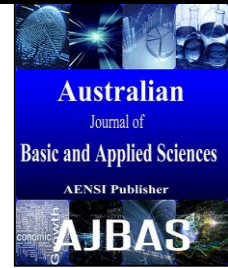




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Business Model Innovation beyond Resource Constraint

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ABSTRACT

The business model is prevalent in recent studies, but not well defined and knew. Most preview studies tried to explain business model by value creation and value capturing. In practical, business models innovations are for fitting their environment changing. This study interprets the bricolage concept for building a new business model beyond resource constraint environment. The methodology is case study by a small, young business. Their new business models were frequently created to fit their environment. The findings are that “at hand” and “making do” which are important for new business model as resource constrain. Resource exchange and rearrangement are the ways to create new business models. The resources exchange would concern both inside and outside.

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INTRODUCTION

Business models have been integral to trading and economic behavior since pre-classical times (Teece, 2010). The business model concept became prevalent with the advent of the Internet in the mid-1990s, and it has been gathering momentum since then. It means as a conceptual tool or model (George & Bock, 2009; Osterwalder, 2004; Osterwalder, Pigneur, & Tucci, 2005), a structural template (Amit & Zott, 2001), a method (Afuah & Tucci, 2001), a framework (Afuah, 2004), a pattern (Brousseau & Penard, 2006), and a set (Seelos & Mair, 2007).

Preview studies have been little done into the dynamics and processes of business model development and study lack of business model definition. Johnson, Christensen, and Kagermann (2008) suggested four interlocking elements that taken together create and deliver value. These four elements form the building blocks of any business. They are customer value proposition, profit formula, key resources, and key processes.

Evidence suggests that both start-up and young firms—despite typically being resource-constrained—are sometimes able to innovate (Katila & Shane 2005). Such firms are seldom able to invest in expensive innovation processes, which suggest that they may rely on other pathways to innovation. How to innovate for a new, small business is much important if the resource was scarcity. Bricolage,”

defined as making do by applying combinations of the resources at hand to new problems and opportunities, provides a pathway to innovation for new firms. Variations in bricolage behaviors can provide an explanation of innovation under resource constraints by new firms. (Senyard, Baker & Davidsson, 2011).

Bricolage is an important concept during the process of new business model formation. This study concerns about how a small business to form a new business model for competing exist enterprises. Ng, Ding, David & Yip (2013) derive three value drivers of the new business model of outcome-based contracts. Their study shows that behavioral and information alignments are important to achieve outcomes. However, material and equipment alignment (i.e., joint supply chain) does not have a significant effect on contract performance. Lisbon (2014) also argued the research on bricolage and product innovation is still incipient, and innovation is not the resource issues but related to time pressure. Inferior resources may also be involved in improvisational product innovation. This is because, under time pressure, there may simply be no time to assemble the otherwise preferred resources.

Objectives:

This study tried to explore new business model innovation by bricolage concept beyond resource constraint. These findings provide the directions to

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approach business growth for small and new start company.

Literature Review:

New business model is frequently to counter their competitors in internet era. Small and new start business usually face the problem of resource constrain. Scarcity resources may also be involved in an improvisational product innovation. This study would like to find that how to make business model innovation beyond resource constrain by Bricolage.

Business Model:

Companies frequently changed their business models to create new competitive advantages. Doz and Kosonen (2010) propose that companies be made more agile, which can be achieved by developing three meta-capabilities: strategic sensitivity, leadership unity, and resource flexibility. The main interest areas of business model are (1) e-business and the use of information technology in organizations; (2) strategic issues, such as value creation, competitive advantage, and firm performance; and (3) innovation and technology management (Zott, Amit and Massa, 2011). The business model idea is also to be a useful platform for delineating the field of entrepreneurship.

Afuah and Tucci (2001) propose the business model as a unifying construct for explaining competitive advantage and firm performance and define it as "the method by which a firm builds and uses its resources to offer its customer better value and to make money in doing so."

In the technology and innovation management field, the business model is mainly seen as a mechanism that connects a firm's (innovative) technology to customer needs and/or to other firm resources (e.g., technologies). The business model is conceptually placed between a firm's input resources and market outcomes, and it "embodies nothing less than the organizational and financial 'architecture' of the business" (Teece, 2010).

Panos and Mari (2013) described some consensus the design of the value creation, delivery and capture mechanisms to be employed by the firm (Amit and Zott, 2001; Chesbrough, 2010; Ghaziani and Ventresca, 2005; Teece, 2010; Chesbrough and Rosenbloom, 2002; Zott *et al.*, 2011). Specifically, a business model articulates the value proposition of the firm; identifies a market segment and specifies the revenue generation mechanism; defines the structure of the value chain required to create and distribute the offering and the complementary assets needed. The early extant literature emphasized the importance of coupling technological innovation with the development of an appropriate business model. New business models are conceived and implemented, it has left the issue of value capture relatively under-explored. This is surprising given that the adoption of a novel business model has been

acknowledged as an important element of a firm's intellectual property (Zott *et al.*, 2011).

