E- Insurance

Concept, Importance and Applications

E- Insurance: Concept, Importance and Applications

Abstract:

The main objective of this paper is to identify the concept of e-insurance and determining the most common applications used by insurance companies. Today's rapid growth of information technology, artificial intelligence and technological advances forced insurance sector to change traditional strategies and adopt new technologies to improve insurance services. E-insurance means adopting technological methods in providing insurance services including promotion, negotiation of insurance policies. Practicing all insurance services through online channels would improve insurance services, facilitate interaction with all kinds of customers, increase productivity and sales levels and reduce costs of insurance companies. The present paper is organized as follows: the first section, introduction to the current paper. The second section, identifying e-insurance concept, advantages and limitations of e-insurance. The third section, reviewing the most common applications of e-insurance. Finally, introducing the supervision authority of e-insurance.

Keywords:

Insurance Industry; E-Insurance; E-Commerce; Information Technology; Cyber insurance; Insure Tech.

1. Introduction:

In recent decades, the world has witnessed different forms of technological advances, internet-based development, volatile economic conditions and electronic environment. Therefore, conditions and strategies of business enterprises are changing every day to meet the changeable demands of different kinds of customers. Hence, keeping abreast with technological development is becoming more important than others to increase the competitive advantage of enterprises. In the last decade the insurance sector in Egypt has become one of the financial sectors that play a vital role in the sustainable development process of the national economy. Thereby, insurance companies have to adopt new technologies and strategies to attract new customers. Electronic Insurance (E-insurance) is one of the new strategies that appeared in the last decade. E-insurance means using technology in providing insurance services and responding to the expectations of global clients (Saeed, 2012).

1.2. Research Problem:

Insurance companies are facing excessive challenges of new technologies, internet-based restrictions and internationalization of markets. Furthermore, the demands and expectations of nowadays globally customers became a major challenge for any business. This research aims at identifying how the insurance sector would face and keep up with these challenges.

1.3. Research Objective:

The main objective of this research paper is to investigate the impact of modern information, new technologies on improving insurance industry. To achieve this main objective the following sub-objectives should be achieved:

1- Investigating the importance of e-insurance and its limitations.

2- Identify the most common applications of e-insurance.

1.4. Research Importance:

This paper is providing insights into the importance of e-insurance as a vital strategy for insurance companies management. Moreover, this paper highlights the different applications used by insurance companies to keep up with technological challenges.

2. E-Insurance Concept:

In recent decades, the internet is transformed from just a communication medium that facilitates the exchange of information to a crucial channel of promotion and distribution of products and services. Different prior studies have defined e-insurance. Ahonen and Jarvinen (2003) defined e-insurance as the distribution of insurance services through electronic channels to simplify the services provided. While Morsi (2016) explained e- insurance as a method that provides, promotes and negotiates insurance services on the internet. Therefore e-insurance includes developing and implementing information infrastructure, as well as preparing, compiling and implementing the necessary policies, rules and regulations to the performance of digital or information society in the insurance industry (Hatami; 2005, 15). E-insurance subrogates manual activities of insurance affairs (Meshkat et al., 2012).

Electronic commerce (e-commerce) is the starting point of using the internet as a promoting and distribution channel. It is becoming an important driver of strategic changes for business internationally. E-commerce has led to a big and vital change in the marketing and trade world. Moreover, it improved the productivity and sales levels of enterprises. Thus, e-commerce became a core part of economic growth in many countries. These reasons along with globalization and internationalization of trade markets are forcing insurance sector to cope with these changes and being more spirited to adopt technological methods. E-insurance is considered a fundamental part of e-commerce and has been considered extremely (Meshkat et al., 2012). Therefore, turning to e-insurance technology is an essential step for insurance companies.

The following graph shows the value of sales in USD using electronic channels in business activities from 2015 to 2020.

Source: available at https://www.emarketer.com

The traditional system of insurance services relied on providing services either through an active channel by the insurance agent or through passive channels by newspapers, radio and television. Nowadays, different insurance companies automated their services and started to provide their insurance policies online.

E-insurance combine both methods to achieve more efficient and effective business. Due to busy daily lives, customers need more convenient and qualitative services that suits their time. Thus, high quality and lower prices products are not only what customers search for but also for speed communication and convenient services. Therefore, information technology became a dominant factor in determining production, planning and marketing strategies (Sekulovska, 2012). E-insurance is the result of this technological development. Insurance companies could not be incurious to these changes. Thus, insurance companies have to take the advantages of new technologies to get more competitive advantage.

