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Achieving business model innovation in large corporations: Process insights from the chemical industry

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Despite the fact that business model innovation (BMI) has attracted intense scholarly attention, there is a paucity of insights concerning the organizational implementation of BMI efforts in large corporations. This paper investigates how business model innovation is managed in the complex environment of the chemical industry and derives consequences for the establishment of a systematic BMI process in large corporations. Based on a multiple case study design, we identify three different types of BMI processes and show that (1) the degree of technology involvement and (2) the stage of technology development act as key moderators for the choice of process. With our results, we contribute novel insights to the ongoing academic discussions on BMI processes in corporate environments and on the relationship between technology and business model innovation. Practitioners will profit from rich implications gained from our study.

1. Introduction and motivation

A thorough analysis of BMI literature reveals that the organizational implementation of business model innovation is an understudied area which needs more empirical insights, particularly with respect to large corporations. Prior work points out a number of open questions to this topic which seem worthwhile to study in particular. *First,* business model innovations can have different degrees of innovativeness and different modes of implementation in a multi-business firm. These issues increase the complexity of BMI management. *Second,* business model innovation can be, but not necessarily is, linked to technology or product innovation. It can precede or succeed technological innovation, or occur simultaneously, such that alignment and/or handover points seem necessary. *Third*, only few insights into the process of business model innovation exist to date, which might be caused by the lack of institutionalized BMI processes in most organizations. As a consequence, processes, roles, and responsibilities required for the corporate implementation of a continuous BMI process are not clear.

Our research studies these points in the unique context of a large and diversified multinational corporation which has institutionalized its corporate BMI activities.

2. Methods and data

We adopt a multi-case study design (Yin, 2014) to investigate how the MNC in question manages business model innovation. The firm studied is a large chemical corporation with global operations which has established a corporate BMI process in 2010. We observed the

implementation of this BMI process in the first six pilot BMI projects (each of them is treated as a case). While all cases had the same core BMI process steps, they differ substantially regarding the execution and embedment of these core steps. Original data was collected by means of observation, single and group interviews with involved managers and project team members, and internal documents and protocols. We identified emerging patterns and differences between the cases adopting a cross-case analysis (Eisenhardt, 1989) including tabular pattern matching (Miles & Huberman, 1994). By iterating between our initial findings and original data (Miles & Huberman, 1994) we refined our findings until we reached a consistent picture.

3. Findings

Our case analysis reveals that the six BMI cases exhibit significant differences with respect to how the BMI process was executed. We identify three types of BMI processes: BMI processes of type A are pure business innovations in which the logic of an existing business is altered without a new product or technology. Type B is a BMI process for technologies or product innovations that are in the final development stage with a clear target market. Type C are BMI processes for radical early-stage technology developments with an undefined target market. With this study we break new ground in understanding the management of and process behind business model innovation within the corporate setting. The three process archetypes identified differ in number of characteristics which serves as basis for new insights regarding: (1) the triggers for BMI, (2) the role of technology and uncertainty, (3) the purpose of the BMI process and team composition, (4) handover and implementation, and (5) organizational anchoring and leadership.

4. Contributions

Our work takes up Mason and Spring's (2011, p. 1040) call for "[…] in-depth, longitudinal, ethnographic studies to help us understand how managers develop, represent, translate and transform business models through situated management practice." Within the unique setting of a large and diversified MNC, we were able to generate first-hand insights into the establishment, management, and application of a corporate BMI process. The findings contribute novel insights to closing several research gaps and ambiguities in the young field of business model innovation.

As a main contribution, our longitudinal and observatory research approach allowed deeper insights into the exact process structure of emerging business model innovations than achieved in prior research (e.g., Bucherer, Eisert, & Gassmann, 2012; Frankenberger, Weiblen, Csik, & Gassmann, 2013). It highlights that a large MNC must be able to manage three types of the BMI process to fully profit from BMI. The three process archetypes identified serve as a new structuring device to interrelate and explain many ambiguities found in BMI research: *triggers and antecedents for the process* (Björkdahl, 2009; Frankenberger, Weiblen, & Gassmann, 2014; Zott & Amit, 2013), *process structure* (Bucherer et al., 2012; Frankenberger et al., 2013; Sosna, Trevinyo-Rodríguez, & Velamuri, 2010), *implementation options* (Markides & Oyon, 2010; Massa & Tucci, 2014; Trapp, 2014), and *novelty of the innovation* (Amit & Zott, 2012; Johnson, Christensen, & Kagermann, 2008; Thompson & MacMillan, 2010).

Our study starts to unravel relationships and causalities between these ambiguities from prior literature and thus helps structure the field of research. Future research should ensure to clearly specify which BMI process type is under study and help add more detail and context to the archetypes and their application.

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