

B2B E-Commerce: Utilizing Electronic Marketplaces For Procurement

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INTRODUCTION

Internet has revolutionized business. It has played an instrumental role in transforming the world into one huge global market and is creating what is being called "digital economy". The word E-commerce has become a buzzword in the world of business. Electronic Commerce is exactly analogous to a marketplace on the Internet. (It can also be referred to as EC, e-commerce or ecommerce).

E-commerce transactions in India are expected to reach \$100 billion in the year 2008 as companies increase the use of Internet to cut costs and improve speed and efficiency.

"The e-commerce transactions, which are currently growing at the rate of 30-40% in India, are expected to cross the \$100 billion mark," Bikky Khosla, CEO of business-to-business (B2B) portal Tradeindia, said. "With the advent of Internet, the far-flung global markets have shrunk into one small market. The B2B portals have succeeded in breaking the geographical and other conventional barriers involved in trading," he said. "They have also succeeded in cutting down on the time and cost involved in the export-import business," Khosla said. B2B portals help exporters and importers to trade with ease. Companies can avoid costs in terms of manpower, time involved in a transaction and document preparation, he said. "Today, B2B portals are an absolute necessity for all enterprises of any type and size. The advantages of having the assistance of a quality B2B portal are massive. Registering one's company with a B2B portal can have immediate impact on the company's productivity," Khosla added. Some of the leading B2B portals operating in the country include Tradeindia, Indiamart.com, Tradeget.com and Indianexporters.com.

The first stage in the evolution of B2B was the Electronic Data Interchange (EDI) where a buyer maintained separate connections with each supplier. This was both difficult and expensive to maintain. It neither increased the population of buyers and sellers nor was it transparent. The second stage was the basic E-commerce model where companies put their product catalogues on the Internet and conducted one-to-one transactions.

Now, B2B E-commerce is in the third stage of evolution. Unlike the first and the second, now a B2B E-commerce initiative brings together large numbers of buyers and sellers, thereby creating a community of traders. As many buyers and sellers gather at a common place, the information flow increases and hence the transparency. This in turn reduces the overall transactions cost.

The original first stage of commerce on the Internet was that of E-Commerce, which business to consumer activities is. Business to business goes well beyond that popular form of consumer purchasing. It is intended to bring "**Just in Time**" concept to a greater height which allows businesses to coordinate with its business associate for real time transaction and improving efficiency and productivity for both organizations. Because Time is money; people are money, good management of both means more money for the business and less expenditure on others.

B2B also offers unique benefits such as less human intervention, less overhead expenses, fewer inadvertent errors, more efficiency, more advertising exposure, new markets and new physical territories equate to an intelligent method of mutual business. It is a win-win situation for both buyer and seller.

These are just a few of the benefits that B2B E-commerce can offer. It is already well accepted in the business community, that the potential return of doing business on the Internet is far greater than the investment. The bottom line is greater profits for the business.

The most exciting part of the Internet for businesses is the fact that they have an opportunity to open a new branch in this virtual world, which can be accessed by anyone, anywhere, anytime. Marketing on the Internet for an organisation is the process of using the Internet as a medium to market themselves, their products and their services.

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Understanding customers and their behaviour that drives revenue or costs are the Holy Grail of customer analytics and business intelligence. As the Internet allows one-to-one communication, it enables one to create specialised content for a specific target audience. There are a number of aspects to customer and business intelligence, ranging from online tracking tools to enterprise data warehouses that are integrated with online analytical processing tools. Expect analytical tools to become more strategic as competition for profitable customer segments intensifies.

For example, a pharmaceutical company, marketing an antibiotic had to advertise in a medical journal. All it would be able to focus on would be benefits of the product, but it may not be able to address the concerns of health practitioners through this mode of communication.

But if the pharmaceutical company built a community of doctors, thereafter, it would be able to build one-to-one communication with each of the doctors. Thus, if a doctor was not prescribing the product because he felt that the price was too high, the company would be able to address that concern. If a doctor was not prescribing the antibiotic because of safety concerns regarding the product, he could be shown communication that addressed that particular issue. As each health practitioner can influence sales worth lakhs of rupees, the cost of building that one-to-one relationship would be well worth it.