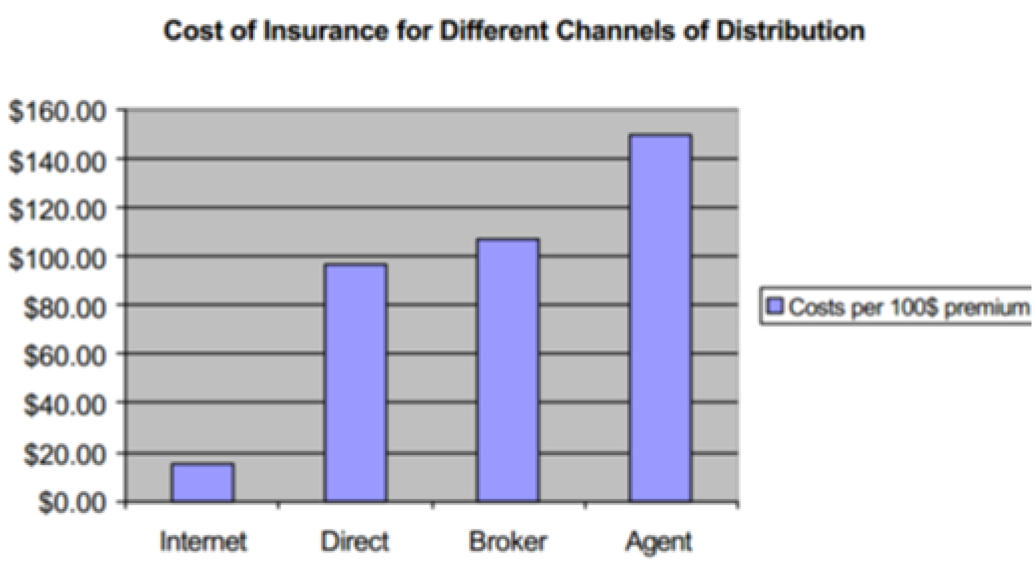
A stream of insurance companies is now developing agile working environments using "hubs" and "labs" to bring more innovative strategies within their business. So that insurer can enrich the clients' experience and form strong relationships with them (Radwan,2018). Digitalization of insurance services and business agility will simplify and improve overall business activities. Applying high technologies and digital transformation will aid the insurance sector in facilitating procedures and increasing target customers, getting lower sales turnover and improving productivity level. Thereby, digital transformation is the desired strategy over the coming years.

2.1. Advantages of e-insurance:

Applying e-insurance technologies bring several significant opportunities and advantages such as:

1- **Reducing the unneeded costs**

Online promotion for insurance services provides lower costs and time compared with traditional advertising methods. Meanwhile, automating insurance services would reduce administrative costs and improve managerial database by new customers. Cost reduction advantage of e-insurance would lead to a reduction in insurance premium which may encourage customers to buy more insurance. The following graph indicates the difference in cost saving using different distribution channels.



Source: Hiwarkar (2013)

2- **Helping in expanding the target market**

Turning into a digital system allow insurance companies to expand and enter new markets with different cultures, ages and social levels.

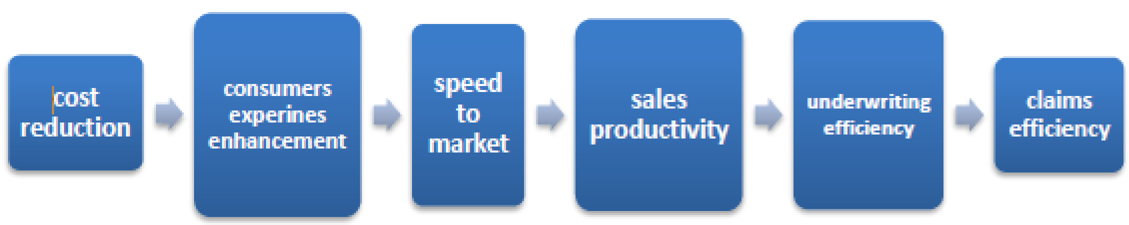
3- **Achieving more competitive advantage**:

Nowadays customers practice their daily activities using the internet including buying, selling and exchanging products and services. Thus, when insurance companies adopt and provide online services that facilitate easier, faster and less costly services would provide companies with competitive advantage.

4- **Providing more qualitative insurance services**:

E-insurance allows insurance companies to improve the quality of services provided. E-insurance helps companies to provide faster and easy access services, thus satisfying more customers needs.

