Value-based Strategy for Internet Business

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ABSTRACT

This paper proposes a strategic direction that focuses on creating and providing high value for the customer for the success of Internet Business. Internet business, which means "a new way of business that utilizes Internet as media of transaction with customers", is viewed as a new way of value creation and provision. Internet business is characterized as to make it possible for firms to create and provide higher or newer value for the wider range of customers than in conventional business.

For this purpose, this paper tries to answer three questions: (1) What are the differences of value adding activities in Internet Business environment from those in the conventional business environment? (2) How can we create and deliver value to the customer in an effective way in Internet business? (3) What is the strategic role that high value plays to the customers in Internet Business?

The concept of value to the customer is changed considerably from providing products or services to satisfying customers' whole and circumstantial requirements. The importance of value delivering process is increased in that customers acquire value in the process of transaction as well as end products or services. Furthermore, information plays a vital and growing role in the value creating processes.

Values to the customers can be created and/or added by changing the content - "what is provided to the customer on transaction" - or the context - "the way things are provided". The value improvements of both can be mainly achieved by quality enhancement, cost reduction, and customization.

The value can help firms to attract new customers, increase customers' switching costs and lock-in them in much more efficient and effective ways in Internet business, making possible for sustainable strategic competitiveness. The efforts of firm that focus on the value to the customer, can be the appropriate strategic alternative in that it can capitalize on opportunities and mitigate threats of Internet Business environment, as well as preserve strengths and offset weaknesses of firm's value creating capabilities.

The results and propositions of this paper will provide firms that are doing a variety of businesses under Internet environment with some implications to formulate and implement their own Internet Business strategies

KEYWORDS

Internet Business, Electronic Commerce, Value Adding Activity, EC Strategy, Value-based Strategy

1. Introduction

As Internet has been used for business purpose, firms perform a huge amount of task in Internet. Even the firms that do the most of their works on Internet have appeared – so called dot-com companies. While the business on Internet has given them many opportunities such as large market, low transaction cost, and new business area, they are suffering from the suspicion about their profit generating capabilities.

Diverse prescriptions or diagnoses are proposed for the success of Internet business. Seybold (1998) proposes eight critical success factors for Internet business based on the customer management. Green & Seanna (1998) analyze that Internet business owes its the success to the characteristics such as ultra-convenience, super selection, community service, and pricing possibilities. Though each proposition has much implication to succeed in Internet business, they are short of theoretical basis and aren't derived from the systematic analysis that considers the characteristic differences of Internet business from traditional one.

In the perspective of traditional strategy, several types of factors that affect the success of the business can be found. According to the structural perspective of strategy, the structural characteristics of the industry, such as barriers to entry, degree of competition, the relative power of suppliers and/or buyers, determine the levels of performance that a firm can achieve. Performance differences among firms are attributable to firm conduct, which is a central premise in strategic management research. The researchers in esource-based view emphasize the resources that firms have developed to compete in the environment. Resources confer competitive advantage to a firm according to the extent they are rare or hard to imitate, have no direct substitutes, and enable companies to pursue opportunities while avoiding threats (Miller & Shamsie, 1996). These kinds of theories also cannot be applied directly to Internet business, for they didn't consider the environmental differences of Internet business. Business on the digital economy needs completely new way of competition for the new economics of information (Evans and Wurster, 1997).

This paper proposes another way of success for Internet business, the value-based strategy. The strategic directions that focus on the value for the customer can be applied well to the business on Internet and this reflects the characteristic differences of digital media and their opportunities and threats.

For this purpose, we first examine the characteristic differences of value in Internet environment, and generate the framework that describes the components and improvement directions of customer value by integrating the previous researches that have been performed in fragments. We also find the strategic roles of customer value to the firm's competitive advantage.

The results and propositions of this research can provide the theoretical basis for the future researches on value for the customers and their improvements in Internet business. It also can be of use to formulate and implement the strategy of Internet business. Especially, the framework can be used to diagnose the current status and derive the future directions on the perspective of customer value.

The remainder of this paper is organized as follows: in section 2, the concept of Internet business is examined on the basis of new way of value creation and provision, the differences of customer value between Internet business and conventional business are followed in section 3, and further derive the framework that describes the value components and value improvement directions of Internet business in next section. In section 5, we propose the Internet Business strategy based on the value for the customer and address the strategic role of value to the customer. Summary and future research area are presented in the last section.

2. Internet Business as a New Way of Value Creation

The Definition of Internet Business

The term "Internet Business" is hardly seen in academic journals but widely used in practical worlds. Instead, Electronic Commerce (EC) as "a new way of doing business on the electronic communication network" (ESPRIT, 1997) has been broadly used to designate the Internet business. "EC" and "Internet business" are similar concepts in that both of them mean the business that actively utilize Internet as a business media. EC and Internet business have been seen from various points of view, and they may be still ongoing argument.

