Electronic Insurance and its application in e-commerce

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Abstract
Situations and procedures of business continuously are changing and every day, more options are delivering to businesses. In recent years, due to rapid growth of information and communications technology, and most importantly, the expansion and development of internet, the trend of these variations has been accelerated. Electronic is one of these options that many debates are performed concerning the implementation and in particular, its impact on business. The financial services sectors and especially the insurance industry were not excluded from this issue and in this regard, there are considerable studies that most of them have been carried out in developed and industrialized countries; moreover, some studies have been performed in undeveloped or developing countries. In present paper, in addition to defining the electronic insurance, the impact of e-commerce on insurance industry has been discussed. This paper has been organized through the category in which, in the next part insurance industry and the challenges about it and a review on Iranian insurance industry are presented. Fourth part has discussed the electronic insurance and role that it plays in e-commerce. Fifth section has focused on the impact of e-commerce on the insurance. And next section has investigated the advantages and disadvantages of e-commerce in the insurance industry, and finally, in the last part, the conclusions of this paper are presented.

Keywords: Insurance Industry; Information and Communications Technology; E-Commerce; E-Insurance

Introduction
In general, e-commerce involves any kind of business or economic activities such as buying, selling, transferring or exchanging products, services or information those are performing through electronic connections. Most of discussions in e-commerce is limited to internet, which primarily is related to the electronic commerce (Fathiyan; 2008, 26). Nowadays, the internet and e-commerce has brought about fundamental changes in the methods of business. In recent years, due to the rapid growth of information and communication technology, and above all, the development of internet, the process of these variations has been accelerated. Since the new millennium, insurance companies throughout the world are actively presenting their services to e-insurance, particularly internet. E-insurance is the result of evolution in communications and information technology, in other words, it is an insurance operations, which are performed by using internet. The style of life and work are influenced by increasing demand of accessing to internet in order to receive information and services, therefore, the insurance companies could not be indifferent to these requests. The insurance companies could take advantages of new information and communication technologies to provide better services. Meanwhile, e-insurance will reduce the real-time of activity and management costs (Hatami; 2005, 5).

Insurance Industry and Challenges
Insurance industry, because of its importance in economic growth and public health is one of the most active sectors in financial services. For example, modern and industrial countries whose economy is based on technology considerably are exposed to risk, and individuals need to insurance coverage, and most importantly, they need to provide their costs after retirement. Hence, insurance companies play an important role as an investor and stockholder. In 2003, all operating insurance companies in the world have sold approximately
2.947 billion dollars insurance policies, in which this income is about 07.8 percent of Gross Domestic Product (GDP). In other words, about 8.07 percent of GDP is allocated to purchase of insurance products, the share of developing countries has been approximately 758 billion dollars that nearly 93 percent are in Asian countries. United Kingdom, Germany and Italy, among the nations of Europe union, with 25, 17 and 16 percent of the insurance market’s share respectively, in 2003 with a growth rate of 18.5 percent, totally have issued about 34.488 billion insurance policy. East and South Asian countries, by issuing 198.997 million dollars insurance policies have had the growth rate about 12.4% (Molana Poor; 2008, 15).

E-Insurance and Its Role in E-Commerce

General meaning of e-insurance is the use of internet and information technology to produce and distribute the insurance services. And the specific meaning of e-insurance is, providing insurance coverage through an insurance policy, in which all request, proposal, contract, negotiation will be performed online. Although paying insurance premium, distributing insurance policy and process of paying the claim can be done online, in some countries, regulatory (supervisory) and technological (technical) restrictions may not allow doing quite electronic operations. Internationally, however, in order to support the paying insurance premiums and online distributing insurance policy, regulations are modifying continuously (Fathiyan; 2008, 14). The accepted impacts of e-insurance on the efficiency are included:

1. E-insurance will reduce managerial and administrative costs through the process of business automation, and will improve the managerial data

2. E-insurance, by selling insurance policy, directly will reduce commission paid to middlemen (of course part of this commission should be spending to attract customer and marketing.)

Cost reduction in competitive market, lead to reduce insurance premiums, and allow people and customers to buy more insurance, which results in greater penetration of insurance in the countries. According to Sigma\textsuperscript{38} estimate, American insurers in long term will reduce insurance of individuals, sales costs, administrative affairs and damages settlement, up to 12 percent (15 billion dollars). Because of requiring high level of counseling services in insurance of "business", in this field, the possibility of reducing costs will be 9 percent (11 billion dollars). According to general meaning of e-insurance, approximately 1 percent of 2.5 trillion dollar of world insurance premium has earned by e-insurance. However on the basis of specific meaning of e-insurance this number will be less. Internet, allows newcomer insurance companies to avoid setting up long and costly process of traditional selling channels, and current companies take advantages of the financial and internet services beside their business name and brand to add the insurance products to the collection of their existing items. Therefore old insurers are encountering increasing competitive pressure. The insurance products that need a little counseling are suitable for sale through internet, and traditional middlemen find that their insurance is encounter to competitive pressure, however in the case of complex insurance products, and high-value transaction, in which the customers are willing to spend money on consulting, selling through internet are not so appropriate. Therefore, the products that have potential of standardizing, describing and rating through limited number of parameters are appropriate to marketing over the internet and online distributing; such as car insurance, private liability insurance, household insurance and endowment insurance; of course, it does not mean that other insurance products don’t use of

\textsuperscript{38} Sigma Swiss - Re
lots of opportunities that e-commerce gives them to improve the quality of their services (Yar Ahmadi; 2005, 1-3).