Similarly, paint companies in the decorative segment can build a community of interior designers, furnishing companies and architects. There are many advantages a company can derive by using the Net.

- **Microanalysis on RoI:** The best thing about the Internet is that it gives comprehensive feedback on the marketing strategy. Each impression of the communication is noted, each click recorded thus enabling microanalysis of RoI.

- **B2B marketing:** 95 percent of the companies who sell to business customers cannot use any mass media like television, radio, print. Thus, the only options that remain are institutional sales, direct marketing or exhibitions. The Internet can be extremely effective in nearly all B2B marketing as most business users are connected to the Internet.

- **Immediate feedback:** Each marketing strategy and communication can be done on a dipstick study basis, and based on the feedback; the strategy can be scaled or shelved.

Thus, the cost of marketing can be greatly reduced by exploiting this new media effectively. But companies want to use online marketing need to ensure the following:

- **Simplicity:** The site should be user-friendly or else chances are that the customer will not hang around for too long. Good business sites make it easy for the user to find what he's looking for, and quickly at that.

- **Quick response:** A fast response time is one of the most important aspects that any user expects to see in all his dealings with the company, whether he's clicked on the search facility or sends an e-mail about a doubt or complaint.

Business to Business Websites: Web site content ranges from basic sites providing customers with general company information to more complex sites where interactive applications offer customers virtual product catalogues, opportunities to provide feedback, and an array of services including the ability to pay for and fulfil orders online. Successful websites add value because of their ability to present fresh, useful, relevant, and comprehensive information. For example, virtual product catalogues on websites are replacing the laborious and expensive necessity of printing and updating the physical catalogues that are customarily used in business to business sale. Website content can also make information seeking more convenient for customers. Many firms handle common information requests that would normally require access to a service representative by posting customers' most frequently asked questions and associated answers on their websites.

The battle to provide more value than the competition (and still make a profit) will become ever fiercer. In an age where machines talk to machines, the consumer will become empowered as he finds value in a proliferation of choices. The Internet is a leap in communication, empowered by technologies that require professional development of e-marketing strategies, tools to reach the target audience, and personalised messages that are tailored to that audience's need. The solution will require management understanding of and focus on processes such as name acquisition, maintenance, campaign execution and measurement.

Ultimately, winning organisations will harness the power of online marketing to reach their clients efficiently and also effectively

ELECTRONIC MARKETS

- **Types of B2B :** Three different types of B2B exchanges operate.

The first category is **buyer-controlled**. It is a consortium of buyers who aggregate their purchases. The recently-formed consortium among Daimler Chrysler, Ford and General Motors (to which Toyota recently joined) is an instance. By this process, the buyers are looking to manage efficiently the procurement process; lower administration cost, and ensures uniform pricing.

The second category is **seller-controlled**. Here the sellers who cater to fragmented markets such as chemicals and auto components come together to create a common trading place for the buyers. While the sellers aggregate their market power, it greatly eases the buyers search for alternative sources.

The third category is **third-party exchanges** that are neither buyers nor sellers. They thrive purely on the fees generated by matching buyers and sellers. Examples are ChemConnect.com, Chemdex.com, Indiamart.com and so on.

B2B E-commerce helps to remove *barriers raised by geographic fragmentation* of the market. While buyers get to know about new sellers with better products, suppliers discover new buyers. B2B also helps in *eliminating unnecessary inventory build-up* for both buyers and sellers. Lack of information about production schedules of the buyers lead to inventory build-up for the sellers. At the same time, the difficulty associated with finding alternative supply sources forces the buyers to build-up inventory. As B2B *promotes information flow and enhances transparency*, supply-chain management becomes possible. In addition, both the sellers and buyers enjoy *reduced order processing costs and lower cost of interacting with each other*.

Mere order matching, which earns commission, is just not enough for the third-party exchanges. They will have to strive to retain the buyers and sellers, that is, they have to provide other value-added services (providing specialized information, for instance) that helps to retain the existing sellers and buyers and attract fresh traders. Buyers and sellers, in turn, benefit through specialized information content. *In effect, the market benefits from buyer and seller discovery and price and product transparency.*

• B2B PROCESS

The B2B process starts with a requisition for an order. Purchasing organizations have internal approval process to prevent unauthorized orders. Though the exchanges do not directly offer these facilities, they do it with the help of software provided by companies such as Ariba and Oracle.