We designate Internet business as similar but different concept from EC, which is defined "a new way of business that utilizes Internet as media of transaction with customers". EC can be discriminated from Internet business in that while the former includes the most type of activities in business that utilizes Internet, the latter means the business that is performed mainly through Internet. From this point of view, EC cannot be construed as simply "selling and purchasing of products and services over the Internet" (Keeney, 1999), but as broad meaning that "support for any kind of business transactions over a digital infrastructure" (Bloch et al., 1996). While, Internet business can be seen as special type of EC, which includes the business that utilize digital network as transaction media with customers. It can be easily, though not exactly, viewed as so-called Business-to-Customer electronic commerce.

In this paper, Internet Business is defined specifically as follows;

(1) Business that utilizes Internet as transaction media, especially with buyers or customers.

This excludes the business that uses Internet mainly as a media for buying their raw materials or other equipment from suppliers.

(2) Business that utilizes Internet media for its primary activities and profit making.

By this definition, firms that perform supporting activities for the business on Internet, such as Internet business consulting, solution providing, web site designing, logistics, or Internet service proving are excluded.

(3) Business that performs most of transactions with customers on Internet.

This definition excludes the companies that do business mainly on off-line and does partially on on-line, and the companies that utilize Internet for supporting small part of their activities.

Internet Business as a new way of value creation and provision

What are the major differences of Internet business from conventional business? There can be various perspectives on Internet business which can answer such questions as "what <u>exactly means</u> the Internet business?", and "What changes can be expected from Internet business?". Three major perspectives on Internet Business can be addressed as follows.

First, Internet business is viewed as a driving force towards more efficient market. In the beginning, many of researches on Internet business or EC are performed by transaction cost economists (Malone et al, 1987, 1889; Bakos, 1991). According to them, electronic market where electronic transaction take places, can reduce the buyers' cost associated with conducting transactions (transaction cost). It also reduces perceived complexity of products and asset specificity, which has been argued to alleviate market imperfections, and result in more effective markets (Bakos, 1991). This will make lower the price of products and prohibit the

supplier from earning extra profits. The market becomes more efficient and takes the form of full competition, as more firms participate in Internet business, which may appear as a threat to the firms or suppliers.

Second, Internet business allows market to be enlarged and it helps firms capture new business opportunities. As digital media can be accessed with more ease and at a lower price, a large number of people participate in the businesses from all over the worlds, forming a global marketplace. By this reason, firms can perform business with a large number of customers without the constraint of time and space. The information processing capabilities of Internet also enable firms to do the new type of business that was hard to do in physical environment. For this reason, various new business opportunities emerge for the firms that conduct business in Internet.

Third, Internet business can be viewed as a new way of creating and providing value for the customer. Firms can create value for the customer that has been different from and difficult in conventional business. And, value creating and providing of Internet business can be performed differently from conventional physical world of business (Rayport & Sviokla, 1994).

In conventional business, customer can be offered the limited values due to the constraints of physical media. As transactions and distributions take place in digital media such as Internet, the greater and newer type of values can be created and provided to the customers in an effective and efficient way. In addition, the value can be distributed to the wider range of customers than in conventional business.

This research focuses mainly on the third perspective and regards Internet business as a new way of value creation and distribution. From this point of view, business on Internet is important for the possibility of creation and provision of higher value to the customer than in conventional business. That is, it can enhance the value, create new value for the customer, and distribute the value to wide range of customers. The value-adding activities and direction of value enhancement should be conducted differently from the conventional business.

3. Value Characteristics of Internet Business

There are significant differences in the characteristics of value for the customer in the business between Internet and conventional environment. The concept of value for the customer is reviewed, and the factors that make the differences of value are examined. We also address the three different characteristics of value in the Internet business.

The Concept of Customer Value

Traditionally, especially according to Porter (1985), business has been viewed as "the processes composed of value-adding activities", and the output of firms' activities are considered "value to the customer". The value created by a firm can be measured by the amount that customers are willing to pay for it. A business is profitable if the value it creates exceeds the cost of performing the value activities (Porter, 1985).

We define customer value in Internet Business as the benefits to the customer from the transactions with Internet business for sacrificing the costs. The cost includes all the efforts, time, and money required to gain benefits. This definition is a bit different from that of Porter (1985) in that it is associated with costs as well as benefits. This is similar to the concept of a value

proposition that characterizes the combination of end-result benefits and price to a prospected customer from purchasing a particular product (Keeney, 1999). From this standpoint of view, customer value can be added either by increasing benefits or by reducing the cost related to gaining the benefits.

The factors that bring the differences

Characteristics of Internet business are different from those of conventional business, especially in the values that are created and provided to the customer. The differences stem mainly from 1) the characteristics of the digital media where transactions take places and 2) the digitalization of transaction and content. Internet business means to conduct the digitalized transaction with customers for the contents hat are both digital and physical. These two factors bring the different characteristics of value-adding activities of Internet business.

