

Excerpt from

**THE MICRO-FOUNDATIONS OF BUSINESS MODEL INNOVATION
AS A DYNAMIC CAPABILITY**

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Abstract

This study adopts a dynamic capabilities perspective to explore the activities and processes through which business model innovation arises in established organisations.

New and innovative business models are fundamental to the commercialisation of latest technologies, performance, competitive advantage, as well as the creation of value for customers, the focal company and its ecosystem. Yet, our current understanding of how established companies design and implement new business models is limited by a lack of empirical research.

The dynamic capabilities perspective offers a promising route to investigate the managerial and organisational activities and practices through which business model innovation is enacted.

Based on a review of the business model, business model innovation and dynamic capabilities literatures, business model innovation is framed as a dynamic capability and research questions are developed.

These questions are investigated using grounded theory methodology, collecting and analysing data from five case studies from the manufacturing, financial services, media, consulting, and healthcare industries.

Findings from an initial sample suggest a business model innovation process consisting of an inception, evolution and diffusion phase, encumbered by cognitive, emotional and behavioural challenges. Linking the findings to the dynamic capabilities perspective, three micro-foundations, namely, process orchestration, learning, and deployment mechanisms are identified.

Findings from a subsequent theoretical sample not only unravel the underlying managerial and organisational activities of these micro-foundations, but also reveal further details on the challenges faced, as well as the key role of senior management for orchestrating and enacting this process and its underlying activities.

Considered collectively the findings offer a novel understanding of how business model innovations come about in established organisations, a practice labelled '*crafting business models in statu nascendi*'.

The dissertation closes with a discussion and synthesis of the findings, the theoretical contribution and managerial implications, as well as limitations of the present study and areas for future research.

Keywords: Dynamic capabilities, business models, business model innovation.

1 Discussion and Conclusion

1.1 Synthesis of Findings and Theoretical Contributions

Motivated by (1) the increasing academic and managerial interest, and (2) the rising importance of business model innovation as a strategic choice to enhance enterprise performance and create value for customers, the focal firm and its ecosystem, coupled with (3) a lack of understanding of processes of business model innovation in incumbent organisations, which (4) is seen as the biggest barrier to business model innovation in established companies, the purpose of this study was to contribute to our understanding of how business model innovation comes about in established firms. The specific academic objectives thereby were:

- Identify and develop an in-depth understanding of how incumbent firms, outside of e-businesses, develop and implement novel business models in practice.
- Unravel the nature of business model development and implementation processes, and explain how such processes are enacted.
- Understand and explain the challenges and complexities processes of business model innovation pose to established organisations.

Looking at this research area through a dynamic capabilities lens, the research questions asked:

- (1) What is the nature of such a process of business model innovation in established companies?
- (2) What is the nature of the micro-foundations, and their managerial and organisational activities and practices, underlying this process?
- (3) What are the challenges and complexities inherent to enacting this process?
- (4) What is the role of top management within this process?

Based on a qualitative research design, and applying grounded theory methodology, data from five case studies were gathered and analysed in a two-stage process.

Having discussed the findings from each sample in detail above (chapters 4.4 and 5.5.), here the main findings from across the two samples are synthesised into a unifying narrative (Geletkanycz and Tepper 2012) answering the research questions posed, while aiming at internal and external theoretical integration, as outlined in chapter 3.

The narrative follows the structure of first outlining the overall process and its characteristics (research question 1), followed by the challenges and complexities encumbering this process (research question 3), before outlining how the micro-foundations and their underlying activities were enacted to cope with these challenges (research question 2), and finally summarising the role of top management within the process (research question 4). In line with grounded theory methodology and theoretical integration, the “analytic story” (Corbin and Strauss 2008, 267) thereby revolves around a main theme, namely that of *crafting business models in statu nascendi*.

Five key findings will be illustrated:

- (1) Crafting a new business model requires operating it, while it is still being delineated and vice versa;
- (2) The process of business model innovation consists of the three phases inception, evolution, and diffusion;
- (3) Two arrays of challenges encumber this process: Design related challenges, and implementation/operation related challenges;
- (4) Learning and deployment mechanisms underlie this process and are enacted to cope with these challenges, while process orchestration mechanisms guide the overall process;
- (5) Top management has a vital role for initiating, orchestrating and participating in these learning and deployment mechanisms, through enacting the process orchestration activities of providing top-down direction and guidance, while involving the organisation.

Considered collectively the findings offer a novel understanding of how business model innovations come about in established firms.

In what follows the details of each of these findings, as well as their theoretical contribution, will be discussed in light of answering the research questions posed.

1.1.1 What is the Nature of the Process of Business Model Innovation in Established Companies?

As to the nature of the process, two findings emerged from the analysis as key characteristics of the overall process:

- (1) Crafting a new business model requires operating it, while it is still being delineated and vice versa;
- (2) Three phases of the business model innovation process can be distinguished.

As has been outlined in chapter 2 (literature review), existing process theories are typically build around stages of understanding, development of business model alternatives, evaluation of these alternatives, and finally implementation. Wirtz (2011) for example suggests the business model design process to follow the phases: Idea generation, feasibility study, prototyping, decision-making, followed by implementation. Amit and Zott (2014) propose the five stages: (1) Observing how stakeholders interact to meet customer needs, (2) synthesising observations into an in-depth understanding of opportunities and challenges, (3) generating potential business model solutions, (4) refining these solutions by consolidating them into alternatives, evaluating and prototyping them, and finally (5) implementing the final design.

Whereas existing literature acknowledges the iterative nature of these stages (e.g., Amit and Zott 2014; Teece 2010), it nevertheless presupposes a “natural sequence” (Amit and Zott 2014, 8) of first gaining understanding, before moving to fully designing various business model options, evaluating these, and finally implementing a fully designed and tested business model.

