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Dynamic Business Model Innovation : An Analytical Archetype

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Abstract. Business model innovation (BMI) is becoming increasingly a central subject of research in management discipline. However, two issues pose serious challenge in advancing this strand, firstly dynamics of competitive landscape and secondly multifaceted structure of business model. Having considered these issues, this article proposes an analytical archetype based on Dynamic capabilities theory (DCT) in order to show theoretically how a dynamic approach to innovate business models provides executives and researchers a handful of insights into the realm of value innovation in the current challenging landscape. This archetype is a novel approach to BMI and accordingly enriches the existing body of management literature in particular in the contexts of innovation and strategy.

Keywords: business model, value innovation, dynamic capabilities

1. Introduction

Two concepts of business model and dynamic capability have been undeniably brought to the forefront of business research and the significance of these two are increasingly acknowledged due to the importance of business models in formation and growth of the firms and critical role of dynamic capabilities in competiveness of today's enterprises. These two concepts are fundamentally intertwined (Teece 2010) and both have lied at the heart of strategic operation of modern enterprises. In spite of this fact, there are still numerous unsettled perplexities faced by executives and researchers in dealing with dynamics of business models and coping with internal challenges as well as environmental forces aiming at crippling firms (Hamel and Valikangas 2003). Hence, understanding the dynamics of business model innovation and rendering easy-to-implement dynamic approaches for making business models agile is now a top priority in executives' agenda and also a fruitful field of research. Therefore, from a strategic perspective it is assumed that, dynamic capabilities (DCs) are theoretically highly applicable in business model innovation at least for two interrelated reasons: firstly dynamic capabilities and business model are conceptually knitted to each other (Teece 2010) and technically business model is a micro-foundation of firm's dynamic capabilities and secondly business model innovation (BMI) is a strategic process based on the firm's higher order capabilities (Winter 2003) in face of forces coming from a changing and evolving business landscape in which dynamic capabilities have been a key factor of survival and competitiveness(Eisenhardt and Martin, 2000; Teece, Pisano and Shuen, 1997). However, despite these logical arguments these two constructs are both sophisticated and their relationship has remained a challenging issue in the current wave of strategy research. Having considered these notes, this article is aimed to develop an analytical archetype for approaching BMI dynamically. In doing so the following questions must be properly answered: 1) what is business model innovation? 2) What are dynamic capabilities and what role can they play in BMI? 3) How does a conceptual archetype for explicating the interactions of DCs and BMI get developed? What are the implications and limitations of this archetype? It must be noted that, in addressing these questions this study adopts a systematic literature analysis approach (Tranfield *et al.* 2003) in which a protocol for literature review is developed in order to sifting through conceptual findings and narrowing the analysis to reach the appropriate theoretical base for stating and classifying evidence. The theoretical findings are stated in a set of propositions as well as a conceptual model schematically as organized in the next successive sections.

