

Business Model Adaptation within large incumbent firms

Exploration of content and process

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ABSTRACT

Incumbent firms often struggle to adapt their Business Model in changing environments. In this context this paper explores both content and process of Business Model adaptation.

Business Models (BMs) can be defined on different units of analysis. BMs around a specific value proposition or product should be distinguished from BMs at an organization or business unit level. Adapting the organizations' business model can be done by either starting new business (potentially disruptive) or by adapting/creating a value proposition BM (incremental). Decisions are crucial for business model adaptation. Variations in decision processes lead to different choices. Different choices, in their turn, lead to variations in effective firm performance. Although with limitations, this paper presents a guideline for aligning the BM adaptation process with environmental velocity.

1. Introduction

Incumbent firms often struggle to adapt in rapid changing environments. Remaining competitive despite external threats appears to be a challenge as established stakes may be affected when business is turned around.

Macro-developments in the world economy have changed the traditional balance between customers and suppliers (Teece, 2010). New communications, computing technologies and liberalised markets have increased the freedom of choice for customers. Technological diffusion may follow incremental or radical (and disruptive) pathways (Helfat & Winter, 2011). In this light, much attention was recently paid to Moore's law of innovation. According to Moore's law, which is based on innovation in the computer industry, innovations may follow exponential pathways of improvement. Exponential technological improvement paves the road for radical diffusion.

Whether or not external environments of firms change incremental or radical, firms are forced to adapt to this new environment. The way that firms

adapt to its environment can be framed in its business development process.

In this paper the business development process at an incumbent firm is explored from a multi-theoretical perspective. A connection is sought between static theoretical concepts (*business models* and *business strategy*) and dynamic theoretical concepts (*strategic decision-making processes*).

1.1 Problem definition and research questions

Within literature, *Business Models* have received lots of attention. The concept was initially focussed on electronic commerce. However, the *Business Model* concept has also proven useful in other fields of application. Business Model literature provides concepts for understanding how companies capture value from their business activities (Bouwman et al., 2012).

However, shortcomings of the Business Model concept are in the practical application of BM concepts. Literature provides little support for understanding how to move from an existing BM to a desired one (Bouwman et al., 2012). However, BM adaptation might appear to be necessary when the

existing BM threatens to fail. BM adaptation is a strategic challenge for firms.

Current knowledge gaps comprise of the question how abstract BM ideas can be implemented in inter-organizational settings and how BM ideas are connected to existing business and enterprise architecture of a firm (Bouwman et al., 2012).

The sequence of reasoning in this paper is guided by the following research questions.

1. How can the changing business of a firm be framed in terms of business strategy and business models?
2. How may incumbent companies decide on business model adaptation?

1.2 Structure

After the research methods have been described, the business model concept and its connection to strategy will be explored. After that, the relation to inter-organizational decision-making on business model adaptations is explored. In the final chapter, a tentative proposal is presented for aligning the process to high velocity environments. With that, holistic and static views of firms are related to dynamic and evolving view of firms.

2. Research methods

This study is a meta-analysis in that sense that it combines theories from multiple research disciplines. Literature within Strategic Management is combined with literature on Business Models and inter-organizational decision processes on business development.

This paper is a result from an empirical study at an incumbent energy supplier in the Netherlands. Data was gathered through a combination of interview/surveys and intra-case studies.

3. Content of Business Model Adaptation

Different terminologies exist to describe how businesses adapt to its environment. *Innovation*, *Business development*, *Product development*, *Business Model adaptation* are terminologies used for describing change processes at firms. These terminologies overlap and are not mutually exclusive. However, the common denominator is a

focus on change and dissatisfaction with the status quo (Dottore, 2009).