The findings of this study challenge this natural sequence, proposing that the process of business model innovation in established companies is characterised by engaging simultaneously in delineation and implementation/operation¹ activities.

First implementation and operational steps were taken after an initial idea of the new business model, lacking any details and specifications, had been formulated. The knowledge created through engaging in action, along with additional knowledge acquired, informed the next design steps, the implementation and operation of which created new knowledge informing the following round of design activities. In a similar

¹ As implementation and operation are highly interrelated and no clear boundaries can be drawn between them, the terms will be used together.

vein, companies in the sample engaged in operational activities well before they had a thorough understanding of customer needs for example. These insights were only gained later in the process, partially through experiential learning, partially through cognitive knowledge acquisition.

The findings from the present study provide a detailed illustration of how the process of business model innovation iterates between identifying opportunities and needs for further business model design, to formulating responses, and implementing a course of action (see Figure 3 in chapter 4.4). New business models were hence not designed first and then tested and implemented, but business model design and operation happened simultaneously. Indeed, while it might seem paradox, designing a new business model required operating it. Only through engaging in operational activities would it become clear whether the business model was functional, i.e., it served the defined purpose and it could be operated, and which parts, that is, activity system content, structure, and governance, needed to be further designed to increase the maturity and functionality level of the new business model.

The findings of this study thus support and strengthen prior findings and propositions that business models require refinements before working successfully (Demil and Lecocq 2010; Teece 2010), and cannot be designed on the drawing board (Sosna et al. 2010), or behind closed doors, but only while engaging in action; A practice one of the research participants referred to as “*crafting*” business models. As such, engaging in operational activities can be considered an antecedent to business model design, next to the various types of knowledge acquired through cognitive learning mechanisms.

While a business model needed to be delineated while operating it, it also needed to be operated while still being formed, that is, “*in statu nascendi*” as another interview respondent put it.

The process of business model innovation can thus be labelled as a process of *crafting business models in statu nascendi*, denoting a practice of concurrently delineating the business model, while it is already being operated, as well as operating the new business model, while it is still being delineated.

The fact that business models are crafted in *statu nascendi* constitutes a novel understanding of how business model innovations come about in established firms, and

this might be a key characteristic of business model innovation, distinguishing it from other forms of innovation.

Whereas the findings from this study strengthen the need for gaining a deep understanding about customers, the industry (e.g., Amit and Zott 2015; Demil and Lecocq 2010; McGrath 2010; Teece 2007), and the company itself (Amit and Zott 2014), and its business model (Demil and Lecocq 2010), they challenge the notion of having to develop multiple, fully detailed, business model alternatives, an activity that would necessarily need to happen on the drawing board, which are then to be evaluated and prototyped, before making a choice and proceeding to implementation (e.g., Amit and Zott 2014; Casadesus-Masanell and Ricart 2007; Chesbrough 2007, 2010; McGrath 2010; Santos et al. 2009; Teece 2007, 2010; Wirtz 2011). Indeed, the organisations in this study all developed a single, rudimentary idea, lacking any details, which was briefly evaluated, not through extensive prototyping, but rather through a simple validation by stakeholders. The successful outcomes of these pilots led organisations to further pursuing their initial business model ideas by operating them.

The present study hence proposes an alternative explanation of the business model innovation process, dissecting it into three phases:

- An *inception* phase, within which a trigger was identified, followed by the development of a first initial idea, and the validation of this idea;
- An *evolution* phase, during which the details of the business model were designed and implemented simultaneously; and
- A *diffusion* phase, during which the new business model was spread throughout the organisation or scaled up in size.

While the organisations in the sample moved through the three phases, the intensity between delineation and implementation/operation shifted from focusing on delineation during the inception phase, to being balanced between delineation and implementation/operation during the evolution phase, and focusing on implementation/operation on a larger scale during the diffusion phase. As has been outlined, during the evolution phase, deployment activities focused mainly on implementing and operating the new business model, while reconfiguring the existing one, whereas during the diffusion phase, deployment activities focused on reconfiguring existing behaviours to be in line with the new business model.

These three phases were characterised by exhibiting features of being linear on a phases level, that is, organisations in the sample progressed from inception to evolution, once the initial pilot was successful, and from evolution to diffusion, when the new business model had achieved a sufficiently high maturity level, while being iterative on an activities level, especially within the evolution and diffusion phases.

1.1.2 What are the Challenges and Complexities Inherent to Enacting this Process?

The characteristic of having to craft business models in *statu nascendi*, explains the simultaneous existence of two arrays of challenges across the process of business model innovation, the third key finding of this study.

Design challenges

A first array of challenges revolved around designing a functional business model, that is, one that serves the defined purpose, as well as being viable. These challenges were primarily of a cognitive nature; designing a new business model required delineating the content, structure, and governance of the activity system. These cognitive challenges also created emotional ones, i.e., uncertainty and insecurity about what the most functional solution was. While the findings did not surface any particular behavioural challenges relating to the design of the new business model, the questions of how to design a new business model, i.e., which activities to engage in and where to find answers to the problems faced, can be interpreted as behavioural challenges.

Implementation/Operation challenges

The second array of challenges revolved around the implementation of the new business model, and associated challenges were of a cognitive, emotional, as well as behavioural nature. Cognitive challenges revolved around creating awareness and understanding of the need for and the new business model. Creating commitment and support for the new business model were emotional challenges, mostly expressing themselves as resistance and opposition, while issues centring on engaging in implementation activities, and acting according to the new business model were behavioural challenges. Table 1 provides a summarising overview of the challenges encumbering both business model design and implementation/operation.

