



E- COMMERECE: ROLE, ANALYSIS OF THE IMPACT, IMPLICATION OF E- COMMERCE ON THE INSURANCE INDUSTRY

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Abstract

E-commerce (electronic commerce) is the buying and selling of goods and services, or transmitting of funds or data, over an electronic network, primarily in the internet. E-commerce consists of buying and selling of products and services over electronic systems such as the internet and other computer networks. E-commerce is a commercial activity dealing directly with the trading of goods and services and with other related business activities, in which the electronic communication medium plays a central role. These activities include the communication of information, the management of payment, the negotiating and trading of financial instruments and the management of transport.

The production processes are the first which include procurement, ordering and replenishment of stocks; processing of payments; electronic links with suppliers; and production control processes, among others. The second is customer-focused processes, which include promotional and marketing efforts, selling over the Internet, processing of customers purchase orders and payments, and customer support, among others. An internal management processes. The third includes employee services, training, internal information-sharing, video-conferencing, and recruiting. Generally electronic applications enhance information flow between production and sales forces to improve sales force productivity. The purpose of this paper is to find the benefits, challenges and success of e-commerce with special reference to Life Insurance Corporation of India.

Key words: E- commerce, Role, Analysis, Impact, Implication, Insurance Industry

INTRODUCTION

The e-commerce is one of the best achievements of the twentieth century, since the conduct commercial transactions via the Internet may be the consumer easy selection process and purchase convenient manner different from traditional methods, and with the beginnings of the new millennium impose the emergence of e-commerce term significant challenges to the insurance industry as an important economic sectors Generally, and insurance companies in particular as a result of scientific development, which has led to a reduction in costs and innovation in the production, which led to intense competition on both levels local or global. The insurance industry is a vital part of the economy and it has a varied impact to the community and individuals, therein lies

the problem of lack of research in e-commerce adoption of the insurance market, which impact on a lot of competitive advantages as well as beneficiaries and Consumer Rights Protection Service. And to the importance of this subject and the novelty of this study is to shed light on the e-commerce and the possibility of their application in the insurance industry and development in order to raise the level of performance in all its activities to keep pace with modern developments so as to enhance the protection of consumer rights and gain customer satisfaction. has been selected the national insurance company being one of the companies ancient and that have the potential physical and human can contribute use of e-commerce.

WE are living in e-century. The Internet and information and communications technologies (ICT) are central to economic growth and productivity. Internet-based technologies and networks can increase productivity, decrease costs and open new market opportunities. Now-a-days, using the Internet and email to conduct business is not uncommon. However, lack of technical and management skills in Information and Communications Technology is a barrier. There are a wide variety of resources available to help you to improve 2 your e-commerce skills. Simply, decide what skills you need and identify the appropriate resources to help you to build those skills. The skills that may be required range from basic abilities, like word processing and Internet navigation, to more complex capabilities such as designing and building websites and database management. There are a range of resources to help you broaden your understanding of the e-commerce environment and develop your technical skills. These include online resources, books and magazines, seminars and training courses. Keeping this in mind, a summary on the background of Electronic Commerce is being provided.

MEANING OF E-COMMERCE

E-Commerce or Electronics Commerce is a methodology of modern business which addresses the need of business organizations, vendors and customers to reduce cost and improve the quality of goods and services while increasing the speed of delivery. E-commerce refers to paperless exchange of business information using following ways.

- Electronic Data Exchange (EDI)
- Electronic Mail (e-mail)
- Electronic Bulletin Boards
- Electronic Fund Transfer (EFT)
- Other Network-based technologies

The concept of e-commerce is all about using the internet to do business better and faster. E-commerce is the process of buying and selling over the Internet, or conducting any transaction involving the transfer of ownership or rights to use goods or services through a computer-mediated network without using any paper document. Electronic commerce or e-commerce refers to a wide range of online business activities for products and services. It also pertains to “any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact.” Business transacted through the use of computers, telephones, fax machines, barcode readers, credit cards, automated teller machines (ATM) or other electronic appliances without the exchange of paper-based documents. It includes procurement, order entry, transaction processing, payment authentication, inventory control, and customer support. E-commerce is subdivided into three categories: business to business or B2B (Cisco), business to consumer or B2C (Amazon), and consumer to consumer or C2C (eBay) also called electronic commerce. E-commerce the phrase is used to describe business that is conducted over the Internet using any of the applications that rely on the Internet, such as e-mail, instant messaging, shopping carts, Web services, UDDI, FTP, and EDI, among others. A type of business model, or segment of a larger business model, that enables a firm or individual to conduct business over an electronic network, typically the internet. Electronic commerce operates in all four of the major market segments: business to business, business to consumer, consumer to consumer and consumer to business. Ecommerce has allowed firms to establish a market presence, or to enhance an existing market position, by providing a cheaper and more efficient distribution chain for their products or services.

