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Business Model Design at the Base of the Pyramid

The extant literature on Base of the Pyramid (BoP) business models reveals the following dilemma: Business models should both adapt to and shape the context in which they are deployed. This article focuses on how new ventures can design a business model bottom up while simultaneously adapting to and shaping the context in which the venture is operating. Through a single case study of a globally leading mini-utility firm in the rural electricity sector at the BoP, this article makes three contributions. First, it contributes to the literature on business model design by showing that specifically designed interim business models facilitate adaptation to and the shaping of the context. Second, the article refines the native capability construct, splitting it into native “pull” and “push” capabilities. This brings nuance to much of the BoP literature that suggests ventures yield to local context. Third, the article links the business model design and native pull/push capability to potential and realized absorptive capacity. Accordingly, hands-on strategies for developing potential and realized absorptive capacity are suggested.

Keywords: business model design; base of the pyramid; entrepreneur; native capability; absorptive capacity

1 Introduction

Business models are dynamic constructs that change over time (Demil and Lecocq, 2010) and are rarely designed perfectly the first time they are implemented.

Entrepreneurs change, modify, adapt, and refine their business models several times during the early days of a firm's existence (Druilhe and Garnsey, 2004). Designing a business model is the “purposeful weaving together of interdependent activities ... performed by the firm itself or by its suppliers, partners and/or customers” (Zott and Amit, 2010, p. 218). The majority of literature on business model design assumes that business models are constructed through a process of adaptation to their context represented by potential customers (McGrath, 2010), established institutions (Provance et al., 2011) and competitors (Sosna et al., 2010). Recently, however, it has been suggested that business models can also shape the context they are part of by serving as a market device (Doganova and Eyquem-Renault, 2009); shaping collective actions (Mason and Spring, 2011) and external networks (Palo and Tähtinen, 2013); and influencing its business ecosystem (Sánchez and Ricart, 2010). For the entrepreneur attempting to develop a profitable business model, this presents a dilemma. On the one hand, a business model that adapts to the context faces the risk of not introducing novel components that challenge the status quo. These novelties, despite initial resistance from potential stakeholders in the context that best fits the present situation, can eventually be a source of competitive advantage (Zott and Amit, 2007). On the other hand, while a business model that intensively challenges the present players in a certain context may certainly introduce novelty, it may at the same time repel potential stakeholders to a degree that will eventually prevent the proposed business model from being accepted. This article's main objective is to

analyze this dilemma of “adapting to” and “shaping of” the context at the BoP when designing a business model.

To do so, we apply a definition of business models that can accommodate both perspectives. Boons and Lüdeke-Freund (2013) proposed a definition of a business model based on the understanding that the model can also shape its context (Doganova and Eyquem-Renault, 2009). They suggested that a business model consists of the following elements: (1) value proposition (value offered to the customer); (2) supply chain (upstream relationship with suppliers); (3) customer interface (downstream relationship with customers); and (4) financial model (monetization from 1, 2, and 3) (Boons and Lüdeke-Freund, 2013). This definition lays out the contact points of a business with the actors in the context, such as customers, suppliers, funding agencies, and other actors related to the elements of a business model. These are all part of the business ecosystem, which consists of actors and organizations that depend on each other to different degrees (Zahra and Nambisan, 2012). Our understanding of the context is closely related to the term “business ecosystem.” Our definition of the term encompasses all the actors that could potentially become part of a business ecosystem through changes triggered by its “shaping of” component. The terms “context” and “business ecosystem” will be used interchangeably throughout the rest of this article.

The Base of the Pyramid (BoP) offers a suitable context in which to explore the dilemma of business model designs with regard to the adaptation to and shaping of the context because firms are advised to adapt to their context and build on local conditions (Hart and London, 2005). Simultaneously, firm activities are also expected

to radically change the context in which they operate by introducing new products and services (Prahalad and Hammond, 2002). The vast number of people throughout the world living in poverty—often located in rural areas in developing countries—have been denoted as the BoP (2002). By including the people at the BoP in the market economy, entrepreneurs can generate profits while simultaneously alleviating poverty (Hart and London, 2005). However, BoP markets are associated with unique challenges (London and Hart, 2004) and high levels of uncertainty (Alvarez and Barney, 2006), and the institutional contexts of these markets often provide little support for economic activities (Khanna et al., 2005). Non-existent formal capital markets, an uneducated workforce, poorly developed public infrastructure, informal governance mechanisms (Webb et al., 2010), and little or no protection of property rights (De Soto, 2000) are all characteristics of the BoP context that must be overcome. Overall, the business ecosystem is poorly developed. To compensate for this, firms should closely interact with people at the BoP (Hart and Sharma, 2004) and develop native capabilities that build upon, and not around, the conditions and resources of the BoP context (Hart and London, 2005). Native capability refers to the ability to integrate into local routines (Bittencourt Marconatto et al., 2016), team up with non-traditional partners (Hart and London, 2005) and NGOs (Seelos and Mair, 2007), include fringe stakeholders (Hart and Sharma, 2004), and build upon already existing local resources (Hart and London, 2005). This will foster adaptation to local conditions (Simanis and Hart, 2009). At the same time, however, the fundamental idea behind the BoP proposition is to radically alter the BoP context through poverty alleviation and better living standards (Prahalad and Hammond, 2002). While firms must also be highly sensitive to the local context as well as capable of building upon

and adapting to it, the BoP proposition suggests that the same firms, through their business models, can introduce a radical change in the context (2002). We ask how a business model is designed when it is expected to simultaneously adapt to and shape the context.

2 How business models adapt to and shape context

In this section, we begin by presenting two sides of the following dilemma of business model design: the capacity to simultaneously adapt to and shape the context in the business model design process at the BoP. We then examine this dilemma in more detail, analyzing how likely it is to affect the elements of a business model and its design.

2.1 “Adaptation to”

Experimenting with business models is a key part of the business model design process (See Baden-Fuller and Morgan, 2010 for an overview of different types of experimenting). The experimental approach to business model design implicitly takes an “adaptation to” approach. Based on exposure to real customers, partners, and other actors involved in the business ecosystem, the business model goes through a discovery or trial and error process (Sosna et al., 2010) in which the business model is fine-tuned and brought into alignment with its surrounding context (Chesbrough and Rosenbloom, 2002). The business model adapts to the context because it responds and adapts to external triggers (Sosna et al., 2010), such as customer demands (Trimi and Berbegal-Mirabent, 2012) and customer values (McGrath, 2010).

2.2 “*Shaping of*”

By virtue of being part of a network, a business model shapes the market and is in turn shaped by the market through its existence (Mason and Spring, 2011). A business model proposes a new future whereby the business ecosystem, represented by potential partners, customers, investors, and other stakeholders, is invited to join the new business model and create virtuous cycles between the firm and the surrounding ecosystem (Sánchez and Ricart, 2010). One firm’s downstream activities are another firm’s upstream activities. Through a negotiation-like process, both sides make adjustments so they can monetize their activities as per the proposed business model. Potential collaborators in the business ecosystem redesign their business models according to a leading firm; only when the business ecosystem is redesigned as a whole is the potential value established (Hellström et al., 2015). This process can take place as the business models are implemented or earlier in the design process when the business model exists only as a construct or a proposal for the future. Due to its potential power to shape contextual elements, the business model has “performative” powers (Doganova and Eyquem-Renault, 2009).

This shows that business models at the BoP could also both adapt to and shape the BoP context. Due to the emerging focus on developing native capabilities at the BoP, however, there is an undercurrent in the literature on this subject that suggests that the business model ought to adapt to the BoP context. Next, we introduce the native capability construct and its relation to the adaptation to, and shaping of, the context.

2.3 *Native capability and “adaptation to” and “shaping of”*

Early literature on the BoP focused on multinational enterprises (MNEs), which tend to have a sense of “corporate imperialism” (Prahalad and Lieberthal, 2003) and are not particularly concerned about adapting to the local context (Hart, 2012). As a counterpoint to this, in later literature on the BoP, it has been argued that firms must become socially embedded and develop native capabilities in order to succeed at the BoP (Hart and London, 2005). Because developing native capability is about becoming indigenous and showing respect to the local culture and natural diversity (2005), it prioritizes the existing local over the new and foreign. Consequently, native capabilities implicitly have a greater focus on “adaptation to” compared to the “shaping of” the local context.

Being socially embedded is essential in building native capabilities because social embeddedness provides access to important actors who would have been unavailable were it not for social ties. Also, being socially embedded increases trust between actors and eases market transactions. On the other hand, when it puts constraints on a business opportunity, being socially embedded can go from being an asset to being a liability (Jack and Anderson, 2002).