Table 1 - Design and Implementation/Operation Challenges

Type of Challenge	Design Related Challenges	Implementation/Operation Related Challenges
Cognitive	Designing a functional business model Lack of knowledge	Creating awareness and understanding for new business model
Emotional	Uncertainty and inexperience with the new business model and business model design creates discomfort	Creating commitment and support for new business model
Behavioural	How to design the new business model and where to look for solutions Lack of design experience	Engaging in implementation and operational activities

As has been shown, while moving through the business model innovation process phases, the challenges occurred at a varying intensity, with the design related challenges dominating during the inception and evolution phases, and the implementation challenges becoming more intense during the diffusion phase.

These findings expand the challenges identified by existing literature (as outlined in chapter 1), that is, business model innovation being a particular type of organisational innovation, which needs to be treated in a distinct way (Bock et al. 2010), companies lacking the experience and capabilities regarding how to innovate their business models (Chesbrough 2010; Koen et al. 2010; Markides 2008), and the existing mental models being hard to overcome (Chesbrough 2010; Markides 2000, 2008), and provide a detailed explanation of the challenges organisations face. In particular, the findings contribute a finer distinction of the design and implementation/operation challenges to be considered, as design and implementation/operation activities happen concurrently, and that these challenges are not only of a mental, i.e., cognitive nature, but also entail emotional and behavioural challenges.

1.1.3 What is the Nature of the Micro-Foundations, and their Managerial and Organisational Activities and Practices, Underlying this Process?

The fourth major finding of the study are the three micro-foundations, process orchestration, learning, and deployment mechanisms, and their underlying activities, managers and organisations engaged in to fulfil the tasks of delineating and implementing/operating the business model while coping with the identified challenges and complexities.

Process orchestration mechanisms

Process orchestration mechanisms serve the purpose of steering and managing the overall process of business model innovation.

Whereas some organisations in the sample acknowledged the process to have happened rather unconsciously and in a reactive mode, others engaged consciously in the process, managing and steering it actively. The reactive mode was characterised by organisations only engaging in business model design activities as the need to do so emerged, whereas the proactive mode was characterised by a conscious installation of measures ensuring the business model innovation process to successfully unfold. Two propositions as to the context within which these different modes emerge have been made. First, it seems to make a difference whether the new business model replaces the existing one, and, second, that the size of the organisation, and hence the number of impacted people, make a difference.

As outlined in chapter 5, the process orchestration mechanisms can be summarised as providing direction, while involving the organisation. The main activities performed include initiating the process, establishing structures and routines for the three functions of dynamic capabilities, identification of opportunities and needs for change, formulating responses to these and implementing a course of action, to unfold, steering and shaping the discussion and the business model design, while involving the organisation and guiding it through the entire process. These practices highlight the importance of top management within the process. How these activities were enacted manifested itself more specifically through the learning and deployment mechanisms.

To the best of the author's knowledge, existing theories do not consider process orchestration mechanisms or how to manage and steer the process of business model

innovation and related activities. Although Chesbrough (2010) acknowledges the need to consider and address issues of governing business model innovation activities, he offers no insight as to how this is being done. Although the contextual approach (outlined in chapter 2.2) focuses on factors influencing the business model innovation process, and the rational approach (outlined in chapter 2.2), focuses on activities by managers and organisations constituting the process, none of them focuses on how the business model innovation process is being steered and managed.

Whereas the dynamic capability literature acknowledges the need for managing the reconfiguring (Teece 2007), the mechanisms and activities to orchestrate such processes have received no attention to date. The present study hence contributes a first understanding of how to set up and manage the process as such, and introduces the notion of process orchestration to the discussion, proposing that management needs to actively be engaged in the process by providing direction, while at the same time involving the organisation.

Learning mechanisms

To delineate the business model and cope with the design related challenges, organisations engaged in activities, which can collectively be interpreted as learning mechanisms. These learning mechanisms fulfil the functions of identifying opportunities and needs for change, as well as being foundational to the formulating of responses to these opportunities or needs.

Three sets of managerial and organisational activities underlying these learning mechanisms have emerged from the findings.

First, *cognitive knowledge acquisition activities*, i.e., collecting data pertinent to the design of the business model. At least four main types of knowledge can be distinguished:

- (1) Knowledge about the customer, supporting the understanding of customers' needs, their behaviour, the customer experience, and what is driving customer value and satisfaction. As has been illustrated, the concept of 'customer' can be defined broadly to also include ecosystem stakeholders, e.g., the specialist doctors, or suppliers.

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- (2) Knowledge about the industry, including studying various types of business models, competitive forces, what is driving success in the industry, benchmarking, etc.;
 - (3) Knowledge about other industries, including again various types of business models that might serve as inspiration; and
 - (4) Knowledge about the firm itself, e.g., performance data, core competencies, assets, resources, internal stakeholders' needs, internal processes, etc.

These findings support existing theory as to the type of information and knowledge required to design a new business model (Amit and Zott 2014; Demil and Lecocq 2010; Teece 2007, 2010).

Activities to acquire this knowledge ranged from individual self-study, researching secondary studies and literature, and engaging in market research or hiring outside experts, to collectively discussing and sharing existing knowledge among colleagues in discussions, meetings and workshops. Some of this knowledge was also acquired during previous experiences, supporting prior findings by Sosna et al. (2010).

Second, *experiential knowledge creation activities*. As no prior knowledge existed, particularly in the case of business models that were 'new-to-the-world', knowledge about the functionality of the business model, i.e., does it yield the expected results and can we operate it, needed to be created through engaging in operational actions. Knowledge created through experiential action came in the form of success, challenges and insights, which shaped the design of the business model. Experiential action thereby not only created knowledge of problems, as suggested by Thomke (1998), but also about what worked well, i.e., success, and it generated insights that would be used to further enhance the business model design.

The present study confirms the vital role of learning, both cognitive and experiential, which has been acknowledged by the business model innovation (Sosna et al. 2010), as well as the dynamic capabilities (Eisenhardt and Martin 2000) literatures, and the need to engage in action to mitigate a lack of existing knowledge (Chesbrough 2010) and create insights (Doz and Kosonen 2010).