FEATURES OF E-COMMERCE

Electronic commerce, or e-Commerce, refers to the purchasing and selling of goods or services via electronic means, such as the Internet or mobile phone applications. It may also refer to the process of creating, marketing, servicing and paying for services and goods. Businesses, governments and the public can participate in e-Commerce transactions. The following discussion will elicit the unique features of e-commerce. The unique features of e-commerce technology include:

1. Ubiquity:

E-Commerce is ubiquitous, it is available just about everywhere and at all times by using internet and Wi-Fi hotspot such as airport, coffee cafe and hill station places. Consumer can connect it to the Internet at any time, including at their homes, their offices, on their video game systems with an Internet connection and mobile phone devices. E-Commerce is ubiquitous technology which is available everywhere. Moreover, individuals who have cell phones with data capabilities can access the Internet without a Wi-Fi connection.

2. Global reaches:

The potential market size is roughly equal to the size of the online population of the world. E-Commerce Technology seamlessly stretches across traditional cultural and national boundaries and enables worldwide access to the client. E-Commerce website has ability to translate the multilingual websites as well as allow the access to visitors all over the world, purchase products and make business interactions.

3. Universal standards:

The technical standards of the Internet are shared by all of the nations in the world. The whole online tradition is growing and expanding their features in the world. To development any kind of business need Internet and communication application which make the business relationship more lovingly and attractive for secure business and successful business.

4. Richness:

Users can access and utilize text messages and visual and audio components to send and receive information. An individual may see information richness on a company's blog if a post contains a video related to a product and hyperlinks that allow him to look at or purchase the product and send information about the post via text message or email.

5. Interactivity:

E-commerce technologies allow two-way communication between the merchant and the consumer. As a result, e-Commerce technologies can adjust to each individual's experience. For example, while shopping online, an individual is able to view different angles of some items, add products into a virtual shopping cart, checkout by inputting his payment information and then submit the order.

6. Personalization:

Technologies within e-Commerce allow for the personalization and customization of marketing messages that groups or individuals receive. An example of personalization includes product recommendations based on a user's search history on a Web site that allows individuals to create an account.

7. Information density:

The use of e-Commerce reduces the cost to store, process and communicate information, At the same time, accuracy and timeliness increase; thus, making information accurate, inexpensive and plentiful. For example, the online shopping process allows a company to receive personal, shipping, billing and payment information from a customer all at once and sends the customer's information to the appropriate departments in a matter of seconds.

8. Social technology:

E-Commerce technology has tie up the social media networking application to provide the best source of content sharing technology and e-Marketing systems. You can share your content or data easily in just one click.

9. User-Generated Content:

Social networks use e-Commerce technologies to allow members, the general public, to share content with the worldwide community. Consumers with accounts can share personal and commercial information to promote a product or service. When a company has a professional social networking account, a member of the same social network has the option of associating himself with the company or a product by saying he likes or recommends it. When an individual updates his status on a social networking account, he may also mention a product or company by name, which creates word-of-mouth advertising.

Benefits of E-Commerce in LIC of India

The uptake of e-commerce is influenced by its potential to create business value and by awareness of its participants of the potential benefits. A major reason for most companies, irrespective of size, to participate in business is to extract some benefit from it. E-commerce is no different. The benefits of e-commerce identified from the research are as follows:

- Business efficiency
- Increased automation of processes
- Transformation of traditional market chain.
- Retained and expanded customer base
- Reduced operation costs
- Enhancing well-being and education of customers
- Consumer loyalty
- Competitive advantage
- Convenient operation

Challenges for Adopting E-commerce in LIC of India

To extract benefits from e-commerce, it is important for businesses to overcome the e-commerce inhibitors and challenges. E-commerce challenges identified from the research are classified as

- Technological
- Managerial
- Business related

The technological issues comprise of Security concern, Web Site Issues and Software and Infrastructure cost. The managerial challenges comprise of People and organizational issues and obtaining senior management support. The Business challenge includes Customer service, Customers old habits and Legal issues.

Success Factors of Using E-Commerce in LIC of India

To maximize value from e-commerce business must identify and evaluate factors critical to success. The e-commerce success factors identified from the research are also divided into the same three categories

- Technological

- Managerial
- Business related

The technological issues consist of secure transactions, Web site functionality and features such as catalogues, frequently asked questions, CRM, decision support, Payment issues credit cards & e- payment Integration of web site to all business.