While agreeing that becoming deeply engaged and involved with the local community at the BoP is important, Simanis (2011) convincingly argued that an important aspect has been overlooked in the BoP literature: there is often no existing market to tap at the BoP—the market must be created. Taking the view that a consumer market is “a lifestyle built around a product,” Simanis (2011, p. 105) reminded us that for many

Indian villagers today, it is just as irrational to pay for clean water as it was for Americans to buy bottled water some decades ago. Accordingly, water sanitation companies that seek to make a profit at the BoP cannot “respect” local traditions in that regard. In order to fully exploit the business opportunity, the BoP context must be challenged. At the BoP, the business model at hand needs to adapt to the context and build native capabilities. However, because it introduces a new value proposition, challenges supply and customer relations, and introduces new financial models, it will also need to shape the context in which it is deployed. This implies a redefinition and expansion of some of the principles of the native capabilities construct.

In the next section, we introduce the concept of “absorptive capacity” in order to contrast it to the native capability construct and explore how such capabilities could be developed in interaction with the context. Following that, we deconstruct the dilemma of business model design by looking at how each element in the chosen definition of the business model relates to “adaptation to” and the “shaping of” the context at the BoP.

3 Absorptive capacity and native capability

Absorptive capacity (ACAP) refers to a venture’s ability to assimilate and take advantage of external knowledge, which depends on its prior knowledge (Cohen and Levinthal, 1990). Put another way, the more an organization knows, the better it will be at acquiring and assimilating new knowledge external to the organization. The knowledge in ACAP is frequently referred to as “advanced” knowledge such as that acquired through research (e.g. Patterson and Ambrosini, 2015); accordingly, ACAP is cumulatively built up through research and development activities. ACAP centers

on knowledge, external to an organization, as input to the internal innovation process. Native capability focuses on the ability to integrate into local routines and build upon local conditions that are external to a venture. The conditions under which native capabilities are developed can be seen as more constraining, and firms engaging with the BoP context usually lack prior knowledge of the same. The key point of the native capability construct is to transform seemingly unprofitable conditions into something of value by becoming embedded in the context. Regardless of the nature of the external—knowledge or a seemingly restraining condition—the common denominator in both constructs is that they both refer to the capacity to absorb something external to the organization or venture.

However, as pointed out by Zahra and George (2002) in their reconceptualization of ACAP, it is not enough to absorb external knowledge—it must also be exploited. Consequently, the authors split ACAP into potential absorptive capacity (PACAP), which consists of acquiring and assimilating knowledge; and realized absorptive capacity (RACAP), which consists of transforming and exploiting knowledge. They related these to the routines and processes in the firm and changes made to them in order to better assimilate and exploit developing knowledge. Drawing a parallel to the present literature on the native capability construct, the focus here is on the need to integrate into the local conditions and traditions at the BoP. Put differently, the native capability construct, at present, focuses more on the need for absorbing knowledge on local conditions and less on how to profit from it when it is done. This gap is addressed in this paper by linking it to the business model design process and absorptive capacity. Below, the article deconstructs the business model design process at the BoP, analyzing how each element of the business model relates to “adaptation

to” and the “shaping of” the context.

4 Deconstructing the business model design process at the BoP

The extant literature on the BoP informs us about the four elements of the definition of the chosen business model and how it relates to “adaptation to” and the “shaping of” the context in the business model design process. Table 1 gives an overview, and a further explanation follows.

Table 1. The four business model elements and their relation to "adaptation to" and "shaping of"

Business model elements	Adapting to (pull)	Shaping of (push)
Value proposition	Broad value proposition	Narrow value proposition
Supply chain relation	Accept existing supply chains	Generate new or cultivate existing supply chains
Customer interface	Learn from customers	Educate customers
Financial model	Accept low purchasing levels	Inject working capital

4.1 *Value proposition*

We will argue here that a broad value proposition perspective is closest to “adapting to” the context, while a narrow value proposition perspective is closest to the “shaping of” the context. Due to the strong link between social and economic performance (Dahan et al., 2010), it is important to expand the value proposition beyond the product (London and Hart, 2004) to also include social value at the BoP (Linna, 2013). A broader value proposition implies that the value offers benefits not only to the customer but also to a broader segment of the ecosystem. Firms that are not able to integrate a broader value perspective, e.g., by ignoring the importance of social ties, may never be able to reduce and limit the liability of their foreignness and, consequently, will never become part of society, which is required to succeed at the

BoP (London and Hart, 2004). The value is expected to increase for more actors as people on the fringe (Hart and Sharma, 2004) and non-traditional actors (London and Hart, 2004) are invited to participate in joint value creation. Consequently, a broad value proposition perspective implies that more actors have an input in the content of the value proposition; there are more contextual factors to adapt to when designing the business model.

In contrast to a broad value proposition, a narrow value proposition targets fewer actors. This does not automatically mean that a narrow value proposition supports the “shaping of” context. However, if a value proposition does not align with the present context, firms must evaluate whether they will adapt their value offering so that it adapts to the context or if they should attempt to alter conditions in the context so that they fit the desired value proposition from the firm’s perspective (Khanna et al., 2005). In contrast to the broad value proposition, fewer actors have a say in the narrow value proposition. There is potentially less adaptation to the context in a narrow value proposition, and we expect that it is easier to shape a context by convincing fewer actors, rather than more actors, about a new value proposition.

4.2 Supply chain

One way to increase the value proposition for more actors is to utilize local supply chains (Hart and London, 2005). In this way, local communities are included as producers (Gold et al., 2013), which increases wealth throughout the supply chain (Matos and Silvestre, 2013). This method improves the standard of living of the parties involved (Martinez and Carbonell, 2007) because the poor capture more gains from their products (Karnani, 2007b). Using local supply chains also increases the

interdependencies between the firm and the local context, which further contributes to the firm's development and its long-term sustainability (Simanis and Hart, 2008).

Arguably, it is beneficial to build on existing supply chains. However, paradoxically, supply chains at the BoP are often severely constrained. Good quality raw material is absent, debt and equity markets are close to non-existent, and people in general have little education, which places limitations on the labor market (Webb et al., 2010). In practice, firms have two choices, one of which is to accept the existing, poorly developed supply chains. This could entail (i) acquiring resources of a lower quality than necessary, (ii) not obtaining the resources sought, or (iii) acquiring resources from foreign global supply chains. Because all these actions to a certain degree would accept the status quo, this would also represent an adaptation to the context.

Alternatively, firms can also generate or cultivate a local supply chain by, for example, training and educating raw material producers, financial institutions, and/or local labor (Ramachandran et al., 2012), which would in turn shape the context.

4.3 Customer interface

We assert that positioning the firm so that it learns from the customer is a means to adapt to the context, while educating customers shapes the context. The unique social, cultural, and institutional situation at the BoP implies that different products and services are needed compared to the West (Prahalad, 2004). However, understanding exactly what the BoP customers' desires and value preferences are can be a challenge. It is necessary to obtain deep customer intelligence (Martinez and Carbonell, 2007), which can be provided by non-traditional partners (London and Hart, 2004) such as people on the fringe of society (Hart and Sharma, 2004). Treating interactions with

early customers as a learning opportunity can increase understanding of customer behavior at the BoP (Linna, 2013). Applying the knowledge acquired through a tight customer interface would be equivalent to “adaptation to” the context.

However, there are examples that certain products, such as water sanitation, have been rejected by customers at the BoP because they have not understood the underlying technology (Webb et al., 2010). Given that certain technologies could benefit the local population (such as access to electricity or water sanitizing), would it be right to dismiss this product offering, or would a better solution be to educate customers and, through this action, shape their attitudes and preferences? Sometimes, NGOs have taken on the job of educating customers, preparing them for the subsequent launch of a commercial firm (Tasavori et al., 2015). This would be equivalent to the “shaping of” the context in the form of customer preferences and behavior changes.

4.4 Finance

Despite the fact that people at the BoP are often willing to pay for products (Seelos and Mair, 2007), the key challenge at the BoP remains how to compensate for the customers’ low disposable income (Subrahmanyam and Gomez-Arias, 2008). Keeping costs low is a challenge because customers at the BoP are often scattered across large geographical areas (Martinez and Carbonell, 2007). Their dispersed location combined with an imperfect infrastructure (Thompson and MacMillan, 2010) makes it difficult to access these markets (London et al., 2010). Consequently, distribution costs increase, which ultimately lead to higher end-user prices (Rosca et al., 2016). Different measures have been adopted to compensate for the limited purchasing

power at the BoP. One strategy has involved repackaging and selling smaller units and cheaper products (Pitta et al., 2008). Another strategy is to cross-subsidize poorer customers by charging the wealthier customers more (Subrahmanyam and Gomez-Arias, 2008). Third, and perhaps the most commonly used measure to compensate for the limited purchasing power at the BoP, is illustrated by Grameen Bank, which provides micro-loans to customers previously considered too poor to receive a loan (Yunus et al., 2010). We will argue that the two initial measures adapt to the context, while the third measure shapes the context. The two initial measures *accept* the lower purchasing power and adapt products and their associated prices so that they fall within the available purchasing power range for various segments. The third refuses to accept the low purchasing power and injects working capital into the community with the aim of spurring economic activity, which in fact will contribute to mobilizing customers to increase their purchasing power over time.

