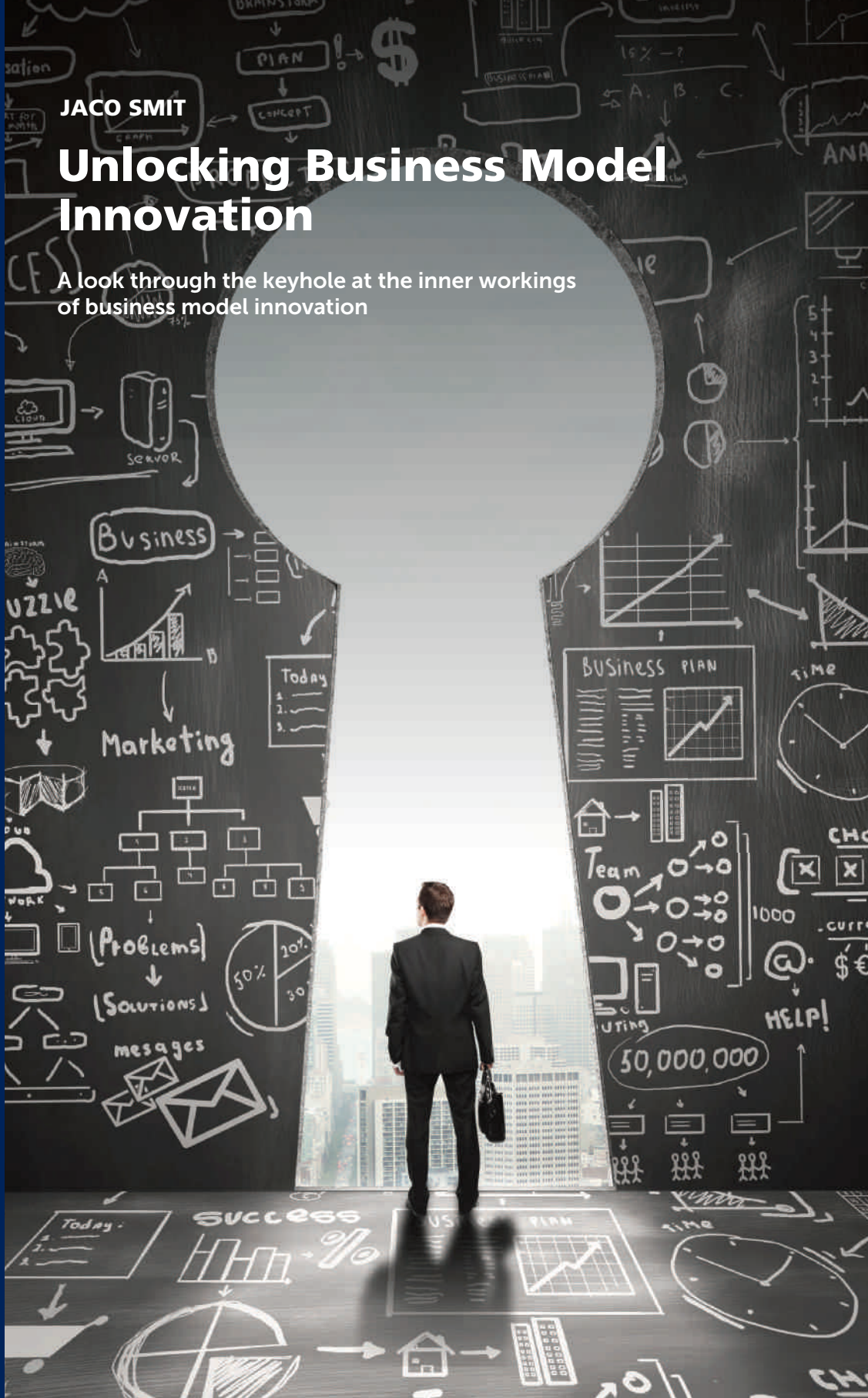


JACO SMIT

Unlocking Business Model Innovation

A look through the keyhole at the inner workings of business model innovation



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Unlocking Business Model Innovation
A look through the keyhole at the inner workings of Business Model Innovation

Business model innovatie ontgrendeld
Een blik door het sleutelgat naar de innerlijke werking van Business Model Innovatie

Thesis

**to obtain the degree of Doctor from the
Erasmus University Rotterdam**

**by command of the
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The logo of Erasmus University Rotterdam, featuring the word 'Erasmus' in a stylized, cursive script.

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WORD OF THANKS

“The traveler has reached the end of the journey!” Edmund Burke

What a journey it has been. I could fill a book with the names of those to whom I am grateful for bringing me to this point in my life, for the experiences that shaped me into the person I am today. This PhD is the result of all of the experiences that led up to this point and the people in them. To each and every one of you, I thank you.

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To those named here and those not, I thank you.

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CHAPTER 1

INTRODUCTION

1.1 A different perspective on business model innovation

The modern mobile phone has more processing power than the super-computer which put Apollo 11 on the moon (Kaksu, 2014). A staggering fact about the information age in which we are firmly embedded. In the current reality, consumers have an increasingly vast number of choices, yielding progressively less satisfaction, and firms are overwhelmed with an ever expanding list of strategic choices, yielding progressively less value (Prahalad & Ramaswamy, 2004). Ever more, firms are forced to turn to innovative ways of doing business in order to satisfy customers and remain competitive. Consistent innovation is rapidly turning into an essential factor in every successful business; in fact, it has been developing toward this for quite some time (Magretta, 2002; Coles & Mitchell, 2003; Chapman, 2006). Companies need to innovate to stay current and remain competitive.

When one speaks of innovation; images of new, technologically advanced or novel solutions for everyday needs are conjured up. While this is an entirely valid representation, it does not encompass the concept of innovation as a whole. Commercial focus thus far has been primarily on technological innovation, hence the association (Chesbrough, 2007; Moss Kanter, 2006). However, in the new age, having the most technologically advanced and up-to-date product offerings no longer suffices to satisfy growing consumer desires. Organizations have to split their focus to include business model innovation in the new business sphere (Chesbrough, 2007; Moser et al., 2007; Chapman, 2006; Chapman & Pohle, 2006; Boulton et al., 2000).

A conglomeration of related events; globalization, the internet and ICT advancement, shortening product life cycles, increasingly intense competition, and shrinking profit margins (Prahalad & Ramaswamy, 2004; Krishnan & Prahalad, 2008; Moser et al., 2007; Chapman & Pohle, 2006), have caused some major shifts in the nature of the business environment and the factors needed for success. The increase in information availability and accessibility, particularly to the average consumer, has made differentiation and unique value offerings an essential determinant of success (Krishnan & Prahalad, 2008), but simultaneously all the more difficult to achieve. Gone are the days that organisations could compete on the basis of the 'traditional' differentiation factors such as price, variety, quality and the like. These have become part of the license to operate. As consumers can gain access to millions of sellers of similar or often identical products or services online or read reviews of a store, an organisation,

or a service provider, the importance of how business is done has taken a front seat. The business model has become the value driver, not the product.

One of the great successes in the technology industry today (in part due its role in the company turnaround) is the Apple iPod. The first iPod was not necessarily the most technologically advanced or the most attractively priced mobile music player on the market at the time. The business model however, which included the launch of iTunes (an online music store where consumers could purchase their favourite songs), presented each individual with the opportunity to easily customize the product (by loading their own desired music), and buy single songs (as opposed to whole albums, which was the norm at the time) to express their personality. The iPod alone could have been just another mobile music player, but the combination with a service (iTunes), the value proposition (instant customization) and an image created by clever marketing, all elements of the business model, it became a global hit.

The realization that business models are the next differentiating factor is slowly dawning among the managerial ranks; a study by the Economist Intelligence Unit reported that more than 50% of the executives surveyed believe that business model innovation will eventually surpass product and service innovations in importance (Johnson et al., 2008). As we move further into the technology age, the possibility and likelihood that products and services are copied, and that consumers are aware of the substitutes, is increasingly likely. How a firm does business is becoming the differentiating factor (Bell et al., 2007; Gassman, 2006).

The prevalence of business model innovation in practice is being mirrored in research, a growing cache of literature on the topic is being generated. The concept, and naturally the first research, stems from the domain of e-business models. This literature revolves around the characterization of different types of e-business models, identifying online revenue streams, and the description of e-commerce business model elements (Timmers, 1998; Mahadevan, 2000; Gordijn & Akkermans, 2001; Pertovic et al., 2001). More recent literature focuses on the description of model elements and composition (for examples see Chesbrough, 2007; Johnson et al., 2008). The lack of clarity in what exactly a business model was resulted in there being more than 20 different perspectives on which elements a business model was composed of by the end of 2008 (Morris et al. 2005; Tikkanen et a., 2005; Chesbrough, 2007; Bell et al., 2007; Johnson et al., 2008). The result being that the majority of research still revolves around investigating the elements of a business model; what a business model consists of; and what exactly is implied by the term business model innovation (Morris et al., 2005; Coles & Mitchell, 2004; Tikkanen et al., 2005; Chesbrough, 2007). Research up to this point gave the dynamism of business model innovation relatively little consideration and essentially examined a rather

static end-state, as opposed to the process leading to business model innovation, in focusing on its elemental composition.

Research of late is moving more in the direction of process orientation (e.g. Sosna, Trevinyo-Rodriguez & Velamuri, 2010), starting to explicate the complexities involved in making business model innovation happen. Being in the early stages, this research is still quite practical in nature and lacks a certain degree of theoretical depth (Sosna et al., 2010; Rasmussen & Foss, 2014). The call for more research into the drivers and mechanisms of business model innovation still rings out (Morris et al., 2005; Chesbrough, 2007; Amit & Zott, 2008; Sosna et al. 2010; Rasmussen & Foss, 2014).

In the domain of business models, it is my opinion that the crux of success lies in the totality of business model innovation. It is as much about the end-state business model as it is about the path to implementation, and that in the most holistic sense: the model, the people, and the environment. I tried to mirror this perspective in the choices made in writing this dissertation, attempting to pull apart the process and look through the keyhole at the inner workings of business model innovation. Each chapter is another step closer to capturing the totality mentioned but also further away from the business model itself. Starting close to current thinking with a theoretical exploration of the business model innovation process, and ending with a new perspective, in an empirical investigation of the effect of the process on arguably the most fundamental part of an organisation, its people.

1.2 Dissertation overview

This dissertation consists of four chapters; the current chapter, as well as three independent research articles. I have placed them in chronological order of completion, although coincidentally this order also adheres to the logical journey on which I aim to take the reader. The first article is conceptual, followed by two empirical articles which, in part, explore some of the theoretical elements of the conceptual article. As the chapters which follow were a product of collaboration with other authors, I will henceforth use ‘we’ in reference to the author(s).

In the first article we respond to the call for more process-oriented research, taking a team-based approach and viewing business model innovation through a behavioural lens. We present a process model, stipulating the part teams (and more specifically, their networks) and leadership play in business model innovation performance. Additionally, we explore the interactions between and changes in said aspects at different stages of the business model innovation process. The eventual result being a behavioural theory on business model

innovation in the form of a path dependent multi-stage model anchored in social network, leadership, and innovation management theory.

In the second article we decided to take a step back from the theoretical and explore an intriguing case of business model innovation. The aim being to make in-roads into which organizational factors contribute to successful business model innovation and why. We conducted a longitudinal, qualitative study of an offspring of Tata in the IT industry in India, which was initiated in 2001 right after the dot.com bubble burst: MJunction. Our findings suggests new multi-stage, multi-level organizational process theory for developing business models in resource-constrained settings.

Having looked at the process of business model innovation both theoretically and empirically; the third and final article explores a behavioural side of business model innovation. Moving away from the organizational processes and more toward the human dynamics involved in the process of business model innovation. We used a prototypical example of business model innovation, both in organizational and behavioural terms, to investigate the role business model innovation plays in the larger fabric of the organization, specifically during change. We shed light on the perpetuation of identity change in organizations across different social levels, i.e. individual, group, and organization. Furthermore, we find business model innovation to be a vehicle for a much larger shift in the organization, the shift in identity.

Overall, this dissertation aims to push business model innovation research into the next phase of development, beyond a strict focus on composition or organizational processes and toward organizational antecedents and behavioural aspects, the how and the why of successful business model innovation.

1.3 Declaration of contribution

This dissertation is the culmination of the hard work of many individuals. As the saying goes, ‘it takes a village’ and I hereby declare my own contribution to the pieces shown here as well as acknowledge the contributions of others involved. Chapter 1 is the sole work of the author of this dissertation (incorporating the feedback of the promotor). Chapter 2 is a co-operation between five co-authors (named in Chapter 2), two of which are the promotor and the author, names are listed alphabetically as each co-author contributed significantly in writing or expertise. Chapter 3 is based on a paper written with three co-authors (named in Chapter 3), two of which are the promotor and author. The part played by the author included data collection, coding and analysis, expertise and a significant part of the text writing. Chapter 4 is co-authored by the author and an ERIM member (named in Chapter 4), the author formulated

the research question, conducted data collection and analysis, and contributed the bulk of the text writing under the guidance and expertise of the co-author.

CHAPTER 2

BUSINESS MODEL INNOVATION: TEAM NETWORKS AND LEADERSHIP ¹

2.1 Introduction

Strategic change and competitive advantage, driven by more dynamic global competitive conditions, rapidly advancing technology, and increasingly knowledgeable customers are increasingly associated with developing new business models (Boston Consulting Group, 2009, IBM, 2013). However, currently we have very little *theory* on how to effectively manage such developments, or on how to manage business model innovation.

The rise of a new management practice, such as earlier Total Quality Management, Business Process Outsourcing, or Six Sigma, is often marked by enthusiastic contributions aimed at practitioners, after which more neutral, research-oriented publications emerge (Abrahamson, 1996; Abrahamson & Fairchild, 1999). Business model innovation (BMI) is no exception. Initial contributions typically focused on the *design* of successful new business models: on which components or activity systems contribute to success; for instance, a customer value proposition, a revenue model, resources, assets, distribution channels, and partners (Magretta, 2002; Morris et al., 2005; Tikkanen et al., 2005; Chesbrough, 2007, 2010; Fiet & Patel, 2008; Johnson et al., 2008; Zott et al., 2011; Baden-Fuller & Morgan, 2010; Casadesus-Masanell & Ricart, 2010; Teece, 2010; George & Bock, 2011; for an exception, see Amit & Zott, 2001 exploring drivers of BMI). More recently, research has started to explore the *process* of BMI (Sosna et al., 2010; Svejenova et al., 2010; Yunus et al., 2010; Sabatier et al., 2010; Matzler et al., 2013). However, this emerging research is relatively a theoretical, and typically does not conceptualise the mechanisms driving BMI success. Our paper seeks to fill this theoretical gap. We present new behavioural theory on the process through which new business models are (successfully) developed, from initial idea to launch. In short, we present a new behavioural theory of business model innovation (BMI).

We examine the setting of an established organization, such as a multinational corporation, or an established social enterprise or NGO, developing a new business model. While BMI presumably implies less uncertainty, complexity and interdependence than changing the entire organisation, it arguably implies more so than more conventional types of innovation, such as product innovation or process innovation. BMI is distinctive in that innovation occurs at the system level, characterized by complex interdependence among

¹ This chapter was written as a paper and is co-authored with H. G. Barkema, C. Coleridge, F. Qin, and D. A. Stam.

multiple components in a business model (Casadesus-Masanell & Ricart, 2010; Chesbrough; 2010; Teece, 2010; Zott et al., 2011; George & Bock, 2011; Casadesus-Masanell & Zhu, 2013), implying much uncertainty. When interlocking components of an entire business model or system are reconfigured, agents undertaking the initiative need to constantly engage in dialogues with multiple stakeholders, both inside and outside the organisation, and seek inputs and support from them throughout the BMI process. Hence, BMI has distinctive characteristics compared to other types of innovation: relatively high levels of interdependence, complexity and uncertainty.

We take the team level of analysis. Teams are the building blocks of modern organizations (Marks et al., 2001). A team-level is low enough to explain processes underlying BMI development and implementation, but teams are better equipped to deal with complex problems than are individuals. We model the networks through which teams source informational and political resources from multiple stakeholders to move the BMI forward. For this, we use network theory, which is particularly suited to model complex constellations of relationships (Ancona & Caldwell, 1992; Oh et al., 2004, 2006; Zhou & Li, 2012; Lipparini et al., 2013; Patel et al., 2014) and is therefore particularly appropriate in the context of BMI. We also use leadership theory, as leadership is significant in uncertain environments (Shamir et al., 1993). Leaders may reduce uncertainty by providing direction and purpose to a team, including how the team may realise its potential performance by using its networks to acquire resources. Moreover, we explicitly model how required resources depend on the stage of the BMI, and that appropriate leadership changes in interaction with team composition and networks, as the BMI goes from one stage to the next.

We believe our paper contributes in several ways. As mentioned, many papers have explored BMI design and components of activity systems and, more recently, the process of BMI. This literature has provided much insight into *what* contributes to BMI success, and *how*; however, it's now time to provide more insight into the *why* (i.e., new theoretical logics), necessary for offering a theoretical contribution (Whetten, 1989). We believe we offer a novel theoretical approach by conceptualizing BMI as a behavioural process: a team-based, path-dependent process emphasizing the roles of team networks, leadership, and how these interact at various stages to influence performance. We hope our theory will serve as a 'theoretical platform' to inspire both new theory and empirical research in this emerging and currently somewhat fragmented domain.

Moreover, we engage in 'multidisciplinary theory building' by integrating two major contemporary theoretical lenses, social networks and leadership, to explain a currently "under-

theorized” strategic issue. We offer new theory on the links between social network theory and social psychology, to conceptualise how a team’s internal processes interact with its external processes to affect BMI outcomes. We believe we are also filling a theoretical gap about the motivational aspect of network use. Social network scholars earlier examined which types of networks facilitate innovation (Uzzi & Spiro, 2005; Reagans & McEvily 2003; Reagans et al., 2004). However, as Kilduff and Brass (2010) recently emphasized, social network theory tends to ignore “human agency.” Our paper develops new theory on ‘agency’ in network analysis, with new propositions about team members’ motivation to use their external networks for collective tasks. We hope our theory, on how specific leadership styles motivate team members to better use their networks, is one promising avenue to close this theoretical gap.

This paper is structured as follows. First we describe the key building blocks of our model, by defining BMI, discussing BMI teams, and why and how team social networks and leadership are important for BMI. We also discuss BMI stages and the dynamic nature of the BMI process. Next, we develop propositions on how different types of social networks and leadership influence BMI performance, how they interact, and how these relationships change as the BMI moves from the concept stage to the development stage. We end with a discussion and suggestions for further research.

2.2 Setting the Stage

Defining Business Model Innovation

Zott et al.’s review (2010) of 103 business model publications reveals that despite a lack of definitional consistency, the literature converges on an activity system perspective. A business model is viewed as a system, comprised of interconnected and interdependent activities that enable value creation and capture. A great variety of components are identified as important for success: these include a value proposition, a revenue or profit model, key processes and resources, a distribution channel, and partners. Each component needs to be put in place with its combined functioning in mind (Morris et al., 2005; Mitchell & Coles, 2004; Tikkanen et al., 2005; Chesbrough, 2007, 2010; Fiet & Patel, 2008; Johnson et al., 2008; Zott et al., 2011; Baden-Fuller & Morgan, 2010; Casadesus-Masanell & Ricart, 2010; Teece, 2010; George & Bock, 2011; Casadesus-Masanell & Zhu, 2013).

The components tie together in influencing business performance, and each is connected, in different ways, with different parts of the organization. Some activities are executed within various functional areas within the organization, while others are related to customers, partners, and suppliers, external to the organization. Thus a business model is

characterized by a system that spans boundaries within the company and the boundaries of the company itself.

Business model innovation is the process through which a new business model is designed and implemented. Although BMI shares some common characteristics with corporate venturing, or new product development, which have been extensively examined in the strategy literature (e.g. Ancona and Caldwell, 1992; Burgelman, 1983a, b; Garud & Van De Ven, 1992; Danneels, 2002), BMI is a distinctive process because the innovation occurs at the system level. The output of the BMI process is a novel activity system to create, deliver, and capture value that is new to the market and also to the firm. Since a business model spans boundaries, creating such a system involves developing, or exploiting, exchange relationships between the core BMI team and multiple stakeholders who participate in the various activities in the system. As the components within a business model are often interlocked (Johnson et al., 2008), the innovation of a business model entails changes of multiple components and sometimes reconfiguration of the entire system.

BMI is complex (Levinthal, 1997) in the sense that the effect of one component (e.g., a value proposition, or revenue model, or alliance with partners, or distribution channels) on the performance of the new business depends on other components. The contribution of one team member to BMI success depends on those of others, and the contribution of internal team members depends on external team members. Accordingly, BMI impacts a wide variety of stakeholders, internal and external to the firm. In order to be successful, those responsible for the BMI need to frequently engage in dialogue with multiple stakeholders and seek inputs and support from them throughout the BMI process. The interdependence among multiple components, and the wide range and variety of stakeholders, set BMI apart from other types of innovation, such as process or product innovations, which usually centres on the activity of discovering new products or services, and are typically more bounded by roots within existing firm capacities and existing patterns of connections among stakeholders.

In addition, BMI is different from new product development in that it does not necessarily involve the discovery of new products or services. Instead, it often occurs through redefinition of an existing product or service and the way through which such product or service is provided to customers (Markides, 2006). Going beyond a company's current activities implies substantial uncertainty (Daft & Lengel, 1986; Garud & Van de Ven, 1992; Stone & Brush, 1996; Forbes, 1999). It may be unknown which parts might be affected and whether the process will lead to success (March & Olsen, 1976; Mintzberg et al., 1976; Weick, 1979; Ghemawat, 1991). There will be uncertainty about what the value proposition will be, which

technology should be used, whether there will be demand for the new product or service, and with whom to partner. There may also be uncertainty about what the tasks and roles of individuals involved in the BMI will be, and whether they will be willing to work for each other, or whether conflict or, more subtly, giving priority to other, day-to-day activities is more likely. Finally, there may be uncertainty about whether the necessary resources (e.g. information, money, people, and technology) from the organization to develop the new business model will be available. Thus it appears that BMI, compared to more traditional innovation, is more interdependent, more complex, and more uncertain.

BMI teams

Many of the typical structures and tools to manage innovation, such as stage gate models, portfolio management, or project management techniques, are not well suited to the combination of complexity, interdependence and uncertainty involved in BMI. One exception is teams. Teams are flexible and organic entities that are able to cope with complex problems, that are well suited for interdependent processes, and that are helpful in reducing uncertainty. Moreover, in practice companies tend to put the fate of BMI in the hands of a dedicated team. We therefore focus on such a dedicated team as a basis for our analysis of the BMI process.

As became clear earlier, BMI requires the help and support of many formal and informal organizational members from different business units or functions within (and outside of) the organization. One job of a BMI team, then, is to find the right stakeholders from whom to get the right resources to move the BMI forward. This provides BMI teams with some crucial questions. What are the right resources? Which stakeholders can provide these resources and how can a team reach them? How can a team be directed towards these stakeholders and be motivated to get the necessary resources from them? How can these stakeholders be motivated to support the team? We believe that the answers to these questions lie in the team's social network and leadership.

Critical BMI resources and team social networks. BMI, as it takes place at the system level (Zott et al., 2010), will include financial, operational, technological, and marketing and sales aspects (Chesbrough, 2007). This multi-functional, boundary spanning character of BMI requires that the team not only have substantial knowledge of the functioning of multiple aspects of the business at the earlier phase of the innovation, but also that it is able to work with various parties, within and outside the organization, to implement the innovation. The requirement for cross-functional knowledge and successful boundary spanning makes the team's network critical to the success of such a process, and more relevant than in other types of innovation. In order to succeed, team members need to source, share and combine

information and other resources from outside the team, in interaction with others inside and outside the organization (e.g., partners, suppliers, distributors). Typically, a variety of intangible and tangible resources are needed, for which the team's social networks are vital (Ancona & Caldwell, 1992; Oh et al., 2004, 2006).

Important *intangible* resources for innovators include information about new customers and markets (Slater & Narver, 1995; Von Hippel, 1986; Prahalad & Ramaswamy, 2004); organizational and partner capabilities, technology and resource availability (Leonard-Barton, 1995; Prahalad & Krishnan, 2008); 'know how' or process information (Nonaka & Takeuchi, 1995; Van de Ven et al., 1999); 'know who' or contact knowledge for experts, influencers, brokers and decision-makers inside and outside the organization (Nadler & Tushman, 1997), as well as information about their priorities, allegiances and preferences (Tsai & Ghoshal, 1998). Substantial *tangible* resources are needed as well, especially at the implementation stage: money, staff and access to technology. These intangible and tangible resources may be obtained from a broad variety of parties within the organization (R&D, the marketing department, other business units), and from outside (e.g., partners or lead clients).

Tangible resources are typically not speculatively provided to the team in advance, but, like intangible resources, need to be sourced through the team's networks – whether formal or informal, strong or weak. Thus, having the right connections with the right stakeholders is essential to the team's innovation performance.

The team's networks are important not only because of the need to source intangible and tangible resources. BMI often goes against the dominant logic of an organization's leading coalition (Prahalad & Bettis, 1986; Covin & Miles, 2007). In such a case, political support – obtained through connections with higher-ups in the organization—is necessary to anchor the innovation in the organization: to develop a legitimate place within the firm's portfolio of activities (Anand et al., 2007), to open doors to its capabilities and tangible resources, and to withstand pressure from elements within the organization that are challenged by the change the BMI represents.

Team leadership. However, while the team's network can provide potential pathways to source the resources and support necessary to move the BMI forward, this potential is not harnessed unless the team is motivated to use its network, and the stakeholders are motivated to aid the BMI team. Team leaders, and especially their communications, can influence the likelihood that networks live up to their potential by affecting these motivational factors – inspiring the support of stakeholders, engendering members' willingness to use their networks

and to provide access to their networks to others within the team, and aligning the use of the networks with the team's goal. For this, we argue that leadership is crucial.

Moreover, multifunctional or diverse teams are known to be conflict-prone (Jehn, 1995), yet due to the interdependency of tasks, success depends on team members' individual motivation and cooperation, for sourcing, sharing and combining information and other resources. Leadership is particularly effective when a task is challenging and if conditions or directions are uncertain, if short-term results cannot be measured and monetized through financial rewards, or when the faith or moral convictions of team members can be mobilized (Shamir et al., 1993). These are precisely the conditions that are present in the case of BMI.

Leadership is a core function in innovation teams, and also in BMI teams. For instance, Clark and Wheelwright (1992) in their classical taxonomy of innovation team structures argued that in structures most suitable for radical innovation – heavyweight team structures and autonomous team structures – leaders have a central role. Several scholars have argued that the responsibility for innovation lies squarely on the shoulders of leaders (Jansen et al., 2009; Smith & Tushman, 2005). Considering the complex, interdependent and uncertain nature of BMI, we believe that leadership is vital to the BMI process.

Leaders may influence followers by what they *say* (e.g., vision or goal communication) and by what they *do* (e.g., role modelling or rewarding; Bass, 1985; Shamir et al., 1993; Howell & Higgins, 1990). Both types of behaviours may reduce uncertainty by giving direction and cues about what is acceptable or desirable behaviour from followers. By clarifying (long-term and short-term) directions, leaders may help participants in the BMI process choose which network ties to use, with whom, for what; and what sort of information and other resources need to be sourced, shared and combined within the team to design and implement the business model. What leaders communicate and what they do may also strengthen the identity of the group (van Knippenberg et al., 2004; van Knippenberg & Hogg, 2003), motivating team members to contribute to the BMI process and its success.

The dynamic BMI process

Complexity, uncertainty and interdependence in turn lead to a highly path dependent process. The success of developing a system with multiple interlocked components depends on frequent interactions and exchanges between the focal team and the stakeholders who are connected to these components. The tasks are different across various phases in BMI (Sosna et al., 2010), so the priority and nature of these interactions and exchanges also change across the BMI process, and such interactions and exchanges, in turn, feed back into the focal team and

shape its dynamics. Accordingly, the role of social networks and leadership will vary across the successive stages of the BMI process.

To explain these changes, we first need to characterize the successive stages of BMI. Although it appears that scholars in related literatures agree that innovation and venture processes go through various stages of development, there is little agreement on what these stages actually are. Burgelman (1983a, b), for instance, itemizes four stages of venture development: conceptual, pre-venture, entrepreneurial, and organizational. Garud and van de Ven (1992) describe the agenda setting period, expansion period, and contraction period. Bhawe (1994) outlines three stages as well: the opportunity stage, the technology step and the organizational creation phase. Kazanjian and Drazin (1990) viewed the progression of stages as reflections of the problems faced by an innovation project at a particular point in its development. In fact, stages, depending on the organization, can be more discrete (Zaltman et al., 1973) or more fluid (Schroeder et al., 1989). The labels and delineation of stages of BMI differ from one organization to the next (Ruhnka & Young, 1987) and even from project to project. However, although there is no consensus about the number and delineation of stages, what *is* clear from this literature is that stages *do* exist, each with a different set of tasks, activities and challenges. Hence, below we will assume that two fundamental stages exist in BMI, which we will label the concept stage and the development stage. Identifying these stages will enable us to conceptualize BMI as a path-dependent trajectory, where team variables in the concept stage influence the same variables, and ultimately BMI performance, in the development stage.

BMI teams start in the first period with an initial team configuration – composition and size, tasks (e.g., business model design) and roles (e.g., leadership behaviours such as charismatic or transformational leadership), and in-built access to social networks (characterized by individual and team network range, ties with whom, and with what tie characteristics). These factors facilitate the flow of intangible and tangible resources into the team. These resource inputs cue mediational factors – in the form of team processes (such as sharing of resources, building of networks), behavioural processes (such as conflict and internal politics), and the emergence of identity and motivation (Marks et al., 2001). This leads to team outputs, which depend on the specific task of the team but may be some form of resource utilization, e.g., a business plan (Galbraith, 1982; Ruhnka & Young, 1987; Kazanjian, 1988; Kazanjian & Drazin, 1990). In established organizations, these outputs are typically subjected to higher-level decision-making, e.g., reject, hold, or fund the initiative for the next stage. These outcomes, in turn, influence the starting conditions or inputs for the development stage, together

with additional resources implied by a positive decision in terms of funding and staff. Most importantly, the team itself changes (in terms of team composition, tasks and roles, team identity, etc.) when moving from one stage to the next. These starting conditions (in terms of team composition, tasks and roles, team identity, etc.), together with mediating factors in the form of team processes (such as conflicts and internal politics), will again influence team motivation, and so on.

These then provide the building blocks of our model: BMI and its stages and a dedicated team with its network and leadership, based on which, in the balance of this paper, we develop a new model integrating a BMI team's internal processes involving leadership, and its external processes, both related to its networks at the above-defined two stages. Our dynamic model also accounts for the change in the team itself when it moves from the concept stage to the development stage. Our model is novel in that it bridges network and leadership theories by explaining how a team's internal processes interact with its external processes to affect BMI outcomes. We show that the 'right' leadership can steer the direction and enhance the incentives of a team's sourcing activities through its networks, and thus enhance BMI performance.

In the following section, we outline our new model. We focus on the stages of BMI in chronological order: first, we discuss the necessary resources, critical stakeholders, important network features and effective leadership processes for the concept stage. Second, we do the same for the development stage.

2.3 Theory and Propositions

The Concept Stage

In the concept stage, the initiative is newly formed. The key concern is whether an identified opportunity can be realistically and successfully pursued. The team's objectives are to generate innovative ideas, and to screen and combine these ideas to design a business model. The targeted output may be a business plan or similar, (Galbraith, 1982; Ruhnka & Young, 1987; Kazanjian & Drazin, 1990), i.e. an object of judgment upon which the decision to continue, kill the initiative, or go back to the drawing board is based. If successful, the project will move forward to the development phase.

Team characteristics. The size of the team responsible for BMI is usually small at this stage; in extreme cases it could be a single individual. Status as a formal project may be tentative if at all granted (Kazanjian, 1988). Within the team, the division of labour may not be clear-cut. Team members may be generalists rather than specialists (Galbraith, 1982) and work closely together across multiple tasks.

At the early phase of the project, team members are typically building the BMI concept through a process characterized by effectuation (Wiltbank et al., 2006), or bricolage (Baker & Nelson, 2005; Miner et al., 2001), combining resources at hand to exploit new opportunities. Such activities take place in a highly uncertain environment. The uncertainty lies eventually in the value of the concept itself, someday to be validated in an external market, and more immediately in internal processes, as the BMI concept may or may not win the innovating organization's approval or be allocated resources for development.