Digital media like Internet are characterized as ease of use, low cost, wider connectivity, and direct link with processing capabilities. Internet is composed of easily available common set of protocol, thus characterized as open network. This allows us to use Internet with ease, at a low cost, anywhere and anytime. Digital media can overcome and release the barriers of physical media that have imposed much limitation of space and time on transaction and distribution activities in conventional business. That makes it possible for customers to get the same benefits at a lower cost than in traditional business, as a result, to increase the net value to the customer.

Under Internet business, offerings to the customer as well as transactions can be digitized. Target of digitalization includes content format, container, distribution, and transaction itself. Many of physical products can be digitized on their format or containers. Making digital photos or digital video files are examples of format digitalization. Converting paper book or encyclopedia into CD-ROM title is an example of container digitalization. Most of services can be digitized with minor sacrificing in its contents. Providing real-time interactive consulting service without face-to-face interaction in the network may be an example of service digitalization. Digitalization of distribution can be applied only to the digital offerings. Delivering software on the network without disk or CD-ROM can be an example of distribution digitalization. Transactions such as information search, ordering, payments, and after-service can be digitized.

A lot of benefits can be achieved by digitizing the offerings and transaction. It can be reproduced without additional costs (Shapiro, 1998), enhance the efficiency in transaction. As business transaction such as its contents creation and distribution become digitized, firms make it possible to give completely new type of value to the customer, which was hardly to be done in conventional business.

Three major differences

There are three major differences in value adding activities between conventional business and Internet Business.

First, the value concept is ever changing. Traditionally, values are mainly offered to the customers as the forms of product or service (Porter, 1980). Internet business, however, can afford to provide the customer with total value or total satisfaction. Values to the customer in Internet business do not simply mean providing product or service. It is something that satisfies what customer wants with product or service. The product or service is the only main tool for providing value to the customer.

For example, someone who buys a bottle of wine do not want 450 ml of 12-year old red wine itself, but emotional satisfaction or joy by drinking it. For this reason, he/she would like to know

the information that optimizes smell, tastes, and even best applicable side dishes and background music. Under Internet environment, firms, rather than delivering some wine alone, can satisfy these requirements by providing them with additional information and materials such as music files or pictures.

In conventional business, it might be difficult for firms to create and provide the total value to the customers in an effective way. But, in Internet business, this kind of total value could be created and delivered with ease at a low cost. These are attributed to the characteristics of digital media that have the capability to create and distribute high value to the customer. What's more, a variety and high customers' requirements and turbulent competition drove the firms to do business in such a way.

Second, the importance of value delivering process is ever increasing. It is crucial how to deliver value to the customer as well as how to create value. While firms add value through series of value adding activities, the customers acquire the value through value acquisition process. The value to the customer is all that customer acquire in each activity of value acquisition process.

In conventional business, the value adding possibility through transaction and delivery of product or service is relatively under estimated. Under the new economy, as there exists the possibility to add value for the customer in the transaction, value delivering processes get much more importance to provide higher value to customers.

In the case of e-mail card (e-card) business, though final offerings to the customer are electronic card and its delivery service, customers can get much value through the process of transaction. A customer can be given a lot of benefits if he/she is notified on the birthday of his/her best friend, recommended the type of card or gift that his/her friend may like to receive, or if he/she perform the transaction in a convenient and comfortable way.

In addition, the role of information in value adding activities is getting more important. In conventional business, information is considered a supporting element in value adding processes. Under Internet environment, information becomes the main source of value and value-adding activities are performed through and with information (Rayport and Sviokla,1995).

Information becomes one of the major offerings in Internet business. In conventional business, most of information is categorized as information product, information service, or as the addition to the product for the constraints of the physical media that restrict the distribution of information as separate offering. As rich information of diverse format can be distributed freely and rapidly, demand of information becomes increased and information is recognized as important resources in Internet environment. On the contrary, the business that creates and provides information as main offering becomes viable and appears important business area.

Information, which lies at the heart of the digital good, can be easily transformed and increased in their value. For this value-adding possibility of information, many of product and services transformed as digital format.

Information plays an important role even in value improvement of product or service that cannot be transformed as digital. Value of these types of offering can be added by providing additional information. Most products as well as services are composed of both physical and information component. Information component means everything that the customer needs to know to obtain the product and use it to achieve the desired results (Porter 1985).

In a word, information might play a critical role in value adding activities under Internet environment.

4. Value-adding activities in Internet Business

In this section, we propose the systematic approach to create and improve the value for the customer by deriving the customer value framework of Internet business. The framework divides the value into two components, i.e. content and context value, and is composed of three directions of value improvement such as quality enhancement, cost reduction, and customization. Comparative analysis with previous research and detailed description of each cell in value framework are followed.

The Customer Value Framework of Internet Business

The customer value framework that explains the value scheme of Internet business consists of two dimensions, namely value components and value improvement directions. The former describes "what constitute the value for the customer?", the latter describes "how value for the customer can be created or improved?".