Second, before the orders are processed, the exchanges have to have the set of suppliers for each of the products for the industry which they are catering to. For example, ChemConnect have to compile the list of suppliers for each and every chemical for which they offer the facility of trading. In the third stage, the exchanges match the orders of the buyers with the suppliers.

The fourth stage is ensuring that the orders are fulfilled. This includes all post-order requirements, including arranging for shipping of the material ordered. The fifth stage would be to process the payment schedule. Though there are very few exchanges which offer the entire gamut of the above services, there are many which go up to order matching.

How do the B2B exchanges earn revenue in the process? The B2B initiatives earn primarily through transaction fees which ranges between 0.50 per cent and 10 per cent of the total value of each transaction based on the complexity. More the orders matched, the higher the revenue. Others charge an annual subscription fees, irrespective of the number of orders. The exchanges also earn through membership fees, auction fees and license fee for the use of any specialized customized software that is offered.

Revenue is also generated by providing specialized content. This could be in the form of analysis, statistics, price and product data, industry news, forecast reports and other technical services.

• BUSINESS-TO-BUSINESS E-COMMERCE SYSTEMS

There are two generic types of Internet-based e-commerce systems-Net marketplaces and private industrial networks.

1. NET MARKET PLACES (Exchanges or hubs)

Net market places (Exchanges or hubs) bring together potentially thousands of sellers and buyers into a single digital marketplace operated over the Internet.

TYPES OF NET MARKETPLACES

⇒ **E-distributors:** Provide electronic catalogues that represent the products of thousands of direct manufacturers.

⇒ **E-procurement companies:** Independently owned intermediaries connecting hundreds of online suppliers

offering millions of maintenance and repair parts to business firms who pay fees to join the market.

⇒ **Exchanges:** Independently owned online marketplaces that connect hundreds of suppliers to potential thousands of buyers in a dynamic, real-time environment.

⇒ **Industry consortia:** Industry-owned vertical markets that enable buyers to purchase direct inputs (both goods and services) from a limited set of invited participants.

2. PRIVATE INDUSTRIAL NETWORKS

Private Industrial Networks (PINs) form the largest part of B2B e-commerce today. They are Web-enabled networks for the coordination of trans-organisational business processes. They focus on continuous business process coordination between companies.

• E-Marketplaces

1. Vertical e-Marketplace

A Vertical e-Marketplace spans vertically up and down every segment of one specific industry. Each level of the industry has access to every other level, which greatly increases collaboration. Buyers and Sellers in the industry are connected to increase operating efficiency, and decrease supply chain costs, inventories, and cycle times. This is possible because buying/selling items to customers in a similar industry standardizes needs, therefore reducing the need for outsourcing many products.

2. Horizontal e-Marketplace

A Horizontal e-Marketplace connects buyers and sellers across many industries. The most common type of materials traded horizontally across industries is MRO's (Maintenance, Repair, and Operations materials). These items are so popular because they are crucial to the daily running of a business, no matter what industry (or what level of that industry) you are in. These articles are mainly business and consumer articles. Many corporations have these bought directly on-line by the maintenance team in order to relieve the purchasing department.

3. No-frills e-Marketplace

Developed in response to customers want to purchase products without service (or with very limited service). The approach parallels the B2C offering of no-frills Budget Airlines.

INDIAN ORGANIZATIONS THAT ADOPTED B2B ELECTRONIC BUSINESSES

Many large and medium sized enterprises have deployed one or more components of an e-business infrastructure. The pattern of adoption of e-business in India is virtually identical to that elsewhere in the world, with automotive manufacturers, FMCG and oil companies and financial institutions (bank and stock exchanges) being the early adopters. The list of companies includes names such as Hindustan Lever, Pepsi, Coke, BPCL, IOCL, Bombay Stock Exchange, HDFC Bank, Maruti, TELCO, Ford, Samsung, Hindustan Motors, L&T, Godrej & Boyce, HCL Infosystems, Mahindra & Mahindra, Ballarpur Industries and many more.

