Feasibility Study of E-Insurance Services in Iranian Insurance Companies (Asia Insurance Co.)

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Abstract  
This paper attempts to study the feasibility of e-insurance services in Asia insurance company. Its method can be used as a theoretical way in other insurance companies. This study is based on TELOS model which involves technical, economical, legal, operational and seasonal factors. This research’s data are collected via 27-question questionnaire-based survey from Iranian insurance companies "Asia Insurance Company". At the end of this study Asia insurance company is recommended by us to work on E-insurance services within its departments.

Keywords: Electronic Commerce, Insurance, Electronic-Insurance, Feasibility

1. Introduction

The term “E-commerce” has become widespread—a force that is here to stay. E-commerce and the internet are increasingly becoming one of the most important drivers of strategic change for business and national governments[Arora,2003]. Indeed in spite of the dismal plight of dot-coms of the late 90s, everything from real estate sales to education has moved online. Yet not all the industries have experienced the same level of success in transitioning from the traditional retail approaches to the less clear-cut online models. Several areas within the financial services industry, such as banking and investments, have had a significant amount of success adopting to cyberspace[Garven,1998].

The insurance industry, on the other hand, has been lagging in its adoption of E-commerce[Garven,1998; Jackson,2003]. Although it is recognized that E-insurance has the potential to become a multibillion dollar industry, it is difficult to see how this will occur without some fundamental changes to the way e-insurance is being implemented. The current reality is that few available e-insurance offerings provide any real value and that less than 1% of all insurance sales are actually being transacted online [Garven,1998; Pastore,1999; Jackson,2003]. This article examines the factors that influence implementation of e-commerce in the insurance industry and suggests some future technological trends that will accelerate the transition to this new era of e-insurance. This article aims at investigating the feasibility of e-insurance services in Asia Insurance Company in Iran [Grossman, McCarthy, Aronson, 2004].

2. Insurance

Insurance is an agreement where, for a stipulated payment called the premium, one party (the insurer) agrees to pay to the other (the policyholder or his designated beneficiary) a defined amount (the claim payment or benefit) upon the occurrence of a specific loss. This defined claim payment amount can be a fixed amount or can reimburse all or a part of the loss that occurred. The insurer considers the losses expected for the insurance pool and the potential for variation in order to charge premiums that, in total, will be sufficient to cover all of the projected claim payments for the insurance pool. The premium charged to each of the pool participants is that participant’s share of the total premium for the pool. Each premium may be adjusted to reflect special characteristics of the particular policy. Normally, only a small percentage of policyholders suffer losses. Their losses are paid out of the premiums collected from the pool of policyholders. Thus, the entire pool compensates the unfortunate few. Each policyholder exchanges an unknown loss for the payment of a known premium.
Under the formal arrangement, the party agreeing to make the claim payments is the insurance company or the insurer. The pool participant is the policyholder. The payments that the policyholder makes to the insurer are premiums. The insurance contract is the policy. The risk of any unanticipated losses is transferred from the policyholder to the insurer who has the right to specify the rules and conditions for participating in the insurance pool. The insurer may restrict the particular kinds of losses covered. For example, a peril is a potential cause of a loss. Perils may include fires, hurricanes, theft, and heart attack. The insurance policy may define specific perils that are covered, or it may cover all perils with certain named exclusions (for example, loss as a result of war or loss of life due to suicide).

Hazards are conditions that increase the probability or expected magnitude of a loss. Examples include smoking when considering potential healthcare losses, poor wiring in a house when considering losses due to fires, or a California residence when considering earthquake damage. In summary, an insurance contract covers a policyholder for economic loss caused by a peril named in the policy. The policyholder pays a known premium to have the insurer guarantee payment for the unknown loss. In this manner, the policyholder transfers the economic risk to the insurance company. Risk, as discussed in Section I, is the variation in potential economic outcomes. It is measured by the variation between possible outcomes and the expected outcome: the greater the standard deviation, the greater the risk[Anderson;Brown,2005].

Electronic Commerce

Electronic commerce may be defined as being “Any form of business or administrative transaction or information technology exchange that is executed using any information and communication technology”[e-centre UK]. With the growth of commerce on the Internet and the World Wide Web, e-commerce often refers to purchases from online stores on the Web, otherwise known as e-commerce Web sites. They may also be referred to as "virtual-stores" or Cyber stores. Since the transaction goes through the Internet and the Web, some have suggested another term: I-commerce (Internet commerce), or i-commerce[Arora,2003].

Major Types of E-commerce

E-commerce can be broadly classified into four categories: business-to-business(B2B), business-to-consumer (B2C), customer-to-business(C2B) and consumer-to-consumer(C2C). Following is a brief discussion:[cornal et al][Bromideh; Aarabi,2006]. B2B has been in use for quite a few years and is more commonly known as EDI. In the past EDI was conducted on a direct link of some form between the two businesses where as today the most popular connection is the internet. The two businesses pass information electronically to each other. B2B generally involves large companies transferring all their business purchasing and sales to the web. The use of extranets facilitates this. A typical example is Cisco[www.cisco.com] the supplier of internet hardware, where both buyers and suppliers can deal online. B2C enables sellers to reach more customers and can gather comprehensive, focused information about them, enabling sellers to target them more efficiently. This is where the consumer accesses the system of the supplier. It is still a two-way function but it is usually done solely through the internet. Well known B2C examples include retail activities such as the virtual bookshop Amazon[www.amazon.com].