Experimentation as a means for experiential learning has received considerable attention in the business model literature, asserting that organisations need to experiment with multiple business model options to learn which one works best (e.g.

Baden-Fuller and Morgan 2010; Casadesus-Masanell and Ricart 2007; Chapman Wood 2007; Chesbrough 2007, 2010; Magretta 2002; Markides 2008; McGrath 2010; Mitchell and Coles 2004a, 2004b; Svejnova et al. 2010; Teece 2010).

The present study proposes a different view on how organisations applied experimentation. Instead of experimenting with different options, companies tried to make the initial idea functional, that is, craft the business model in a way that it served the intended purpose, and could be operated.

Experimentation did here not occur on the level of which business model works best, but on the level of how to achieve this functionality, testing different solutions to particular challenges faced. In those cases where several models were necessary to achieve functionality, these options emerged with time only through engaging in operational activities with prior business models. It needs to be recognised that the initial ideas and the validation of these were positive for all organisations in the sample. It is possible that organisations engage in developing further ideas in the inception phase, should the first option prove to be unsuccessful, which would be similar to experimenting with various business model options. Yet, the findings from the current study suggest that experimentation with further business model options only occurs if the first or previous options were not successful.

These findings contribute a novel interpretation of how and for what purpose experimentation is being used in the context of business model innovation and thereby calls for a clear distinction between these two types of experimentation to be made. To illustrate the point: Hirslanden made the decision for a hybrid business model and experimented with how to make this business model work, and this only if the first option did not work sufficiently well. It did not experiment with alternative business models, e.g., installing a chief physician business model, or a pure private practitioner model, or being an infrastructure provider only. ProSiebenSat.1 experimented with how to make the media-for-revenue-share and equity business model work, i.e., trying with different types of customers and products. It did not experiment with different business models, that is, e.g., buying equity positions with cash and then trying to push the value of the business through advertising, or going into content production like other television networks like HBO or Netflix have done, or still another model would have been to become a private TV station not relying on advertising at all.

The present findings also challenge the notion of discovery driven planning processes, which "... demand that business model assumptions are both articulated and tested" (McGrath 2010, 258). As the details of business models are not clearly known at the outset, underlying assumptions cannot be outlined upfront. At best, single assumptions can be tested, as knowledge is acquired or created throughout the process.

Third, *knowledge interpretation, application and codification activities*. Making sense of the knowledge acquired and created happened to a very large extent in collective activities, such as discussions, meetings and workshops among colleagues. Such activities were also central to formulating responses to the opportunities and needs identified.

These findings strengthen prior propositions according to which conversations among top management and stakeholders are a necessary ingredient to business model innovation (McGrath 2010; Sosna et al. 2010).

While these activities were vital to designing a novel business model, they were equally foundational to designing deployment interventions, targeting both structural and behavioural change (Santos et al. 2009). Knowledge about, opportunities and needs for change, the formulation of responses and the implementation of a course of action fostering business model implementation and operational behaviour in line with the new business model also needed to be acquired, interpreted and applied, and this was done to a large extent through the same learning mechanisms and the outlined underlying managerial and organisational activities and practices.

Deployment mechanisms

Deployment mechanisms summarise managerial and organisational activities fostering the implementation/operation of the new business model, while coping with the implementation/operational challenges. At least four sets of activities and practices can be distinguished, as described in detail in chapter 5: *knowledge dissemination activities* creating awareness and understanding, *activities for involving organisational members and external stakeholders* creating commitment and support, *establishing methodologies and standards* to foster action towards implementation, as well as *reconfiguring organisational structures*, to foster action towards operating the new business model and reconfiguring behaviour in line with the new business model.

The findings confirm the need to reconfigure existing organisational structures (Amit and Zott 2014; Santos et al. 2009; Sosna et al. 2010), and the importance of activities for leading change (Chesbrough 2010), including communication and feedback processes (Bieger and Reinhold 2011; Mitchell and Coles 2004b), and the transfer of knowledge from top management to the organisation (Sosna et al. 2010), especially in circumstances where the new business model is implemented within existing organisational structures or where it replaces an existing business model. Demand for roadmaps outlining how the business model innovations will be implemented (Johnson et al. 2008), can be partially confirmed. While the present findings strengthen the proposition that roadmaps outlining the overall process seem to be difficult (Chapman Wood 2007), the study found evidence of project management and according plans used as a tool to structure the implementation of initiatives pertinent to the deployment of the new business model.

The two micro-foundations learning and deployment were essential to enacting the three functions of dynamic capabilities: identifying an opportunity or need for change, formulating a response, and implementing a course of action. Whereas during the inception and evolution phases, the focus of the three functions lay on delineating the business model, it shifted to identifying and formulating responses to implementation/operational challenges and deployment activities during the diffusion phase.

1.1.4 What is the Role of Top Management Within this Process?

The existing business model innovation literature provides a contradicting view on the role of top management for the process of business model innovation.

Mitchell and Coles (2004a) argue that while the CEO might be the source of initial business model innovation concepts, he will not play a vital role throughout the process in most companies. Chesbrough (2010) argues that the owner-manager is well positioned to be the leading force behind business model innovation, a proposition that Sosna et al. (2010) confirm in their study of one company, while asserting that CEOs and general managers of business units are not suited to do so, because of their historical baggage and the typical 2 to 3 year rotations of positions, which might be too short a timeframe to develop and implement a new business model. Zott and Amit (2010) claim that designing a business model is a key task of management.

The present study confirms the importance of owner-managers (in the case of Fahrenheit 212 and Trumpf), while providing evidence that C-level management, managing directors, business unit leaders, and members of the executive board are not only actively involved, but that their involvement is considered key to the success of the endeavour.