In general, the extant literature on BoP emphasizes that business models ought to adapt to the context insofar as it suggests implementing broad value propositions, learning from customers, and accepting low levels of purchasing power. The supply chain element communicates both an “adapting to” and “shaping of” approach—build on existing supply chains (adapting to) but, as these are often weak, also generate new supply chains as well as cultivating existing ones (shaping of).

Figure 1 illustrates a conceptual model on how the business model and its elements are expected to be designed at the BoP based on what the aggregated literature on the BoP suggests. This represents the current stand in BoP literature, in which native capabilities are important for firms operating at the BoP and should be developed by

adapting to the business ecosystem. Each component of the business model is connected to collectively create it. Each component has a dashed line on two sides that illustrates the component's ability to serve as a gateway both inward to the firm and outward to the business ecosystem. The firm's absorptive capacity is located at the center of the model. Native capabilities are represented by arrows that point from the business ecosystem to each component of the business model, moving toward the firm's absorptive capacity in order to illustrate that firms ought to adapt to the business ecosystem. This conceptual model will be used to illustrate and discuss our findings. We begin, however, by describing our research design.

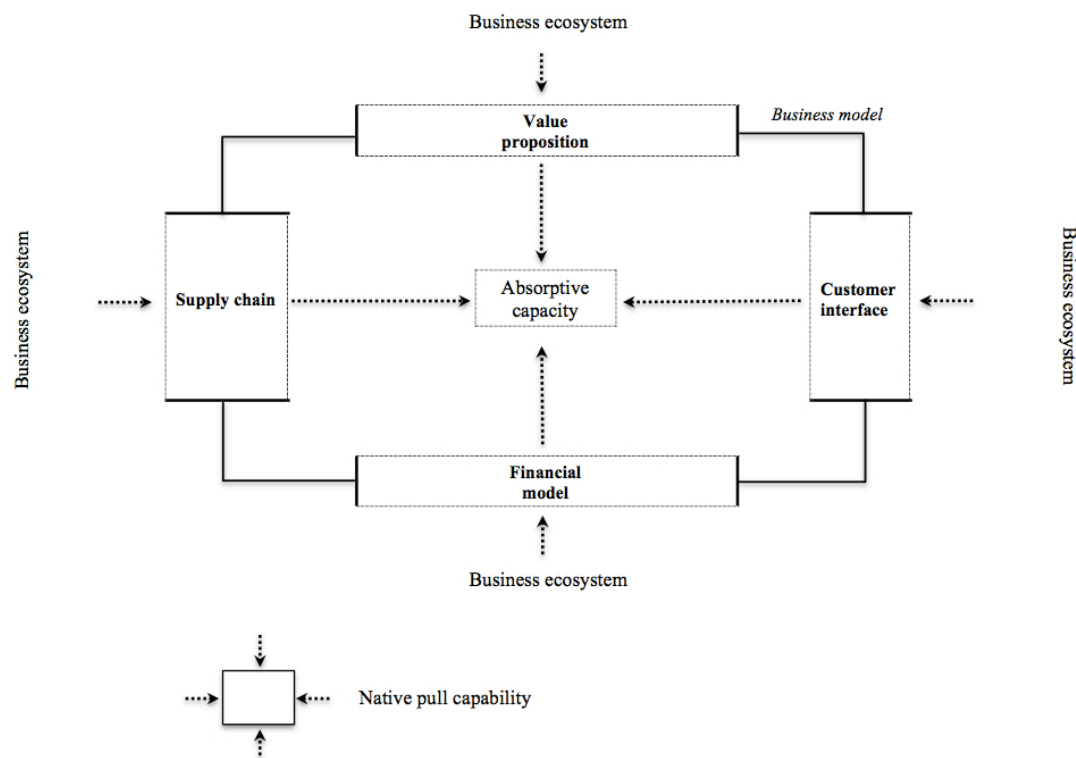


Figure 1. Conceptual model exhibiting the extant literature's focus on business models' need to adapt to the context at the BoP.

5 Research design

In this study, we adopt a single case study design. A single case allows us to extend rather than test an existing theory. According to Eisenhardt and Graebner (2007), this is significant given that the existing research does not address similar research questions in a similar context. Moreover, “single cases can enable the creation of more complicated theories than multiple cases, because single-case researchers can fit their theory exactly to the many details of a particular case” (Eisenhardt and Graebner, 2007, p. 30). We focus on firms in the rural electricity sector in India and, more specifically, the mini-utility sector, where the production and consumption of electricity takes place locally (IFC, 2012), for three main reasons.

First, despite national power reforms (Haselip, 2007), the rural electrification deficit in India is overwhelming (UNDP, 2011) and over 100,000 villages in India lack access to the central electricity grid (Reddy et al., 2006). Of these, 25,000 are regarded as being out of reach of the central grid (Moharil and Kulkarni, 2009), and entrepreneurs are expected to contribute to solving this problem (Balachandra, 2011). It has been argued that business models, not technology, are the bottlenecks of rural electricity dissemination at the BoP (Zerriffi, 2011). This establishes the fact that designing and implementing a business model that is optimal for entrepreneurs is of the greatest importance in the rural mini-utility electricity sector in rural India.

Second, rural electricity, particularly mini-utilities, have the power to transform rural livelihoods and their ecosystem. In addition to lighting, which improves the indoor

climate as households no longer need to depend on health-hazardous kerosene lamps, mini-utilities provide “productive” power, which spurs local activity such as water pumps for irrigation purposes, milling, grinding, and other processes with revenue-generating potential. This in turn propels local economic activity (IFC, 2012). Mini-utilities and their associated business models are expected to shape the context considerably, also expanding the traditional financial definition with regard to value proposition.

Third, the BoP context provides unique challenges, such as a poorly developed institutional context for business transactions (Prahalad, 2004) and resource scarcity (Ramachandran et al., 2012). Actors who seek to conduct business in BoP areas are advised to adapt to the context, build on the local conditions (Simanis and Hart, 2009), and develop native capabilities (Hart and London, 2005). This implies being more sensitive to and yielding to the local context, emphasizing the rich, real-world context in which the phenomena occur (Eisenhardt and Graebner, 2007). Business models at the BoP are also expected to adapt to the context.

5.1 Sampling

Commercially driven mini-utility firms that are close to economic viability while operating in a BoP context are rare (IFC, 2012) and have only recently started to emerge in India as a consequence of a new electricity act. Enacted by the Government of India in 2003, the act allowed, for the first time, private sector players to generate and distribute power in rural India. According to Yin (2009), a single case is chosen because it is unusually revelatory, is an extreme exemplar, or provides opportunities for unusual research access (2009). Further, choosing a particular organization allows

us to gain certain insights that other organizations would not be able to provide (Siggelkow, 2007). In other words, as stated by Eisenhardt and Graebner (2007, p. 27): “Just as laboratory experiments are not randomly sampled from a population of experiments, but, rather, chosen for the likelihood that they will offer theoretical insight, so too are cases sampled for theoretical reasons, such as a revelation of an unusual phenomenon, replication of findings from other cases, contrary replication, elimination of alternative explanations, and elaboration of the emerging theory.” By this, they conclude, “Theoretical sampling of single cases is straight forward”.

Husk Power Systems (HPS) is an unusually revelatory case firm in the sense that it has expanded rapidly over a relatively short time period, indicating the design of a successful business model operating in the BoP context. Indeed, 79 power plants have been installed over a six-year period, from 2007 to 2012. Each power plant provides electricity to one or a few villages, and HPS aims for shareholder profit within a reasonable time. IFC (2012) ranks HPS as the number-one firm globally that is close to commercial viability in the mini-utility sector at the BoP. In a sector that is dominated by either governmental or non-commercial actors, HPS is an exception (2012). As such, in the rural electrification landscape, HPS constitutes what could be termed “an extreme case.” According to Neergaard (2007), this is defined as a particularly problematic or successful example of a phenomenon. Such a successful example can be used as a best practice case (Patton, 2002). HPS is a mini-utility company generating productive power that can contribute to significant changes in the context. Finally, HPS operates within Bihar, one of the poorest states in India (Government of India Ministry of Statistics and Programme Implementation, 2015), lacking in raw materials, equity, and a proficient labor market (Webb et al., 2010), in

addition to having poorly developed infrastructure (UN, 2015). HPS cannot avoid and build around all these deficiencies. Rather, they must build native capabilities and build *on* some of these conditions (Hart and London, 2005), which would include an “adaptation to” approach to the local context.