Radwan (2018) arranged the main advantages of the digital transformation of insurance services form Radwan's point of view in six key areas as follows:



Source: Radwan (2018), PP. 6

2.2. Limitations of E-insurance:

There are some restrictions that limit the usefulness of e-insurance. one of these restrictions is technical hurdles; it's hard to assure the reliability and security of network used. Limitation of specialized networks is another restriction to e-insurance (Hiwarkar, 2013).

To overcome these disadvantages, companies should provide a comprehensive presentation that facilitates the understandability of the services provided. Furthermore, clients can fill a questionnaire, send an email to ask for any question.

2.3. Applications of E-insurance:

Recently, several applications have been used by insurance companies as types of e-insurance systems such as:

1- Electronic Penetration

Electronic penetration is one of the main risks that threaten e-insurance. In recent years, different lawsuits have proceeded against electronic hacking. Electronic penetration is hacking someone's computers and getting confidential data so that hackers can extort the injured person and get a ransom from the victim. Hiwarkar (2013) defined Electronic penetration as exploiting computer systems of technology-based enterprises. Electronic penetration is known also as Cyber-attacks or computer network attack. Cyber hackers use malignant code to change computer code, leading to disruptive consequences to companies.

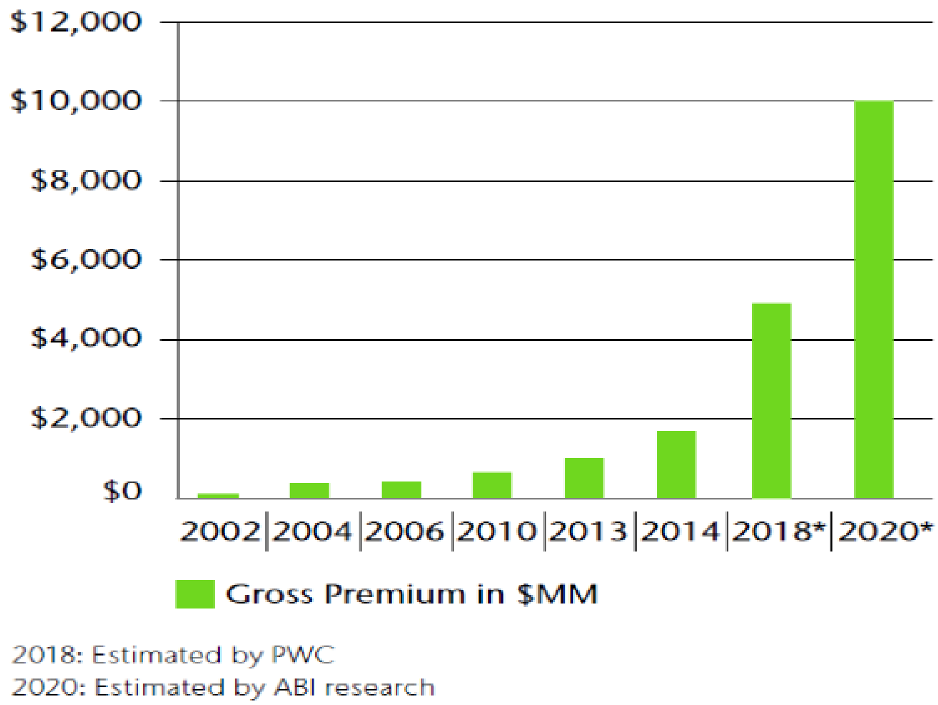
No doubt that a lot of losses resulting from these electronic hacking such as losing millions of dollars, a huge reduction in stock prices, data destruction and harming the reputation of the firm. The year 2018 has witnessed large security breakthroughs leaking data to millions of users. British Airways, Facebook website, Aadhaar, Quora website, Airaner Ryanair company, Orange company, target company are different companies that have been affected by a hack on their websites and lost millions of dollars.

According to results from a cybersecurity survey that was presented by BIMCO, Fair play and ABS Advanced Solutions in September 2018, more than a fifth of the respondents had been a victim of a cyber attack. 27% had never received a cybersecurity training, while only about 50% of the respondents had a business continuity plan in place (Yarchak, 2018).

