BBA (B&I)
G.G.S.INDRAPRASTH UNIVERSITY, DELHI
BBA (B&I) –208 Computer Applications II

Objective

The main objective of this course is to acquaint the students with special applications of Information Technology in Insurance sector. It will also familiarize students regarding Ecommerce applications and various other computer applications prevalent in Insurance today.

Course Contents :

Unit-I

Defining E-Business: Overview, Communication Gateways, E-Business statistics, Strategies & Advantages of E-Business. Differentiating between different E-Business categories. Introduction to E-Commerce, Interdisciplinary nature of E-Commerce, Benefits & Limitations of E-Commerce.

Unit-II

Business-to-Business form of E-Commerce: An overview of Inter-organizational Information Systems and EDI, Models of B2B form of E-Commerce (Supplier-Oriented Marketplace, buyer Oriented Marketplace, Intermediary Oriented Marketplace)

Unit-III

Business-to-Customer form of E-Commerce: Introduction to concepts of E-Banking, Electronic Funds Transfer Systems, Electronic payment mechanisms, Merchant Accounts and Payment Gateways, Electronic cash. Customer-to-Customer form of E-Commerce: Concept of Intermediaries and Internet enabled Auctions.

Unit-IV

Customer to Government form of E-Commerce: Introduction to E-Governance, Four Phased model of E-Governance. I.T in Insurance Business: Internet based delivery of Insurance products, Servicing of Policies.

UNIT-1

Definition of E-Business:

Overview

Let's start from the original definition (now moved) by IBM one of the first suppliers to use the term in 1997 to promote its services:

"*E-business (e'biz'Nis) – the transformation of key business processes through the use of Internet technologies*".

E-business is about using Internet technologies to provide superior customer service, streamline business processes, increase sales, and reduce costs. E-business uses tools such as email, online banking solutions, websites, supply chain management software and web-based customer relationship management.

The key business processes referred to in the IBM definitions are the organizational processes or units in the centre of Figure 1.1. They include research and development, marketing, manufacturing and inbound and outbound logistics. The buy-side e-commerce transactions with suppliers and the sell-side e-commerce transactions with customers can also be considered to be key business processes. The majority of Internet services are available to any business or consumer that has access to the Internet. However, many e-business applications that access sensitive company information require access to be limited to qualified individuals or partners. If information is restricted to employees inside an organization, this is an **intranet**. If access is extended to some others, but not everyone beyond the organization, this is an **extranet**. Whenever you log-on to an Internet service such as that for an e-retailer or online news site, this is effectively an extranet arrangement, although the term is most often used to mean a business-to-business application

Communication Gateways

Communication gateways

- **CRM**
- **SCM**

What is CRM?

CRM methodology enables the organization to understand the customers' needs and behavior better. It introduces reliable processes and procedures for interacting with customers and develops stronger relationships with them. The process helps organization in assimilating

information about customers, sales, marketing effectiveness, responsiveness, and market trends. Then this information is used to give insight into behavior of customers and value of retaining those customers. The whole process is designed to reduce cost and increase profitability by holding on to the customer loyalty.

A simple installation and integration of the software package doesn't ensure success. It has to be absorbed into the system. Employees have to be convinced about its positive attributes, and then they have to be trained. The existing business processes have to be modified. The company has to decide what kind of information is to be collected about the customers, what is to be done with the information, and prioritize this accumulated information. The company must drill into this database of its customers and ascertain their buying patterns, product preferences, the potential for add on sales etc.

A good strategy will be to integrate every area of touch point with customers like marketing, sales, customer service, and field support. This is achieved with the integration of the people, process, and technology in the business

Objectives of CRM

CRM, the technology, along with human resources of the company, enables the company to analyze the behavior of customers and their value. The main areas of focus are as the name suggests: ***customer, relationship,*** and ***the management of relationship*** and the main objectives to implement CRM in the business strategy are:

- To simplify marketing and sales process
- To make call centers more efficient
- To provide better customer service
- To discover new customers and increase customer revenue
- To cross sell products more effectively

The CRM processes should fully support the basic steps of ***customer life cycle.*** The basic steps are:

- Attracting present and new customers
- Acquiring new customers
- Serving the customers
- Finally, retaining the customers

Selection of the Right CRM Technology

The point here is ***one size doesn't fit all.*** There is no single CRM software or formula which will give instant success to all companies. For small or medium enterprises, the requirement is different from that of big firms. Most CRM packages provide excellent sales force automation, but not equally good integration with computer telephony, or with web. These are adequate for small and medium firms but not for large firms. A mix of different software to link the databases,

data warehousing software, contact management software, and a CRM package will go a long way in helping to upgrade the small companies.

Other internet enabled applications available are enterprise resource planning packages, e-commerce applications, relationship management packages, enterprise portal applications etc. One can adopt the best practices to slash costs, introduce efficiencies into supply chain and internal operations. Today t he global market for CRM services and solutions is currently worth $148 billion. This proves to show the numerous choices available in this field.

Benefits

The following are the benefits of adopting CRM processes:

- Develop better communication channels
- Collect customer related data
- Create detailed profiles of individual customers
- Increased customer satisfaction
- Access to customer account history, order information, and customer information at all touch points
- Identify new selling opportunities
- Increased market share and profit margin
- Increased revenues
- More effective reach and marketing
- Improved customer service and support
- Improved response time to customer requests for information
- Enhanced customer loyalty
- Improved ability to meet customer requirements
- Improved quality communication and networking
- Reduced costs of buying and using product and services
- Better stand against global competition

Types of CRM

When it comes to application of CRM, three broad classifications are possible. They are:

- Operational CRM
- Analytical CRM
- Collaborative CRM

Operational CRM

The operational application of CRM enables effective interaction with customers. For this purpose various tools are used. These ***contact management tools*** aim to reduce costs by improved process efficiency and use of media based communication

channels. These are also aimed to provide customers with a consistent interface across all communication channels. To achieve this relevant customer data is collected and also displayed at all customer touch points. This is the customer master data. Another set of data where employees' contact with customers is also logged. This has information like topics discussed, customer requirements, ***soft*** customer data like hobbies, preferences, interests, details about children and other minor stuffs.

Banks are an exemplary implementation of CRM as customer contact management. ***Channel management tools*** aim to understand how customer interacts with the company. It aims to deliver products and services across multiple channels in effective, efficient, and consistent manner. ***Content management tools*** enable the company to manage what is visible to the customers i.e. what the customers are able to see when they interact with the company. The various processes undertaken are: campaign management, sales management, service management, and complaint management.

Analytical CRM

The data collected in operational management is analyzed to segment customers. The valuable information thus obtained is used to satisfy customers. Analytical CRM is composed of:

1. Pattern discovery component
2. Product and customer analysis component
3. Multitude component
4. Sorting and customer fractionation component
5. Customer value evaluation component

Analytical solutions provided for most companies are integrated view of customer across all channels and applications, campaign performance analysis, customer profitability analysis, cross-selling and up selling. The analytical solutions help answer questions like:

1. Who are their best customers?
2. Whom they are likely to lose?
3. How to retain them?
4. How to attract new customers?
5. How to improve profitability of customers?

Examples are data warehousing, online analytical processing (OLAP), and data mining systems.

Note: Concept of ***customer segmentation*** : the value of customer is judged based on ***RFM*** analysis i.e. focusing on ***Regency, Frequency,*** and ***Monetary*** value from customer purchasing data in retail business. Accordingly the customers are divided into various levels. The four main segments of customers are:

- At the top is the VIP customer whose expenditure is most and form 1% of all customers in a certain period.
- Then the main customer forming 5%.
- Next the ordinary customer forming 20%.
- And at the bottom is the scattered customer an overwhelming 80%.

The first three categories create more than 80% of all profits for the company and as a result they are differentiated as the best customers. They are the real targets of ***Customer Centralization.***

Collaborative CRM

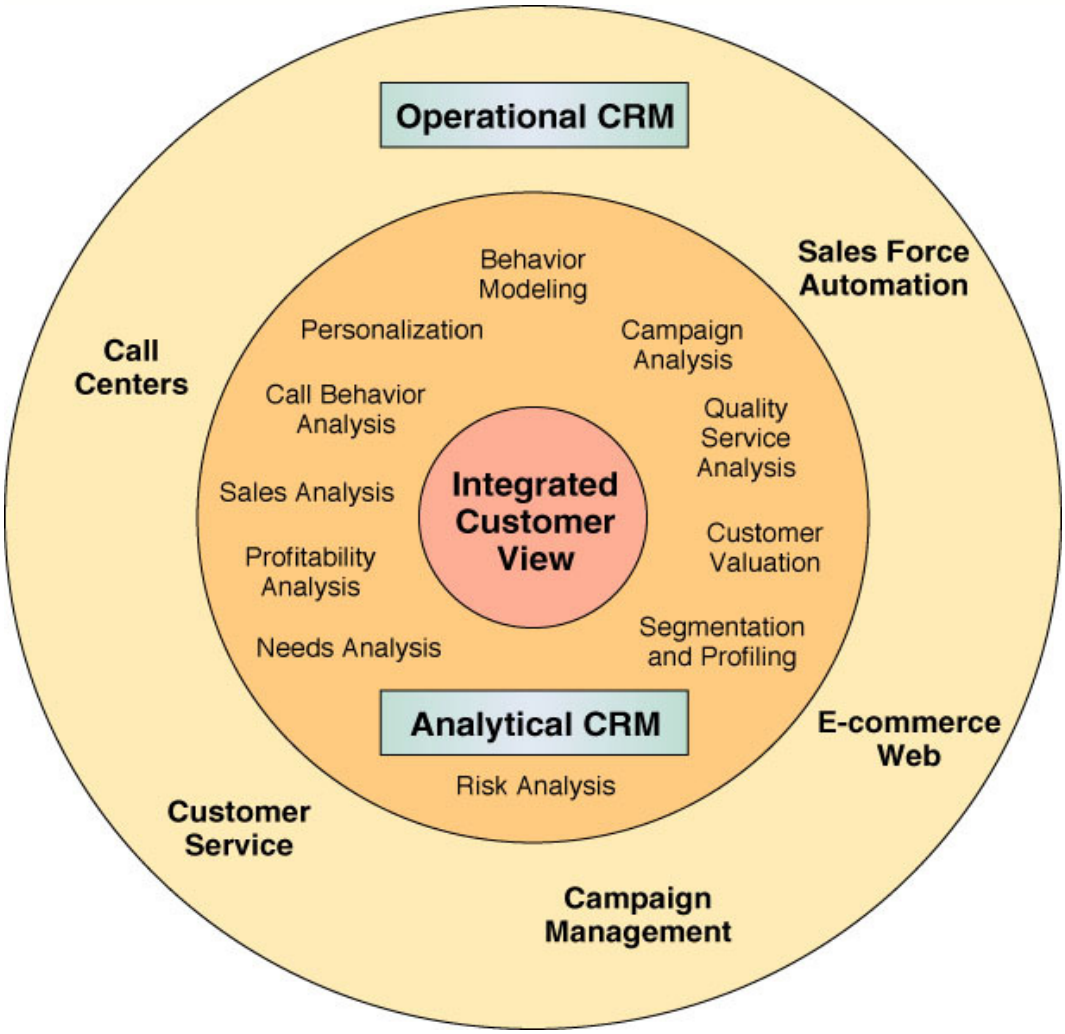
The various departments of company like the sales, technical support, and marketing, share the information they collect about customers. The objective is to improve the quality of customer service and increase customer loyalty.