Networks and informational resources. Intangible resources play the central role during the concept stage. As BMI is impelled by an organization's need to reshape the basis of competition (Almeida et al, 2009), the team needs to gain good understanding of the potential competition, partners, value chain and customers. This requires access to diverse and rich information from external parties. Meanwhile, the system-level nature of the desired innovation implies a need for broad knowledge about internal functions (sales, R&D, marketing, etc.), processes, resources, and competencies. The BMI team's access and ability to source such information and knowledge from a diverse range of its members' connections, and to recombine these in fruitful ways, is an important reason for bringing the group into existence, and the effectiveness of this search plays an important role in their chances of success (Ancona & Caldwell, 1992; Brown & Eisenhardt, 1995; Rosenkopf & Nerkar, 2001).

Search effectiveness depends in part on the group's network "range": the extent to which network connections span institutional, organizational, or social boundaries (Burt, 1992: 148-149). The highly uncertain nature of the task requires access to non-redundant sources of information (March, 1991; Taylor & Greve, 2006); non-redundancy also derives from high network diversity and range (Granovetter, 1973.) The team's collective network range is determined both by the number of ties possessed by individual team members and by the degree of overlaps among members' connections. When team members' ties overlap, the group can access less non-redundant information than if their ties are mutually exclusive.

In BMI, heterogeneous sources of information are more likely to provide conflicting information (leading to generative examination of the areas in doubt), various information (leading to a greater range of ideas and perspectives), and disparate information (leading to access to the 'long tail' of people with unusual skill sets or backgrounds in an organization, who know both about the organization's working and about some domain of knowledge) (Harrison & Klein 2007). While actors with homogenous networks are likely to view issues in a similar way, those with heterogeneous networks are more likely to see things from multiple perspectives, and hence are more able to understand and combine diverse information (Burt,

2005) to contribute to the creation of (radically) new business models. This leads to the following proposition, which, along with others, is depicted in Figure 2.1.

Proposition 1a: During the concept stage, teams with wider collective network range, and thus more access to non-redundant sources of information both inside and outside the organization, are more effective in sourcing informational resources, which positively influences performance at this stage.

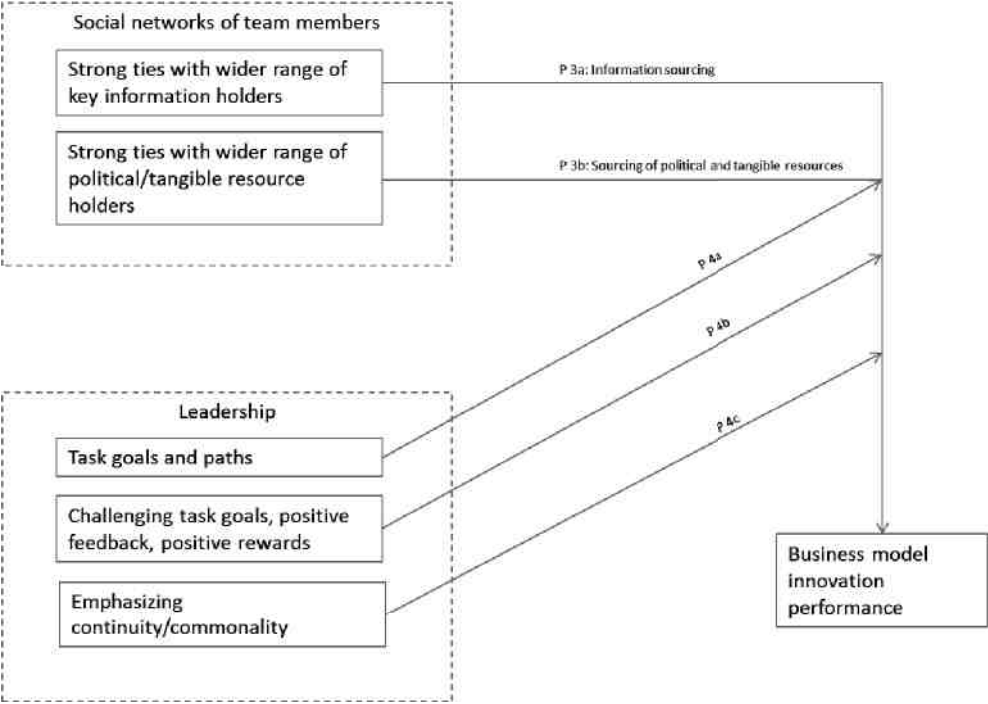


Figure 2.1: Concept Stage

Networks and external connections. As well as novel information from diverse sources, the BMI team needs to obtain in-depth knowledge and understanding of the needs, aspirations and dreams, habits and routines, and the economic and social context of a new client group (London, 2010), and the contextual intricacies of working with new types of suppliers or partners. Also, to navigate BMI’s complexity, the team needs to engage in exchange of rich, nuanced information, and joint problem-solving, with such external parties.

Thus, the team requires strong, boundary spanning ties, directly into the environment to which the organization is adapting (for example, with a member of the client group the new business model intends to serve). Boundary spanning ties may be formally constituted— as in a contractual or hierarchical relationship—or they may be ties embedded in a BMI team member’s network of connections. The chance of success in creating a new business model

concept can be significantly improved when the internal initiative is combined with an early stage external partnership, even in an informal way, (Zhou and Li, 2012). The boundary spanning connection with the external party must be strong enough to allow for high frequency of interactions and rich information flows, in order to support the BMI team in its efforts to craft a coherent new business model.

Successful collaborations in uncertain contexts—in this case, exploration and the creation of new solutions—require closer than arm’s length relationships. The development of such cohesive relationships with external parties may have taken place on past projects and therefore may already exist at the start of the focal BMI. Alternatively, if a team does not have such relationships, it may develop them. Collaborators will need to plan and enact episodes of social interaction, information sharing, and listening, encouraging participation and trust (Raes et al., 2011), creating an environment where it is attractive for parties to propose and “sell” ideas.

In sum, we propose that having strong relationships with at least one key external party is important to the success of the BMI team in the concept stage. While a broad range of informational sources may be sufficient in more traditional innovation settings for creativity and innovation (Hansen, 1999), we propose that in BMI settings, the need for access to fine-grained information from new contexts requires a strong connection with at least one key information holder external to the organization.

Proposition 1b: During the concept stage, teams with strong relationships with at least one external party in the context to which the BMI is addressed, are more effective in sourcing informational resources and increasing performance at this stage.

Networks and political support. Sources of information are found both internal to the organization and external, but political supporters (March, 1962; Ancona & Caldwell, 1992; Van de Ven et al., 1999; Kanter, 2000) are usually from inside the organization (Barden & Mitchell, 2007). Possessing ties to precisely those people who have the power to influence and support the BMI team is vital for sourcing political support (Oh et al., 2006). We expect strong connections to powerful actors in the organization’s dominant coalition (Thompson, 1967) to enable the team to obtain timely political support for its initiatives.

Political support anchors the innovation in the organization: it helps open doors to its capabilities and tangible resources, develop a legitimate place within the firm’s portfolio of activities (Anand et al., 2007), and withstand pressure from elements within the organization

that are disrupted by the change the BMI might represent. This anchoring is especially important if the BMI goes against the dominant logic of an organization's leading coalition (Prahalad & Bettis, 1986, Covin & Miles, 2007). In fact, all four of Prahalad and Bettis' original dimensions of dominant logic may be challenged by (successful) BMI: the firm's competitive strategy and its measures of performance, the values/expectations and the reinforced behaviour of its managers. Critical to the effort to innovate without being constrained by these aspects of the organization's dominant logic, is the strong support of one or a limited number of advocates (Markham, 2000), who are in a position to promote the BMI, are willing to put their reputation on the line to endorse the initiative and to give the BMI team the space to further develop the initial idea.

For political support at the concept stage, diversity and its concomitant, high network range, are less relevant, and may even be detrimental. When the idea of a new business model has yet to come into shape, exposure to a wider and more diverse audience may invite challenges or provide a conduit for requests (or demands) for the new idea to conform to various aspects of the existing business model(s), hampering the improvement of the idea at the concept stage and reducing the chance for its further development.

In the initial stage when the concept has not emerged, there is high uncertainty around the shape the BMI will ultimately take, and the future success of the project. Political support will have to be based in part on trust in the team's ability to succeed. Unlike information, which may travel through weak-but-diverse ties, political support is often offered on the basis of direct knowledge of past performance (Parise & Rollag, 2010), or with an expectation of future reciprocity (Coleman, 1988)—and thus is offered through direct and strong ties.

Whatever the origin of the tie, we propose that it is important to have a connection with a limited number of powerful or resource-holding (or influencing) figures in the organization. Where such a tie exists, the likelihood of a BMI team member being able to call in favours or even credibly to promise future favours in exchange for support is significantly enhanced (Moran, 2005; Uzzi & Lancaster, 2003)

Propositions 1c: At the concept stage, teams with strong connections with a limited number of higher ranking individuals inside the organization are more effective in the sourcing of political support than teams lacking such connections, increasing performance at this stage.

Vision Communication. The above suggests that social networks of the development team members are crucial for BMI to be successful. However, the mere *existence* of such ties

is not enough for them to contribute to success. That is, appropriate ties only indicate that there is a potential for sourcing required resources. Whether these resources are sourced, however, depends on (at least) three factors: whether the external stakeholders are willing to support the BMI team, whether team members are willing to use their networks for the BMI team, and the extent to which the team members utilize their networks in accordance with the goals of the BMI team. We argue that leaders and especially their communication can influence the likelihood that networks live up to their potential by affecting the factors above.

Directing the team. The team's main focus in the concept stage of BMI is addressing uncertainty by sourcing information. In order to allow teams to deal with uncertainty and not be inundated by it, leaders should intervene, and provide direction and a sense of purpose. Without such direction, it will be hard for team members to contribute to the team's success: when team members do not understand the purpose of the team, they cannot take the initiative in working towards achieving it. At the same time, leaders should not limit search activities or narrow the scope of team members' focus. Hence, in this phase of BMI, leaders should guide the team, but not limit it.

Transformational and charismatic leadership theories (Bass, 1985; Beyer & Browning, 1999; Burns, 1978; Conger & Kanungo, 1987) may inform leaders how to do this. Transformational and charismatic leaders aim to inspire and motivate employees to perform beyond even their own expectations (Bass, 1985). They do so by tapping into or transforming employees' needs, values, and norms, providing long-term guidance for employees' daily work. By displaying charismatic leadership behaviour, leaders may increase the intrinsic value of effort, accomplishment expectations, and the intrinsic value of goal accomplishment as well as instilling faith in a better future and creating personal commitment to a vision (Howell & Shamir, 2005; Mio et al., 2005; Emrich et al., 2001; Shamir et al., 1993, 1994). Although the specific behaviours that make up transformational leadership are heavily critiqued (van Knippenberg & Sitkin, 2014) the notion that communicating visions is at the heart of charisma is widely acknowledged (van Knippenberg & Stam, 2014).

Vision communication refers to communicating images of the future of a collective with the aim of convincing others of the merit of the images (Stam et al., 2010a, b). Visions are similar to (task) goals, but they are more abstract and long term and need not be accomplishable to be inspiring (Kirkpatrick & Locke, 1996). By communicating a long-term vision, leaders provide team members, and others internal and external to the organization, with an idea of the purpose and long-term task for the BMI process, creating a sense of purpose and direction for those involved (Berson et al., 2001). Hence, vision communication can improve performance

(Kirkpatrick & Locke, 1996; Stam et al., 2010a, b) and even lead to venture growth (Baum et al., 1998) and more (positive) media attention (Bligh et al., 2005).

Vision communication may also reduce uncertainty about the BMI and motivate the BMI team to perform better. By providing an image of what to aim for, team members are provided with a common purpose for their work. Although such an image is abstract and vague enough to not restrict team members from exercising discretion in choosing and carrying out their activities, it does provide some direction and therefore reduces the uncertainty that team members may experience (cf. Stam et al., 2014). In sum, a sense of common purpose is important because it reduces uncertainty and problems of complexity.

Because of the above, leadership may promote a better use of a team's social networks by giving a common purpose to the participants in the BMI process for the use of these networks. As visioning by leaders specifies direction and purpose (Stam et al., 2014), it can enhance the effectiveness of sourcing activities via team members' networks. Such leadership behaviours may guide a team members' sourcing activities (suggesting ideas for where to go and what to do), without limiting them. Indeed, it has been suggested that visioning is especially important in uncertain and complex contexts, when the leader cannot guide all activities of subordinates for these very reasons, as is the case in BMI (Uhl-Bien et al., 2007; Shamir & Howell, 1999).

Proposition 2a: In the concept stage, vision communication by leaders strengthens the influence of the range of networks, of the strong ties to external information holders, and of the strong ties to higher-ranking individuals on performance at this stage.

Motivating team members. Furthermore, in the early stages of BMI individuals are not only uncertain about the project and their common and individual tasks, but also about themselves and the group in which they have to work. Potentially beneficial exchange relations within the team, needed for successfully designing and implementing a new business model, may break down due to internal conflict and the high uncertainty and complexity associated with BMI teams. Thus, team members may not readily understand why they should commit their resources (i.e., their networks) to the team's ends.

Leaders may address these issues of complexity (and implied need for cooperation of people around a common task) and uncertainty (Hogg & Terry, 2000; Pratt, 1998) by creating a shared identity and feelings of cohesion (Van Knippenberg et al., 2004). Research shows that identifying with a group or organization may indeed enhance performance (Millward &

Postmes, 2010; Van Knippenberg, 2000), organizational citizenship behaviour (Barreto & Ellemers, 2002; Dukerich et al., 2002; O'Reilly & Chatman, 1986), and boost self-esteem (Hogg & Terry, 2000).

Vision communication may be critical to such identity work. Many studies have found that leaders may create a common social identity (Lord and Brown, 2004; van Knippenberg et al., 2004), leading Reicher, Haslam and Hopkins (2005) to call (charismatic/transformational) leaders “entrepreneurs of identity”. Vision communication may be an important tool to influence identities of followers (Lord & Brown, 2004; Stam et al., 2010a). For instance, Jansen and colleagues (2009) and Smith and Tushman (2005) argued that visions are crucial for innovation projects, because they create a common identity amongst employees. Shamir, Arthur, and House (1993) state that a way to strengthen the engagement of employees is discussing the collective identity of the company, and to address the common history of the company, to spell out company norms and values, and to emphasize that both employees and management are members of the same team, through vision communication. These effects have been confirmed by both qualitative (Shamir et al., 1994) and quantitative research (Kark et al., 2003). Stam and colleagues (2014) recently even suggested that emphasizing the collective and its values is necessary to create a sharedness of the vision because it activates the social self of followers. In sum, emphasizing the collective of those involved in the BMI process (team members, other participants inside and outside the organization) in vision communication will reduce uncertainty and problems of complexity, and motivate those involved in the BMI process, increasing performance at the concept stage.

Importantly, we expect that leaders can motivate team members to use their social networks through this communication as well. As team members identify with the team, they are motivated to cooperate and to contribute to the team (Ashforth et al., 2008; Riketta, 2005) for instance through using their networks for the benefit of the team. Vision communication, as an antecedent of identification, can therefore improve the effectiveness of sourcing and sharing activities. For instance, Beyer and Browning (1999) discuss how Robert Noyce, through vision communication, was able to create cohesion in the American semi-conductor industry and lead different American companies to cooperate and unite against an invasion of Japanese companies in their home market.

Proposition 2b: In the concept stage, emphasizing the collective in vision communication strengthens the influence of the range of networks, the existence of strong ties

to external information holders, and of strong ties to higher-ranking individuals on performance at this stage.

Motivating external stakeholders. However, even if leaders can motivate team members to use their networks for the team, and direct their effort towards the team's goals, these efforts are in vain if the network partners (key decision makers in the company, those that hold crucial information etc.) do not respond. How can leaders legitimate the BMI to such an extent that these partners are more likely to support the project?

Charismatic and transformational leadership theories suggest that emphasizing a crisis, as a component of vision communication, may be important to open individuals up to the ideas of a charismatic leader (Beyer & Browning, 1999; Conger and Kanungo, 1987; Shamir & Howell, 1999). Crises come with distress, negative emotions, and feelings of uncertainty and negativity (Dutton, 1986; Madera & Smith, 2009; Pearson & Clair, 1998; Pearson & Mitroff, 1993; Stubbart, 1987). As a result, followers are particularly open to leadership (Shamir & Howell, 1999), and especially to those leaders who are able to provide motivation, inspiration and a purpose (Bass, 1985; Conger & Kanungo, 1988). Hence vision communication calling attention to problems of the status quo, how a new business model might be different from the current situation (discrepancy), and how it can help mitigate the problems of the entire organization, can help to establish the needed BMI. In doing so, the potential new business model (or the vision for it) can be contrasted with current practices and be presented as a much-preferable alternative to the problematic current practices.

Such urgency and discrepancy can be a major influence for team members and others, both inside and outside the organization. Indeed, Schilling (2000) argues that urgency is necessary for companies to take action and Stam and colleagues (2014) argue that visions that emphasize crisis may get more attention. In addition to the team leader, a small number of power holders in the company may be crucially important for the BMI team to access tangible and political resources in the concept stage. It helps if these people are utterly convinced of the usefulness of a new and different business model. By emphasizing in their vision communication how a new business model might be different from current practices, and thus why it is urgently needed, leaders can give those involved in the BMI process both a better sense of direction and motivate them to contribute to it.

Proposition 2c: In the concept stage, leadership emphasizing discrepancies between the BMI and current practices in vision communication strengthens the influence of the range of

networks, the existence of strong ties to external information holders, and of strong ties to higher ranking individuals on performance at this stage.

Thus, we argue that leader communication that focuses on communicating a vision, that emphasizes the collective and that focuses on the discrepancies between the BMI and the current business, is most likely to lead to optimal use of a team's social networks. We note here that, although we specified the distinct processes underlying the effects of vision, collective identification and discrepancies, these communication elements are inherently related. First, effects of these elements may overlap. For instance, emphasizing the discrepancies between the BMI and current practices may not only affect external stakeholders, but also motivate internal team members to contribute to the team. Second, one element may strengthen the effects of another. For instance, emphasizing discrepancies may be a tool for leaders to create more clarity on the vision and direction of the BMI itself and thus strengthen the effects of visioning. In other words, the three communication elements discussed above form an integrative whole that serves as a basis for optimal communication by BMI leaders in the concept stage.

Transition from Concept to Development Stage

In BMI, the outputs or endowments of the project at the concept stage (e.g. information, funding, more or different human resources, technologies) provide inputs for the next stage (cf Ilgen et al, 2005). For at least four reasons, the BMI team will change over time and itself constitute an input to the next stage: the number and type of its members, their roles and tasks, the type of networks of the team, with whom and for what. First, as the project develops, a broadening scope and size may create a need for more tangible and human resources, requiring a change in the composition and size of the team. Second, as more human resources need to be managed, team members are likely to experience a shift from conducting search to more managerial tasks. Third, members may develop new ties inside or outside the organization, or weak ties can 'thicken' into strong ties, or new team members may add ties to the team's network. Finally, team members may leave due to illness, shifting priorities, or differences of opinion. For all these reasons, we believe that for an adequate delineation of the dynamic and path-dependent BMI process it is necessary to take into account the changes in the team itself.

The Development Stage

At the development stage, the direction of the initiative is now clearer (Ruhnka & Young, 1987) and the project has likely been formalized (Bhave, 1994). The outline of the project has been approved (for instance, in the form of a business plan) (Ruhnka & Young, 1987) and the team's task is to execute and launch the initiative successfully. Performance at

this stage is likely to be subjective, at least from the organization's perspective. Ultimately, performance is based on the value created and captured by the new business model.

Team characteristics. With the project moving to the development stage, the size of the BMI team increases, with hierarchy and formalization of tasks introduced (Galbraith, 1982; Ruhnka & Young, 1987). Tasks at this stage may include the development of an IT platform (if part of the business model), or an in-depth market study to gauge potential demand, developing or testing a prototype for the new product or service, or one or more pilots, together with internal or external partners. With the overall direction now clearer, the roles of team members in the project now are often more defined and discrete.

Coming out of the concept stage, the team's network has also grown larger, with more connections developed by existing team members and additional connections brought in by new team members. BMI teams that have successfully moved onto the development stage may well feature a network with a wide range of connections with groups and actors inside and outside the organization, combined with cohesive relationships with at least one external party, and strong connections with a small number of higher-ups in the organizational hierarchy. Although such a network is, as we have argued, effective in sourcing the necessary inputs in the concept stage and hence enhancing the team's performance in that early phase, it may not be optimal when the team moves to the next stage, as the team faces a new set of challenges, and the critical inputs required in order to succeed have changed.

Networks and informational resources. When BMI moves to the development stage, the kind of information needed for BMI success changes as well. A diversity of sources of information becomes less important than depth of knowledge in selected domains. Where at the first stage the focus is on *what* may be possible, now the emphasis shifts to *how* the innovation may be created (Ruhnka & Young, 1987). The focus of the project shifts from sourcing and trying out a wide variety of information, to the effective fine-grained transfer of complex and tacit knowledge in order to collaboratively solve emerging issues (e.g., marketing, technical, financial, possible supply and distribution issues) (Galbraith, 1982), problems, and constraints in the project's development (Bhave, 1994).

Not all ties that were developed in the concept stage are equally relevant to the further development of the business model. Hence, the team is likely to engage in a selection process to identify which ties are important, followed by investment into strengthening these ties, increasing their "bandwidth", and converting them to stronger relationships. Whilst in the concept stage, strong relationships between the team and one or a very small number of external parties may be sufficient for high performance; in the development stage, more cohesive

relationships need to emerge around a larger number of selected partners, both within and external to the organization.

Depending on the specific business model, these strong ties may connect with various functional units, departments, or business units within the organization. The same holds true for external parties and recent studies have shown such strong external ties are conducive to innovation success (Foss et al, 2013, Love et al, 2014).

While such ties take more time and effort for team members to develop or to maintain, they also enable the transfer of complex knowledge, to identify and jointly work on emerging problems and constraints, and to co-innovate new solutions (Nahapiet & Ghoshal, 1998; Capaldo, 2007), all of which is important at this stage. This proposition, and others about the development stage, are also depicted in Figure 2.2.

Proposition 3a: During the development stage, teams with strong relationships with a number of internal and external contacts are more effective in the sourcing of informational resources, which improves performance at this stage.

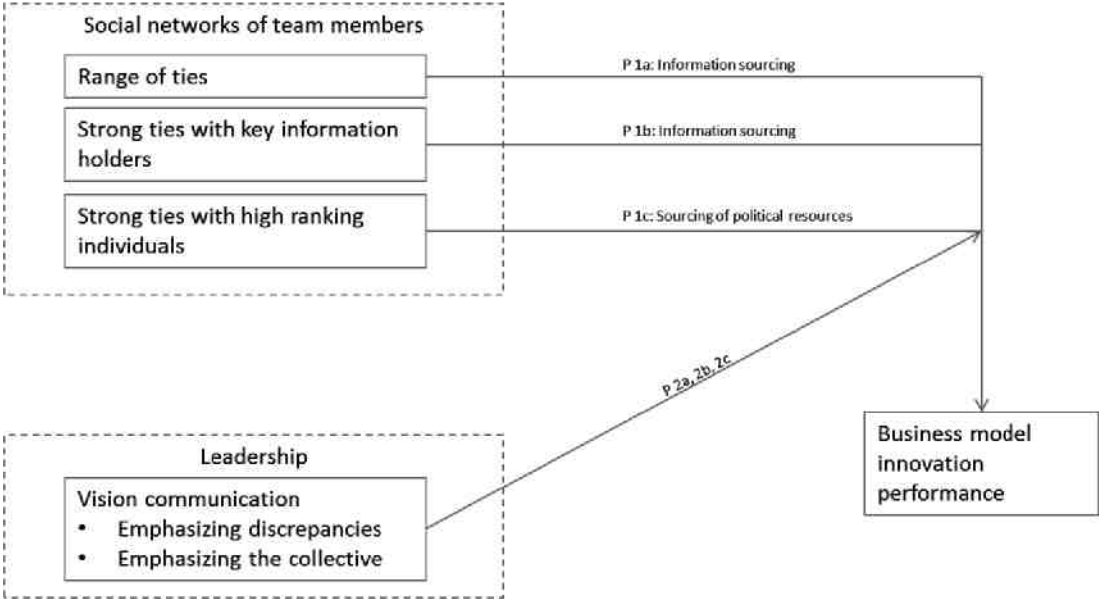


Figure 2.2: Development Stage

Networks and political support. Ancona and Caldwell (1992) noted that less effective product development teams got ‘stuck’ on the activity of scanning for and discussing possible variations to its idea, lacking support from political higher-ups— similarly, successful BMI teams, when moving from the concept stage to the development stage, need to change their focus from being influenced by their environment to influencing it. The degree and nature of

required political support to obtain the needed tangible resources also shifts at this stage; instead of simply giving permission or encouragement for the team to exist, higher-ups are needed to approve typically substantially larger investments in terms of people and funding. Where the support of a single champion may have been sufficient during the concept stage, the development stage requires a broader range of support (Burgelman, 1983a, b), including possibly from senior levels of the organization, especially if the BMI is going to sit at the ‘top table’ of the organization’s activities (Anand, et al., 2007). Accordingly, the network features required to source intangible and tangible resources and to develop political support must also change.

As a BMI project develops, one of the main threats to its existence or eventual success is over-reliance on a single source of tangible or political support. A single sponsor or financial supporter may be working under exogenous deadlines or resource restraints that do not necessarily accord with the development needs or life cycle of the project (Van de Ven et al., 1999). Even if a project survives the concept stage under the protective guard of a single sponsor, when it reaches the development stage it will require assistance from departments or divisions of the company beyond the sponsor’s direct control. Projects that are overly identified as coming from a particular organizational context may meet resistance from other areas of the company. A project that goes on too long without attracting the patronage of others besides its founding sponsor may be seen as a “pet project”, rather than a broadly supported initiative. The development of a cohort of patrons or sponsors may lead to helpful consensus about the prospects for and importance of the particular innovation as well.

Proposition 3b: During the development stage, teams connected with a wider range of higher-up individuals in the organization are more effective in sourcing political support, which enhances performance at this stage.

Leadership and directing the team. As in the concept stage, we argue that leadership can help to optimally leverage networks in the development stage. However, in this stage, we propose, leaders should display different behaviours to accomplish this, because the team and its environment have changed. For instance, as the BMI project moves from the conceptual stage to the development stage, BMI teams are likely to become bigger and change in composition over time and across phases of development (Galbraith, 1982; Ruhnka & Young, 1987; Kazanjian, 1988; Kazanjian & Drazin, 1990). As more people get involved, the overall complexity of the BMI project increases; as more parties get involved and need to coordinate

roles, the project itself becomes more fine-grained and is divided into smaller constituent pieces. A more formal hierarchy needs to be put in place and the leader may have to start managing people more formally and directly. All of this has an influence on leader behaviours as well.

As tasks become more formalized and the purpose of the team becomes clearer, leaders should display more individually-oriented behaviours (House, 1971). As the project has become clearer, direction becomes more definite and freedom to deviate smaller. Moreover, as more members join the team and individual tasks are more detailed and structured, uncertainty diminishes. Hence, the need for high-level abstract leadership behaviours (like charismatic behaviours) becomes less pronounced (although not completely disappearing). Leaders have more leeway to individually direct members' efforts, and the same applies to (sub-) projects with other parties, inside or outside the organization. We use path-goal theory and transactional leadership theory to provide insight into how BMI leaders can offer such more direct guidance.

Path-goal leadership theory promotes leadership behaviours such as directive path-goal clarification, supportiveness, participation, and achievement orientation (House, 1971, 1996). These behaviours provide structure for followers, clarifying expectations, guiding work, and creating a supportive and friendly work environment. Path-goal leadership behaviours empower followers and encourage them to strive for performance excellence (House, 1996). Clear goals that are hard to reach, yet not impossible to attain, are most likely to lead to goal accomplishment (Locke & Latham, 1994, 2006).

Transactional leadership is oriented to rewarding (or punishing) members based on their accomplishment of tasks and task goals (Bass, 1985; Burns, 1978). Similarly to path goal theory, transactional leadership emphasizes that leaders should carefully explain task goals to BMI team members and those they cooperate with, both within the organization and externally, guiding them to accomplish these goals. By providing specific individual and (sub-)group task goals and helping team members to reach these goals, task uncertainty is reduced, while complexity (e.g., how to cooperate with others in the BMI process) is explicitly dealt with.

Through transactional leadership and path-goal leadership, specifying which goals to reach and how, leaders can also enhance the incentives for and effectiveness of sourcing activities through team networks. Leaders who help team members formulate clear task goals and specify a path for attainment can help team members to optimally source information.

Proposition 4a: In the development stage, leadership that provides concrete task goals and paths to accomplish these goals strengthens the influence of members' networks on performance at this stage.

Motivating team members. As the team grows and its structure and tasks become more formalized (Bhave, 1994, Ruhnka & Young, 1987), motivating people becomes more of an individual issue. As the group's identity becomes clearer and leaders manage members more directly, leaders have the opportunity to motivate team members and others within and outside the organization through means that might not be effective at the concept stage. As the number of tasks increases and the impact of each task on the overall project becomes smaller, it becomes more important for participants in the BMI process to understand how their relatively small tasks influences overall performance, in order for them to experience feelings of self-esteem (i.e. general positive feelings about the self, Campbell & Lavalley, 1993). As more people join, it may be hard to understand one's unique contributions relative to others'. This is important since, if team members and other participants in the BMI process are to successfully perform tasks, they will need to believe in their capabilities to do so (i.e. self-efficacy – the belief that one is able to perform a specific task, Bandura, 1997). Both of these issues, self-esteem and self-efficacy, deal with individual self-evaluative aspects of identity – how one evaluates the self – and leaders play an essential role in managing these issues (van Knippenberg et al., 2004).

We argue that leaders may influence self-evaluations of team members and others involved in the BMI process through several practices related to path-goal leadership and transactional leadership. By specifying the relationship between individual tasks and overall group goals, leaders create a sense of impact and meaningfulness that is important for individuals' self-esteem (Spreitzer, 1995; Thomas & Velthouse, 1990) and a team's effectiveness (Kirkman & Rosen, 1999). In addition, setting high goals signals that the leader believes in the abilities of the team member and external participants, strengthening their sense of self-efficacy and of goal commitment (Locke & Latham, 2002; Klein et al., 1999). Finally, providing feedback and rewards about goal attainment shows people that they are taken seriously, enhancing their feelings of being respected (Branscombe et al., 2002; Simon & Stürmer, 2003; Williams & DeSteno, 2008). All of these effects will strongly enhance motivation to accomplish the set goals. As a consequence, team members are more likely to use their social networks for the team.

Proposition 4b: In the development stage, leadership that provides challenging task goals, positive feedback about task performance, and positive rewards upon task accomplishments enhances self-evaluations of team members, increasing the influence of members' networks on performance at this stage.

Motivating external stakeholders. We argued earlier that in the early stage of the BMI process, leaders should emphasize discrepancies between the BMI and current practices in the company. There is a caveat however. Solely identifying problems of the status quo risks creating a sense of insecurity and uncertainty about the future of the organization and importantly, individuals' place in the future organization. As the project enters the development stage, the team grows, and it requires a greater variety of intangible and especially tangible resources, involving a greater number and diversity of political heavyweights, higher up in the organization. Bigger investments are involved, and more external parties. This forces the team to legitimize its existence to a broader set of constituents inside and outside the organization. Only emphasizing how the BMI differs from problematic current practices may be important in the short run, but may not be optimal as the project moves forward (Stam et al., 2014). As the project formalizes and increases in scope, size, and aims to reach towards higher levels in the organization, it becomes more important to show how the project links to the overall organization as well.

Specifically, it becomes more important that leaders present a consistent identity of their organization in order to motivate a broader range of followers (van Knippenberg et al., 2004, Shamir et al., 1993) within and outside the organization. It becomes more important to show a connection between the old and the new. By showing how the project fits within a larger picture, the broader narrative of an organization's overall strategy and identity, and how the new business model helps to reinvent and reinvigorate this for the future, the insecurity and the sense of being an outsider is diminished (Stam et al., 2014). This is especially important in development stage of the BMI process, as more individuals are involved in sourcing tangible and political resources, and these individuals need to be convinced of the benefit of the BMI not only in changing the current situation of the company, but also in fitting within the company's overall scope.

By emphasizing how the BMI process fits the overall agenda and identity of the organization, a broad variety of participants in the BMI process from different departments, functional units, and at all levels required, may feel more motivated to contribute to the BMI process and provide the required information rather than to mobilize any available dark forces working behind the scenes to sabotage the new initiative or, more subtly, to fail to contribute to its success.

Proposition 4c: In the development stage, leadership that emphasizes continuity or commonality between the BMI and current practices strengthens members' common identity and consequently the influence of members' networks on performance at this stage.

We note here that again these communication elements are not independent from each other. For instance, the effects of goal setting may be critically dependent on the extent that people feel positive about themselves (as a result of feedback, challenge and rewards). Also, communicating consistency between the BMI and the organization's goals may not only motivate external stakeholders, but may also motivate team members to use their networks for the sake of the team. A final remark concerns the relative importance of the communication elements discussed under the concept stage heading (vision, the collective, and discrepancies). Although these elements are less influential in the development stage, they are not completely unimportant. As such, we would argue that providing (challenging) goals, feedback, rewards, and consistency are additions to the earlier communication elements discussed rather than substitutes.

