N	V (in workshop description)
	With great enthusiasm, the participant dove into the diagrams, especially the one describing the business context in which the method can be used.	W	-	-
	The participant noted, from experience, that there are many more different business development contexts including post merger integrations, scaling up or down business units, setting up daughter companies, spinning in or out other companies (or one of their business units), or transforming a business unit (which resembles business unit innovation).	M	I	V (more business contexts supported)
	"Many other business context require that the current (as-is) situation (including current employees, resources, capabilities and culture) is taken into account in the new (to-be) situation, which the method does not currently supports."	M	I	V (discussed in the business contexts)
	"The as-is and to-be situations should be described independent of each other, preferably by two different groups."	W	I	V
	"I like integrated stories the this" (translated from Dutch)	M	U	-
	The BCD method is "Business development for dummies"	M	U	-

Interview type: Expert	*Participant: former business development consultant*				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	**Action**
I. Starting point	Aspirations, intention	-			
	Means & partners	-			
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	"The method seems to be very product centred."	M	-	-
	Foundation level business model design: questionnaire	-			
	Specific business model design: strategic choices	"what lacks is what the company will distinguish itself"	M	I	V (included in method)
	Specific business model design: Revenue & cost sources	"The diagrams are very much self-centred. Instead, why not show the interests of all parties involved?"	M	I	X (that can be done using a network analysis, though it is not included in the method).
	Specific business model design: activities &	"Should support functions also be included?"	M	N	X (no)

	business representation	"When a customer is part of a producing activity, this is not called co-creation, as concept is reserved for *developing* something together."	M	N	V
	Specific business model design: interaction diagrams	-			
	Consistency checks	Useful	M	U	-
III. Opportunities and threats of the set of business models	Reality check				
	Opportunities & threats	"This is an external view only, what about an internal view?"	M	I	X
	Building on your successful business: growth paths	"Add growth dimensions or something similar to give this more depth and to aid the user"	M	I	X
	Rules level business model	-			
	Story telling	-			
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria	"Give the user more help, like a list of criteria to use. This list could include the concept's feasibility, and finance-ability."	M	I	X (the dimensions named are already checked in the method)
	Prioritize the business concepts				
V. Finish up	Innovation check				
	Synergy and gap analysis				
Method evaluation	Useful	Maybe			
	Room for entrepreneurship	Probably			
Result evaluation	Consistent	-			
	Future proof	-			
General comments and observations	Nice, but needs more starting points for the user of the method		M	U, I	V (several aids have been introduced in the text)
	Are there types of business models that the user of the method might help develop his own?		M	I	X (yes, there are topologies, but most of those are very generic)
	The participant is not sure who should use the method: it is too shallow for operationalizing it and too complicated (in his opinion) for simply defining the direction the business should go.		M	N	- (see the text for more on who should use the method)

	The participant has, being a former business development consultant, his own (more extensive) method. Though a full comparison is out of the scope (and because the method is proprietary), the two methods seem to be similar in many aspects, even though the scope of the participant's one is much broader and takes about six weeks to complete instead of one afternoon.	M W	-	-

Interview type: Expert + BD Comparison	*Participant: expert on entrepreneurship and coach for young entrepreneurs in high-technology firms*
Comparison	Background: The participant, a friendly but firm person, supports young entrepreneurs-to-be in starting their high-tech businesses, which he has been doing for many years. He gained this experience firsthand by building several businesses himself. The ventures he supports are usually set up by students from the local university of technology.
	Business development process: The participant describes the process chronologically. It starts when a starting entrepreneur approaches him. The first question he asks is whether there is besides a product also an opportunity in the market. Next, he tries to understand the person behind the entrepreneur, to find out if the entrepreneur has entrepreneurial skills. The participant vigorously stresses (and continuous to do so throughout the interview) the importance of entrepreneurial skills, which he considers vitally important in becoming successful. If these skills are lacking however, he advices to create a team of people who together have these skills. The new venture usually does not start right after this, because, even when a viable business concept has been created, the first years of the new enterprise are about developing the (at the university) invented technology into a product. When that is (almost) finished, the entrepreneur should start talking to potential customers and look for subsidies like the grants at universities (which can provide funding for analyzing the technical and commercial feasibility of the new product or for bringing the product to the market). Doing business with a first customer is the next step in the process, after which the company should grow and develop further. The participant calls these steps the pioneering phase of new venturing, which success all depends on the (commercial) skills of the entrepreneur.
	Evaluation: When comparing the process of business development of the participant with the BCD method, the following differences are to be noted.
	In the BCD method, the importance of the entrepreneur himself is only found in the means he has at his disposal
	The process of defining a product idea from a technology is only touched upon in the BCD method. It takes in reality however a long time and continuous when the business has been started.
	That a team of people instead of one is involved in starting up the new business is not recognized in the BCD method. The table of means [Table 13] does also not recognize multiple people (though it can be used for that scenario).
	The assumption of the BCD method that a business can be designed and that this process is iterative and often repeated, seems to be valid as the business does change during the start-up phase according to the participant. In other words, (re-) developing and checking the business concept seems to add value for the entrpeneur(s).

