

E-BUSINESS MODELS AS A TOOL TO INCREASE MÉXICO SMALL AND MEDIUM SIZE ENTERPRISES' SALES

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ABSTRACT

Due to the growing incursion of electronic media in the commercial environment, identifying factors that improve competitiveness is important. The need for timely information that allows for effective decisions, as well as allowing for effective use of time and resources is paramount. To achieve this objective business models based on information and communication technologies, known as e-business models, have been developed. This study examines 189 web pages of organizations as well as the review of bibliographical and research material. The aim is to recognize business models that organizations use and to describe them. A compilation of data related to the sales of e-commerce B2C enterprises established in Mexico was carried out. The goal is to identify business models used in México and quantify increase sales via Internet of experienced by Mexican organizations. This knowledge is important to further develop e-business models. The results demonstrate that imports and exports are increasing, new markets are emerging and confidence of the Mexican market is consolidating.

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INTRODUCTION

The advent of the Internet in the enterprise sector has transformed the course of commercial relations between Mexico and the world. Information and communication technologies represent a tool for the purchase and sale of goods and/or services that overcome geographical barriers and barriers related to time and human or financial resources. In addition these technologies bring about more direct relations with the suppliers, clients and investors, including competitors. Before the global economic crisis, Mexico faced various problems, among them a decrease in economic activity.

According to the Summary of Indicators of the Department of Estate and Public Credit (2009), for the first six months of 2009, the trade balance was an accumulated deficit of \$1,207 million. The value of exported goods was \$19,364 million in June this year, which is 26.6% lower than the year before.

With the arrival of the current economic crisis, the struggle to obtain a competitive advantage over others is increasingly difficult. Clients and consumers have the freedom to choose the most satisfying supplier. Customers select on the basis of quality products, speed of service and competitive pricing. The internet offers tools that ease barriers of time and distance disappears. It also offers a series of advantages like the expansion and diversification of global markets.

Organizations seek to develop new business models on the Internet, as the Internet is already considered as new line of sales, displacing other forms of trade; therefore PROFECO (2006) considers electronic sales as an alternative to reducing costs, a fundamental tool for increasing the sales of a country, to boost the economic activities toward economic growth and development resistant to global crisis.

The remainder of the study is organized in the following manner. In the literature review, the relevant literature, such as basic concepts of electronic commerce, its regulatory framework and basic concepts of

e-business models, are presented. In the methodology section, the method used to achieve the goal of this study is introduced. In the results section, the information demonstrated by the investigation that was carried out is presented and analyzed to formulate the conclusions.

LITERARY REVIEW AND BACKGROUND

Jeffrey Reypert (2005) defined the term e-commerce as the “exchanges mediated by the technology between several parties (individuals, organizations or both), as well as the electronic activities inside and between organization that facilitate these exchanges”.

From the company point of view the advantages of ecommerce include: access to the global market; the integration of different resources (multimedia), diversification of products offered, and reduction of costs of sales. It allows maintaining direct contact with the client and reducing costs of distribution. Retailers can use the net to initiate the traditional wholesale or retail points of sale, it encourages the autosegmentation and autopositioning in the market and it saves in the publicity costs. It is possible to gain additional income by selling advertisements or by designing web pages, and also it is available 365 days per year, 24 hours per day.

From the consumer’s point of view ample information about the product can be obtained through the internet allowing the comparison of alternatives offered by different companies. This information allows the consumer to make a better and a more convenient decision, thereby broadening the possibilities of choice. Electronic commerce has several disadvantages. In Mexico, many people do not yet have access to the Internet. Similar access problems are present in many countries. The costs of the Internet are different in every country, which is the reason for differences in infrastructure between countries. Some consumers mistrust this medium for purchasing because it is open for deception, the connections lack quality, it does not facilitate the search of the needed product, as well as hacker and fraud issues.

Business to Consumer (B2C): an Important Category of E-commerce

This kind of business to the customer is about the interchange between companies and final consumers through electronic means. The main initial development involved e-mail as a means to substitute catalog business. This implies there is cost reduction because vendors do not invest in producing, printing and shipping costs. There are two additional reasons for the success of this business: First is cost reduction and second is that everyone who owns a computer with Internet access has the ability to purchase in this way.