2.4 Discussion and Conclusions

Strategic change and competitive advantage are increasingly associated with developing new business models (IBM, 2013; the Boston Consulting Group, 2009). However, currently we have very little theory on how to manage BMI. Previous literature on BMI emphasised the design of business models and components of activity systems, and more recently explores the process of BMI. However, this emerging literature is relatively a-theoretical, and typically does not conceptualise the mechanisms driving BMI success. Our paper seeks to fill this theoretical gap, by presenting new behavioural theory on the process through which new business models are (successfully) developed, from concept to launch. We hope our new theoretical approach, anchored in, and synthesising insights of, leadership theory, social network theory, and innovation research, will serve as a platform inspiring new theory and empirical research in this emerging, currently rather fragmented field.

We argued that BMI has distinct characteristics, with typically more uncertainty, complexity, and interdependence, than more conventional types of innovation, such as product and process innovation. Nevertheless, the validity of our model, using leadership, external networks of teams, and their interactions, and how this varies in terms of their influence on performance from one stage to the next, may be explored for other settings as well. For instance, in the new product development literature, Ancona and Caldwell's (1992) qualitative study documented that "ambassadorial" activities of new product development teams, information seeking, co-ordination of activities and 'guarding' of the innovation process within a team were key to success, although these researchers did not consider the interaction of team processes and such activities. Although new product development teams generally do not experience the complexity and uncertainty that BMI teams experience, our theory might nevertheless inspire

new team-based theory of radical product innovation (i.e., new product development that is relatively uncertain) as well.

We believe our work also contributes to social network theory. Social network theorists have already examined which types of networks facilitate innovation (Uzzi & Spiro, 2005) and even focused on teams (Reagans & McEvily, 2003). However, as Kilduff and Brass said in their recent (2010) overview of social network theory, “(p)erhaps the most frequent criticism of social network research is that *it fails to take into account human agency...* (italics added)... and to show how “intentional, creative human action serves in part to constitute those very social networks that so powerfully constrain actors in turn.” New theory, as developed in our paper, on how specific leadership styles strengthen a team’s common identity and purpose, motivating team members to better use their existing social networks, is perhaps one promising avenue to begin to fill this gap.

Likewise, social psychologists have studied team creativity and innovation as output variables, but did not examine how and why a team’s internal processes (e.g., team leadership and identity formation) interact with external processes such as the flow of information and other resources through its external networks. We developed such theory for the context of BMI: on how social networks and leadership styles interact in terms of their influence on performance and why, as teams move from BMI concept to development.

We also developed, through our dynamic stage model, theory (cf. Ilgen et al., 2005) on how the team itself changes in the course of the BMI endeavour and how these changes constitute an input to the second, development stage. It is straightforward to illustrate the path-dependency of this process. Suppose, for instance, a small team in the concept stage, with a charismatic leader emphasizing the collective in vision communication, reinforcing the team’s sense of a common identity and purpose, motivating them to use their ties with higher ranked managers and with external parties, and to share and combine ideas, information and other resources within the team, when developing a business plan. This may lead to a high quality business plan which gets approved, but also forms an excellent start for the development stage, with a core team with a common identity and purpose, and intact networks supplemented with new team members (as part of the additional support), all of which may increase the likelihood of success in the development stage. In contrast, an ineffective leader in the concept stage with a poorly motivated team may deliver a weak business plan. If at all approved, this team will start the development phase weakly in terms of its size, networks, identity and purpose, and with a sub-optimal plan, all of which may contribute to failure during the development phase.

As this example illustrates, path dependency has real and important implications, not only theoretically, but for practical reasons as well.

The dynamic part of our theory was inspired by prior theory such as Ilgen et al.'s (2005) IMOI (Input-Mediator-Output-Input) stage model. We do think, however, that a more formal modelling for our setting of BMI would suggest a slightly different formulation (than IMOI), as in our context the dynamics imply potentially important changes in the team ("T") itself as well. As the number of the team's members, their roles and tasks, the range, pattern and content of their network ties change, so the functioning and abilities of the team change. For these reasons, we would suggest a "TIMOTI" model for our setting, capturing changes in the team itself as well. Future theoretical and empirical research can provide more insight.

We believe our theory may also add to the corporate venturing literature and to the ambidexterity literature. Previously, researchers in corporate venturing (Galbraith, 1982; Burgelman, 1983a, b; Garud & Van de Ven, 1992; Bhavé, 1994; Archdivili et al., 2003; Cornelissen & Clarke, 2010) and the ambidexterity literature (O'Reilly et al., 2009) have also studied how new ventures emerge in established organizations. Some studies examined the process of developing new ventures using rich case study analysis (Burgelman, 1983a, b; Garud & Van de Ven, 1992). Burgelman (1983a, b), for instance, studied where new ventures come from in a large corporation such as Intel, and how they get funded and ultimately legitimized as part of the corporate strategy. Other studies examined conditions for successfully developing new businesses away from a firm's core business, such as the vision of corporate leaders or CEOs (Smith & Tushman, 2005; Jansen et al., 2009), or effective alliances or networks with external partners (Lin et al., 2007). The idea of process is at the core of the ambidexterity literature (Gibson & Birkinshaw, 2004; Raisch & Birkinshaw, 2008; O'Reilly & Tushman, 2008) although this (firm-level) research typically reduces the entire BMI-process to a single concept, i.e., exploration. None of these literatures however developed theory at the micro-level of how and why external *team* factors (types of social networks, with whom, and for what) and internal team factors (e.g., types of leadership) interact to influence BMI performance, and how this varies across different stages of BMI. Hence, we believe our new theory adds to these existing research streams as well.

We hope our new theory will also inspire empirical work, theoretically extending and empirically testing the theory and propositions developed in this paper. We strongly encourage qualitative work as well. We think we argue on good grounds that social networks and leadership are important in BMI settings; however, qualitative research may reveal other, even more important drivers of the BMI process and performance at various stages.

Qualitative research is particularly important when studying non-traditional settings, other than the West, where most of our theories come from, including on teams, leadership and networks. Qualitative work on BMI in Asia, Africa, and South America would add much to our study (Barkema et al., 2012), particularly when examining BMI in types and settings of organizations that are currently underexplored by management researchers. At the “economic base of the pyramid,” (Prahalad, 2010), for instance, new business models are beginning to enable companies, social enterprises and NGOs to succeed economically while creating social value for clients in sectors such as mobile banking, health care, and solar energy (George et al., 2012). Qualitative work on how new businesses evolve over time in congruence with social impact (and what this means for recipients) might offer important new insights to the field of BMI, the broader field of management, to the social psychology of teams and leadership, and to social network theory as well. We strongly encourage such research.

CHAPTER 3

AN ORGANIZATIONAL PROCESS MODEL FOR RESOURCE CONSTRAINED SETTINGS: THE CASE OF MJUNCTION ²

3.1 Introduction

As companies emerge post-crisis in the West, waking up to new competitive realities and new expectations and demands from society, innovative business models are increasingly seen as an important source of competitive advantage. Recently, low-cost business models have attracted considerable interest; for instance, those of companies in emerging economies, some of which are seen as hotbeds for low-cost innovation (such as Tata with its Nano), and of organisations with specific economic and social goals (Ansari, Munir, & Gregg, 2012; George, McGahan, & Prabhu, 2012; Prahalad & Hart, 2006). Low-cost business models are seen as increasingly relevant for the developed markets of the West as well, with increasing segments (e.g. the elderly and youths) on stagnant or declining incomes (Radjou, Prabhu, & Ahuja, 2012). Although – as concluded by the editors of a recent special issue (George et al., 2012) – the clear relevance has been widely recognised, we currently lack theory on the organizational *process* of developing these low-cost business models. George et al. (2012) suggested that longitudinal, qualitative research is needed to develop such new theory. Our aim with this paper is to do precisely that.

Low-cost business models in India have been described as the result of “Jugaad”-innovation, or ‘make do’ (in Hindi) with resources at hand (Radjou et al., 2012). As a theoretical lens for our study, we therefore used theory on ‘bricolage,’ defined as “making do by applying combinations of the resources at hand to new problems and opportunities” (Levi-Strauss, 1962). Earlier, Baker and Nelson (2005) used this lens (and qualitative research) to propose a process model for developing new businesses under resource-constrained conditions. However, they did not develop an *organisational* process model, in terms of which organizational factors contributed to the process and why. Our aim is to do exactly that.

We also used leadership theory as a sensitizing lens. Leadership is particularly effective if: a task is challenging, if conditions or directions are uncertain, and/or if short-term results cannot be measured and monetized through financial rewards (Shamir, House, & Arthur, 1993) – precisely the conditions that are present when developing new business models (Bucherer, Eisert, & Gassmann, 2012; Stieglitz & Foss, 2015). Given the early stage of theory development, and that our theories – on bricolage and leadership – came from very different

² This chapter was written as a paper and is co-authored with H.G. Barkema and S. Soylu.

settings (mainly, the US and Europe although Levi-Strauss' (1962) bricolage theory was inspired by anthropological studies of non-western people) than the one studied here (India), we were open to other potential explanations as well.

Interest in new business models in general rose to new heights in the 1990s, along with the rise of the IT sector in the US where new business models seemed to create enormous value (Teece, 2010). Many new developments in IT are however now happening in emerging economies, with India arguably on the forefront of attention in this respect (George et al., 2012). Emerging industries, such as the on-line auction market in India (studied here), are often highly resource-constrained; and resource-constrained settings are a particularly interesting arena to study low-cost business models (Aldrich & Fiol, 1994). Capturing these aspects, we selected TATA as a research subject, an Indian company well-known for its innovative low-cost business models. More specifically, we focused on MJunction, a spin-off of Tata. MJunction was launched in 2001 following the burst of dot.com bubble. From a theoretical sampling perspective, new business development at a new Tata company, in India, in IT, right after the dot.com crash, seemed like an ideal ('extreme') case to study.

MJunction initiated a variety of different business models in e-commerce, including internet-based auction markets for coal and steel (cutting out the middlemen, including the mafia, from distribution channels); selling electronics to consumers; selling used cars; and organising conferences. It quickly became one of the largest e-commerce players in India and as a whole very profitable. Success came quickly for some of its business units (BU, hereafter), within months, others however took many years. We conducted a longitudinal (2010 to 2014), multi-level case study of six BUs (which varied widely in terms of success; Eisenhardt, 1989) within this one organization to identify which organizational factors appeared to be behind successful processes, how they contributed, and why (Whetten, 1989).

The main insights were theoretical. We found that 'bricolage' was key; however, surprisingly, this did *not* distinguish high- from low-performing business models per se. High-performing business models combined bricolage with "exploration" and "exploitation" practices (March, 1991); ways of thinking that have previously been seen as incongruent (Levi-Strauss, 1962) or paradoxical (Smith, 2014). Moreover, we found that these processes were driven by distinct leadership features at both the firm- and the BU-level. These organizational processes – combining bricolage, exploration and exploitation, and leadership – changed fundamentally when the firm moved from the entrepreneurial phase to a more mature phase, as captured by the new multi-stage, multi-level organizational process theory developed in this paper.

Below we will first present the theory used to sensitize our research questions. After which we will discuss our methodology, key findings, insights, and conclusions.

3.2 Theoretical Background

Bricolage theory

The concept of “bricolage” was introduced by Levi-Strauss (1962) based on anthropological studies of a great variety of people across the globe and how they – within their social structures such as communities and kinship – understood, gave meaning to, and made use of objects in their natural and social environment. The bricoleur’s “universe of instruments is closed and the rules of his game are always to make do with whatever is at hand” (Levi-Strauss, 1962: 11), put to different use depending on the situation. Resources and opportunities are not objectively given but socially constructed, implying differences in growth trajectories of organizations (Baker & Nelson, 2005). Levi-Strauss contrasted the “bricoleur” with the “engineer,” whose knowledge is abstract, detached, and distant from a concrete problem, searching externally for resources (objects, information), and adapting them to the project (Baker & Nelson, 2005). “The engineer is always trying to make his way out of and go beyond the constraints” (Levi-Strauss, 1962: 13). Although both imply “parallel modes of acquiring knowledge” (Levi-Strauss, 1962: 9), they are seen as “two distinct ways of scientific thought” (p. 10). Bricolage can surprise and sometimes generate brilliant results, equal or superior to engineering solutions in early stages, but advanced engineering leads to better results (Levi-Strauss, 1962).

The concept of bricolage has been applied to entrepreneurship under resource-poor conditions. Baker and Nelson’s (2005) qualitative study, set in a declining mining area in the US, showed entrepreneurs engaged in improvisation (Miner, Bassoff, & Moorman, 2001), ‘making do’ with ‘resources at hand,’ refusing ‘to enact limitations and a bias toward action’, in terms of the ‘recombination of resources for new purposes.’ Baker and Nelson (2005: 333) therefore defined bricolage as “making do by applying combinations of the resources at hand to new problems and opportunities,” supported by multiplex relationships with clients: friendships turning into clients, and vice-versa. They observed, in fact, two types of bricolage. “Parallel bricolage”, or bricolage in its most extreme form; making use only of the available set of physical inputs, skills at hand, and personal networks, and “selective bricolage”; rejecting bricolage in at least one domain, enabling organizations to routinize and grow, unconstrained by the behaviors that led to their initial success. These findings led to a process model for entrepreneurial growth, driven by making do, resources at hand, and recombining resources,

with some organizational factors (e.g., friendship and multiplex ties) enhancing the process of bricolage (Baker & Nelson, 2005).

While one-agent settings are typical for early-stage entrepreneurs, technological and organizational development trajectories may be best understood in terms of multiple, co-creating and –learning groups. Garud and Karnoe (2003) provided a rich description of how Danish engineers and entrepreneurs combined resources at hand to solve a variety of problems and exploited new opportunities in the Danish wind turbine industry. They observed that the Danish ecosystem (of wind turbine producers, users, government, and testers), incrementally adjusting existing technologies through bricolage as part of a trajectory of co-creation and co-learning, outperformed US producers focusing on ‘break-through R&D’. Interestingly, a later study (Hendry & Harborne, 2011) – broader in scope and longer in time-horizon – observed that although this may have been true in the 1970s when the technological trajectory started, in the 1980s large, formal R&D programs and learning by search actually became more important for success in this industry.

Baker and Nelson (2005) concluded that “there has been scanty prior use of bricolage in organization studies,” a situation that has not changed much in the past decade. This work on Western resource-constrained settings suggests useful definitions, characteristics (‘make do’, recombining resources at hand) and boundary conditions for bricolage (early growth stages), and a few organizational antecedents (friendship ties; multi-agent settings facilitating co-learning and -creating technological trajectories). Nevertheless, we appear to be in early stages of theory development on the role of bricolage in the process of organizational growth, including on what organizational factors influence the process of bricolage and firm growth, and why (theoretical logic), when (e.g., growth stage) and where. For example, little is known about resource-constrained settings such as emerging economies in Asia, despite ‘making do’ (or Jugaad) being described as central to low-cost business models (Radjou al., 2012).

Leadership theory

The process of setting up new ventures involves great risks and uncertainty (Barkema & Vermeulen, 1998), requiring effective leadership (Shamir et al., 1993). Leaders may influence followers by what they *say* (vision or goal communication) and by what they *do* (role modelling or rewarding; Bass, 1985; Shamir et al., 1993; Howell & Higgins, 1990) and reduce uncertainty by giving direction about what constitutes acceptable or desirable behavior from followers (Kuhnert & Lewis, 1987). Leadership plays an important role in resource-constrained settings: the leader's charisma is essential in realistically assessing environmental resources and constraints to come up with effective strategies (Conger & Kanungo, 1987). What leaders say

and what they do may strengthen the identity of the group (van Knippenberg, Knippenberg, De Cremer, & Hogg, 2004), motivating team members to contribute to the business model development process and its success. If a task is challenging and if conditions or directions are uncertain, if short-term results cannot be measured and monetized through financial rewards, or when faith of team members can be mobilized, leadership is particularly effective (Shamir et al., 1993). These are precisely the conditions that are present in the case of business model development, particularly in resource-constrained settings.

Moreover, new business development requires creative ideas. Hence, a leader's support for creativity is essential. The delegation of authority and the use of expert knowledge enhance the generation and implementation of creative ideas (Krause, 2004). Transformational and transactional leadership styles increase the number of creative ideas (Howell & Avolio, 1993; Shin & Zhou, 2003; Gong, Huang & Farh, 2009). Leaders maintaining positive relationships with followers, support the implementation of creative ideas (Scott & Bruce, 1994). And leaders who strengthen psychological empowerment of followers, increase the generation of creative ideas at work in the long run (Zhang & Bartol, 2010).

Beyond fostering creativity, leadership is a core function in innovation teams. Clark and Wheelwright (1992) argued that in those team structures that are most suitable for radical product innovations – heavyweight team structures and autonomous team structures – leaders have a central role. Others have argued that the responsibility for the implementation of creative ideas in firms lies squarely on the shoulders of leaders, e.g., top management teams (Jansen, Vera, & Crossan, 2009; Smith & Tushman, 2005). Leadership styles at the firm and BU-levels are significant determinants of organisational innovation and BU performance (Howell & Avolio, 1993; Jung, Chow & Wu, 2003).

Furthermore, Bucherer et al. (2012) state that top management involvement in setting up new business models is even more important than in the case of product innovation. According to Doz and Kosonen (2010: 371), to develop new business models, firm-level top management has to make "bold and fast decisions without being bogged down in top-level 'win-lose' politics". Smith, Binns and Tushman (2010) argued that the successful development of business models require leaders to sustain the integration and unity among BUs. In sum, leadership is clearly important for the success of new business model development, and for sensitizing our research questions on what organizational factors influence the process of developing (successful) business models, and why.

3.3 Methods

Research Design and Setting

We aimed to uncover which organizational factors influenced the process of developing new business models, and why, including the under-explored intersection of firm-levels and stages (Burgelman, 1983; Garud & van de Ven, 1992; Raisch, Birkinshaw, Probst, & Tushman, 2009). Hence, we did a qualitative study. This enabled a more holistic account of a novel phenomenon which existing theories do not explain well (Eisenhardt, 1989; Yin, 1994; Ozcan & Eisenhardt, 2009; Lee, 1999). It also helped to uncover the process of events and actions, in terms of the underlying factors and mechanisms (Miles & Huberman, 1994; Maxwell, 1996). We used an embedded multiple-case format³ enabling a ‘replication-logic’ (Eisenhardt, 1989) to build a more robust, accurate, and generalizable theory than a single-case study might have done (Eisenhardt & Graebner, 2007; Yin, 1994).

We selected the IT industry (a hotbed of low-cost business model development), for similar reasons to Amit and Zott (2001). This industry has globalized since the 1990s however, and is now strongly coming up in Asia, with India as one of the countries on the forefront. In fact, India is as seen as a hotbed for business model innovation, in particular low-cost models (e.g. the TATA Nano), both for serving economic goals, as well as economic and social goals in combination (Prahalad & Hart, 2006; George et al., 2012). Our research setting was MJunction, an Indian company that created new markets, through new business models around e-auction platforms, in a variety of industries in B2B (steel, coal; sourcing supplies) and B2C (e.g., on-line retail). Two competitors, TATA Steel (private sector) and SAIL (Steel Authority of India, public sector), jointly gave the push in 2001 to what became India's largest e-commerce company. After a third party (and its initial investment) pulled out. The two funded an equal partnership joint venture to create value by transforming the supply chain, replacing middlemen (in industries such as steel and coal, previously dominated in extreme cases by the mafia) and shops (in B2C, selling electronics and books) with transparent e-auction markets.

MJunction first engaged a well-known Western consulting company. The proposed business model (copied after the West) would generate earnings from advertising and projected a profit after year four. After the dot.com crash, one of the three initial partners pulled out,

³ Although the BUs that we explored are under a single company, we argue that our research setting is multiple as we did cross-case analyses (cf. Eisenhardt, 1989) after we derived our first-order concepts, second-order and aggregate themes.

leaving MJunction with substantially less initial capital. Despite limited resources, MJunction's management travelled to Europe and the US to learn from similar ventures, including eBay and two Belgian ventures that failed; one selling through e-auctions and the other sourcing supplies for similar companies. MJunction realised that to survive, they would have to generate profits much earlier than year four. Hence they designed the business model to be transaction-based. Less than two years after devising the initial plan, and less than a year after having to re-evaluate, MJunction was launched. Quickly after it started with steel, it initiated a range of BUs in industries such as coal (CoalJunction), used cars (AutoJunction), sourcing and procurement (BuyJunction), online retail (Straightline), and organising conferences (MJunctionEdge). Table 3.1 on the follow page gives a brief descriptions of these BUs.

<i>Business Unit</i>	<i>Year/ Period of Launch</i>	<i>Commerce Transaction</i>	<i>Description</i>	<i>How was it started?</i>	<i>How is it connected to other Business Units?</i>
<i>MetalJunction</i>	2002	B2B	e-marketplace for steel	Joint venture between TATA Steel and SAIL to create transparency in the steel sales market	N/A
<i>BuyJunction</i>	2002-2005	B2B	e-sourcing and procurement	Realization that similar (MetalJunction) infrastructure can be used for procurement/sourcing	Using the same infrastructure used for the sell-side in MetalJunction for the buy-side
<i>Coaljunction</i>	2005	B2B	e-auction for coal and coal related products	Applying the auction model used for MetalJunction to the coal market to address corruption and create transparency and value	The MetalJunction model applied to the coal industry

<i>AutoJunction</i>	2006	B2B, later B2C	Integrated e-commerce portal for automobiles	Selling repossessed vehicles to recover at least part of the value	Same principle as MetalJunction but with a focus on automobiles
<i>Straightline</i>	2009	B2C, later B2B	Online shopping portal	Selling consumer goods through an online portal and creating value by making use of the principles of aggregation and price transparency	Moving the proven online infrastructure to the business-to-consumer space
<i>MJunction Edge</i>	2009-2010	B2B	Conferences and specialized industry publications	Providing relevant and targeted industry information to auction customers	Added value for the primary segments served by MJunction

Table 3.1: Description of MJunction Business Units

We had four reasons to study MJunction as a case for low-cost business model development. First, MJunction operated in India, well-known as a resource-constrained country (George et al., 2012; Inoue, Lazzarini, & Musacchio, 2013). MJunction BUs also started in a new industry (e-auction), where resources are typically more constrained (Aldrich & Fiol, 1994). In addition, MJunction was launched immediately after the dot-com crash in 2001, further amplifying resource constraints. Lastly, MJunction was initiated by the TATA group, well-known for its innovative, low-cost business models.

An embedded multiple-case study format was appropriate as having a variety of BUs within one organization (MJunction) enabled more ‘valid comparisons’ (Hallen & Eisenhardt, 2012) and reduced variation (in organizational characteristics not central to our study) while enhancing generalizability (Eisenhardt, 1989). This, in turn, enabled a ‘replication logic’ (Yin, 1994); handling cases like series of experiments where in each case we refined our insights derived from previous ones (Eisenhardt, 1989; Brown & Eisenhardt, 1997; Yin, 1994). Furthermore, performance variations, across BUs and across time, enabled us to portray our

cases as contrasting (Eisenhardt, 1989; Martin & Eisenhardt, 2010; Hallen & Eisenhardt, 2012). BUs such as MetalJunction and CoalJunction had been profitable almost from inception, while BUs such as Straightline seemed to struggle for a considerable time to make profits. We also observed that some BUs, such as Straightline, showed interesting variation across time, for instance, from B2C to B2B, enabling more fine-grained analysis for theory building (Eisenhardt, 1989).

Sampling BUs within MJunction also enabled us to control for firm- and team-level factors such as social ties and formal incentives that prior research has associated with business model development (Ancona & Caldwell, 1992; Van de Ven, Polley, Garud, & Venkataraman, 1999; Kanter, 1988). These controls-by-design for potentially confounding influences enabled us to focus on new business model development-specific factors that are more likely to yield new theory.

We took a longitudinal approach, with the first author conducting a total of 40 interviews in two major rounds, in 2010 and 2012. In the second round, we interviewed a number of the same respondents. Collecting both real time and retrospective longitudinal data helped to overcome informant bias (Leonard-Barton, 1990) and increased confidence in our interpretation of the evolution of business model development over time. It also gave more information about BU performance over time, and the factors and mechanisms driving performance variations, across time and across BUs (Ozcan & Eisenhardt, 2009).

Data Collection

Using complementary units of analysis – BU- and firm-level – helped to collect richer data, and rigorous theory building (Yin, 1994; Martin & Eisenhardt, 2010). Multiple data sources, interviews and archival data, enabled triangulation and increased our confidence in the robustness and accuracy of the emerging theory (Jick, 1979; Denzin, 1989; Kumar, Stern, & Anderson, 1993; Hallen & Eisenhardt, 2012). It also reduced the potential for retrospective bias by matching real-time archival data with retrospective accounts of interviewees (Leonard-Barton, 1990). We used semi-structured interviews, enabling direct communication with staff members and open enquiry about situational meanings for action (Miles & Huberman, 1994; Hopf, 2004).

We interviewed the heads of the six BUs and team members involved in setting up the BU. We also interviewed the managing director (MD), two Vice Presidents (VP), and members of functional departments, such as HRM and finance. Interviewing participants at multiple hierarchical levels and from different types of units reduced potential biases of individual participants by allowing claims to be confirmed or complemented from multiple sources

(Golden, 1992; Miller, Cardinal, & Glick, 1997; Cardinal, Sitkin, & Long, 2004; Plowman, Baker, Beck, Kulkarni, Solansky, & Travis, 2007; Martin & Eisenhardt, 2010).

We used ‘theoretical saturation:’ conducting more interviews until we felt that a more detailed understanding would not be achieved (Eisenhardt, 1989) by virtue of additional interviews. Theoretical saturation was important because qualitative research aims to maximize the variety of the unknown phenomenon (Miles & Huberman, 1994). Towards the end of our second data collection round, we felt we had almost reached saturation (i.e., we conducted one more interview with the MD early 2014), resulting in data from 37 semi-structured interviews from staff in the eight BUs and from functional units, and three interviews with the MD. We explain more about data saturation in our data analysis-section (pp. 13-14).

Interview Schedule. Interviews took place at the informants' work place, at MJunction headquarters, in Kolkata, India. At the beginning of each interview, participants gave informed consent and agreed to have the interview recorded. The interviewer disclosed his background and research aims to put participants at ease. The shortest interview lasted 35 minutes and the longest 96 minutes, with an average of 55 minutes.

The interview topic guide was informed by sensitizing research questions (Miles & Huberman, 1994) about business model development and leadership. Following Eisenhardt (1989), we used a funnel-based approach, starting with general questions about initiating new business models followed by more specific probes. We conducted five pilot interviews. Revisions were made of the themes and questions in the topic guide after the pilot and the first round of interviews based on the emerging themes. Such revisions enabled us to probe emergent themes (Eisenhardt, 1989). The resulting topic guide included themes such as ‘the origin, stages, and process of business model development’, and ‘leadership practices’. Since the interviews were semi-structured, the topic guide remained flexible and open. Follow-up questions and probes were used during interviews as appropriate.

Data Analysis

We used within- and cross-case analyses, without a priori hypotheses (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). We treated each BU as a case. The units of analysis implied by our theory were the BUs of MJunction. During the early stages of analysis, we observed knowledge transfers and learning across BUs, influenced by organizational-level factors such as firm-leadership. Hence, we inductively included the entire organization (MJunction) as another unit of analysis to explain these surprising findings. After each round of interviews, verbatim transcription was carried out. NVivo (version 8) was used to analyse interview texts (Basit, 2003; Bazeley, 2007).

We used procedures recommended by Miles and Huberman (1994), Eisenhardt (1989), and Gioia, Corley, & Hamilton (2013) to analyze the data. To ensure coding accuracy, two co-authors coded the data separately and formed independent views, which we integrated into each interview transcript (Miles & Huberman, 1994; Hallen & Eisenhardt, 2012). Then, for within-case analyses, we made contact summary sheets to indicate main themes and concepts from each interview (Miles & Huberman, 1994). During the initial rounds of analysis, we derived 'first-order concepts' by coding interview transcripts focusing on patterns of in-vivo phrases indicated by interviewees (Gioia et al, 2013; Miles & Huberman, 1994). Deriving 'first-order concepts' enabled us to dissect the textual data into meaningful and manageable segments such as quotations. We continued this until we could not derive any other distinct ones and had reached theoretical saturation (Glaser & Strauss, 1967). Then, we collated first-order concepts into superordinate, 'second-order themes' that were theoretically distinct, and revised them to be specific enough and non-redundant (Gioia et al., 2013). Next, we grouped our 'second-order themes' under 'aggregate themes' to reflect broader levels of meaning and a grounded theoretical framework (Gioia et al., 2013). We triangulated these data by emphasizing the codes and themes that were confirmed by multiple participants and by identifying themes that were consistent across interviews and archival data (Jick, 1979).

As the theoretical framework emerged, we related our findings to the literature to highlight similarities and differences (Eisenhardt, 1989; Ozcan & Eisenhardt, 2009). Juxtaposition of contradictory and confirming evidence tends to "unfreeze" thinking, and has the potential to drive conclusions with less researcher bias (Eisenhardt, 1989: 546). Hence, our data analysis took into account disconfirming and contrary expectations, as well as points of consistency (Yin, 1994). We created a "thick description" (Lincoln & Guba, 1985) of findings by extensively using narratives to enable the transfer of findings to other settings (Balogun & Johnson, 2004). Figure 3.1 depicts the overview of the emergent data structure and Table 3.2 contains the supporting representative informant (first-order) quotes underlying the second-order themes we derived in our analysis.