In the case of life insurance, supervisory institutions should ask insurers to add some items at the issued insurance policies on the website. Item of being undeniable is an example. It means, after a period of time insurers cannot deny the issues presented by policyholder and ignore them. In addition, a clause on not penalizing should be proposed. Such kind of clauses defends the cash value of insurance policy and provides a time to holding over the insurance premiums that is not terminable and default able. Such items should be mentioned in the e-insurance, because, it is possible that the insurer cannot pay insurance premium on time. In developing countries, due to lack of insurance popular culture and training insurance, and in order to allow consumers make decision on the base of necessary information, there should be high levels of comparisons between proposed contracts through the website (Yar Ahmadi, 2005: 5).

The Impact of E-Commerce on Insurance
Internet and e-commerce as two main factors, not only are the pioneers of major transformations in the business, but also have influenced people's daily lives. In a short period of time, the internet is regarded as a means of communication, and studies have shown that Americans were the pioneers to acceptance internet and using it in online purchases. As well as, available evidences indicate using internet and developing e-commerce in other countries; and it seems there is no other option but to accept it.

The world transformations indicate that, in the last century, using e-commerce has been the major activity of developed countries. Developing countries also are moving quickly towards accessing and using it. However, all countries based on infrastructures and capabilities have invested in this important activity (Ahmadi; 2009, 5). In this section, after a preliminary discussion about the internet and e-commerce, e-insurance is addressed; and finally, some applications of the e-commerce in insurance companies will be discussed.

E-Insurance, the Solution of Traditional Administrative System
E-insurance as one of the main parts of e-commerce is an industry that has been considered extremely. The loss of spatial and temporal restrictions, reduction of rates, increasing the sales volume, easy access to information, reduction of transaction costs, customer focus, specialization of activities and restructuring sales network are some advantages of electronic insurance. Producing and distributing insurance credit cards is one of new instruments in this industry that along with other credit and debit cards will fundamentally change the structure of selling insurance policies and the structure of insurance tariffs. Information and communication are the primary means of e-insurance. In other words, e-insurance is utilizing information and communication technology in order to develop a new process of insurance, which is consistent with the information and networking community. Therefore e-insurance, including developing and implementing information infrastructure, as well as preparing, compiling and implementing the necessary policies, rules and regulations to performance of digital or information society in insurance industry (Hatami; 2005, 15).

Application of E-Commerce in Insurance Industry
E-insurance is a substitute to manual activities to do insurance affairs on the network environment or by using a smart card system and is an effective factor in accelerating and ease of insurance processes. Electronic insurance is a media that Iranian modern technologies in the arena of information and insurance have used it less. One of the noticeable points in e-insurance, in case of coordinating with the banking and hospital systems, etc. is that it leads to promoting these systems. In this scheme, since individual and commercial transactions on internet through SHETAB system, that is, the Interbank Card Switch, electronic banking integration, and presenting electronic money in all banks are performable; applying logical
structures to use coordinate electronic records, such as paper structures to critical transactions, such as cheque (check), documents contain of important information, etc. is essential. The main advantage of internet services is the ability of further and stronger communicating with customers. In this regard, all working procedures will be implement as mechanized systems; for example, the web technologies allows all individuals covered by insurance have the ability of observing the required information, doing relative operations and providing required specific information.

The true value of this technology will be identified when, not only it gives consumers the ability to self-service (receiving report, request, settlements, notice of changes, insurance terms, insurance policies, . . .), but also has had some impact on reducing the costs related to insurers.

The most important instruments in e-insurance is information and communication; in other words, e- insurance is taking advantage of information and communication technology in order to develop a new process of insurance that is coordinate to the network and information society. Hence, the e-insurance includes development and deployment of information infrastructures, as well as, preparing and implementing policies, necessary rules and regulations to performance of the information or digital society in the insurance industry.

On the other hand, the success key to set up an automatic insurance system is paying attention to valid, documented and investigated data collection. Considering to this classification has elevated the efficiency of insurance services system to great extent, and the trend of providing customers’ required supplies and services will be further accelerated by using the effective management and coherent data (Nikoo Fetrat; 2007, 1).