2. Business Model: Possession and Innovation

Business model is simply the business logic of the firm (Tikkanen et al. 2005) however; its theoretical boundaries transcend mere profit and cost structures of the firm. In fact a business model represents the strategic positioning of the firm in a market (Yip 2004) and defines how a firm creates and captures value for its stakeholders (Chesbrough 2007;Casadesus-Masanell and Ricart 2010). Hence, business model (BM) can not only be a core component relating product-market strategies and performance of the firms (Zott and Amit 2008) but also more importantly it is a strategic tool for capturing value from firms' innovations (Chesbrough and Rosenbloom 2002). In this regard a thriving business model consists of four inter-locked elements that work harmoniously together to provide a firm superior and sustainable competitive advantage (Johnson et al. 2008). These four include customer value proposition (CVP) as the unique set of offerings differentiating the firm from its rivals, profit formula which describes how the firm manages its costs and review and create superior profit to stay ahead of its competitors, key resources and key processes which enable the firm to create and capture value and handle CVP and administrate profit formula. More radically, Doz and Kosonen (2010) define BM differently from two views, objectively as a sets of structured and interdependent operational relationships between a firm and its customers, suppliers, complementors, partners and other stakeholders, and among its internal units and departments (functions, staff, operating units, etc) and subjectively as a representation of these mechanisms, delineating how it believes and shows the firm relates to its environment. However a business model in these forms does not guarantee sustainability of competitive advantage for the firm because any firm explicitly or implicitly has a business model it is own terms (Chesbrough 2010;Teece 2010) but instead having a clear and coherent plan, superior ability and willingness to reinvent and innovate new business models is the only viable key to develop sustainable competitive advantage in today's hypercompetitive landscape (Johnson et al. 2008;Hamel and Valikangas 2003;Chesbrough 2007). Thus as acknowledged by Linder and Cantrell (2000) although a business model, strictly speaking, is the organization's core logic for creating value and but firms do need a change model as the core logic for explicating how a firm will change over time in order to remain profitable. The capacity to distinguish and communicate these models and co-align them is a must which improves organization's focus. Hence, sole possession of a business model even a sophisticated one as modelled by Johnson et al. (2008) does not bring about enduring supremacy but indeed the ability to keep the business model uniquely positioned and structured under furious exogenous forces does create sustainable advantage. This issue in increasingly recognized and set as a strategic priority, in this sense, IBM Global CEO Study (2006 and 2008 cited in Casadesus-Masanell and Ricart 2010) show that executives are actively seeking ways to improve their business models and innovate new models to beat competition more effectively. Consequently, a rising tide of theoretical and empirical research is being carried out to further this strand and dismantle barriers ahead of both researchers and executives (for instance special issue of long range planning 2010 devoted to business model innovation). Business model innovation is on the one hand making competition irrelevant (Kim and Mauborgne 2004) and on the other hand is creating whole new bundle of customer value and wealth (Kim and Mauborgne 1997,2004) and hence it may take place either in an entirely new competitive direction (Govindarajan and Trimble 2005) or in existing ones but through radical changes in established paradigms (Markides 1997;Hamel and Valikangas 2003) or finally in a hybrid form. In this respect, business model innovators are technically strategic innovators which revolutionize value chains architecture (Govindarajan and Gupta 2001) in different ways from new product developments to new delivery and marketing patterns (Anderson and Markides 2007). Given these descriptions the logic and dynamism of business model innovation necessitates specific set of orchestrated components that not only create and capture value by utilizing existing business model but also opens way to diagnose, re-assess and improve these models and if necessary reinvent new models. Therefore, business model innovation comes with a bundle of inherent perplexities and difficulties. Apparently so far there is no consensus on approaches to deal with these issues and some scholars (e.g. Markides and Charitou 2004) believe in ambidextrous structure whereas other (e.g. Govindarajan and Trimble 2005) believe in more advanced configurations such as a strategic DNA. The only certainty here is that in an uncertain world firms have unquestionably to become able to revise and reinvent their business models when necessary or otherwise witness their gradual extinction. On the basis on this tenet and having noticed the fragmented body of literature in BMI, it is assumed that innovating business model goes beyond strategic planning and decision making and instead it is a systematic procedural strategic activity that is critically contingent on the firm's ability to sort, evaluate , refine and rearrange its diverse resources and capabilities. In this regard Voelpel, et al. (2004) argue that, a business model is incarnated by the business's core value proposition for customers; its configurated value network(s) to provide that value, consisting of own strategic capabilities as well as other (e.g. outsourced/alliance) value networks and capabilities to continually sustain and reinvent itself to satisfy the multiple objectives of its various stakeholders .Hence BMI requires its own set of resources and capabilities. As Johnson et al. (2008) state, executives must know ways, resources and capabilities needed in diagnosing their current models and reinventing their BM when necessary timely and properly. To flesh out the role of these capabilities and explicate their interactions, dynamic capabilities theory is incorporated into the field of BMI.