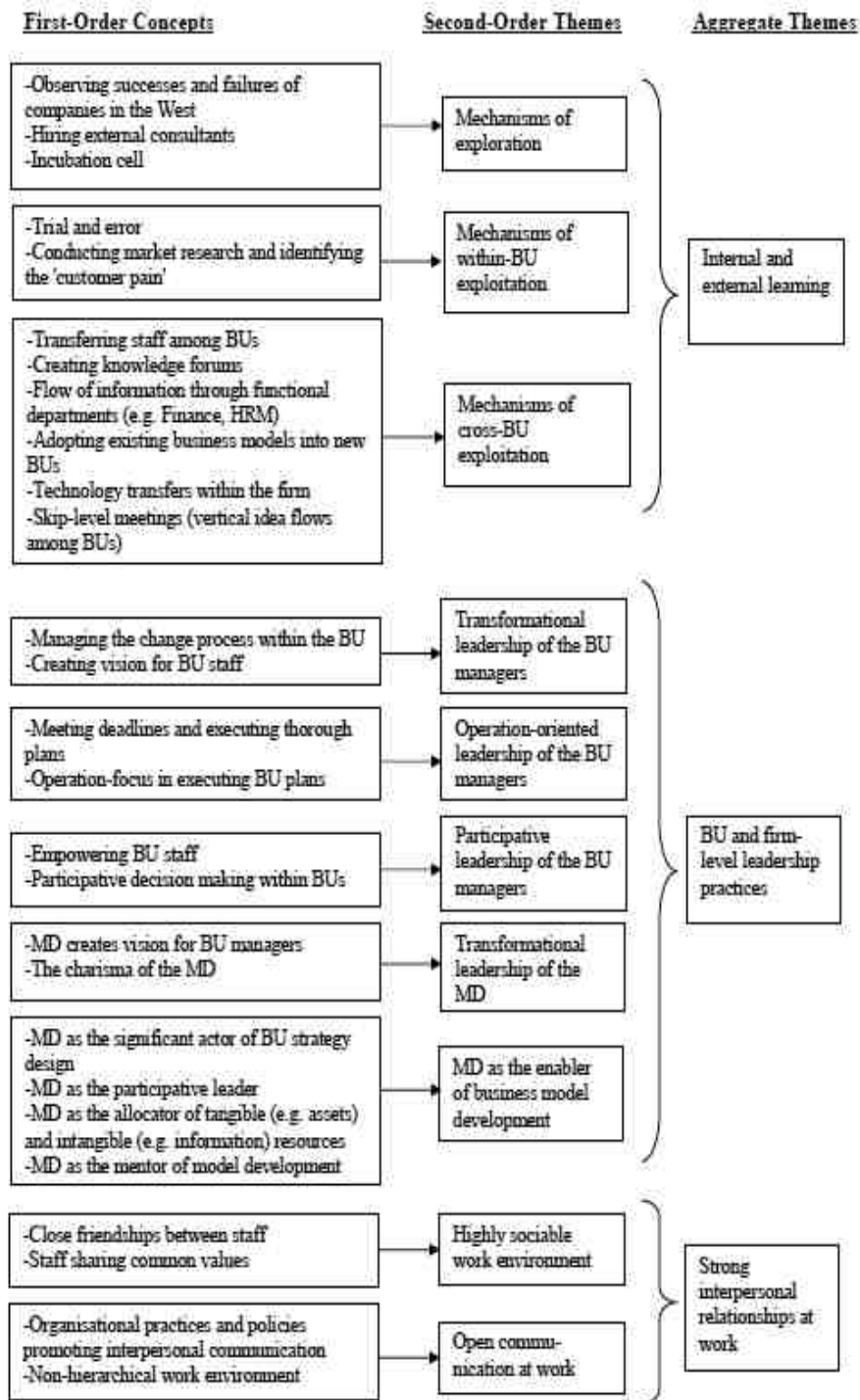


Figure 3.1: Data Structure

Second-Order Themes and First-Order Categories	Representative Informant Quotes
<i>Overarching Theme: Internal and external learning</i>	
<i>1. Mechanisms of exploration</i>	
A. Observing successes and failures of companies in the west	<p>A1: "Around 2001, right after the dot-com boom, the MD and I travelled to the US and Belgium to learn deeply about the successes and failures happening there." (Participant 2, Vice President of MJunction, first round)</p> <p>A2: "When we were visiting X [company name withheld] in the US, We understood a lot of things about processes in e-auctions, these were things which were earlier kind of meaningless to me. And, this knowledge really helped me to gear up the operations for this kind of growth." (Participant 1, the MD of MJunction , first round)</p>
B. Hiring external consultants	<p>B1: "We didn't have much resources on IT platform at the beginning. Initially, we hired staff from a company called X [company name withheld] to develop our IT platform." (Participant 5, Head of MetalJunction, first round)</p> <p>B2: "For MetalJunction, we appointed some people from company X [company name withheld] as the technology partners as well as Y [company name withheld], whose tool we used for the high-tech technological infrastructure...We basically created a team on how to go about it." (Participant 1, the MD of MJunction , first round)</p>
C. Incubation cell	<p>C1: "Changes are happening in MJunction. For example the incubation cell has been formed recently... For example, imported coal initiative is in the incubation cell at the moment. Within the cell, there are people from different departments who provide input and they analyse market data. The senior management also came up, like who will be the person working on a particular project in the incubator. They also recruited somebody from outside who was an expert in that area." (Participant 4, Head of CoalJunction, second round)</p> <p>C2: "Incubation team gets both ideas which the company is pretty sure that they are- firstly good ideas, secondly they have good potential. So those decisions have already been taken before the project moves to incubation cell" (Participant 17, Head of MJunction Business Excellence, second round)</p>
<i>2. Mechanisms of within-business unit exploitation</i>	
D. Trial and error	<p>D1: "We thought of 'why not to take advantage of B2C sales?'. B2B was the base which we have, and we thought we can use our expertise in B2B in B2C as well. But after the initial profit loss, we realised that the customer in B2C is different than B2B. Then we thought of not to have the B2C in the same B2B portal." (Participant 12, Head of AutoJunction, first round)</p> <p>D2: "Today we are learning from our mistakes...There are many capabilities which are not there within the business unit but we need to build those capabilities in order to survive and sustain in this business. So now it is the critical task of identifying what can we build internally from the existing resources, what we need to bring from outside, so that mix needs to be created in terms of how we build the capability." (Participant 21, Straightline staff, second round)</p>

E. Conducting market research and identifying the 'customer pain'

E1: "We did a market research to see the issues from the clients' point of view. All companies we spoke to, we understood their pain points. A pain point is for instance 'I need an effective way of distributing my coal where nobody should complain and it should be smooth.'... We found out coal buyers and asked them 'what are your requirements are? What kind of things you want? Then we addressed all these customer issues. That's how we progressed." (Participant 4, Head of CoalJunction, first round)

E2: "The first process was obviously learning from the clients and understanding their pain points. Having got basically a road map of what those pain points were, we went about identifying our requirements in terms of human resources, resources, capabilities, or learnings." (Participant 23, MetalJunction staff, first round)

3 Mechanisms of cross-business unit exploitation

F. Transferring staff among business units

F1: "If some new opportunity comes along then it might need people with a different skill set. For instance the people I have may not have the skill sets required to handle the new opportunity that comes along. So we need to transfer such people to the business units needing help." (Participant 17, Head of MJunction Business Excellence, first round)

F2: "So first X [name of the employee] was with MetalJunction. Then he was moved to CoalJunction. Head of CoalJunction was one of my best resources in Metal Junction, Y [name of the head] was heading CoalJunction now, so this is the way you provide support. And I got new people in place of them in MetalJunction." (Participant 1, the MD of MJunction, first round)

G. Creating knowledge forums

G1: "We have an idea forum wherein whatever ideas you have towards anything. It may not be relevant to your division yet the idea can be posted at a certain forum. There's a team which evaluates this, and whichever the genuine ideas they have found or whenever they can get experts opinion on that. So, those ideas are implemented and the employee is also rewarded for that, who has given us the idea. (Participant 12, Head of AutoJunction, second round)

G2: "I am in the auction forum. Similarly, someone from MetalJunction is there, someone from Straightline is there. This forum meets around once in a month, and then people share ideas there. I have done something good over there in CoalJunction, then I will give a presentation on that. And then, people will see if that is useful, even not useful to them, but it may be useful later, they can take some lead from that." (Participant 4, Head of CoalJunction, second round)

H. Flow of information through functional departments (e.g. finance, HRM)

H1: "Human Resources department of MJunction played a role in terms of swapping rapid information from Metaljunction to Coal business unit, the training which came as part of the orientation of this business unit was also sort of HR's delivery." (Participant 20, MJunction Human Resources staff, first round)

H2: "The good thing that happened in CoalJunction is the structured processes: they were strong in processes due to the constant feeding of support from MJunction corporate unit and funding opportunities from the MJunction finance department". (Participant 17, Head of MJunction Business Excellence, first round)

I. Adopting existing business models into new business units

I1: "I saw Coaljunction started as a pilot run, trying to specialise in the supply chain of Coal in India...There was some cross-fertilization among CoalJunction and MetalJunction because at the end of the day, it was B2B selling. We had some experience doing the B2B selling for steel."
(Participant 20, MJunction Human Resources staff, first round)

I2: "Within MJunction we started setting up business units. First was Metaljunction, then we had Buyjunction been formed and then inside Buyjunction we had departments being set up such as operations was a particular role so we had a big operations team. Business models of the newly created units particularly resembled the existing business units"
(Participant 7, Head of BuyJunction, first round)

J. Technology transfers within the firm

J1: "While in a way the umbilical cord will not cut, because what was important for B2C was – I mean one of the important components for B2C was technology and so that you know the technology platform doesn't make the same mistakes we had earlier and we learned from our experiences. So for each upcoming business unit development, we transferred the technology team and the infrastructure." (Participant 2, Vice President of MJunction, second round)

J2: "The capabilities which we are currently building is domain expertise in terms of the categories. So that's something which we are transferring and building it internally. For example our merchandiser needs to know in terms of what are the product launches, what are the discounts and things like that...Similarly we are identifying and creating that network across the country so that within the shortest turnaround time from order to dispatch, that is where our focus is on. So we would want to build this capability so that we deliver this item in the shortest possible time to the end customer.
(Participant 11, Head of Straightline, second round)

K. Skip-level meetings (vertical idea flows among business units)

K1: "Through feedback, we have taken a few initiatives to increase the engagement level of our Junctionites [i.e. BUs], we have started with something called Skip Level meetings wherein each person gets an opportunity to talk to the senior most person in the organisation. Now through that initiative, the engagement level has increased in a lot."
(Participant 24, Head of MJunction Human Resources, second round)

K2: "With the initiation of skip-level meetings, people feel proud that they are being able to talk to the Vice Presidents and give them suggestions, innovative ideas, their concerns. On the other hand, the senior members are getting to know, in depth, all the ground realities and they find scope for improvements. (Participant 35, MJunction Human Resources Specialist, second round)

***Overarching Theme:
Business unit and firm-level
leadership practices***

***4. Transformational leadership
of the business unit managers***

L. Managing the change process within the business unit

L1: "I was educating them [BU staff], leading them, assisting them in the change process. Leading them through the change process smoothly... I felt the best way to go about implementing a change is not to be pushy about it. Instead, being a partner, taking them through is crucial."
(Participant 7, Head of BuyJunction, first round)

L2: "Leading people gathered from different departments during the early stages was I think the biggest challenge of our BU head, as working in a new unit with vague practices was problematic. He [BU head] strongly led this change process (Participant 4, Head of CoalJunction, first round)

- M. Creating vision for business unit staff
- M1: "In first stage the vision of the BU manager is very important, as this stage seems to be quite general and with a lot of uncertainty going on." (Participant 20, MJunction Human Resources staff, first round)
- M2: "I'm wearing different hats at the same time when I talk to different people...Some of it is very much grounded in today. Some of it is very much talking about the future, more in terms of inspiring people on what can be done" (Participant 5, Head of MetalJunction, first round)
5. *Operation-oriented leadership of the business unit managers*
- N. Meeting deadlines and executing thorough plans
- N1: "The communication in the development stage was to finish in a fixed time frame and motivate your team to finish off that job in a fixed time frame. There you are not strategising anything as far as the business goes as you already use the detailed plans made in the previous stage." (Participant 12, Head of AutoJunction, first round)
- N2: "We are already having really good idea of the product that what we are going to build. So what you need from the unit manager for the next stage is basically a good, proper execution of the plan." (Participant 14, MetalJunction staff, first round)
- O. Operation-focus in executing business unit plans
- O1: "In the initial years, the leadership was more of a tactical nature, so more in terms of the immediate operation-related issues in the BU." (Participant 16, Straightline staff, first round)
- O2: "Tweaking around with the new software was at the core of my leadership during the development phase. So to say, a very operation-orientated communication with my personnel had happened." (Participant 5, Head of MetalJunction, first round)
6. *Participative leadership of the business unit managers*
- Ö. Empowering business unit staff
- Ö1: "We wanted to empower people for speedier decision-making...Our organisation needed to grow...obviously the aspiration is to move fast for high performing individuals and move at an accelerated rate." (Participant 35, MJunction Human Resources Specialist, second round)
- Ö2: "As the business plan reached its maturity, I delegated most of my authority to my colleagues in the business unit, as it was the best way of getting things faster." (Participant 4, Head of CoalJunction, second round)
- P. Participative decision making within business units
- P1: "Earlier the MD was the supreme decision maker, but after the initial phases, all departments such as marketing and finance were involved in each step. Every department were involved in major decisions in AutoJunction." (Participant 12, Head of AutoJunction, first round)
- P2: "Participative decisions are crucial. If my followers take part in the decision making, then they will come up with brighter ideas and they will think out of the box. Otherwise they will say 'okay, they are doing this, let's continue with this without any problem" (Participant 4, Head of CoalJunction, second round)
7. *Transformational leadership of the MD*

Q. MD creates vision for business unit managers	<p>Q1: "My boss [the MD], he actually made it very clear that there would be no confusion. He tried to minimise the uncertainty. I had a discussion I with him I still remember very well. I was telling him this is a new [business] unit, I don't even know how would it, whether it would prosper, be successful or not. So he was the one who told me that we will succeed. He always showed me direction, the proper direction and vision to succeed." (Participant 7, Head of BuyJunction, first round)</p> <p>Q2: "My role is in terms of visualising. I create the vision for the BU leaders about what should my business look like, what should CoalJunction, BuyJunction for instance should look like...I look each of the BU very deeply. (Participant 1, the MD of MJunction, first round)</p>
R. The charisma of the MD	<p>R1: "It was the MD's charisma, his inspiration that glued the team together while we were struggling with the initial concept plan." (Participant 10, Head of MJunctionEdge, first round)</p> <p>R2: "You know our formal leader is our business unit head, yet the aura of the MD surrounds the every aspect of the processes." (Participant 25, CoalJunction staff, second round)</p>
8. MD as the enabler of business model development	
S. MD as the significant actor of business unit strategy design	<p>S1: "A lot of guidance, a lot of discussions with the MD took place during the earliest stage of the business model development for AutoJunction, as this business was new for the company. AutoJunction didn't have this knowledge, so that is why more involvement was required at the senior level." (Participant 12, Head of AutoJunction, first round)</p> <p>S2: "...since this market is a very unorganised market, asset selling market, there are very few organised sellers of asset. So first decision the MD took was to have a pilot team. That pilot team was four, five people which I talked about; so two data entry operators and three from the pre-auction; those the pilot team." (Participant 11, Head of Straightline, first round)</p>
T. MD as the participative leader	<p>T1: "The MD kindly counsel with us [heads of BUs] during the revision of MJunction mission statement" (Participant 7, Head of BuyJunction, first round)</p> <p>T2: "I really appreciate the fact that the top management counts our opinions in company-level decisions. A good example was my involvement in the strategic plan of MJunction for the next 5 years." (Participant 11, Head of Straightline, first round)</p>
U. MD as the allocator of tangible (e.g. assets) and intangible resources (e.g. information)	<p>U1: "To be frank, it was the MD who provided valuable information on how things could be working. So I got my initial, you know, all information input from the MD that I required for the preparation of these concepts, making presentations or whatever was required at that time." (Participant 11, Head of Straightline, first round)</p> <p>U2: "I'm grateful that top management has always believed in us and so we get a lot of help from the MD. The processes are formalised but we are given all the funding and the IT infrastructure what we want. That's how things work out better." (Participant 14, MetalJunction staff, first round)</p>
V. MD as the mentor of business model development	<p>V1: "In these later years, my role is more in terms of guiding them [BU Heads]... I would interfere a little bit more in our more recent ventures, for example Straightline and AutoJunction. I play a more direct role for them. But if you look at the other business units, it's more supporting and telling the guys [BU Heads] I'm here if you need my help rather than the other way round which says you need to tell me what you're doing." (Participant 1, the MD of MJunction, second round)</p> <p>V2: "The MD has much more guidance kind of a role... Now we are having sort of guiding meetings with the MD. We tell him during these</p>

meetings 'this is what we need to do' and ask his advice on these matters." (Participant 7, Head of BuyJunction, second round)"

**Overarching Theme:
Strong interpersonal relationships
at work**

*9. Highly sociable work
environment*

W. Close friendships
between staff

W1: "The relationship between the... you know- from MD to the junior level, junior-most level- there is a love for each other, there is a respect for each other, people like each other in MJunction." (Participant 6, MJunction IT department staff, first round)

W2: "So we [peers] meet up even after office hours and we chat. We are very good friends... There are a lot of personal relationships between employees in MJunction. Many of the people in the company have worked for 7-8 years together. People do a lot of activities after work. We, for instance, even have our own tennis club in MetalJunction " (Participant 23, MetalJunction staff, second round)

X. Staff sharing common values

X1: "There is a certain degree of integrity in MJunction that you will find which basically supersedes almost everything else. That organisational culture of being with likeminded people is what so far has been positive." (Participant 22, AutoJunction staff, second round)

X2: "As they have worked together for long time, many people in MJunction know each other quite well. After you know who you can trust, you begin developing collective norms and values in your department. (Participant 24, Head of MJunction Human Resources, second round)

10. Open communication at work

Y. Organisational practices and
policies promoting
interpersonal communication

Y1: "We are encouraged to mix with each other in MJunction. We have our formal parties, we have our formal joint lunches, we have our joint meetings; so people get to know each other very well within a very short period of time. So if somebody is joining here today, within, say, a month's time he will know almost everybody." (Participant 6, MJunction IT department staff, first round)

Y2: "As a formal policy, all of the Vice presidents of BUs as well as many seniors and subordinates are required to hold meetings. In these joint discussions, these people in different units and positions get to know each other and establish rapport (Participant 4, Head of CoalJunction, second round)

Z. Non-hierarchical work
environment

Z1: "Overall, in MJunction, hierarchy is not...I am not able to find the right word for it... hierarchy is almost, if I may say, non-existent. So there are organisations in India where if one needs to meet the MD, take up an appointment two days in advance, be there on time, maybe wear at least a shirt with a tie and all. That culture is not there in this firm. And my personal feeling is that this is what helped us to achieve whatever we have been able to". (Participant 6, MJunction IT department staff, first round)

Z2: "The top driven element is that today if somebody has an idea, they can sit down with the business unit head or they could sit down with somebody from another business unit and they could easily go and say: 'Hey, listen, I have this idea, can you do something with it?' You could call for a meeting with the MD, you could actually walk in meet the senior staff in the corner office and tell him, 'Hey, boss, I would like to try this.'" (Participant 22, AutoJunction staff, second round)

Table 3.2: Data Supporting Interpretations of First Order Concepts/Second Order Themes

Secondly, after determining first-order concepts, and second-order and aggregate themes, we did cross-case analysis and identified cross-case patterns reflecting a broader level of meaning (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). We used tables to compare patterns of relations and to identify similarities and differences among cases (BUs) (Miles & Huberman, 1994). From the emerging themes, we formed tentative associations between constructs, and refined these initial associations via ‘replication logic’ (Eisenhardt, 1989), frequently recoding data in each case to compare and verify the occurrence of patterns.

3.4 Findings

Performance of the business units

Before we discuss our findings, we will first explain how we evaluated BU performance. Like Martin and Eisenhardt (2010), we used 'qualitative assessments' of participants from different phases of our interviews to capture potential differences and changes in how staff members understood the goals of business models over time. In the first major interviewing round (in 2010), virtually all staff members understood performance in terms of short-term financial goals: revenues and profits. High performance was indicated by comments as: "[CoalJunction] is very good in terms of business processes and we deliver it through technology...We are contributing, I think, around 35 to 36% of the revenue of the company." (Head of CoalJunction) and "Today, MetalJunction is one of the two businesses which are contributing maximally to the company's revenues, and BuyJunction is the third" (Head of BuyJunction). In contrast, low performance was indicated by comments implying that it took longer than expected to reach anticipated growth, revenues or become profitable: "We're trying to understand what is the requirement for this kind of business...We are not a mature player right now" (Head of AutoJunction). Also, MetalJunction, CoalJunction and BuyJunction were labelled as “A-businesses,” others were not. “A-businesses” were associated with high revenues and profits. In sum, there was complete agreement among interviewees, across all levels, functions, and BUs, about how performance was evaluated (in terms of revenues and profits), which BUs performed well (MetalJunction, Coal Junction, BuyJunction), and which ‘took longer’ to grow and reach this stage, i.e., the other BUs (see Table 3.2).

However, over time, it became clear to staff members that the newer, “lower-performing” BUs (mostly, but not exclusively in B2C) were really in very different businesses than the original B2B BUs and required different business models, in multiple important, interrelated dimensions: in terms of value propositions (e.g., selling electronics or books to individual consumers), revenue models (pay before delivery), technology (for selling on-line), organizational processes (for selling and delivery), marketing and sales (to many “anonymous”

individual consumers). In our second interviewing round (in 2012), at the emerging strategic level of the growing firm they were therefore increasingly evaluated (e.g., by the MD) in *strategic* terms, as investments in very different types of business models, with performance evaluated in terms of strategic goals and operational measures towards these goals, such as the “number of visits to websites” or “are they getting the necessary processes in place for when the market takes off?” Consistent with this more strategic evaluation, during our last interview, early 2014, BUs had been classified in terms of McKinsey’s “Horizon approach,” labelled as “Horizon 1,” (Metal Junction and Coal Junction) indicating mature businesses making the most revenues and profits; “Horizon 2” (BuyJunction, MJunctionEdge) having substantial revenues, profits and perceived as major opportunities for growth and profits. In contrast, BUs classified as “Horizon 3” were seen as in early stages of development and yet to generate substantial revenues and profits (Straightline and AutoJunction).

Entrepreneurial-stage: Learning processes

Higher-performing BUs: Internal and external learning. Initially, a well-known Western consulting firm was invited to draw up a business plan for MJunction (for informant quotes, see Table 3.2). The resulting business plan for e-auction platforms reflected Western business models (e.g., eBay), with revenues from advertising, projected to be profitable after four years. However, at the planned start, in 2001, the dot.com crash happened and one of the three start-up partners pulled out, limiting investment funds, and MJunction decided it needed to be profitable much earlier, generating value for clients and revenues from the beginning.

The initial team of MJunction (and its later leadership) started by gathering information from outside. The current MD and VP travelled to the US and Belgium to visit e-selling platforms (e.g., eBay, e-selling and e-sourcing firms in Belgium) to learn about their business models, such as internal processes, and causes of success and failure. They learned, for instance, from Belgian failures to combine e-selling (as in MetalJunction and CoalJunction later) and e-sourcing (BuyJunction) into one company. Combining these different pieces of externally-sourced knowledge led to the business model for MetalJunction, the first BU. MJunction also rented an IT-platform and hired local IT experts to adjust the platform rather than develop it in-house, saving time and costs. As the MD noted,

“Initially, we did not invest anything on IT. Instead, we hired a platform from a Chennai-based company in India. It’s closed down now. During the first 7 months, we did MetalJunction auctions on that platform. After which we got our own technology. Rented platform gave us an edge as for 7 months my only expenditure was the monthly rental, which wasn't very high.”

Moreover, before starting to sell services in the Indian market, as many respondents mentioned, MJunction first explored in-depth what they called ‘customer pain:’ short but intensive interactions with clients to identify their problems and understand what generated value for them. MJunction staff also sought to learn from solutions already in the markets they were trying to replace. For instance, team members studied the steel market and the loans that had been given in the market earlier, or as the Head of IT described,

“Gathering knowledge and information were important initially, because you have to understand the market. Maybe there’s something already available in the market. What are they offering, are you going to replace those things?”

A process of ‘trial-and-error’ followed, with solutions for client problems developed within days or weeks rather than months, iterating quickly to more customer value. As a result, profitability was reached quickly, or ‘profitability from day one,’ as staff members often put it, for MetalJunction, the first BU. Over time, this BU expanded its offering with more features and services (e.g., in financing), developing more value for customers and becoming highly profitable. It also initiated other, high-performing BUs.

Hence, consistent with bricolage theory (Levi-Strauss, 1962; Baker & Nelson, 2005) the business model was ‘cobbled together’ from a range of different knowledge components, experiences and objects – experience with business models in broadly the same industry abroad, a consulting report, IT platforms and knowledge from IT experts in India – and improved through trial-and-error, based on knowledge of customer pain and solutions already in the market. However, interestingly, there were two important differences. First, rather than strictly working with an existing repository of knowledge (a ‘closed universe of objects and knowledge,’ a key characteristic of bricolage; Levi-Strauss, 1962), MJunction first gathered external information about new business models. Second, to fine-tune the model, it again engaged in external knowledge acquisition, about customer pain and solutions already in the market. The combined process led to ‘profitability from day one.’

New businesses in B2B emerged from existing BUs: MetalJunction led to CoalJunction and BuyJunction. Staff members would identify a new client need and quickly – within days or weeks, at low cost – cobble a solution together, again searching for best practices already in the market and ‘customer pain.’ In fact, over half of the interviewees, including the MD, mentioned that feedback from customers was a key initiator of new business development. This helped to develop solutions quickly at low costs when moving the auction platform from MetalJunction to CoalJunction, and to some extent to BuyJunction, a new platform for e-sourcing supplies for client firms. The process for developing these new BUs was as follows. After staff members of

an existing BU (e.g. MetalJunction) identified a new business opportunity, they might get dedicated time to design a business plan for a new BU (implying knowledge transfer through staff members to the new BU). Emerging business plans would be discussed with functional departments (HR, IT, Finance) sharing their learning from earlier BUs, especially in the beginning when functional departments were small and the same people worked with all BUs. After a business plan was developed, in discussion with the MD (who worked closely with all BUs, another source of shared knowledge), it would formally be reviewed, discussed, and decided on by a group at the end of the concept stage, with the heads of the BUs, functional heads, and the MD; another mechanism for transferring learning. After a positive decision, the business plan would be developed to a new BU and launched, all within a short space of time.

Knowledge was also transferred across BUs by transferring staff at later stages (see Table 3.2 for quotes). For instance, an employee who started at BuyJunction then moved to MetalJunction as Head of Operations. Such knowledge transfers appeared to contribute to the performance of new BUs, as the HR director of MJunction noted,

“The B2B business units have a commonality, because at the end of the day, one thing we have been masters at is transforming the supply chain using the electronic form of commerce. So, that’s the reason why MetalJunction grew so quickly when started in 2002. Although CoalJunction only started in 2005, it has benefited a lot from the mobilization of staff from MetalJunction...There's plenty of learning among units which have been in MJunction for long.”

In sum, consistent with bricolage theory, new BUs emerged as part of an overall trajectory where different groups were part of – and contributed to – micro-processes of co-learning (Garud & Karnoe, 2003). People from functional departments (HR, IT, Finance), existing BUs, and the MD shared knowledge together with people of new BUs as part of a joint learning trajectory (see quotes in Table 3.2). In fact, we identified various knowledge-transfer mechanisms, such as staff transfer, and group decision-making around BU milestones. However, MJunction did not *only* use a closed universe of knowledge when setting up new BUs; it again sourced external knowledge (about customer pain and solutions already in the market), contributed relatively quickly to revenues and profits.

Low-performing BUs: Internal learning only. These BUs also started with identifying a business opportunity from within an existing BU; staff members would get dedicated time to design a business plan; plans would be discussed with functional units, and business models would be improved through trial and error. In some cases, in an attempt to make the BU profitable and to build on MJunction’s best practices, B2C BUs would incorporate B2B

elements. For instance, Straightline started working with companies to develop loyalty programs for their employees (spending ‘company points’ on buying electronics through Straightline’s portal), tapping into MJunction’s knowledge about B2B.

However, over time, staff members began to realize that knowledge could not productively be transferred from B2B BUs to the new BUs given the very different business models needed for success (not auctioning but on-line selling; advertising rather than personal contact; delivery to many individual consumers rather than a limited number of clients), *nor between the very different individual B2C BUs*. As the MD stated, "The difference in a B2B is very simple, I can go down and meet these guys because there are a finite number of guys." Another senior manager: "it was difficult to get information and other sources [from the CEO] and other businesses. The nature of the business [in Straightline] is very different [than B2B business units]." Or, a senior manager in MJEdge, which hosts conferences for the steel and coal industries:

“MJunctionEdge, a small business, a growing business, can really not draw anything from the other MJunction business units since their business is different... Other businesses will benefit from the conferences that MJunctionEdge conducts, because people from procurement, coal, and steel will attend and they will be networking. However MJunctionEdge cannot draw from them [although MJunctionEdge benefited from competencies and contacts in B2B].”

These BUs did not perform well. During our last interviews, Straightline and AutoJunction were in Horizon 3, the category for businesses in the concept and development stage, generating some revenues but not profitable, although MJunctionEdge, the B2B conference business, had moved to Horizon 2, generating substantial revenues and increasing profits.

In sum, consistent with bricolage theory, MJunction combined elements of its existing stock of experiences, insights, and objects (IT-platforms) and developed new business models through trial and error (Baker & Nelson, 2005). Low-performing BUs tried to continue the joint trajectory of co-creation and learning of existing BUs, functional departments, the MD, and new BUs (Garud & Karnoe, 2003), however – even though, as MJunction started to realize over time, very different business models were needed – *external knowledge acquisition* was not utilized. For instance about comparable business models; by visiting firms in the industry it was targeting, or engaging a consultant, as it had done when starting MetalJunction. Nor did it source knowledge externally when fine-tuning these business models to the Indian market (i.e., little or no market research about ‘customer pain’ or solutions already in the market). This led to surprises. As the BU head of Straightline said; they had not realized that people were not

ready to buy customer products online. Also, as the business models required for the new BUs were very different from each other (for AutoJunction for selling used cars to individual clients; MJunctionEdge for organising conferences for corporate clients, etc.) not much knowledge transfer between units was possible either. By the end of our window, 6-8 years after the start, these BUs still did not generate much revenues and profits by MJunction's standards, and most were considered to still be in early phases of development.

Exploitation and exploration. Our deeper analysis suggested that high- and low-performing BUs differed significantly in terms of the type and amount of learning. More specifically, it strongly suggested conceptualising these differences in terms of exploration and exploitation (March, 1991; Raisch et al., 2009), where exploration means acquiring and deploying knowledge that is relatively remote from a company's existing knowledge base (in terms of several interrelated dimensions; Levinthal, 1997), and exploitation means generating and deploying knowledge in the neighbourhood of its knowledge (March, 1991; Gavetti & Levinthal, 2000; Levinthal, 1997). These concepts were very salient in the successful business model trajectory. First, a relatively short period of exploration (as for the first BU, MetalJunction) focusing on quick, external learning (hiring an external consultant, learning from companies in the West, using external IT platforms and experts). Followed by a long period of exploitation (within MetalJunction, and across BUs: through CoalJunction and BuyJunction), using external knowledge to adjust the business model: when starting a new BU (by identifying customer pain and solutions already in the market), and across BUs (where we identified several mechanisms for internal knowledge transfer). With bricolage at the heart of the process: cobbling experiences, knowledge, and objects (in part externally acquired) together to design the initial business model and fine-tune it through trial and error. In contrast, not much exploration or exploitation was associated with the less successful BUs such as Straightline. Nevertheless the successful business model enabled MJunction to be profitable 'from day 1' and to make it overall, through successive BUs, very profitable. Table 3.3 summarises our findings about exploration and exploitation processes during this Entrepreneurial Phase.

<i>Business Unit</i>	<i>Commerce Transaction</i>	<i>Performance</i>	<i>Exploration processes</i>	<i>Exploitation Processes</i>	<i>Representative Informant Quotes</i>
<i>Metal-Junction</i>	B2B	High (Horizon category1)	<p><u>-Source of learning:</u> external</p> <p><u>-Mechanisms of learning:</u> hiring external consultants, vicarious learning through observing successes and failures of companies in the West</p> <p><u>-Duration of learning:</u> short</p>	<p><u>-Source of learning:</u> external</p> <p><u>-Amount of within BU-exploitation:</u> high</p> <p><u>-Mechanisms for within-BU exploitation:</u> market research, identification of the customer pain, trial and error</p> <p><u>-Amount of cross-BU exploitation:</u> high</p> <p><u>-Mechanism for cross-BU exploitation:</u> staff transfers, adapting existing model into new BUs, functional departments</p>	<p>"When we were visiting X [company name withheld] in the US, We understood a lot of things about processes in e-auctions, these were things which were earlier kind of meaningless to me. And, this knowledge really helped me to gear up the operations for this kind of growth." (exploration, observing successes and failures of companies in the West)</p> <p>"We have a great deal of discussion with clients to see if their point is actually a pain one. To do so, MetalJunction customer relations staff process all the client feedback in the form of flow charts and we further discuss them with the clients." (exploitation, identification of the customer pain)</p>
<i>Coal-Junction</i>	B2B	High (Horizon category1)	-No exploration process	<p><u>-Source of learning:</u> external</p> <p><u>-Amount of within BU-exploitation:</u> high</p> <p><u>-Mechanisms for within-BU exploitation:</u> market research, identification of the customer pain, trial and error</p> <p><u>-Amount of cross-BU exploitation:</u> high</p> <p><u>-Mechanism for cross-BU exploitation:</u> staff transfers, adapting existing model into new BUs,</p>	<p>"We try to understand what their [client] requirement was then we also tried to understand what the buyers' requirements were. (...) The clients particularly wanted transparency and a good, effective, simple way of distribution of the coal. They were also looking at a fair market price (...) On the other hand, the buyers wanted, some of the examples are, they wanted a very easy process, a very simple screen. Then small consumers, small consumers said, we cannot bid for, big materials like 500 tons, 1000 tons, we don't have so much money, we need small lots. We then articulated our system accordingly." (exploitation, identification of the customer pain)</p> <p>"So first X [name of the employee] was with</p>

functional departments

MetalJunction. Then he was moved to CoalJunction. Head of CoalJunction was one of my best resources in Metal Junction, Y [name of the head] was heading CoalJunction now, so this is the way you provide support. And I got new people in place of them in MetalJunction." (exploitation, staff transfers)

Buy-Junction

B2B

Moderate (Horizon category2)

-No exploration process

-Source of learning: external
-Amount of within BU-exploitation: high
-Mechanisms for within-BU exploitation: market research, identification of the customer pain, trial and error
-Amount of cross-BU exploitation: high
-Mechanism for cross-BU exploitation: staff transfers, adapting existing model into new BUs, functional departments

"What I understand and firmly believe in is the fact that a customer's complaint or feedback is the only means of pointing out the blank spots of the company in the early stages. You need to know how to read them, you need to respect them, and you need to be sincerely after them to eliminate them. But, almost all of the things which we have done have come up from these feedbacks." (exploitation, market research and identification of the customer pain)

"BuyJunction emerged almost out of the existing platform. What I've seen a number of times is that; like MetalJunction starts and then an activity within MetalJunction becomes almost self-sustainable and then new business is developed out of that. It is the same thing happening now with BuyJunction that there are activities within Buy Junction which start as a support function but then people see an opportunity and it almost develops like a new business unit." (exploitation, adapting existing model)

"I have been heading the operations of this unit [MetalJunction] since around

2007, and earlier to that, before 2003, I was the second in command in the BuyJunction unit. When I joined this company I was looking after the reverse auctions which was in the BuyJunction area." (exploitation, staff transfers)

Straight-line

B2C, later B2B

Low (Horizon category3)

-No exploration process

-Source of learning:
internal during B2C, external during B2B

-Amount of within BU-exploitation:
little

-Mechanisms for within-BU exploitation:
trial and error

-Amount of cross-BU exploitation:
little

-Mechanism for cross-BU exploitation:
absent

"It is important that we take a little bit more time in developing a new business; do market research exhaustively, and then go ahead, because that is exactly what we did not do for straightline..." (lack of identification of the customer pain)

"Straightline, B2C portal, they cannot draw from the expertise that we have in B2B and procurement, and category expertise from any other department; they will have to develop the expertise themselves for an absolutely new type of business, which is B2C. (...) Nobody else in the organization can help them in that, so small businesses cannot really draw much from the new businesses given the very nature of their business." (absence of cross-BU exploitation)

<i>Auto-Junction</i>	B2B, later B2C	Low (Horizon category3)	-No exploration process	<u>-Source of learning:</u> internal during B2B, external during B2C <u>-Amount of within BU-exploitation:</u> little <u>-Mechanisms for within-BU exploitation:</u> trial and error <u>-Amount of cross-BU exploitation:</u> little <u>-Mechanism for cross-BU exploitation:</u> absent	"We are not aware of, what is in the online marketing. We are trying to understand that what is the requirement for this kind of business...So daily there is a learning, this is the learning phase for us." (lack of identification of the customer pain) "In AutoJunction we had to recruit somebody from outside, from the industry, because we were absolutely clueless about the auto industry." (absence of cross-BU exploitation)
<i>MJunction-Edge</i>		Moderate (Horizon category2)	-No exploration process	<u>-Source of learning:</u> internal <u>-Amount of within BU-exploitation:</u> little <u>-Mechanisms for within BU-exploitation:</u> trial and error <u>-Amount of cross-BU exploitation:</u> little <u>-Mechanism for cross-BU exploitation:</u> absent	"I think market research could have been done more comprehensively. Of course it was done to an extent, but it could have been done more comprehensively and with a little more time" (lack of market research)

Table 3.3: Entrepreneurial Phase Exploration and Exploitation Processes in MJunction Business Units

Friendly atmosphere at work: High and Low-performing BUs. Respondents often mentioned ‘maintaining strong interpersonal relationships at work’ as a key characteristic of MJunction. This theme emerged from our deeper analysis as well, suggesting that strong interpersonal relationships were maintained between people at similar levels, and between hierarchical levels (see Figure 3.1, and Table 3.2 for sample informant quotes). This was consistent with bricolage theory (Baker & Nelson, 2005), and the opposite of ‘ownership and control’ of information, seen as detrimental for knowledge sharing and co-learning of groups engaged in bricolage (Garud & Karnoe, 2003). The interrelationships were promoted by various mechanisms (for quotes, see Table 3.2). Having colleagues in one building, using one open space, a jointly developed mission statement, and having one common restaurant, promoted

that even new recruits quickly felt accepted as part of the MJunction family, socialised as “Junctionites.” Extensive voluntary CSR activities involving more than half of the staff to train support staff and their families in IT skills to increase their chances on the labour market, seemed to contribute to the process as well. Our findings indicated that close friendships enhanced sharing common values at work, promoting a cohesive organisational culture, integrity among staff, and the development of collective norms.