	For high-tech start-ups, up to several years are used to create a product from technology, usually requiring external investments or other not-yet acquired means. As the BCD method does not have much room for changing or increasing the means, it is not part of the BCD method. Yet-to-be acquired means are however also not in Sarasvathy effectual business design.				
	As the BCD method does, the participant also evaluates the feasibility and consistency of the business and the aspirations of the entrepreneur.				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	
I. Starting point	Aspirations, intention	-			
	Means & partners	-			
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	The participant immediately asked to define what a business idea is, as in his environment, most people only have a product idea. His own definition is: "a way to make money with a product".	M	I	V (recognized in the text)
	Foundation level business model design: questionnaire	-			
	Specific business model design: strategic choices	-			
	Specific business model design: Revenue & cost sources	-			
	Specific business model design: activities & business representation	-			
	Specific business model design: interaction diagrams	-			
	Consistency checks	"The use of checks for consistency and feasibility are useful."	M	U	-
III. Opportunities and threats of the set of business models	Reality check	“”	M	U	-
	Opportunities & threats				
	Building on your successful business: growth paths	The question of the potential of a business model is very important, as it forces the entrepreneur to think about the future of his business: "a venture with only one product will have to turns off the lights after a few years.”	M	U	-
	Rules level business model	-			

	Story telling	Creating a story out of the business model is a nice addition", but should be tailored to the listener, being for example an investor or a (potential) employee.	M	U, I	V (in workshop description)
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria	-			
	Prioritize the business concepts				
V. Finish up	Innovation check	-			
	Synergy and gap analysis	-			
Method evaluation	Useful	Yes			
	Room for entrepreneurship	Quite some			
Result evaluation	Consistent	Probably			
	Future proof	Maybe			
General comments and observations	"When performing the method in a workshop like setting, a consultant is needed to support the process and deepen the understanding of the method."		W	I	V (in workshop description)
	For a new venture, the entire new venture teams should be involved, not just the entrepreneur: "that would be like looking in a mirror".		W	I	V (in workshop description)
	"The idea of developing multiple alternatives is useful, especially for entrepreneurs that do not have a complete idea of what their business should be about"		M	U, E	-
	"The creative process of defining the product [which is not part of the BCD method], has been explored in the field of architecture by a PhD student named Maxim Ivashkov."		-	-	-
	The participant concluded that the BCD method can be useful for a starting entrepreneur who does not exactly know what he will be doing, but that it is depend on the type of person "as there are also entrepreneurs who know exactly what they want to do".		M	U	-
	For big companies, "which have a more analytical mindset and aim for a long term strategy, the method might also be helpful".		M	U	-
	He also repeated the need for a consultant (the first time of use) and the need for the entire team of entrepreneurs or people from throughout the existing organisation to attend.		W	I	V (in workshop description)
	With a smile, the participant finished by saying that the tool has "the ability to catch brainwaves"		M	U	-

Interview type: Expert + BD Comparison	*Participant: Experience innovation consultant and soon-to-be entrepreneur*