3.1 Business Model concept

Every firm either explicitly or implicitly employs a particular business model. According to different business model concepts a business model at least contains the following elements (Boons & Lüdeke-Freund, 2012):

1. *Value Proposition (VP)*
The VP describes the promised value to be delivered to a customer; or the value that a customer is believed to experience. The value proposition may contain a product a service, or a combination of both.
2. *Supply Chain (SC)*
The SC describes the upstream relationships with suppliers.
3. *Customer Interface (CI)*
The CI describes the downstream relationships with suppliers.
4. *Financial Model (FM)*
The financial model costs and benefits from 1, 2, 3 and their distribution across stakeholders.

Business Model functions

The BM concept has proven its applicability for both start-ups and incumbent companies (Osterwalder, 2004). However, a diverse set of BM approaches exist all bearing certain functions. Al-Debei and Avison (2010) distinguishes between the *design*, *analytical* and *evaluating* function of the business model concept:

1. *Design function*

Business Model literature provides frameworks for designing a BM around a value proposition. For example, Osterwalder's BM CANVAS (Osterwalder, 2004) is a popular tool for explicating innovative ideas into a business model. The BM design school is focussed on identifying and dealing with design issues within each of the BM domains. Bouwman, Haaker, and Vos (2008) provided a model for dealing with what they call "critical design issues".

2. *Analytical function*

Next to a tool for design, BMs can be used for analysing and understanding how existing organizations capture value from its business activities. As it was already mentioned before, BM

often emerge implicitly and are rarely explicated. Therefore, an employed BM often represents a set of tacit knowledge that is in the minds of few key managers (Al-Debei & Avison, 2010).

Explicating a firms' BM has become a necessity because it enhances managers with control over their business (Al-Debei & Avison, 2010). Control over a business model is especially of importance in rapid changing environments when strong BM controls are needed.

3. Evaluating function

Some BM authors use the BM concept rather as a tool for evaluating the functioning of existing business models. For instance, Gordijn (2002) uses the BM concept as a tool for evaluating value streams within a multi-actor network. By evaluating business models quantitatively they may be stress-tested within different scenarios. Next to that, BM evaluation may identify opportunities for improvements.

The above mentioned functions of the BM concept are not mutually exclusive and they overlap to some extent. The BM concept above all provides a framework to structure thoughts on how organizations capture value from their activities, now (analysis and evaluation) and in the future (design). Al-Debei and Avison (2010, p. 486) state that most BM definitions "are meta definitions, consisting of lists of elements that could or should be included in a business model."

Hierarchical level of Business Models

Business model concepts are rather abstract and therefore needs further understanding when using BM for defining current business of an organization. On the one hand BMs help to understand how *organizations* capture value from their activities (Bouwman et al., 2012), on the other hand they provide a framework for designing around a specific value proposition (Osterwalder, 2004). This would imply that each organization would have one specific value proposition. However, this it is pretty straightforward that this is not true; most organizations offer a set of value propositions. Therefore, it is concluded that business models of existing organizations can be analyzed on different hierarchical levels. The *Unit of Analysis* of a BM depends on the purpose of the model. Different

hierarchical levels of the unit of analysis may be distinguished.

1. Level of an organization

The unit of analysis of a BM may be defined on the level of an enterprise or on the level of a part of the enterprise such as a business unit (Lambert, 2012). Therefore, the BM concept may be defined on different hierarchical organizations levels.

2. Level of a specific value proposition

The unit of analysis of a BM may also be defined on the level of a specific value proposition. BM design approaches such as the BM CANVAS (Osterwalder, 2004), put a specific value proposition at the centre of a BM.

When exploring *business model adaptation* within an incumbent firm, one should define which part of the organizations' business model is subject to adaptation.

3.2 Business Strategy concept

Many definitions of the strategy concept have evolved over time. Porter (1996) states that a strategy covers "the creation of a unique and valuable position, involving a different set of activities" (Porter, 1996, p. 68). Within this view, a strategy answers the question how a company will be unique, how it will achieve a competitive advantage and how this advantage may be sustained over time. Porter (1996) makes a strict distinction between strategy and specific actions, stating that specific actions are no strategy but merely means for a firm to arrive at a favourable position. Three generic strategies were identified by Porter, consisting of *cost leadership*, *differentiation* and a *focus strategy* (Porter, 1998).