In this study, we focus on HPS’ business model as our unit of analysis, collecting data on and analyzing changes to the business model and the reasoning behind the same.

5.2 Data collection

To increase the validity of the study, data were collected from multiple sources in rural India over two periods in 2012 (Healy and Perry, 2000). The first period included initial, semi-structured interviews with one of the founders of HPS and visits to two power plant sites. A follow-up visit with a considerable expansion in the scope of the interviews took place approximately eight months later. Data were collected at HPS’ headquarters and in remote villages of rural India in the state of Bihar. In-depth knowledge was acquired through interviews with the founders and top management, and these served as the primary source of information. The two founders of HPS, who operate as the Chief Executive Officer (CEO) and Chief Operating Officer (COO), were the starting point. They provided a broad overview of HPS’ development and strategic decisions and the core logic of the firm from its inception in 2007 until the end of 2012, which was the time at which the data collection was finalized.

Additional information was gathered from the Vice President (VP) of Operations, who has worked closely with the two founders since 2008. He provided valuable information that added nuance to the picture of the development of HPS. Archival data were also collected to trace the development of their business model.

Table 2. Overview of respondents

Person	Date	Place	Type	Language
CEO, Co-founder	Feb, 2012	HPS Head-quarter, Patna	Semi-structured interview	English
CEO, Co-founder	Nov, 2012	HPS Head-quarter, Patna	Semi-structured interview	English
CEO, Co-founder	Nov, 2012	HPS Head-quarter, Patna	Semi-structured interview	English
COO, Co-founder	Nov, 2012	HPS Head-quarter, Patna	Semi-structured interview	English
COO, Co-founder	Nov, 2012	HPS Head-quarter, Patna	Semi-structured interview	English
VPO	Nov, 2012	HPS Head-quarter, Patna	Semi-structured interview	English
Team, 6 persons (BM1)	Nov, 2012	Field office, Tamkuha	Group interview	English/Hindi
Team, 5 persons (BM1)	Nov, 2012	Field office, Bettiah	Group interview	English/Hindi
Partner (BM2)	Nov, 2012	Power plant, Suklahi	Semi-structured interview	English
Partner (BM2)	Nov, 2012	Power plant, Misir Batraha	Semi-structured interview	Hindi
Customer (BM3)	Nov, 2012	Power plant, Pataili	Semi-structured interview	Hindi
Customer (BM3)	Nov, 2012	Power plant, Kundilpur Pacs	Semi-structured interview	English
End-user	Nov, 2012	Private house-hold, Pataili	Unstructured interview	Hindi

In addition, a considerable amount of data was collected outside of the HPS headquarters. The primary sources of information were two group interviews with field staff at two different regional offices. Table 2 presents an overview of the respondents. In addition, semi-structured interviews with customers and partners (sometimes overlapping) were conducted at different power plant sites. Pictures and observations from the field also contributed to a deeper understanding of the development of HPS' business model.

There are several challenges associated with collecting reliable business data from emerging markets (Hoskisson et al., 2000). One potential hindrance is different understandings of formal and informal language. In this respect, all of the informants were Indian. However, the CEO had spent several years in the USA; he spoke fluent English and understood the background of the Western researchers. Also, one of the researchers was of Indian origin and had previous experience working in rural India through micro-credit organizations, which gave him an understanding of the cultural

setting. As our informants lived in remote, rural locations in India, a person of Indian origin on the research team was crucial to minimize the risk of misunderstandings, and this increased the reliability of our study.

The first interview with the CEO was built around open questions such as, “Please tell us about HPS’ development from its inception until today,” allowing the respondent to tell his story without much interruption from the researchers. Because the business model emerged as a core theme in the first interview, the second interview guide was structured around the four business model elements as suggested by Boons and Lüdeke-Freund (2013): (1) value proposition; (2) supply chain; (3) customer interface; and (4) financial model. We probed further if certain aspects were unclear, for instance, “Does this mean that in the first BOM [business model number two], the customers were partners?” We also probed further for a clearer picture of the entire trajectory of the business model design, asking questions such as, “You said this is how it evolved, the BOOM, BOM, and BM [the three different business models implemented by HPS]. Can you say something more about that?”

5.3 Coding and analysis

The coding and analysis process applied in this article is inspired by the “Gioia Methodology” (Gioia et al., 2013). The method is inductively inspired; however, the coding process applied here should not be confused with a purely inductive grounded theory approach (Corbin and Strauss, 1990). We have also not applied a purely deductive approach. An abductive approach (Gioia et al., 2013) has been used where cycles between the empirical data and extant theory through several iterations (Alvesson and Kärreman, 2007) have taken place. As an example, we conducted a

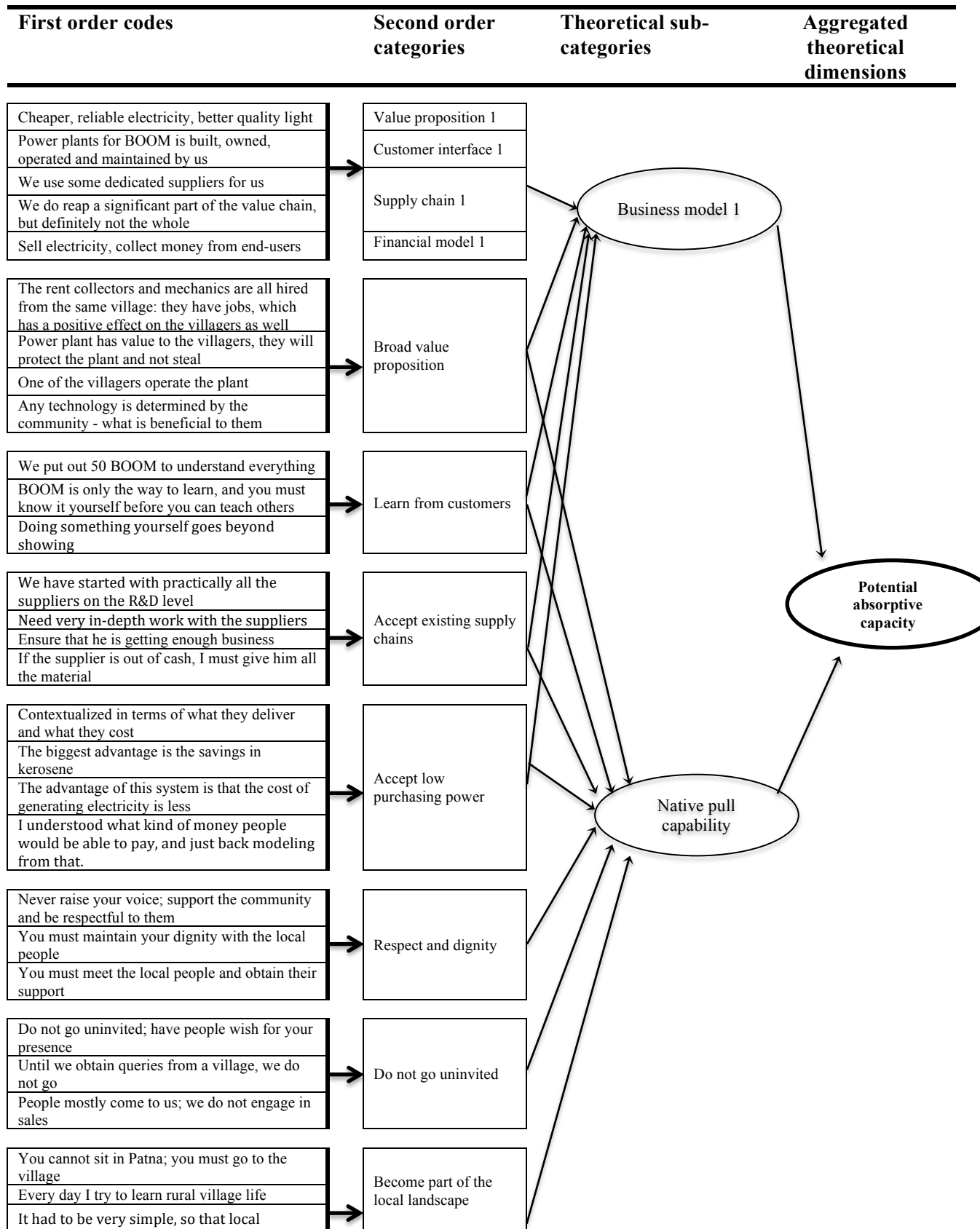
literature review and collected data partly in parallel and partly sequentially. We first developed the preliminary conceptual model (Figure 1) based on initial knowledge, refining this (Figures 2–4) as our understanding and knowledge were raised throughout the research process.