Values <u>provided to</u> the customer can be divided into content and context. While content means "what is provided to the customer on transaction", context means "the way things are provided" (Rayport & Sviokla, 1994). Values from content and context constitute the total value for the customer. Firms can enhance or create value to the customer by changing either content or context. By creating the more valuable contents or providing the contents in a more valuable way, firms can provide higher value to the customer. In other words, value for the customer can be improved by 1) the things they purchase, or 2) the way things are purchased or delivered.

The contents exchanged in transaction are classified by their type and format. Content type, though vague in some cases, can be divided into product, service, and information. Each of content can be divided into physical and digital by its format. This classification is based on whether they are delivered on digital media. While most contents exist as physical format in conventional business, much of the content which was previously physical can be converted into digital format under Internet environment.

Content value can be enhanced more easily with information and services than with product and with digital offerings than with physical ones, due to the flexibility of reconfiguration and modification. Context value of digital offerings can be increased more easily than physical offerings, because these can be delivered in a variety of ways in digital network. Value of physical product can also be better enhanced under Internet environment than in traditional business. Customers can achieve their goals by sufficient information related to the products and services they purchase.

Even with the same content, customers are given the different values in the process of acquisition and from its delivery, which describes the context value. While content value means the generic benefit from the offerings, context value means the contingent value that are affected in the transaction process. While content value appeals to a logical reason, the context value appeals to emotional one. The importance of context value becomes increased when there aren't significant differences in content value. Context value can be added by differentiating the ways of transaction. Attractiveness of web site, convenience, and ultra-selection can be the examples of context value to the customer.

Customer values, both of content and context, are added or increased in three directions, namely, quality enhancement, cost reduction, and customization. Value for the customers can be increased by enhancing quality of content and context. Quality means the level of goodness of the content or transaction. Cost refers to the degree of efforts required to gain the value, which includes time, inconvenience, and sufferings as well as money. Value to the Customers can be enhanced by reducing costs. While quality enhancement increases positive effects on the value, cost reduction plays a role of decreasing the negative effects on the value. Different

customers, of course, may view the value of the same purchase very differently (Keeney, 1999). Customization is to satisfy each customer's desire by changing the content and context to meet the individual delicate requirements.

<Table 1> The Customer Value Framework

	Content	Context
Quality Enhancement	Product characteristics & delivery Richness Reliability	Attractiveness
Cost Reduction	Low Price Low Freight Charge	Convenience
Customization	Content Customization	Context Customization

Comparison with previous research

Keeney(1999) develops a list of the values that can be used to maximize customer satisfaction in Internet commerce, logically categorizes them into means and fundamental objectives, and indicates their relationships. The set of fundamental objectives can be divided into content value (product quality, cost), context value (time to receive product, convenience, time spent, shopping enjoyment, privacy, safety) and others (environment impact). Smith (1997) proposes a set of criteria to evaluate Internet information sources. These criteria also can be classified into content-related (scope, content, cost, purpose and audience, reviews) and context-related (graphic and multimedia design, workability). DeLone and McLean (1992), in their "IS success model", points two dimensions of information system quality which affect user satisfaction; i.e. system quality and information quality. System quality, which can be defined as how well the system responses, is similar to the context value. Information quality, which focuses on the output of the information system, is also similar to the content value of Internet business.

Among various frameworks, SERVQUAL (Parasuraman et al. 1988) have been widely used to measure the quality of service, which defined five dimensions of service quality, i.e., reliability, responsiveness, assurance, empathy and tangibles. Tangible, which is defined as "appearance of physical facilities, equipment, personnel, and communication materials", can be applied to Internet business with slight modification, like "appearance of web site". Empathy, which refers to "the caring, individualized attention the firm provides for its customers", is similar to the customization, especially of the context. Responsiveness, "the willingness to help customers and provide prompt service", can also be applied to Internet business as a component of context value. On the other hand, assurance, i.e. "knowledge and courtesy of employees and their ability to convey trust and confidence" and reliability, which is "the ability to perform the promised service dependably and accurately" can be interpreted as constituents of content value of Internet business.

Evans and Wurster (1997) insist that the tradeoff between richness and reach can be no longer applied to business in new information economy. The "richness" in their proposition is defined by three aspects of information; i.e. bandwidth, degree of customization, and interactivity. The bandwidth, which is defined as "the amount of information", implies the degree of detail of information and can be another criteria of content value. We use the term "richness" to refer to it, which is reinterpreted in a narrow sense from the original meaning. The richness of content is similar to the "scope" in the criteria of Smith (1997), which covers the degree of breadth, depth, time, and format to meet the customer requirement.

< Table 3> Comparison of the Criteria for the Value to the Customer

		Parasuraman et al. (1988)	Smith (1997)	Keeney (1999)
Quality Enhancement	Content	Reliability, Assurance	Scope Content	Product Quality
	Context	Tangible	Graphic & Design	Shopping enjoyment
Cost	Content		Cost	Cost
Reduction	Context	Responsiveness	Workability	Convenience Time spent
Customization	Content			
	Context	Empathy		

Quality Enhancement

Quality of both content and context can be the target of value enhancement. While quality of content is determined by the characteristics of offerings, quality of context is affected by the way of transaction and delivery.