We also observed that strong interpersonal relationships were sustained by 'organisational policies and practices that promote open communication at work'. Formal parties and joint meetings improved communication and enabled people to get to know each other fast, even if they worked at different BUs. Another mechanism promoting open communication was, definitely for Indian standards and as broadly understood by staff, the non-hierarchical work environment. As respondents indicated, it was easy for subordinates to meet with higher ups including the MD, to discuss new ideas. All these related features, which we broadly capture under the aggregate theme ‘strong interpersonal relationships at work’, were strongly supported by the organization, including its leadership (e.g., the MD).

Entrepreneurial-stage: Leadership

The findings showed that firm and BU-level leadership were important for high BU performance as well. Table 3.4 depicts our findings about leadership practices in MJunction.

<i>Business Unit</i>	<i>Most apparent entrepreneurial phase leadership (Firm-level)</i>	<i>Most apparent entrepreneurial phase leadership (BU-level)</i>	<i>Most apparent mature stage leadership (Firm level)</i>	<i>Most apparent mature phase leadership (BU-level)</i>	<i>Representative Informant Quotes</i>
<i>MetalJunction</i>	Very strong involvement and influence by the MD in BU operations. Centralised decision-making. The MD is very influential in strategy design	Transformational leadership (emphasis on creating vision)	Less involvement and influence of the MD in BU operations. The MD acts as an 'mentor'	Operation-oriented leadership in development stage, empowerment in launch stage	"It works like this that almost everything goes to the MD for approval, and people at all levels are always trying to second-guess what is the MD's thought process, because nobody would like to appear as, trying for something which the MD doesn't want in any case. So, I mean so nobody feels like, nobody wants to be thought of which the MD doesn't want to do." (leadership, concept stage, firm-level)

BuyJunction

MD provides support and guidance to BU leaders, when needed

Transformational leadership (emphasis on creating vision and managing organisational change)

Less involvement and influence of the MD in BU operations. The MD acts as an 'mentor'

Operation-oriented leadership in development stage, empowerment in launch stage

"The next stage [launch] is more about, how do I manage things? How do I manage them better?...it's more of a, very operational, in a sense that leadership, that quality, all those things are at a next higher level." (leadership- launch stage, BU-level)

"I was educating them [team members] about this, leading them, assisting in the change process. (...) I felt the best way to go about implementing a change, bringing up new things is not to be pushy about it. Be a partner with them, take them through and I always believe every man is rational so as long as you're able to show him the logic, this is how we need to do it, this is why we need to do it and this is the possible benefits of any particular change that we do, but if it makes sense to me, it will make sense to another logical person." (leadership-concept stage, BU level)

"I see myself moving away from being a coach, to more of an ambassador role - an ambassador role, being the ambassador and answering within the Indian context - I'm looking at India as the context ... so I'll be an ambassador as far as the entire company is concerned, reaching out to people, top leaders, consultants, networking and then giving an opportunity for my horizon heads and interact with them - moving from a coach to ambassador - but that is the second change that I see

happening within the country." (leadership, mature phase, firm-level)

"Now we are trying to...give much more or bestow much more responsibility, ownership to our colleagues which earlier, were not there. So the colleagues internal accountable. They also know that this is their own thing and they have to do it. They have to perform. And unless you know that you're growth gets impacted."
(leadership- launch stage, BU-level)

CoalJunction

MD provides support, guidance and mentoring to BU leaders, when needed	Transformational leadership (emphasis on creating vision and managing organisational change)	Less involvement and influence of the MD in BU operations. The MD acts as an 'mentor'	Operation-oriented leadership in development stage, empowerment in launch stage	"We are given tremendous independence, a lot of encouragement by the top management, especially by the MD to ensure that we do get into innovative ways of working." (leadership- launch stage, Firm-level)
				"Regarding leadership after the initial setup, important aspect is operations management. Within operations you have so many things, market making, pre-auction activities with the customer relation activities, then conducting the auction, then post auction activities, so many activities are there." (leadership- development stage, BU-level)

<i>AutoJunction</i>	<p>Strong involvement and influence by the MD in BU operations. Centralised decision-making. The MD is very influential in strategy design</p>	<p>Operation-oriented leadership</p>	<p>Strong involvement and influence of the MD in BU operations. Centralised decision-making. The MD is very influential in strategy design</p>	<p>Operation-oriented leadership in development stage, empowerment in launch stage</p>	<p>"During the early stages, I wasn't reporting to any VP, instead, I was directly reporting to the MD. All of my recruitment for my BU was done by the MD. The MD for instance took all the job interviews." (leadership-entrepreneurial phase, firm-level)</p> <p>"Instead of revolutionizing the business, our unit head deeply focused on the systems and procedures, how we accomplish reporting etc." (leadership- concept stage, BU-level)</p> <p>"Because the communication in the development stage was to finish in a fixed time frame and motivate your team to finish off that job in a fixed time frame. There you are not strategising anything with regards to leadership as far as the business goes, you are not strategising anything." (leadership-development stage, BU-level)</p> <p>"Given that we are still figuring out our core competencies, our MD has still been providing us with his guidance and builds our strategy, as he was doing several years ago." (leadership- mature phase, firm-level)</p>
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<i>Straightline & MJunction-Edge</i>	Strong involvement and influence by the MD in BU operations. Centralised decision-making. The MD is very influential in strategy design	Operation-oriented leadership	Strong involvement and influence of the MD in BU operations. Centralised decision-making. The MD is very influential in strategy design	Operation-oriented leadership in development stage, empowerment in launch stage	<p>"When we start up, the message [of the head of the BU unit] is really about building our systems. You can think of revenues and the clients later, building your systems is the vital part in the concept stage." (leadership- concept stage, BU-level)</p> <p>"My involvement with these groups [Horizon 3, which is Straightline and AutoJunction as specified earlier] are more than with Horizon 1 and Horizon 2 businesses. So while Horizon 1 and Horizon 2 approach me when they require my help, as far as Horizon 3 is concerned, I am playing a more active role, to find out what's happening in the external markets, finding out are we looking at this new technology which has come out, are we looking at these new partnerships that we can actually get into, reaching out (...) I'm playing a more active role in terms of how they are able to evolve [Straightline and AutoJunction] and come out with what we call the 'decisive, competitive edge'." (leadership, mature phase, firm-level)</p>
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Table 3.4: Firm and BU Level Leadership in MJunction Business Units

BU-level leadership: High-performing BUs. Interviewees often mentioned leadership as important for BU success. They typically understood the formation of new BUs as having a concept stage, a development stage, and a launch stage (with some also identifying a scale up stage), each with different types of BU leadership. We found that a transformational leadership style, particularly the visionary features, was important in the concept stage of successful BUs. MJunction’s HR manager said that during the early stages of successful BUs, such as BuyJunction and CoalJunction, BU leaders acted proactively to overcome difficulties and provided a clear vision to their employees:

“At the first stage the vision is very important [in leadership], as this stage seems to be quite general, with a lot of uncertainty...Since business models, resources, platforms, cannot be

built in time and again; so when you think of stage zero to stage one, when you have sort of moved ahead with the plan and you have conceptualized and it has got approved; when you look at it, when you look at every input you need to make it grow, that is where you need to be visionary.”

As interviews revealed, visionary leadership in the concept stage coincided in high-performing B2B BUs with a process of staff members identifying new business opportunities, getting dedicated time to develop a business plan, which after being evaluated and approved, would move to the development stage. Having worked together with only a few co-workers in the concept stage; leading the team now became a full-time commitment and 'operation-oriented leadership' became common; giving orders and supervising technical requirements, and meeting deadlines. As a respondent from MetalJunction noted, during the development stage they aimed at guiding their subordinates to perform their tasks,

“The next stage [implementation] is more about, how do I manage things? How do I manage them better? How do I tweak around with the software? ...it’s more of a, very operational, in a sense that leadership, that quality, all those things are at a next higher level.”

During the subsequent ‘launch’ stage, we observed that empowering employees, and participative decision-making enabled faster decision-making, in combination with flatter organizational structures. As a BuyJunction staff member noted,

“Now we are trying to give much more or bestow much more responsibility, ownership to our colleagues which earlier were not there. So the colleagues are internally accountable. They also know that this is their own thing and they have to do it. They have to perform. And unless you know that your growth gets impacted.”

BU-level leadership: Low-performing BUs. The concept stage of low-performing BUs took much longer than in high-performing BUs, as they were still figuring out their business models (we interviewed Straightline and Autojunction for the first time more than three years after the start). Findings indicated that BU leadership was more of a 'tactical' nature; operation-oriented towards strategic goals, rather than visionary. As a Straightline employee noted,

“When we started up, the message [of the leader] was really about building our systems and reporting procedures. He insisted that building our systems was the vital part in the concept stage and we can think of revenues and the clients later.”

Although stages in low-performing BUs were ambiguous, we found operation-oriented leadership in their "not-so-clear" development stage and empowering employees for faster decision-making in their “not-so-clear” launch stage (Table 3.4).

In sum, we found clear stages and associated leadership styles for successful BUs: a short concept period with transformational leadership of BU leaders, in particular the visionary part; a development stage with an operations-oriented leadership style; a more empowering leadership style in the launch state. These (clear) stages and leadership styles were not found to the same degree – or consistently – for leaders of unsuccessful BUs.

Firm-level leadership: High and low-performing BUs. Top management provided guidance and support by providing transformational leadership and allocating resources to start up and when BUs struggled to perform well. In high-performing BUs, after the initial expansion of MJunction, the visionary role was relatively short-lived as BUs moved to development and launch stages relatively quickly. In contrast, in struggling BUs like Straightline, the MD maintained the visionary leadership role, also in the absence of a clear vision at the BU-level about what should be done to reach competitive advantage. The MD also provided another aspect of transformational leadership to low-performing BUs: intellectually stimulating and redirecting the thinking of these BU members. As a respondent from Straightline noted,

“The MD was very much aware of the situation which we were in because there were meetings [with the MD] which were frequently happening. [The MD] was also aware that these were the hurdles that we are facing and he also started asking 'what is your plan to grow? How do you want to grow?' and that is when we started exploring after number of site review meetings and all, we decided that we had to grow.”

Firm-level leadership also encouraged participative decision-making. We observed many examples where the MD invited staff members to participate in decision-making, for instance, when formulating a company mission, and when deciding to have a joint open space or separate offices. We found that the MD's participative leadership stimulated friendship, facilitated an open atmosphere at work, a free flow of information, and bottom-up encouragement of initiatives, in fact, both for high- and low-performing BUs. Apparently, like strong interpersonal relationships (Baker & Nelson, 2005), an overall trajectory of bricolage (Baker & Nelson, 2005; Levi-Strauss, 1962) and co-learning of groups (Garud & Karnoe, 2003), this type of leadership did *not* lead to high-performing BUs *per se*. Only *in combination with* (external) exploration and exploitation (with underlying learning mechanisms), as in high-performing BUs but opposed to low-performing BUs, was it associated with high performance.

Major organizational change: Moving from entrepreneurial to mature phase

During our subsequent interview rounds, MJ had rapidly become a very different organization, leaving an entrepreneurial phase focusing on short-term profitability and entering a next phase we called the "mature phase." A need for strategy emerged at the firm-level rather

than day-to-day improvisations to expand individual businesses. MJunction was reaching its limits for growth in India and identified important strategic decisions, such as whether to internationalize, in which business, through internal growth or acquisitions. These decisions required a broader, firm-level perspective, taking into account what the increase in size and formalized processes implied for its innovativeness and open culture that had driven success up to this point.

This more strategic view – away from short-term profitability – also influenced how B2C BUs were seen. There was still the view that these BUs had not been successful due to a lack of market research. A manager with a financial background in a successful BU said "An unfortunate problem is that I think there [in Straightline] was not enough due diligence exercised or market study that had been conducted when we thought of going into this business, of starting this business." However, reflecting the new way of thinking, the MD saw AutoJunction and Straightline as 'strategic investments,' positioning the company for the future,

“B2C online retailing has not yet happened here [India] but it’s going to happen here as well...So Straightline really enables us to position ourselves that whenever this happens, we will be there with strong capability to take advantage of this opportunity...So what is critical as far as Straightline is concerned is making sure we have good suppliers from whom we can get quality products and services.”

In sum, with B2C BUs such as Straightline and AutoJunction now being understood as requiring very different business models, MJunction experimented with adding new elements such as logistics and a gifting service for Straightline and a community around its portal for AutoJunction. This type of development, in a less resource-scarce environment, was internally oriented in exploring new business models. Interestingly, this step-by-step process was in line with the relatively long development process others have found for more munificent settings (Europe, US); often of 6-8 years (Sosna, Trevinyo-Rodriguez, & Velamuri, 2010; Biggadyke, 1979). In contrast, it was very different from how MJunction originally developed its first successful business model (MetalJunction), with a relatively short period of *external exploration*, combined with a relatively long period of external and internal *exploitation* within and across BUs, enabling more revenues and profits for the increasingly profitable firm.

The growth of MJunction to 200, 300, 400 and more staff members prompted a major, qualitative organizational change, from informal procedures and putting people in the right place at the BU-level, to formal processes and structures at the firm-level. MJunction had from the beginning emphasized quality management, through the MD and others of the initial group who came from implementing SAP systems within TATA. It was now time to implement

company-wide processes. A formal, company-level strategic planning process was introduced. As the MD noted,

“We’re coming out with a strategic planning process which is also something new. (...) Earlier, strategy was designed maybe sitting in my room, but today we have a process which runs it.”

A new firm-level structure, the executive board, emerged, which included the former second line in command as well. As part of these organizational changes, the processes of exploration and exploitation for initiating and growing new business models changed as well. Table 3.5 summarises exploration and exploitation processes with respect to the entrepreneurial and matures phases.

	<i>Firm-level or BU-level process?</i>	<i>Formal or Informal?</i>	<i>Mechanisms of knowledge transfer</i>	<i>Representative Informant Quotes</i>
<i>Entrepreneurial Stage: Exploration</i>	BU-level	Informal	-Hiring external consultants, vicarious learning through observing successes and failures of companies in the West (in MetalJunction only)	"For MetalJunction, we appointed some people from company X [company name withheld] as the technology partners as well as Y [company name withheld], whose tool we used for the high-tech technological infrastructure...We basically created a team on how to go about it." (hiring external consultants, MetalJunction)
<i>Entrepreneurial Stage: Exploitation</i>	BU-level	Informal	-Market research, identification of the customer pain, staff transfers, adapting existing model into new BUs, functional departments (in high performing BUs) -Trial and error (in both high and low-performing BUs)	"So first X [name of the employee] was with MetalJunction. Then he was moved to CoalJunction. Head of CoalJunction was one of my best resources in Metal Junction, Y [name of the head] was heading CoalJunction now, so this is the way you provide support. And I got new people in place of them in MetalJunction." (internal staff transfer, high-performing BUs)
<i>Mature Stage: Exploration</i>	Firm-level	Formal	-Incubation cell	"That’s [the incubator] where new ideas get allocated and obviously the function is very new- it’s only two or three months, but the idea is that the business units with established lines of business might not have the mental banquet available to them to focus on new initiatives and build them because there is some conflict between running the established and running with the new." (exploration, mature stage, incubation cell)

<i>Mature Stage: Exploitation</i>	Firm-level	Formal	-Knowledge forums, skip-level meetings, technology transfers within the firm, trial and error (in both high and low-performing BUs)	"So when they discuss in the forum, a business development manager will say what he has done in his own department, which client and how he has convinced and how he has got the business and what is the potential. Now that information may be important for the other guy who is in a different department...So that is how people each learn from what is happening in that area and then that can be used. In fact we have implemented a few things which we have learned from MetalJunction and BuyJunction in the knowledge forums. Small things maybe, operational things, but this is how they do it so let us also do it because we can do it, it is replicable in that market. So those are the learnings." (exploitation, mature stage, knowledge forums)
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Table 3.5: Exploration and Exploitation Processes with Respect to Firm Stages

Changing patterns of exploration. One company-wide change was introducing an incubator for new businesses. As the Head of Strategy and Business Excellence (a new role) said, the incubator is where new ideas get allocated, to aid BUs that may not have the scope to focus on new initiatives. BU heads now had their own key performance indicators that hindered them to focus on new opportunities. The incubator enabled a renewed focus on new opportunities and aided the development of new ideas for these opportunities.

Changing patterns of exploitation. New forms of exploitation emerged as well. Various firm-level mechanisms were established, replacing people-based transfers towards new BUs as a source of knowledge transfer by formal processes for two-way, horizontal learning between BUs, such as knowledge forums. As the Head of CoalJunction noted, a good example is the forum on auctions where staff from different BUs share ideas about e-auctions. Each knowledge forum had a 'champion' coordinating information flows, and supporting incremental improvements in BUs.

Second, a bottom-up learning mechanism was introduced, suggested by an external consultant. As the Head of HRM said, by organising 'skip-level meetings', MJunction tried to retain its entrepreneurial strengths by involving every employee in decision-making as it grew larger. A third example of (horizontal) firm-level exploitation concerned technology transfer within the firm, for instance of the capability to build communities around websites. This capability was seen as vital for MJunctionEdge; ten years after its inception physical conferences were less in demand. It came to MJunction through an external hire – the new head of MJunctionEdge – who had worked for MJunction earlier. This person hired others with

capabilities in online community building, for instance, in AutoJunction, where growing communities around websites were also important. This knowledge had potential for creating value for B2B as well. As the head of IT of MJunction said, ‘since the B2C market is more developed in building communities than B2B, there is going to be synergies. Learning is actually from B2C to B2B rather than the other way round. In part through IT- that’s involved- but also through MJunctionEdge, that is developing this capability around community building.’ In other words, the knowledge externally acquired, partly in the previous phase in B2C, was now ‘exploited’ at the company-level by leveraging it to B2B BUs.

Changing patterns of firm-level leadership. During our last interview round, firm leadership had evolved as well. As MJunction moved to a mature phase, the visionary leadership of the MD (in terms of overseeing the processes and guiding the heads of BUs) became less significant for successful BUs (now classified as Horizon 1 and 2). However, as the MD noted, his visionary leadership role remained significant for low-performing BUs,

“My involvement with Horizon 3 [Straightline and AutoJunction as specified earlier] are more than with Horizon 1 and 2 businesses. As far as Horizon 3 is concerned, I am playing a more active role in terms of how they are able to evolve and come out with what we call the ‘decisive, competitive edge’.”

However, that role was coming to an end. While the MD was still guiding Straightline and Autojunction in the ‘incubator’ during our final round, soon someone would be hired for this role. As the MD noted, he was moving to a more external role,

“I see myself moving away from being a coach to more of being the ambassador (...) so as far as the entire company is concerned, I’ll be reaching out to people, top leaders, consultants, networking and then giving an opportunity for my BU heads and interact with them.”

It seemed that BU heads had developed the skills to lead and mentor their cohorts with vision and that the MD was no longer needed to support as in the past. Instead, he was moving to external networking with industry leaders, consultants and others to ensure further growth for MJunction as a mature company in India and abroad.

3.4 An Organizational Process Model for Resource Constrained Settings

We aimed to uncover a theoretical logic for the *organizational process* of developing successful business models in resource-constrained settings. Our findings showed that bricolage was at the heart of it, with as key elements external exploration and exploitation. We also uncovered organizational determinants of these processes, and how and why they differed greatly across the entrepreneurial phase and the mature phase (see Figure 3.2 for the organizational process model). We will first discuss the entrepreneurial phase.

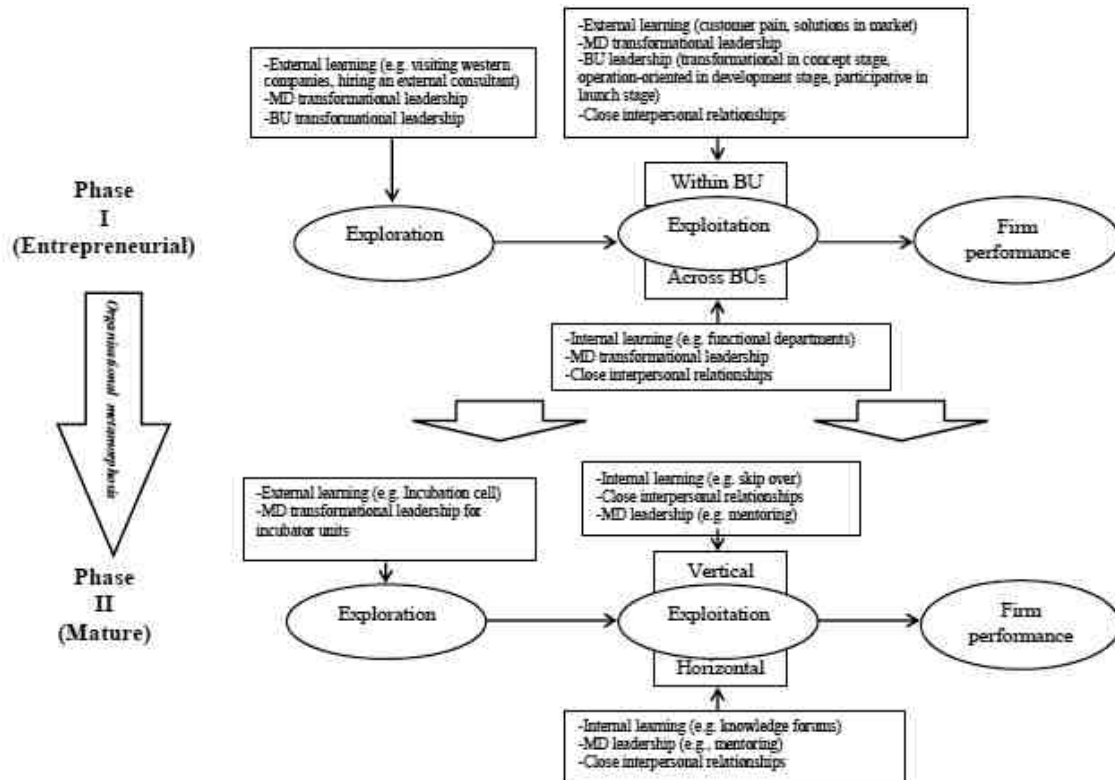


Figure 3.2: An Organizational Process Model for Resource-Constrained Settings

The entrepreneurial phase

A successful process for business model development contains both external exploration and external exploitation (March, 1991). In the case of MJunction, an initial team started with *external exploration* by visiting successful and failed businesses abroad and through a business plan from a consulting firm. The resulting experiences and insights were quickly ‘cobbled together’ with experiences, insights (from local IT experts), and objects (hiring a local IT-platform) from the Indian market to form an initial business model. The quick and creative (Amabile, 1996) cobbling together of different, low-cost elements to form a solution (business model) is consistent with the traditional notion of bricolage (Levi-Strauss, 1962). The difference however is that internal experiences, insights and objects are combined with a quick, intensive search for external ones. This process was supported by transformational leadership, providing a clear vision, encouraging followers to explore new ways of doing things, and inspiring them with the leader's charisma (Bass, 1985; Bass & Riggio, 2006), at the firm- and BU-level. Transformational leadership, initiated in MJunction by the MD when developing the first BU, reinforced transformational leadership at the BU-level.

The process continues with *external exploitation* in the local market by investigating customer pain and solutions already in the market. This facilitated a process of trial and error and incremental improvement of the value proposition and business model within days or weeks rather than months, in close interaction with clients (with whom relations are friendly). Improving a (quickly cobbled together) solution through trial-and-error is again consistent with bricolage, except for the active search for – and inclusion of – external insights and experiences. The type of BU-level leadership facilitating this process is stage-dependent. Transformational leadership is essential at the concept stage, to create a clear vision for BU staff members to guide the process (Bass & Riggio, 2006). Operation-oriented leadership focusing on practical, bureaucratic, and supervisory aspects of the procedures is needed at the development stage, when it is key to reach goals and milestones on budget and on time. Participative leadership with an emphasis on empowerment is essential (Srivastava, Barthol, & Locke, 2006) at the launch stage. This process led to a business model that was ‘profitable from day one.’

Performance was increased further through continued external exploitation. Additional business opportunities were recognized in adjacent markets, leading to new BUs. Market research was again carried out (investigating customer pain), and the business model and value propositions were again quickly fine-tuned to the new market through trial-and-error. Again supported by BU-leadership of the new BUs: transformational at the concept stage, operational at the development stage, and participative at the launch stage. In sum, a ‘cascading business model,’ improving performance further.

Performance was further enhanced through ‘internal exploitation:’ ‘making do’ with the firm’s existing stock of knowledge (from initial BUs, functional departments, the MD) and objects (e.g., MJunction’s IT platform) for a new BU. With various mechanisms, such as employees or organizational structures and processes (Fourné, Jansen, & Mom, 2014; Walsh & Ungson, 1991) supporting internal knowledge transfer, a core source of gaining competitive advantage (Argote & Ingram, 2000). In the case of MJunction, significant knowledge transfers across BUs happened through staff transfer and brainstorming around the development and milestones of new BUs (with heads of other BUs, functional departments, the MD). The information sharing between individuals and units was supported by close interpersonal relationships (or multiplex ties). In turn, supported by a range of management practices, for instance, in MJunction by having one open space, jointly developing a mission statement, extensive joint CSR activities, and the MD’s transformational leadership style. These knowledge transfers enabled further economies of scale, scope and learning, contributing to revenues and profits.

That external exploration and exploitation is necessary for high performance in resource-constrained settings, in addition to bricolage, stage-dependent leadership styles, and friendship, was suggested by our findings. Low-performing BUs also engaged in bricolage: the cobbling together of available experiences, insights, and objects from within Mjunction, and also engaged in trial-and-error to develop business models and had friendly relationships. These same conditions were found earlier for entrepreneurial bricolage by Baker and Nelson (2005) to develop novel products and services: ‘make do,’ ‘for new purpose,’ ‘based on resources at hand,’ and close interpersonal relationships. However, what was *not* present in the low-performing units was the external exploration and exploitation. In sum, external exploration and external exploitation *combined* with bricolage, supported by close interpersonal relationships and leadership (at the firm-level: transformational firm-leadership; at the BU-level: transformational leadership at the concept stage, operation-oriented leadership at the development stage, and participative leadership at the launch stage), facilitate the development of high-performing (and quickly profitable) business models in resource-constrained settings (see Figure 3.2).

The mature phase

At some point there emerged a clear need for strategic decisions, such as whether to expand abroad through startups or acquisitions, requiring the introduction of a management board. Discrete changes emerged, where informal, BU-level processes were replaced by formal, firm-level processes and structures, leading to a very different (in terms of structures, processes, leadership) organization (Greiner, 1998). As this second phase was fundamentally different – qualitatively rather than quantitatively – we call this change process *organizational metamorphosis*, connoting qualitative and fundamental change. A metamorphosis is “the process of transformation from an immature form to an adult form in two or more distinct stages” (Oxford Dictionary, 2014), for instance, from egg, to pupa, caterpillar, and butterfly. Although this definition is usually applied to insects or amphibians, it fits the type of organizational change we observed well. However, the main reason for discussing it here is that, as part of it, the processes of exploration and exploitation, and their organizational antecedents, changed as well.

Exploration and exploitation. In this second, more ‘mature’ phase, bricolage was abandoned, consistent with the idea of ‘selective bricolage’ (Baker & Nelson, 2005). Formal structures and processes such as measuring staff performance in BUs at the operational, short-term level, started to crowd out long-term initiatives such as setting up new BUs, leading to a separate unit for exploration, an incubator. In the case of Mjunction, it meant that ‘old’

initiatives such as AutoJunction and Straightline, still seen as in early stages of development, moved to the incubator. The MD's transformational leadership role continued for the incubator, although he was later replaced by an incubator manager. Exploitation was now through formal, firm-level processes, for instance, vertically (skip-over) within the expanding hierarchies of the larger BUs, and horizontally, in communities of practice (Brown & Duguid, 1991) and knowledge forums across BUs. Still supported by close interpersonal relationships in the (relatively young) firm, although the role of the MD changed for the high-performing BUs to mentoring.

Interestingly, exploration and exploitation in this phase appear to be similar, in terms of underlying organizational structures and processes, to what has been observed earlier in non-resource-constrained settings of Western firms (Gibson & Birkinshaw, 2004, Mahmoud-Jouini, Charue-Duboc, & Fourcade, 2007; Jansen, Tempelaar, Van den Bosch, & Volberda, 2009). We believe this second phase of our model is nevertheless very interesting, for two reasons. First, our study found what has been found earlier for Western settings, now for resource-constrained settings as well, extending the external validity of these insights. However, interestingly, these similar structures and processes in the mature phase emerged after a process that seemed initially (i.e. in the entrepreneurial phase) tailored to a resource-constrained setting. This process generated the profits and created 'a munificent island in a sea of resource-constrained conditions:' a platform for the same organizational processes and structures found earlier for more munificent settings in the West. In other words, the organizational structures and processes of the second phase showed the validity of earlier research in this domain; however, as a result of a process specifically found for resource-constrained settings. Second, and relatedly, we present the second phase as part of a multi-phase process model for developing high performing business models, which also contains the initial phase and the organizational change leading to the second phase. In sum, we help to understand – and provide new theory for -- how and *why* this second development stage happens (and has external validity), as part of novel, multi-stage, multi-level organizational process theory for developing high-performance business models and firms for resource-constrained settings.