Business models seek to explain both value creation and value capture. Value can also be created through revolutionary business models. According to Hamel (2000), to thrive in the "age of revolution," companies must develop new business models - in which both value creation and value capture occur in a value network—which can include suppliers, partners, distribution channels, and coalitions that extend the company's resources.

On the firm performance viewpoint, some literature on the business model tends to concentrate on the firm's activities with its network of partners, scholars increasingly are acknowledging that firms do not execute their business models in a competitive vacuum (Hamel, 2000) and that firms can compete through their business models (Casadesus-Masanell & Ricart, 2010). The business model represents a potential source of competitive advantage (Markides & Charitou, 2004).

Kastalli, Van Looy and Neely (2013) argued that manufacturing firms are turning to services as a new way of creating and capturing value. To examine how manufacturers can steer the transition towards services. It shows that manufacturing firms need to emphasize two separate but related dimensions of the market performance of service activities: "service adoption," reflecting the proportion of customers who purchase the manufacturer's services; and "service coverage," signaling the range of service elements or the comprehensiveness of the service contract that customers opt for.

Arend (2013) argued that business model need to transition from the idea-as-given perspective to a not-given perspective in order to place the business model idea in a theoretical perspective where it can be understood in more abstract terms and then applied in new ways. That transition will lead to new research questions, a new determination of the idea's value in nontraditional contexts, and new effects on existing related theories and on policies to control potential (negative) effects.

Im and Cho (2013) proposed a new systematic approach to new business model development, which consisted of two stages: identification of business model alternatives and business model evaluation and selection. This agile problem of these studies is difficult to create value business model for changing environment.

Nchez & Ricart (2010) suggested that interactive business models require a firm to combine, integrate and leverage both internal resources with ecosystem's capabilities to create new business opportunities.

Bricolage:

In his book *The Savage Mind* (1966), French anthropologist Claude Lévi-Strauss used "bricolage" to describe the characteristic patterns of mythological

thought. In his description it is opposed to the engineers' creative thinking, which proceeds from goals to means. Mythical thought, according to Lévi-Strauss, attempts to re-use available materials in order to solve new problems. The term bricolage has also been used in many other fields, including critical theory, education, computer software, and business.

The term "psychological bricolage" is used to explain the mental processes through which an individual develops novel solutions to problems by making use of using previously unrelated knowledge or ideas they already possess. The term, introduced by Jeffrey Sanchez-Burks, Matthew J. Karlesky and Fiona Lee of the University of Michigan,

Jacques Derrida extends this notion to any discourse. "If one calls bricolage the necessity of borrowing one's concept from the text of a heritage which is more or less coherent or ruined, it must be said that every discourse is bricoleur." Bricolage as the characteristic mode of production of the schizophrenic producer.

Bricolage can also be applied to forms of improvisation, more commonly known as improve. The idea of using one's environment and materials which are at hand is the main goal in Improve. The environment is the stage and the materials are often pantomimed. The use of the stage and the imaginary materials are all made up on the spot, so the materials which are at hand are actually things that the players know from past experiences (i.e. an improvisation of ordering fast food: One player would start with the common phrase "How may I help you?").

Bricolage is also applied in interior design, through blending styles and accessorizing spaces with what is "on hand". Many designers use bricolage to come up with innovative and unique ideas.

Baker and Nelson(2005) concluded three concepts of bricolage that are resource at hand, recombination of resources for new purposes and making do (making do by applying combinations of

the resources at hand to new problems and opportunities). Baker, Miner & Eesley(2003) explained bricolage making do with current resources, and creating new forms and order from tools and materials at hand. Weick, Sutcliffe and Obstfeld (2005) identifies the following requirements for successful bricolage in organizations as,

- Intimate knowledge of resources
- Careful observation and listening
- Trusting one's ideas
- Self-correcting structures, with feedback

Lisbon (2014) suggested the activities of bricolage occur when people explore existing resources in novel ways, not necessarily under time pressure as in the case of improvisation.

Methodology:

The methodology of this study to collect primary data is case study by in-depth interview. This non-structured questionnaire hopes to trigger more discussion, thus researchers need not formal questions and interview in order. The researcher draws up the questions to reach the research purposes during interviews. The data collections are kind of experiences, opinion, and the knowledge of interviews.

Moreover, researcher informs participants the research motivation, theories and the study aims. By the depth interview, it may explore the new ideas, concepts and even development new frameworks.

Case selected:

The case company is a young and small logistic company. The resource is fund by themselves. In the early years, the business was felled decreasing. The President and vice president changed their business model and move to success tread. In this study, we do case study for how this case company contered resource constrain by new businss model,the interviews are introduced as table 1 below:

Table 1: Interviewee List.

