# Impacts of ICT Application on the Insurance Sector (E-Insurance) Mrs. Supriya Ganesh Sapa<sup>1</sup>, Mrs. Sangita Babasaheb Phunde<sup>2</sup> and Mrs. Madhuri Ravindra Godbole<sup>3</sup>

 $^{1,\,2,\,3}$  Institute of Management Studies Career Development & Research, Ahmednagar

#### ABSTRACT

Information and Communication Technology (ICT) has a profound impact on the social life of the people and on the economic structure of the nation. The real challenge is, to make use of internet and other ICT's, in order to create better economic opportunities and to reduce poverty. When used in a productive sphere, ICTs are most likely to improve the living standard of people, by affecting different business and service sectors especially the insurance sector. Insurance sector plays an important role in the growth of the country's economy. The aim of the present paper is to know the benefits of ICTs application in the insurance sector and the barriers the insurance sector may face in complete ICT application. The paper takes a critical look at the level of ICT penetration in the insurance industry.

**Keywords**: ICT, Insurance, Service sectors.

# Introduction

"E-commerce" focuses on the use of Information and Communication Technologies (ICT) to enable the external activities and relationships of the business with individuals, groups and other businesses. "e-business" is defined as the application of ICT in support of all the activities of business. Objectives of e-business are Worldwide Presence, Cost Effective Marketing and Promotions, Developing a Competitive Strategy and Better Customer Service. "e-insurance" also called Insurance Services, Internet Insurance Services, e-insurance. E-insurance is defined as services that provide online insurance sales, services, and information sites. 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. Insurance is a means by which you secure protection for yourself and your family against unforeseen circumstances. An insurer is a company selling the insurance; an insured, or policyholder, is the person or entity buying the insurance policy. The insurance rate is a factor used to determine the amount to be charged for a certain amount of insurance coverage, called the premium. The transaction involves the insured assuming a guaranteed and known

relatively small loss in the form of payment to the insurer in exchange for the insurer's promise to compensate (indemnify) the insured in the case of a financial (personal) loss. The insured receives a contract, called the insurance policy, which details the conditions and circumstances under which the insured will be financially compensated. The simple conception of insurance is the spreading of risks for a few individuals, among many. This is done when individuals and businesses pay a premium to an insurance company to cover them in case of a catastrophic occurrence. In other words, we all pay premiums in case something happens to one of us. Believe it or not, this simple concept is what drives the existence of all insurance companies. If something happens, we can't afford to be without it.

# Facts:

Only about 0.2 per cent of the total population of India has health insurance policies. Insurance is quite rightly perceived to be a difficult product simply because a large percentage of the Indian population remains uninsured. Then, there is the problem of low penetration. While the insurance rates in the urban areas are promising, very few people living in the rural areas have their own insurance policies. This is a problem that has been addressed by the IRDA and is under scrutiny now in an attempt to increase the rate of penetration. Penetration of insurance is calculated as the ratio of insurance premium to the GDP. In the paper, 'India Life Insurance 2012: Fortune Favors the Bold', McKinsey and Company stated that, "In urban areas, penetration of life insurance in the mass market is about 65 per cent, and it is considerably less in the low-income unbanked segment. In rural areas, life insurance penetration in the banked segment is estimated to be about 40 per cent, while it is marginal at best in the unbanked segment." One of the main reasons for this, say experts, is the mis-selling of insurance products. The IRDA stated that most of the grievances registered with them were regarding mis-sold insurance policies. There also is a need to design insurance products in a more customer-friendly manner, in a way that would appeal to the general public.

The above mentioned facts clearly highlight the shocking state of affairs in the seemingly successful insurance sector. While the figures in urban India are promising, we cannot rely simply on them and ignore the rural sector. There is an urgent need to revamp the insurance products in general to attract more customers. There is also a need to educate people about the need and benefits of insurance. Only then can the issues of uninsurance and low penetration be

tackled. (Deepak Yohannan is the CEO of MyInsuranceClub.com, an online insurance price and features comparison portal).

# Literature Review

According to O'Brien (2002), there are many ways that organizations may view and use information technology depending on their goals, aims and objectives. Organizations may use ICT to strategize; they could as well be content to use ICT to support efficient everyday operation. The process of information technology adoption and use is critical to deriving the benefits of information technology (Karahanna et al, 1999).

Businesses, large or small rely on quality information for just about everything they do (Mescon et al, 1999) and today computers play a central role in communications, especially with business and commercial activities.

According to Steven Alter (2002), without the technical progress, new ways of doing and managing work would not have been feasible.

Poon and Swatman (1997) believe that ICT/E-commerce can help firms introduce new methods of direct and indirect marketing. In addition to introducing new methods of marketing, ICT can improve marketing and marketing techniques.