The managerial success factors consist of Effective project leadership – company vision, forming alliances with customers and maintains appropriate organizational structure

The Business success factors involves advertising methodology, quick respond time, better customer service. A significant proportion of the research reported to date has focused on the insurance sector with little reported work or research on the uptake of e-commerce in the insurance industry. Recent research explored from the perspective of LIC of India the three key areas of e-commerce benefits, challenges and success factors. This paper focuses on the responses from the insurance sector and customer.

ROLE OF E- INSURANCE ON INSURANCE INDUSTRY

- Business Enabler through capacitation of: -
 - Distribution channels (mobile and electronic sales e.g., global travel insurance market)
 - Payment systems simplification (mobile and electronic sales and claims processing at negligible cost, e.g., impact on financial inclusion/micro insurance by allowing collection of sub \$1 premiums)
 - Speedy & flexible business growth without borders (no need for brick-and-mortar expansion)
- Empowerment: -
 - Disruptor to traditional capital models
 - Capacitated consumers (ubiquity of devices and connectivity)
 - Intra-industry competition and collaboration (Telcos, banks & insurance companies)
- Reduction in costs
- Competitive products by incorporating the speed, flexibility and interactive capabilities of the net
- Opportunities for new and existing intermediaries
- Amazon effect, that is, the concept that consumers are so used to buying product online (sometimes with as little as one click) that the insurance industry must get as close to that reality as possible
 - Insurers must identify the middle ground between using the web to funnel leads to live agents, and finding other ways to interact with customers online – Things like live chat are popular when prospects have questions about their coverage that they want answered.
- According to J.D. Power & Associates, for every 100 people that consider a brand, 59 will visit the company's website, 33 will solicit a quote but only 2.4 will bind on the website.
 - One could say that the web doesn't perform at a high closure rate
 - There are hybrid or blended channel pathways that complete the circle

THE POTENTIAL OF E-COMMERCE IN THE INSURANCE INDUSTRY

Modern day insurance has evolved into a multifaceted and complex industry involving an array of divergent products and services. The current insurance industry landscape is characteristically hybrid in nature, offering everything from health and life insurance to property and casualty. Many insurance companies also offer

financial services such as asset management as well as commercial leasing and lending. A number of forces have challenged the insurance industry in recent years, resulting in stagnating sales in both the life/health and property/casualty sectors. Chatterjee and Jessup attribute this slowdown to a number of factors: the emergence of financial products such as annuities and mutual funds have lured customers away from traditional life insurance products, skyrocketing costs of health insurance, customers are turning to self-insurance and other risk management alternative measures as opposed to traditional property/casualty products, intra-industry competition due to deregulation such as banks that are expanding their range of services. Although it has been slow in adopting e-commerce, the insurance industry stands to gain substantially from picking up the pace. The spectre of an e-enabled insurance landscape is appealing to many in the industry and the potential benefits to be accrued undeniable: reduction of transaction costs. More competitive products by incorporating the speed, flexibility and interactive capabilities of the net e- growth of markets by generating more leads and expanding markets more quickly at a relatively lower cost thereby increasing revenues, and improvement of investment by expanding investment strategies, opportunities for new and existing intermediaries. The use of the Internet is growing throughout the world at a rapid pace. While the U.S. still holds the lion's share of the global market, it is anticipated that this share will diminish from 36% to 25% by 2005. Not surprisingly, e-insurance is also being embraced globally. The European insurance sector, for example, has been active in making the transition. Asia also shows enormous potential to drive this trend globally. Approximately 50% of domestic Chinese insurance companies' Web sites currently offer the capability to buy policies online, while India is leading the way in the rest of Asia, with rapidly expanding growth in the insurance industry.

BARRIERS TO E-COMMERCE IN THE INSURANCE INDUSTRY

Insurance companies that have started to venture online have met with varying degrees of success. In an examination of the web sites of the top 100 property-casualty insurance companies, McCarthy and Aronson found the ability to locate an agent to be the most prevalent online capability. Few companies surveyed actually provided the ability to purchase an insurance policy online. This disparity seems to corroborate what Pastore reports as the schizophrenic nature of e-commerce in the insurance industry. While companies are scrambling to gain a Web presence, few actually exhibit an e-business strategy.