3.5 Discussion

Our paper addressed an intriguing puzzle for management researchers (George et al., 2012): what explains success in low-cost business models? What organizational factors contribute to it, and *why* (i.e., theoretical logic; Whetten, 1989)? Our longitudinal, qualitative study of MJunction in a resource-constrained setting (the emerging IT industry in India) suggested new multi-level, multi-stage organizational process theory. External exploration and

external exploitation, led to experiences, insights, and objects (e.g., IT-platform) that were quickly cobbled together to a new business model, which was improved through trial-and error (“bricolage”) in the local market. This process was supported by transformational leadership at the firm level and BU-level in the concept stage; operation-oriented leadership at the development stage, and participative leadership at the launch stage, making the organization as a whole very profitable quite quickly. This created munificent conditions to move to the next (mature) stage, with firm-level, formal processes for exploration (in an incubator) and exploitation (horizontal and vertical knowledge-sharing mechanisms), supported by firm-level leadership in more of a mentoring capacity. Low-cost business models have attracted considerable interest in research (George et al., 2012) and practice (Radjou et al., 2012; Prahalad & Hart, 2006), and we hope our new conceptualization will inspire future research and theory in this domain.

Implications for other research areas

Bricolage theory. The finding that bricolage is important, is consistent with compelling descriptions of low-cost business development in India by authors with in-depth knowledge of underlying world-views and the setting more broadly (Prahalad & Hart, 2006; Radjou et al., 2012). Different experiences, insights and objects (e.g., IT-platforms) were cobbled together (Levi-Strauss, 1962) and improved quickly through trial and error, supported by friendly relationships with clients (Baker & Nelson, 2005). An internal trajectory emerged, where different groups (business and functional units) co-created and co-learned (Garud & Karnoe, 2003) as new business models were introduced and developed further during the entrepreneurial phase (Baker & Nelson, 2005; Hendry & Harborne, 2011).

However, under certain conditions – as Lanzara (1999) and Ciborra (2002) found in the context of developing information systems – bricolage may also lead to an improvised meandering, path-dependent trajectory, with serendipitous combinations of existing programs and pasted-up solutions, as well as mutually reinforcing patterns across different domains and a community of practice that cements firms into parallel bricolage and stalled growth. We found that successful business model development *combined* two roles that bricolage theory has seen as juxtaposed: of the ‘bricoleur,’ and of the ‘engineer’ (Levi-Strauss, 1962): of abstract planning and going beyond the ‘existing stock of knowledge,’ through external exploration (e.g., visits of foreign, similar business models) and external exploitation (getting information from clients, and about solutions already in the market), and by sourcing objects externally (e.g., IT platforms). It was the *combination* of both ways of thinking, or rather, *integrative thinking*; “(t)he ability to face constructively the tension of opposing ideas and, instead of choosing one

at the expense of the other, generate a creative resolution of the tension in the form of a new idea that contains elements of the opposing ideas but is superior to each”; (Martin, 2007) that enabled high performance.

In sum, we found – and our theory implies – that bricolage (Levi-Strauss, 1962; Baker & Nelson, 2005) was creatively combined (Amabile, 1996) with external exploration and exploitation as part of the process of developing new, successful low-cost business models. In addition, our new theory identifies how and why distinct organizational factors (e.g., leadership) at both the firm- and BU-level contribute to this process, and these processes and organizational factors change as the firm moves to the more mature phase.

Leadership-theory. We believe our study also contributes to the theory on leadership in the context of exploration and exploitation (Smith, 2014). In her model of dynamic decision-making, Smith (2014) usefully described 'differentiating' and 'integrating' leadership practices. We identified, in addition, stage- and level-dependent functions of leadership. For BU-level stages, we observed transformational leadership at the concept stage; operationally-oriented leadership at the development stage, and participative leadership at the launch stage of new successful business models. Firm-level leadership included the roles of creating vision and allocating resources at the entrepreneurial phase of the firm, and mentoring at the mature phase. We found that firm-level leadership (leadership of the MD) was transformational (i.e., visionary) during the entrepreneurial phase. This promoted having one, open space for staff (a decision jointly taken by the staff, as part of participative leadership); various ways of socializing new workers into the firm to motivate them and facilitating information exchange (Blume, Ford, Baldwin, & Huang, 2010), e.g., through CSR activities. This, in turn, seemed to substitute for information and other resources which in more mature firms come from social networks (Ancona & Caldwell, 1990), such as vertical ties ('ambassadors') and horizontal ties with other units and functional departments.

We believe our study also contributes to Smith's (2014) dynamic decision model by examining the impact of leadership on firm and BU performance. Heads of high-performing BUs demonstrated transformational leadership in the concept stage, unlike heads of low-performing BUs who mostly relied on operation-oriented leadership. However, we did not observe a 'direct effect' of firm-level leadership on performance; firm-level leadership practices were observed in both high and low-performing business models. For the entrepreneurial phase, firm-level leadership was only associated with high-performance *in combination with* (Levinthal, 1997) external exploration and exploitation.

Exploration-exploitation theory. We believe our study also adds to the literature on exploration and exploitation, or ‘ambidexterity’ (Duncan, 1976; Gibson & Birkinshaw, 2004; Raisch & Birkinshaw, 2008). This literature studies whether such different tasks as exploration and exploitation can productively be carried out within one organization, and how and why. A large literature has emerged exploring whether exploration and exploitation (March, 1991) are orthogonal to each other or part of a continuum (Gupta, Smith, & Shalley, 2006), effects on firm performance (He & Wong, 2004), and how the two can be pursued simultaneously (“ambidexterity”), for instance, through isolation (Fang, Lee, & Schilling, 2010).

In a recent special issue (of Organization Science), Raisch et al. (2009) identified four major theoretical puzzles for this literature: 1) Should organizations achieve ambidexterity through integration (Gibson & Birkinshaw, 2004; Jansen, Simsek, & Cao, 2012) or separation into different units (Inkpen & Tsang, 2005; Simsek, Heavey, Veiga, & Souder, 2009)? 2) Does ambidexterity occur at the individual or organizational level? 3) Should organizations take a static or dynamic view on ambidexterity? 4) Can ambidexterity arise internally, or do firms have to externalize processes? Future research resolving these issues should be, qualitative, longitudinal, multi-level, and study success as a dependent variable, although research in each of these categories was rare (Raisch et al, 2009).

Smith (2014) recently introduced a model of dynamic decision making which explains the strategic paradox of exploring and exploiting simultaneously. We believe our study, which has the methodological characteristics suggested by Raisch and colleagues, adds to Smith’s interesting work. Our new dynamic, multi-level process theory explains how the paradox is resolved, in the context of high-performing, low-cost business models, by separating exploration and exploitation across individuals, time (first exploration, than exploitation), and units (when initiating a new business model in a BU, first exploration; later in the same or related BUs, exploitation). Our process theory also explains how the form of separation depends on the growth stage of firm. Hence, we believe we extend Smith’s (2014) work on not only resolving the paradox, but also by showing how and why exploration and exploitation can be potentially reinforcing and contribute to performance (see also Zimmerman, Raisch, & Birkinshaw, 2015), and which organizational factors (e.g., leadership) contribute to the process, and how and why this differs across organizational levels and stages. Our theory also implies that in successful business models not everything is done internally: *external* exploration and exploitation were key elements of successful development trajectories.

Interestingly, our theory also suggests a solution to an even more difficult paradox, suggested by Levi Strauss (1962). He argues that being a ‘bricoleur’ and an ‘engineer’

(implying abstract thinking and external information gathering, in our context, for instance, as in external exploration and exploitation), are two very different ways of thinking, that are difficult to combine (Levi-Strauss, 1962). Again, our process theory suggests a solution at the *organizational* level rather than an individual solution, enabling separation across individuals, time, and units, not just resolving the ‘double paradox’ (of combining bricolage with a very different, abstract way of thinking, in itself combining two very different ways of thinking: exploration and exploitation), but also implying higher performance for organizations combining the roles of bricoleur and engineer successfully in low-cost business model development trajectories.

Low-cost business model innovation. The term ‘business model’ gained salience in the 1990s with the rise of the IT sector in the US, a hotbed of experimentation, where innovative business models seemed to create much economic value (Amit & Zott, 2001; Zott, Amit, Massa, 2011; Teece, 2010). As with earlier management trends and fashions if not fads, this led to many enthusiastic writings, before more neutral, research-oriented writings appeared (Abrahamson, 1996; Abrahamson & Fairchild, 1999). Initial writers emphasized that individual components of business models (e.g., a value proposition, a revenue model, distribution channels; Morris, Schindehutte, & Allen, 2005; Johnson, Christensen, & Kagermann, 2008) are interrelated in terms of their influence on performance (Zott et al., 2011). More recently, the attention has shifted towards process-oriented work and case studies of business model innovation (Sosna, et al., 2010; Svejenova, Planellas, & Vives, 2010; Yunus, Moingeon, & Lehmann-Ortega, 2010; Sabatier, Mangematin, & Rouselle, 2010; Matzler, Bailom, von den Eichen, & Kohler, 2013). Sosna et al. (2010) interestingly identified learning as important and exploration and exploration for a Spanish company. However, the “extant literature does not point to any unique drivers of business model innovation” (Rasmussen & Foss, 2015), and “lacks theoretical grounding which would allow us to understand its underlying mechanisms better and move the still shaky conceptual frameworks of business model development and innovation to more solid theoretical ground” (Sosna et al., 2010). We hope our organizational process theory will inspire new theory in this domain.

We hope our new process theory, from findings on one of the most innovative companies in India (Tata), will also inspire process theory on other low-cost business models, with both economic and social goals, for instance, when serving the poor (Prahalad & Hart, 2006; Mair, Marti, & Ventresca, 2012). Although Prahalad and Hart’s narrative was compelling, it was largely descriptive, and lacked theory on the organizational process for developing (successful) new business models. Initiatives at the ‘base of the pyramid’ often fail

and rarely scale up (the “missing middle”). Our process model should not be blindly generalized to these settings, but suggests for instance that a failure to understand –or successfully manage –the ‘organisational metamorphosis’ from the entrepreneurial to the mature stage may lead to failure to scale up, potentially explaining the ‘missing middle’. More research is obviously needed.

Finally, Radjou et al. (2012) recently argued that low-cost business model innovation, or ‘Jugaad’-innovation, is increasingly relevant for the West as well, with its increasingly diverse social groups (in ethnicity, age) and fragmented markets. Many of these groups increasingly have – or are predicted to have – low incomes in the 21st century (growing groups of young unemployed, employed on zero hour contracts, elderly with small pensions, various ethnic low-income groups; Piketty, 2014) for which low-cost business models may enable high-value, low cost products and services. Hence low-cost business model innovation – and the need to understand it – appears to be increasingly relevant for the West as well (Fourné et al., 2014). We hope our new theory will also inspire research and practice here.

Theories emerge from specific social, economic, and institutional contexts; whether they come from a munificent environment such as North America in the 1990s, which propelled the rise of the term ‘business model,’ or from a resource-constrained setting such as India in the early 21st century. Future research may help to understand how and why our new theory is contingent on social, economic, and institutional factors, eventually leading to more ‘global’ process theory (Whetten, 1989; Barkema et al., 2015) on low-cost business model innovation.

CHAPTER 4

GRASSROOTS BUSINESS MODEL INNOVATION: CHANGING THE IDENTITY OF A GOVERNMENT INSTITUTION ⁴

4.1 Introduction

The Netherlands is known for its struggle with water; water management is naturally a crucial task with over 25% of the country under sea level. Tasked with keeping people's feet dry are twenty five semi-independent water boards operating in different regions of the country, managing water purification and flood prevention. In 2007, these water boards were at a crossroads. Clean water and no flooding had become taken for granted; the water boards faced pressure to overcome a perception of sedentariness, to prove their value. Their very existence was under threat. It was, quite literally, innovate or die. Sprouting from a contest to exemplify the vision, 'Think Differently, Act Differently', a group of employees challenged entrenched thinking and assumptions and launched a project dubbed the Energy Factory. Utilizing waste water purification processes to generate and harness heat and electrical energy; surplus energy being sold to citizens and external parties; the project amounted to a significant departure from their existing business model.

The Energy Factory project changed the face of one of the oldest public-sector institutions in the Netherlands by introducing a new business model into an organization which never even considered themselves to be a 'business'. It is this business model innovation (BMI) that we chose to study. In so doing, we uncovered the significance of the change introduced to this archetypical government institution, we uncovered a story of identity change.

The Energy Factory is a prototypical example of *business model innovation*. Before the Energy Factory, water boards worked behind closed doors and relied purely on subsidies and taxes. They focused on performing their duties behind the scenes and as efficiently as possible (arguable having no discernible business model as, in their eyes, they were not a business at all). The post-Energy Factory water boards operate in cooperation with their 'customers' (i.e. citizens and other organizations) and with a very different mind-set and purpose, they now have a direct line to citizens with a valued product and a clear value creation model leading the way in shifting perceptions from being a sedentary institution to being a valuable organization. Concisely put, it signifies a move from 'managing' water to creating and capturing value (Chesbrough & Rosenbloom, 2002). Extant literature mainly focuses on the composition of business models (Morris, Allen & Schindehutte, 2005) and, more recently, the interdependence

⁴ This chapter was written as a paper and is co-authored with D. A. Stam.

between elements contributing to the whole (Johnson et al., 2008; Tikkanen, Lamberg, Parvinen, Kallunki, 2005; Morris et al., 2005; Pateli & Giaglis, 2005). It is only in the past few years focus has shifted toward a more process oriented perspective, studying the underlying processes and antecedents of business model innovation (Sosna et al., 2010; Svejenova et al., 2010; Yunus et al., 2010; Sabatier et al., 2010; Matzler et al., 2013), but research in this area is currently still sparse. It is this domain of BMI research in which we seek to make a contribution, studying the underlying processes of BMI. Specifically, we set out to explore how BMI develops and is driven forward in organization, how the members of an organization play a role in changing the business model and how that presents itself. Essentially, the human element in BMI, an area previously unexplored in BMI literature.

During our research in this domain however, we exposed unanticipated aspect of BMI. While we started with BMI as an outcome and the unit of analysis in this study, while looking at the pattern of change from an analytic perspective, it also revealed itself as an antecedent for *identity change*. The Energy Factory case is an example of the role BMI plays in an organization and how it functions as a vehicle for a much larger identity change.

BMI has been loosely defined as innovation concerning how a business works (Magretta, 2002) and business models are said to provide employees with a concrete framework or logic (Teece, 2010) for decision making. Different from product or process innovation, BMI is a more holistic concept, encompassing multiple elements of the business and providing much more of a heuristic or guiding function for employees (Teece, 2010). Whereas a product innovation, for instance, is released into the market and employees may move on to something new the next day, the business model (or the innovation thereof) is or becomes a central element in the future operation of the business behind a product, process, or service. It is how value is created, captured and conveyed to customers. We propose therefore that a business model essentially concerns “central, distinctive, and continuous characteristics of an entity” (Albert & Whetten, 1985; Ashforth, Rogers & Corley, 2011), i.e. an identity. We thus contend that looking at BMI through a social identity lens will further the understanding of the processes underlying BMI. Investigating BMI through an identity lens could potentially reveal previously unexplored aspects in these underlying processes and therefore further the emerging process focused theory on BMI, as well as open up new directions for this burgeoning research domain.

The Energy Factory started as an idea for a new business model with a small group of individuals, spread over 4 water boards, believing in the project. Confronting disbelief from colleagues and embracing the spirit of the vision created by the Union of Water Boards, they created a promotional booklet and went on to share the story with other water boards. Growing

from 4, to 11, to eventually 15 water boards (although others are involved unofficially), the Energy Factory spread across the sector. This process of bottom up identity formation is an important topic of research in the organizational identity literature (Humphreys & Brown, 2002; Cornelissen, Haslam & Balmer, 2007). Theorists on organizational identity have recently focused their attention on how embedded identities are formed over different levels of identity. Ashforth, Rogers, and Corley (2011) for instance provide a theory of how identities on different levels (the intrasubjective, the intersubjective, and the generic subjective) relate to each other. Missing in this picture are the specific mechanisms through which identities may cross levels. Starting as a project with a select few individuals and proceeding to spread a new way of thinking and working to the entire organization, the Energy Factory provides a suitable vantage point from which to investigate the subtleties involved in identity changes enacted across levels (Ashforth et al., 2011).

We use a case study approach to investigate the Energy Factory. This allows us to delve into not only the change itself, but the between level dynamics which emerged as the story unfolded. We address the question of how a business model develops among employees to become the new way of doing things and why there may be resistance at particular points. We first provide some context for our work by presenting background theory and defining relevant concepts in the identity and BMI literature. We then tell the story of Energy Factory and highlight several relevant theoretical aspects. Lastly, we conclude by discussing the implications of this study.

4.2 Theoretical Background

Business Model Innovation

A business model is the combination of a value proposition, a revenue or profit model, key processes and resources, a distribution channel, and partners, where each component needs to be put in place with their combined functioning in mind (Magretta, 2002; Morris et al., 2005; Mitchell & Coles, 2004; Tikkanen et al., 2005; Chesbrough, 2007; Fiet & Patel, 2008; Johnson et al., 2008; Zott et al., 2011; Baden-Fuller & Morgan, 2010; Casadesus-Masanell & Ricart, 2010; Chesbrough; 2010; Teece, 2010; George & Bock, 2011). Unfortunately, the exact number and nature of the elements involved is cause of much academic debate (Magretta, 2002; Morris et al., 2005; Mitchell & Coles, 2004; Tikkanen et al., 2005; Chesbrough, 2007; Fiet & Patel, 2008; Johnson et al., 2008; Zott et al., 2011; Baden-Fuller & Morgan, 2010; Casadesus-Masanell & Ricart, 2010; Chesbrough; 2010; Teece, 2010; George & Bock, 2011). What is clear, however, is that a business model comprises of the totality of these elements as well as the interaction between them. Consequently, scholars have defined business models as the way

in which companies capture value (Chesbrough, 2007; Chesbrough & Rosenbloom, 2002); in behavioural terms, ‘the way things are done’.

BMI, in essence, is a change in the mix of these elements, i.e. a change which necessitates the re-evaluation and adjustment of the entire model. BMI thus involves a change of (multiple) elements of the business model and/or a change in the interaction between elements and could be seen as a change in the way a company captures value. From a behavioural perspective, BMI therefore involves “changing the way things are done”. An example of such BMI is MJunction’s move to web-based B2B auctions selling of steel and raw materials. In this case the company changed the sales channel, key partners, and revenue model by cutting out the middle man in the traditional sale of steel and coal. Another example would be low-cost airlines that, compared to the service quality emphasizing business models of competitors, provided a different value proposition, worked with different key stakeholders (cheap airports), used a different revenue model (charging for food and upgrades) etc.

Prior research has usually seen BMI from a strategic or innovation lens, thinking about it as if it were a strategic tool or a performance outcome. As a consequence, extant research is sparse on the dynamics and the processes underlying business models, or more importantly, BMI (Johnson et al., 2008; Morris et al., 2005). Furthermore, BMI is often treated as an end-state, evidenced by the focus of research on the composition of business models (Morris et al., 2005). We contend that in order to take the next step in BMI research, the underlying process and behavioural aspects of BMI should be considered. More process oriented research on BMI has emerged in recent years (Sosna et al., 2010; Svejenova et al., 2010; Yunus et al., 2010; Sabatier et al., 2010; Matzler et al., 2013) although one aspect that remains unexplored is the human element. The role people play in the process and interact with the BMI.

Magretta (2002) characterized it as the story of the organization, others as the way things are done or the processes which create and capture value. In any of these characterizations lies a core element, namely the embedded or institutionalised aspects of an organization. In line with this, we argue that BMI has clear consequences for entrenched thinking and the identity of individual organizational members, organizational groups, and the organization as a whole. We posit that by viewing BMI through the lens of social identity theory and as a business process with a wider purpose, we reveal the nature of the BMI process in a different light. In so doing, we provide a novel perspective on the process of BMI and a foundation on which future research can build toward a theory of what successful BMI is or requires, especially from an employee perspective. Current literature on BMI does not provide much by way of guidance in taking this perspective, although practice shows its applicability and value. The late 90’s

turnaround of Apple was essentially a story of identity change; a company selling computers changed its value proposition, and with it various other elements of its business model to match. Apple moved from selling products, to selling experiences. Making their products part of the consumer's identity and more importantly, embedding the identity of the company into its products. Still today you see their business model shine through in how they choose to sell their products, the Apple Store is an icon of the Apple business model. Steve Jobs himself said: "You can't talk about profit; you have to talk about emotional experiences." The path walked by Apple employees in building the new business model is what drove the success of the effort. The new business model was the new identity and vice versa. Apple provides an apt example of how important the identity of an organization is to its success and how intimately the business model relates to organizational identity.

Organizational Identity

Identity has been defined in many ways, a product of several disciplines and research domains converging on the topic from different perspectives. We follow Albert and Whetten (1985) however and define identity as the "central, distinctive, and continuous characteristics of an entity" (Ashforth et al., 2011). In this definition, we also prescribe to the suggestion made by Ashforth, Rogers, and Corley (2011) that 'continuous' is a more appropriate descriptor than 'enduring', as originally contained in Albert and Whetten's (1985) definition. Research of late (Corley et al., 2006; Gioia et al. 2000) and the subject matter of this article suggests that not only is identity change at the collective possible, but it is a likely outcome, especially when considering a multi-level perspective.

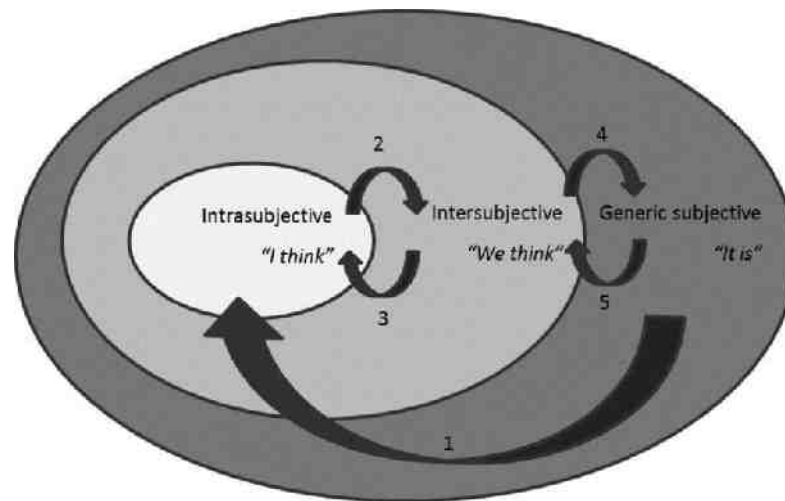
Identity is an immensely important aspect of organizational life (Ashforth, Harrison & Corley, 2008). Organizations spend millions telling stakeholders who they are and reaffirming the perceptions of their characteristics, something as simple as a logo costing in the hundreds of millions for some organizations (e.g. Accenture, Pepsi, BP). It comes as no surprise then that identity research comprises a large cache of research and remains to be a popular topic in both research and practice. The majority of extant research however focuses on a single level of analysis, i.e. individual, group, or organization. A topic that deserves additional attention is the formation of identities, specifically the formation of collective identities and the dynamics at play as these identities develop from the individual, to the group, to the organization level (Ashfort et al., 2011).

In order to understand why identity change and its dynamics, especially across levels, are of such importance, it is necessary to look at the function of identity. At the individual level, identity provides a sense of self on a personal level (Postmes & Jetten, 2006) and situates a

person in their environment on a social level (Tajfel, 1978; Ashforth; 2001). At the group level, identity defines in-groups and distinguishes them from out-groups (Brewer & Gardner, 1996). Finally, at the organization level, identity provides coherence and can serve to coordinate action among organizational members or disparate groups (Barney, 1998). Based on the function of identity at these different levels, which is remarkably similar, i.e. to define, distinguish, and situate, the importance is clear. Without identity, organizations could not exist, nor could organization for that matter (Haslam & Ellemers, 2005).

Identity at each of these levels has received attention in research; however it is the cross-level mechanisms which drive the formation of an identity and contain inherent potential revealing the underlying aspects of identity in organizational theory. The process of moving from individual, to group, to organization level identity. Ashfort, Rogers, and Corley (2011) explore the relations between the different levels of identity. Based on Wiley's (1988) classification of levels, they discuss how collective identities form at three levels: individual (intrasubjective), group (intersubjective), and organization (generic subjective). The intrasubjective refers to how individual members of the organization construe the organizational identity, whereas the intersubjective refers to how groups of organizational members (or all members) share construal of the organization's identity. Finally the generic subjective signifies the actual practices and regulations that enact the organization's identity. These levels translate more practically to "I think" for intrasubjective, "we think" for intersubjective, and "it is" for generic subjective.

Figure 4.1 shows an adapted version of the model presented by Ashforth and colleagues (2011) showing the nested nature of identities and the development of identity over different levels as well as the iterative path followed by identity as it builds to the generic subjective. The arrows (numbered 1 through 5), 'signify the enactment of a given construction and the ensuing sensemaking' (Ashforth et al, 2011: 1146). First, the equilibrium is disturbed by a stimulus which threatens the current subjective identity. This leads to a re-evaluation of the identity from an individual perspective, 'I think' (1). From the intrasubjective, identity is propagated by involving multiple individuals, building upon individual level identities to arrive at the intersubjective (2). Moving between the intra- and intersubjective is an iterative process (3&2) as groups settle on a mutually agreed-upon shared identity which does not critically violate identities at the individual level. Finally, as the group shares a common mental model, the identity starts bleeding into the fabric of the organization, into the practices, policies, and processes, becoming bigger than any group or individual (4). This too is a process of revision (5&4) until finally the new equilibrium settles in the generic subjective.



*Figure 4.1: The Construction of Identity at Each Extra-Individual Level of Analysis
(Adapted from Ashforth, Rogers & Corley, 2011)*

Following the characterization of business models as ‘the way things are done’ - representing the institutionalised aspects of an organization’s operations, how the different parts of the business interact, and to some extent the behavioural standards - the model above (as well as providing an intriguing and very useful representation of how identities develop over time) importantly also provides insight into how BMI may: a) be successfully managed by monitoring the identity change accompanying it as it moves through the various levels of identity, providing insight into interventions or changes needed at particular times and b) how BMI may impact the overall identity of the company. Nonetheless, it also leaves open several questions. First, while Ashforth and colleagues (2011) identify interaction as a mechanism through which identity propagates, the specific vehicles for this interaction and what the starting point of this interaction is, remains vague. Second, Ashforth and colleagues (2011) discuss how identities are embedded and how content remains isomorphic across levels. What they do not discuss, yet what is highly important in organizations, is how changes in identity occur. We believe that in these aspects sits immense potential for BMI. Since, as in the case of the Apple example, BMI and identity change often go hand in hand, it is imperative to know what part BMI plays in propagating identity change and where this starts (or ends). In order to exploit this and increase chances of BMI success by for instance merely ensuring implementation (if you do not start, you cannot finish), we also need to shed more light on how identity change occurs and what mechanisms are involved in between levels. In sum, we need to start answering the question: How does identity change move from one stage to the next and what part does BMI play in this process?

4.3 Methods

The water board have been operating similarly for centuries, thus The Energy Factory setting provides a unique opportunity to explore a business model coming into being in an environment in which BMI is arguable entirely new. The impetus for studying the Energy Factory was crystal clear purely from how it was presented as a project. Previous initiatives pursued by the water boards; or the majority of government institutions for that matter; were kept under wraps and happened behind the scenes. The Energy Factory project on the other hand was taken all the way to the doorsteps of citizens, representing a significant departure from the status quo already. What we did not realise however was the extent of this departure and the far reaching consequences of a single project.

These consequences, coupled with the methods of presentation and public interest nature of this project, results in Eisenhardt's (1989) criteria of an extreme situation with the process of interest being "transparently observable" being met with ease. We opted for a case-study format due to the exploratory nature of the study and our interest in the underlying *how* (Yin, 2003) of BMI and identity change. Our aim is theory elaboration (Maitlis, 2005), building on and extending the work done by Ashforth, Rogers, and Corley (2011). The underlying processes involved in cross-level identity building deserve further explication. While Ashforth and colleagues (2011) start the conversation on these mechanisms, we believe there is more richness to uncover and therefore choose to use their model as a starting point to further theory in this domain, partly by further exploring these processes empirically but also in a previously unexplored setting. In terms of methodology, we chose to mirror the process followed by Plowman, Baker, Beck, Kulkarni, Solansky & Travis (2007) to a large extent. This is partly due to some parallels in our research outcomes and partly due to notable quality of their approach (recognized among other things by them winning the Academy of Management Journal Best Paper Award). They in turn followed a method as described by Miles and Huberman (1994) and used by Dutton and Dukerich (1991), hence we felt it was well established in the qualitative research domain.

Data Sources

We collected data via three avenues: (1) interviews with employees/former employees of the water boards; ranging from individuals at officially participating water boards directly involved in the Energy Factory project to employees with no tangible connection to the project (to test the reach of the identity change), (2) secondary data (e.g. internal communication, project reports, web sites) about the Energy Factory project and its results, (3) short textual accounts from employees interviewed with their perspective on the unfolding of the Energy

Factory project, adding to the narrative and allowing for the extraction of themes that may not have come through clearly in the interview. Gathering data from various participants at multiple hierarchical levels and from several different water boards reduced potential biases of any individual participants by confirming claims through several sources (Miller, Cardinal, & Glick, 1997; Cardinal, Sitkin, & Long, 2004; Plowman, Baker, Beck, Kulkarni, Solansky & Travis, 2007; Martin & Eisenhardt, 2010). Furthermore, collecting data from multiple sources, originating from different times in the process, mitigates potential retrospective bias by matching real-time archival data with the accounts of the interviewees (Santos & Eisenhardt, 2009) and allowed us to triangulate which strengthens our conviction regarding the accuracy of the findings (Jick, 1979; Kumar, Stern, & Anderson, 1993; Hallen & Eisenhardt, 2012).

Informants. We first conducted an extensive interview with one of the initiators, recognized by others as one of the two main drivers of the project. The purpose being to get a comprehensive picture of the project and those involved. Following this discussion we compiled a list of potential respondents comprising the people intimately involved in the Energy Factory project. Based on the tips received from interviewing respondents on this list, we put together a list of additional respondents who were said to have a substantial connection to or first-hand knowledge of the project. Realising the importance of the vision as the initiator of the change early in the research process, we also interviewed someone involved in drafting the vision and launching the competition which led to the Energy Factory. The remaining respondents were approached from personal networks and somewhat at random in the offices of the water boards to get a complete story from all angles (i.e. to gauge the extent or reach of the change in the organization) and satisfy the condition of theoretical saturation (Eisenhardt, 1989). We kept interviewing different individuals until we were satisfied that we had reached theoretical saturation and that we would not gain additional understanding of the phenomenon of interest by interviewing additional respondents.

Our respondents corresponded to the three levels of identity; the intrasubjective, the intersubjective, and the generic subjective; essentially providing us with three pseudo data sets. We interviewed the 2 individuals behind the winning idea which spawned the Energy Factory project. We interviewed the group which formed around the project and those who joined to form the Energy Factory team. Finally, we interviewed people in the organization entirely removed from the project, but were eventually touched by the identity change and therefore with a more distal view on its origins so as to gain a comprehensive picture of the change that occurred in the water board and the extent of said change. This theory-driven data collection

provided us with a complete perspective on the identity change, from individual to organization level.

We conducted 14 interviews in different locations, with interviews lasting an average of 50 minutes each; these were recorded, and later transcribed. In addition to the interviews, we spent approximately 30 hours at the water boards observing people and exploring the office environments as additional input into understanding the identity that now ruled. Interviews were conducted by two researchers, one designated as the interviewer and the other taking notes and keeping track of potential clarification questions. Following each interview, the researchers compared and discussed impressions.

Due to the nature of the research direction, we were careful not to reveal too much regarding the purpose of our study prior to the interview so as not to lead respondents to speaking without predispositions (besides their own pre-existing ones). We were however clear regarding our methods and the academic intentions of our study (Miles and Huberman, 1994), putting respondents at ease and encouraging them to speak freely.

The stories provided by respondents are essentially retrospective accounts of the development process of the Energy Factory and the surrounding change. Retrospective accounts have inherent limitations which, using the recommendations by Miller, Cardinal and Glick (1997) as guide, we have addressed by undertaking the following actions: we verified individual reports by confirming facts with multiple knowledgeable respondents (Williams, Cote & Buckley, 1989; Bagozzi & Phillips, 1982; Phillips, 1981; Seidler, 1974); we triangulated findings using several secondary data sources (as described below); we encouraged respondents to decline answering or to leave out information they did not recall (i.e. free reporting) (Cohen & Java, 1995, Lipton, 1977), we asked respondents to summarise their story in writing following the interview, providing us with an additional check; we ensured respondents of the confidentiality of the information they shared with us, undertook several actions to maximize the comfort of respondents and minimize inconvenience related to data collection (Huber & Power, 1985); e.g. met them at the most convenient location at a time of their choosing, explained the usefulness of our study and the context clearly.