ICT application can help firms Strengthen their relationships with business partners (Ratnasingam and Pavlou, 2003; Zaheer et al., 1998;Poon and Swatman,1997),improve their trading relationships (Mehrtens et al, 2001);build closer relationships among trading partners (Moodley, 2002), and build better relationships with their actual customers (EBusiness watch Report,2008).

It possible for firms to have: access to market information easy (Khong Sin Tan et.al, 2009), access to knowledge, access to international markets (E-Business watch Report, 2008). Increases the speed of service/goods delivery (E-Business watch Report, 2008;

# Significance of the study

Insurance industry is a service industry. The insurance industry is very important sector for any economy, as it provides coverage for businesses, investments and individuals through the sale of insurance policies. In India Gross Domestic Product (GDP) Growth Rate depends on Agriculture, Engineering, Automobile and Service industries. Service industries are the major source of economic growth, accounting for more than half of India's output. Insurance is a service industry which has a major contribution to India's GDP. The gross premium as a

Volume-3, Issue-1, March 2014 www.ibmrdjournal.com 313

percentage of the GDP has gone up from 2.3 in the year 2000 to 4.8 in 2006. Together with banking services, it adds about 7% to the country's GDP. Insurance has become the basic need. However, in India only 18% to 20% of the total population is insured because of less awareness about insurance. Even though LIC was formed and started operation in 1956 and private companies started in 2000, the awareness about insurance has not increased as expected. In the Indian contest there is usually a single principal earner. If due to some reasons there is a demise of the principal earner, the financial burden comes on the rest of the family members. May be the elder child has to stop his education and earn for the families livelihood. This situation will increase illiteracy in the society. But if the family is insured they will have some financial support. Therefore insurance plays an important role in the literacy of the country.

Internet access in India has doubled every year over the last five years and forecasts predict this growth to quadruple every year over the next three years. According to e-marketer report on India online, about 33.2 million people in India accessed internet and that's about 2.9% of Indian population. This figure is going to be 71.6 million people, which will be about 6% of population. Considering limited access of human-insurance agents in rural areas, there will be more demand of purchasing insurance online from these areas, followed by semi-urban areas. Due to e-insurance the awareness of insurance will increase. People will get transparency about comparative study of insurance. It will help people in making perfect financial planning. But it is obvious that without knowing the positive benefits of ICT application in their interaction and the probable barriers they may face to have complete electronic interaction, both the company and its clients will show no interest to benefit from new information and communication technologies (ICTs). Therefore, a perspective study to explore the impacts and barriers of ICT application by industry and its customers is severely needed.

Benefits to the Insurer By e-insurance:

Benefits of e-insurance to the insurer are classified into six general classifications:

*Direct benefits:* Those which are quantifiable such as number of new customers.

*Indirect benefits:* Those which cannot be measured easily, such as increase of customer loyalty and goodwill as a result of online services.

*Short term:* The benefits that can be realized by companies within months such as improved revenue. Increased revenue, increased productivity and better marketing.

Long term: Benefits such as additional customer enquiry and forming new networks, which may be achieved in long term.

*Tangible benefits:* Such as reduced costs of gathering, storing, retrieving, processing, analyzing and transmitting information reduces the administration and production costs. ICT can improve marketing and quality of information.

In addition to introducing new methods of marketing, ICT can improve marketing and marketing techniques.

*Intangible benefits:* Such as improved relations with business partners, improved internal controls and quality of information.

Other Miscellaneous benefits are:

ICTs/e-commerce are mainly applied in insurance industry for information purposes, application submission, proposal preparation and online contract conclusion, notification of claims, probable address changes, access to customer and contract data.

The insurance staff can contact each other via an intranet and a paperless system which has helped the tasks to be carried out faster. The electronic interaction of company and its clients is limited to information provision via website, and receiving application forms electronically.

The seamless storage retrieval, sorting, filtering distribution and sharing of information can lead to substantial gains in production, distribution, marketing and creation of new products and services. The Internet, electronic mail, videoconferencing are some of the capabilities of computer systems in recent times. Traditionally, information systems were designed to work in the immediate workplace environment. But recent developments in concepts and design of technologies have greatly considered the possibility of work outside offices and the work place, and have come up with a number of interesting discoveries and design. Thanks to nanotechnology, miniaturized devices such as laptops, palm tops and memory cards now come in handy for business. On the trade side, ICT will give firms access to new customers and ability to find new markets and reach new clients, which in turn will increase the profitability of the firm. ICT will facilitate communications among business partners, makes controlling access and participation in a communication event easy, and enables impossible communications possible.ICT will not only improve but also increase the speed of communications between trade partners which leads to fast delivery of goods and services by suppliers. When an insurer deals

Volume-3, Issue-1, March 2014 <a href="https://www.ibmrdjournal.com">www.ibmrdjournal.com</a> 315

directly with the customer using ICTs, it can save costs for running agencies and for paying

commissions to agents. The paperwork can also be reduced by processing claims via Internet and the number of staff can be reduced by automation of processes. Nearly 12 to 26%, 9 to 15% and 4 to 12% of an insurance company's premium income goes to pay the costs of distribution, administration and claims settlement respectively. These costs can be reduced if an insurer uses new ICTs in its processes.