Has e-insurance progressed at an evolutionary or revolutionary pace? A re-examination of the top 100 property-casualty insurance company Web sites studied in 2000 has shown that insurance company Web sites today offer more functionality and expanded services. However, the increased functionality of the Web sites over a four-year period can hardly be termed revolutionary.

Companies who have started to implement e-insurance have confronted some monumental challenges. Chatterjee and Jessup describe SAFECO's foray into e-insurance. Assimilating the new Web based technology into its current business activities and strategies proved to be one of the most critical success factors for this company. Obtaining the necessary technical expertise to build and maintain the involved infrastructure also proved to be problematic but of vital importance. In their study of several British companies, Mieczkowska, Barnes, and Hinton also found that the ability to realize a fit between the new technology and the already existing processes is a key success factor. Fisher uses the experiences of such companies as Ohio Casualty, Ins Web, and Ensure Point to offer some lessons learned and draw some new conclusions regarding e-insurance. Many of the early projections that e-commerce would bring revolutionary change to the industry need to be tempered with a more evolutionary perspective. The idea that the Internet would radically change fundamental business processes and disintermediate traditional agents has not come true. Instead, insurance companies are using e-commerce in a more modest way to reduce overhead, eliminate redundancies, and free up agents so they can deal more effectively with sales and customer service issues. Among the most significant barriers to e-commerce adoption has been the alienation of agents by companies selling insurance through the Internet due to fears of cannibalization, inter-state regulation, and the conservative culture of the insurance industry itself. There are also a number of technical issues that are impeding progress of e-insurance. The complexity of the underlying technology involved in implementing e-commerce has been a challenge for insurance companies. In many insurance companies, silos of technology have been created which are divided along product lines. Typically, these systems are mainframe based and resistant to rapid change. Much of the information technology related to e-insurance is being used to automate rather than to fundamentally change existing business

processes. Another part of the problem stems from lack of standards in the industry, allowing for the reliable exchange of information. The lack of international standards has been cited by several authors as one of the most significant challenges facing the insurance industry.

The Emerging Semantic Web and the Future of e-insurance

While the efforts of ACORD and other bodies are paving the way for the future of e-insurance, it is clear that many challenges remain and that there is a long way to go. To really bring the Web to its full potential as a medium for e-business, further expansion of the basic infrastructure is needed. Today, the primary impetus for this comes from Semantic Web research, which is rooted in artificial intelligence. Originally a vision of Tim Berners-Lee, the goal of the Semantic Web is to put data on the Web in a form that machines can naturally understand, or to have the capability of converting it to that form. The next generation of the Web will be one of data that can be processed directly or indirectly by machines. While XML is definitely an improvement over a pure text and database solution, it only represents the first step in the process of building a Semantic Web. With XML, data achieve independence only within a specific domain (e.g. insurance industry). Standards, such as those provided by ACORD, are certainly a step in the right direction in providing a common structure within this domain. But data can be composed from multiple domains. For example, the word ‘title’ might have one meaning in a publishing context and a very different one in the insurance industry. To eliminate such ambiguities taxonomies are needed, in which simple relationships between categories can be established. Even further along up the scale are ontologies, which will allow new data to be inferred from existing data by following logical rules. Kanter [8] describes a fictionalized scenario that could take place in a not-too-distant future in which semantic web technology has become commonplace and software agents mediate insurance transactions. Picture a typical car accident scene in which the victim’s car computer transmits to a carrier the fact that an accident occurred. With present day technology it is conceivable that the victim’s car computer could transmit information, including the name of the policy holder and the location of the accident, to the insurance carrier’s computer. For this to be deciphered, it would have to be encoded in an XML like format in which fields such as ‘location’ and ‘policy holder’ are synched up with fields in a database. In an idealized semantic web future however, those computers would actually understand each other by using inferential rules based on ontologies. With the aid of ontologies, the concept of an ‘accident’ would be related to other concepts such as vehicle involvement, possible injury, repair, claims or body shops. It is easy to see how agents, claims reps, carriers and other stakeholders could exchange information in ways that would eliminate the need for human interaction with semantic web technology.