It allows the company to synchronize and manage efficient, productive interaction with customers, prospects, partners, and internal associates across all communication channels. The customers' viewpoint is taken care of at every transaction level thus enabling better service to the customer. Collaborative CRM also reduces web service costs by enabling web collaboration

Implementation

To implement CRM, following factors need to be given due consideration:

- - Easy interaction between customers and company, enhancing quick response to customers' request and suggestions
- - Easy access to information about company like content of customization, advantages of the company, benefits doled out to the customers. This establishes profitable relationships with the customers based on mutual trust and respect
- - Abundant supply of customer information which have been accumulated and integrated from different channels
- - Grow with customers i.e. customers' information should be updated along with the passage of time
- - Have cordial relationship with other companies targeting the same customer segment. Thus giving relevant solution to customers' need and increasing acknowledgement to customers
- - Customers' information must be segmented to provide support for customization based on personalized information i.e. tailoring the company's product and services accordingly



Improvement in customer relationships increases customer loyalty, decreases customer turnover, increases sales revenue, and decreases marketing costs, thus increasing profit margins.

Company types that must adopt CRM

Companies that do not have repeat business from customers will not gain much from CRM. And also that have walk-in customers not providing multiple sales and service channels will not benefit much from CRM. Again if maintaining long term relationship with customer is not a priority for the company, it will be wise not to invest in CRM. Then who benefits? The more the channels to access customers and more the number of touch points with customers, greater is the need for CRM installation. Companies in

- banking
- finance
- insurance

- airlines and hotels
- Telecommunications and health care benefit from installing CRM software.

Technical Functionalities

Multiple communication channel - This is one major factor of CRM, which enables business to be responsive to the needs and desires of its customers. CRM solutions provide better utilization of all communication channels in company. The various communication channels are:

- **Web channel** - This supports a number of customer service and customer account management activities. Customers can verify and browse product descriptions and also report problems through this channel.
- **Fax channel** - Company can use this channel to generate fax that is sent directly to customers, while customers use this to submit requests for information and contact.
- **Interactive TV channel** - Cable TV companies interact with customers through this channel.
- **IVR (Integrated Voice Response)** - This channel answers all incoming calls from the toll free network, and also provides guidance through use of prompts.
- **E-mail** - Customers can e-mail their service requests and check status. The company can also use this as outbound channel to distribute information.
- **Direct mail** - This channel is used primarily for outbound communication to customers. The inbound direct mails are not managed by CRM.
- **Direct field sales force channel** - Activities like browsing product offerings, capturing leads, completing orders, and performing high level customer care are all done remotely by the agents through this channel.

Database - database of customers is created by collecting information through semi-structured interviews, document analysis of annual reports, organizational charts, and system charts. The information is collected on the basis of strategy and process of CRM. The information thus collected is continuously updated to build up a lifetime relationship.

Workflow and assignment - CRM solutions enhance the customer service by clearly defining the tasks, assigning the tasks to the various departments. The order of carrying out the tasks is spelt out. CRM solutions also monitor the smooth flow of information to support the task and finally keep track of the tasks being completed.

Scalability - CRM applications can be used on a large scale, in terms of number of participants it can handle, and can be expanded to any desired scale.

Privacy concerns - This functionality is one of the major factors in the selection criteria of CRM applications. Those organizations implementing customer facing operational applications, customer intelligence, and customer-centric marketing must give priority to customer privacy

issue in deciding the business strategy. Questions like how customers' privacy can come into play during operation and how it is protected in each application need to be answered first before choosing the right CRM solution.

Often it is seen that CRM applications has not brought success to organizations as expected. The failure rate for CRM implementations is as high as 70%. The reasons are:

- Absence of a clear transitional process i.e.. a step by step awareness, a clear funding strategy, and attainable goals is a must rather than introducing sweeping changes all at once.
- The main focus of business is on products' sale and geographical segmentation of market but not on customer segments.
- Key performance measurements are not tracked. Data integration, interdepartmental communication, and good supervision of these processes are critical to success.
- Weak functional organization of a company can cause customer and employees' confusion.
- Short term interests are often given importance. Ethics must be given priority over financial gains. A customer focused company must be prepared to make recommendations in favor of customers even at the cost of short term interests of the company.
- The financial measures of success are often inadequate. In a customer centric model the branding, research, and development must align with development, compensation, budgeting, and incentive policies.
- Other new technology and solutions are introduced without implementing the necessary framework.

What is ERP

ERP is the acronym of Enterprise Resource Planning. ERP utilizes ERP software applications to improve the performance of organizations' resource planning, management control and operational control. ERP software is multi-module application software that integrates activities across functional departments, from product planning, parts purchasing, inventory control, product distribution, to order tracking. ERP software may include application modules for the finance, accounting and human resources aspects of a business.

ERP vs. CRM and SCM

CRM (Customer Relationship Management) and SCM (Supply Chain Management) are two other categories of enterprise software that are widely implemented in corporations and non-profit organizations. While the primary goal of ERP is to improve and streamline internal business processes, CRM attempts to enhance the relationship with customers and SCM aims to facilitate the collaboration between the organization, its suppliers, the manufacturers, the distributors and the partners.

ERP Definition - A Systems Perspective

ERP, often like other IT and business concepts, are defined in many different ways. A sound definition should several purposes:

1. It answers the question of "what is ... ?".
2. It provides a base for defining more detailed concepts in the field - ERP software, ERP systems, ERP implementation etc.
3. It provides a common ground for comparison with related concepts - CRM, SCM etc.
4. It helps answer the basic questions in the field - benefits of ERP, the causes of ERP failure etc.

A definition of ERP based on **Systems Theory** can server those purposes. ERP is a system which has its goal, components, and boundary.

The Goal of an ERP System - The goal of ERP is to improve and streamline internal business processes, which typically requires reengineering of current business processes.

The Components of an ERP System - The components of an ERP system are the common components of a Management Information System (MIS).

- **ERP Software** - Module based ERP software is the core of an ERP system. Each software module automates business activities of a functional area within an organization. Common ERP software modules include product planning, parts purchasing, inventory control, product distribution, order tracking, finance, and accounting and human resources aspects of an organization.
- **Business Processes** - Business processes within an organization falls into three levels - strategic planning, management control and operational control. ERP has been promoted as solutions for supporting or streamlining business processes at all levels. Much of ERP success, however, has been limited to the integration of various functional departments.
- **ERP Users** - The users of ERP systems are employees of the organization at all levels, from workers, supervisors, mid-level managers to executives.
- **Hardware and Operating Systems** - Many large ERP systems are UNIX based. Windows NT and Linux are other popular operating systems to run ERP software. Legacy ERP systems may use other operating systems.

The Boundary of an ERP System - The boundary of an ERP system is usually small than the boundary of the organization that implements the ERP system. In contrast, the boundary of supply chain systems and ecommerce systems extends to the organization's suppliers, distributors, partners and customers. In practice, however, many ERP implementations involve the integration of ERP with external information systems.

ERP modules

ERP software is made up of many software modules. Each ERP software module mimics a major functional area of an organization. Common ERP modules include modules for product planning, parts and material purchasing, inventory control, product distribution, order tracking, finance, accounting, marketing, and HR. Organizations often selectively implement the ERP modules that are both economically and technically feasible.

ERP Production Planning Module:

In the process of evolution of manufacturing requirements planning (MRP) II into ERP, while vendors have developed more robust software for production planning, consulting firms have accumulated vast knowledge of implementing production planning module. Production planning optimizes the utilization of manufacturing capacity, parts, components and material resources using historical production data and sales forecasting.

ERP Purchasing Module:

Purchase module streamlines procurement of required raw materials. It automates the processes of identifying potential suppliers, negotiating price, awarding purchase order to the supplier, and billing processes. Purchase module is tightly integrated with the inventory control and production planning modules. Purchasing module is often integrated with supply chain management software.