Thirty per cent of global export-import trade now takes place online. **Indiamart.com**, India's online B2B marketplace is an ideal platform for Indian exporters to connect with International buyers, tap new markets and generate business enquiries at a relatively low cost. It is already promoting 2, 50,000 Indian suppliers with 50, 00,000 buyers from 65 countries and on average five lakh business enquiry per month online.

eBay India Motors, the leading online B2B Motors marketplace, announced its plans of enhancing focus on the Heavy Commercial Vehicles segment in Northern India. eBay India Motors' currently has a large community of over **9,000 buyers (mostly dealers)**, who are registered and trained to buy on the platform, across **250 cities**. The B2B Motors Marketplace on eBay India is an independent and neutral platform, which provides a level playing field to all buyers on the platform, thereby eliminating intermediary costs along with a reduction in holding costs and turnaround time. eBay India Motors is the largest online marketplace for the sale of second hand trucks, tractors, cars, bikes and other commercial vehicles in India. It is a *B2B Motors Marketplace* which presents a unique opportunity for sourcing used vehicles from Transporters; Logistics service providers, Financial Institutions, Leasing Companies and large Corporate through online auctions.

• Reduced Cycle Time, Reduced Inventory, Lower Transaction Costs

Samsung India claims to have compressed their order cycle from 40 to 15 days after adopting e-business, and faster turnaround means substantial business gains. Likewise electronic manufacturer **LG Electronics India** achieved 30 percent savings through its e-SCM (Supply Chain Management) initiative, in terms of lower inventory, product and transaction costs. Quick return on investment is an attractive proposition for adopting e-business by an organization. And for this reason, a number of large Fast Moving Consumer Goods (FMCG) and consumer durable firms in India, which operate with very thin margins have gone for e-business. According to an

estimate, FMCG firms can achieve up to 2 percent increase in margins through dealer/distributor connectivity while e-procurement and supplier connectivity can enhance margins up to 3 percent. **Hindustan Lever Ltd.** a major FMCG reduced inventory from 45 to 5 days off-take by bringing all its distributors and dealers on line. Obviously the impact on bottom lines must be significant. For all the value to be captured, system wide connectivity linked into existing IT systems of business partners is required. In India, these partners are primarily SMEs: the vast majority of them are not IT enabled. For the few who have IT systems, there are challenges in integrating existing solutions across the business. Additionally, many business partners in India are unwilling to come online as it makes their financial situations transparent.

• **Reduced Cost & Benefits through E-Procurement & E-Auctioning**

Large buyers have today realized how critical e-sourcing is to the overall growth of a company. According to Freemarkets, India's leading reverse auctioneer, the potential of savings are huge as almost 70-80% of a company's turnover is spent on procuring goods.

In India, companies have used auctions effectively to reduce prices. **SmithKline Beecham** realised savings of 17-20% through reverse auctions of some direct materials. **Hindustan Lever Ltd.** realised savings of 35% through a reverse auction for an electrical wiring contract for a personal products plant. **Maruti's** auction for conversion from diesel to CNG of 17 forklifts led to 40% savings. L&T group in Chennai for procurement of desktop computers resulted in saving of 17% over offline negotiated prices with 9 suppliers participating. For the **Mohan Meakins group**, auctions were used for procurement of crown. The auction was conducted from Chennai and 8 suppliers participated across the country. For the auction value of approximately Rs 23.1 million, savings of approx. 4% were achieved as compared to the last Purchase Order raised by company on its suppliers. While online procurement is a key source of savings, the highest value is expected from efficiency gains and collaborative efforts in the supply chain achievable through wider and faster information sharing.