Comparison	Background: The participant is on the verge of starting a new company and describes the process of starting that company. The focal point of this new company is not the service that is offered, but a story that facilitates a platform for those interested in the service. This idea of a story is very much linked to the idea or dream the participant has of future companies. As this dream is very personal to the participant and is based on experiences, skills and (tacit) knowledge, it is very hard to copy the idea of this new company. The goal is to form a strong community of people interested in the ideas the company represents, based on a common set of shared values (which will be enforced).				
	Business development process: The new venture is very much based on the participant and a friend. By building and focussing on the personalities of the entrepreneurs instead of on structure or investments, they hope to form the basis of a sustainable and lasting company. Another driving force in the new company is the network of the two entrepreneurs.				
	Evaluation: Though the business is still in the first phases of starting up, the process so far shows a very effectual and very personal approach: there are clear aspirations and intentions and the participant is convinced of the value the new business can bring (a need is not mentioned at all). When comparing it with the BCD method, the lack of personal aspects in the method is noticeable immediately. One might however wonder how generic a method can be when focussing very much on those personal aspects. In the end, the story of the participant shows that the BCD method is mainly about the basics of a new business.				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	
I. Starting point	Aspirations, intention	-			
	Means & partners	-			
II. Transform a set of business ideas into a set of business models	Business idea(s), intended users	-			
	Foundation level business model design: questionnaire	-			
	Specific business model design: strategic choices	"Vision is who you want to be, coming from you are" (in the discussion whether the BCD method should be about what will be or what is now)	M	-	-
		"What distinguishes a company is not in the method, but is very important"	M	I	V
		On the difference what you are an what you want to be: "You should stay close to what you are, also as a company. Within that context, you should adapt to the environment, which your strategy."	M	-	-
		"What you want to do and are should coincide"	M	-	-

	Specific business model design: Revenue & cost sources	-			
	Specific business model design: activities & business representation	-			
	Specific business model design: interaction diagrams	-			
	Consistency checks	-			
III. Opportunities and threats of the set of business models	Reality check	-			
	Opportunities & threats	-			
	Building on your successful business: growth paths	-			
	Rules level business model	-			
	Story telling	-			
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria	-			
	Prioritize the business concepts				
V. Finish up	Innovation check	-			
	Synergy and gap analysis	-			
Method evaluation	Useful	Yes, if with accompanying story			
	Room for entrepreneurship	Some			
Result evaluation	Consistent	-			
	Future proof	-			
General comments and observations	"There is difference between what you offer (the product) and what you are as a company." An example is a company in the telecom industry that is traditionally actually very good at integrating other companies. "Management should recognize this and act accordingly."		-	-	-
	The participant mentions Prahalad as the only relevant thinker of this moment in the business literature and tells bout ideas like the importance of (one-to-one) relations, co-creation, platform creation, the importance of the price consumers are willing to pay (instead of determining a cost price plus margin) and global resources. Why the traditional ideas on for example strategy are even still taught at all is also a mystery tot the participant.		M	I	V (several ideas names are integrated in the text and the method)
	"The BCD method is just another method, but is the story that you [the interviewer] tells about it that makes it unique and useful."		M	U	-

	The participant also likes the design approach and the way the steps form a story.	M	U	-
	The participant is of the opinion that the method shows an interesting 'language' to visualize the business model.	M	U	-
	The participant reacted quite strongly, for example by becoming impatient, to ideas that originate from the so-called 'traditional' business schools (like mission, vision and especially the way relations are describe in the method).	M	-	-
	"Companies must be prepared to make bold decisions as ignoring those will eventually break them, especially in the current fast-pacing world."	-	-	V (recognized in the Introduction)
	The participant told the story of the new business with passion, showing a strong dedication.	-	-	-