The findings from the present study thus strengthen the propositions regarding the vital role top management plays in the business model innovation process, from initiating it, to orchestrating it and actively participating in learning and deployment activities. Members of top management were the main actors in all activities related to designing and implementing the new business model. They not only provided top down direction, but also involved the organisation and participated in these involvement activities, while ensuring that the process of crafting the business model unfolded by establishing the necessary structures. While in certain cases the CEO was indeed the initial source of opportunities for business model innovation, managing directors and general managers of the business units and other colleagues from the top management team were the key agents throughout the process.

Because of having to implement/operate a new business model, the details of which are still being developed and formed, and thus are still unclear to a large extent, there is a high need for management to provide direction, and be actively involved, up to a point of taking interim middle management positions. As the details are unclear, and even management does not know, which path to travel, how should employees know? Yet, as management cannot know all the answers and, especially in larger established organisations, relies on middle managers and employees to implement and operate the new business model, there is an equal need to involve the organisation.

These findings contribute to the current business model innovation literature that top management does indeed play a vital role within the process, and that its active participation is even regarded as a necessary success factor of the process.

The portrayed importance of management is in line with propositions of the dynamic capabilities paradigm, in which entrepreneurial managers play a vital role in identifying opportunities and needs for change, formulating responses and implementing a course of action (Augier and Teece 2009; Helfat et al. 2007; Teece 2007, 2009, 2010), as well as

in the design and implementation of novel business models (Amit and Zott 2014; Helfat et al. 2007; Teece 2007).

Besides confirming its importance, the findings enhance our understanding of the managerial activities performed, and describe the managerial behaviour of how they are being performed to address design and implementation challenges. Furthermore the findings illustrate that management not only plays a vital role in performing the three functions of business model innovation as a dynamic capability, that is identifying opportunities and needs, formulating responses and implementing a course of action, but also in orchestrating the overall business model innovation process and its underlying micro-foundations of learning and deployment mechanisms.

1.1.5 Conceptual Framework of the Micro-Foundations of Business Model Innovation as a Dynamic Capability

Figure 1 provides a summarising illustration of the conceptual framework of the micro-foundations of business model innovation as a dynamic capability.

The overarching process orchestration practices and principles guide the overall process, as well as the learning and deployment mechanisms.

The functions of dynamic capabilities are enacted throughout the three phases, focusing with varying intensity on different aspects, that is, the design or the implementation/operation of the new business model.

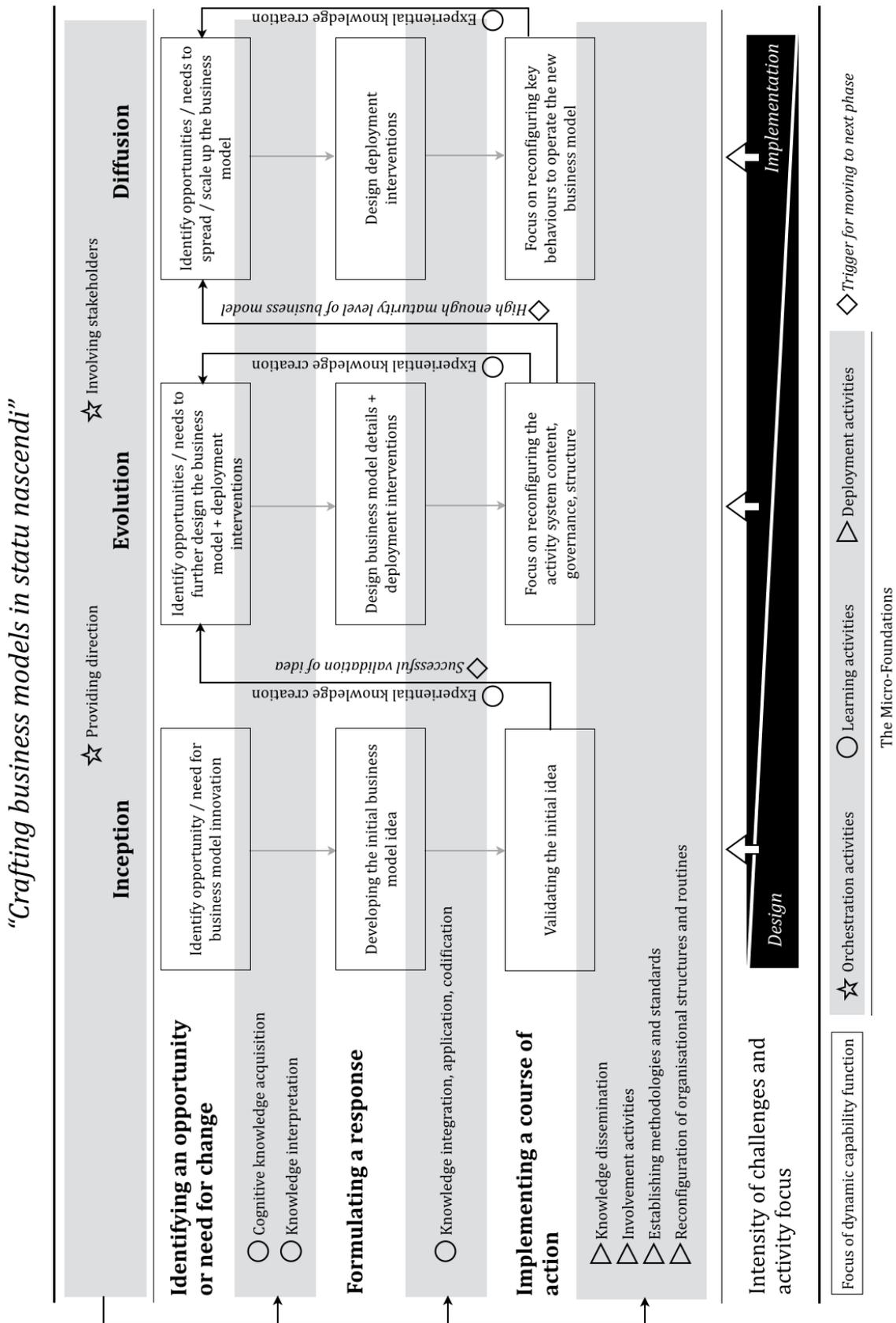
While the learning mechanisms are foundational to the identification and formulation functions, the deployment mechanisms underlie the implementation function. Implementing a course of action leads to experiential learning. Knowledge created through engaging in experiential action provides insights on opportunities and needs to further design the business model or formulate deployment activities.

