



A two-tier business model and its realization for entrepreneurship[☆]

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ABSTRACT

Entrepreneurs are important to economic development. Business model design is critical to assist entrepreneurs. This study proposes a two-tier business model for entrepreneurs, consisting of a conceptual model and a financial model. The conceptual model describes the idea of a new business which is useful to explain a business. The financial model provides the numbers of the new business which makes the business model accountable and measurable. The two-tier business model is more applicable in that on one hand, the model addresses the conceptual and financial issues separately to avoid confusion; on the other hand, the model integrates both the conceptual and financial models to provide a complete view of the business. Each of the conceptual and financial models provides the relationships among their components. In addition, the two-tier business model shows the relationships between both models. This study realizes the business model by the application of Internet. In addition, two real cases, including Apps and one million dollar home page, exemplify the practices.

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1. Introduction

Entrepreneurs play an important role in economic development (Acs, 2006; Acs & Amoros, 2008; Ribeiro & Montoro-Sánchez, 2011b), and entrepreneurship is essential for the growth of both businesses and overall economies (Libecap, 2003). Entrepreneurship is an activity that involves the discovery, evaluation, and utilization of opportunities to introduce new products and services (Shane, 2003).

Business model design is important for entrepreneurs (Zott & Amit, 2010). Trimi and Berbegal-Mirabent (2012) point out that the study of business model design for entrepreneurs is new and attractive. Business models can act as various forms: to provide means to describe and classify businesses; to operate for investigation; and to act as recipes for management (Baden-Fuller & Morgan, 2010). However, there is no consensus regarding the definition, nature, structure, and evolution of business models (Morris, Schindehutte, & Allen, 2005; Tikkanen, Lamberg, Parvinen, & Kallunki, 2005).

There are two major types of business models, including static and evolving ones (Demil & Lecocq, 2010). The static model describes the target business, while the evolution model describes how a business evolves from one static model to another. Applegate, Austin, and McFarlan (2003) introduce four approaches for evolving a business,

including enhancing, extending, expanding, and exiting. Business models continue to evolve from their initial states and throughout repeated application (Dunford, Palmer, & Benveniste, 2010) for survival and success (Javalgi, Todd, Johnston, & Granot, 2012). Dunford et al. (2010) exemplify the concept by the case of ING Direct.

Regarding the static models, Morris et al. (2005) illustrate the business model further by relating the concept of the business model to management concepts: a business model captures the key components of a business plan. Itami and Nishino (2010) consider that a business model contains what the business does and how the business makes profit. Yu and Huarng (in press) focus on how to create wealth for entrepreneurial firms.

To better capture all the important factors, this study proposes a two-tier business model to assist entrepreneurship, consisting of a conceptual model (the first tier) for describing the business idea and a financial model (the second tier) for discovering the financial concerns. Each model consists of components and linkages between the components. The two-tier business model is different from the previous models in that, first, the two-tier business model clearly separates the components of the conceptual and financial models to prevent the confusion of examining both at the same time. In addition to listing the components as in previous studies, the business model specifies the relationships (linkages) among the components, which helps to explain entrepreneurship (Ağca, Topal, & Kaya, 2012; Amorós, Fernández, & Tapia, 2012; Anderson, Dodd, & Jack, 2012; Baba & HakemZadeh, 2012). Further, the two-tier business model clearly explains the relationships between the components of the two models. To that end, Section 2 introduces the two-tier model. Section 3 provides some practices to realize the new model for entrepreneurship. Section 4 exemplifies the practices by two real cases and Section 5 concludes this study.

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2. The two-tier business model

2.1. The conceptual model

The conceptual model aims to describe a business, comprising of key components, including innovation, resource, market, and value, as in Fig. 1. The model starts with the innovation. Innovation is one of the key elements for entrepreneurship (Audretsch, 2012; Kim & Huarng, 2011; Stearns & Hills, 1996; Workman, 2012). Chaston and Scott (2012) manifest the relationship between innovation and business performance. “Each new venture is an innovation” (Vesper, 1994). An innovation can be an innovative idea, business concept, or any one of the 12 dimensions of business innovation (Sawhney, Wolcott, & Arroniz, 2006). The business concept may derive from the analysis of market opportunity, product and services, competitive dynamics, or strategies (Applegate et al., 2003).