As a great variety of content are transacted in Internet business, content quality should be evaluated with multi-faceted criteria. As previous researches on the quality of product, service, and information have been performed separately, these can't be directly applied to evaluating content quality of Internet business itself. It is considered that quality criteria used in the traditional researches must be modified and tuned to be applicable to Internet Business.

For the firms providing customer mainly with product, the content value is determined by the quality of product and additional information. Product quality is the characteristics of product that affect the degree of customer satisfaction. In this case, the content quality of a firm is increased by their capability that procures the high quality product more efficiently and effectively. In addition, the professional knowledge about the product is required for increasing the quality of additional information, for information also plays a vital role in improving content value in this case.

In the case of service as a main offering, general criteria of service quality such as reliability and assurance constitute the content value, each of which means "the ability to perform the promised service dependably and accurately", and "knowledge and courtesy of employees and their ability to convey trust and confidence" (Parasuraman et al. 1988). Rareness of the service can be an important criterion of the content value because completely new type of service can be developed. If a firm creates innovative service on Internet and provides it exclusively or earlier than others, it has monopolistic power, and this will have a great influence on the content value.

As for information, richness and reliability become the major constituents of content value. Richness is defined as "the amount of information", implies the degree of breadth, depth, time, and format to meet the customer requirement (Smith,1997). Reliability can be the one of components for content value, which covers accuracy, currency, and objectivity (Wang, 1998).

Context quality, which refers to the size of benefits in the process of the transaction, is determined by the characteristics of Internet business site, transaction and delivery of content.

Among various factors that affect the quality of context, attractiveness can be one of the most

crucial components. Attractiveness means the characteristics of web site or transaction process that attract the interest of customers or make customers "not bored". The criteria "tangible" of SERVQUAL model (Parasuraman et al. 1988) can be applied to Internet business. Attractiveness of Web site is defined in terms of interactivity and vividness (Kim, 2000). Interactivity means "the extent to which users can participate in modifying the form and content of a mediated environment in real time", and vividness is referred to "the representational richness of a mediated environment as defined formal features" (Steuer, 1992).

The characteristics of content delivery can be the important determinant of context value especially in the transaction of physical product. Customer value can be increased in the case the content they purchased should be delivered accurately, comfortably, and in time.

Diversity of content can increase the customer value by giving customer a full selection. When a buyer can select from the wide range of content, it can be the crucial benefit to him.

Cost Reduction

As for the value improvement by cost reduction, price and freight charge play the important role in the content value. Mean while, the elimination of inconvenience and uneasiness can play the major role in the context value. While the cost related to the content is the factor that appears to the customer directly, the cost related to the context exists implicitly and becomes an obstacle to activation of Internet business.

As for digital offerings such as information or services, price of the content can decrease as long as sufficient customers are secured. This is for the characteristics of digital good that can be easily transformed to enhance value and reproduced with lower additional costs (Shapiro and Varian, 1998). On the other hand, most of physical offerings, especially the freight charge, are not traded free of charge. Customer price of the physical good can be decreased by efficient logistics that can distribute the product inexpensively, promptly, and securely.

Inconvenience of doing business can be considered the major cost related to the context. The cost including the customers' uneasiness of transaction occurs without direct interaction between parties of transaction. One way to solve this problem is to maximize the convenience of transaction. Shopping experiences such as minimal effort and painfulness are identified as one of the factors affecting shoppers' behavior in Internet shopping (Jarvenpaa and Todd, 1997). Ease of use (Keeney, 1999), connectivity, delivery time can affect the convenience of the Internet business. Characteristics of Internet media give firms various possibilities to enhance the convenience of transaction as well as uneasiness. Internet business system should be designed to maximize these conveniences of transaction. Providing a various and sufficient information in each stage of transaction, acknowledging the progressing status of transaction frequently, authorizing the customer to cancel the careless order at any time can be the examples that can not be implemented easily in conventional business.

Another way to reduce the cost related to the context can be to resolve the uneasiness of transaction by providing customers with assurance and reliability. This can be achieved by providing the additional information or comment of other customers who have the experience in the offerings and detail answer to the probable questions of customers. Uneasiness of the customer can be decreased when they are provided with the explicit statement of secure transaction from the offering firms or they have previous experience of transaction. For this reason, customers should be encouraged to post the experience of their own purchase of transactions.

Brand awareness and image can be the effective tool to solve the uneasiness by the indirect transaction. Though the security and payment can be the prerequisite for the transaction, these can also incur the uneasiness of customer and increasing the cost of customers'.

Customization

Customization means improving values for the customer by increasing the degree that offerings or ways of transaction meet the individual requirements or tastes of customer. As customers are different in their needs, customization that focuses on the individual requirements is the substantial way of customer value improvement because the offerings that are targeted to the common requirement of general customers cannot satisfy all of them.