Interview type: Expert + BD Comparison	*Participant: Consultant online business development*				
Comparison	Background: The participant supports setting up new online ventures, or the expansion of existing businesses for capturing new markets.				
	Business development process: A new business or new business unit is created to create organic growth. Setting up a new business starts with identifying the market need. The business model is at that moment a minor issue. Actually, setting up the business model itself usually just takes about one day, out projects of approximately five months. During that day, several variants of the business model are discussed, each with different revenue streams. However, because of the business' online nature, the actual way of how the business model works does not have a big impact on the organization itself. For an online business, the business model (thus how the business will be making money) is often clear from the start. On the other hand, it is the foundation of the business (in terms of creating a cash flow). After setting that up, the next steps include establishing the governance, the legal structure and the required infrastructure.				
	Evaluation: The reasons for doing business development identified by the participant are also mentioned by several authors referred to in this project. There is however an importance difference in definition of the words business model and of its importance. This might be because an online business is quite easy to adapt to a change in market needs, that elaborate thinking about it is not necessary. This seems however unlikely. The process of defining the business model (even though smaller in scope) is rather similar to the BCD method, which is also iterative and also features the creation of alternatives.				
Step	**Sub-sub-step**	**Remarks & observations**	**On**	**Cat.**	
I. Starting point	Aspirations, intention				
	Means & partners				
II. Transform a set of business ideas into a set of	Business idea(s), intended users	"The market segment does not have to be the user of the business idea"	M	I	V (changed market into user)

business models	Foundation level business model design: questionnaire				
	Specific business model design: strategic choices	He adds to this list: Time and Budget	M	I	X (out of scope of method)
	Specific business model design: Revenue & cost sources	Het remarks that in practise, there are many dependencies between parties	M	I	-
	Specific business model design: activities & business representation	He describes the need for insight into the actual cash-flow the business is going to generate	M	I	X (out of scope)
	Specific business model design: interaction diagrams	He recognizes the need for different perspectives on a business	M	U	-
		An example is needed	W	I	V (in workshop template)
	Consistency checks				
III. Opportunities and threats of the set of business models	Reality check				
	Opportunities & threats				
	Building on your successful business: growth paths				
	Rules level business model				
	Story telling				
IV: Develop business concept prioritization criteria and prioritize	Define prioritization criteria				
	Prioritize the business concepts				
V. Finish up	Innovation check				
	Synergy and gap analysis				
Method evaluation	Useful	Yes, nice			
	Room for entrepreneurship	Probably			
Result evaluation	Consistent	- (not tested)			
	Future proof	- (not tested)			
General comments and observations	He recognized the iterative nature of business concept development in the idea of perpetual beta's (being continuously improved online services)		M	-	-
	The template needs more examples		M	-	V (in workshop template)
	The participant noted that he expected the business model to be a description of how to make money, not of a complete business.		-	-	-

Appendix B GENERIC CHANNEL FLOWS

Coughlan et al. (2006, p. 74) describe the following eight channel flows ("activities or functions that produce the service outputs demanded by end-users" (p. 73)):

- Physical Possession
- Ownership
- Promotion
- Negotiation
- Financing
- Risking
- Ordering
- Payment

Appendix C BUSINESS MODEL SELECTION TOOLS: THE STRATEGY TYPIOLOGY AND INNOVATION MANAGEMENT STYLES

	Defenders	Prospectors	Analyzers
Basic strategies	"aggressively maintain their existing, narrow domain of products and customers often ignoring developments outside their own market"	"are constantly looking for new business opportunities, often outside their existing domain."	"fall between the Defenders and Prospectors"
Characteristics and behavior			
Growth	"grow cautiously and incrementally through market penetration and aiming for long-term stability	"Prospectors are growth driven and invest extensively in product and market development.	"They aim for minimizing risks while maximizing opportunities for profit. Analyzers' are much focused on maintaining their traditional set of products and customers stable while simultaneously locating new business opportunities.
New product development focus	current goods or services	The prospectors are creating change in the industry and are often referred as innovators.	When Analyzers grow they do it steadily through market or product development.
technology	Defenders often operate on a single and cost-efficient core technology. When they improve the technology, they do it in order to maintain efficiency.	Prospectors invest in multiple technologies, all of which are aim to be flexible and some prototypical technologies. In the Prospector firms the technology is embedded in people.	Analyzer firms often invest for dual technology core, having a both stable and flexible component.
Strategy	The Defenders also have a tendency toward vertical integration.	-	-

