Abstract

E-business is not only changing the channel of traditional transaction and the model of marketing, but also innovating the correlation among enterprise, customer and government. The principal part of e-business application should be in enterprise. E-business is a process that spreads total enterprise via information technology. This electronized and webfied process not only adjusts the intrinsic organizational and management model, but also across the border of enterprise and represent the relation renovation with customers and strategic partner. This paper presents a business theory framework for e-business. Based on organization change model, it summaries the impacts of e-business on organization management. Management innovation with e-business has be emphasized from customer-oriented management and supply chain management.

Key WORDS: E-business, Management innovation, Customer Relationship management, Supply Chain Management

Introduction

For all of these influences, the operational model and internal mechanism in the enterprise will face a deep transformation. It is obvious that e-business also will result in many problems in the far-reaching fields such as finance, law system, policy and information security. So, Exploring the model of e-business that fits the situation of country will help the enterprise to win in the future drastic competition under the context of globalization. Many governments such as Unite States, Japan and Singapore etc. take the research of the management methods and developing policy of e-business as the important strategic task. And the famous international companies such as IBM, Cisco etc. also set up their system of e-business for improving their capability of response to the complicated business world.

As a developing country, China should take advantage of information technology to enhancing the national power. It will be a life-and-death issue concerning the future of China in the new century. We hope this content of the paper will benefit the research of e-business in China, furthermore it can offer the macro guidance to the practical operation of the enterprise.

1. Brief History and Management Theory Framework of E-business

The headstream of e-business could be set in 1839, the age of inventing the telegraph, if we wanted to find the ancestor of e-business. The telegraph was used to send the messages in the business. In the 1950s, the telephone and facsimile
came into the real world and became the popular way to communicate in the business activity.

During the 1970s, the introduction of electronic funds transfer (EFT) between banks over secure networks changed financial markets. EFT was taken as the modern method in the way of e-business in the western. In China, the system of EFT was established in 1991.

During the 1960s, the technology of electronic data interchange (EDI) presented itself. This technology and electronic mail (e-mail) were adopted by the most corporations of the western with the development of the modern communication network. Both EDI and e-mail were called electronic messaging technologies.

Ever since commercial use of the Internet was allowed in the early 1990s, e-business entered a period of rapid growth. The advent of the World Wide Web on the Internet represents a turning point in e-business by providing an easy-to-use technology solution to the problem of information publishing. The Web also made e-business a cheaper way of doing business and enabled more diverse business activities. All advantages of Web including its friendly user-interface accelerated traditional companies to restructure their business in order to remain competitive edge. Now it is obvious that e-business will leave no industry untouched and no region immune.

R. Kalakota and A. B. Whinston defined e-commerce in their book Electronic Commerce: A Manager's Guide. 'From a communication perspective, electronic commerce is the delivery of information, produces/services, or payments via telephone lines, computer networks, or any other means. From a business process perspective, electronic commerce is the application of technology toward the automation of business transactions and workflows. From a service perspective, electronic commerce is a tool that addresses the desire of firms, consumers, and management to cut service costs while improving the quality of goods and increasing the speed of service delivery. From an online perspective, electronic commerce provide the capability of buying and selling products and information on the Internet and other online services.'

In the report of the Delphi Group 'e-active: How the Leading Edge of e-businesses are Transforming Themselves and Their Industries', the concept of e-business were defined in a farther way. E-business is considered as a new business model that emerging in the Web-driven environment and has descended across the corporate world. Unlike e-commerce, e-business does not only focus on the front-end of the traditional business—automating consumer transactions—but automates and webifies the entire value chain, linking partners and customers under a single automated system. Unlike EDI systems, e-business applications are built on open non-proprietary environments based on the Web. E-business is not just about point of sale applications, nor is it just about distribution, but the automation of the entire value chain.

The management theory framework of e-business sees Figure 1.1.
Applications of e-business

banking, retail, publishing, shopping, job seeking, advertising, travel agent, auction, etc.

Law

Methods and Theories
Technology, Strategy, Marketing, Logistics, Information management......

Infrastructure
(1) Network; (2) Multi-media and publishing; (3) Information distributing; (4) Public service.

Figure 1.1 The Management Theory Framework for e-business

2. The Impacts of E-Business on Organizations of the Modern Corporations.

The core of operation of the modern corporations is the operation of organization. In the view of whole system, the structure of organization is the product based on many management activities that involved in division of work, departmentalized, authorization, etc. And organization innovation is a crucial problem to managers. In this paper we think that the organization of the corporation composed of four basic elements according the theory of integrated structure. They are Goal, Technology, activity and institution. Clearly, a efficient organization not only need the internal coordination of four elements, but keep the external coordination with the environment. E-business will have impacts on these basic elements and become the part of the operational model of organization.