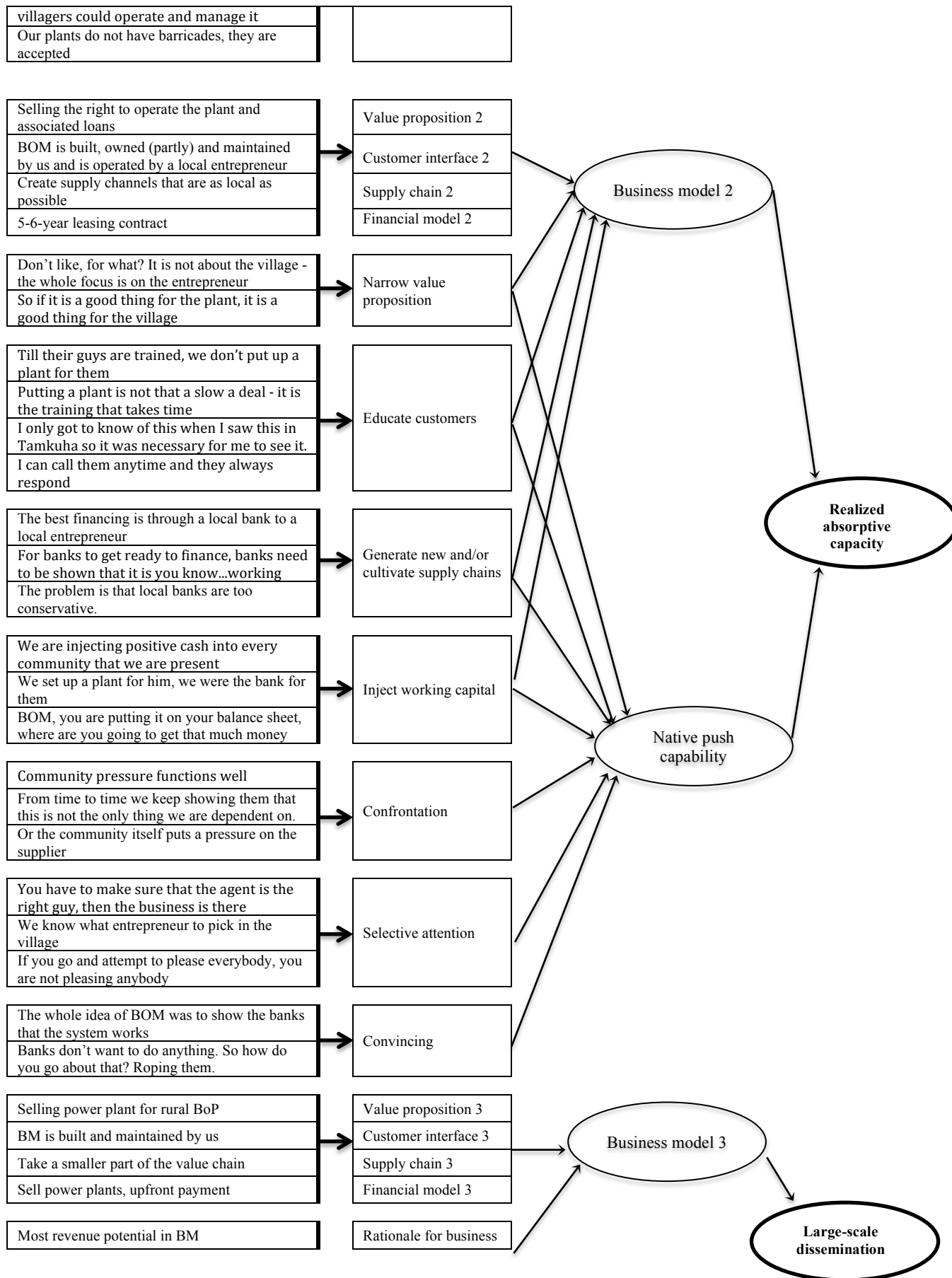
All relevant material was transcribed and coded using the NVivo software to systematize the qualitative data. The material was coded in four steps, a process in which the data were transformed from empirical to abstract theoretical dimensions. The two initial steps of coding were empirically driven, with the objective of reducing the data to a manageable entity through a structural coding technique (Miles et al., 2013). In the two latter steps, categories from the two initial steps were arranged into theoretical dimensions; as the coding process transitioned into the third and fourth steps, it also moved from being more inductive to more deductive because the existing theoretical concepts inspired the theoretical subcategories (third step) and the aggregated theoretical dimensions (fourth step). In the following section, a more detailed description of the coding process has been explained. The entire coding scheme is displayed in Table 3.

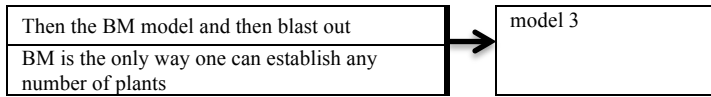
The goal of the first step was to organize the empirical data into a more manageable entity by reducing the data without losing the respondents' voices (Gioia et al., 2013). We applied a structural coding technique (2013), which implies that the codes reflect the content of the empirical data in the best possible manner. In the first cycle, we reduced the amount of data yet retained all of its aspects. The first cycle resulted in a vast number of codes that needed to be further organized into second-order categories. In the second coding step, we identified common content that would potentially

contribute to informing our research question (Gioia et al., 1994). In the third cycle, we reassembled second-order categories into theoretical subcategories—a leap from the empirical domain to the theoretical—in a coding process known as axial coding (Boeije, 2010). A constant comparison technique, which ensured an intimate link between the data and the emerging theoretical concepts, was applied (Glaser and Strauss, 1967). At this stage in the coding, irrelevant data were excluded, and “outlier” statements were rejected (Shepherd and Williams, 2014). Theoretical subcategories were combined and merged into aggregated theoretical dimensions in the fourth step. However, to obtain consistency between the coding steps, numerous iterations between the second-order categories, the theoretical subcategories, and the aggregated theoretical dimension took place before the puzzle was solved (Saldaña, 2013).

Table 3. Overview of the coding process







6 Findings

6.1 Husk Power Systems

HPS was founded in 2007 with the mission to empower rural people in India with electricity produced from renewable energy. Based in Bihar, one of the poorest and least developed states in India, HPS has installed 79 power plants and adjoining transmission lines (mini-grids) in a rural BoP context over a period of five and one-half years. HPS' power plants run exclusively on gasified biomass such as rice husks. The power plants range from 30 to 100 kW in size and supply 300 to 1000 households with basic electricity services. At the end of 2012, HPS had over 400 employees. Table 4 shows the deployment of the power plants at HPS over this period.

Table 4. Sequential deployment of power plants at HPS

	Business Model	2007	2008	2009	2010	2011	2012	Total
Power plants installed annually	BM1	1	2	7	32	7		49
	BM2				3	17	1	21
	BM3				3 ^a	1 ^a	5	9
Total		1	2	7	38	25	6	79

^a Special cases of power plants bought outright by primary agricultural cooperatives (PACS).

Table 4 shows that HPS has launched its power plants as per three different business models. There is also a progression from the first business model to the third. We discuss this and the characteristics of the three business models in the following sections.

6.2 Husk Power Systems' business models

HPS runs three different business models in parallel. We will denote them as BM1, BM2, and BM3. The initial power plants were organized as per BM1, the subsequent power plants were distributed as per BM2, and the last ones followed BM3. It is important to note that the power plants continue to function on the basis of the business model selected at the time of their launch and did not switch models over time. This means that if a power plant was initially established as per BM1, it will continue in the same manner. It will not transfer to BM2 or BM3. Each power plant operates as per one of the three business models and in isolation from the other power plants. In Table 5, BM1 and BM2 are placed according to each business model's element; that is, if the element has more of an "adaptation to" or more of a "shaping of" nature.

Table 5. Overview of the various business models and associated elements' adapting to or shaping of context

Business model element	Adapting to (pull)	Shaping of (push)
Value proposition	Broad value proposition BM1	Narrow value proposition BM2
Supply chain relation	Accept existing supply chains BM1	Generate new or cultivate existing supply chains BM2 <i>BM1</i>
Customer interface	Learn from customers BM1	Educate customers BM2
Financial model	Accept low purchasing levels BM1	Inject working capital BM2

6.2.1 Business Model 1 and native pull capability

BM1 is a work-intensive business model in which HPS operates a large part of the value chain. HPS acquires first-hand information from various actors in the business ecosystem. The fundamental idea of BM1 is to adapt to the context. This is illustrated

in Figure 2. Figure 2 illustrates how each business model component is designed to facilitate adaptation to context. Its activities include building the power plant and the mini-grid system and conducting the daily operation of the plant, which typically consists of feeding the gasifier with rice husks, cleaning it, and making sure that the generator is running on the right load intervals. HPS also owns the plants and is in charge of collecting payments from its customers, which are the village households. In addition, HPS performs the maintenance. The key customers in this model are village households and small businesses. The product offered to them is electricity that is cheaper and of better quality than the available alternatives, such as kerosene lamps and small bonfires.