Interview questions. Interviews followed a very simple structure with three sections: initial contact or exposure to the Energy Factory concept, development from concept to full-fledged project, realisation of the Energy Factory and consequences. The questions were deliberately open-ended and non-specific in terms of topic so as to obtain the story of the Energy Factory project from the respondent's perspective and in a narrative form. Interviews can be classified as semi-structured although we chose to embed little to no sensitizing theory or pre-conceived

questions related to the research topic in the structure. Our aim was to collect data with no pre-determined direction, being as deductive as possible in our approach. To this end, we asked as few questions as possible (i.e. a single question for every section was sufficient in some cases) and let the respondent answer the question in the narrative form. Following each section, clarification questions were asked where necessary, being mindful of keeping to the narrative format and building a bridge to the next section; additional probing question usually revolved around the transition between different stages of the project or change. At the end of each interview, respondents were asked to share any other information they deemed relevant.

Secondary sources and other data. Internal documents, reports, web sites, videos, interview observation notes, and textual accounts from respondents comprised the secondary data reviewed. This data set gave us a verified longitudinal source of data. Among these data sources were the original report outlining the vision from which the Energy Factory emerged, the booklet used to convince the upper echelons and other water boards of the project’s feasibility and value, and the project’s own website (the first non-central website created for a project by the water boards). A full list of these resources is shown in Table 4.1.

Secondary Data Sources & Other Data

Source	Description
Energy Factory: Water Boards Inside Out	Booklet used to present the Energy Factory project on “road show”.
Short Stories	Short textual accounts from respondents describing their perspective and process as regards the Energy Factory project.
WaterWays.org	The website of an organization dedicated to projects surrounding water management in the Netherlands. Specifically the background information on the WaterWays vision and the Energy Factory were used.
Courage: Think Different, Act Different	A report on the vision of WaterWays describing the need for change and the direction of change in the way Water Boards operate.
Energiefabriek.com	The website of the Energy Factory, the first non-central website used by the water boards.
Youtube.com	Various short videos created as promotion for the Energy Factory, also interviewing citizens of the Netherlands regarding their perspective on the project.

Table 4.1: List of Secondary & Other Data Sources

Data Analysis

The Energy Factory concept is, by design, a story. To stay as close as possible to the empirical reality and thus bring readers on the same journey and make sure we did not stray

from reality, we sought to tell a story as well. The closer we stay to reality, the more relevant our findings in this case.

Using themes as our guide, we aimed to recount the story of how the Energy Factory, a BMI, resulted in changing the identity of the water boards. Our analysis followed procedures described by Miles and Huberman (1994) and used by Dutton and Dukerich (1991) as well as Plowman, Baker, Beck, Kularni, Solansky and Travis (2007).

Step 1: Using a contact summary sheet. A contact summary sheet was created for each interview (Miles & Huberman, 1994). The sheet was an amalgamation of quotes from interview transcripts, relevant points from field notes, and identified themes. All contact summary sheets were checked twice to ensure all relevant quotes, notes, and themes were included. We defined a theme as a recurring topic of discussion which speaks to the central ideas of the interview (Dutton & Dukerich, 1991).

Step 2: Creating a complete theme list. Based on the contact summary sheets, a complete theme list was generated by amalgamating all of the identified themes recorded (Dutton & Dukerich, 1991). Themes were checked for uniqueness and amalgamated when overlapping; the result was a list of 26 unique themes. The list of themes represented recurring topics across or within interviews, which were identified by us as central to understanding the Energy Factory story or by multiple respondents as being a central element in the process underwent by the water boards in the Energy Factory story. After arriving at the complete theme list, interviews were rechecked to verify that the underlying themes were still valid in all cases and we had not over-simplified or over-summarised the theme list, resulting in some quotes becoming misrepresented as a result of merging or adjusting themes. Examples of identified themes are ‘accelerating change’, ‘way of thinking’, ‘way of working’, ‘tipping point’, ‘vision presentation’ and ‘enabling the vision’.

We then proceeded to further consolidating the list by grouping similar or related themes under major headings representing conceptually coherent constructs: interaction, vision, identity, enactment of change, barriers/differences.

We decided to eliminate barriers/differences as a theme due to the relatively small amount of data representing this theme and the nature of its impact, or rather lack thereof (Dutton & Dukerich, 1991). What were identified as barriers/difference by interviewees were not relevant in retrospect as they were merely an underlying legacy from the ‘old’ identity. A complete theme list as well as the final consolidated list of constructs is depicted on the following page in Table 4.2.

Construct	Themes
Identity	way of working – way of thinking – external pressure
Interaction	conceptual– ground level – mid-level movement – levels of change – tangible vision – tipping point – vision impact – vision perception – vision realisation
Enactment of Change	accelerating change – fundamental change – catalyst – enabler – enabling the vision – process
Vision	vision – buy-in – vision presentation – contagion – value of vision

Table 4.2: Constructs with underlying themes

Step 3: Construction of a timeline. Based on our initial interview with one of the initiators of the Energy Factory, we put together a timeline of the project. The timeline was continually adjusted and revised based on new data from interviews and secondary data obtained in researching the Energy Factory. The final timeline is shown in Table 4.3.

Timeline of Change at Water Boards

Period	Topic	Event/Action
1255		The first water board is established.
Pre 2007		Water boards are tasked with managing the water supply and flood control.
2007	<i>Initiating Change</i>	Cabinet discusses necessity of water boards and considers the possibility of shutting them down Union of Water Boards devises plan to increase visibility and perception of value of water boards Waterways program started: 50 individuals identified to drive change Vision: Think Different, Act Different presented as impetus for change and to provide direction Water boards described as “dusty” and “old-fashioned” Innovation Challenge launched: devise a concept which brings the water boards closer to citizens so as to change their image and show their value, exemplifying the vision: Think Different, Act Different
2008	<i>Challenging Identity</i>	88 ideas submitted Winning Idea: Energy Factory Resistance from within water boards, disbelief regarding realism of project and discontent with changing the way things are done Team assembled: 4 water boards with similar ideas Informational booklet created and promoted on ‘road show’

2009	<i>BMI – Implementing Identity</i>	7 additional water boards join the Energy Factory The Energy Factory as focal point draws positive attention due to the visible difference in approach from how the water boards usually operate
2010		Another 4 water boards join the Energy Factory Realisation gets underway
2013		First official Energy Factory is completed Raw Materials Factory comes to life in the organization Water boards described as “value adding”, “innovative”, and “open”

Table 4.3: Timeline of Change at Water Boards

Step 4: Narrative Analysis. After constructing a timeline for change that occurred at the water boards, we used the timeline as the foundation for constructing a narrative account of the case. Creating a complete narrative served several purposes. First, it provided a point of reference for us as authors to refer to in discussions. Additionally, it organized the data into a coherent whole, drawing together the rich descriptive data into an organized story (Langley, 1999) based on the theme analysis and archival data (Miles & Huberman, 1994). It was at this point that we could clearly identify the pattern of change from an analytic perspective, which broadened our focus to include identity. Whereas we went into the study with an interest in BMI, the narrative analysis revealed a much larger change, namely a change in identity.

Step 5: Coding interview data. Atlas Ti, a computer-assisted qualitative data analysis package, was used for the analysis of interview transcripts; this smoothed the coding process, as compared to manual coding, which is decreasingly used due to its time-consumption (Basil, 2003; Bazeley, 2007). The coding process essentially involved going through every sentence of the interview transcripts and coding sentences or extracts under the relevant themes. Coding was verified by coding interview transcripts from scratch a second time a few weeks later and checking overall correlation. Codes that were not repeated or were different in the second round of coding were checked with the original coding and discarded if there was no agreement between the two rounds. This was in addition to the two initial rounds of quotes extraction during the creation of contact summary sheets. Therefore, data was reviewed in totality four times. The last coding round also laid focus on the relevance of all codes as well as inclusiveness. Table 4.4 displays the themes under which codes were grouped as well as examples of quotes falling under each theme.

Themes with Supporting Quotes

Theme	Quotes from Interviews	Representative Quotes
Interaction	182	<p>[...] that works on different levels. The first is that it is a sort of concept or label through which people recognize: that is the shift we are going to make. Thus everyone feels the tension in the system, but now everyone all of a sudden sees: we can also produce something, it is not all just a problem, all these impurities and materials that we have to remove, but we can also use it to our advantage.</p> <p>While the real value of the concept is contained much more in the impact it has on others. So, what might lead to recognition or own interpretations or to other new images, for example the Raw Materials Factory. That is the larger change process that is occurring, giving space and direction.</p> <p>Thus, that [thinking] has come to life more broadly [among people] and they also all found Sharepoint and the civil engineers were also taken to meetings by the realisation club, so that did cause for some contagion and grows the whole group.</p>
Vision	106	<p>The Energy Factory project was of course about the Energy Factory, but importantly also about a new, different way of looking at things and cooperating in different ways.</p> <p>We dream of a water board which is a modern authority, visible in society and contributing to addressing important societal challenges. Where water safety and water management are naturally in good hands, but where we also contribute to other societal ambitions. Where we cooperate with other parties on the basis of equality. Where outside-in thinking is the norm and where we show society the added value we deliver.</p> <p>What is different is that there is less tunnel vision, everyone doing their own thing; but much more working with an integrated vision, where we are all going, knowing each other, knowing where expertise is located and applying that expertise at the right moment. That is, in my opinion, the core of what is different now...</p>
Identity	134	<p>We were very task oriented; we were established as government institution for these and these tasks and we just do them well. You</p>

can do them behind closed curtains because these things just have to happen. While now we look much more at what kind of value we add to society because we exist for society, never forget that. You can, with a water purification plant, do a fine job, namely purify water, but you can also, with the same sewage water purification plant, create value in the form of energy. In another form, producing materials with the Raw Materials Factory, that is of course the same notion, in other words, adding value by utilizing what we already have in hand. You also increasingly see, at least I do, the moral obligation to deliver this value for citizens.

[...] and [the Energy Factory] also gives a sense of unity between the water boards, you come together and you cooperate, I think it has been very good, and the continuation you now see with the Raw Materials Factory.

[The vision] is much more about the way of working and the way of taking initiative that is important and not necessarily the Energy Factory itself.

Thus they essentially start to change from an inward focused , technically oriented system much more toward a facilitating, outward focused support system

Now the image is much more: we are a component in a much larger societal whole and we can be of added value for that environment.

I find in general that the water boards are in a much better position than 8 years ago. There is much more external consideration, more cooperation with partners. People are open to innovations, also from other sectors. People are aware of the role played in a value chain and not purely focused on their own patch and their own task and doing your own thing. In that sense the Union of Water Boards' plan with the Energy Factory as example, has achieved a significant amount.

I think that had the Energy Factory not been there, if they had not won a prize with it, then these things would have got off the ground anyway. Societal pressure is so high to conserve energy and raw materials... it strengthened it, it put it in a broader perspective... I think societal developments and the way of thinking about energy inside the Energy Factory bolster each other.

Enactment	130	<p>What you saw, it was not only the story being presented, but also the way in which...</p> <p>What I find extremely important in the story of the Energy Factory is, the content is important, but it is also about the way in which your bring it.</p> <p>The success of the Energy Factory was initially in the image and in the different approach, the different way of working, but it would never have been as successful had we not had the technical realisation side as well. You should not sell hot air; it should be about something real.</p> <p>[...] it was not that with the Energy Factory a trick was done and afterwards everyone forgot about it, but that they want to further build upon that with the Raw Materials Factory and further improve; also very clearly: 'We should it together with everyone now'. The result being that all water boards put their hands in the air and said: 'We will do it together from day one'. That, for me, exemplifies that there has been a shift.</p>
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Table 4.4: Quotes Supporting Themes

4.4 The Energy Factory Story

Initiating Change

Identity. The water boards have a rich history in the Netherlands. The first boards were formed in the 13th century and the later development of water boards played a deciding role in the structure of the present day system of government. In the earlier days of the water boards, local water boards were chaired by nobility; still today, one can view the lavish gifts and fine art pieces given to or commissioned by the water boards in some of their offices. The identity of the water boards; i.e. that which was central, distinctive and continuous; was similar to that of many government institutions. They operated 'during office hours', often behind the scenes, and managed their tasks without 'rocking the boat' too much. The stuffy, grey-suited, government employee archetype with full future job security (i.e. taken for granted future existence of the organization) sums up the identity of the water boards. Their history bestowed them with an image of trustworthiness and reliability, but on the other hand also with an air of stiffness and stuffiness. What was a positive connotation of reliability before, took a negative turn at the start of the century.

Societal pressure for sustainability and government transparency in spending behaviour in the early 2000's, coupled with a lack of visibility and a consequent perception of

sedentariness brought into question the necessity of the water boards. There were talks at the ministry level considering the possibility of disposing of water boards altogether. Facing this *external pressure* and a threat to their very existence, the Union of Water Boards – an oversight authority – devised a plan to change the perception the ministry and the public had of them, and improve the position and visibility of the water boards in society. Respondents described society’s perceptions of the pre-Energy Factory water boards as “old-fashioned” and “dusty”. The average person was barely even aware of the water boards. When the water boards were first established, their existence was undeniably important. Floods were an all too real threat and sanitation a foremost concern or challenge a few centuries ago. Modern lifestyles, a myriad seemingly more important everyday concerns, coupled with the, at least perceived, low threat of flooding and sanitation being a taken for granted luxury in a developed economy such as the Netherlands has made the water boards evaporate from the average person’s thoughts. A short video made by the water boards, asking people on the street who they are and what they do, showed the status quo as people being either completely unaware or highly uninformed about the existence, tasks, or duties of the water boards.

The external stimulus, i.e. threat to existence, jolted the water boards out of their comfortable, taken for granted state and into an uncertain, unsustainable one. Something had to *change*. The *external pressure* in the case of the water boards necessitated a shift in *identity*, i.e. who they are and what they do. The slow and steady movement into the modern age, holding on to values and views from the past was no longer good enough. This weakened the constraining effects of the established identity, allowing for more freedom or exploration (arrow 1, Figure 4.1); as one respondent neatly put it:

“[...] on the one hand you need autonomous pressure on the system, thus there has to be a requirement to think more fundamentally about change. That is recognised by individuals who get the freedom to experiment.”

Vision. Such individuals were not however left to their own devices to experiment without constraints. The Union of Water Boards’ plan essentially delineated the area or general direction in which experimentation was to take place. They selected 50 individuals (dubbed the ‘Club of 50’), 2 from every water board, to initiate steps in a new direction and to *accelerate the necessary change* from within. These individuals were identified as ‘innovators’ and ‘the next generation of water board employees’. The club of 50 were asked to draw up a document in support of the plan devised by the Union of Water Boards, which “sketches the contours of the change trajectory and brings the necessary innovation to its feet”.

The document drawn up by the 50 chosen individuals was presented in the form of a *vision*, an ideal future state of the organization (Conger, 1989), entitled ‘Courage: Think Differently, Act Differently’. It presented five areas of change, which embodied the essence of what needed to be done differently within the water boards: connecting with stakeholders, creating value beyond functional tasks, centralisation and cooperation, image management, and as overarching element, culture. Each element presented its own challenges, also shortly outlined in the document, to focus attention on what were considered to be the most obvious and important hurdles to the success of the *vision*. The central idea was to bring the water boards to the 21st century; the vision was stated as:

“We dream of a water board which is a modern authority, visible in society and contributing to addressing important societal challenges. Where water safety and water management are naturally in good hands, but where we also contribute to other societal ambitions. Where we cooperate with other parties on the basis of equality; where outside-in thinking is the norm and where we show society the added value we deliver.”

In more simple terms, respondents described it as: “[...] to position water boards in society and to connect them with the state, other government authorities, and with the people” or “[...] water boards a little bit out of the dusty image”.

Enactment. The Club of 50 in place, the Union of Water Boards decided to issue a challenge to act as *catalyst* and to *enable the vision*. Led by the Club of 50, all the water boards were challenged to submit innovative ideas which exemplify the vision and takes steps toward bringing the water boards to the forefront of the minds of citizens. Water boards across the country worked to craft their ideas, the *value of the vision* being immediately apparent as people started to think about change and change *perspective*, something that was not the norm at the water boards. In total, 88 ideas were submitted, multiple by many of the individual water boards. By emphasizing what needed to change, i.e. discrepancies in the status quo, the vision drawn up by the 50 individuals (considered by the Union of Water Boards to be prototypical leaders or front-runners in times of change) served to provide the needed motivation to water board employees (arrow 1 in Figure 4.1) to break free of the constraints of the present state.

Summary. In the first part of this story the water board, an age-old organization with a rigid identity and culture that has remained similar over centuries is awoken by an exogenous shock, a threat to their survival, which started a process of identity renewal: They formulated an alternative identity in very broad terms to save their organization and aimed to involve the organization through an innovation contest. Although not affecting the identity of the organization yet, the formulation of the new vision did achieve one thing: It challenged the

current organization identity of the water boards and consequently allowed individuals to dream about a new world: “Everyone started to dream, people saw the Water Boards becoming the new green energy provider of the Netherlands. People had freedom, they began to dream.”

Challenging Identity

Interaction. Along with the movement into the intra-subjective based on the formulated vision and the innovation contest came an important element in the identity transition of the water boards, dialogue between individuals in the form of storytelling. Following the introduction of the vision and the subsequent submission of ideas, the *value of the vision* was immediately apparent as employees of the water boards started connecting the vision or future state with the status quo, creating the necessary continuity to make the transition successful. This was apparent in interviews when respondents made light of the significant change they were undergoing and did more than just show support for the vision, but accepted it as if it were part of the organization already; “... it is obvious because all the building blocks were already there, only it is not so obvious that it happens automatically” and:

“I was of course immediately enthused about it, because it is the whole story ‘in one word’. That is the cleverness of it. It immediately implies something that may have partly been there already, but also partly not; and you can immediately go along with it... So all the elements were already there, but by giving them visibility, you accelerate it.”

The process of creating and communicating the vision with 50 employees, coupled with the storytelling triggered by the vision, put in motion the transition from ‘I think’ to ‘we think’ (arrow 2 in Figure 4.1) as well as a feedback loop as people modify their stories based on responses from their colleagues. The interaction between the vision and people as well as between people sparked a momentum; “... the real value of that concept sits more in the impact it has on others. So, what might lead to recognition [of a concept] in some, or to different interpretations or new images as was later seen with the Raw Materials Factory. That is really the principal change-process that is occurring, giving space and direction”. As Boal and Schultz (2007) argue: “Engaging in dialogue and exchanging stories are two mechanisms by which cognitive consensuality is achieved, producing an organizational identity and shared life story”. Furthermore, the innovation challenge generated additional interaction at the group level, solidifying the shift from the intra- to the intersubjective, i.e. promoting ‘we think’. One of the project leaders said: “... that world just broke open and became much more of a network club... [the question became] how will we share all this documentation and make the business cases... we created a Sharepoint environment in which everything was uploaded...”

Identity. The challenge was won by the Energy Factory concept. The Energy Factory truly filled the brief on thinking and acting differently, using the water that flowed through the filtration systems of the water boards and converting the kinetic energy in the system into electrical energy, which could subsequently be used to power the water boards' operations but also be sold to citizens. In essence, a plan centred on innovation, changing not only how the water boards are perceived, but changing what they do and, consequently, who they are. Upon presenting the Energy Factory (submitted by Water Board Aa and Maas) as the winning concept, among the 88 submitted, a barrage of discontent and disbelief was launched from colleagues. The Energy Factory represented something different, a *new way of doing things*; this was therefore a natural response to such an identity threat. The idea was written off by many saying; "if that was possible, we would have realised and implemented it years ago" and "how is this better than our concept, we worked out a technically sound case and this is merely a nice story". Coincidentally however, 3 other water boards had submitted ideas along the same line, albeit with a much more technical focus. Teaming up, the 4 water boards who submitted similar ideas went to work on *spreading their vision* and convincing colleagues of the potential inherent in the Energy Factory. The strength of the Energy Factory, it was soon realised, was in its approach. The approach taken by the Energy Factory was unlike any the water boards had taken before, instead of focusing on the technical, they brought an *impactful story* to life, a story that could be understood by those who were technically trained and layman alike. A director in the organization summarized it by saying: "It is a story that has more to do with positioning than with content."

The newly formed Energy Factory team created an informative booklet entitled "Energy Factory: Water Boards Inside Out". The booklet followed suite to the original notion of the Energy Factory in that it did not place overbearing emphasis on the technical and brought the story, along with the potential and underlying thinking, to life. Members of the team went on what was referred to as a "road show" to *spread the word*, presenting the booklet to other water boards and convince them to join the project, at one point even involving a comedian to generate enthusiasm around the concept. The campaign was successful; the *process* resulted in the Energy Factory now comprising 15 water boards in total. Additionally, of the water boards that did not join, the majority were not opposed to the Energy Factory or what it stood for. Their reasoning was more practical, involving resource constraints. One respondent laid out the reasoning:

"Together we embrace the [Energy Factory] concept, but at the moment it costs too much in terms of effort for us to be a member [of the project] and everything that goes

with membership... the arrangement is that you need to commit so many hours and pay a contribution. For a small water board, the contribution may be a relatively large amount, but also the time one must put into it, some people cannot afford.”

The process was not without its difficulties however. One of the originators told us; “You did see when we went from four to the eventual fifteen water boards; that you had a temporary relapse in the way of working, because you are in such a flow with the four of you and then you have to take ten water boards along from the basics.” The story they told on their ‘roadshow’ was decisive in convincing colleagues to mobilize toward changing, and importantly, following the change already in motion. Utilizing stories, strategic leadership structures interactions and fosters the necessary continuity between the past, the present, and the future of an organization and of its members (Boal & Schultz, 2007). This also aids in providing perspective on change, which can help to reduce the resistance to it and smooth the transition (not to mention helping the organization survive when change is crucial) (Kolb, 2003). These stories still need a practical outlet however, especially in a practically oriented organization such as the water boards.

Summary. Thus in this second part of the story, the identity of the organization truly gets challenged. The challenge starts with an innovation contest that attracts the attention of several individuals (although certainly a minority) who submit their proposals for review. The challenge itself causes a stir: employees discuss the challenge and its implications informally. This already starts a process of identity shift by causing people to share the mere idea that the organization’s identity is malleable. The daunting project that wins the contest, the Energy Factory – more than a simple innovation: a large scale BMI - however, is not met with cheers alone: implementing identity change is more difficult than ‘simply’ spreading the word.

BMI - Implementing Identity

Enactment. Essentially, before the Energy Factory, the revenue model of the water boards consisted of taxes, they did not really have partners (especially considering that water boards often did not even cooperate with each other), and their key resources and processes were focused on water management and flood control. In the wake of the Energy Factory, their business model is becoming different, at least part of it. The Energy Factory, and some projects stemming from it, have taken on a more complex revenue model, receiving revenue from selling energy, or other resources, to partners and the general public. They now have an expanding partner network, including other water boards, but also commercial organizations and local councils for instance. Key resources and processes are now more focused on adding value as opposed to managing resources or risks, most importantly, changing their value proposition

from defensive, i.e. managing, preventing, linear to more proactive, i.e. connecting, adding value, cyclical. Along these lines, the new business model came with a *new way of thinking*, a new way of looking at things. Table 4.5 illustrates the effect of the BMI at the water boards.

Employee Views on Business Model Innovation

The success of the Energy Factory was initially in the image and a different approach, different way of operation, but it would have never amounted to as much as it did had we not had the technical realisation side. You cannot sell hot air; it needs to have some substance.

Eventually, nothing has been built in terms of an Energy Factory, or in a very limited sense, with us; but the fact that a realistic concept came forth, which was also embraced by management and the board, that resulted in it resonating positively. Only writing a nice story and winning an innovation challenge and then nothing happening, that does not produce much. The fact that you then saw things changing...

I think that the Energy Factory became the symbol of the Union of Water Boards' plan. I think that currently more people know the Energy Factory than the Union of Water Boards plan. That is not bad though, because it became something tangible and the Union of Water Boards vision, that is a lot of nice words which you cannot deny, but to show that is actually means and what is meant by a different way of working; that you have to experience and do to infect others to also go do it.

They think about new organizational models, some begin to say: 'we should do this in a closed corporation structure'. You see that they think much more strategically about their place in the broader transition landscape.

[...] the Energy Factory and the Raw Materials Factory, that is truly a new concept, a different way of thinking, towards closing the system. So, thinking is much more cyclical, there is much more thinking in terms of production, not just handling, but you are really going to produce something, you are going to produce value.

Table 4.5: Supporting Quotes – Employee Views on Business Model Innovation

The water boards, and more specifically, the water board employees are however “real doers”, as one respondent put it. The words in the vision thus only inspired up to a certain point. When it came to enacting the new vision, modelling the new *identity* in the form of a concrete change, BMI drove the perceivable and by employee accounts, “memorable” and “real” change, the *tipping point* was evident in the stories which emerged around this theme. One of the two project leaders sketched the progression for us:

“... I am inspired by the vision. Although I think, water boards are real ‘doers’ and you saw that in the entire trajectory of the Waterways vision; particularly those things that became very concrete, those had an effect. They tipped the balance somewhere, and there where it remained a lot of talking; a few were inspired; but I do not think it would have reached the breadth that it did if it became tangible and that is

what happened with the Energy Factory. Through that you got a lot more layers of the organization into the momentum, more than only those involved in the project or only management...”

A business model is essentially a heuristic mechanism from which employees draw to do what they do; and in an organization such as the water boards with technically trained and practically motivated people with a functional task, what they do is who they are.

Identity. In the wake of the Energy Factory, many employees described the atmosphere as more open, the upper echelons as more receptive to ideas, and the water boards as cooperating on a number of areas. Projects bearing the label Energy Factory, but not officially being part of the project, have also emerged. Table 4.6 shows how employees see the change in the water boards following the Energy Factory.

Employee Views on Post-Energy Factory Water Boards

Now everyone is busy with the Energy- or Raw Materials Factory as image. Thus, every person in water purification is busy thinking about: how will we market our waste streams and how will we add value in society.

You see it in people, but you also see it in projects and processes. The consideration of, what do you do with the raw material demand, the energy demand; that has become self-evident so quickly. Thus in that sense: this is included in every potential project. So one could say; in the way of working that raw material demand has become foundational as well. You see at the organizational level that this has become part of normal operations.

[...] the thinking in general I find a water board wide phenomenon. What you see, for example on the water systems side where they are clearing the waterway trenches and such and the disposal of the grass costs a lot. There they have set up a project with a mushroom grower, who it turns out, can utilize that grass very effectively as compost. Usually he had to purchase compost or a fertilizer-like substance, and now he can use our grass, he just comes to collect it and we do not have to pay to dispose of it and we also do not need to receive payment for it as it already saves us a great deal of money in terms the usual disposal cost. He no longer has to purchase it; all he must do is collect it.

“[...] one could say the Energy Factory has become much more of an inspiration than a mandatory network [...]. You indeed see investment decisions being made outside the Energy Factory network to build fermentation tanks or introduce new techniques.”

[...] thus even in the real rigid regime players like board members and a sort of police department such as communication and finance and such, there is much more freedom in thinking about what is possible. They also now get that if you dream every so often and dare to look a bit further, because what if, that the yield can be quite substantial.

[...] the entire thinking of the system has really changed and also the regime has shifted along. In 2008 managers and the board were very much against things I suggested, simple things like a website for the Energy Factory. I was confronted with the communication department who said: ‘Come on, we already have an Aa and Maas site and we handle everything centrally and none of this additional site, own logo business, and what does all this even cost etc. It was really difficult, even just talking about getting permission from the board. Then I wrote a whole piece about why this would be so useful. It was quite a mild mannered piece. It is difficult to imagine that now,

but it was back and forth and struggle, struggle, struggle and then they said alright, it was about 1500 euro or something.

Table 4.6: Supporting Quotes – Employee Views on Post-Energy Factory Water Boards

Observing the change in the organization, both in terms of perceptions, decisions and processes, indicates a tentative shift toward the generic subjective (arrow 4 in Figure 4.1). We say tentative as respondents used words such as “thinking” and “consideration” often, indicating the feedback to the ‘we think’ mind set (arrow 5 in Figure 4.1).

Concomitantly, value creation opportunities are being identified in other areas, e.g. Grass Factory, changing the way the water boards have looked at certain problems in the past. The Grass Factory follows the same thinking as the Energy Factory in that it is plays on value creation with existing practices and processes performed by the water board. In this case, the management of waterways, which includes keeping the grass in canals and trenches under control, provides an opportunity to provide farmers with grass for feed and other purposes. One respondent described the mowing of the water ways and the *different outlook* they have now:

“[...] you see a waterway trench as a nuisance because the grass has to be cut and that is all a nuisance, but if you see it as a Grass Factory then you are confronted with a wholly different image [...] then you are actually looking for grass that will grow faster so you can cut it more often.”

External parties have approached the water boards to join forces or to at least explore the possibility to do so. The water boards, in cooperation with external parties, are taking advantage of contextual conditions which allow for the more sustainable, value-adding, and efficient use of energy produced by water purification. In one instance, a partnership has been formed between the water boards and a fried foods company as their facilities are next to each other and this allows for the most efficient use of water board energy.

Most visibly, a new large-scale project has been launched, involving all 25 water boards, the Raw Materials Factory. Besides extracting energy from purification processes, minerals and other useful chemicals or materials can also be extracted from waste water, essentially extracting value from water where energy would otherwise be spent just getting rid of it. Additionally, when speaking to respondents, some of who had no tangible connection to the project itself; they recognized the changes that occurred in the *way of thinking and working* at the water boards, even though they could sometimes not explicitly relate them to the Energy Factory. Respondents often sketched their views with short non-specific statements, shown in Table 4.7.

Views on Change in Water Boards

Thus I see the shift in thinking and also in attitude and behaviour.

What I find an even better development... that you see that [the Energy Factory] brought an effect or a broadening with it. The concept, the way of working, the way of looking at things.

What I want to get across is: there has been a definite shift in mind set inside the water boards; that we look at things differently. The first time we started with four, now expanded to fifteen and now with the Raw Materials Factory everyone is a member at once.

But there is something fundamental happening; and it goes further than just a new concept being implemented or introduced.

[...] the Energy Factory, that was from my perspective a foundational project. If you were to ask me: name a project before, I would not be able to.

The transition goes further than the Energy Factory alone, but it does provide a very fitting metaphor.

What you saw was not only the story being presented, but also the way in which. You had a stand at a climate congress and you had footsteps leading to your stand saying: 'This is where things happen'. You hung stickers in the bathroom: 'Energy is being produced here'. It is a completely different approach than how the water boards usually do things.

Table 4.7: Supporting Quotes – Views on Change in Water Boards

This gave us a clear signal that the Energy Factory and the change that it powered has begun to become larger than itself and any individual, it is becoming the new equilibrium, the generic subjective 'it is'.

Summary. In the final part of this tale the Energy Factory project slowly comes to fruition. Through elaborate networking and lobbying the project team builds a good basis for its implementation on the soil that was already prepared by a vision and a contest. With enough support the project is finally launched and appears a great success, awakening and validating a dormant new identity by implementing a BMI: that of a value adding, innovative public organization.

4.5 Discussion

We initiated this study to explore the dynamics of BMI; what we were confronted with was identity change across levels and the role BMI played in facilitating said identity change. This paper therefore explores the development of identity across levels and the dynamic mechanisms involved in the process. It offers a new perspective on identity enactment across multiple levels and the mechanisms involved, unique insights into the BMI process and its effect on organizational members, and a view on visions which goes beyond the current

literature. We elaborate on the theory by Ashforth, Rogers and Corley (2011) by exploring the construction of identities empirically and by offering insight into the specific mechanisms (signified by arrows 1 through 5 in Figure 4.1) to which they refer as “the enactment of a given construction and the ensuing sensemaking” (Ashforth et al., 2011). Below we build a set of testable proposition based on the analysis of the water board story.

Starting Identity Changes

Status Quo. The first part of the water board story starts like that of many other organizations (especially traditional governmental ones): with a clear identity that is firmly embedded in the fabric of the organization. More than that, the water boards had an additional hurdle in that their identity was also embedded in the community within which they operate. Before jumping to the question of how identities can actually be changed, it may be prudent to look at how identities remain stable over time (and especially so long a time). Importantly, such stability in itself can be considered a miracle at work (Gioia, Schultz & Corley, 2000). Looking at the water board case, we found strong evidence that the enacted identity, the generic subjective identity, was quite clear to the internal and external environment. We also found evidence however that the various units of which the organization was comprised, varied in their perception of what was the organization, and that individuals certainly had many divergent ideas of what was the essence of the water boards. This is in line with the discussion by Ashforth and colleagues (2011) on isomorphism across levels of identity: that the various levels of identity differ in the extent to which their content varies.

How then, could it be possible that identities become stable if individuals hold various identities and within units, individuals share different identities? The water board case suggests two elements that are important to understand the stability of identities: The nature of the different cross-level identity effects, and the strength of the different cross-level identity effects.