Customization is the one of the major differences from conventional business that focused on creating and providing the common value to the segmented customers. Firms can create different value for each customer, and provide values in different ways for individual customers. This would be new experience for customers, which could not be expected in conventional business environment.

Internet business enables firms to create and distribute personalized value to each customer. This opportunity owes a lot to the characteristics of Internet media such as information processing capabilities and interactivity. The interactivity of Internet media allow firms to know a lot about what customers want in much more accurate and rapid ways. These kinds of information about customer can be used for creating individual value to be the most suitable to each customer. As the media are directly connected to information processing capabilities, offerings or way of transactions can be diversely transformed to meet each customer's needs exactly, which will give the technological feasibility that differs from conventional business. In this context, customization can be achieved by the combination of information processing capability and marketing competencies.

Customization can be more easily applied to the digital offerings especially to information and services than physical ones because digital goods can be customized to meet individual taste. Scope or degree of detail as well as list of contents can be differentiated to the individual customer.

Customization of context can be applied to any type of offerings including physical product. This can be accomplished by differentiating the way of each element of transaction process such as list of offering, order entry, settlement, delivery and after-sale service. In addition, configuration and design of Internet business site can be applied to the context customization.

Customization of cost can be used as a way of improving the value for the customer. Customer can get high value by paying for the small parts of the content that are needed for their requirement.

5. Value-based Strategy for Internet Business

In this section, diverse diagnoses and advices to be successful in Internet business are reviewed, and another direction of value-based strategy that focuses on enhancing value for the customer is proposed. We illuminate the viability of this strategy based on traditional strategy theory and address the strategic roles of higher value to the customer

The Value-based Strategy

Though new way of business in the digital economy appear as big opportunity to the firm, success of Internet business cannot be achieved as easily as expected. This is because the

characteristics of digital media on which Internet business takes places give firms threats as well as opportunities. Characteristics of Internet such as low access cost and ease of use allow more suppliers to do business, resulting in driving businesses to more fierce competition. In addition, the connectivity of Internet makes it possible for customers to switch to other suppliers with more ease, resulting in high customer requirements.

These strategic characteristics of Internet environment such as fierce competition and high customer requirements, have made it difficult for the Internet business firms to gain profit. Moreover, the characteristics of digital media affect the market with different economic rules from those in the conventional markets. For these reasons, different directions of business strategies that fit with Internet environment are required to survive and become successful in Internet environments.

The direction of firms' strategy that focuses on creating and providing superior value to the customers can be the most effective strategic alternative in Internet environment. This strategu is called "value-based strategy".

The value-based strategy stresses on the importance of the values delivered to the customer. In this view, creating and providing higher value to the customer becomes the strategic goal. This is based on the assumption that Internet business can be successful only by offering higher value to the customer. The firms that accept value-based strategy are advised to allocate their resources to maximize value for the customer.

The strengths, weakness, opportunities, and threats (SWOT) framework is perhaps the most well-known approach to drawing strategy (Andrews, 1971). Performing a SWOT analysis involves describing and analyzing a firm's internal capabilities – its strengths and weaknesses – related to the opportunities and threats in its competitive environment. The value-based strategy can be the most attractive in that it is the action to preserve strengths, offset weaknesses, avert threats, and capitalize on opportunities.

The most important thing among the opportunities given to the firms that perform business in Internet may be the possibility to create and improve value for the customer. As offerings and transactions become digitalized, they can be improved in their value for the customer. The possibility to know about the customer in detail makes it possible for firms to create and provide the value that fit the requirements of the individual customer. Value-based strategy gives firms directions to exploit the opportunities of Internet business.

Another opportunity of Internet business is the market enlargement, which means that firms can do business with wider range of customers. Values that are created or improved in Internet business can be distributed to a large number of customers without requiring additional costs. Firms can utilize the opportunities of digital media by establishing high value to the customer as their strategic objective.

The threats given by the digital media such as fierce competition, high requirement and low switching cost of customer, cannot be surmounted by short-term tricks or myopic solutions. It requires fundamental countermeasures that overcome the threats, and the benefits to the customer can be used as the essential tool to mitigate these threats.

The strengths and weaknesses of the firm should be evaluated by their capabilities to create and improve value to the customer. A firm cannot create every type of value to the customer. A firm should focus on the value that it feels the most confident it can create within their resources and capabilities. The weak point of their capabilities to create value for the customer should be complemented in the first place. In the long run, organizational competence should be focused on to accumulate the capabilities to create and improve value for the customer.

In this context, creating and providing higher value to the customer can be the best strategic direction that capitalizes on opportunities and mitigates threats of Internet business environment.