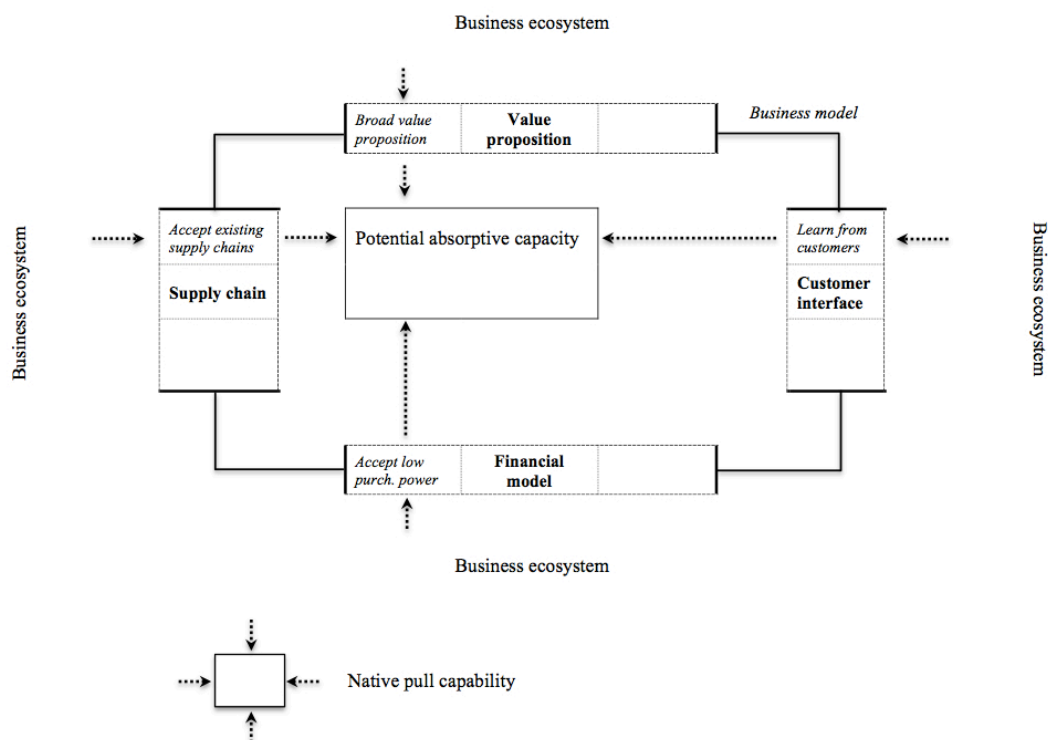


Figure 2. Business model 1 facilitates adaptation to the context.

The design of BM1 helped HPS gain first-hand exposure to the context in which it operates, and also helped it to fine-tune its technology and service. Technological solutions were based on the availability of components in the local supply chain, such as rice husks and bamboo sticks to hold the wires and gasifier producers. The rationale behind BM1 was not primarily to scale up but to learn from customers and become embedded in the context. The CEO and co-founder explains this as follows:

“[BM1] is not a scalable model at all, so we put out 50 just to understand everything ... it is the only way to learn. Until you do it yourself, how would you know? You can't teach others before you know yourself.” (CEO)

The principal design logic of the technology was that it had to be operated by the villagers due to the availability of potential local employers and the legitimacy that the power plants would gain if “one of their own” were hired. The value proposition not only targeted the end users and the consumers of electricity but also included the broader village community. This increased legitimacy and included adaptation to the local context in the sense that all aspects of the technology and operations were adapted to local conditions. Moreover, the end-users' disposable income and its share allocated for electricity was fixed, and HPS reverse-engineered from that price point. This reflects an “adaptation to” approach in the financial element of the business model. Compromises were made on a number of components, leading to both lower quality technology and efficiency rates. As the quote above illustrates, absorbing as much as possible from the context and learning was the guiding principle when designing BM1. Moreover, HPS took a humble approach with regard to the locals, treating them with respect and dignity and not being too assertive. In fact, they would wait for the villagers to ask for electricity and request HPS' presence in the

community. This allowed HPS to get close to and earn legitimacy in the local context.

Our findings show that our case firm actively pursues this goal through the design of its business model. Based on that we coin the term “native pull capability.” Native pull capability resembles the native capability construct; however, the “pull” emphasizes the active absorbing approach, which is exercised and developed in two ways: (1) designing the business elements so that they facilitate absorption of knowledge from the context, and (2) exercising respect and dignity for the context by not going in uninvited and by becoming part of the local milieu.

6.2.2 Business Model 2 and native push capability

BM2 stands in contrast to BM1 because it facilitates a “shaping of” rather than an “adaptation to” approach, which is illustrated in Figure 3. Figure 3 illustrates how each business model component is designed to facilitate the shaping of the context through native push capabilities. In BM2, a local village entrepreneur operates and co-owns a power plant alongside HPS. HPS partners with the local entrepreneur, who provides part of the capital cost of establishing the plant (typically 10%). At the US Dollar and Indian Rupee exchange rates prevalent at the time, this ranged between USD 2000 and USD 3000, including government subsidies. HPS still built the plant, initially owned most of it, and provided maintenance services. However, the local entrepreneur manages the day-to-day operations with his own employees. The local entrepreneur pays a lease fee to HPS and becomes the sole owner of the plant after a predetermined period of time. For HPS, the local village entrepreneur is the key customer. To these entrepreneurs, HPS offers a power plant and a loan, the key value being access to capital. The value proposition here is narrower compared to BM1.

HPS has a relationship with the local village entrepreneur and provides value for this specific customer. As indicated earlier in the article, a narrow value proposition does not automatically imply that there is a “shaping of” approach; however, a narrower value proposition eases the “shaping” if necessary because there are fewer actors to convince. Local village entrepreneurs take on a considerable amount of risk because they are in charge of operating, maintaining, and distributing electricity in the BoP context and because they invest in the power plant. Regardless of the perceived risk, HPS seeks to reduce the considerable operational workload associated with BM1 and has tried to convince and educate local village entrepreneurs to take on the daily responsibilities. However, this requires a major shift in parts of the supply chain, especially access to equity. Due to the perceived risks associated with power generation and sale of electricity in rural BoP markets, local banks refuse to provide loans to the local village entrepreneurs. HPS takes on this responsibility and issues loans to the village entrepreneurs. Through demonstration, HPS cultivates an existing but inadequate equity supply chain that is necessary for the large-scale dissemination of power plants. The supply chain element of BM2 facilitates a “shaping of” context. Moreover, by providing loans, HPS injects capital into the village and refuses to accept the low purchasing power of the village entrepreneurs. As such, HPS shapes the context through its financial model.

BM2 is designed such that it facilitates the “shaping of” context. However, it is only a temporary model. The CEO explains this as follows:

“[BM2] was a very point-in-time period kind of model. It was never meant to be a long-term model. The idea was to demonstrate, especially to banks . . . if you

are going to start offering plants in [BM3], where are people going to get that money from? Villagers don't have that kind of money.” (CEO)

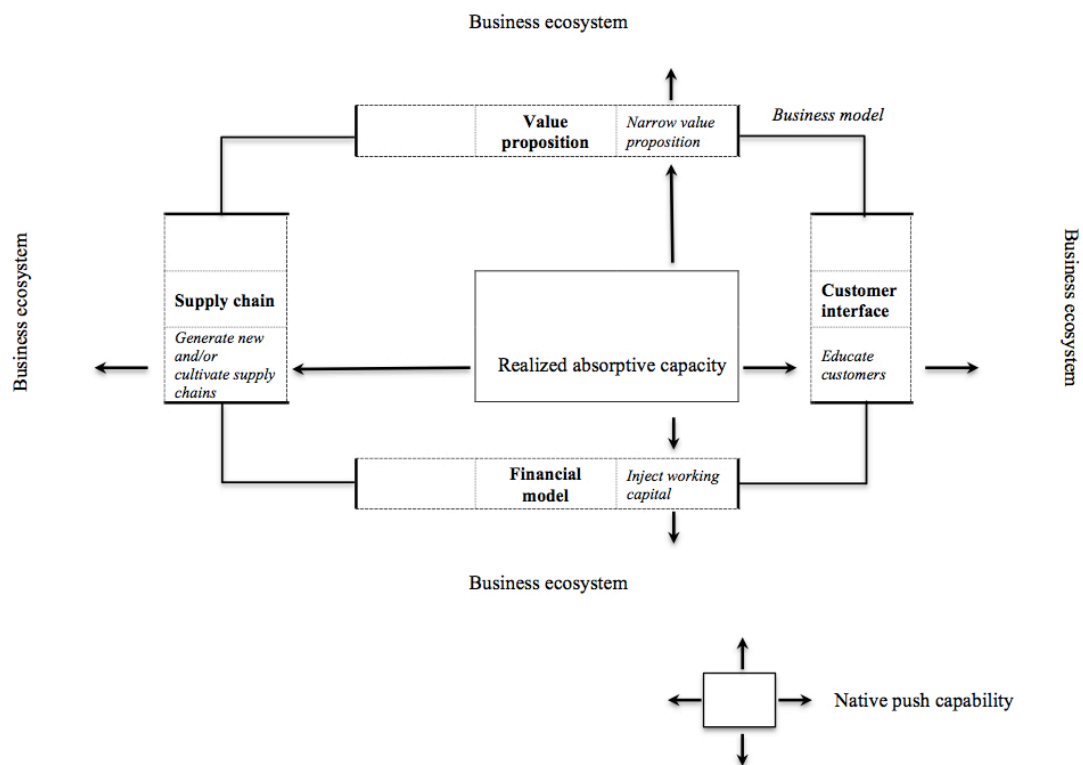


Figure 3. Business model 2 facilitates shaping of the context.