promotion	In the Defender firms promotion is done from within favoring financial and production experts.	Marketing and R&D experts form dominant coalition which is large, diverse and transitory.	They have a large and influential applied engineering group. Marketing and engineering form the dominant coalition in the Analyzer firms, followed by production.
planning	Defenders conduct intensive, cost oriented planning.	Prospectors' planning is comprehensive and problem oriented.	Planning done by Analyzers is intensive in the stable business and comprehensive in the new businesses.
org structure	Functional structure with high degree of formalization and centralized control. Information flows vertically and conflict resolution is done through hierarchical channels.	They are organized according to product structure and have a decentralized control and a low degree of formalization. Coordination mechanisms are complex and conflicts are resolved through integrators.	They tend to have a matrix structure with moderately centralized control. Coordination can be complex and conflict resolution tends to happen both hierarchically and horizontally.
perf measr.	against past performance."	Performance in the Prospector firms is measured against important competitors and their reward system favors marketing and R&D."	Performance is measured against effectiveness and efficiency."

Table 22 – Miles & Snow's strategy typology (in: Mäkinen & Kotilainen, 2006, p. 2)

	The Cauldron style	The Spiral Staircase	The Fertile Field	The Pac Man style	The Explorer style
Core	constantly rethinking the firm's business models and rapidly creating new models for both existing and new businesses	continuously innovate and improve their core business	The existing strategic assets and competencies can be leveraged at the same time steering the company into new directions, often and for the most part outside its existing business.	The Pac Man style is used to acquire successful innovators and integrate competencies into existing businesses.	
When to use	when fast change is creating challenges and opportunities	when the existing business offers opportunities for growth	can be used when there are narrow opportunities for growth or a need for major change in core business.	can be used when the company has resources to invest in the innovation made by smaller companies in the field.	can be used when the company senses a big opportunity, but how to exploit the opportunity is unclear. The style works best in concentrated industries where fast moving competitors are not likely to steal the idea. Explorer style often begins with a champion.
Leaders	are using the entrepreneurial energy of its management team repeatedly questioning everything and creating a rough but exiting vision of how the firm should change	focus on their existing business and innovate so dramatically that they alter it repeatedly	The leaders will require a clear understanding of the critical assets and competencies that innovation can be built on.		The management can conduct a series of inexpensive probes progressively to solve problems that had prevented a big innovation from realizing.
provides	an internal market for ideas, resources and rewards				

Vision	The vision is shared with larger and larger groups of intrapreneurs who will improve it	The Spiral Staircase style requires strong commitment to core business and customers; this style is very focused on improving the way the firm performs to satisfy its customers.	People with traditional backgrounds across organizational boundaries can be then helped to see the opportunities outside their existing responsibilities.		
execution	Cauldron style requires a loose enough and informal structure that makes swift change possible. The Cauldron style can result as frequent organizational changes; the organization must be structure flexibly enough to adjust to new mode when necessary.	Innovation is driven by autonomous teams that are given enough power to execute. But the whole company is affected by learning and experimentation that this style requires.	The style can use taskforces, or 'elite teams', to look for the new opportunities. The company will need to be structure ready act, for example to determine if and when to spin off a growing business.	A strong R&D capacity is needed to understand the industries that the company is investing in. The company must be prepared to execute the acquisitions quickly thus regular scanning of the potential firms is necessary. The company should also have a well-defined process for integrating the new companies into existing business. Execution risks can be reduced by building partnerships and alliances	When using this style the research should be focused on specific business goals and a careful cost control is necessary on each experiment. The company must also have persistence as the opportunity may be a longer term prospect or vision and it may take years before products or services can be sold.

Table 23 - Loewe's et al. innovation management styles (in: Mäkinen & Kotilainen, 2006, p. 2)

	Defender	Prospector	Analyzer
The Cauldron	-3	4	0
The Spiral Staircase	2	-2	4
The Fertile Field	-2	3	1
The Pac Man	-4	4	2
The Explorer	0	3	3

Table 24 - Summary of the combinations of Miles & Snow's strategy typology and Loewe's et al. innovation management styles (in: Mäkinen & Kotilainen, 2006, p. 5): 0 > indicates that the style and strategy are in line, < 0 that they are not