E-business Models

“Business model” is one of the latest buzzwords in the Internet and electronic business world (Dubosson-Torbay, Osterwalder, Pigneur, 2002). Delta advisor’s article “business model”, establishes that a business model is the mechanism by which a business tries to generate income and benefits. It is a summary about how a company plans its client’s services. Imply strategy concept and implementation. A business model is the way to interact with clients. It should specify the client and the way to cover a market, why it is attractive, how it is supported, which is the strategy for mixing products and sales in such a way to guaranty the actual customer fidelity and the fidelity of new customers. The client definition allows focus on the activity and effort that really allow added value to the customer.

Rappa (2005) states: “In the most basic sense, a model is the method to do business by which the company can be maintained and generate incomes. The business model talks about how the company makes money identifying its place on the chain value”.

Functions to Be Complied-Mexican Business Model

According to Chesbrough and Rosenbloom (2001), the specifications for a complete and actual market are: Articulate the value proposition, is the value created to users of the product model (good and / or service) offered using technology; identify a market segment, for those users the use of technology should be useful and the company should earn money by offering the same; define the structure of the value chain that the company needs to create and distribute your product and determine the complementary assets needed to support the position of the company; estimate the cost structure and potential benefits to offer its product, taking into account the value proposition and the structure of the chosen value chain; describe the position of the company within the value system, linking suppliers and customers; formulate the competitive strategy through which the innovative firm will be more competitive and achieve sustainable advantage.

DATA AND METHODOLOGY

Amitt and Zott (2001) state "...the model suggests that the value creation potential of e-businesses hinges on four interdependent dimensions, namely: efficiency, complementarities, lock-in, and novelty", but in this case, in agreement with Rappa (2005), for the creation of a business model it is important to consider a series of factors from creation to implementation. This investigation was based on the following factors: A) How to select clients, B) How to define and differentiate product offers, C) How to create utility for clients, D) How to get and conserve clients, E) How to launch to the market (Publicity strategy and distribution), F) How to define the activities to be executed, G) How to configure the resources, H) How to get the benefit.

The types of investigation carried out in this section are applied, exploratory and the conclusive. First, specific questions can be determined about the problem. Second, an exploratory investigation with the intention of finding solutions to assumptions raised about the problem will be carried out.

The following information was obtained from a study by the Mexican Association of Internet in 2008 using 189 of its members. This study used questionnaires of those companies which using websites to sell products. The results include sales, percent of sales using the internet, product categories, and services. Since sales using the internet are relatively new and increasing in size, it is necessary to analyze if it is an effective way to increase sales.

Companies that sell using traditional methods face the challenge of defining their presence and reaching virtual markets. They need to determine when and how to use the internet. The presence of an electronic marketplace that provides rapid access to information that buyers and sellers can use to make decisions and become more efficient, new models of businesses based on the Internet have been developed. The data that follows comes from a study of electronic commerce in Mexico AMIPCI (2009). AMIPCI was founded in 1999 with the mission to build an internet based economy in Mexico.

The sectors included in the study include tourism and travel, department stores, entertainment, virtual businesses, and businesses with specialized products.

RESULTS

Business Models

Thanks to the development of electronic commerce, new forms have arisen to sell tangible goods as well as intangible goods, reducing costs and barriers.

The brokerage model connects sellers and buyers. The "broker" who operates the site, facilitates the transactions, and usually receives a commission for each sale. The following types of markets can be identified: Vertical markets, B2C (B2C or buy/Sell fulfillment) involve intermediaries who maintain and manage information, reducing costs to consumers. Vertical markets B2C (B2B or Market Exchange) consist of intermediation between companies. Business trading Communities are sites that collect data provide contact between the agents of a business sector. Purchase groups (Buyer Aggregator) aggregate buyers that have an interest in the same product, concentrating the demand in order to obtain better conditions of sale from the supplier. Distributors (Distributing) publish on line catalogues of products. Virtual commercial centers (Virtual Mall) are collections of electronic stores under the same distributor enriched with means of common and guaranteed payment. Usually they become a market for the industry when they specialize in a sector. These web pages can include forums of discussion, closed groups of users, etc. Members of e-malls have reduce their costs of presence in the Internet, and payments and traffic can be generated from other virtual stores. The metamediaries (Metamediary) are virtual commercial centers which managed transactions and guarantee payments, protecting consumer and reporting satisfaction with salesman. Auction Brokers supply all types of products for sale, the sellers can be either particulars or companies. Inverted auction (Reserve Auction) sites, consists of an intermediary who negotiates the sale of a product or service as the buyer that fixes the price, later the salesmen realize their supplies adjusting to the predefined conditions. The classified ones (Classifiends) are ready of items corresponding to the supply or demand of products. The quota of the intermediary usually pays attention by announcement, more not by transaction. Search agents locate products or services that are being offered for the best price. The software that drives these sites searches through data bases and contains algorithms to account for variation in the description of products in different databases. These services may also create personal pages so that buyers can see information on what interests them, and can create links between people with common interests, often sending them electronic mail to alert them of changes in product availability.