In the water board organization; individuals, groups, and units, had been lobbying and networking for changes to the very fabric of the organization. None had been successful so far however. Individuals were constrained by inflexible managers and units by rigid rules and regulations. This indicates first that the influence attempts of the intrasubjective (individuals) and the intersubjective (groups and units) on the levels above them (what we refer to as of now as upward cross-level identity effects) were aimed at changing the current identity of the organization, while the influence attempts of the generic subjective (rules and regulations) and the intersubjective (management of teams and units) on the levels below them (what we refer to as of now as downward cross-level effects) were aimed at preserving the current identity of the organization. Moreover, they indicate that the downward effect generally overruled or

contained the upward effect, and phenomenon that may be driven by the fact that content at higher levels of identity is more homogeneous than content at lower levels of identity (as also implied by Ashforth and colleagues (2011) in discussing isomorphism across levels of identity). Organizational members may be more likely to remain with what is clearly known than what is not only new, but also rather unclear.

Proposition 1a: Upward cross-level identity effects, from the intrasubjective to the intersubjective and the generic subjective, serve to change the organizational identity.

Proposition 1b: Downward cross-level identity effects, from the generic subjective to the intersubjective and the intrasubjective, serve to preserve the organizational identity.

This demonstrates clearly that identities are difficult to ‘dislodge’. Downward cross-level effects of clear identities constrain any attempt for identity change and the longer this situation remains, the clearer high level identities become, and the more protected from change the organizational identity becomes. The water board case however also shows that no identity is completely safe from change.

Impetus for change. In trying to understand how a stable identity may change over time, the effect of a fundamental, often exogenous, shock (or crisis) is discussed (Corley & Gioia, 2004; Meyer, Bartunek, & Lacey, 2002) and, importantly, the effect on said identity is posited as direct (Meyer, Bartunek, & Lacey, 2002). The water board case, however, shows a more subtle picture. That is, the exogenous shock that the water board faced, the threat of being merged with another, bigger, public organization, had its effects on the organization but it did not change it directly. Individuals were certainly affected and started toying around with ideas for change (intrasubjective) as a response to the possibility of vast changes to their organization, and to some extent these change ideas became shared by a group of (influential) organizational members (intersubjective). The identity threat by itself however did not change the reality of the organizational identity (the generic subjective) directly at all; as one interviewee described:

“... a long period in which pressure builds, pressure from outside, the ruling regime tries to improve efficiency, but at increasing cost with diminishing returns. That often leads to problems, internal tensions. The front-runners develop alternatives. At a certain moment the developments align and give way to potential tipping points... What it actually does is give the underlying developments a boost and direction, the real system change only then gets going”.

This suggests that exogenous shocks affect levels of identity differently. As shown in Figure 4.2, the higher degree of variation in content in the intersubjective means that the

exogenous shock has a much more noticeable and disruptive effect on the intersubjective. In the case of the generic subjective however, there is hardly anything to latch onto and the shock is much like a drop in the ocean.

Proposition 2: Exogenous shocks affect the intrasubjective more than the intersubjective and the intersubjective more than the generic subjective.

The strongest effect of this shock was the formulation of a new vision, and potential alternative identity for the water boards. Interestingly, the effects of the vision were important, i.e. It caused organizational members to talk about identity and to be more open to change, but it too did not directly change the identity of the organization. A reason for this may be that a vision of an alternative identity is first and foremost just that: a vision, and not reality. Indeed, this is at the basis of the critique that Stam and colleagues gave on the field of vision communication (Stam et al., 2014) when they suggested that what research on visions should emphasize more than anything else is vision pursuit (making the vision reality).

Does this mean that vision had nothing to do with identity change in the water board case? On the contrary: vision was the main reason that various individuals were able to “experiment” and make their ideas for their company reality (cf. vision pursuit; Stam et al., 2014). However, such individual ideas were not the vision, although they were in line with the vision, but often already existed in the company for some time (as the differentiated content of the intrasubjective). Vision, however, allowed these “rogues” to enact their ideas by making them legitimate. Vision essentially built a bridge between the intersubjective and generic subjective, allowing existing ideas to circumvent the constricting grasp of higher levels of identity on lower levels of identity. As the Energy Factory project leader said:

“While the real value of that concept sits much more in the impact it has on others. Hence, what may lead to recognition or to personal interpretations or other new ideas... that is actually that larger change process occurring, being given opportunity and direction.”

Proposition 3: Offering a strong alternative identity serves to weaken downward cross-level identity effects.

Cross-level dynamics

Identity is a shared construct on an organizational level and therefore needs to be founded on some consensus. The new vision introduced into the organization provided common ground for a shared reality to emerge. Meindl’s (1990) social contagion hypothesis contends

that shared leadership perceptions emerge from social interaction and the same holds true here. The interaction between individuals and groups within the organization displaced the existing story and allowed a new one to emerge. Without interaction, the story does not perpetuate and, importantly, does not evolve to become a collection of individual stories which are shared by those who helped built it.

The threat to identity (essentially a threat to the future as organizational members knew it) created a certain level of unease or uncertainty in the organization. To mitigate such feelings individuals often attempt to regain consistency and create continuity (Ibarra & Barbulescu, 2010; Lounsbury & Glynn, 2001) between the status quo and the future state outlined by the vision. This is often done through mechanisms such as storytelling (Ibarra & Barbulescu, 2010; Kolb, 2003). Storytelling serves a socialization function. Stories are the link between the past, the present, and the future; creating the continuity necessary for organizational agents to not be paralyzed by radical changes (Boal & Schultz, 2007). The water board case shows how the stories which emerged helped to give an outlet to existing alternative ideas in the organization, but were just that however; stories travelling through the organizational ranks, moving from intrasubjective ideas to intersubjective stories. A respondent explained that only with the emergence of the Energy Factory was there momentum behind ‘making the change’: “...then the ball started rolling, because then we received many requests to come and tell the story...”

Proposition 4: Interaction is a mechanism through which the intrasubjective can influence the intersubjective, but not the generic subjective.

To move from being mere stories around the proverbial water cooler, and to solidify the new perspective into the practices of the organization that enact its identity, i.e. the ‘it is’ (Ashforth et al., 2011) a practical channel is needed. The water board case shows how the coming to fruition of the Energy Factory concept moved the new vision (from the Club of 50) and resulting emerging stories (the innovation challenge ideas) to embedding a new way of doing things. Especially, in practically oriented organizations, such as the water boards, a practical outlet is needed to secure the legitimacy of the vision and ensuing stories and shift the identity towards a transitional tipping point where the ‘new way of doing things’ becomes merely ‘the way we do things’. One interviewee summed it up as:

“The success of the Energy Factory was initially contained in the image and the different approach, the different way of working, but it would have never amounted to so much had we not also had the technical realisation side. You cannot sell hot air...”

BMI provides the bridge between what is still intangible stories to the tangible practices. Going back to the ‘roots’ of business models; without the enactment of the new revenue model, partner network, key processes and resources and the other elements that make up the business model it would be remiss to call something business model innovation. Furthermore, without said enactment, the support behind an “idea” will eventually wither and die. As the water board employee so eloquently put it: “You cannot sell hot air.” Different from for instance policies or product innovation, BMI is a more fundamental change and creates momentum among people because it is embedded in their day to day, in what they do. If the new approach is inherent in people’s operating environment (assuming conditions are conducive to this), the chance that it becomes the ‘new way of doing things’ is much higher.

Proposition 5: Business model innovation is a mechanism through which the intersubjective can influence the generic subjective.

BMI success

BMI has been typified as the ‘way things are done’ (Magretta, 2002) and therefore sits quite close to the organization’s identity as the enactment of said identity (especially in smaller, single business model organizations but also in larger, multi-business model ones where the identity is embedded into each business model). As organizational members work to create continuity and consistency between the status quo and the future, so too do they try and harmonize the practical with the intangible. The Energy Factory would arguably have been significantly less successful, had someone managed to get it off the ground at all, with the ‘old’ water board identity still in place. In the ‘old situation’ even simple projects met a wall of resistance: “...the regime has moved along, in 2008 I was met with resistance from management regarding simple things like a website...” Now however, it is a very different world:

“... the Energy Factory thinking, it was essentially about value creation using our existing assets, and that we had never done. We were very task-oriented, we were called into being as a body for this and that task and we do these tasks to the best of our ability. You can do these tasks just fine behind the scenes because that just has to happen. While now we look much more into what value we are adding to society, because you are there for society, never forget that. You can, with the water treatment plant, perform the task just fine, namely clean the water. You can also however, with the same sewage water treatment plant create some additional value and one form (of value) is energy. But another form is raw material production with the Raw Materials Factory, this is of course the same idea, namely the creation of value with what we have in hand.”

Proposition 6: BMI is more likely to be successful when it is tied to an identity (change) on the intrasubjective and the intersubjective level of identity.

We summarise our propositions on cross-level dynamics of identity change in Figure 4.2, keeping true to our original purpose of theory elaboration and returning to a modified and extended version of the model originally drawn by Ashforth, Rogers, and Corley (2011). We specify the mechanisms denoted by the arrows in Figure 4.1 and provide a more comprehensive view on the cross-level dynamics of identity change.

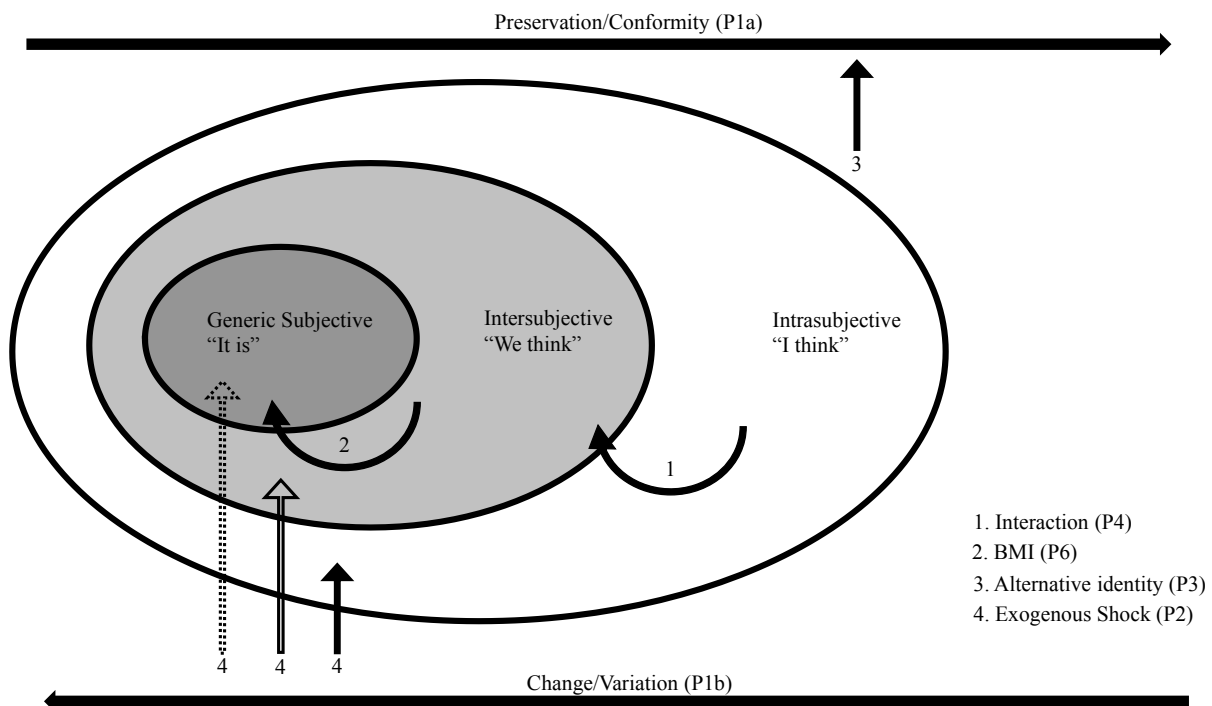


Figure 4.2: The Construction of an Identity

We have reversed the model to put the generic subject at the core, following the logic that this is where the most core elements of an identity are contained, where it is least vulnerable to outside influence, and most importantly, where there is the least ‘room’ for variation. Moving outward, there is more variation in subsequent levels and these are more susceptible to external forces (arrows 4). We specify interaction and BMI as two cross-level mechanisms bridging the levels of identity and driving identity change forward (arrows 1 and 2). Furthermore, we specify the forces of change and preservation that are constantly in play as well as a moderating effect of a strong alternative identity on the downward cross-level identity effects.

4.6 Conclusion

Having set off on this journey with the intention of uncovering the inner workings of BMI set against the backdrop of a ‘blank canvas’, i.e. a government agency which before did not have a business model by virtue of their mandate in society. We uncovered a larger theme

centred on the part a business model, and more importantly the innovation of a business model, can play in the identity of an organisation. Our propositions on BMI and cross-level identity dynamics furthers the work of Ashforth, Rogers, and Corley (2011) in the domain of how identities develop across extra-individual levels of analysis. In addition, we also provide a starting point for further research into the dynamics of BMI, the part BMI plays in the process of identity change, but also the part identity plays in BMI. We encourage future research to continue pursuing this avenue in different settings and with different methods, extending BMI literature beyond mere composition and process and further into the behavioural domain, but also providing fresh perspectives on identity research.

SUMMARY

The modern mobile phone has more processing power than the super-computer which put Apollo 11 on the moon (Kaksu, 2014). A staggering fact about the information age in which we are firmly embedded. In the current reality, consumers have an increasingly vast number of choices, yielding progressively less satisfaction, and firms are overwhelmed with an ever expanding list of strategic choices, yielding progressively less value (Prahalad & Ramaswamy, 2004). Ever more, firms are forced to turn to innovative ways of doing business in order to satisfy customers and remain competitive. Consistent innovation is rapidly turning into an essential factor in every successful business; in fact, it has been developing toward this for quite some time (Magretta, 2002; Coles & Mitchell, 2003; Chapman, 2006). Companies need to innovate to stay current and remain competitive.

When one speaks of innovation; images of new, technologically advanced or novel solutions for everyday needs are conjured up. While this is an entirely valid representation, it does not encompass the concept of innovation as a whole. Commercial focus thus far has been primarily on technological innovation, hence the association (Chesbrough, 2007; Moss Kanter, 2006). However, in the new age, having the most technologically advanced and up-to-date product offerings no longer suffices to satisfy growing consumer desires. Organizations have to split their focus to include business model innovation in the new business sphere (Chesbrough, 2007; Moser et al., 2007; Chapman, 2006; Chapman & Pohle, 2006; Boulton et al., 2000).

The majority of extant research revolves around investigating the elements of a business model; what a business model consists of; and what exactly is implied by the term business model innovation (Morris et al., 2005; Coles & Mitchell, 2004; Tikkanen et al., 2005; Chesbrough, 2007). Research up to this point gave the dynamism of business model innovation relatively little consideration and essentially examined a rather static end-state, as opposed to the process leading to business model innovation, in focusing on its elemental composition.

Research of late is moving more in the direction of process orientation (e.g. Sosna, Trevinyo-Rodriguez & Velamuri, 2010), starting to explicate the complexities involved in making business model innovation happen. Being in the early stages, this research is still quite practical in nature and lacks a certain degree of theoretical depth (Sosna et al., 2010; Rasmussen & Foss, 2014). The call for more research into the drivers and mechanisms of business model innovation still rings out (Morris et al., 2005; Chesbrough, 2007; Amit & Zott, 2008; Sosna et al. 2010; Rasmussen & Foss, 2014). It is this call I hoped to answer in writing this dissertation.

In the domain of business models, it is my opinion that the crux of success lies in the totality of business model innovation. It is as much about the end-state business model as it is about the path to implementation, and that in the most holistic sense: the model, the people, and the environment. I tried to mirror this perspective in the choices made in writing this dissertation, attempting to pull apart the process and look through the keyhole at the inner workings of business model innovation. Each chapter is another step closer to capturing the totality mentioned but also further away from the business model itself. Starting close to current thinking with a theoretical exploration of the business model innovation process, and ending with a new perspective, in an empirical investigation of the effect of the process on arguably the most fundamental part of an organisation, its people.

Business Model Innovation: Team Networks and Leadership – Chapter 2 extends current literature, which provides insight into *what* contributes to BMI success, and *how*; by providing more insight into the *why* (Whetten, 1989) of BMI. We use leadership and network literature as the theoretical backdrop to explore BMI in the context of two stages, a concept stage and a development stage, with different requirements and characteristics in each.

We believe we offer a novel theoretical approach by conceptualizing BMI as a behavioural process: a team-based, path-dependent process emphasizing the roles of team networks, leadership, and how these interact at various stages to influence performance. Moreover, we engage in ‘multidisciplinary theory building’ by integrating two major contemporary theoretical lenses, social networks and leadership, to explain a currently “under-theorized” strategic issue. We offer new theory on the links between social network theory and social psychology, to conceptualise how a team’s internal processes interact with its external processes to affect BMI outcomes.

We argued that BMI has distinct characteristics, with typically more uncertainty, complexity, and interdependence, than more conventional types of innovation, such as product and process innovation. Nevertheless, the validity of our model, using leadership, external networks of teams, and their interactions, and how this varies in terms of their influence on performance from one stage to the next, may be explored for other settings as well.

An Organizational Process Model for Resource Constrained Settings: The Case of MJunction – Chapter 3 addresses an intriguing puzzle for management researchers (George et al., 2012): what explains success in low-cost business models? What organizational factors contribute to it, and *why* (i.e., theoretical logic; Whetten, 1989)? Our longitudinal, qualitative study of MJunction in a resource-constrained setting (the emerging IT industry in India) suggested new multi-level, multi-stage organizational process theory. External exploration and

external exploitation, led to experiences, insights, and objects (e.g., IT-platform) that were quickly cobbled together to a new business model, which was improved through trial-and error (“bricolage”) in the local market. This process was supported by transformational leadership at the firm level and BU-level in the concept stage; operation-oriented leadership at the development stage, and participative leadership at the launch stage, making the organization as a whole very profitable quite quickly. This created munificent conditions to move to the next (mature) stage, with firm-level, formal processes for exploration (in an incubator) and exploitation (horizontal and vertical knowledge-sharing mechanisms), supported by firm-level leadership in more of a mentoring capacity. Low-cost business models have attracted considerable interest in research (George et al., 2012) and practice (Radjou et al., 2012; Prahalad & Hart, 2006), and we hope our new conceptualization will inspire future research and theory in this domain.

Grassroots Business Model Innovation: Changing the Identity of a Government Institution – We initiated this study to explore the dynamics of BMI; what we were confronted with was identity change across levels and the role BMI played in facilitating said identity change. This paper therefore explores the development of identity across levels and the dynamic mechanisms involved in the process. It offers a new perspective on identity enactment across multiple levels and the mechanisms involved, unique insights into the BMI process and its effect on organizational members, and a view on visions which goes beyond the current literature. We build a set of testable proposition based on the analysis of story of the Energy Factory.

Having set off on the journey with the intention of further uncovering the inner workings of BMI set against the backdrop of a ‘blank canvas’, i.e. a government agency which before did not have a business model by virtue of their mandate in society. We uncovered a larger theme centred on the part a business model, and more importantly the innovation of a business model, can play in the identity of an organisation. We elaborate on the theory by Ashforth, Rogers and Corley (2011) by exploring the construction of identities empirically and by offering insight into the specific mechanisms to which they refer as “the enactment of a given construction and the ensuing sensemaking” (Ashforth et al., 2011). In addition, we provide a starting point for further research into the dynamics of BMI, the part BMI plays in the process of identity change, and also the part identity plays in BMI. We encourage future research to continue pursuing this avenue in different settings and with different methods, extending BMI literature beyond mere composition and process and further into the behavioural domain.

Concluding Remark – I set out to take a look through the keyhole at the inner workings of business model innovation in this dissertation. In my research I discovered that business model innovation is a phenomenon not conducive to being classified into any one framework or theory. We must use other scientific theories and domains to contextualise business model innovation and so make sense of this interesting, albeit practical, process. At the start of this journey, I wanted to answer the question: What drives business model innovation to success? I believe I have, at least partly, answered this question in my discovery that business model innovation is a fluid concept driven mainly by people and behaviours, which in turn also augments said behaviour, driving other processes (one of which could potentially be more business model innovation). I have highlighted the importance of leadership in driving this process as well as its outcomes, e.g. learning, identity change. I hope I have piqued the interest of others to follow up on the findings of this dissertation and shine a light on the many remaining mysteries inherent in business model innovation.

SAMENVATTING

De moderne mobiele telefoon heeft meer rekenkracht dan de super-computer die Apollo 11 op de maan heeft gezet (Kaksu, 2014). Een onvoorstelbaar feit over het digitale tijdperk waarin wij ons momenteel bevinden. In de huidige realiteit, hebben consumenten in een toenemendere mate keuzes, met als resultaat minder tevredenheid, en bedrijven worden overweldigd met een steeds groeiende lijst van strategische keuzes, die minder waarde oplevert (Prahalad & Ramaswamy, 2004). Bedrijven worden gedwongen zich te wenden tot innovatieve manieren van zakendoen om klanten tevreden te stellen en de concurrentie voor te blijven. Consistente innovatie is snel een essentiële factor aan het worden in elke succesvolle onderneming; de ontwikkeling in deze richting is zelfs al geruime tijd gaande (Magretta, 2002; Coles & Mitchell, 2003; Chapman, 2006). Innovatie is een geen pre om concurrerend te blijven, maar een eis.

Als men het over innovatie heeft wordt beelden van technologisch geavanceerde en nieuwe oplossingen voor dagelijkse behoeften opgeroepen. Hoewel dit een volledig geldig representatie van innovatie is, omvat het niet het begrip innovatie als geheel. Commerciële focus tot nu toe is in de eerste plaats op technologische innovatie, vandaar het verband. (Chesbrough, 2007; Moss Kanter, 2006). Het meest technologisch geavanceerde en up-to-date product aanbod volstaat niet langer om de groeiende consument verlangens te bevredigen. Organisaties moeten hun aandacht verdelen om business model innovatie op te nemen in de nieuwe realiteit (Chesbrough, 2007; Moser et al., 2007; Chapman, 2006; Chapman & Pohle, 2006; Boulton et al., 2000).

De meerderheid van de bestaande literatuur draait rond het onderzoeken van de elementen van een business model; wat een business model uit bestaat en wat er precies wordt geïmpliceerd door de term business model innovatie (Morris et al, 2005; Coles & Mitchell, 2004; Tikkanen et al, 2005; Chesbrough, 2007). Onderzoek tot op dit punt heeft de dynamiek van business model innovatie relatief weinig aandacht gegeven en, door gericht te blijven op de elementaire samenstelling, in essentie een nogal statisch eind-staat onderzocht. Dit in tegenstelling tot het proces dat leidt tot business model innovatie.

Onderzoek gaat tegenwoordig meer bewegen in de richting van proces (bijv Sosna, Trevinyo-Rodriguez & Velamuri, 2010), de initiële stappen tot het expliciteren van de complexiteit inherent bij business model innovatie. Het onderzoek is nog in het beginfase dus is het vrij praktisch van aard en mist een zekere theoretische diepgang (Sosna et al, 2010; Rasmussen & Foss, 2014). De roep om meer onderzoek naar de drijfveren en de mechanismen

van business model innovatie klinkt nog steeds (Morris et al, 2005; Chesbrough, 2007; Amit en Zott, 2008; Sosna et al 2010; Rasmussen & Foss, 2014). Het is deze oproep die ik hoop te beantwoorden in het schrijven van dit proefschrift.

Op het gebied van business modellen, is het mijn mening dat de kern van succes in de totaliteit van business model innovatie ligt. Het is net zo veel over de eind-staat business model als over de weg naar implementatie, en dat in de meest holistische zin: het model, de mensen en alles in de omgeving eromheen. In het schrijven van dit proefschrift heb ik geprobeerd naadloos bij deze perspectief aan te sluiten en een poging te doen tot een kijkje door het sleutelgat naar de innerlijke werking van business model innovatie. Elk hoofdstuk is een stap dichterbij het vastleggen van de genoemde totaliteit maar ook verder weg van het business model zelf. Beginnend in de buurt van het huidige denken met een theoretische verkenning van de business model innovatie proces, en eindigend met een nieuw perspectief, in een empirisch onderzoek naar het effect van het proces op misschien wel het meest fundamentele deel van de organisatie, haar mensen.

Business Model Innovation: Team Networks and Leadership – Hoofdstuk 2 breidt uit op huidige literatuur, die inzicht geven in wat bijdraagt aan BMI succes en hoe; door meer inzicht in het waarom (Whetten, 1989) van BMI. We gebruiken leiderschaps- en netwerk literatuur als de theoretische achtergrond voor het onderzoeken van BMI in de context van twee fasen, een conceptfase en ontwikkelingsfase, met verschillende eisen en kenmerken in elk. Wij geloven dat wij een nieuwe theoretische benadering tot het conceptualiseren van BMI bieden, een conceptualisering als een gedragsproces: een team-gebaseerde, pad-afhankelijk proces die nadruk zet op de rol van het team netwerken, leiderschap, en hoe deze interageren in verschillende stadia om de prestaties te beïnvloeden. Bovendien engageren wij in 'multidisciplinaire theorievorming' door twee belangrijke hedendaagse theoretische lenzen, sociale netwerken en leiderschap, te integreren en een momenteel "onder-getheoretiseerde" strategische kwestie uit te leggen. Wij bieden nieuwe theorie over het verband tussen sociale netwerk theorie en de sociale psychologie door te conceptualiseren hoe de interne processen van een team samenhangen met de externe processen die BMI succes beïnvloeden.

We argumenteren dat BMI verschillende kenmerken heeft, met over het algemeen meer onzekerheid, complexiteit en onderlinge afhankelijkheid, dan de meer conventionele vormen van innovatie, zoals product- en procesinnovatie. Desalniettemin is de validiteit van ons model, met behulp van leiderschap, externe netwerken van de teams en hun interacties, en hoe dit verschilt in termen van hun invloed op de prestaties van de ene fase naar de volgende, mogelijk te onderzoeken in andere settings.

An Organizational Process Model for Resource Constrained Settings: The Case of MJunction – Hoofdstuk 3 richt zich op een intrigerende puzzel voor management onderzoekers (George et al, 2012). Wat zijn succesfactoren in ‘low-cost’ business modellen? Welke organisatorische factoren dragen bij tot succes, en waarom (d.w.z. theoretische logica; Whetten, 1989)? Onze longitudinaal, kwalitatief onderzoek van MJunction in een middel-beperkte omgeving (de opkomende IT-industrie in India) suggereerde nieuwe multi-niveau, multi-fase organisatieproces theorie. Externe exploratie en externe exploitatie leidde tot ervaringen, inzichten, en objecten (bijvoorbeeld een IT-platform), die samen snel aan elkaar werden geflanst tot een nieuw business model, dat werd verbeterd door middel van trial en error ("bricolage") in de lokale markt. Dit proces werd ondersteund door transformationeel leiderschap op bedrijfsniveau en BU-niveau in de conceptfase; operatie-gerichte leiderschap in de ontwikkelingsfase, en participatief leiderschap bij de lanceringsfase, waardoor de organisatie als geheel vrij snel zeer winstgevend werd. Hierdoor ontstond milddadige omstandigheden om naar het volgende (volwassen) fase, met organisatie niveau formele procedures voor exploratie (in een incubator) en exploitatie (horizontale en verticale mechanismen voor kennisdeling), ondersteund door organisatie niveau leiderschap in meer van een mentor capaciteit. ‘Low-cost’ business modellen hebben veel belangstelling voor onderzoek aangetrokken (George et al, 2012.) in de praktijk (Radjou et al, 2012; Prahalad & Hart, 2006), en we hopen dat onze nieuwe conceptualisering toekomstig onderzoek en theorie in deze domein zal inspireren.

Grassroots Business Model Innovation: Changing the Identity of a Government Institution – We initieerden dit onderzoek om de dynamiek van de BMI te verkennen; we werden echter geconfronteerd met identiteit verandering tussen meerdere niveaus en de rol die BMI speelt in het faciliteren van deze identiteit verandering. Dit hoofdstuk onderzoekt ook de ontwikkeling van identiteit tussen niveaus en de dynamische mechanismen betrokken bij het proces. Het biedt een nieuw perspectief op identiteit uitvoeren over meerdere niveaus en de betrokken mechanismen, unieke inzichten in het BMI-proces en het effect ervan op de organisatieleden, en inzichten in visie die verder gaat dan de huidige literatuur. We bouwen een aantal toetsbare proposities gebaseerd op de analyse van het verhaal van de Energiefabriek.

Wij begon onze onderzoek met de intentie om de innerlijke werking van BMI bloot te leggen, met als achtergrond een 'witte doek', dat wil zeggen een overheidsinstelling die eerder niet beschikte over een ‘business model’ vanwege hun mandaat in de samenleving. We ontdekte een overkoepelende thema gecentreerd op het aandeel dat een business model, en belangrijker nog de innovatie van een business model, kan spelen in de identiteit van een organisatie. We

breid uit op de theorie van Ashforth, Rogers en Corley (2011) door de constructie van identiteiten empirisch te exploreren en door het bieden van inzicht in de specifieke mechanismen waarbij zij refereren naar "de vaststelling van een bepaalde constructie en de daaruit voortvloeiende zingeving" (Ashforth et al., 2011). Daarnaast bieden we een uitgangspunt voor verder onderzoek naar de dynamiek van BMI, het deel dat BMI speelt in het proces van het veranderen van identiteit, en ook het deel die identiteit speelt in BMI. We moedigen toekomstig onderzoek aan om te blijven voortzetten op deze weg door in verschillende organisaties en met verschillende methoden BMI literatuur verder uit te breiden dan alleen de samenstelling en het proces, maar juist verder in de domein van gedragsprocessen te gaan.

Concluding Remark – Ik ben aan dit proefschrift begonnen om een blik door het sleutelgat naar de innerlijke werking van business model innovatie te nemen. In mijn onderzoek ontdekte ik dat business model innovatie een fenomeen is dat niet in één kader of theorie kunnen worden ingedeeld. We moeten andere wetenschappelijke theorieën en domeinen gebruiken om business model innovatie te contextualiseren en dus zin van dit interessante, zij praktisch, proces te maken. Aan het begin van dit ‘avontuur’ wilde ik de vraag beantwoorden: Wat drijft business model innovatie tot succes? Ik geloof dat ik, althans gedeeltelijk, deze vraag heeft beantwoord in mijn ontdekking dat business model innovatie een vloeiend concept is, vooral gedreven door mensen en gedrag, die op hun beurt ook dat gedrag verandert, die fungeert als aandrijver van andere processen (waarvan er één meer business model innovatie zou kunnen zijn). Ik heb het belang van leiderschap benadrukt in het managen van dit proces alsmede de resultaten, bijvoorbeeld leren, identiteit veranderen. Ik hoop dat ik het voldoende belangstelling gewekt heb bij anderen om voor opvolging van de bevindingen van dit proefschrift te zorgen en een licht te schijnen op de vele resterende mysteries die inherent zijn aan business model innovatie.

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PROPOSITIONS

1. A business model is more complex than the sum of its parts.
2. The most important input for business model innovation is information, complete external information and diverse internal information; that is what drives successful business model innovation.
3. Leadership is a deciding factor in the process of business model innovation.
4. Business model innovation is at least as much behavioural as it is processual.
5. The assessment of success of business model innovation is dependent on it being exposed to the outside world, without exposure it is nothing more than a concept.
6. Our understanding of management science is far surpassed by its complexity.
7. A person can hear but not listen, but it is impossible to listen without hearing.
8. “Simplicity is a great virtue but it requires hard work to achieve it and education to appreciate it. And to make matters worse: complexity sells better.”

(Edsger W. Dijkstra, 1972 Turing Award winner, 1930-2002)

9. Objectivity is judgement in the absence of bias. As humans, we are shaped by our experiences and any judgement is a reflection of those experiences, hence objectivity is unattainable.
10. Theories are designed to fail; it takes a multitude of cases to prove a theory, but a single case to refute it.
11. “Tell me how you measure me, and I will tell you how I will behave.”

(Eliyahu Goldratt, Physicist, Author and Management Guru, 1947-2011)

In the 21st century, consumers have an increasingly vast number of choices, yielding progressively less satisfaction, and firms have an ever expanding list of strategic choices, yielding progressively less value. Firms are forced to turn to innovative ways of doing business in order to satisfy customers and remain competitive.

When one speaks of innovation; images of new, technologically advanced or novel solutions for everyday needs are summoned. While this is entirely valid, it does not wholly encompass the concept of innovation. Having the most technologically advanced and up-to-date product offerings no longer suffices to satisfy growing consumer desires. Organizations have to split their focus to include business model innovation in the new business sphere and the crux of their success lies in recognizing the totality of business model innovation. It is as much about the end-state business model as it is about the path to implementation, and that in a holistic sense: the model, the people, and the environment.

This dissertation mirrors this perspective, attempting to pull apart the process and look through the keyhole at the inner workings of business model innovation. Each chapter is another step closer to capturing the totality mentioned but also further away from the business model itself. Starting close to current thinking - with a theoretical exploration of the business model innovation process - and ending with a new perspective, in an empirical investigation of the effect of the process on arguably the most fundamental part of an organisation, its people.

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