BM2 does not support their massive growth goal because HPS cannot operate as a bank on a large scale, since doing so would require too much capital. BM2 is specifically configured to imitate the potential business model local banks would need to adopt if they chose to provide loans to local village entrepreneurs. BM2 and its configuration allow HPS to adopt the same position that banks may occupy in the future. HPS provides banks with the following solid and trustworthy argument for why they should provide loans: HPS has, for a period of time, through BM2, taken on the risk and demonstrated its technical and economic feasibility. Once HPS has

shaped the contextual elements in their favor, they can deploy BM3, which is the final business model that supports large-scale dissemination.

At the time BM2 was implemented, HPS had a set of resources, including a functioning power plant. To exploit this resource, HPS has taken on an authoritative role and confronted the context so that they can take advantage of their resources, e.g., HPS selects village entrepreneurs to be in charge of the local power plant, regardless of whether this creates turmoil in the local village. Moreover, HPS seeks to convince local banks to provide loans. The prescriptive attitude related to BM2 and the attempt to shape the context is less humble and less invitational compared to BM1 and the native pull capabilities. The “push” in native push capability emphasizes the active shaping of the context in favor of the venture, and similar to the native pull capability, this is exercised and developed in two ways: (1) designing the business model elements so that they facilitate the shaping of the context, and (2) exercising confrontation, selective attention, and convincing. We also observed native push capability in BM1, but in a milder form, where HPS worked with local fabricators, experimenting with and training them in manufacturing the biomass gasifier they required. As this is an attempt at shaping the local supply chain, we put BM1 in italics in the “shaping of” side of Table 5.

6.2.3 Business Model 3 and large scale dissemination

In BM3, the power plant is sold to a local village entrepreneur, who assumes 100% ownership. The local entrepreneur finances the plant himself, typically by borrowing money from a local bank. He is himself in charge of making a return on his investment by performing all day-to-day operations, selling electricity, following up

with customers, and collecting payments through the staff that he employs. HPS' role here is to provide advice, build the plant, bring it to operation, provide training for the local entrepreneur's employees, and provide advanced maintenance services through a mobile team of skilled engineers.

The successful experience with its previous two business models enabled HPS to scale up the business using the final model, BM3. Only a few power plants were operational under BM3; however, they seemed to be profitable, and one of the village entrepreneurs working under BM3 explained the following:

“The second plant that I want to install is even bigger than this one, which I will get funded through a loan. I will go to the bank and say, ‘Give me a loan. When the subsidy is from the government’s side through the instructions of the District Industrial Department, then you must give me a loan for the gasifier. And if you want to see an already running project, then I already have one up and running right here’.” (Local Village Entrepreneur—BM3)

Based on the above, our main finding is that the implementation of specifically designed interim business models can contribute to solving the dilemma of both adapting to the context and shaping the context of their businesses. This is illustrated in Figure 4. Combining Figures 2 and 3, Figure 4 illustrates how the native capability construct is split in two, demonstrates how the native pull/push capability relates to PACAP and RACAP, and represents the design of each business model element.

7 Discussion and implications

7.1 Business model design

Extant perspectives on business model design recognize the contexts' influence on the business model. The business model adapts to external triggers (Sosna et al., 2010) such as customer demands (Trimi and Berbegal-Mirabent, 2012), customer value (McGrath, 2010) and external institutions (Provance et al., 2011). However, their perspectives present a "neutral" business model design that is neither specifically invitational nor hostile toward the context. It merely represents the state at the time the best possible business model design was being constructed. The business model is reconfigured according to the response received through its interaction with the context and is shaped by the business ecosystem after its deployment through discovery, trial and error, and fine-tuning. In contrast, we argue that a particular configuration of the business model actively facilitates input from the context. In contexts like the BoP, where there is limited or no knowledge of the conditions of the context and how it can potentially impact the firm, such a configuration may be required for enhancing the absorptive capacity of the firm.

Doganova and Eyquem-Renault (2009) suggested that a draft of a business model shapes other actors' business models and, consequently, its surrounding context. We find that it is not a scale model that shapes the actors' business models but rather a full-scale implemented business model (BM2). We suggest that a full-scale implemented business model is more powerful compared to a scale model (2009) because external actors can see and observe the business model in action, demonstrating commitment from the entrepreneurs' side. We speculate that a scale model would not have the power to change the context in the same manner as a deployed business model does at the BoP.

Mason and Spring (2011) argued that the networked and interlinked nature of business models implies that a business model shapes a context as it touches elements of other actors' business models. Likewise, Tsvetkova and Gustafsson (2012) recognized the acting power of a leading firm's business model that triggers a systemic change in the business ecosystem. Similar to the extant "adaptation to" literature, this extant "shaping of" literature assumes a best possible business model that is intended to be fine-tuned into a final version. In contrast, we suggest that the business model that corresponds best with the entrepreneurs' visions and dreams may not be implemented first. Due to the need to both adapt to the local context *and* shape that context, interim business models can be deployed as a tool to satisfy both adaptation to the context and the shaping of the context.

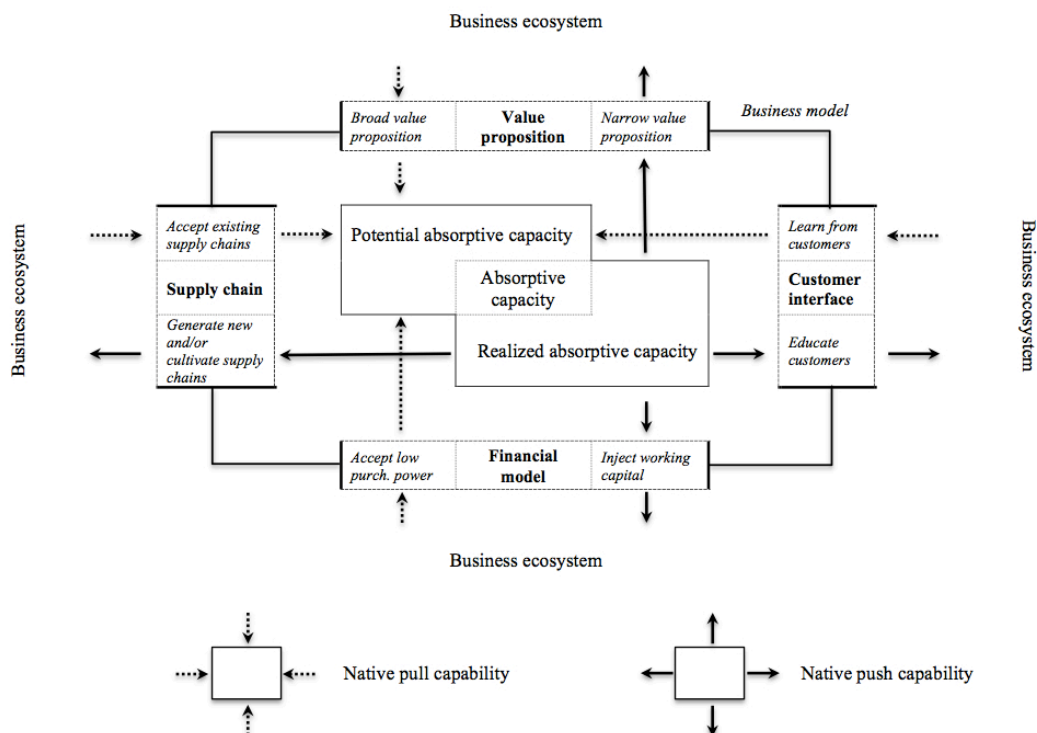


Figure 4. A firm's business model may adapt to or shape the context through interim specifically designed business models.

This implies that business model design is an entrepreneurial skill that involves more complexity than previously reported. Not only must entrepreneurs consider designing the traditional elements of a business model—what type of value to offer, where to be located in the supply chain, what the customer interface ought to look like, and how to monetize these activities—they must also consider other consequences that a business model design may have. These consequences may include being shaped by the business ecosystem or shaping the business ecosystem so that subsequent business model designs benefit from better alignment with the ecosystem and, in turn, become more profitable and increase shareholder and stakeholder profits.