Publicity on-line or the Advertising Model) consist on a web site that shows payments and no payments contents to tangibles and intangibles goods. This includes services associated for example the e-mail, publicity messages by mean of banners and blogs. Some examples are: Generalized Portal, which is a site that receives the user at the moment that gets access to internet. This site is financed by announcement and sponsorships. Specialized Portal, is the same concept as General portal, but it is more specialized as indicated in the name, and is focused to restricted audience cause of the specific topics. Thanks to this feature, it allows realizing better publicity segmentation. The Incentive marketing (Attention marketing) model get in contact with announcers and consumers, the clients perceive an economic compensation by visualization on web pages, formulary complementation, opinion formulation and others. Free model, consist of a Web site that offers clients different free services. Bargain Discounter, is an organization that sells the model at a price.

The Informediaries (Informediary Model) consist of companies that give free Internet services with goal of obtaining user information. Information on pages visited, items purchased, etc are collected and may be used to make decisions or passed on to other firms. There are two kinds of informedaries: First, the recommender system is a site to provide users information about the quality of products and/or services, giving advice about purchasing and can facilitate the application to interchange of purchase experiences between. It is a service with free content with access allowed after some information is provided. The firm uses the data obtained to create a data base which is exploited commercially.

The Merchant Model: works as a complement for traditional business. This project is based uniquely on Internet (cybertraders). In this business model incomes comes from the sale of products and services. There are several subsets of this model. Virtual merchants work only with Internet. Catalog Merchants, sell person to person by mean of a catalog which shows products and services. The vendor on-off (Surf-and-Turf), is the way that companies use traditional models and decide to sell by Internet. The Vendor

Bit, is discussed by Del Águila (2001). He states “It is about companies that commercialize digital products (for example electronic magazines) and services. The sales and distribution is through web...”

The Productor (Manufacturer Model) involves products, goods and services, sold with the goal of reducing or eliminating distribution channels so that the product and/or service arrives to the client with a more economic price and the contact is directed between the producer and consumer in a way that is beneficial for both.

The Affiliation (Affiliate Model) involves organizations that develop a member net. In this way if a potential client gets to the vendor page through a member site and makes a purchase income splitting arrangements are activated.

The attractiveness of the Community model is based on users loyalty. People invest their time and economic resources in the project and can be identified into two categories: Voluntary Contributor Model, which Águila (2001) defines as a user community that sponsors a site through voluntary donations. Knowledge Networks, according to Del Águila, involves user experts who assist others with solving problems without getting any payment.

The Subscription Model consists of incomes obtained by access, content and by connection time. Some sites combine the free model with the subscription model which it allow clients access to information.

According Michael Rappa (2005) the utility model request is based on measured use and the immediate payment method. The difference between this and the subscription model, is that the measured use is based on real rates. Traditionally, the measurement has been used by basic services like electricity services, water and long distance calls.

Totals Sales and Sales Areas

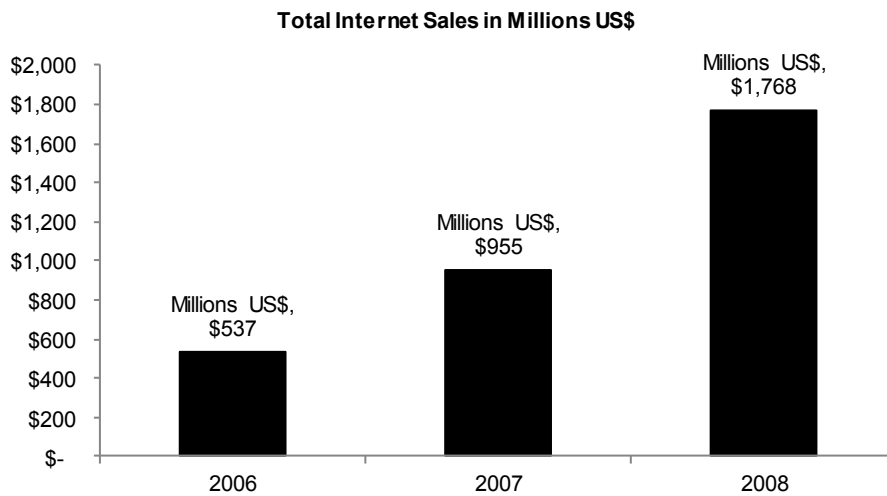
In this section we report the amount of sales of electronic commerce based on the Internet. In 2006, sales made by this method total \$537 million dollars, in 2007, \$955 million dollars, and in 2008, \$1,768 million dollars. Figure 1 summarizes this data.