Another view on strategy differentiates between emergent and deliberate strategies. In order to do so, strategies as a plan, a ploy, a pattern, a position and a perspective have been distinguished from one-another (Mintzberg & Quinn, 1996).

The difference between Porters' and Mintzbergs' view on strategy concerns the process by which strategies emerge (Mazzucato, 2002). Porter perceives strategy as something that is deliberate and can be designed, while Mintzberg pays more attention to the emergent nature of strategy. The latter means that strategy is not the result of rational

calculation but of experimentation and trial and error (Mazzucato, 2002).

Business strategy in general answers the question how an organization will compete in the business which they are or will be in.

3.3 Strategy and Business Models

The relation in established Business Models

The business model is often referred to as an implementation of a business strategy (Osterwalder, 2004). Strategy is translated in a BM, and BM evaluation indicates to what extent the BM fulfils the business strategy.

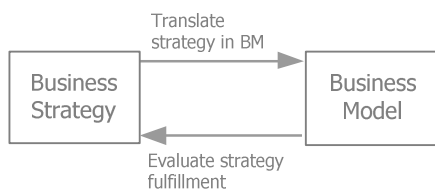


Figure 1 | Business strategy and business model

This relation is very generic and doesn't take the BM unit of analysis and state in account. Therefore its applicability is rather applicable for tweaking a BM that is already established.

The relation in Business Model design

Within business model design the value proposition resembles the *uniqueness* of a business model and with that represents part of the business models' strategy. When designing a business model, the value proposition may be unique. However, the value proposition does not answer the question how the business model is going to be sustained over time or how it strategically fits to an established BM. For that reason BM design needs to be coupled with a strategy analysis (Teece, 2010). The BM/strategy design for a start-up company can be distinguished from BM/strategy design for an established company.

Strategy and BM for Start-up Company

When designing a business model for a start-up company the strategic constraints from the existing organization does not need to be taken into account. Therefore, the desired strategy analysis is limited to to the question why employment of the business model would create a *sustainable* competitive position (Teece, 2010). While designing BM without organizational constraints a strategy analysis should indicate what 'isolation mechanisms' can and should

be used to prevent imitation by competition and hinder disintermediation by customers and suppliers (Teece, 2010). Disintermediation by customers or suppliers would make the BM redundant which would most likely lead to poor BM performance.

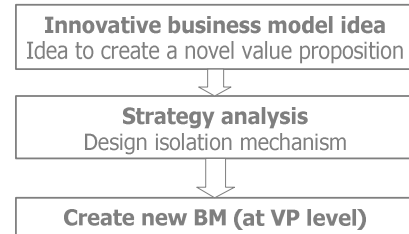


Figure 2 | BM and strategy for start-up

Strategy and BM for Established Company

In the second situation an innovative business model idea should also be aligned with existing business before it will be adopted by an organisation (Markides, 2008). After all, it is unlikely that firms decide to create an innovative business model that has the potential to radically disrupt their business. Therefore, a strategy analysis should not only indicate isolation mechanisms, but should also indicate how engagement in a new business model would create a competitive advantage for the overarching business model. We call this strategic alignment of an innovative business model idea with the existing organization BM.

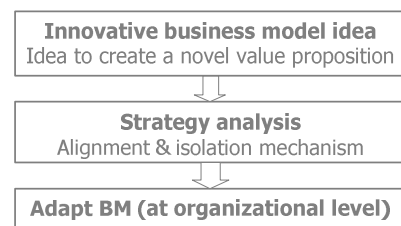


Figure 3 | BM and strategy for established company

The BM of an incumbent firm is one that should be perceived at an organizational level. Adapting the organizations' business model can be done by either starting new business (disruptive) or by adapting existing value proposition BMs (incremental).