3. Dynamic capabilities (DCs): From concept to BMI Application

From the early definition of dynamic capabilities (DCs) by Teece, Pisano and Shuen (1997) as the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments (p. 516) to the latest one developed by Barreto (2010) as "the firm's potential to systematically solve problems, formed by its propensity to sense opportunities and threats, to make timely and market-oriented decisions, and to change its resource base (p.271)", dynamic capabilities have been seen as the cornerstone of competitiveness and drivers of adaptability and innovativeness (Eisenhardt and Martin 2000;Narayannan et al. 2009). In this sense, strategically the dynamic capability view (DCV) focuses on the dynamic processes of generating, developing, and accumulating a firm's resources, as inputs into the firm's value chain (Eisenhardt and Martin 2000; Mulders and Romme 2009) and its essence is nothing but making firms responsive to changes in a rapid unpredictable environment (Teece et al. 1997; Sirmon et al. 2007;Teece 2007). Thus, dynamic capabilities are capabilities a firm possesses or develops to stay competitive. By capability it means that, DCs are reutilized complex procedures reflected in a wide range of abilities which show the capacity to reassess, renew and reconfigure firm's resource (Eisenhardt and Martin 2000; Teece 2007) this is due to this notion that, capabilities involve the coordination of multiple organizational activities and actors all aimed at a specific objective, such as adaptation and growth (Helfat and Peteraf, 2003). By dynamic it means that, DCs are organizational dynamic that leads to a change in the capability base of the firm in face of environmental changes (Bruni and Verona 2009) and as a whole concept dynamic capabilities represent the firm's capacity to purposefully create, extend or modify its resource base (Helfat et al., 2007, p. 4).These capabilities may help firms deal with dynamic market environments, improve productivity and generate new strategies more effectively (Narayannan et al. 2009).Hence, arguably for coping with forces pressuring executives to rectify or reinvent their business models, dynamic capability perspective is highly likely to provide useful insights into untangling the complex problem of BMI. For this purpose, dynamic capabilities are considered meta-capabilities compared to ordinary or operational capabilities (Winter 2003) and subsequently are built on higher order continuous strategic learning in which managers play a crucial active role in building, integrating and reconfiguring the capability base of an organization (Bruni and Verona 2009). Therefore firm's dynamic capabilities synthesize operational, marketing, human, social and managerial capabilities and form a complex system that enables firm to deploy its resources in a superior way that outperforms and outsmarts competitors. In this respect firms require DCs to reassess and reconfigure all resources and procedures involved in their value creation and capture in order to keep their value systems (as embedded in their business model) ahead of rivals. This simple argument shows how and why dynamic capabilities matter in BMI. Having considered this theoretical foundation the next section develops an analytical archetype for BMI based on DCV.

4. Proposing an analytical Archetype

Dynamic capabilities are first and foremost learning-based procedures which demonstrate the role of knowledge development and utilization activities involved in and associated with them. So, to develop and deploy a dynamic capability, managers must establish a strategic learning system through which needs and directions for necessary changes are clearly clarified and systematically pursued. Furthermore, DCs are built upon a careful ongoing, broad and in-depth analysis of firm's resource base including all tangible and intangible assets engaged and equally importantly about to be allocated and employed in value chain of the enterprise. Since a business model is the organizing framework of vale chain design and management and innovation is essentially a learning-based strategic action dynamic model of BMI accordingly requires a full understanding of firm's current resource stock and capability repertoire as well as a purposeful learning plan aimed at diagnosing status quo and findings critical changes. This argument gives rise to the first and second proposition of this study stated as follows:

Proposition1: business model innovation is a dynamic learning-driven process in which first and foremost principles of the existing business model are challenged based on the utilization of the current set of knowledge and accordingly BM innovation areas and directions are recognized to be pursued.

Proposition2: full understanding of the firm's resources and capabilities, their value appripriability and value chain engagement is a prerequisite of business model innovation because it effectuate dynamic model of resource analysis and configuration towards a new combination of assets for innovating new value systems.

In addition, BMI either reactively or proactively is triggered by environmental sense-making (Govindarajan and Trimble 2005). To apply DCV into this process, mangers must constitute a strategic objective for BMI and give direction to the processes through which required dynamic capabilities are developed and employed. Therefore, dynamic process of business model innovation must be grounded on a sound strategic objective that not only provides objectives for lower-tier capabilities but also early explicates ways to coordinate and unify those capabilities into a dynamic process leading to a new business model.