The trigger for moving from the inception phase to the evolution phase is the successful validation of the initial idea, whereas the organisation moves from the evolution phase to the diffusion phase once the business model has reached a certain maturity level, which is characterised by the business model fulfilling its intended purpose, while also being possible to operate.

The challenges and respective focus of activities range from design to implementation/operation and occur with varying intensity throughout the process.

Activities are shown according to their primary function to keep the framework relatively simple.

Figure 1 - Conceptual Framework of The Micro-Foundations of Business Model Innovation as a Dynamic Capability



Source: Own representation

1.1.6 Summary of Theoretical Contributions

Contributions to the business model literature

Considering the four perspectives on the business model phenomenon outlined in chapter 2, the present study contributes primarily to the dynamic perspective and more specifically the rational approach, interested in activities and processes through which business model innovations transpire in established organisations.

As has been shown at the outset, the existing business model innovation literature is characterised by a lack of empirical research on how incumbent firms outside of the e-businesses sector, design and implement novel business models, which is seen as one of the greatest barriers for established companies to engage in business model innovation.

The present study contributes towards filling this gap by providing rich empirical evidence on the nature of this process, its phases, challenges and complexities, as well as the managerial and organisational activities and practices enacted to fulfil the tasks of designing and implementing a novel business model while coping with the challenges.

The present study also contributes to the contextual approach of the dynamic perspective, and more specifically to the existing understanding of the role of top management within the business model innovation process. Whereas current research describes characteristics leaders need to exhibit (see chapter 2), the present studies sheds light on their active role and behaviour in initiating, orchestrating, and participating throughout the business model innovation process.

Considered collectively, the findings from this study provide a novel understanding of how business model innovations come about in established organisations.

Contributions to the dynamic capabilities literature

Although business model innovation and related concepts like business model design, or business model reconfiguration, have been recognised as dynamic capabilities (e.g., Agarwal and Helfat 2009; Amit and Zott 2014; Andries and Debackere 2006; Augier and Teece 2009; Chesbrough 2010; Harreld et al. 2007; Helfat et al. 2007; Sosna et al. 2010; Subramanian et al. 2011; Teece 2007; Teece 2009, 2010), little empirical effort has been made to investigate them. The present study contributes to filling this gap.

The findings of this study illustrate how this particular dynamic capability manifests, including its constituting process, and underlying micro-foundations and types of managerial and organisational activities and practices.

The present study confirms that cognitive and experiential learning mechanisms, are essential to the functions of identifying an opportunity or need for change and the formulation of a response to this need or opportunity (Teece 2007) and demonstrates how these functions are enacted to alter the business model as a specific type of resource.

Beyond confirming that implementation, configuration and deployment processes are essential to dynamic capabilities (Helfat et al. 2007), the present study also illustrates what the pertinent activities and practices are and how they are enacted.

Furthermore, the proposed conceptual framework of business model innovation as a dynamic capability, decomposing it for analytical purposes into a process, underlying micro-foundations and managerial and organisational activities and practices underlying these micro-foundations, might offer an interesting template for investigating and describing further dynamic capabilities.

1.2 Managerial Implications

Besides the theoretical contribution the presented findings have a number of implications for practicing managers. Managers need business model design know-how, implementation know-how, and business model management know-how (Amit and Zott 2014). The present findings provide insights primarily as to the design and implementation.

Summarising these findings of crafting a business model in statu nascendi from a managerial standpoint, the following conclusions can be drawn.

- Design and implementation are highly integrated and happen simultaneously; cognitive and experiential learning, and hence engaging in action, are required not only to design the new business model, but also to identify implementation and operational challenges. This means business model innovation processes cannot be fully planned. Furthermore, the need to engage in action creates particular dynamics and above all two arrays of challenges that need to be addressed;
- Designing a functional business model requires a deep understanding of customers, the industry and the organisation itself, and it requires engaging in action;
- Identifying these challenges, and insights, leads to further design and fine-tuning of details, before a fully functioning business model is delineated from these efforts;
- While it is vital to provide direction by guiding the organisation and establishing learning and deployment processes, activities and structures, it is equally vital to engage the organisation, both during design and implementation activities. Hence, management needs to reflect upon how to design and orchestrate the process of business model innovation, as much as reflecting on the content of the business model itself and how to implement it;
- The design and implementation of a business model is a considerable effort, requiring extensive management attention and time.

A number of specific actions can be deduced from these overall implications.

First, *clear your agenda*. As the findings show, crafting a novel business model is likely to be a multi-year effort requiring a considerable amount of management attention and

active involvement by top management. It is not an undertaking that can be easily delegated or outsourced.

Second, *provide direction*. Active involvement will require providing clear direction to the organisation. As the destination of the journey might be unclear, and detours might be unavoidable, providing direction will create at least a certain level of comfort within the organisation. As the details and specifications of the new business model are likely to be unclear for a considerable period of time, providing direction on the process and the next steps to be taken can provide guidance in the absence of content. Providing direction also means focusing the discussion on relevant topics. Relevant topics revolve around design and implementation/operation, e.g., understanding the customer, the market, the industry, and the firm, implementation progress, awareness, understanding, commitment, and behaviour of employees, key stakeholders, etc.