7.2 Native pull/push capability and PACAP/RACAP

The present understanding of the term “native capability” implicitly ascribes the defining power to the BoP context. Native pull capability closely resembles the term native capability because building native capabilities at the BoP involves learning from locals and building capabilities *on* the resources and conditions found in the context, and through that, gaining and deserving the trust of the locals (Hart and London, 2005). We subscribe to this perspective and follow the logic of respecting the BoP traditions and customs. Native pull capability is the ability to identify or “pull” the most relevant and essential information and knowledge and adapt to it. HPS respectfully and humbly approaches the local villages, becomes part of their everyday life, and absorbs—or pulls out—what they need to know in order to operate in the context.

In contrast, and after a period of exercising and developing native pull capabilities, HPS confronts certain actors in the context and convinces them to make changes that benefit HPS. Native push capability is necessary to do this successfully. We claim that this is what HPS does in BM2 when it invests considerable resources into convincing the local banking system to provide loans to local village entrepreneurs.

The term “native capability” naturally emerged as a response to the “corporate imperialism” approach exercised by MNEs when working at the BoP (Prahalad and Lieberthal, 2003). After all, the idea of having Western MNEs save the world’s poor was too good to be true (Karnani, 2007a). The MNEs’ presumably powerful resource portfolios and global capacity did not help them achieve their intended objectives of increased sales alongside poverty alleviation because they only pushed their own agendas, with little respect for the local people and with a poor understanding of the real value propositions at the BoP. All in all, they were too alien to the BoP context. Native push capability and corporate imperialism resemble each other in the sense that both approaches try to change the existing context. In other words, the company’s resources get priority over native contextual elements. However, the two approaches differ in one very important respect. While corporate imperialism is an *alien* force that seeks to change the BoP context, native push capability is a *familiar* force that seeks to change the BoP context. In our case, the native push capability was exercised *after* a period of native pull capability, which means that every effort to become familiar and deeply involved with the BoP community was made before attempts were made to change it. We argue that native push capability is not a type of corporate imperialism where local customs and traditions are compromised. Rather,

we argue that knowing when to exercise native pull capability and when to exercise native push capability represents a more refined understanding of native capability.

Our reconceptualization of the native capability construct into native pull and push capabilities is parallel to the reconceptualization of the ACAP into PACAP and RACAP conducted by Zahra and George (2002). Due to ACAP's one-sided focus on the acquisition and assimilation of external knowledge, they reintroduced what they had shown to be part of the ACAP literature but not brought to the forefront of the discussion. Namely, that the absorption of external knowledge is not sufficient for profit-oriented ventures. The absorbed knowledge ought to be taken advantage of through transformation and exploitation. Similarly, we have argued that the native capability construct is too one-sided, emphasizing the need to build on local conditions rather than challenging them. Further, and also similar to PACAP and RACAP, exercising native push capabilities should occur after native pull capabilities have been exercised: First know and learn before change and challenge.

Finally, we suggest that PACAP and RACAP are higher-order categories compared to native pull and push capabilities, and we suggest that native pull capability facilitates PACAP. Correspondingly, native push capability facilitates RACAP. Put differently, native pull capability is exercised and developed through business model elements that are specifically designed. At the BoP, combining this with a display of respect and dignity, not going there uninvited, and becoming part of the local landscape will positively contribute to a venture's PACAP. Similarly, we suggest that native push capability is exercised and developed through business model elements that are

specifically designed. At the BoP, combining this with confrontation, selective attention, and convincing will positively contribute to a venture's RACAP.

8 Conclusion and limitations

By conducting research on business model design and its interplay with the business ecosystem in the context of the BoP, this article makes three contributions: (i) specifically designed interim business models are deployed, and each model is designed so that it mainly facilitates an “adaptation to” or a “shaping of” the context; (ii) the term “native capability” is split into “native pull capability” and “native push capability.” Specifically designed interim business models can serve as vehicles for exercising and developing native pull/push capabilities; (iii) Native pull/push capabilities are linked to a firm's absorptive capacity. Specifically designed interim business models that facilitate native pull capabilities can enhance a firm's PACAP. Similarly, specifically designed interim business models that facilitate a firm's native push capabilities can enhance a firm's RACAP.

The first contribution implies that business model design should not be considered solely as an end in itself; it can also serve as a means. As such, it can be viewed as a tool for entrepreneurs. This implies that entrepreneurs may not opt for the best possible business model from inception but that interim business models may be deployed to prime both the firm and the ecosystem. Because specifically designed interim business models can facilitate the ecosystem's shaping of subsequent business models, they can be used to gain more knowledge about the particular conditions of the BoP context so that entrepreneurs become truly embedded within that context.

Such business model trajectories are expected to require more time and capital compared to a trajectory in which the best possible business model is sought from the beginning. Consequently, the time to market, break-even points, and return on investments are milestones that may be postponed further into the future. However, entrepreneurs may become deeply embedded and able to shape the context in which they are to operate and, through this process, lay fertile ground for future revenue generation. Entrepreneurs and investors may want to consider a business model trajectory that entails setting up interim models. Impact investors may benefit from this insight because it shows how a business model can shape the context and also possibly create a greater impact, which is one of the objectives of impact investors.

Academic scholars cannot assume that when business models are designed, it is the business model that yields to the context. Nor can we assume a business model trajectory where an initial business model is fine-tuned into a final model. Rather, scholars must be open to rather large detours with radically different business models implemented along the business model trajectory.

The second contribution challenges the rather submissive tone found in much of the literature on the BoP. By “submissive” we refer to the fact that entrepreneurs and their companies should take many BoP conditions as a given and build their companies on the basis of them. The native capability construct contributes in this direction. We argue that there is a risk of not changing anything for the better at the BoP if its context is not challenged on certain parameters. We are of course aware of the risk in taking such a stand, and we may be reminded of the fruitless “corporate imperialism” that characterized initial BoP thinking and initiatives. However, our case study shows

that after a period of absorption through native pull capabilities, there may be time for prescription through native push capabilities. Simanis (2011) argued that there is no ready-made market at the BoP. At least some lifestyle changes must take place for consumer markets to thrive and grow. For this, people's habits must change; and with that, new value propositions emerge, new supply chains must be put in place, and capital must be injected. We argue that native push capability is necessary to drive these changes and create markets.

The third contribution provides a theoretical anchoring of the native capability construct. Absorptive capacity has been linked to firm performance and seems to have positive effects, especially under highly dynamic conditions (Wales et al., 2013). Viewing the native capability pull/push construct as a means of enhancing absorptive capacity can provide insight into firm performance at the BoP.

Triangulation in this case does not guarantee that our data include retrospective rationality. However, it does assure us that each business model design and its trajectory have taken place. We do not claim that the founders had a detailed vision of the business model trajectory from inception; however, we do assert that each business model was intentionally implemented, as referred to in this article.

9 Future research

Research on the dynamic aspect of business models is in its infancy, as is research on business models at the BoP and how they and the business ecosystem mutually shape each other. The ability of entrepreneurs and their associated business models to both align with the local context and shape it is an interesting line of research inquiry

because the agency of business models offers a new perspective on how entrepreneurs can enter existing markets and create new ones. If it is, as this article suggests, that agency resides in the design of the implemented business model, then this opens up a debate on whether entrepreneurs should aim for the appropriate business model immediately or go through several interim business models prior to the final one. Our study focused on a single firm at the BoP. Our finding about specifically designed interim business models that are launched sequentially with the purpose of adapting to or shaping the context, however, is potentially applicable in any context. That business models and contexts are mutually influential is not disputed. We suggest that one way this mutual influence is achieved is through these specifically configured interim business models. Future researchers can study the business model trajectories of firms in different contexts to explore where and when such configurations come into play. In the BoP context, a multiple case study approach would be suitable for building upon the findings described in this article. In such studies, more emphasis could be placed on the context's reaction to the suggested business model, and extending the scope to include more external respondents could be beneficial. In addition to confirming or disconfirming our findings, this could add nuance to our understanding of a business model's ability to shape the context. Further, the link between business model design, native capability, absorptive capacity, and venture performance at the BoP is worth investigation. Currently, native capabilities are seen as a requirement for success at the BoP. Our findings nuance the construct of native capability and its application in engaging with the external context. What is more important for success at the BoP: native pull capability, native push capability, and/or the sequence? How is success at the BoP, an uncertain and dynamic context, linked to

the absorptive capacity of firms? In a context that does not lend itself easily to business planning approaches, like the BoP, do interim business models represent a firm's approach to enhancing absorptive capacity? These are but a few examples of questions that can be explored by future researchers in the BoP context.

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