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Business models for frugal innovation: The role of resource-constraints

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Frugal Innovation is an extreme case of innovation: radically new applications are innovated for an environment of extreme resource and cost constraints. While the phenomenon of frugal innovation has been described from a product perspective, very little is known about how firms organize frugal innovation on a business model level. This study is based on a multiple case study approach investigating five business models for frugal innovation in the context of the medical equipment market in emerging economies. We find that there exists an overarching frugal business logic, based on which firms can establish different business models.

1. Introduction

The recent rise of frugal innovation in and for emerging markets has triggered researchers and practitioners alike to discuss the effects on firm’s strategies and approaches to this kind of innovation (e.g. Zeschky, Widenmayer, & Gassmann, 2011). However, up to now there is no established research on business models in the context of resource-constrained environments. Most of the research relevant to the topic of business models in resource-constrained markets has described the structurally different customer requirements in Western and emerging markets (Seelos & Mair, 2007), provided anecdotal examples of product and service solutions for people at the base of the pyramid (BoP) (e.g. Anderson & Billou, 2007; Prahalad & Hammond, 2002) and based on that derived implications for the design of business models for Western firms that want to become active in emerging markets (George, McGahan, & Prabhu, 2012; London & Hart, 2004; Williamson, 2010).

Prominent examples of business models in emerging markets are microfinance loans combined with mobile solutions (Hughes & Lonie, 2007; Yunus, Moingeon, & Lehmann-Ortega, 2010) mobile solutions for agriculture providing farmers with stock prices of their crop to increase market transparency (Prakash & Velu, 2010), new marketing strategies for the BoP including tiny product sizes for items of daily use such as food and hygiene (Anderson & Markides, 2007; Payaud, 2014) or infrastructure projects including mini power plants (Halme, Lindeman, & Linna, 2012).

While extant research on business models has been valuable for understanding the constituents of business models, there is little understanding about the “inner architecture” of a business model, i.e.,
how the single constituents interact and what effect changes in these constituents have on each other. The aim of this article is to shed some light on this inner architecture in the context of frugal innovation as an extreme case of innovation.

3. Methods

For our multiple case study based approach (Eisenhardt, 1989), we use five cases of frugal innovation within the medical equipment industry in emerging markets. All five cases are frugal innovations in the form of a physical product, in B2B markets, and comparable in terms of investment level (under 15k Euro). We interviewed senior managers from the companies who were involved in either development, marketing, or general management of the frugal innovations. This provided us with an in-depth understanding of processes and structures within firms that innovate for resource-constrained environments. The interviews were recorded and transcribed verbatim immediately after the interviews. Subsequently, the interview transcripts were sent back to the interviewees for confirmation before we continued developing the full cases. Whenever possible, we triangulated data by interviewing several managers within the same company, as well as by cross-checking interview data with publicly available information and internal documents. In total, we conducted 12 interviews which lasted between 40 and 120 minutes and accumulated in a total of 10 hours interview material.

4. Findings / Results

The analysis of the five frugal business models revealed various differences regarding value creation and value capturing mechanisms. We identify that, when adopting an aggregated view, frugal innovation is based on a basic frugal business logic which materializes in two requirements: Efficiency in all operations and efficacy in innovation and marketing. Beyond the frugal business logic – on the level of business models and tactics – frugal innovation can be managed very diversely.

Taking the business logic for frugal innovation in value creation as a basis, the inner logic of the business model (for frugal innovation) can be distilled. We argued that value capturing is the reflection of value creation in financial terms. As a consequence, depending on the value creation design, the value capturing needs to be designed respectively.

7. Conclusion

With this study we shed light on business models for frugal innovation. While intensely discussed in academia and practice, empirical in-depth insight remains rare as to how frugal innovation is organized from a business model perspective. Triggered by the extreme requirements regarding cost efficiency as well as innovation and marketing efficacy, this study argues that frugal innovation is a promising context to advance the body of knowledge in the business model discipline.

9. References