Industries with a high e-commerce adoption, for example Automotive, are well-positioned on all the above dimensions. The potential margin impact in Automotive and Consumer goods could be as high as 4% of sales. Both these industries are dominated by companies with the willingness to drive e-commerce adoption across their supply chains. Truck maker, **TELCO** adopted an Internet enabled value chain management solution to cut inventory from 65 to 20 days. Jeep and tractor manufacturer, **Mahindra and Mahindra** cut plant inventory level from 50 to 20 days and dealer inventory from 15 to 10 days through SCM system. Maruti Suzuki has connected its 300 vendors and 215 dealers through an on-line web-enabled network. Mahindra and Mahindra uses internet to provide customization options for select models such as the Quadro. Maruti is experimenting with car finance and insurance fleet management and reselling of second-hand cars. Though Power Utilities form a potential industry to adopt e-commerce practices because of consumer network, in India, the entire industry is dominated by Public Sector Undertakings (PSU) that are in very poor financial condition and where e-commerce investments are unlikely to be priority initiatives. Yet there is one PSU who is a trendsetter on the IT front, **Gujarat State Fuel Management Company (GSFMC)**. GSFMC is a fuel management solution provider promoted by various state-sector companies such as Gujarat Narmada Fertiliser Corporation, Gujarat Electricity Board, Gujarat State Fertiliser Corporation and Gujarat State Petroleum Corporation. GSFMC is in the process of setting up a first of its kind on line energy exchanger. To be called fuelxs.com, the site will serve as an electronic marketplace where buyers and suppliers of fuel can interact and contract for fuel. It will provide an open transaction platform and support multiple bidding mechanisms for efficient price determination.

• **Low Cost Channel to Service Business Customers**

CISCO India accepts all its customer orders online. It estimates that its online ordering process has resulted in an increase in the configuration accuracy of its products to almost 100% as compared to 40% in the offline process. Additionally, CISCO's web site provides real-time assistance to its customers, with the ability to fulfil inquiries with one interaction-80% of all non-technical support questions are answered online through online documentation of product information, thus eliminating the time and expense required for onsite assistance by CISCO personnel.

Legal and regulatory framework for e-commerce

Besides developing the e-infrastructure in the country through effective Telecom Policy measures, the Indian government is taking appropriate steps as confidence building measures for the growth of e-commerce. It has created the necessary legal and administrative framework through the enactment of the Information Technology Act, 2000 which combines e-commerce transactions and computer misuse and frauds rolled into an Omnibus Act. While on the one hand it seeks to create the Public Key Infrastructure (PKI) for electronic authentication

through digital signatures, on the other hand, it seeks to build confidence among the public that the frauds in the cyber space will not go unpunished. The Controller of Certifying Authorities (CCA) has been put in place for effective implementation of the IT Act. The Act also enables e-governance applications for electronic delivery of services to citizens. The CCA acts as a regulator for the growth of e-commerce and e-governance. It is responsible for the establishment of PKI in the country through licensing of certifying authorities (CAs). For this purpose, it has notified standards which are based on international standards as adopted by the International Telecom Union, the Internet Engineering Task Force (IETF), Institute of Electrical and Electronics Engineers, Inc. (IEEE) and the Federal Information Processing Standards (FIPS) of the Government of the United States. These standards range from specifying the high security modules for storing private keys of the CAs to the public key certificates, the certificate revocation lists and the directory services. A notable feature of the implementation in India is the creation of a panel of independent auditors who would be responsible for auditing the technical and physical infrastructure of the CAs to ensure conformance with the standards as also to ensure that the CAs comply with their certification practice statement. There will be greater emphasis to ensure that the identity of individuals and businesses is verified as per established procedures to create the required level of trust in the electronic environment. The CCA has established the National Root infrastructure which would be used for digitally signing the certificates of all the certifying authorities. Beginning February 2002, four Certifying Authority licences have been issued to operate under the Root. It is also setting up the National Repository to store all the certificates issued by all the CAs in the country as required under the Information Technology Act.

RESEARCH MODEL

An electronic market is an inter-organizational information system through which multiple buyers and sellers interact to accomplish one or more of the following market making activities:

1. Identifying potential trading partners
2. Selecting a specific trading partner
3. Execution of trade transactions

An electronic market place allows buyers, sellers, independent third parties, and multi-firm consortiums to exchange information about prices and product offerings (Mahadevan, 2000). It has been suggested that electronic markets will create great benefits for both buyers and suppliers. At the same time, some of the myths still surrounding electronic markets have been challenged (Grover and Ramanlal, 2000).