Proposition3: dynamic process of BMI is planned on a strategic objective developed by top managers and disseminated throughout the organization in order to align, ordinate and combine different capabilities towards a whole system for administrating BMI.

On the other hand, strategic decision factors confronting each business model vary based on the configurational and contingency components a firm is restricted to including firm's age, industry concentration, customer type, government regulations, and so on (Shafer et al. 2005) consequently, an organization's business model is never complete as the process of making strategic choices and testing business models should be ongoing and iterative (Shafer et al. 2005). Thus business model innovation, dynamic capability development and environmental continuous scanning must be co-aligned and co-evolved in order to yielding a thriving BMI. This means that dynamic process of BMI is crafted and executive based on the firm's strategy configurations and contingencies which necessitate managers to take a balance approach for dealing with both exogenous and endogenous shocks.

Proposition 4: dynamic business model innovation tackles endogenous shocks by reconfiguring business model structure and copes with exogenous shocks by developing contingency plans and simultaneously balances these sets of shocks through a dynamic process of capability development and competence utilization.

Business models as the system of value creation and capture is a networked structure consists of suppliers, focal firms, retailers, customers and all components involved in creating, capturing and delivering elements of value (Zott and Amit 2008, Chesbrough abd Rosenbloom 2002) so re-conceptualizing value system of the firm through BMI directly deals with radical innovations in network architecture as well as components of the firm which to succeed requires harmonious management of heterogeneous relationships. This gives rise to the need for a managerial dynamic capability to socially and strategically link different partners and purposefully orchestrate them in a manner that transcended boundaries of the focal firm. Thus, the dynamic mode of BMI is technically a dynamic re-arrangement of value networks (Voelpel et al. 2004) which synthesizes inter and intra firm relational resources and capabilities towards a whole new source of value.

Proposiiton5: dynamic business model innovation is carried out through a purposeful radical re-vision and re-arrangement of inter and intra organizational relationships through dynamic relational capabilities.

These five propositions jointly form the analytical archetype of business model innovation from dynamic capabilities perspective which can be synoptically illustrated in figure1 and titled as Dynamic Business Model Innovation (DBMI).