Third, *assemble a team*. While providing top-down direction is essential, involving the organisation is equally important. Assembling a core team of associates with the needed skills and capabilities will be required. As has been outlined, different capabilities, and maybe personalities, are needed throughout the process. While the inception and evolution phases require a more entrepreneurial mind-set to sense opportunities and formulate responses to seizing them, one that is comfortable with uncertainty and ambiguity, the diffusion phase is likely to require more operational and administrative capabilities. Managers should be prepared to reconfigure their teams, and leadership structures, early on if needed.

Fourth, *pick your tools*. The four perspectives on the business model phenomenon, the static, dynamic, strategic, and operational perspectives, offered in chapter 2 enable managers and their teams to structure business model related discussions and establish a common understanding and language. Among the vast amount of frameworks to describe a business model, the suggestion was made to focus on a narrow definition of the business model as an activity system, as it offers clear concept boundaries to other strategic decisions, namely, the customer and the offering, as illustrated by the “strategy cube” (Figure 2 in chapter 2.2).

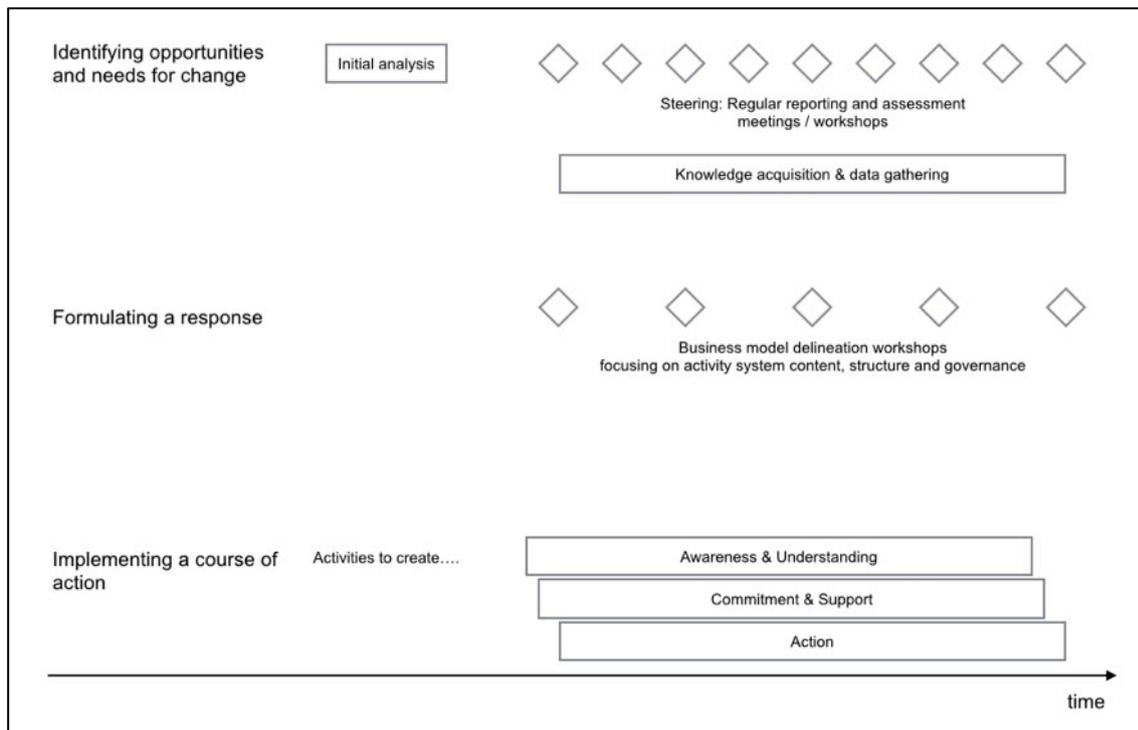
Fifth, *do your homework*. Despite the need to engage in action to be able to delineate a new business model in its full details and specifications, engaging in a thorough understanding of the firm, the customer and the industry at the outset can do no harm.

Engaging in cognitive learning can also mean studying existing literature and secondary research available.

Sixth, *orchestrate the process*. Although it is likely to be difficult to outline a detailed roadmap, managers should have a “big picture” in mind of which activities will be required throughout the process. Such a grand overview will provide stability and comfort to themselves, and enable them to provide direction to the organisation. The conceptual framework put forward here (Figure 20 in chapter 6.1.5) provides orientation of the process, where the organisation is in the process and what the required focus of activities is, which challenges are likely to arise, etc.

The Viennese school of systemic consulting (e.g., Heitger and Doujak 2008; Königswieser and Exner 1998) has a practice of developing so-called “architectures”, outlining the overall process and structures of strategic change initiatives, creating spaces for learning, design and action. Regular meetings and workshops for enacting the three functions of identifying opportunities and needs for change, formulating responses and implementing a course of action, as well as steering the overall process should be planned for. These spaces will enable managers to exercise a fair amount of control over the process, while providing stability, to them and the organisation, in an ocean of uncertainty. Figure 2 illustrates what such a high-level architecture might look like.

The findings from the present study can inform the types of questions to be asked, the information to be gathered and the dimensions of the business model as activity system to focus on: Which activities to perform, how to sequence and structure them, and how to organise their performance, including internal organisational structures, as well as relationship to external partners.

Figure 2 - Business Model Innovation Architecture

Seventh, *reflect upon yourself*. Most importantly, before getting started, managers should engage in some self-reflection and ask themselves, whether they are willing to take the effort, dedicate the necessary resources and have the entrepreneurial spirit and drive needed to make the business model innovation endeavour a successful one. The practice of *crafting a business model in statu nascendi* is likely to demand energy, dedication, courage and personal determination.