Benefits to the Insured By e-insurance:

Benefits of e-insurance to the insured are classified into two general classifications:

Informational: Includes improved marketplace information, improved communication and relationships. For the insurance policies based on market share, providing on-time insurance coverage to customers would be vital for customers, since any minute delay in delivery will hand the market to the competitors. There is no doubt that electronic interaction, will surely give the clients the opportunity to seize the markets. Timeliness of insurance operations, adequate information storage facilities, faster means of communication and reduction in the amount of effort put into work.

Operational: Includes transparency, reduced transactional costs and Time efficiency. In addition, using the premium calculator in the web, an insured can calculate the rough amount of the premium they are charged for insurance policies. By referring to an insurer's website, a customer can easily calculate his premium, read the conditions of a policy, sign the insurance policy electronically and receive his electronic copy of the insurance policy. All these facilities will help the cost cuts and ultimately, increase an insurer's sales volume.

Benefits of e-insurance At the Country Level:

Benefits of e-insurance at country level are classified into two general classifications:

Economic: Increase GDP, employment opportunities, improvement of local

Entrepreneurship. The impact of ICT on the economic growth indicate the contribution of ICT on economic growth which is very important for the

Country. ICT is one of the key drivers of the rapid growth for economies, and the service industry is the main ICT user.

*Socio-cultural:* Education, Awareness creation, Employee skills development, Institutional development and improving e-readiness.

*Objectives of the study* 

Examine the impacts of ICT application on insurer and the probable obstacles it may face to have electronic interaction with its customers.

Examine the impacts of ICT application on customers and probable obstacles they may face to have electronic interaction with insurer.

Barriers to The Insurer By e-insurance

Barriers to the insurer are classified into 4 main categories:

*Financial:* The adoption of new technologies requires initial heavy investments to purchase needs like software, hardware, equipment, connections and to train staff etc. The financial benefits of ICT investments emerge over long time. Such a time gap is another barrier of ICT application.

*Security:* The threat of virus infection through the internet, power loss, unintentional changes or leaks of information, system faults and capacity problems of servers, threat of hackers, masquerading/spoofing.

*Technical:* Complexity of new technologies requires new skills. Firms may not have the necessary skill and expertise to apply such technologies and they have to either develop new skills inside the firm or outsource part of the task. To acquire new skills in house or out sourcing it would be expensive for firms. In addition to existing information systems of firms may be not proper for future development. Yet another problem exists if firms want to buy new information systems. Firms cannot trust the external IS suppliers.

*Managerial:* The management of the firm does not spend sufficient time on the matter and plan for that. The reason behind this might be that they are not aware of the importance of ICT adoption and the benefits that might be brought about for the firm.

Barriers to the Insured By e-insurance:

Security: The customers of an insurance company may be subject to certain security barriers like theft of credit card information and payment uncertainties, disclosure of personal data (confidentiality), concerns about fraud and technical fault, quote accuracy, too much data entry.

*Technical:* Most insurance customers do not normally think about buying insurance policies online, they only search for insurance information on the internet. Moreover, some insurance products are complex and require individual negotiations and therefore cannot be

purchased online. Customers prefer personal consulting to buy an insurance package than doing it through internet. In case of death claims and maturity claims customer needs an agents support for further documentation. Many customers believe that buying an insurance policy by walking in to an agent's office or through telephone would be easier and faster than doing that through online channels, because getting online quotes usually takes more time than traditional methods. In addition, the process is made more difficult by some insurers by asking the client to fill out online useless forms, the information of which they do not even use in the initial quote process. The insurance terms and conditions are essentially complex and most people may need simple and enough explanation to understand them. To make a decision on purchasing an insurance policy online, a potential customer needs to understand the terms and conditions of each insurance policy presented. In most cases, the websites of insurance companies lack the capability to help the client understand the terms and make a decision on what product to buy.