2.1 Organization Goal

Organization goal is the future situation that a company wants to reach. The drive of organization activities comes from the organization goal. Apparently, a company takes pursuing profit as one of the requisite goals. When the global market is emerging and the competition is becoming cruel, a company has to use the way of e-business to improve the efficiency of organization for getting satisfactory margin. E-business influenced the organization goal greatly by the certain way of positive feedback. First, the positive network externalities that the network economics featured push applications of e-business into the operation of companies. The cost-efficient, global advantages of e-business will help companies to elevate the efficiency of organization. Corporations can optimize its internal and external resource by e-business.

Second, the development of information technology popularized the knowledge and skill of computer. Personal computer is changing into the popular tool, and China also will be this situation in coming future. In this era of
'ubiquitous computing', to large companies, they will use the serial technology of e-business following the social trend in order to get more the competitive edge; to small companies, they see the Internet as a chance to develop their market in low-cost and want to snatch subdivided market from the large companies. E-business offers all middle and small enterprises some opportunities to struggle with these giants. In the other hand, the training investment in companies focuses on the fields of information technology application, corporations need advance organization learning for adapting the social revolution. A rapid response that e-business endowed is basically necessary. Consequently, the social advancement and organization goal forms the interaction effect that forced e-business into the strategic stage of a company. Distinctly, e-business is becoming the must way to accomplish the organization goal.

2.2 Organizational Activity

Organizational activity is a series of activities that are implemented around organizational goal. The division of work diversified these activities that based on the practical experience. Inevitably, the activities with experience will put certain subjectivity in organization activity. The results of some activities that depended on the special capabilities or certain managers are the reflection of the subjectivity. However, e-business lessens the need to special operational skills in the organization activities and increases the objectivity in the management. Enterprises will require their employee to understand the information technology and use technology more than only practical experience to manage organization activities. For example, the process of a company such as production, sales, marketing, accounting and inventory is reengineered by the system of Enterprise Resource Planning (ERP). A important question is that the cost of a company maybe hasn't been decreased after the company launched its e-business because the information system need soft ware, hard ware and engineer to support, all these will expend a big sum of money. However, even if any cost hasn't be cut down, at least the company reduce the risk of competition because of its new model and quick response. Every enterprise starts to realize that the reduced risk means survival of an enterprise in some degrees. So, e-business will give enterprises more space and chances of activities.

2.3 Organization Technology

Apparently, e-business has the great impact on the technological element in an organization. This impact can advance the technology innovation, in fact the technology innovation will bring to management innovation. In the time of Industrial Revolution, the division of organization was an important technology to increase the productivity of a company. De facto, we can think the division of work as a management model in early scientific management. However, both management and technology is a transfer in the process of organization activities. In the industrial production, mechanization became the mainstream model by replacing parts of human being's labor. But the advent of information technology remodeled the mechanized division of work with automation and intelligence technology. The the Computer Integrated Manufactory System (CMIS) was
implemented in manufacturing industry and Management Information System was applied in most companies. We can find the impact of information technology on varied businesses. And today's e-business has a little bit difference from early information technology, because e-business reinvents the management process of organization through a way of automating and intelligentizing. This is to use an integrated technology to replace management of human being, rather than the partly intelligentized technology.

2.4 Organization Institution

Organization has to set up and operate under certain institution that determines the interrelation of employees in organization activities. In traditional enterprises, organization activities showed something of mechanism that the work of its employees was like the extension of a machine from the work time table to the work process. Although managers encouraged innovation in their thought, the chances and methods of innovation were scarce since the essential of mechanical work. As time past, the institution that suppressed the nature of human being would depress the efficiency of organization and further cumber to achieve the organization goal. Even if the modern management theories gave some methods that based on the humanism to improve the problem, but the effect was not satisfactory as the prediction. The reason is that these methods only loosened the restriction to employees in a low class in terms of the mechanism and had not modified the process and means of work to employees. E-business that embeds in the enterprise is changing the process and means of work, reeducating the employees and improving the context of innovation. Moreover, organization institution can direct and employees in a deep class.

3. E-business and Management Innovation

E-business is the product of the era of Network economics. The implementation of e-business will change traditional model of manufactory, service and consumption and integrate the information flow, fund flow and logistic flow. So, to a company, e-business isn't equal to program a web page or launch an online shop, etc. It is the most important to transform the basic operational model and push companies to enter a new stage by e-business. For this goal, companies have to redesign their customer management, partner management and internal management. In sum, management innovation is the only way to the challenge of globalized economics.