ERP Inventory Control Module:

Inventory module facilitates processes of maintaining the appropriate level of stock in a warehouse. The activities of inventory control involves in identifying inventory requirements, setting targets, providing replenishment techniques and options, monitoring item usages, reconciling the inventory balances, and reporting inventory status. Integration of inventory control module with sales, purchase, finance modules allows ERP systems to generate vigilant executive level reports.

ERP Sales Module:

Revenues from sales are live blood for commercial organizations. Sales module implements functions of order placement, order scheduling, shipping and invoicing. Sales module is closely integrated with organizations' ecommerce websites. Many ERP vendors offer online storefront as part of the sales module.

ERP Market in Module: ERP marketing module supports lead generation, direct mailing campaign and more.

ERP Financial Module:

Both for-profit organizations and non-profit organizations benefit from the implementation of ERP financial module. The financial module is the core of many ERP software systems. It can gather financial data from various functional departments, and generates valuable financial reports such balance sheet, general ledger, trail balance, and quarterly financial statements.

ERP HR Module:

HR (Human Resources) is another widely implemented ERP module. HR module streamlines the management of human resources and human capitals. HR modules routinely maintain a complete

employee database including contact information, salary details, attendance, performance evaluation and promotion of all employees. Advanced HR module is integrated with knowledge management systems to optimally utilize the expertise of all employees.

E-Business Statistics

Business-to-business (B2B) E-business statistics – Europe

The Europe site has the best range of B2B Internet usage statistics showing variations in adoption and Internet usage and ICT use across the European Union.

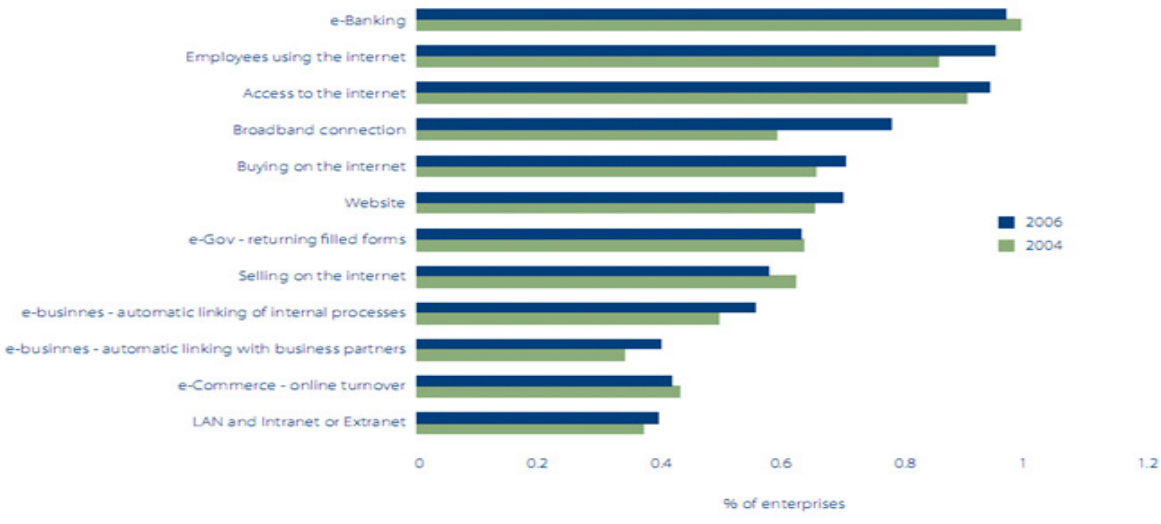
Tags (view related articles): ***Internet marketing statistics***, ***Business-to-Business (B2B)*** The B2B Internet data is part of the i2010 initiative which also covers consumer internet use.

- View **B2B Internet usage statistics**

Across all 25 countries surveyed in 2006, the average percentage levels of Internet transactions, which show the potential for future growth in Business-to-business E-commerce, are:

- 11.7% e-commerce as % of total turnover of enterprises
- 13.9 % enterprises receiving internet orders
- 37.9 % enterprises purchasing on the internet

Figure 14 **Take-up of ICT**
SMEs v. large enterprises



Source: Eurostat, Community Survey on ICT use in Enterprises

E-Business strategies

E-business strategy defined

An update on the definition of E-business strategy highlighting the essence of an E-business or Internet strategy for an organization planning its digital strategy.

E-business strategy introduction

In the 3rd edition update to E-business and E-commerce Management, I have reviewed how best to explain E-business principles - how does an E-business strategy differ from other strategies? The post sets out what I see as the essence of an E-business strategy.

You may also find this **definition of E-business and E-commerce** useful.

E-business strategy can be created through following these established principles of business planning, but through careful consideration of how to best identify and exploit the differences introduced by new electronic channels. In a nutshell, E-business isn't just about "*how to do business online*"; it's about "*how to do business differently online*". The E-business strategy defines how.

E-business strategy characteristics

E-business strategies share much in common with corporate, business and marketing strategies.

These typical quotes summarizing the essence of strategy could equally apply to each, strategy:

- "Is based on current performance in marketplace"
- "Defines how we will meet our objectives"
- "Sets allocation of resources to meet goals"
- "Selects preferred strategic options to compete within a market"
- "Provides a long-term plan for the development of the organization"

The E-business strategy imperative

Many ask why a separate E-business strategy is required.

But, think about the implications if e-business strategy is not clearly defined. I have seen these in many organizations:

- Missed opportunities and from lack of evaluation of opportunities or insufficient resourcing of e-business initiatives. These will result in more savvy competitors gaining a competitive advantage;
- Inappropriate direction of e-business strategy (poorly defined objectives, for example with the wrong emphasis on buy-side, sell-side or internal process support);
- Limited integration of e-business at a technical level resulting in silos of information in different systems;

- Resource wastage through duplication of e-business development in different functions and limited sharing of best practice. For instance, each business unit or region may develop a separate web site with different suppliers without achieving economies of scale

E-business channel planning strategies

An important aspect of E-business strategies is that they should create new "e-channel strategies" for organizations.

An E-channel strategy defines how a company should set specific objectives and develop specific differential strategies for communicating with its customers and partners through electronic media such as the Internet, E-mail and wireless media.

E-channel strategies define specific goals and approaches for using electronic channels. This is to prevent simply replicating existing processes through e-channels, which will create efficiencies but will not exploit the full potential for making an organization more effective through e-business.

Without specific goals and strategies to communicate the benefit of E-channels for customers and partners, adoption of the new channels will be slow relative to a structured approach. We will see in the section on objective setting that key metrics about online contribution can be set which suggest the percentage and value of leads, sales, services and purchases that are facilitated through e-commerce transactions.

E-channel strategies also need to define how electronic channels are used in conjunction with other channels as part of a multi-channel e-business strategy.

This **multi-channel e-business strategy** defines how different marketing and supply chain channels should integrate and support each other in terms of their proposition development and communications based on their relative merits for the customer and the company. Finally, we also need to remember that e-business strategy also defines how an organization gains value internally from using electronic networks, such as sharing employee knowledge and improving process efficiencies through intranets.

To summarise;

- E-business strategy is a channel strategy
- Specific E-business objectives need to be set to benchmark adoption of e-channels.
- E-business strategy defines how we should:

1. Communicate the benefits of using e-channels 2. Priorities audiences or partners targeted for e-channel adoption 3. Priorities products sold or purchased through e-channel 4. Achieve our e-channel targets

- E-channel strategies thrives on creating differential value for all parties to a transaction
- BUT e-channels do not exist in isolation, so we still need to manage channel integration and acknowledge that the adoption of e-channels will not be appropriate for all products or services or generate sufficient value for all partners.

This selective adoption of e-channels by business according to product or stakeholder preference is sometimes referred to as "right-channeling".

- E-business strategy also defines how an organization gains value internally from using electronic networks, such as through sharing employee knowledge and improving process efficiencies through intranets.

Please add your thoughts below - how do you see the best way of explaining e-business strategy.

Advantages of E-Business

Lower Sales Costs

- Traditional businesses typically rely on salespeople to interact with customers and convince them to buy products and services. Although commonly paid on commission, the cost of paying a sales force can represent a substantial business expense. Through product descriptions, images and videos, you can provide the information online that a customer needs to make a purchase decision. Because your website acts as your sales force, e-business can dramatically reduce your acquisition costs.

Broader Customer Reach

- Unlike traditional businesses, e-businesses can access customers in a broad geographic area. If your products and services are appropriate for an international audience, you can use online marketing strategies to attract customers all around the world. The enhanced potential for geographic reach can help increase business sales.

Improved Sales Tracking

- Ecommerce solutions can enable you to accept online payments for your services and products; a variety of companies can provide integrated online shopping carts and credit card processing. Ecommerce solutions also commonly provide tools to track and analyze sales based on factors such as geographic area, amount of purchase, time and day of the week of purchase, returns and type of payment method. This data can help you refine your business approach to capitalize on sales trends and maximize profits.

Customer Retention

- Online payment solutions typically collect customers' email addresses along with payment and shipping information. You can also integrate an opt-in form on your website to provide potential customers with discounts, special offers and online newsletters in exchange for their email addresses. Compiling an email list through sales and opt-in forms allows you to stay in contact with your potential and existing customers to increase repeat sales and sustain business income.

Customer Convenience

- E-business allows your customers to shop and make purchases without ever having to leave their homes or offices. The increased convenience of online shopping is attractive

to customers who are interested in your products or services but who do not have the time to travel to a traditional store to complete purchases.

Differentiating between different E-Business Category

Categories of E-Business

When people think of e-business, online retail outlets typically come to mind. While this is the main form of e-commerce, there are a few other types of online business models as well. Each category of e-business has its own specific traits and advantages, and can work in various industries.