Traditionally, the firm's strategy has been defined in terms of its product/market positioning – the products it makes and the markets it serves. The strategy generally determines how to allocate its resources that are inherently estricted and limited. That is, firm's strategy might give the direction on the decision-making of their resource allocation. In product/market positioning, the firm should select the values that can be produced by their resources and capabilities, and the customers they serve should be selected on that ground.

Strategic Role of Value to the customer

Customer value can be used as the strategic tool and it could play the strategic role in Internet Business. It helps firms attract new customers, increase customers' switching costs and lock-in them, and giving them sustainable competitive advantages in the long run.

Above all, it helps firms appeal to new customers. By the characteristics of Internet media that emphasize on the size, the acquisition of a sufficient number of customers can be said the most imperative one. For this reason, various kinds of efforts are made to attract and increase the customers. Sufficient customers cannot be easily acquired in the traditional methods. This is because that customers are recognized as the important resources which are limited in their characteristics, and they have a lot of information as information asymmetry disappear.

In this circumstance, high value to the customers can be used as the most effective tool to attract customers. The content and context, the major constituents of customer value as offering and way of transaction, are regarded as the most important criteria of buying decision making in Internet environment. Various events that attract customers' concern or commercial advertisements cannot be the efficient method to acquire customer. It's because they take huge amount of expenses although they are useful in informing customers of the web sites. Customers can be accumulated efficiently and effectively when they are provided useful offerings and transaction environments, and when they recognize the benefit from the business.

Once some customers experienced and are delighted with higher value given by a firm, the shared value will be diffused rapidly among larger customers. That is, the firm can expect "word-of-mouth" effect that is referred to as the most effective way to announce the business site and attract the customers.

Second, higher value can play an important role in activating and keeping customers. Retaining customers as well as acquiring them are very important for sustaining competitive edge, especially in Internet Business where customers' switching costs are seriously low for the connectivity of Internet media. Therefore, it is much more necessary for firms to increase the switching cost of customers in Internet Business.

Two types of methods can be used to strengthen the loyalty and to retain the customers: positive and negative compensation. Customer lock-in occurs as users invest a lot of time and energy in interacting with a business, discouraging them to repeat the same investment in another application. The more time consumers invest and the more familiar relations they develop in interacting with other customers, the less likely they are to start building these virtual relationships again elsewhere (Kierzkowski et al, 1996). On the contrary, customers don't leave the business if they know they are offered with higher value. While the former is a negative compensation method, the latter is a positive compensation method.

The value-based strategy can play the critical role in gaining and sustaining strategic advantage. These days, Internet business firms, so called dot-com companies, have trouble with their profit generating capabilities mainly because of the fierce competition and high customer requirements. Value-based strategy can contribute to the profit generating of business on Internet. A firm's profit can be increased when the sales are magnified and the related costs are reduced at the same time. Value can help firms to enlarge customer base and enhance customer loyalty, resulting in sales increase. Moreover, costs for the value become greatly

decreased as values are distributed to wider range of customers. It is because value to the customer in digital environment is costly to product but cheap to reproduce like digital product or information (Shapiro & Varian, 1998). For this reason, the value which a firm creates can be provided to wider range of customers than that in conventional business with little additional cost. Eventually a firm can earn high profit by creating and providing higher value to the customer.

Not every firm can create and enhance value to the customer easily. This can be achieved by exploiting their resources and capabilities to create superior value that meet the delicate requirement of their customers. The capabilities to create high value to the customer are firm-specific, rare, and difficult to imitate or substitute, which are regarded as the basis for sustainable competitive advantage.

In addition, considering the importance of scale in digital environment, it is a noteworthy phenomenon that the winner takes all or almost. Once a firm creates and offers superior values to the customers that are differentiated with others and establish strong customer loyalty, then it can accumulate the more customers, and it will be hard for competitors to reverse the situation.

6. Summary and further Research area

Internet business, which is defined as "a new way of business that utilizes Internet as media of transaction with customers", can be characterized as their capability to create and improve the value for the customer. Through business on Internet, firms can create a high or new value for the customer and provide the value to wider range of customers than in conventional business.

Value characteristics of Internet business are different from conventional business, and these are summarized as changes in value concept, increasing importance of value delivering process, and increasing importance in the role of information. The concept of value for the customer is changed to the comprehensive one. It does not simply mean providing products or services, but providing customer with total satisfaction. In addition, values for the customer can be improved significantly in the value delivery process. Information plays important role in value improvement of physical goods as well as information goods. These changes owe mainly to the characteristics of digital media and digitalization of offerings and transactions. Digitalized offerings or transactions make it possible for firms to create high or new value with a relatively low price.

This research developed the value framework that explains the component of value and improvement directions of the value, which can be used to measure and analyze the degree of value for the customer. Values for the customer are composed of content value and context value. The former means the values that are given to the customer by the offerings themselves and the latter means the values that are gained in the process of transaction and delivery. Each value component can be improved in three ways; quality enhancement, cost reduction, and customization.