The United States Coast Guard (USCG) released a Cyber Strategy guidance document in June 2015. This document illustrates the agency's vision for operating in the cyber insurance and presents the agency's goals and objectives for its three stated strategic priorities: defending cyberspace, enabling operations and protecting infrastructure (Yarchak, 2018). In December 2016, the USCG published a cyber-security policy concerning the criteria and process for reporting of suspicious activity and breach of security and added cyber security to the list of security items covered by the 2002 Maritime Transportation Security Act (MTSA). The policy determined penalties of up to USD 25,000 per cyber preparedness violation. In mid-July 2017, the USCG announced a request for public comments to its Navigation and Vessel Inspection Circular (NVIC) 05-17: "Guidelines for addressing cyber risks at MTSA regulated facilities" (Yarchak, 2018).

Thus, demand for protection and securing companies information increased, and cyber insurance became a necessity. Cyber insurance is a type of e-insurance that is used to protect the business from internet penetration risks. Although electronic penetration ways are changing every day, experts expect that cyber insurance is going to increase through the next few years. The cybersecurity insurance market is expected to grow by 25.4% during the period from 2018 to 2023. Price Water House Coopers expects that cyber insurance will reach 7.5 billion dollars in 2025, while Allianz company expects that e-insurance will reach 20 billion dollars in the same year. Nevertheless, in Egypt cyber insurance still not widespread in the insurance market.

The following graph indicates the expected increase in cyber insurance premiums from 2002 to 2020 according to PWC.



Source: IFE (2019)

2- **Electronic marketing of insurance policies:**

Nowadays, insurance companies provide different services using online methods such as electronic marketing and mobile applications. Research results demonstrated that electronic marketing using social networks improved the efficiency of marketing by 63% compared with other traditional methods (Saeed, 2012).

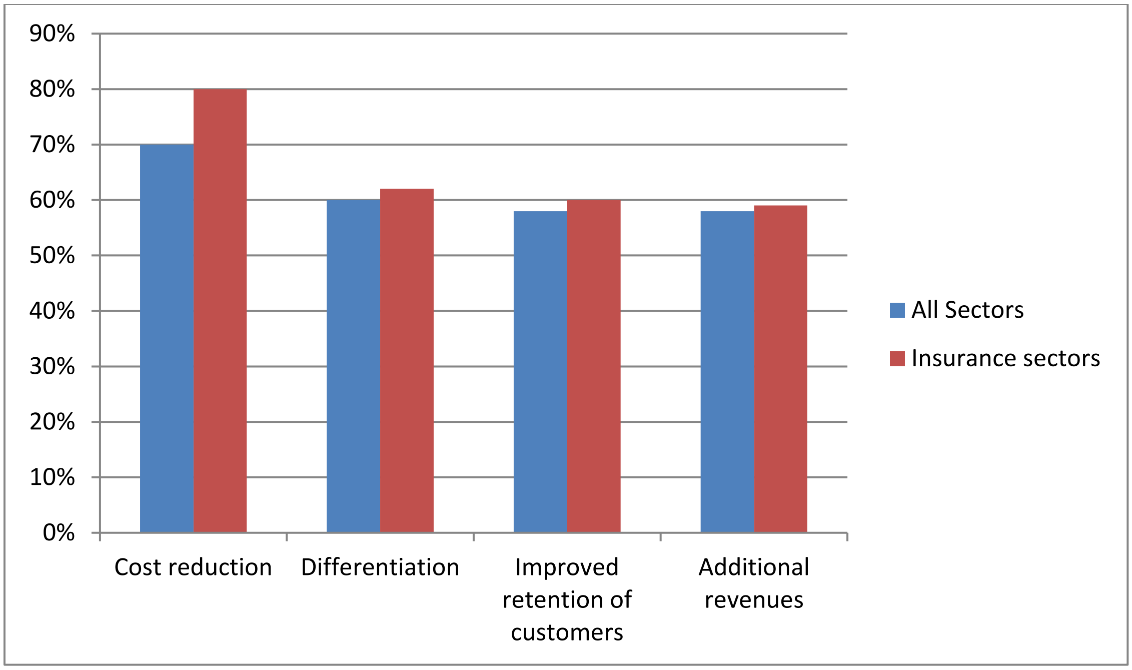
3- Insurtech:

Insurtech is the transformation of insurance services to electronic insurance by adopting new technologies to simplify insurance policies and increase competitive advantage. Insurtech is the insurance of the future (Radwan, 2018). The most common examples of insurtech are monitoring devices used in cars, Wearable activity trackers and mobile applications such as TRUDI and policy buddy .

68% of insurance companies are dealing with insurtech and have changed their strategies to address the upcoming challenges and turning these challenges into opportunities that improve insurance services (Yarchak, 2018).