Traditional Consumer Business

- **B2C** **(Business-to-Consumer)**

A common e-business type is the consumer business, commonly referred to as the business to consumer model, or B2C. This type of e-business provides a product or service aimed at a specific consumer market. Examples of B2C e-businesses include e-commerce clothing stores, online bookstores and Internet music retailers.

Businesses selling to the general public typically through catalogs utilizing shopping cart software. By dollar volume, B2B takes the prize, however B2C is really what the average Joe has in mind with regards to ecommerce as a whole.

Having a hard time finding a book? Need to purchase a custom, high-end computer system? How about a first class, all-inclusive trip to a tropical island? With the advent ecommerce, all three things can be purchased literally in minutes without human interaction. Oh how far we've come!

Business to Business Trade

- **B2B** **(Business-to-Business)**

  As is typical with brick and mortar operations, businesses must often source inventory and services from other business providers. E-businesses that do this are called business to business, or B2B. Business to business e-commerce operations include wholesale-only websites, Internet-based public relations, graphic design and business consulting firms, and web designers that specialize in working with businesses.

Companies doing business with each other such as manufacturers selling to distributors and wholesalers selling to retailers. Pricing is based on quantity of order and is often negotiable.

Consumer to Business Trading

- **C2B** **(Consumer-to-Business)**
  One category of e-business rapidly becoming more prevalent is consumer to business trading, also referred to as C2B. In this model, consumers post a need for a service or product, such

as building contracting, dance lessons or a supplier of light fixtures, and businesses make proposals to gain clients. C2B e-businesses can often be seen on Internet forums and classified-ad sites. The proprietor of a C2B business usually makes money from membership, posting or advertising fees.

A consumer posts his project with a set budget online and within hours companies review the consumer's requirements and bid on the project. The consumer reviews the bids and selects the company that will complete the project. Elance empowers consumers around the world by providing the meeting ground and platform for such transactions.

Companies using internal networks to offer their employees products and services online--not necessarily online on the Web--are engaging in B2E (Business-to-Employee) ecommerce.

G2G (Government-to-Government), G2E (Government-to-Employee), G2B (Government-to-Business), B2G (Business-to-Government), G2C (Government-to-Citizen), C2G (Citizen-to-Government) are other forms of ecommerce that involve transactions with the government--from procurement to filing taxes to business registrations to renewing licenses. As far as we known, in the nowadays, e-commerce has emerged as a new force. However, not everyone has accurate information of it. We often hear people mention B2B, B2C and C2C, but what are they? Actually, they are different e-business modes.

As a professional **e-commerce dealer**, ePathChina is pleased to share some useful information about e-commerce modes. There are almost seven kinds, namely, B2B, B2C, C2C, B2M, M2C, B2A (B2G) and C2A (C2G).

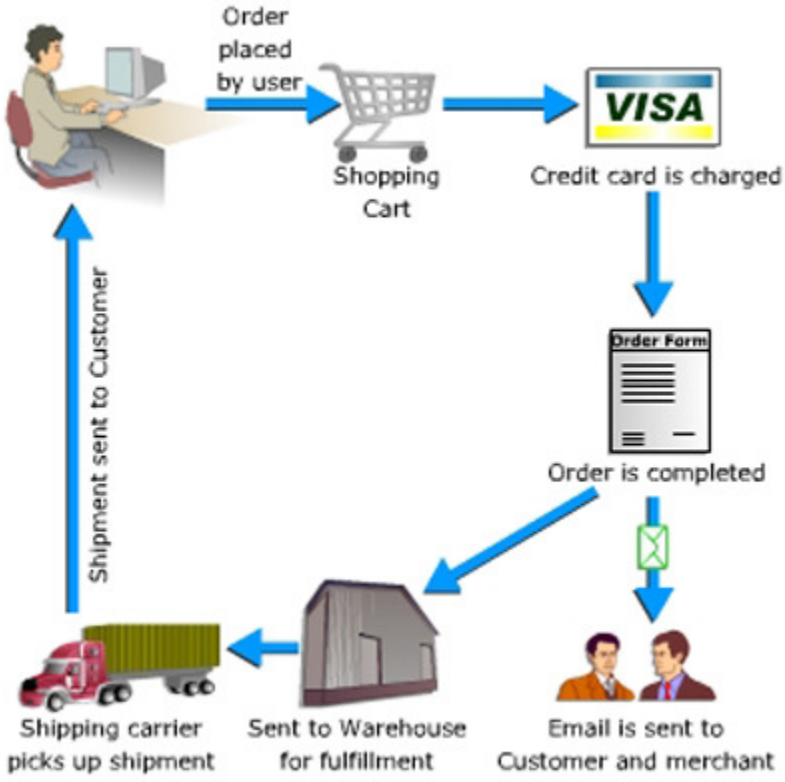
B2B = Business to Business

B2B (referring to the enterprises), namely have products, services, and information exchanging between enterprise to enterprise. Sometimes it is written as B to B. according to the target, B2B can be divided into foreign trade B2B and domestic B2B; in accordance with field can be divided into comprehensive B2B and vertical B2B. For instance, alibaba.com, made-in-china.com, dhgate.com, hc360.com etc. are typical B2B dealers in China.

B2C = Business to Customer

B2C is the earliest e-commerce mode in China, with a sign of 8848 online mall's official operating. B2C means enterprises provide a new shopping environment for consumers through

the Internet – **online stores**, consumer can purchase online and pay online. This mode saves the time and space of enterprises and customers, which improve the transactional efficiency. The famous domestic B2C are dangdang.com, joyo.com and so on.



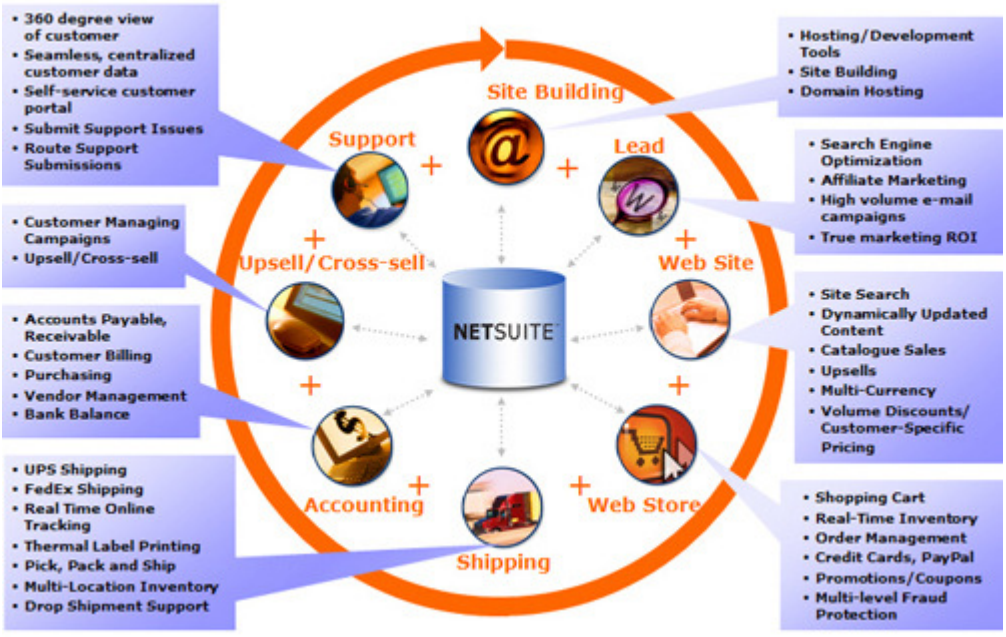
C2C = Consumer to Consumer

As a e-commerce mode, unlike B2B and B2C, C2C is a pattern between consumers and consumers that provides an online transaction platform for contracting parties, which not only make sellers provide commodities auction online but also buyers select and bid up the preferred goods themselves, such as ebay.cn, taobao.com, paipai.com, youa.com.

B2M = Business to Manager

Comparatively speaking, B2M is a kind of brand-new mode of electronic business. But this mode has essential difference from above three. The ultimate difference lies in their target client base's features. The former three's target customers group appear as consumers, but B2M's customers group are enterprises or products sellers or other worker, not ultimate consumers.

Compared with the traditional e-commerce, B2M has a greater advantage: e-commerce below the line development! B2M can bring online commodities and service to below-the-line. Enterprises publish their products or services through the network; professional managers obtain the products or services information on the net, and provide products selling or enterprises services, then, enterprises achieve the object of selling products and gain services with the services from managers, both online or offline. Professional managers earn commission by providing services for enterprises. Essentially, B2M is a proxy pattern.



M2C = Manager to Consumer

M2C is not only an extension of B2M, but also an obbligato follow-up developing like of B2M. Unlike B2M doesn't target at final consumers, in M2C link, the manager will face consumers, namely ultimate consumers.

Managers will eventually sell products to consumers, similar to the C2C, but not completely. C2C is a traditional profit pattern, whose earning is basically the price difference of offer goods. Nevertheless, the profit models of M2C and are abundant and flexible; they can be both the price difference and commission. And M2C's logistics management mode can be also more diverse than C2C, such as zero inventories; and cash flow has more advantages than traditional C2C.