Firm resources and sustainable competitive advantages have strong links (Barney, 1991; Wernerfelt, 1995). Hence, resource is another component in the conceptual model (Canina, Palacios, & Devece, 2012; Huarng, Mas-Tur, & Yu, 2012; Ribeiro & Montoro-Sánchez, 2011a). The resource shows how a business must align its internal systems to deliver the benefits of the value (Rayport & Jaworski, 2001). The more the entrepreneurs' resources, the greater the willingness for external partners to cooperate (Wu, 2007).

Opportunity recognition is an important aspect on entrepreneurship and studies emphasize the importance of market knowledge in opportunity recognition (Bettiol, Di Maria, & Finotto, 2012; Eggers, Hansen, & Davis, 2012; Siegel & Renko, 2012). Market is always a concern (Rayport & Jaworski, 2001), revealing why a business operates in a specific environment with the given legal framework, technology, (potential) customers, competitors, and resources (Petrovic, Kittl, & Teksten, 2001).

The overall objective of a firm's business model is to exploit a business opportunity by creating value for its stakeholders (Zott & Amit, 2010). Value creation is the ultimate goal of a business model (Afuah & Tucci, 2001; Applegate, 2001; Huarng & Yu, 2011b; Petrovic et al., 2001).

In summary, the innovation describes what a business will do; the resource addresses how a business will fulfill the innovation; the market specifies who will become the target customers; and the value represents why a business can survive and sustain.

The conceptual model also specifies the relationships between these components. In Fig. 1, the solid line from one component to the other represents the latter follows from the former in interpretation. For example, the innovation explains the necessary resource and the potential market. The resource supports the market. Both the

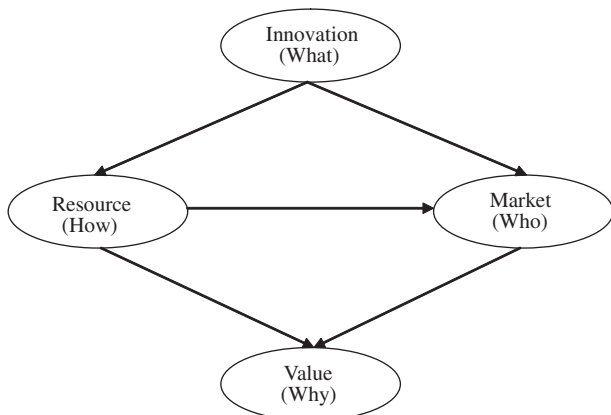


Fig. 1. The conceptual model.

resource and the market affect the final value proposition. The conceptual model serves as the first tier of the two-tier business model.

2.2. The financial model

The essence of a business model is in defining the manner where a business delivers value to customers, entices customers to pay for the value, and converts those payments to profit (Teece, 2010). Hence, only the conceptual model cannot fully describe the real situations or reflect the sustainability of a business. A business model should be able to reflect financial conditions in a business (Dubosson-Torbay, Osterwalder, & Pigneur, 2001). In other words, a business model should be able to translate the conceptual model into numbers (Meyer & Crane, 2010). Hence, a financial model, consisting of cost, revenue, and profit, serves as the second tier of the two-tier business model, as in Fig. 2.

The cost (Chesbrough & Rosenbloom, 2002) monetizes all kinds of resources that need to realize and support the innovation. How much capital does a new business require (Shane, 2008)? Christensen, Parsons, and Fairbourne (2010) show that startup capital recovery time is a critical factor for a successful entrepreneurship, which confirms that the cost is an important financial component. The revenue (Afuah & Tucci, 2001; Alt & Zimmerman, 2001; Applegate, Austin, & Soule, 2009; Applegate et al., 2003; Betz, 2002; Zott & Amit, 2010) includes all possible incomes from the products or services a business supplies.

Simply put, the profit is equivalent to the revenue minus the cost. Or the profit can be the financial performance for subtle analysis. In the analysis of a business, the profit often gains higher profile (Itami & Nishino, 2010). The solid line in Fig. 2 shows that both the cost and the revenue affect the profit (Betz, 2002; Chesbrough & Rosenbloom, 2002).