 Accord Michael E. Porter's value chain model (1985), every enterprise is the aggregation that integrates design, manufacture, sales and dispatch (see Fig. 3.1). In terms of this model, we can discuss the management innovation in the context of e-business in two aspects.
3.1 Customer-Oriented Management Innovation — Customer Relationship Management

In modern competition, with the changing rules of marketing, customer management has been becoming the most important element. Customers own more chances for choosing the product and service in the globalized market. They are not long-loyalty in certain companies. So Enterprises have to focus on the customer's need and make the operational model around customer. And if the companies want to offer their customers the products and service that they need, these companies have to understand their customers roundly, of course, the best way is to do Customer Relationship Management (CRM) that a new management model is based on e-business. Obviously, CRM can help companies collect and analyze the information of customers, then try to set up a long-term partner relation with old customers by improving the service standard.

In traditional businesses, the information of customers couldn't be get and manage in a efficient and effective means. So, marketing emphasized to attract the new customers, and a company and his customer is a buying-selling relation simply. But during recent years, keeping old customers became the crucial task in the marketing, because the cost of creating a new customer is 5 times as much as the cost of keeping a old customer in this era of high competition. Companies are trending to build long-term partner relation with their customers that replace the simply buying-selling model. It is clear that CRM which takes care of value period of customers is the result that fits the need of marketing. CRM takes care of all value period around customer.

During the practical operation, CRM is embodied by the interaction between companies and customers. The interaction will strengthen or weaken the desirability that customers want to do business with companies. Traditionally, companies took the interaction as a heavy burden, especially in the service after sales. But CRM think that every interaction between companies and customers is instructive and valuable, and also can reinforce the customer loyalty. Under reasonable situation, customers always share their information such as income, education background or his hobbies etc. with companies. All these information is

![Fig.3.1 The Model of Value Chain](image-url)
like a gold mine that can help companies to develop new product or offer improved service.

In the front-end of a company, CRM will link the analysis of market information, marketing, sales and customer service; accordingly, CRM will relate to product design, manufacturing, quality control in the back-end of a company. Therefore, the concept and practice of CRM involves all of the process of a company. Undoubtedly, CRM is the important part of management innovation that based on e-business.

3.2 Value Chain-Oriented Management Innovation—Integrated Supply Chain Management

With increasing competition of marketing, e-business is also the main means to delivery the goods to the sales agent and customers. Hereby, the future competition not only will be among the companies, but also will be among the supply chains that the companies own. Supply Chain Management (SCM) is the another important concept in e-business. Supply chain based on the value chain that involved many departments and many companies. The final task that supply chain supports is to insure products to reach the target customers. In this process, Fund flow guarantee the smooth operation of logistics and also is a essential goal to a company; information flow supports the effective course of logistic and fund flow, which involves in business information publishing, promotion, technology support and Service, etc.. (see Fig. 3.2)

![Logistic, Information and Capital Flow](image)

Fig 3.2 Logistic, Information and Capital Flow

In the context of e-business, information flow can be sent by the computer network as well as fund flow. But most of logistic still need depend on the traditional physical way, because only few product and service such as electronic publishing ,information consulting and software etc. can use the network way to get you need directly (see Fig.3.3).
The traditional manufacturing was a push-model that means 'manufacturing based on inventory', films 'push' their products to customers via the channels of inventory and dispatch. For a faster response to demand change of customers, the push-model is changed into 'pull-model' gradually, manufacturing relys on the orders of customers and supply chain pursues zero-inventory. All films that involve in the supply chain have to be interdependent in their businesses, which form a virtual enterprise that function is far than only one manufacturing film. So, supply chain management will give a promise that offers high quality information access for companies and customer, in the other hand, presents customers the products and service that they really want.

4. Conclusion

E-business is having a significant impact on the organization of enterprise and pushing the management innovation. These are real challenge that all enterprises will face seriously. In the strategy, an enterprise must set his VISION and value notion, then learn how to choose strategic partner and alliance. In the management, an enterprise will offer high quality service to customers and keep their loyalty via meeting their demand. In the operation, how to build e-business system or information system that crosses departments or organizations will be a important task to an enterprise. Moreover, logistics, process of work and human resource will need re-management and re-engineering.

In conclusion, e-business is a process that spreads total enterprise via information technology. This electronized and webfied process not only adjusts the intrinsic organizational and management model ,but also across the border of enterprise and represent the relation renovation with customers and strategic partner.
Reference


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