B2A = Business to Administration (B2G = Business to Government)

Introduction to E-commerce definition

"*Electronic commerce (e-commerce) is often thought simply to refer to buying and selling using the Internet; people immediately think of consumer retail purchases from companies such as Amazon. But e-commerce involves much more than electronically mediated financial transactions between organizations and customers. Many commentators refer to e-commerce as all electronically mediated transactions between an organization and any third party it deals with. By this definition, non-financial transactions such as customer requests for further information would also be considered to be part of e-commerce.*"

"*When evaluating the strategic impact of e-commerce on an organization, it is useful to identify opportunities for buy-side and sell-side e-commerce transactions as depicted in Figure 1.1, since systems with different functionalities will need to be created in an organization to accommodate transactions with buyers and with suppliers.* ***Buy-side e-commerce*** *refers to transactions to procure resources needed by an organization from its suppliers.* ***Sell-side e-commerce*** *refers to transactions involved with selling products to an organization's customers. So e-commerce transaction between organizations can be considered from two perspectives: sell-side from the perspective of the selling organization and buy-side from the perspective of the buying organization.*"

Types of sell-side E-commerce

How E-commerce can apply E-commerce varies a lot according to the market they are in. I identify four main types of site which you will commonly see, although they do overlap. These are:

1. **Transactional e-commerce site**. These enable purchase of products online. The main business contribution of the site is through sale of these products. The sites also support the business by providing information for consumers that prefer to purchase products offline. These include retail sites, travel sites and online banking services.
2. **Services oriented relationship building web site**. Provides information to stimulate purchase and build relationships Products are not typically available for purchase online. Information is provided through the web site and e-newsletters to inform purchase decisions. The main business contribution is through encouraging offline sales and generating enquires or leads from potential customers. Such sites also add value to existing customers by providing them with detailed information to help them support them in their lives at work or at home.
3. **Brand building site**. Provide an experience to support the brand. Products are not typically available for online purchase. Their main focus is to support the brand by developing an online experience of the brand. They are typical for low-value, high volume Fast Moving Consumer Goods (FMCG brands) for consumers.
4. **Portal or media site**. Provide information or news about a range of topics. Portal refers to a gateway of information. This is information both on the site and links through other sites. Portals have a diversity of options for generating revenue including advertising, commission-based sales, sale of customer data (lists).

How is E-business and E-commerce management used

You will find that the term E-business is used in two main ways within organizations. The first is as a concept which can be applied to strategy and operations. For example, 'our organist ion needs an improved e-business strategy (or E-business technology)'. Secondly E-business is used as an adjective to describe businesses that mainly operate online, i.e. they have no physical presence on the high-streets and seek to minimize customer-service and support through enabling 'web self-service'. In the dot-com era they used to be known as 'pure-plays'. For example Amazon (www.amazon.com) and eBay (www.ebay.com, Case study 1.3) are the world's two biggest e-businesses.

Interdisciplinary Nature of E-Commerce:

Interdisciplinary Nature of EC - meaning, e-commerce covers a lot of different areas

- Marketing

- Computer Sciences
- Consumer behavior and psychology
- Finance
- Economics
- MIS - Management Information Systems
- Accounting and Auditing
- Management
- Business Law and Ethics

Benefits & Limitation of E-Commerce:

Benefits and Limitations of e-business / e-commerce, is to give you the tools to answer to people who question the value, or purpose, of having an online component of their marketing program.

Most people appreciate the basic benefit that e-business may help them sell more, but beyond that they are not too clear - *your job is to point out **more** benefits so it will become obvious that e-business is a great thing and that they need you to help them do it.*

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Benefits of e-Business e-Commerce

- Benefits to organizations that use this with their business partners
- Benefits to consumers
- Benefits to society

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Limitations

- Technical Limitations
- Non-Technical Limitations

Basic Benefits of e-Business e-Commerce

- **o** increase sales - this is the first thing that people consider when dealing w e-commerce
- **o** decreasing costs
- **o** provide price quotes
- **o** increase profits
  - **o** understanding that profits is not the same as sales
- **o** Expands the size of the market from regional to national or national to international
- **o** Contract the market
- **o** reach a narrow market
  - **o** target market segmentation allows you to focus on a more select group of customers
  - **o** and therefore have a competitive advantages in satisfying them

.

Decreasing costs

- **o** costs of creating the product
- **o** marketing
  - **o** of promotional material
- **o** costs of distribution
  - o e.g. Netscape allowing you to download instead of waiting to get the CD by mail

O costs of processing (orders from the customers)

- o repeat activities and information processing
- o of handling customer phone calls
- o of handling sales inquiries
- o determine product availability (inventory management)

O costs of storing information

o lowers telecommunication costs.cc

Provide price quotes

- with a web site, you can have the prices listed, and change them
  - you simply edit the web page

- in a printed catalogue you are stuck with the expense of printing a new version if you need to change many of the prices

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UNIT-II

Business-to-Business form of E-Commerce

An overview of Inter-Organizational Information Systems

Web-enabled applications for business-to-business (B2B) electronic commerce are expected to enhance inter-organizational coordination and improve relationships among business partners. In B2B procurement, proposed potential benefits are in transaction cost savings and competitive sourcing opportunities. However, organizations still are unsure whether a Web-based B2B e-commerce system can deliver the promised benefits.

For example, is the use of the Web an improvement over existing, and mature, information technology (IT) systems, such as electronic data interchange (EDI)? In this context, two of the important research questions that we address in this paper are:

1. What is the value of Web-based procurement to an enterprise? How is it created?

How do we measure this value?

2. What factors most affect the realization of the potential value of a Web-based

Procurement system?

Model of B2B form of E-commerce

Central to this inquiry is the need for organizations to measure and determine the impact of Web-based system on B2B processes and the value to the enterprise. Knowing the value of Web-based systems is a necessary first step to motivate users to adopt the system. In the current economic environment, when organizations are critically evaluating each of their investment, Web-based B2B systems are no exception. But, as IT evolves from a mere productivity tool to a more pervasive and strategic business tool, the measurement of its value to an organization has become more challenging. Most evidence of Web benefits at organizational level are anecdotal and there are very few systematic studies that look at the value from organization's perspective. Moreover, the nature of the Web creates impacts beyond the traditional organizational boundaries, requiring the cooperation of business partners and, in some cases, even competitors within the industry. Thus, there is a need for a better framework to determine the value of the Web for an organization. Using Web-based B2B procurement as a case, we present a value framework that draws on prior work on IT impact, but considers the capability of Web to create new value. We apply our methodology to help a major mid-western heavy equipment

manufacturer evaluate the potential of its Web based procurement system. Our preliminary results indicate that even though all the stages of B2B procurement can be affected by Web, the realized value is dependent on the characteristics of B2B process, the organization of business units and the supply chain. Our B2B impact framework, in addition to clearly identifying the areas of Web value, help organizations understand and manage the critical factors that influence this value. Our paper is organized as follows. We discuss Web-based procurement systems to know how they create benefits for an organization and formulate the research questions being addressed in this paper. We then review the existing literature on IT value and present the need for a different framework to understand value of the Web. Our valuation framework is presented followed by an analysis of the effect of critical factors on the Impact on B2B tasks A Web-based procurement system provides enhanced search capabilities, faster and accurate processing, real-time and rich-media information support, and low communication and coordination costs. From the buying enterprise point of view, use of a Web-based system affects four major categories of B2B operations - search, order processing, monitoring and control, and coordination. Search: Search costs are costs incurred by the buyer to locate an appropriate seller and purchase a product. Search costs in procurement are incurred at two places –when the professional buyer looks for a supplier for contracting purchases and when the individual user in the organization looks for the appropriate product to order. In both cases, the Web and associated search engines considerably lower the search costs, which can be quite significant in large organizations. Web-enabled search engines help users to easily search using multiple methods to ensure that she can find the right product even with limited available information. This "user-friendliness" of the system reduces the "premium buys", where the user goes around the procurement system and incurs higher processing and product costs.

Factors B2B tasks Impact on intermediate

Measures Impact on performance measures

Processing: Web-based procurement system involves electronic document routing and information flow, thus reducing labor costs involved with manual processing. Webbased system can automatically route the product request for the necessary approvals and order placement with suppliers. This reduces the transaction cycle time and gets the materials to the user faster. As the system requires minimum data inputs during the information processing cycle, much of the sources of errors are eliminated. Thus, we find that Web-based procurement processing lowers the cycle time, errors and the processing costs.

Monitoring and control: Using a Web-based procurement system, organizations can achieve their twin objectives of responding effectively to the user needs as well as leveraging their combined buying power. Users can search the catalog to identify the most cost-effective supplier and place their orders. Corporate B2B managers can aggregate the demand for the

whole enterprise and use this to negotiate competitive prices for the products, which they can then make available to any business unit, irrespective of the size or location of the unit. Centralized control, combined with the availability of an increased range of items on the electronic catalog, motivates more users to order through the e-procurement system, reducing the extent of "premium buys".

Thus, the major benefits of Web-based monitoring and control are reduction in average product price and reduction in "premium buys".

Coordination: One of the major advances of Web-based IOS over other traditional IOS is its ability to support increased and more complex coordination. Several times, during the fulfillment of an order, procurement personnel need to communicate and exchange information with the suppliers and users. Using a Web-based procurement system provides real-time information flow and is less costly to coordinate with suppliers and users. This leads to faster resolution of any problems and results in lower order cycle time. The low communication costs of the Web and the lesser time spent by the procurement staff in coordination results in lower transaction costs. Improved coordination capability also helps to speed up product development cycle time and avoid design of duplicate components.