Appendix D EXISTING BUSINESS MODEL TEMPLATES

Pillar	Business Model Building Block	Description
Product	Value Proposition	Gives an overall view of a company's bundle of products and services.
Customer Interface	Target Customer	Describes the segments of customers a company wants to offer value to.
	Distribution Channel	Describes the various means of the company to get in touch with its customers.
	Relationship	Explains the kind of links a company establishes between itself and its different customer segments.
Infrastructure Management	Value Configuration	Describes the arrangement of activities and resources.
	Core Competency	Outlines the competencies necessary to execute the company's business model.
	Partner Network	Portrays the network of cooperative agreements with other companies necessary to efficiently offer and commercialize value.
Financial Aspects	Cost Structure	Sums up the monetary consequences of the means employed in the business model.
	Revenue Model	Describes the way a company makes money through a variety of revenue flows.

Figure 31 - Osterwalder's business model template, from Osterwalder, Pigneur and Tucci (2005)

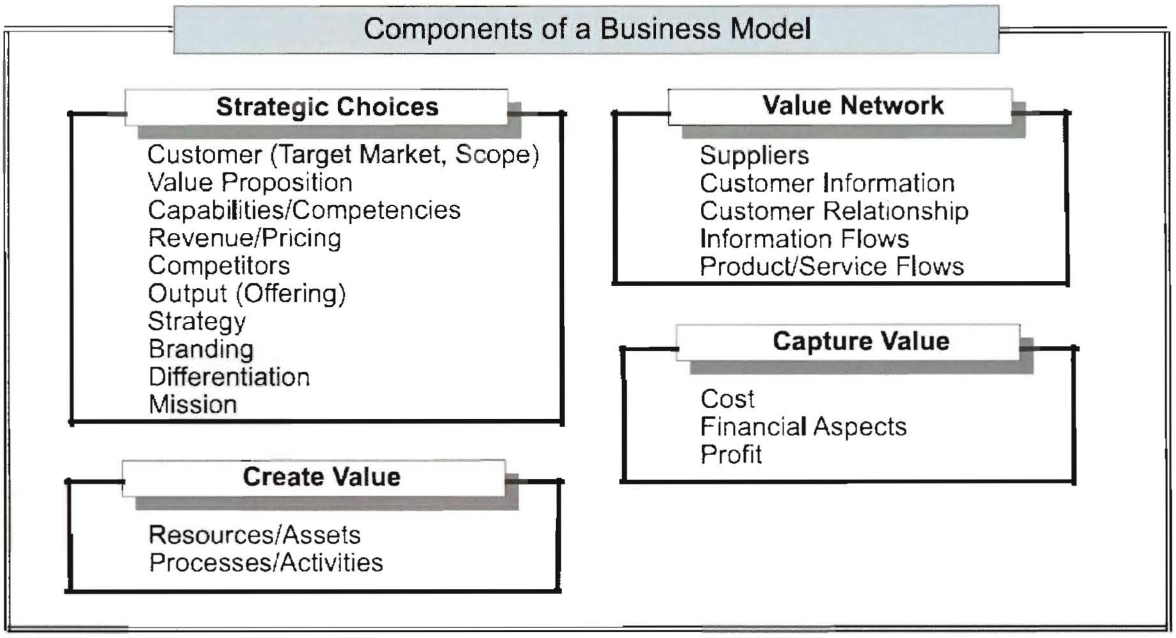

Figure 32 - the business model template of Shafer et al. (2005, p. 202)

Appendix E FOUNDATION LEVEL QUESTIONNAIRE

The questionnaire is essentially that of Morris et al. (2005, p. 730) However, several of the questions are clarified somewhat because several evaluations showed that they were unclear.