According to a release dated September 19, 2006, the Internet and Mobile Association of India (IAMAI) and IMRB International, Internet users in India have reached 37 million in the month of September 2006, up from 33 million in March 2006. During the same period, the number of "active users" has risen from 21.1 Million in March 2006 to 25 Million in September 2006. "Active User" is an internationally accepted and widely used category to define users who have used the internet at least once in the last 30 days.

The numbers are a result of the largest "offline" survey so far carried out in India to estimate the "ever user" and "active user" categories. The primary survey for the study was conducted in early 2006 amongst 16,500 households covering 65,000 individuals across 26 major metros and small towns in India, with additional coverage of 10,000 business and 250 cyber café owners. The survey did not include rural areas.

IWS considers that the number of Internet users in India is now 40,000,000 to give credit to the new first time users since the survey field work was performed till November 27, 2006. Less empirical evidence exists to support claims concerning uses and benefits of electronic markets. This paper makes a contribution by presenting empirical research on business to business (B2B) electronic markets used in Delhi region.

Specifically, this research is concerned with planned utilization of electronic market places as there were indications in India that very few companies were utilizing such markets at the point of time of this research (2006-07), leading to the following three research questions:

- To what extent do organizations have plans to utilize the electronic market place for purchase?
- What benefits do organizations expect from utilizing electronic market place for purchase?
- What factors can predict the extent of planned utilization of electronic market place for purchase by organization?

Procurement between business partners on electronic markets is the dependent construct in this research as illustrated in Figure 1. This research attempts to explain variation in planned utilization of electronic procurement markets both by operational and a strategic variable. The *operational variable* was defined as the number of purchase orders issued by the organization, while the *strategic variable* was defined as the strategic business

importance of electronic markets for the organization. Expected benefits from utilization of electronic procurement markets are concerned with reduced transaction costs, negotiation of better agreements with suppliers, better utilization of frame agreements, and access to more suppliers. It has been suggested that companies expecting reduced transaction costs will be the most active users of electronic marketplaces. Mahadevan (2000) argues that cost of production and price comparisons becomes negligible. Reduced transaction costs will be of importance mainly in organizations with a high procurement volume. Hence the first research hypothesis H1 was formulated based on this. Research literature suggests that business organizations have to identify the strategic importance of business to business electronic markets for their own business to be willing to plan for utilization of such markets (Earl, 2000). This results in second H2 hypothesis.

HYPOTHESIS

H1:- Organization with more purchase order will have more concrete plans for utilizing electronic market place for purchases.

H2:- Organization identifying strategic business importance of electronic procurement will have more concrete plans for utilizing electronic market place for purchase.

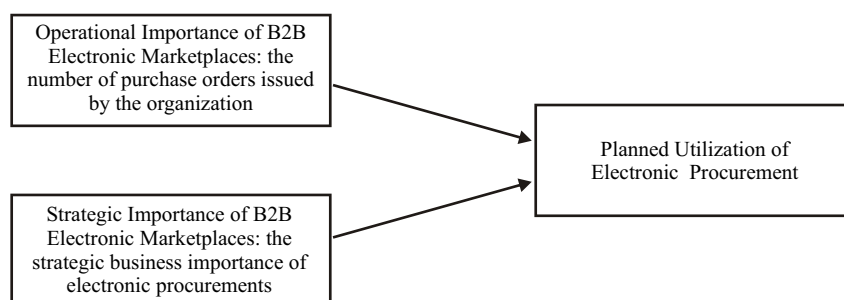


Figure 1: B2B Research Model

RESEARCH DESIGN

Research design is a plan, structure and strategy to answer the problem. There are several methods of data collection. A systematic and scientific methodology, which is referred to as research design determines the correctness and accuracy of the results obtained. In the present study, exploratory research design has been used. The correlation study is successful in identifying the association among the variables upon discovery of such closely associated variables. The study has been conducted based on the following methodology:

DATA COLLECTION

The secondary data has been collected by scanning available literature, various professional magazines, works carried by other research scholars, various research agencies' report and various policy announcements. The primary data has been collected by using structured questionnaire from the businesses applying e-commerce.