The impact of the use of Web for B2B on performance measures can be discussed based on the concept of first order and higher order impacts suggested in IT literature. The first order impact is on intermediate measures that are closer to the process, which in turn affects the performance measures. One of the most visible performance impacts of Web-based procurement is the lower total procurement cost. The reduction in transaction cycle time, caused by the use of Web-based procurement, reduces the labor time used in the process and the labor cost component of the transaction costs. Costs incurred due to electronic processing and coordination is several magnitudes lower than those involved in manual processing and coordination. Lower incidence of errors in a Web-based procurement system reduces the need for labor for error resolution, reducing transaction costs. With less lead times for acquiring products, organizations can store less in inventory and increase inventory turns, leading to lower inventory costs. average price negotiated for contracted items and the lower product development costs contribute to the reduction in the total procurement costs. Quality of the procurement process is an indicator of how well the system meets the procurement needs of the enterprise. Any error in the processing cycle decreases the chance that the product delivered to the user will fully meet her expectations. A measure of process quality is the proportion of B2B orders rejected or returned by the user. Another measure is the number of user complaints about the product. By reducing the probability of errors, a Web-based system can reduce the potential mismatch between user needs and the delivered product, thus reducing user complaints. User satisfaction refers to the perception of the user in the system's effectiveness to meet her business demands. This is more than the receipt of a matching product. User satisfaction is affected by how well the system is

perceived to meet user expectations. Higher cycle time and more errors in the process leads to lower user satisfaction. Access to required information with minimum effort, faster resolution of complaints, and ease of use of the system interface are some ways in which user satisfaction can be improved by a Web-based system

In summary, by implementing a Web-based procurement system, a firm can anticipate the following potential impact on its intermediate and performance measures.

Impact on intermediate measures

1. Lower transaction costs
2. Lower inventory holding costs
3. Lower price
4. Lower product development costs

Impact on performance measures

1. Higher process quality
2. Lower total procurement costs
3. Increased user satisfaction
4. Increased responsiveness of the system

EDI

The basic documents for transaction of business will be taken only once by one agency and other agencies will take the information from that agency, electronically, avoiding the need to either physically take the document from one office to another or keying in the data again and again involving the attendant problems of manual labor and errors creeping in at each stage of data entry.

Benefits of using EDI

There are many benefits of EDI.

- Automatic Data Exchange which removes any manual keying and data entry (which means less jobs == less payment out)
- Quick and Current Updates of information (such as shipping information in computer before physical shipment)
- Increased communications with suppliers and customers
- Reduce usage of paper and waste
- Increased Efficiency
- Cost Savings (From getting rid of people and paper)
- Reduces inventory company must keep (Just In Time (JIT) delivery)
- Improvements in business process

UNIT-III

Business-to-Customer form of E-Commerce

Introduction to concept of E-Banking

E-Banking is becoming increasingly popular among retail banking customers. E-Banking helps in cutting costs by providing cheaper and faster ways of delivering products to customers. It also helps the customer to choose the time, place and method by which he wants to use the services and gives effect to multichannel delivery of service by the bank. This E-Banking is driven by twin engine of "customer-pull and Bank-push".

Electronic funds transfer systems

Electronic Funds Transfer (EFT) is a system of transferring money from one bank account directly to another without any paper money changing hands. One of the most widely-used EFT programs is Direct Deposit, in which payroll is deposited straight into an employee's bank account, although EFT refers to any transfer of funds initiated through an electronic terminal, including credit card, ATM, Fed wire and point-of-sale (POS) transactions. It is used for both credit transfers, such as payroll payments, and for debit transfers, such as mortgage payments.

Electronic payment Mechanism

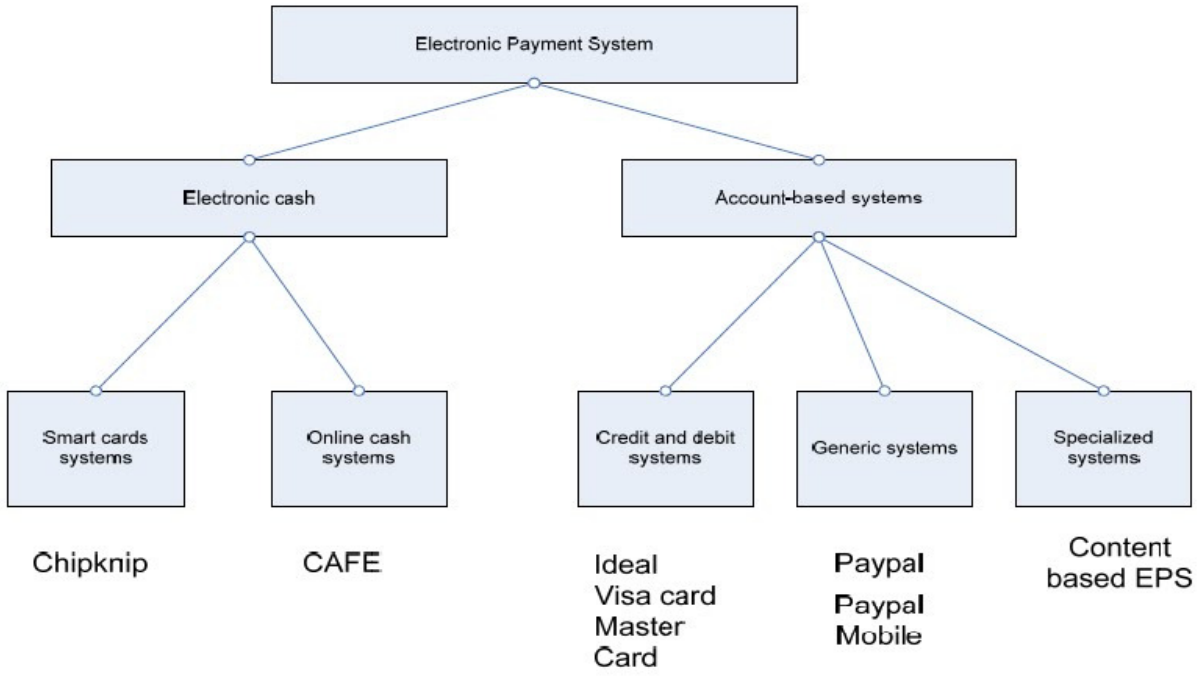


Figure: Classification of electronic payment systems (adapted by D. Abrazhevich)

We categorized the electronic payment systems, we identified that although they used different models and different technologies, and the number of actors involved in these systems is almost the same. They are *Buyer, Insurer, intermediary* (or the system itself, such as: Paypal, credit card company, Chipknip company…), *Merchant, Acquirer and the Network provider* (internet or mobile network)

Basic requirement of electronic payment

Technological Aspect: - Security • Authentication (also referred to as Identification or Validity) • Privacy (also referred to as Confidentiality) • Data integrity (also referred to as Accuracy) • Non-repudiation: • Durability - Authorization type - Process speed - Flexibility - Trust **Economic aspect** - Cost • Buyer cost • Merchant cost	- Liquidity (also referred to as convertibility or Multi currency) - Atomic Exchange - User Reach (also referred to as Applicability or Acceptability) - Value Mobility - Financial Risk **Social aspect** - Anonymity/ traceability - Convenience (also referred to as Easy-to-use) - Mobility - Interoperability **Regulatory Aspects**

Table 1: List of requirement for the electronic payment system

Security issue in the context of online payment system

Security

- Authentication (also referred to as Identification or Validity):

The purpose is to verify the parties in the transaction: a buyer, who is obliged to pay, and a merchant, who is obliged to provide a product or service. In the network environment where lacking face to face meeting, buyer can't observe the merchant's behavior and vice versa. Therefore, there is a risk of misrepresentation, so the identification can prevent this problem, making unauthorized transfers and increase trust between parties

- Privacy (also referred to as Confidentiality):

Only necessary transaction information is revealed to the parties, other data remains unknown. The purpose is to protect the anonymity of the buyer and prevent unauthorized personnel from accessing information from the transactions. For instance, the merchant should not know a customer's card number when an intermediary provides him with a payment certification. The intermediary, in turn, is not supposed to be informed of purchase details.

- Data integrity (also referred to as Accuracy):

The purpose is to prevent tampering with any data in the transaction, to make mistakes when sending information, and to avoid accidentally sending a transaction twice, as well as to avoid transmission errors

- Non-repudiation:

The purpose is to prevent the buyer or the merchant from denying the commitments they made in a transaction. Therefore, information about details of transaction should be recorded somewhere (in the merchant's database or in the intermediary's database)

- Durability:

Users (merchant and buyers) want to be sure that their data or transaction details can be verified and are not going to be misused after a certain period of time. Therefore, the system needs to have some kinds of back-up mechanism

- ***Authorization type:***

This is the ability of a system to perform payments with or without connecting to a central authority. Authorization type can be offline or online. Offline authorization type means that users of the system can exchange money not being connected to a network, without a third party as a mediator.

Merchant account & Payment gateways

A **merchant account** is a type of bank account that allows businesses to accept payments by debit or credit cards. A merchant account is established under an agreement between an acceptor and a **merchant acquiring bank** for the settlement of credit card and/or debit card transactions. In some cases, a payment processor or independent sales organization is also a party to the merchant agreement. Whether a merchant enters into a merchant agreement directly with an acquiring bank, or through an aggregator such as PayPal, the agreement binds the merchant to obey the Operating Regulations established by the card brands.

Payment gateway

A **payment gateway** is an e-commerce service that authorizes payments for e-businesses and online retailers. It is the equivalent of a physical POS (point-of-sale) terminal located in most retail outlets. A **merchant account provider** is typically a separate company from the payment gateway. Some merchant account providers have their own payment gateways but the majority of companies use 3rd party payment gateways. The gateway usually has 2 components: a) the virtual terminal that can allow for a merchant to securely login and key in credit card numbers or b) have the website's shopping-cart connect to the gateway via an **API** to allow for real time processing from the merchant's website.

A **payment gateway** is an **e-commerce application service provider** service that authorizes payments for **e-businesses**, **online retailers**, **bricks and clicks**, or traditional **brick and mortar**. It is the equivalent of a physical **point of sale** terminal located in most retail outlets.
Payment **gateways** protect credit card details by encrypting sensitive information, such as **credit card** numbers, to ensure that information is passed securely between the customer and the merchant and also between merchant and the **payment processor**.