	Case company	Case company	Case company	Seller of internet website	Internet website	Association
Interviewee	Vice President	President/ Vice President	Vice President	Director	Manager	Managing Director
hours	4	5	4	1	1	3
times	1	2	1	1	1	1

Case company:

Case company is a small logistic and just turn around this year started on 2008. The competitors are Takkyubin, Taiwan Pelican Express, HCT Transportation, T-JOIN Transportation and Chunghwa Post. The paid-up capital expended from 10 to 30 million NT dollars on July 01 2013. The services of case company are like a logistic

consultant or the forth party of industry. The case company is resources constrain company, for example, their 2012 revenue (100 million NT dollars) was much fewer than revenue of retail support international (62,047 million NT dollars) as table 2. The information system was built by case company and growth to cooperate with GoMaji and larger logistic center.

Table 2: The comparison of main home delivery company in Taiwan.

President Transnet Corp.	Peilcan	Case company
Employee :6600 operation office :231 paid-up capital : 1110 million NT dollars	Employee: 1500 operation office :45 paid-up capital: 1000 million NT dollars	Employee:30~100人 2012 Revenue:100 million NT dollars. paid-up capital:30 million NT dollars
Technology source - Yamato Transportation	Technology source - Nippon Express	Technology source - by their own

Discussion:

The resource recognized and used of case company is much more different from their competitors. The case company plays as a resource

broker, distribution and rearrangement. There are five new business models (Table 4-1) of case company are created to achieve new growth.

Table 3: New BM of case company.

New BM	Alternatives	resource
BM1	Build information system by their own logistic experience	Case company
BM2	Borrow welfare and package account of Chunghwa Post.	Chunghwa Post
BM3	To be a packages center for Takkyubin, Taiwan Pelican Express, HCT Transportation, T-JOIN Transportation and Chunghwa Post.	Customer ,industrial companies
BM4	Apply government project to built company's real time response system	Government , complementary
BM5	Introduce customers to other fitness home delivery company	Customer, industrial companies

This case provide us the ways to get growth beyond resource constrain. They are showed as below

Finding 1. "At hand" and "making do" are important for new business model if resource is constrained.

BM2, 3 and 5 are "At hand" and "making do" resource gathering. For resource scarcity companies, the ways of "At hand" and "making do" are resources. Rent the warehouse from Chunghwa Post Co., Ltd. was one business model for solving the resource scarcity problem by "At hand" and "making do" ways. Case company played the role as shadow of Chunghwa Post Co. Ltd. In BM2, Chunghwa Post got rent of warehouse and more customers. Vice President of case company explained: "Chunghwa Post is a bank to received cash and their sub-branch over all of Taiwan. My company was regarded as one sub-branch of Chunghwa Post by our customers."

Case company figured their reputation by substituting one branch office for Chunghwa Post. The trust of customers helps case company to set their base for further development.

The details of BM3 and BM5 are discussed as finding 2. The resource of BM3 and BM5 are "At hand" and "making do" resource too.

Finding 2. Not only recombination of resources for new purposes, but resources exchange by inside and outside.

For BM3 and BM5, Vice President of case company said: "We are hardly to do catch the completion's ability; we still can be the broker to help logistic and internet sellers". Within this relationship, three parties could take benefit. The large logistic competitors get more customers and easy to transport the packages by case company's help. The internet sellers get more discounts to save delivery cost. Large logistic competitors and internet

sellers were convenient to transport and focus on their core business. Vice President of case company said: "They need not to pick each customer's packages, but just ask one bigger car to my company. The cost is decreasing by our help". The case company could make strong relationship of customers. In practice, case company help competitors to gather goods and feedback discount to sellers. Case company got part of the discount from other logistic company. The discount was increasing as the internet sellers' growth up. This BM was not only resource recombination, but do resources exchange of resources. In BM 3, 5, case company's position was the centre of resources exchange, and influent market share of industry.

Most logistic company built information system by technology transfer. In BM1, the case build information system by their own logistic experience. President and Vice President said:"The ICT is more important, if the warehouse is expended. Any customer of mine could get the best totally service, and need not to buy a 200 thousand NT dollars information system"

This information system helps internet seller focus on products development and promotion. At the same time, the relationship was closer if the information system was used. Vice President said:"They are completely trust my company after the information system are used".

BM4 is acquiring outside resource to redeploy their resource. This case applies a government project for a real time process by handheld equipments. This project made case company became the leader of new response technology.

Finding 3. Form a new business model by "at hand", recombination of resources for new purposes" and "making do".

Case company is not a traditional logistic as President Transnet Corp. and Peilcan. This company

plays a hidden leader (under table) to do recourses redeploy. A new role of in industry helps case company to build a new business model as resource scarcity. The resource could be capability, experience, information and services.

Conclusion:

Business model is regarded as a new way of creating and capturing value. Resource is usually a scarcity in small business or new start company. This study provides bricolage concept for new business model to create and capture value. Besides, the four elements customer value proposition, profit formula, key resources, and key processes. There are three ways of “at hand”, “recombination of resources for new purposes” and “making do” to meet the environment changing. Some practical ways are suggested to create new business model. They play new roles in industry; resources rearrangement and resources exchange.

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