E-COMMERCE

ANALYSIS OF THE IMPACT, IMPLICATION OF E- COMMERCE ON THE INSURANCE INDUSTRY

- Convenience
- Speed of Execution
- Choice
- Real time delivery
- Survival of the fittest
- Possibility of reduced insurance companies due to economies of scale and emergence of aggregators with strong brands & support services (diversity, innovation & technology)
- Reduced profit margins – Emphasis on high volume – Heavy investment of capital in advanced technology
- Customer Profile – Looking for simplicity, discounts & specialisation, real time collaborative assistance such as live chat etc help with customer conversion
- e-Commerce & Internet changing the role of the broker from intermediary to ‘infomediary’

- Not embracing technology presents threat of being edged out of the market
- Increased customer expectation of quality service continues to rise driven by internet price comparisons which can be made quickly
- New players using advanced technology can and will put long term solvency of some traditional insurers
- Dynamic Pricing based on actual experience – Telematics
- Improved claims experience using modern, automated technologies provides a knock-on effect on retention rates
- Change in actuarial pricing models where historically premiums have been calculated at expense per policy – Volume of business decreases cost - TCF – Future will be expenses based on real life pricing techniques – Internet has considerably lower costs
- Appraisals Values of future profits at a risk discount rate will be harder to calculate in constantly changing e-commerce environment
- Actuarial control cycle
 - Traditional model will be difficult to implement in dynamic e-commerce environment
 - Instead of monitoring the past a combination of ‘prediction, action & reaction’ will be the key to controlling an e-commerce business
 - Sensitivity testing & analysis will become crucial relying heavily on Business Intelligence monitoring tools

Legislation / Reinsurance

- Legislation & Regulatory environment differ for traditional and e-commerce
 - Traditional Insurance sector heavily regulated
 - E-Commerce – nominal regulation which gives them agility, a strong competitive edge and disruptor effect
- Somewhat difficult as reinsurers have minimal based internet activity Reinsurance
- Reinsurers not so involved in the transfer of information as they are the risk bearers
- Decreased administrative costs due to ease of information sharing which allows ease of monitoring of customer accounts

IMPLICATIONS

- **Personal lines**
 - Greater Commoditisation
- Price Transparency
- Virtual social community led bulk purchase
 - Decreasing Profitability
- Driven by increasing globalization, technologies & price competitiveness
 - Automated Underwriting
 - Greater Loss Control
- Telematics to price mileage-based insurance (USA, UK, SA)

- **Commercial Lines**

- Virtual Business Affinity Groups
- Social networking will create virtual business groups that pool their risk
- Greater availability of information & increased price transparency will facilitate this trend
 - Automated Underwriting
 - Business Model Transformation
- Real time data from wearables and devices will transform business models (data analysis)
- Focus will migrate to standardized products & value-added services to proactively manage risks
 - Individual Life, Annuities & Retirement
 - New Products for seniors
 - Aging population will result in new growth opportunities in drawdown or retirement income products
 - Insurers will face competition from other financial service providers
 - Better Risk Management
 - Greater availability of medical & behavioural data along with personalised medicine to drive greater sophistication in underwriting
 - Opportunity to better manage risk and expand boundaries of insurability
 - Tailored Products – For group benefits the responsibility for protection & retirement savings will continue to migrate to the individual resulting in increased voluntary coverage.

DISCUSSION

To maximize the potential of e-commerce, business must be aware of the benefits, challenges and success factors of trading electronically. This research examined these factors in the insurance industry especially in LIC of India. The main findings of the research presented in this paper are: The major benefits of e-commerce adoption not anticipated by the sector are business efficiency, improved image, competitive advantage, increased automation of processes and increased business turnover. The key challenges identified for the sector are the costs of the technology, the lack of knowledge of e-commerce, managing the change, budgeting and issues associated with linking back-end systems. Secure transactions were not considered a major challenge for the sector; in contrast they were considered one of the success factors, along with effective project management, adequate resources, support from top management and rapid delivery of systems. Participating companies correctly estimated the vast majority of challenges of e-commerce that lay ahead. Acquiring IT skilled people was, however, one significant challenge that was not correctly anticipated.

CONCLUSION

This studied has identified and confirmed the key factors for the insurance industry which helps to indicate the importance of e-commerce. The survey results confirm that the identified factors are not dissimilar across the sectors. The study or research conclude that although implementing the e-commerce major at initial level is a tough, difficult and challenging task which does not guarantee the success after implementation. But if it can be done in a proper and defined manner then the organization will definitely get the identified benefits and success between the major identified challenges.

The insurance industry is undergoing a major transformation as it grinds towards adoption of ecommerce. Standards bodies such as ACORD have been instrumental in facilitating this evolution. However, the next generation of Web technology will allow for agent-mediated ecommerce and allow for a new semantic model of data exchange based on ontologies. Ontologies are starting to come out of the cloistered halls of AI research labs and onto the radar screens of mainstream IT managers, who view it as way to achieve competitive advantage. With further exploration of ontologies; e-insurance may indeed reach its full potential.

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