The strategy that focuses on enhancing the value for the customer as a strategic objective can become strategic alternative. The "value-based strategy" is the most attractive one in that it can preserve strengths, offset weakness, avert threats, and capitalize on opportunities. The value for the customer can play the strategic role in helping firms attract new customers, increase customer's switching costs and lock-in them.

Value improvement requires complicate capabilities that are combined with several functions such as information technology and marketing, and these capabilities can be acquired and learned by the ambiguous, firm-specific, and long-term accumulation processes. These kinds of implicit and ambiguous capabilities can not easily imitated by the competitors, and cannot be replaced by other capabilities. For these reasons, value for the customer can give firms long-term sustainable competitive advantage.

The results and suggestions of this paper will provide companies with the direction to analyze and develop the electronic commerce strategies, and help them formulate and implement the Internet Business strategies.

REFERENCES

- 1. Andrews, K. R. (1971), *The Concept of Corporate Strategy*, Homewood, IL:Dow-Jones Irwin, 1971.
- 2. Bakos, Y. (1991), "A Strategic Analysis of Electronic Marketplaces," *MIS Quarterly*, Volume 15, No. 3, September 1991, pp. 295-310.
- 3. Bloch Michael, Yves Pigneur & Arie Segev (1996), "On the Road of Electronic Commerce a Business Value Framework, Gaining Competitive Advantage and Some Research Issues", *CMIT Working Paper* 96-WP-1013, 1996.
- 4. DeLone, W. H., and McLean, E. R. (1992), "Information System Success: The Quest for the dependent variable", *Information Systems Research*, Vol. 3, No. 1, Pp.60-95.
- 5. Evans, Philip B and Thomas S Wurster (1997), "Strategy and the new economics of information", *Harvard Business Review*, Boston, Sep/Oct 1997, Pp. 70-82
- 6. ESPRIT (1997) , "Electronic Commerce An Introduction", 1997 In: http://www.ispo.cec.be/ecommerce/introduc.htm
- 7. Green, H. and Seanna Browder (1998), "Cyberspace Winners: How they did it," *Business Week*, June 22, 1998.
- 8. Jarvenpass, S. L. and Todd, P. A. (1997), "Consumer Reactions to Electronic Shopping on the World Wide Web", *International Journal of Electronic Commerce*, Vol.1, No.2, Pp.59-88.
- 9. Keeney, Ralph L. (1999), "The Value of Internet Commerce to the Customer", *Management Science*, Vol. 45, No.4, April 1999, Pp.533-542
- 10. Kierzkowski, Alex, Shayne McQuade, Robert Waitman, and Michael Zeisser (1996), "Marketing to The Digital Consumer", *The McKinsey Quarterly*, 1996, Number 3. PP.5-21
- 11. Kim, Euijin (2000), "WEBQUAL+: A Deductive Approach to the Quality of A Web Site", Proceedings of INFORMS-KORMS Seoul 2000 Conference, June 18-21, 2000, Seoul, Korea.
- 12. Malone, T., Yates, J., & Benjamin, R. (1987), "Electronic Markets and Electronic Hierarchies: Effects of Information Technology on Market Structure and Corporate Strategies", Communication of the ACM, Volume 30, Number 6, 1987, Pp.484-497
- 13. Malone, T., Yates, J., & Benjamin, R. (1989), "The Logic of Electronic Markets", *Harvard Business Review*, May-June 1989, Pp.167-170.
- 14. Parasuraman, A., V. A. Zeithaml, and L. L. Berry (1988), "SERVQUAL: A Multiple-Item Scale for Measurement Consumer Perceptions of Service Quality", *Journal of Retailing*, Spring, Vol. 64, No.1, 1988. Pp.12-40.
- 15. Porter, Michael E. and Millar, Victor E. (1985), "How Information gives you Competitive Advantage", *Harvard Business Review*, July/August 1985, 149-160.

- 16. Rayport, F. Jeffrey and John J. Sviokla (1994), "Managing in the Marketspace", *Harvard Business Review*, Nov. -Dec 1994, Pp.141-150.
- 17. Rayport, F. Jeffrey and John J. Sviokla (1995), "Exploiting the Virtual Value Chain", *Harvard Business Review*, Nov. -Dec 1995, Pp.75-85.
- 18. Seybold, Patricia B. (1998), Customers.Com: How to Create a Profitable Business Strategy for the Internet and Beyond,
- 19. Shapiro, C. and Hal R. Varian (1998), *Information Rules : A Strategic Guide to the Network Economy*, 1998
- 20. Smith, A. G. (1997), "Testing the Surf: Criteria for Evaluating Internet Information Resources, *The Public-Access Computer Systems Review*, Vol.8, No.3, 1997.
- 21. Steuer, J. (1992), "Defining virtual reality: Dimensions determining telepresence", Journal of Communications, Vol. 42, No. 2, Pp.73-93.
- 22. Wang, R. Y. (1998), "A Product Perspective on Total Data Quality Management", *Communications of the ACM*, Vol. 41, No.2, Pp.58-65. 1998,

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