Advantages and Benefits of E-Insurance

The advantages and benefits of e-insurance are investigable from three perspectives of “insurer”, “under contract agencies”, and “policyholder”:

**1- The advantages of insurer**

- More speed, in the process of issuing insurance policy and getting damage
- Increasing the accuracy in the insurance activities
- Upgrading mechanized insurance system, according to the latest hardware and software facilities
- eliminating costly and time-consuming stages, such as issuing letter of introduction, inquiries from centers and ...
- Reducing the office space of insurance companies through developing virtual space.
- Encouraging policyholders to further use of insurance affairs through a perfect informing
- Attracting organizations to contracts with insurance
- Retaining policyholders and current contract centers
- Facilitating the insurance affairs such as documents, reporting, and ...
- The possibility of further controlling and managing the affairs of insurance
- The possibility of intelligent performing of some insurance processes such as introducing the policyholder to the medical centers, only by phone or internet and . . .
- Inhibiting fraud and forgery
- Exact analyzing the costs
- Integration of mechanized insurance systems in all branches, insurance website and insurance ATM terminals
2- The advantages of under contract companies
   - The possibility of rapid identifying insurance coverage
   - Reducing the time repayment to the Center, from insurer
   - Inhibiting offence and fraud
   - The possibility of issuing special insurance policies in Center place without referring to insurer
   - Rapid identifying the policyholders
   - Increasing the clients in order to use provided facilities
   - Rapid identifying letter of introduction
   - Reducing the administrative costs of the above mentioned Centers in order to communicate with insurer
   - Increasing the rate of interaction between institutions and insurer affairs

3- The advantages of insurer
   - Increasing the rate of identifying actual insurer
   - Reducing the frequency of actual presenting in the branches of insurance
   - No need to manually completing forms
   - The possibility of observing the information of insurance policies related to the policyholder
   - No need to providing a letter of introduction
   - Ease of paying and receiving related funds
   - Reducing the time and the cost of using insurance coverage and the resultant satisfaction
   - Increasing familiarization with the insurance affairs by insurer website
   - The possibility of taking insurance free consulting through accurate informing of insurers website
   - Possibility of direct communicating (virtually) with the managers and administrators in any time and space
   - Instant access to statistics and thereby quickly producing reports (Nikoo Fetrat; 2007, 1-3) and (Ahmadi; 2009, 6).

Disadvantages and Restrictions of Electronic Insurance
In general, there are two types of technical and non-technical limitations in implementing electronic commerce. Technical obstacles including issues related to the security and reliability of network and internet, hardware, required software and lack of compatibility of specialized software with networking capabilities. On the other hand, the cost of developing e-commerce, users’ information security, access to customers, interest of customers to touch the product by their hands before buying them are some of non-technical limitations that prevent the developing e-commerce in businesses. Furthermore several other disadvantages and limitations of using e-commerce in business can be list as follows.
Conclusions and Proposing Strategies of Recommendations
Investigating the situation of business in the world conclude that these industries, based on the nature of their activity has undergone significant changes, and at least in every 5 years have experienced new methods of doing activities. For example, issues related to variety of products and quality management in the 1980s, and introducing relevant standards such as ISO, and even in the recent years issues such as Six Sigma, and new evaluation criteria (such as EFQM) have led to growth, promotion of business and consequently, at present, we can see development and survival of companies that somehow have accepted these issues. Moreover, various industries are not excluded from this issue and despite public support of the majority of industries there have been a lot of successes and failures. The growth of using internet in some business, from the middle of 1990s has led traditional companies encounter to a challenge. Although newly established companies and mainly, companies that are based on e-commerce are increasing every day, traditional companies consistent their critical activities with this type of business. However, in the near future Iranian different industries are not an exception, and as a result will implement e-commerce. This paper has tried to propose an overview of the importance and impact of e-commerce on the insurance industry. According to the research findings in this area, personnel and employees in Iranian insurance industry, have had a positive attitude toward implementation and deployment of e-commerce in insurance companies, and in general, most of them have considered e-commerce as an opportunity (in contrast to threat or challenge), and believe using e-commerce in their company is essential. The most important challenges of insurance companies in applying e-commerce are related to “unavailability of other support departments (such as electronic money, telecommunications network, etc.)” And "lack rules and regulations (electronic signature, copyright ...) "and a “lack of experts in ICT (information and communication technology) and inadequate skilled and experienced personnel in the field of e-commerce that doing necessary action in this area is essential. Sectors related to the marketing and sales, as well as research and development, have had the most potential in applying e-commerce and on the other hand, insurance of car, cargo, life and individuals are more compatible to online sell. Furthermore, improving the company's reputation as a pioneer and new company, facilitating cooperation and transferring knowledge among stakeholders (stockholders, agents
and brokers), reducing the marginal cost of delivering products or services, and expanding business by eliminating geographical restrictions are the most important advantages and benefits of using e-commerce in the insurance companies.
References