How payment gateways work

A payment gateway facilitates the transfer of information between a payment portal (such as a website, mobile phone or **IVR** service) and the Front End Processor or acquiring bank. When a

customer orders a product from a payment gateway-enabled merchant, the payment gateway performs a variety of tasks to process the transaction

1. A customer places order on website by pressing the 'Submit Order' or equivalent button, or perhaps enters their card details using an automatic phone answering service.
2. If the order is via a website, the customer's web browser encrypts the information to be sent between the browser and the merchant's **web server**. This is done via **SSL** (Secure Socket Layer) encryption.
3. The merchant then forwards the transaction details to their payment gateway. This is another **SSL** encrypted connection to the payment server hosted by the payment gateway.
4. The payment gateway forwards the transaction information to the **payment processor** used by the merchant's **acquiring bank**.
5. The **payment processor** forwards the transaction information to the **card association** (e.g., Visa/MasterCard)
    1. If an **American Express** or **Discover Card** was used, then the processor acts as the **issuing bank** and directly provides a response of approved or declined to the payment gateway.
    2. Otherwise, the card association routes the transaction to the correct card **issuing bank**.
6. The credit card **issuing bank** receives the authorization request and sends a response back to the processor (via the same process as the request for authorization) with a response code. In addition to determining the fate of the payment, (i.e. approved or declined) the response code is used to define the reason why the transaction failed (such as insufficient funds, or bank link not available)
7. The processor forwards the response to the payment gateway.
8. The payment gateway receives the response, and forwards it on to the website (or whatever interface was used to process the payment) where it is interpreted as a relevant response then relayed back to the cardholder and the merchant.
9. The entire process typically takes 2–3 seconds.
10. The merchant submits all their approved authorizations, in a "batch", to their **acquiring bank** for settlement via their processor.
11. The **acquiring bank** deposits the total of the approved funds in to the merchant's nominated account. This could be an account with the acquiring bank if the merchant does their banking with the same bank, or an account with another bank.
12. The entire process from authorization to settlement to funding typically takes 3 days.

Many payment gateways also provide tools to automatically screen orders for fraud and calculate tax in real time prior to the authorization request being sent to the processor. Tools to detect fraud include **geo location**, velocity pattern analysis, delivery address verification, computer finger printing technology, identity morphing detection, and basic **AVS** checks.

Electronic cash

Electronic cash is the **debit card system** of the German **Central Credit Committee**, the association which represents the top German financial interest groups. Usually paired with a **checking account**, cards with an Electronic Cash logo are only handed out by proper credit institutions. An electronic card payment is generally made by the card owner entering their PIN (**Personal Identification Number**) at a so-called EFT-POS-terminal (**Electronic-Funds-Transfer-Terminal**). The name "EC" originally comes from the unified European checking system **Euro cheque**. Comparable debit card systems are **Maestro** and **Visa Electron**. Banks and credit institutions who issue these cards often pair EC debit cards with Maestro functionality. These combined cards, recognizable by an additional Maestro logo, are referred to as "EC/Maestro cards".

Modes of payment with electronic cash debit cards

Many retailers provide the option of paying by card or electronic cash, as both payment systems include a guarantee of payment. The electronic direct debit (EDD) system offers no such guarantee and thus exposes the retailer to a default risk.

- In 2005, 13.1% of all payments in Germany were made using electronic cash (payments included the entering of the PIN). In 2009, the percentage of payments using electronic cash went up to 19.4%; payments amounted to 71 billion euros.
- The **electronic purse card** or *Geldkarte* can also be used for payments. With an annual turnover of 0.1 billion euros its market share amounts to less than 0.04%.
- **ELV** (*Elektronisches Lastschriftverfahren*, electronic debit advice procedure) online or offline. 12% of 2005 turnover in commerce was processed using this method. The market share in 2009 was 12.2%, or 45 billion euros. The technology was introduced in 1984. When using *ELV online* (also called OLV) every online payment is checked against a credit rating score and a nationwide blacklist. When ELV takes place offline, there is no telephone line and no checking. It is the most inexpensive method for retailers. All procedures read only the account number, the bank code and the card number from the magnetic stripe or the chip. In contrast to the electronic cash method the customer authorizes a direct withdrawal with his signature.

- POZ (*Point of Sale ohne Zahlungsgarantie*, point of sale without payment guarantee). Unlike OLV and ELV, which are procedures used in retail, POZ was a procedure used by the ZKA (*Zentraler Kreditausschuss*, the German Central Credit Committee) from its introduction in 1994 up to its abolition on December 31, 2006.

Customer-to-Customer form of E-Commerce

Concept of Intermediaries and Internet Enabled Auctions

Definition of 'Internet intermediaries'

The implicit meaning of the word intermediary is that it is located between or among two or more parties, and although they help in the transmission/dissemination process, intermediaries do not initiate decisions to disseminate the content, products or services that transverse their networks or servers. A proposed definition of Internet intermediaries 'is the following:

- Internet intermediaries'bring together or facilitate transactions between third parties on the Internet. They give access to, host, transmit and index content, products and services originated by third parties on the Internet or provide Internet-based services to third parties (Source: OECD).
- Internet intermediaries'are mainly from the business sector although there are an increasing number of social platforms. Current Internet intermediaries identified within the scope of this report include

- Internet access and service providers (ISPs)
- Data processing and web hosting providers, including domain name registrars
- Internet search engines and portals
- E-commerce intermediaries, where these platforms do not take title to the goods being sold
- Internet payment systems, and
- Participative networking platforms, which include Internet publishing and broadcasting
- platforms that do not themselves create or own the content being published or broadcast

Role of Internet intermediaries

Intermediation is the process by which a firm, acting as the agent of an individual or another firm (a buyer or seller), leverages its middleman position to foster communication with other agents in the marketplace that will lead to transactions and exchanges that create economic and/or social value. There are a number of roles that an intermediary can play that lead to the creation of value. They include: aggregation of information on buyers, suppliers and products; facilitation of search for appropriate products; reduction of information asymmetries through the provision

of product and transactional expertise; matching buyers and sellers for transactions; and trust provision to the marketplace to enhance translatability

The main functions of intermediaries have been studied quite widely in literature and can be summarized as follows:

- To provide the infrastructure
- To collect, organise and evaluate dispersed information
- To facilitate social communication and information exchange
- To aggregate supply and demand
- To facilitate market processes
- To provide trust; and
- To take into account the needs of buyers and sellers or users and customers

Internet Enabled Auctions

The online auction business model has helped change the way micro-enterprises do business. For the first time, home-based sellers are able to quickly connect to a global market at a price they can afford. EBay, the Internet auction market leader, currently has over 56 million active users. Among these users are thousands of budget-conscious, home-based merchants around
the world who now make their living by selling products on eBay. This Info-Guide is designed for beginners. It will explain how Internet auctions work and will outline the distinct advantages small business owners can gain from using online auctions to sell their products or services. It will address key issues to consider before getting started, and will provide additional online resources to help you learn more about selling through Internet auctions.

Internet Auctions Explained

How Do They Work?

Internet auctions are often called online marketplaces. They bring buyers and sellers together on the Internet for the purpose of trading goods and services. Most auction sites do not actually sell any products or services that they own themselves. They simply act as "hosts" or "facilitators" and provide the necessary structure for listing, displaying, bidding, and paying for goods and services online. The auction site functions like a local farmer's market – it's essentially a meeting place to buy and sell goods that vendors have brought with them from elsewhere. Buying and selling processes differ, depending on the model of the online marketplace and the type of goods and services being sold. For example, some auctions are by bid only, some allow sellers to set fixed prices for their goods, and some offer a combination of both. Some sites ask buyers to name their price and see if sellers will match it, and others ask buyers to request goods or services they wish to buy. Buyers may find items or services on an auction site by browsing through different categories, by searching using keywords, or in some cases, by visiting an auction member's affiliated store. Then, they either bid on an item against other users seeking to purchase the same item, or they can choose to pay a fixed price that the seller has set in advance.
The auction site makes a profit by charging fees to list a product or service, and/or by taking a commission on each completed sale.

The eBay Factor

If you're reading this guide and considering using an online auction yourself, you've probably heard about eBay. The company is certainly a pioneer and leader in the online auction market. As one of the fastest growing companies in history, eBay's market share is reportedly at about 85%. An article of clothing is sold on eBay every 3 seconds. A car is sold every 90 seconds. And 30,000 pieces of jewelry are sold daily. eBay does 23 billion dollars in annual transactions, and an estimated 400,000 people make their living through eBay.

eBay considers itself a peer-managed online "community" that encourages open and honest communication among all its members. It is this community structure that drives eBay's buying and selling processes.

Other Auction Sites

Although eBay dominates the market, there are other online auction sites vying for market share – such as Amazon and Yahoo auctions, Bidville, Ubid, and Liquidation.com. There are also variations on the theme, such as Priceline.com's "reverse auction" and Nextag.com's "comparison shopping" site. Some auction-type models are industry specific, while others offer services for sale such as Elance Online outsourcing.

Advantages of the Internet Auction Model

The online auction model has distinct advantages over other forms of Internet sales. Understanding the pros and cons of Internet auctions can help you decide whether they are right for your small business.

Some key advantages to online auctions:

- **The online auction is "open" to the world 24 hours a day.**
- **Excitement is generated around the bidding process which encourages people to buy and sell.**
- **Auction sites provide a cost-effective way to market your product or service online.**
- **There is a sense of community created through informal exchanges and feedback.**

Who Should Use Internet Auctions?