4. Process of Business Model Adaptation

The way that an organizational business model is adapted can be explained by the Business Model Adaptation process that a company implicitly or explicitly employs. Decisions, which are the output

of this process, change the BM on an organizational level. Different categories of factors influence this process (see Figure 4).

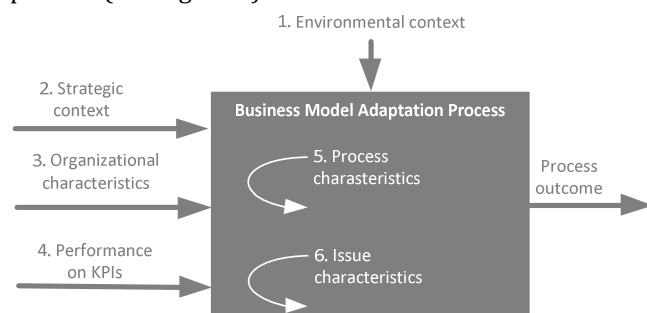


Figure 4 | Factor categories influencing BM adaptation

1. Environmental context;

Different studies showed how environmental context does influence the strategy-process. Attributes such as uncertainty, munificence and dynamism influence the strategy process (Hutzschenreuter & Kleindienst, 2006).

2. Strategic context;

The strategic context refers the strategic position and moves of an organization (Hutzschenreuter & Kleindienst, 2006). Organizations may hold a legacy of having a prospecting-, analyzing-, defending- or reactive-strategy.

3. Organizational context;

Different organizational factors such as age, size, structure as well as culture and routines may influence the strategy-process (Hutzschenreuter & Kleindienst, 2006).

4. Performance on KPIs;

Past performance influences the process through its impact on amongst other comprehensiveness and intensity of information search (Hutzschenreuter & Kleindienst, 2006).

5. Process characteristics;

Different factors determine the sequence of actions within a process. As decisions are made by individuals, personal factors as behaviour and experience are of influence on managers' cognitive models (Hutzschenreuter & Kleindienst, 2006).

6. Issue characteristics.

The business model adaptation process may differ due to issue characteristics.

Concluding, a wide variety of factors influences the process of Business Model Adaptation. Therefore, the question what a good process looks like is dependent on circumstantial characteristics.

5. Process Alignment

In the introduction it was already noticed that large incumbent firms often struggle to adapt to environmental change, especially when the type of change is faster and more unpredictable than before. Decisions are crucial point within the Business Model Adaptation process as it is decisions that reconfigure an organizations BM.

Variations in decision processes lead to different choices. Different choices, in their turn, lead to variations in effectiveness firm performance (Dean & Sharfman, 1996).

Therefore, it is assumed that process alignment is crucial when environmental instability changes. This assumption is strengthened by the fact that successful companies in high velocity environments employ different process than unsuccessful firms (Eisenhardt, 1989).

5.1 Success in high velocity environments

In high velocity environments (HVE) changes in *demand*, *competition*, and *technology* are so rapid and discontinuous that information is often inaccurate, unavailable or obsolete (Eisenhardt, 1989). Firms that believe to find themselves in high velocity environments may want to implement process characteristics that have proven to be successful. Successful firms in HVEs managed to make fast decisions that lead them to effective firm performance (Eisenhardt, 1989).

Confidence to act, a *smooth group process* and *accelerated cognitive processing* contributed positively to decision speed.

The presence of the factors is again influenced by:

- Use of real-time information;
- Multiple simultaneous alternative;
- Two-tier advice process;
- Consensus of qualification;
- Decision integration.

5.2 Method for BM adaptation process alignment

Whether an organization should refurbish their decision-process when they believe to face environmental instability depends on two factors. The environmental velocity and on the presence of a fast-decision making process should be assessed before decision-process is aligned.