SAMPLE SIZE

During the course of the study, random, judgmental and stratified sampling techniques were used to draw the samples among the consumer and businesses applying e-commerce and also the convenience of the surveyor. Using incidental cum purposive sampling technique, samples were drawn as follows:

Total questionnaire distributed was 294. Response received was 194. Improperly/partially filled questionnaire dropped was five. So, total 189 responses have been considered for the study. The geographical area of the study was confined to Delhi and NCR. The actual data was collected during April 2006 to Jan 2007. The statistical analysis was worked with the help of SPSS software.

RESULTS AND DISCUSSION

The extent to which organizations had plans to utilize electronic marketplaces for purchases was measured on a scale from 1 (no plans) to 5 (concrete plans). On average, the response was 3.8 with a standard deviation of 1.1, indicating that most organization had some kind of plans. On second statement, all the respondents were asked about the point of time at which the organizations plan to utilize electronic places to purchase. Out of 189 respondents, 34 are already using electronic place for purchasing, 30 has started in 2006, 59 respondents have started electronic places for purchases from the year 2007. Rest of the respondents will be planning to utilize electronic place for purchases from the year 2008 & beyond.

When asked to rank which goods and services organizations planned to purchase on electronic markets, indirect goods received the highest score, while indirect services received the lowest score, and indirect goods and direct services received medium score. The score difference between indirect goods and indirect and direct services was statistically significant.

When asked to rank benefits expected from utilizing electronic markets for purchases, responding organizations ranked reduced transaction costs on the top. Access to more suppliers was ranked second, while negotiate better agreements with suppliers and better utilization of frame agreements were ranked at the lower end. The importance of reduced transaction costs was significantly higher than the importance of access to more suppliers, better agreements, and better utilization of frame agreements.

The size of the organization was measured through the number of purchase orders issued in 2006, the number of employees in purchasing, and the number of persons working in the organization. The average number of purchase orders was 34,554, with a minimum of 200 purchase orders and a maximum of 6,00,000 purchase orders, and with a standard deviation of 90,582 purchase orders. The number of persons working in the organization was 43 persons on an average, with a standard deviation of 109 persons. The number of persons working in the organization was 1,769 persons on average, with a standard deviation of 4,362 persons.

In the literature, a series of reasons for utilizing electronic markets have been suggested. To know the impact of B2B electronic markets on the organization's purchasing process, 39 statements were given to the respondents to find out the reasons for utilizing electronic place. Respondents were asked to rate each issue from 1 (strongly agree) to 5 (strongly disagree). An exploratory factor analysis was conducted, identifying several significant factors. The first factor identified by statistical extraction and rotation was concerned with strategic issues. This factor had a cronbach alpha reliability of 0.89.

Hypothesis testing was carried out using regression analysis. The first hypothesis suggests that organizations with more purchase orders will have more concrete plans for utilization of electronic market places for purchases. The second hypothesis implies that organizations identifying strategic importance of e-procurement will have more concrete plans for utilization of electronic marketplaces for purchases. The statistical results for the two are shown in Table 1. (Statistical significance of $p > 0.01$ at **)

Table1: Multiple regression analysis between planning and predictors

Predictors	Beta	t-test
Purchase orders	0.851	0.462
Business Strategy	-0.590	-4.983**

The overall regression equation was significant with an F-value of 12,930, indicating that the set of two variables can predict the extent of concrete planning. The adjusted R-square was 0.299, indicating that 70 % of the variation in concrete planning remains unexplained. Table 1 shows that only one of the two predictors is significant. While the number of purchase orders has no significant impact, business strategy has a significant impact on the extent of concrete planning. There is a minus because of the way questions were asked in the questionnaire. The data do not provide support for the first hypothesis, while the data does provide support for the second hypothesis.

Respondents have some plans to utilize electronic market places and they expect some benefits. But responding organizations seem just as concerned with unrealistic expectations and myths (Grover and Ramanlal, 2000) as with potential benefits (Afuah and Tucci, 2001). It may seem surprising that companies are not using and planning to use electronic marketplaces to a larger extent. One potential explanation is offered by Chircu and Kaufman (2000) who argue that the conversion of potential IT value is a lengthy process, fraught with difficulties that may limit the realized value. This again can be explained by lack of knowledge of how firms should organize their IT activities in order to manage the imperatives of the business and technological environments in the digital economy. Strategies and models for business to business trading are not very well known (Timmers, 1999), and the importance of entrepreneurship is not yet recognised. Porter (2001) argues that the Internet tends to weaken industry profitability without providing proprietary operational advantages, making it more important than ever for companies to distinguish themselves through strategy. The high focus on the cost reductions potential is consistent with other studies for pursuing e-commerce.