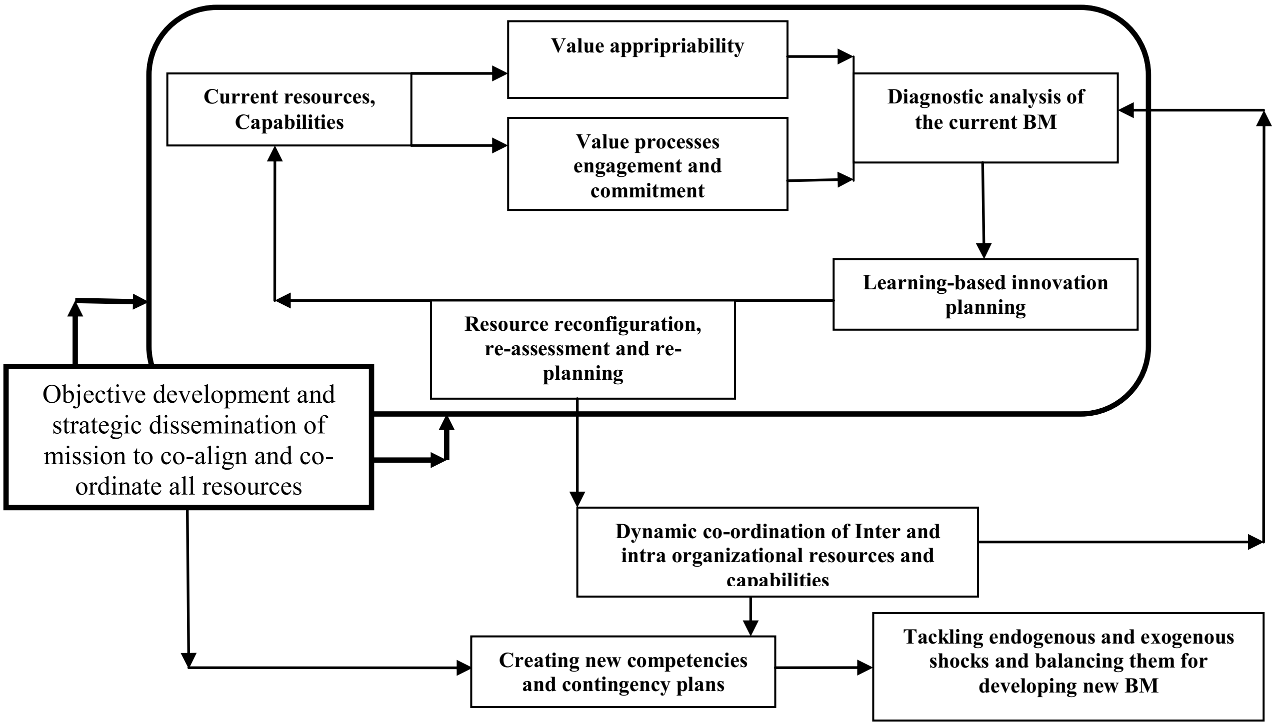

Figure1: dynamic business model innovation: an analytical archetype

5. Discussion and Implications

The archetype as illustrated delineates dynamic systems of business model innovation. The thicker lines show the dynamic capability development and utilization which results from purposeful process of strategic objective development and dissemination conducted by top managers and then it brings abut co-ordination and effective deployment of all value-based inter and intra organizational relationships in the form of dynamic management of relational capabilities (relational assets and resources entailing suppliers, retailers, customers and all value chain elements). The second dynamic system is the ongoing process of assessing and configuring these relationships in a diagnostic manner in order to create a learning plan for improving current resource base and developing new strategies for extending value create-ability of resources in a new business model (BMI). The co-alignment of these dynamic systems with effective dissemination of strategic objectives create a thriving platform for tackling both endogenous forces and exogenous challenges and engender a competency to balance forces which enables executives to effectively embark on innovating their business model timely and properly. It must be noted that, these systems as unified in an analytical archetype is an ongoing learning-based process which requires commitment and endowment of all resources and capabilities and dynamic management of them. Furthermore this archetype implies following noted to be taken into considerations by executives and all practitioners who are interested and involved in business model innovation:

1. Executives must gain a broad and in-depth understanding of their asset stock , resource gaps and capability requirements based on the scanning and analysis of both internal and external environment particularly relational and social aspects that heavily influence their value creation and capture capacities. Categorizing tangible and intangible assets and developing a granular modelling of them in order to illustrating their value chain engagement and value appripriability and also relational dynamism is a must in this context.
2. Creating a learning-oriented conducive culture which disseminates strategic objectives of innovating new business models is a challenging task of executives. This culture enables managers to smoothly re-configure their resources and timely recognize and take action for

deficiencies, develop dynamic managerial capabilities and harmoniously deploy operational and marketing capabilities and co-ordinate required capabilities towards a new ground for establishing new value systems.

3. Business model innovation is inherently associated with relational conflicts between value network partners. So executives should establish mutually-beneficial relationships, control them and strengthen them in order to gain the capability of revising and re-arranging inter and intra relationships when necessary and finally
4. Applying DCV in BMI is neither a top-down nor a bottom-up process but instead it is a two-way collaborative process transecting the boundaries of the focal firm which possesses the business model. This approach requires the synthesis and utilization of different assets that firm may not possess but controls as components of its value network. hence DBMI is essentially dynamic process of managing the control of resources which collaboratively create and capture value for firms and all its stakeholders as determined in the business model.

6. Conclusion

This articles incorporated dynamic capability view (DCV) into the field of business model innovation (BMI) and proposed an analytical archetype consists of five interlocking propositions that helps executives as well as researchers gain new insights into the realm of business model competitiveness. Both constructs of DCs and BMI are at the forefront of current business strategy thinking and managers need more advanced models for understanding the relationships between dynamic capabilities they have in hand or must have and business model they work with or should develop. This short essay addressed this need and provided an easy-to-understand approach for dismantling barriers in this context. The study was concluded by stating the managerial implications of the proposed analytical archetype in order to illustrate directions for further conceptual investigation and empirical scrutiny.

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