

# Impact of M-Commerce on Business Models

Xiaobo Wu

*School of Management,  
Zhejiang University,  
Hangzhou, China  
xbwu@zju.edu.cn*

Qi Chen

*School of Management,  
Zhejiang University,  
Hangzhou, China  
cq1106@zju.edu.cn*

Jingjing Guo

*School of Management,  
Zhejiang University,  
Hangzhou, China  
prettylifein@zju.edu.cn*

## Abstract

*With the popularization of information technology, the development trend of internet is transferring from PC-Internet to Mobile-Internet. More and more enterprises adopt M-commerce business model to achieve competitive advantage. Based on the review of present business model theory, this article clarifies the concept of M-commerce as a kind of emerging business model, and analyses the advantage of M-commerce in business model elements in comparison to traditional commerce and E-commerce from the perspective of business model. Moreover, this article explores the effect of M-commerce business model on enhancing the competitive advantage of enterprises.*

## 1. Introduction

Nowadays, Information technology has been adopted widely in enterprises. It has been well acknowledged by most of scholars that IT is a powerful weapon enabling enterprises to get competitive advantage and transform their business model [1]. As the development of mobile communication technology, the development trend of online business is transferring from PC-Internet to Mobile-Internet, which is primarily reflected by the rise of M-commerce. In this paper, we first review the literature of business model theory, and we analyze the advantage of M-commerce in business modeling in comparison to traditional commerce and E-commerce business models from the perspective of business modeling.

## 2. Business model

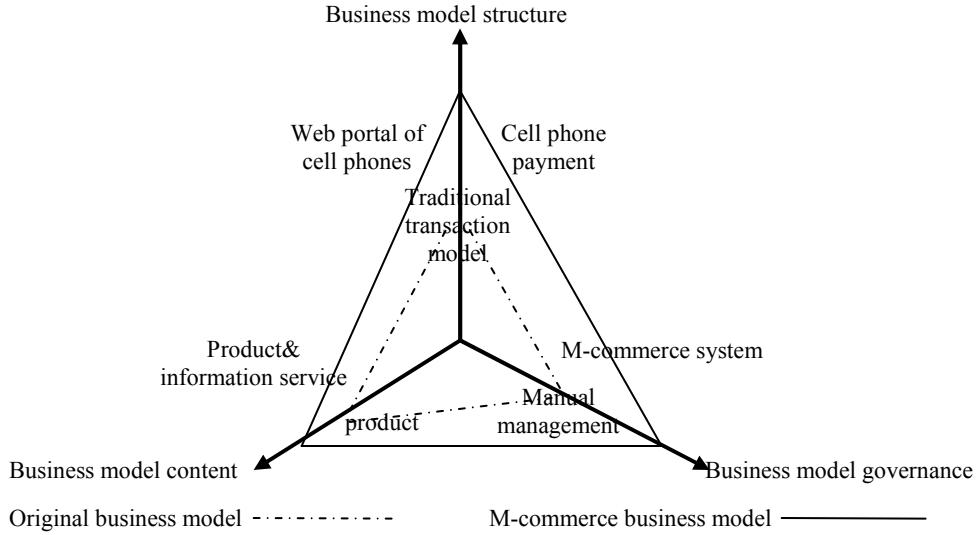
Business model, as an academic term, has been existing in the journals of computer science since 1970s, mainly used for analyzing firms' development and information system. With the development of information technology, firms' business model has changed a lot. Studies on business model gradually appear in the management

journals, and more and more researchers are concerned about business model.

As for the conception of business model, Yan (2007) posits that business model as the way of enterprise operation is closely related with business process and value chain [2], while Rappa (2004) asserts that business model points out what enterprises should do to create value and how to build relationship with upstream and downstream partners and gain benefits from customers [3]. In addition, Timmers (1998) regards business model as a framework of products, service and information flow, which includes descriptions on business activities and their functions, different business participants' potential benefits and income sources [4].

In terms of analyzing enterprises based on business model theory, most of researchers are concerned about the elements of business model. Hamel (2000) thinks that business model comprises four elements which are core strategy, strategic resource, customer interface and value network [5]. Chesbrough and Rosenbloom (2000) disclose business model elements through identifying six kinds of business model's function, which are identifying value intention, recognizing segment market, setting up the structure of firms' internal value chain, defining cost structure and potential benefits, describing the position of firms in the value network and stating competition strategy clearly, and they also point out enterprises are inclined to invest on the technology adapted to their business model through case study [6]. Moreover, Amit and Zott (2001) empirically research on 59 E-commerce enterprises in Europe and America, and posit that business model includes business model content, business model structure and business model governance. They also consider the efficiency, complementarities, lock-in and novelty of E-commerce enterprises as the resource of value creation [7].