Online auctions can be a viable sales channel for small businesses who want to:

- Gain quick and easy access to new markets online
- Test-market a product or some aspect of their online business operations or sales process
- Liquidate excess products
- Build a basic, cost-effective website
- Market your product or service online economically

Key Issues

There are some key issues to consider:

1. **Observe how others buy and sell**
2. **Determine what to sell**
3. **Selling to the US or overseas**

4. **Positioning, fulfillment and logistics**
5. **Feedback and the importance of good customer service**

UNIT-IV

Customer to Government form of E-Commerce

Introduction to E-Governance

Information and communications technologies (ICTs) are playing an increasingly vital role in the daily lives of people, revolutionizing work and leisure and changing the rules of doing business. In the realm of government, ICT applications are promising to enhance the delivery of public goods and services to citizens not only by improving the process and management of government, but also by redefining the traditional concepts of citizenship and democracy.

The effects of ICTs on societies are both far-reaching and uneven. On the one hand, ICT is fueling the transition from industrial-based economies to knowledge-based societies. On the other hand, ICT still has little or no impact in the lives of people in many countries. This wide disparity in the impact of ICT around the world today underscores the uneven progress of economic development. It also highlights the critical role of government in the information age.

The goal of this primer is to clarify the major issues surrounding e-government, as well as to provide readers with best practices in e-governance in the developing world. Leaders committed to e-government are demonstrating that by combining technology with new ways of operating, government can be made much more effective, transparent and responsive.

Four Phased model of E-Governance

All these transactions that involve government as one entity are called e-governance. The various models in the e-governance scenario are:

□□Government-to-Government (G2G) model:

This model involves transactions between 2 governments. For example, if the American government wants to by oil from the Arabian government, the transaction involved are categorized in the G2G model.

□□Government-to-Consumer (G2C) model:

In this model, the government transacts with an individual consumer. For example, a government can enforce laws pertaining to tax payments on individual consumers over the Internet by using the G2C model.

□□Consumer-to-Government (C2G) model:

In this model, an individual consumer interacts with the government. For example, a consumer can pay his income tax or house tax online. The transactions involved in this case are C2G transactions.

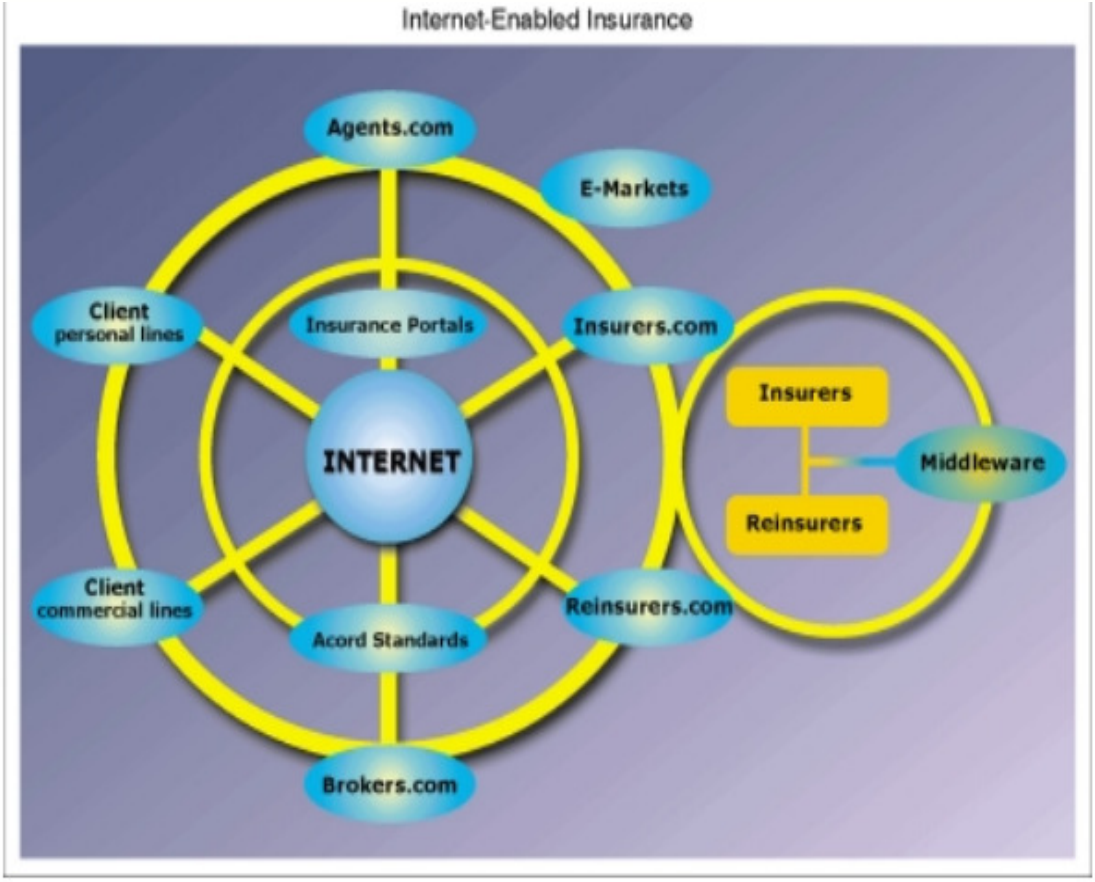
Government-to-Business (G2B) model:
This model involves transactions between a government and business organizations. For example, the government plans to build a fly over. For this, the government requests for tenders from various contractors. Government can do this over the Internet by using the G2B model.

Business-to-Government (B2G) model:
In this model, the business houses transact with the government over the Internet. For example, similar to an individual consumer, business houses can also pay their taxes on the Internet.

IT in Insurance Business

Internet based delivery of Insurance Product
E-insurance can be broadly defined as the application of Internet and related information technologies (IT) to the production and distribution of insurance services. In a narrower sense, it can be defined as the provision of an insurance cover whereby an insurance policy is solicited, offered, negotiated and contracted online. While payment, policy delivery and claims processing may all be done online as well, technical and regulatory constraints may not allow these elements to be subject to full e-commerce application in certain countries.

However, insurance legislation worldwide is being continuously modified to accommodate online payment and policy delivery, and, outside the discussion of e-insurance metrics, these elements should be included in the narrow definition. The anticipated efficiency effect of e-insurance is twofold. First, e-insurance should reduce internal administration and management costs by automating business processes, permitting real-time networking of company departments, and improving management information. Secondly, it should reduce the commissions paid to intermediaries since it can be sold directly to clients. For insurance sold to individuals, agents typically receive a commission of 10 to 15 per .cent for non-life policy sales and renewals and from 35 to 100 per cent for life insurance policies in the first policy year, but much less on renewal. However, some of the income gained in commissions that are not paid to intermediaries must be spent on online customer acquisition and marketing. Assuming cost savings do materialize, in a competitive market they would be passed on to consumers thereby allowing them to buy more insurance, or other products or services. Since insurance penetration in developing countries is only of that in developed countries, the efficiency gains created by e-insurance may contribute substantially to growth in insurance spending and thus intensify its indisputable role in promoting trade and development.



The establishment of Internet-based insurance businesses offers both individual insurance consumers and insurers and intermediaries potential efficiency and cost benefits. E-insurance improves information symmetry and market transparency conditions and may enhance competition that can lead to reduced prices. For insurance regulators from developing countries, Internet-based supervisory tools may increase efficiency by streamlining and speeding up reporting from insurance enterprises. The possibilities offered by Internet communication can also greatly improve the delivery of information to the public, insurers and local and international investors regarding market conditions, rights and obligations. Also, secure Internet communication could be a major tool for fostering international cooperation among regulators to improve the security of insurance markets.

Marketing of E-insurance products

Supervisory bodies should preserve the fairness of information presented to consumers and should attentively monitor the marketing of e-insurance products. Advertisements should not be misleading, past experience should not be used to predict future results, and products should not misrepresent benefits. Often insurers differentiate their products from those of competitors by inaccurately describing or overstating advantages and benefits. When an intermediary (an agent

or broker) offers insurance products over the Internet, such a seller should be required to obtain a license before establishing a presence on the web. The licensing procedure should require the intermediary to undergo competence tests, and the its e-insurance platform and website should be screen

Servicing of Policies

Supervising cross-border E-insurance activities among factors that have inhibited the development of cross-border e-insurance are the wide variations regulatory and supervisory requirements between national and state jurisdictions. If an e-insurance operator wants to offer services in several jurisdictions, it needs to undergo obtain licenses and comply with the respective jurisdictions' supervisory, tax and other authorities. It may be difficult to incorporate all the different and sometimes contradictory requirements into a single e-insurance platform.

Recent studies have concluded that the actual differences between national approaches are so extensive that e-insurers are unlikely to do business on a multi country basis in the near future. A more likely development would be increased targeted penetration of national markets, with whose regulatory and supervisory requirements e-insurers are familiar. To avoid being indicted by a national supervisory authority for unlawfully offering insurance services in that national market, e-insurers should clearly indicate on their website their identity (address, home country) and the jurisdictions in which they are legally permitted to provide insurance services. Also, e-insurance providers should post strong specific disclaimers and risk warnings directed to citizens of countries where the e-insurer is not authorized to operate. The home country supervisory authority should oblige e-insurers to post such disclaimers and warnings. The growth of cross-border e-insurance will necessitate a harmonization of regulatory and supervisory frameworks, the recognition by insurers of home country regulators and of home country complaints and dispute settlement mechanisms. Thus it will require extensive cooperation between regulatory bodies around the world. Such developments could be part of international negotiations on the opening of national financial markets such as those conducted under the aegis of the World Trade Organization.

Text Books:

1. Amor, Daniel, "*The E-business® Evolution*", Hewlett-Packard Professional Books.
2. Turban, Efraim, "*Electronic Commerce: A Managerial Perspective*", Pearson Education Asia, 2002
3. Chabra, T.N., "*E-Commerce New vistas For Business*", Himalaya Publications, 2004-05