Sales were recorded in three areas: International, inside the republic, and metropolitan. The results are presented in Table 1. In 2006 sales conducted in the metropolitan area, are picking up significantly (61%), followed by the sales of inside the republic (35%), and the foreign sales involving the little fraction (4%). In 2007, metropolitan area sales decreased (51%), but are still picking up principally, followed by inside the republic sales, which increased (44%), and foreign sales continue to represent the smallest element at 5%, but did register an increase.

In 2008, changes in metropolitan area sales fell to second place at (36%); inside republic sales increased significantly moving to first place at (50%), and foreign sales, despite continuing to be the smallest element also registered a very substantial increase to approximately (14%).

Consumer sales are represented by cell phones, electronics and audio products, pets, vehicles, clothes, watches, sunglasses, tickets, computers and accessories, etc. In 2006 these sales represented \$183 million dollars, in 2007, \$267 million dollars, and in 2008, \$389 million dollars. Tourism sales include airline tickets, hotel nights, travel packages, among others. In 2006 these sales represented \$354 million dollars, and in 2007, \$688 million dollars, and in 2008, \$1,379 million dollars.

Figure 1: Total Sales for Internet Based in Electronic Commerce from 2006 to 2008



In the table clearly shows the gradual increase in the amount of Internet sales, representing a raise of 75% from 2006 to 2007, and 85% from 2007 to 2008.

People’s confidence to buy on-line: According to research by AMIPCI (2009), the level of people’s confidence is positive, and 55% claim to have a lot confidence, while 39% are indifferent, that means, the people don’t trust, don’t distrust; the 6% have a lot or a lot distrust.

CONCLUDING COMMENTS

Interactive sites for commercial transactions provided by the Internet, are critical for development and growth of organizations in a globalized world where the flow of information needs to be made quickly and effectively through new Internet business models.

The goal of this paper was to identify business models used in México, and recognize and to identify the increase sales via the Internet that Mexican organizations have experienced. The study provides knowledge for firms that wish to position themselves in the México technological areas.

The methodology involved the exploration of 189 organization web pages. The analysis considered factors like how clients are attracted, how product offers are defined and differentiated, creating utility for clients, obtaining and maintaining clients, market launches, defining activities to be executed, configuring resources, how to benefit; and the revision of bibliographical and research material. The results are dynamic and indicate that businesses must be in constant evolution adaptation to new and evolving technologies.

Table 1: Origin of E-commerce Sales Based on Internet on the Three Areas during 2006-2008.

AREAS	2006 % SALES	2007 % SALES	2008 % SALES
International	4%	5%	14%
Inside the republic	35%	44%	50%
Metropolitan area	61%	51%	36%

This table shows the percentage sales conducted in the metropolitan area, inside the republic, and the foreign, during a period of time 2006-2008.

The data show that domestic and international sales on the Internet are increasing. Sales on the internet have increased by 75% from 2006 to 2007, and 85% from 2007 to 2008. Clearly internet sales are covering new markets and territories, aimed at obtaining profits for SMEs. This is an important source of income to improve the Mexican economy. The amount of sales by e-business models, were attractive. This shows that further development and implementation as an everyday practice in SMEs, may be of benefit.

The paper has some limitations. Some difficulty was experienced in this study detecting factors for classifying Mexican web pages. In some cases the web pages were made without any system. To resolve this, we created some specifications to classify webpages into a business model. Another limitation is the webpages examined crossed all economics sectors. Because of this fact this study is very generalized. Future studies should examine industry specific data.

In conclusion it is recommended that SMEs invest in training to learn how to implement new electronic business models. Internet business is potentially very profitable and flexible, because people don't need large amounts of money to begin their own business. Internet businesses can be operated out of a home with standard equipment. This represent a great opportunity for individuals to be their own boss and generate more jobs, thereby contributing to the country's economy.

To follow up this work, we future research that addresses new models for social and labor areas of internet business. There is a need to generate employment in many countries that have severe unemployment problems. Another future research avenue might involve analyzing web pages from various economic sectors.

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