2.3. The two-tier view

The cost and revenue are the other (monetary) side of a coin for resource and market, respectively. When a business delivers the value to

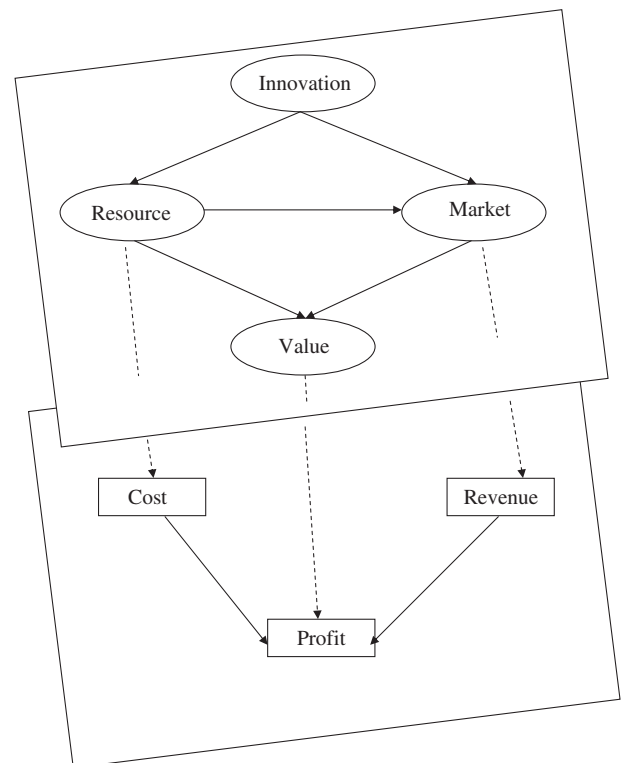


Fig. 2. The two-tier business model.

its customers, hopefully the business can get enough revenue and turn the revenue into profit. A business needs profit to stay in business (Mariotti, 2006). A win–win situation happens when customers obtain the value and the business makes the profit.

The dash lines in Fig. 2 link the two tiers of analyses where these dash lines show the correspondences between the components in the conceptual model and the components in the financial model. The cost, revenue, and profit are the corresponding financial component for the resource, market, and value, respectively.

3. Application to assist entrepreneurship

By applying a new business model, a business can implement different strategies. Coupling strategy and business model analysis to protect competitive advantage resulting from new business model design is important (Teece, 2010). Mason and Spring (2011) consider a business model as bundles of practices. Hence, this study proposes some practices to realize the two-tier business model for entrepreneurship.

Kuratko and Morris (2003) stress the importance in distilling an entrepreneurship mindset. Hence, a business model for entrepreneurship should enhance the motivation of entrepreneurs as well as lower the risk of entrepreneurship. This study suggests some practices, such as innovation on the Internet, reduction of the resource, and expansion of the market (Thompson & MacMillan, 2010). These practices of the two-tier business model fit and reinforce each other.

Internet becomes extremely popular (Huarng & Yu, 2011a) and the diffusion of Internet grows rapidly (Huarng, 2011). The evolution of technology and diffusion of Internet enable businesses to expand their markets (Baviera-Puig, Buitrago-Vera, & Mas-Verdú, 2012; Todd & Javalgi, 2007). So innovating on the Internet can facilitate the growth of new businesses (Javalgi et al., 2012).

Teece (2010) states that the Internet devastates the business models of industries such as music recording and news. The application of Internet can impact the resource and the market. Concerning the resource, the Internet businesses can leverage the advantages of economy of scale (Eisenmann, 2002). A business selling digital product (such as software or digital music) needs little variable costs to reproduce its products. In addition, the business can deliver the products via Internet (by email or download); hence, the business needs lower (or little) logistics expenses. In all, digital products and services need fewer resources than their physical counterparts. The needs of fewer resources reduce the risk of entrepreneurship and lower the barrier of moving to entrepreneurship.

Concerning the market, the Internet companies can take advantage of ubiquity. Ubiquity means the business is available everywhere at all times. Hence, the market can extend beyond traditional boundaries (Laudon & Traver, 2011).