1.3 Limitations and Avenues for Future Research

Although great care was taken to adhere to the standards of grounded theory research, the following limitations of this study have to be noted.

First, the sampling strategy was rather opportunistic. The limited availability of cases of business model innovation in established firms does not allow for a meticulous choice of cases to investigate.

Second, the theoretical sample focused on one particular case. Due to the time constraints imposed by university regulations, gathering data from additional sources was difficult. It would have been interesting to “dig deeper” into other cases from the initial sample, or further expand the sample.

Third, interview respondents were primarily from the ranks of senior management, neglecting other internal and external stakeholders. Further data, beyond interview respondents accounts, was sparse for all but one case, encumbering data triangulation. Hence, the findings presented can be said to represent a top management view.

The constraints of the sample nevertheless do not mean that the findings and concepts are not transferable (Gioia et al. 2013).

Particular topics of interest for future research seem to be the following.

- *Identifying opportunities and needs for change.* The identification of opportunities and needs for change seems to have happened relatively easy for the cases in this study. Further research is needed to understand how exactly these are being identified. Gaining a better understanding about how opportunities and needs for change are identified is an important step, as it represents an essential function of dynamic capabilities, and, as the findings of the present study illustrate, it is the first necessary step to initiate the entire process of business model innovation.
- *Formulating responses.* The companies in the sample engaged in cognitive and experiential learning mechanism. The study did reveal little about how knowledge selection, interpretation and application occur in detail. Further research is needed on knowledge selection and decision-making mechanisms and should investigate workshops and meetings in vivo to be able to understand how the knowledge is applied to design and implementation challenges, and how exactly responses are formulated.
- *The process of business model innovation.* Having outlined the overall process, its micro-foundations, and managerial and organisational activities and practices, many questions regarding the process still remain unanswered. Future research should investigate for example the number of learn, develop, action cycles needed within the evolution phase and factors determining this number. Whereas the tipping point from the inception phase to the evolution phase seems clear, it is less clear what maturity level triggered the organisations in the sample to move to the diffusion phase. As has been suggested the tipping point is a combination of the business model fulfilling the identified purpose, and being possible to operate. Future research should investigate the factors influencing such decisions and what the minimum required maturity level is. The dynamic

capabilities concepts of evolutionary and technological fitness (e.g., Helfat et al. 2007) might provide an interesting lens. Future research on the process should also investigate circumstances, where the initial validation steps do not lead to success and find out how organisations react. And last but not least, future studies should investigate whether the proposed process applies to other organisations in similar and different contexts.

- *The role of cognitive capabilities and personality.* As has been shown, top managers were key in initiating and driving the business model innovation process. Their prominence and importance raises the question what influence their cognitive capabilities and personality traits have on the process and its outcome. A better understanding of these factors could potentially inform team compositions.
- *Stakeholder view.* Having focused on top management, the present study neglected further internal and external stakeholder perspectives. Especially the question of what impact having to implement and operate an unclear and unfinished business model has on internal and external stakeholders could be of interest, potentially informing more functional deployment strategies.
- *Further context factors.* The present study focused on activities and processes, neglecting to a large extent environmental factors, e.g., corporate culture, environmental changes, competitive landscape, etc., that might have had an impact on the process. Further research to better understand what these factors are, and what influence they have on the process and its outcomes is needed.
- *Motivation.* One insight from the study is that organisations kept on pursuing their business model innovation efforts despite the challenges they faced. Future research is needed to understand the factors influencing this behaviour and answer the question why they did not give up. What are the variables influencing whether the organisations continue or do not continue the process? Gaining confidence might play a role as suggested in chapter 4.
- *The role of experiential learning mechanisms.* It has been suggested that experiential learning is required in “high-velocity” markets (Eisenhardt and Martin 2000). As the present study found evidence that experiential learning plays a vital role in “low-velocity” markets, e.g., health care, it might be

interesting to investigate whether the presence of experiential learning is dependent on market dynamics or rather the type of dynamic capability.

- *Orchestrating the process*: as has been shown, two different modes of how the process was enacted can be distinguished, a conscious and a less conscious mode. As both led to success for the organisations in the sample, it is necessary to understand under which circumstances which mode is required. The present study provided first propositions as to the degree of novelty of the business model innovation and the size of the organisation making a difference. Further research is also needed to better understand how the business model innovation process is being designed and orchestrated under various circumstances. This question is of particular relevance to practicing managers.

1.4 Conclusion

This study adopted a dynamic capabilities perspective to explore the activities and processes through which business model innovation arises in established organisations.

Based on a review of the business model, business model innovation and dynamic capabilities literatures, a framework of business model innovation as a dynamic capability, consisting of a process, its micro-foundations and their underlying managerial and organisational activities was proposed.

This framework was investigated using grounded theory methodology, collecting and analysing data from five case studies from the manufacturing, financial services, media, consulting, and healthcare industries.

The findings collectively provide a novel understanding of how business model innovations come about in established firms, challenging, or to the very least offering an alternative to, existing frameworks.

This novel framework not only enhances our theoretical understanding of such processes, but also offers insights for practicing managers.

Markides (2006) has argued that treating different types of innovations as one and the same because of their similarities is a mistake. The broad implication of this study's contributions is that further, grounded, empirical research on how business model innovations come about in established companies is needed. Conceptual work, relying on transposing frameworks from other disciplines, e.g., design thinking (Amit and Zott

2014), discovery-driven planning (McGrath 2010), or strategic agility (Doz and Kosonen 2010), or types of organisational innovation, seems to be of limited value for explaining and understanding how business model innovation transpires in practice.

I hope that this study's findings and insights will motivate academics to engage in more empirical research on how business model innovations come into this world, and make the task of crafting novel business models a little less challenging for established firms.