B2B in India will have a larger focus on direct inputs as manufacturers buy more direct goods than indirect goods. The US experience suggests that it is harder to trade online in direct goods than indirect ones, as direct goods must often be tailored to a particular production process. This makes buyers cautious about changing the way they buy them.

Second, Indian supply chains are less efficient and more fragmented. Indian firms lag in performance on other indicators of supply-chain efficiency. For example, the inventory in our automotive chain is 50 days, compared to 30 days in the US. Thus, supply-chain savings and price discovery are likely to be more important in India than the US.

Third, weak infrastructure is unable to support e-Commerce. Most Asian countries lack an efficient on-line payments system. Good third-party logistics providers are rare. And neither the mechanisms for managing supplier credit risks nor legal sanctions against bad debtors are well developed. The absence of such infrastructure facilities will be a bottleneck to the development of B2B e-Commerce.

Apart from incorporating elements from the winning, Western B2B model, B2B aspirants should consider the following measures to make India-specific adjustments:

- **Target direct goods early.** Start with standard commodities, and aim for complex goods later, possibly offering digital asset-management software that allows transfer of engineering designs. Fortunately, marketplaces targeting direct goods can obtain huge savings for members in industries with few buyers. The volume and implied margins of resulting trade may offset the extra cost of targeting direct goods.

- **Target supply-chain efficiency.** To improve communications in supply chains, marketplaces must connect every link in the chain, using technology compatible with different information technology systems. But some incumbents are using web technology to bring supply chains on-line. Transferring such technologies to B2B marketplaces would produce substantially greater savings for members than the automation of procurement processes.

- **Target additional infrastructure roles.** Marketplaces must play several roles beyond matchmaking buyers and sellers. They must aim to provide inventory-management, financial settlement, global-logistics-management services, as well as quality assurance checks on suppliers. Such additional services, which are best offered through alliances, will help capture more value without necessarily building new assets. To offer members logistical services, for example, a marketplace could ally with existing freight forwarders or eventually join forces with a B2B marketplace specializing in transportation.

CONCLUSION

In this study, the extent to which business organizations in Delhi and NCR had plans to utilize electronic market places for purchases was investigated. Survey results indicate that most organizations had plans, and that the main benefit expected from utilizing electronic marketplaces for purchases were reduced transaction costs and strategic advantage.

The challenge in India will be to foster the creation of such B2B services. A combination of industry incumbents and strategic investors will be able to build a complete, full-service marketplace. While the incumbents will provide the liquidity and industry/functional domain knowledge, the investors will provide risk capital to build key support services. Over time, these services can be leveraged to serve marketplaces from other verticals.

Indian B2B exchanges following these guidelines have a good chance of success. There is a lot of inefficiency waiting to be tapped from Indian supply chains. Net-based marketplace technologies provide some, but not all, the tools to address these inefficiencies. Indian companies will need to embrace a hybrid combination of on-line and off-line tools to capture value from their supply chains.

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CONCLUSION

The farmers of the country face multifarious problems. Water problem is the main reason for decrease in the yielding of the land. The farmers use traditional method of farming which is not suitable for modern crops. Using Bio-fertilizer will minimize the expenses. The government should try to eliminate such types of problems frequently faced by farmers. That will be the proper remedy to safeguard the farmers. The landlords only borrow huge amount of loans from various banks as they have more influence in the local areas. Only limited small farmers will be benefited through this scheme. The debt waiver scheme in the budget is announced for Rs.60, 000 crores. It will not benefit all the farmers. It will be more useful only to the land lords who have influence in the local areas and in banks. So the government should find a permanent solution to solve the problems of the farmers. What is needed is an integrated bottom to top approach for increasing the productivity, reducing the cost, and fetching remuneration prices for the farm products, and to ensure a decent life to the food provider of the nation - the farmer.

(Cont. from page 25)

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