## 3. Comparative analysis of traditional commerce, E-commerce and M-commerce



**Fig 1 Comparison on Nongfu Spring's business models**

**Tab1: Comparative analysis on the business model elements of M-commerce, traditional commerce and E-commerce**

	Traditional commerce	E-commerce	M-commerce
Business model content	Actual product	Actual product & information service	Actual product & information service
Business model structure	Traditional information platform( TV, newspaper); Traditional transaction ways; On-the-spot payment	Internet platform ( eg.internet); Internet transaction ( internet transfer); Internet payment & on-the-spot payment	Mobile internet platform (Web portal of cell phones, information kiosk); Mobile transaction (mobile terminal payment) ; Mobile internet payment& on-the-spot payment
Business model governance	Manual management	E-commerce system	M-commerce system

As a kind of new business model, M-commerce is emerging gradually. Transferring from traditional commerce and E-commerce to M-commerce business models is an effective way for enterprises to achieve competitive advantage. Based on the above review, this article adopts the research result of Amit and Zott (2001) to explore the difference among traditional commerce, E-commerce and M-commerce from the perspective of business model content, structure and governance ( see Tab 1).

### 1) Business model content

As for traditional commerce model, enterprises mainly provide actual products, while in terms of E-commerce and M-commerce models, enterprises supply information service with actual products or pure information service. Such change of product content is able to improve the attractiveness of products for customers effectively and also satisfies their demands for information service.

### 2) Business model structure

In terms of information channels about products, compared with traditional commerce and E-commerce, M-commerce model facilitates customers to get the product information whenever and wherever they want and thus make decision to purchase though web portal of cell phones and information kiosk. Meanwhile, customers are able to purchase products anytime and anywhere through mobile transaction of M-commerce. The business model structure of M-commerce fully displays its mobility and instant access, which enhance the competitiveness of enterprises significantly.

### 3) Business model governance

Under M-commerce business model, enterprises can manage instantly customers' information and transaction process of products (eg. instant control of transactions and actual product logistics) to provide better product and service for customers and consequently achieve the competitive advantage.

## 4. Case study

Nongfu Spring Co., Ltd. is set up on Sep, 1996. After more than ten years' development, it has become the largest company of specialty drinking water and feature. The company asked each sales representative to investigate 50 supermarkets each day. In other words, each sales representative needs to go to 300 supermarkets to collect data, communicate and display the products in a week. However, manual management often led to the warp of data and delay of sales terminals' reaction to demands, which further resulted in management's mistakes in making decisions. In order to change this kind of business model and enhance the competitive advantage in both the domestic and foreign market, Nongfu Spring's management transferred its business model and built the M-commerce managing platform in Aug, 2007. After that, the company could know about the market's actual demand instantly, and operates the instant management of business through M-commerce system, which therefore improves its competitive advantage substantially (see figure1).

### 1) Business model content

As for the original business model, sales representatives of the company mainly provided actual products. However, as for the M-commerce business model, sales representatives supply related information service of products to customers through M-commerce system (the company provides beverage of different tastes according to the seasonal desire, and provides these information to each supermarket in time), which improves the attractiveness of products.

### 2) Business model structure

In terms of information channels of products, in comparison to the original business model, customers are able to visit Nongfu Spring's web portal of cell phones through mobile phones. At the same time, the company collaborates with China Merchant Bank to set up business of cell phone bank and internet bank, which make each supermarket is able to transact with the company instantly.

### 3) Business model governance

Under M-commerce business model, through the M-commerce system, Nongfu Spring can manage the market's demand information and transaction process in time and get the information about market terminals' demand exactly. Such business model governance avoids problems caused by original manual management such as the delay of information about market demand's feedback and data distortion, etc.

## 5. Conclusions

The development of information technology causes changes to traditional business model of enterprises. With

the development of mobile communication technology, M-commerce as a kind of new business model is rising up. M-commerce business model is an effective way for firms to achieve competitive advantage. In this paper, we firstly review the literature of business model theory. Then, according to the research of Amit and Zott (2001) [7], which posits that business model elements include business model content, structure and governance, this paper compares the advantage of M-commerce business model with traditional commerce and E-commerce business models. Furthermore, this article analyzes the competitive advantage of Nongfu Spring's M-commerce in business model elements compared with its original business model. The result shows that the most significant advantage of M-commerce is its mobility and instant access, which are reflected in business model to be the advantage of business model structure (customers are not constrained by territory and time to transact) and business model governance (enterprises are not restricted by territory and time to manage products instantaneously).

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