#### From Insurance To e-insurance

The insurance sector has the highest e-business/ICT application rate among other sectors. A typical e-commerce transaction can have five phases: search, valuation, logistics, transaction and after sales services. A customer, who intends to buy an electronic insurance policy, may pass the first five phases. The customer searches different insurance companies online to compare their services. Then he evaluates the products which suit his needs. After that, there would be an electronic correspondence between the customer and the insurance company regarding the terms and conditions (logistics). In the fourth phase, the customer and insurance company agree to go ahead with the transaction. The online claim settlement involves complex interactions between the insurance company and the insured and may entail the involvement of legal and judicial authorities. Therefore, the claim settlement in an insurance company may be difficult to be done online

# Future of e-insurance in India

The Insurance Regulatory and Development Authority (IRDA) have issued guidelines for creating insurance repositories and for the issuance of e-policies in India. These repositories will be licensed by the regulator and be connected to all insurance companies as their service providers. The insurance buyers will soon be able to open demat or 'e-insurance' accounts for their policies in electronic form. This will reduce hassles for buyers from the need to provide proof of age and address every time a policy is bought. It will also save insurers from printing

Volume-3, Issue-1, March 2014 www.ibmrdjournal.com 318

and delivering policies. The insurance repository will give a unique account number to every individual. It will include all types of policies i.e. life, health, motor and group covers. The data maintained by the repository will include history of the claims data of the individual, and also have the names of the beneficiary, assignees and nominees. This is one of the most positive steps which will impart efficiency and better customer service. The benefits in terms of convenience to policyholders will be enormous while insurers will save in costs. Since the repository will consolidate all policies under a single account, the family will immediately come to know of the policies purchased by an individual in an emergency. ICICI Prudential is one of the pioneering Insurers that offers buy Insurance online in India. This development will definitely boost the Web assurance / Internet Insurance market in India. With such infrastructure in place, authentication of the insured and even the insurability can be verified easily by the Insurers, and consumers can have easier and faster process in purchasing the policies online.

# Research Methodology

Sample size:-Sample size for the present study will be 300 policy holders across Pune and Ahmednagar City out of which, 150 policy holders who have availed their policy through e-insurance in Pune city and 150 policy holders who have availed their policy through manual insurance in Pune and Ahmednagar city.200 will be managers, agents, staff of different insurance companies.

Sampling Method:-The researcher will select a sample on the basis of random sampling method. The researcher seeks to collect the data through primary as well as secondary sources.

*Primary Data:* –The population for the study consists of the various policy holders in Pune and Ahmednagar city and the staff of various insurance companies. The purposive sampling method will be adopted.

- 1. *Questionnaire:*-Detailed questionnaires will be prepared for the policy holders who have availed their policy either through manual insurance or through on line.
- 2. *Interviews & Discussions:* Information will be collected by personal interviews and discussions, so that several other aspects of insurance will also be reflected.
- 3. *Personal Contacts:* Apart from personal contact, other communication mediums like emailing, telephones, fax etc. will also be used to carry out this research.

Secondary data:-It will be gathered through the following sources:-

- 1. *Use of library* Relevant data will be collected through books, journals, newspapers, magazines etc.
- 2. *Use of Internet* Internet will be extensively used to seek data from the websites of various Insurance Companies.
- 3. Published/Unpublished Data Journals regarding Insurance, e- insurance.

# Conclusion

To step in the world of e-insurance, as the first step, it was necessary to know the positive benefits of ICT application on insurer and its customers and the probable barriers they may face to have complete electronic interaction based on ICTs. Therefore, this study was devoted to take this first step. Using the results of the present study, and bearing in mind the positive benefits of ICTs, the insurer with collaboration of its customers can study the existing obstacles before them to have ICT-enabled interaction in more details and take practical steps to setup an electronic interaction between them. Doing a comparative study between e-insurance and traditional insurance to see how e-insurance has progressed in interacting electronically with its customers and to know probable shortcomings would be useful and is highly recommended. The literature reviewed showed that ICT application may have positive impact on a company's supply chain and its relations with business partners, or it may give the possibility of providing new services or create new distribution channel for a company.

#### References

- Dasgupta, Prithviraj ,Sengupta, Kasturi, (2002), E-Commerce In The Indian Insurance Industry: Prospects And Future, *Journal Of Electronic*.
- Gupta A. K., Govindarajan V.,(1984), Business Unit Strategy, Managerial Characteristics, Business Unit Effectiveness at Strategy Implementation.
- O'Brien, J.A.,(2002), Management Information Systems: Managing Information Technology in the E. Business.
- Karahana E., Straub D.W, Chervany N.L., (1999), Information Technology Adoption Across Time, E-Business watch Report.

www.bimadeals.com, Accessed on 24<sup>th</sup> June 2013.

www.insurancepandit.com, Accessed on 14<sup>th</sup> July 2013.

www.policy-bazaar.com, Accessed on 10<sup>th</sup> August 2013.

Volume-3, Issue-1, March 2014 www.ibmrdjournal.com 320