Component 1: factors related to the offering
How do we create value? (select from each set)

- offering: primarily products/ primarily services/ heavy mix
- offering: standardized/ some customization/ high customization
- offering portfolio: broad line/ medium breadth/ narrow line
- offering variety: deep lines/ medium depth/ shallow lines
- offering: access to product/ product itself/ product bundled with other firm's product
- offering: internal manufacturing or service delivery/ outsourcing/ licensing/ reselling/ value added reselling
- offering distribution: direct / indirect (if indirect: single or multichannel)

Component 2: market factors
Who do we create value for? (select from each set)

- our company to customers: b-to-b/ b-to-c/ both
- customer is: local/ regional/ national/ international
- customer is in value chain: upstream supplier/ downstream/ supplier/ government/ institutional/ wholesaler/ retailer/ service provider/ final consumer
- customer is in: broad or general market/ multiple segment/ niche market
- interaction with customer is: transactional/ relational

Component 3: internal capability factors
What is our source of competence? (select one or more)

- production/ operating systems
- selling/ marketing
- information management/ mining/ packaging technology/ R&D/ creative or innovative capability/ intellectual
- financial transactions/ arbitrage
- supply chain management
- networking/ resource leveraging

Component 4: competitive strategy factors
How do we competitively position ourselves? (select one or more)

- image of operational excellence/ consistency/ dependability/ speed
- product or service quality/ selection/ features/ availability
- innovation leadership
- low cost/ efficiency
- intimate customer relationship/ experience

Component 5: economic factors
How we make money? (select from each set)

- pricing and revenue sources are: fixed/ mixed/ flexible
- operating leverage ("the extent to which the cost structure is dominated by fixed versus variable costs"): high/ medium/ low
- volumes to create: high/ medium/ low
- margins to achieve: high/ medium/ low

Component 6: personal/ investor factors)
What are our time, scope, and size ambitions? (select one)

- subsistence model ("survive and meet basic financial obligations")
- income model ("generate on ongoing and stable income stream for the principals)"
- growth model "(attempt to grow the value of the firm to the point that it eventually generates a major capital gain for investors")
- speculative model ("entrepreneur's time frame is shorter
- and the objective is to demonstrate venture potential before selling out")

Appendix F WORKSHOP TEMPLATE

See the file "Workshop Template.pdf".

Appendix G BUSINESS MODEL DEFINITIONS

Author	Definition
Afuah (2004, p. 9)	"... the set of which activities a firm performs, how it performs them, when it performs them as it uses its resources to perform activities, given its industry, to create superior customer value... and put itself in a position to appropriate value"
(Amit & Zott, 2001, p. 511)	"A business model depicts the content, structure, and governance of transactions designed as to create value through the exploitation of business opportunities."
(Christensen, 2002, p. 292)	"The way a company captures value from its innovations. This includes the structure of its costs, how it prices its product or service, whom it attempts to sell that product or service, how it sells it (one time sale, licensing agreement, and so on), what value proposition it purports to offer, how it delivers its product or service, how it offers post sales support and so on."
(Chesbrough & Rosenbloom, 2002, pp. 533-534)	"The functions of a business model are to: articulate the value proposition, i.e. the value created for users by the offering based on the technology; identify a market segment, i.e. the users to whom the technology is useful and for what purpose, and specify the revenue generation mechanism(s) for the firm; define the structure of the value chain within the firm required to create and distribute the offering, and determine the complementary assets needed to support the firm's position in this chain; estimate the cost structure and profit potential of producing the offering, given the value proposition and value chain structure chosen; describe the position of the firm within the value network linking suppliers and customers, including identification of potential complementors and competitors; formulate the competitive strategy by which the innovating firm will gain and hold advantage over rivals."
Magretta (2002)	"stories that explain how enterprises work"
Osterwalder (2004, pp. 14, 43)	"A business model is a conceptual tool that contains a set of elements and their relationships and allows expressing a company's logic of earning money. It is a description of the value a company offers to one or several segments of customers and the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, in order to generate profitable and sustainable revenue streams."
Roberts et al. (2007, p. 150)	"a summation of the core business decisions and trade-offs employed by a company to earn a profit"
Seddon and Lewis (2003, p. 246)	"A business model is an abstract representation of some aspects of a firm's strategy"
TImmers (1998)	"An architecture for the product, service and information flows, including a description of the various business actors and their roles"
Tucker (2001)	"A business model is a description of how your company creates value for customers that in turn generated revenue and profits for your company."
Zott and Amit (2007, p. 181)	"A business model elucidates how an organization is linked to external stakeholders, and how it engages in economic exchanges with them to create value for all exchange partners."

Table 25 - Business Model definitions, adapted from (Leung, 2007)

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