Some businesses may focus on the top of the pyramid, considering very important persons (VIPs) as the target of the business. However, the amount of the VIPs is comparatively small. Prahalad (2004) suggests considering the bottom of the pyramid as the source of fortune. But only a bigger potential market may not guarantee increasing the revenue. This study suggests providing affordable pricing strategy to attract the market.

4. Case study

Two cases realize the two-tier business model for entrepreneurship as follows. Both create innovation on Internet, require fewer resources, and apply affordable pricing to attract large amounts of customers. Table 1 summarizes the features of the two cases.

4.1. The one-million dollar homepage

A single young man created a business with the one-million dollar homepage (<http://milliondollarhomepage.com/>). The entrepreneurship

Table 1
Two cases of the two-tier business models for entrepreneurship.

	The one-million dollar homepage	Apple apps
Innovation	Web page	Software
Resource		
Variable cost	Little	Little
Logistics expense	Little	Little
Market	The world	The world
Pricing	1 pixel \$1	\$.99 or above
Cost	\$ 75	

started with the investment of \$75 and after half a year he became a millionaire (Gorling & Rehn, 2008).

Wielki (2010) considers the one million dollar homepage as a completely new model, which refers to the innovation on the Internet or “presence” business innovation (Sawhney et al., 2006). The innovation attracted attention immediately. Low investment means that the business requires few resources. Adding new advertising to the homepage is straightforward, requires little resource, and needs no logistics.

The one-million dollar homepage sells a pixel \$1 which perfectly fits the affordable pricing. In practice, most businesses can afford 10×10 pixel advertising, which costs \$100 only. The Internet provides the one million dollar homepage ubiquity to attract customers all over the world. Its market expanded quickly after the website launched.

4.2. Apps

The driving force behind the successful Apple iPhone platform is the Apple App Store (Bellman, Potter, Treleaven-Hassard, Robinson, & Varan, 2011), where customers can choose from over 500,000 interactive applications (“apps”). The apps range from work, play and everything in between (Apple, 2012). Because of the popularity of Apple apps, Google also rushes to provide apps for its customers (Bellman et al., 2011). The popularity of apps and competitions between the service businesses are manifest. Gregory (2010) states that the rising popularity of smart phones has created a new type of entrepreneurs – the “app developers”, and the app market is worth nearly two and a half billion dollars a year.

The apps fit the innovation on the Internet, which is the “offering” business innovation (Sawhney et al., 2006). App developers need little variable costs to reproduce their products. The customers can download the apps directly via the Internet, which requires little logistics expenses. The sole expensive resource is the capability to develop the software. The prices of apps can be as low as \$.99, which fits the affordable pricing strategy. The apps can target the whole world as the market via the Internet.

5. Discussion and conclusion

The two-tier business model consists of a conceptual and a financial model. The conceptual model describes the idea of a new business. Hence, it is suitable for startup businesses to introduce themselves or to attract supports. With the financial model, the business model becomes accountable and measurable. Numbers can assist to crystallize the concepts in a new business.

The two-tier business model is different from the previous models. First, the two-tier business model clearly separates the analyses of the conceptual and financial models. Besides, the business model specifies the relationships among the components as well as the relationships between the components of the two models.

This study also provides the realization of the business model for entrepreneurship. The application of Internet, fewer resources, and larger market with affordable pricing strategy are the practices to facilitate entrepreneurs to start their businesses.

Two real cases, the one-million dollar home page and Apple apps, exemplify the practices. Both create innovations on the Internet and provide digital products. Both need low variable costs in producing products (fewer resources): the one-million dollar home page needs rather few resources for each new advertising and apps need not to produce copies. Both apply the Internet to expand their market and apply affordable pricing strategy to attract the customers. As a result, both cases demonstrate that the two-tier business model is suitable for entrepreneurs.

To become sustainable, businesses may need to adapt their business models as time goes by (Dahan, Doh, Oetzel, & Yaziji, 2010). The two-tier business model can evolve from one to another. Positive profits can add more resources to enhance the existing business model. Or positive profits can nurture a new innovation, which is another new business model. Links can show the relationships from one business model to another. Negative profits may force the existing business model to adjust or even to terminate itself. The static two-tier business model can then derive into a dynamic model.

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