The insurtech market forecast determined the value of the global insurtech market revenues at 532.7 million in 2018 and it is expected to reach $1,119.8 million by 2023. The insurtech market forecast demonstrated also that North America is the highest country that adopts Insurtech strategies. North America offers flexible and customized insurance for health, property, and others encouraging clients to choose the most suitable insurance plans for them.

The following graph demonstrates the most common advantages of using insurtech technology by insurance sector and all other sectors.



Source: PWC Global FinTech Survey (2016)

4- Blockchain technology:

In recent decade there has been a large growth of a decentralized economy that could largely change business in the near future. In2017 the world has witnessed a year of cryptocurrencies and high increase in prices, thus blockchain technology has appeared.

Blockchain has become a safe method that keeps a record of events for both parties as it cannot be deleted or modified. So that, ideas and concepts which were difficult to realize in the past could be developed now. Blockchain is an independent technology that does not require brokerage operations, so there is no probability of manipulation by anyone.

5- Digitalization in Insurance

Recently, the world has witnessed a huge revolutionary transformation in the insurance industry. Bain & Company in a collaboration with Google have identified seven key technologies; virtual reality, infrastructure and productivity, online sales technologies, the Internet of Things, advanced analytics, machine learning, and distributed ledger. These technologies are considered a grace for consumers because they provide better service, high quality, more opportunities and lower prices. Almost 6.4 billion devices are connected to the internet, so digitalizing insurance services would make significant opportunities in product segmentation, fasten premium growth (Radwan, 2018). Bain and Google shows that a prototypical P&C insurer in Germany that implemented these technologies could increase its revenues by up to 28% within five years, reduce claims payouts by as much 19% and cut administration costs by as much as 72%

3. Supervision Authority:

There is a significant increase in e-insurance awareness in Egypt thanks to efforts of the Insurance Federation of Egypt. The Insurance Federation of Egypt announced that insurance sector share in GDP by 1% and it is expected to increase to 3% by 2023, thus encouraged Egyptian insurance companies to adopt new technologies to attract more customers and improve overall productivity (IFA, 2019).

Egyptian Financial Regulatory Authority (FRA) in collaboration with Insurance Federation of Egypt studied and issued several regulations and rules that control e-insurance. Different legislations have been issued by FRA concerning e-insurance such as legislation no. 122 in the year 2015; no. 1008 in the year 2018; no. 1128 in 2018. All these legislations and decisions state that each company must obtain the authority's approval to provide insurance services through electronic channels such as mobile applications.

FRA also identified types and validity of different e-insurances policies to be online promoted and provided such as compulsory civil liability insurance policies, travel insurance policies, micro insurance policies and personal accident insurance policies. Furthermore, FRA demonstrated that insurance companies are obligated to provide a comprehensive presentation and explanation of insurance policies that announced on companies' websites. Moreover, FRA imposed insurance companies to provide contact methods to respond to clients inquiries, companies should provide phone number and available emails to answer customers questions.

4. Conclusion:

Recently, technology plays a dominant role in all businesses. E-commerce is becoming a core part of succeeding any company. Thus, it is important than ever for companies' management to adopt different technologies that protect and grow their companies. The insurance sector has a fundamental role in backing sustainable development. Therefore, insurance companies had to face daily technological challenges to protect government and customers form potential losses. E-insurance is a wide expression that has been used in recent years to facilitate insurance services and improve the efficiency of insurance companies. E-insurance is providing insurance services through online or electronic channels, including promotion, payments, negotiation of insurance policies. There are several advantages of e-insurance such as reducing the unneeded cost of underwriting and administrative costs. Entering and expanding to new markets, facilitating insurance services, achieving competitive advantages are other advantages of e-insurance.

Furthermore, there are different applications of e-insurance such as cyber insurance, electronic marketing, insurtech, internet of things and block chain technology. Cyber insurance is a type of e-insurance that is used to protect the business from electronic penetration risks. A cyber attack can have several implications relevant to insurance: loss of property, business interruption, loss of production, loss of data and loss of reputation. Insurtech is the transformation of insurance services to electronic insurance by adopting new technologies to simplify insurance policies and increase competitive advantage. The most common examples of insurtech are monitoring devices used in cars, Wearable activity trackers and mobile applications such as TRUDI and policy buddy. Finally, Egyptian Financial Regulatory Authority (FRA) in collaboration with Insurance Federation of Egypt studied and issued several regulations and rules that control e-insurance.

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