Step 1: Assess environmental velocity

Sharfman & Dean (1991) did an effort to specify attributes of environment velocity. The following three dimensions were proposed (Sharfman & Dean, 1991):

- Measure for *Complexity* refers to product diversity and technical intricacy. An overload of information leads to complex decision-making since managers are bounded in their rationality.
- Measure for *Dynamism* refers to the predictability of environmental elements. Technological and market instability are distinguished from each other in this measure.
- Measure for *Competitive Threat* refers to the availability of - and battle for resources.

In “high velocity markets” the market is very dynamic and change becomes non-linear and less predictable according to Eisenhardt (Eisenhardt & Martin, 2000). Environmental velocity can be based on both internal stakeholder interviews as well as a market analysis in which these measures are investigated.

Step 2: Assess fast decision-making capability

Indicators for fast decision-making capability are based upon empirical study of:

- Emphasis on speed or risk control;
- Use of simultaneous alternatives;
- Use of real-time information;
- Level of detail at point of decision;
- Level of process centralisation (local stakes or holding stakes);
- Individual risk incentive;
- Level of common understanding of BM adaptation process;
- Level of adaptive capability compared to competition;

The fast decision-making capability may be assessed on basis of internal stakeholder interviews and observations.

Step 3: Determine if process alignment is needed

Different outcomes of step 1 and step 2 may lead to different implications. If it is determined that the environment of a firm looks like a HVE and the fast decision-making capability is limited the process should be aligned. In that case, best practice examples from HVE literature may be copied and implemented.

5.3 Limitations and discussion

The method presented in paragraph 5.2 is limited in multiple ways:

- It assumes that an organization is only exposed to one single environment. However, in paragraph 3.3 it was argued that an organizations’ business model may contain different VP business model that are exposed to different environments. This implies that an organization perhaps needs a “responsive” BM Adaptation process.
- The method is limited, as there are no guidelines how the process should be aligned when the market has changed to a “moderate” or nearly high velocity market.
- The method is limited because it only perceives the current state of environmental velocity (through perception and observation) and doesn’t take the future expectation of environmental velocity into account.

For these reasons the method needs further research in its application and its added value to organisations facing ‘new’ change. However, the link between BM adaptation process and BM adaptation performance suggests that a good process is a valuable asset.

6. Conclusions

In this research paper both content and process of business model adaptation was explored. The sub-questions are answered hereafter.

1. How can the changing business of a firm be framed in terms of business strategy and business models?

Basically Business Model adaptation is the frame for business strategy and business models. Business Models (BMs) can be defined on different units of analysis. BMs around a specific value proposition or product should be distinguished from BMs at an organization or business unit level. Adapting the organizations’ business model can be done by either starting new business (potentially disruptive) or by adapting/creating a value proposition BM (incremental).

In design, BMs should be coupled with a strategy analysis for two reasons. Firstly because a BM design doesn’t answer the question how the BM is going to be sustained over time. Secondly, because a BM

doesn't take into account the disruptive character it may have for the existing BM.

Adapting the organizations' business model can be done by either starting new business (disruptive) or by adapting existing value proposition BMs (incremental).

How may incumbent firms decide on business model adaptation?

The way that decisions are made is in the decision process. However when a firm faces new change, the way that decisions are made should be aligned with the environmental change. Variations in decision processes lead to different choices. Different choices, in their turn, lead to variations in effective firm performance. A method for process alignment was presented in this paper consisting of the following steps.

Step 1: Assess environmental velocity

Step 2: Assess fast decision-making capability

Step 3: Determine if process alignment is needed

In case of environmental velocity the process may be aimed at adopting a fast decision-making capability. In that case the process may adopt characteristics such as:

- Use of real-time information;
- Multiple simultaneous alternative;
- Two-tier advice process;
- Consensus of qualification;
- Decision integration.

The implementation of these characteristics was not in the scope of this study and together with the limitations mentioned in paragraph 5.3 offer issues for further research.

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