C2B allows customers to approach business. Consumer to Business is a growing arena where the consumer requests a specific service from the business. For example passengers can bid for airline tickets on priceline (www.priceonline.com). C2C enables customers to interact with other customers. These sites are usually some form of an auction site. The consumer lists items for sale with a commercial auction site. Other consumers access the site and the place bids on the items. The site then provides a connection between the seller and buyer to complete the transaction. The site provider usually charges a transaction cost. In reality this site should be called C2B2C. One example is eBay[www.ebay.com] where individuals can auction off goods to other individuals. COINS-Community of Interest-[www.coins.com], where customers share information and communicate online are a particular aspect of this model[Bromideh;Aarabi,2006].

Effect of E-Commerce on Insurance Companies

Insurance companies have regarded the internet mainly as another channel of distribution for their products. Compared to online stock brokerage and online banking, development of the internet in the insurance industry has been somewhat cautious. Websites mainly serve to provide information about the company and its products. Many insurers especially in developing economies have not seized the opportunities created by e-commerce for making all business processes more efficient, beginning with the online sale of policies. But the growing number of those who have embraced the technology is most encouraging[Vress (2002) and Yao (2004)].

E-Insurance

E-insurance can be broadly defined as the application of Internet and related information technologies (IT) to the production and distribution of insurance services.
In a narrower sense, it can be defined as the provision of an insurance cover whereby an insurance policy is solicited, offered, negotiated and contracted online. While payment, policy delivery and claims processing may all be done online as well, technical and regulatory constraints may not allow these elements to be subjected to full e-commerce application in certain countries (Fisher, 2003). However, insurance legislation worldwide is being continuously modified to accommodate online payment and policy delivery, and outside the discussion of e-e-insurance metrics, these elements should be included in the narrow definition. The anticipated efficiency effect of e-insurance is twofold. First, e-insurance should reduce internal administration and management costs by automating business processes, permitting real-time networking of company departments, and improving management information. Secondly, it should reduce the commissions paid to intermediaries since it can be sold directly to clients. For insurance sold to individuals, agents typically receive a commission of 10 to 15 percent for non-life policy sales and renewals and from 35 to 100 percent for life insurance policies in the first policy year, but much less on renewal (Bender and Marks, 2000; SIGMA, 2001; Fery, 2000).

2. Feasibility
Before an organization starts to perform a project or a plan, nthe various dimensions of that plan should be specified to estimate the capability of it. This specification is called “feasibility study” [Izadi, 2001] There are various types of techniques for feasibility studying. One of these techniques is called TELOS which represents:

T: Technical factors
E: Economical factors
L: Legal factors
O: Operational factors
S: Seasonal factors

In this article the feasibility of e-insurance services on the Iranian insurance company (Asia Insurance Company) has been studied.

3. Asia Insurance Company
Asia Insurance Company, as one of the biggest insurance companies in Iran, aims at bringing people calm and peace. In Tir 1338, it was established to do various kinds of insurance and commercial operations. Different types of insurance such as: Automobile insurance, Life insurance, Group insurance, Fire and allied line insurance and etc are being given to the people (www.bimehasia.com). Asia I.C has started to cover most of its branches and head departments with the internet and right now it aims at selling all the services electronically. For more information, see: www.bimehasia.com.

4. Research Objectives and Questions
The main purpose of this article is to study the feasibility of e-insurance services in Asia Insurance Company. In other words this paper seeks to investigate the state of being feasible of presenting insurance services electronically.

In this case, the research purpose is gained by investigating the following questions:
1) Is it technically possible for A.I.C (Asia Insurance Company) to present insurance services electronically?
2) Is it economically feasible for AIC to present insurance services through the web?
3) Is it legally possible for AIC to present insurance services electronically?
4) Is it operationally feasible for AIC to prepare insurance services through the web for its customers?
5) Is it possible for AIC to present electronic insurance services seasonally?

5. Hypotheses
H1: It is technically feasible to present e-insurance services in Asia insurance company.
H2: It is economically feasible to present e-insurance services in Asia insurance company.
H3: It is legally feasible to present e-insurance services in Asia insurance company.
H4: It is operationally feasible to present e-insurance services in Asia insurance company.
H5: It is seasonally feasible to present e-insurance services in Asia insurance company.

6. Methodology
Summarizing of the information in this research has been done through descriptive and inferential statistics. The goal of this research is studying the feasibility of E-Insurance services in Asia Insurance Company in Iran. In this vein, the research purpose is achieved by developing and investigating the former questions.

7. Data Collection and Analysis
To develop the survey we used a 27-question in questionnaire.
To conduct the survey we targeted a 165-member group of people who are managers and staffs of central departments in IT and Web areas and also the managers and staffs of the branches in Tehran and Karaj. Each participant responds to the statements on a scale of one to five. One indicates strong agreement with the statement; five indicates strong disagreement. To determine the state of presenting e-insurance services all the questionnaires were being returned (165). Among all, 52% were men and 48% were women. We investigated the feasibility according to all the pre-mentioned factors; technical, economical, legal, operational and seasonal. Through the experience upon which we determined our questionnaire, 45.5% of the participants have experience less than 10 years; 28.5% between 10-15; 9.7% between 15-20 and 16.4% more than 20 years. Therefore there is a reliable measurement. A large extent of the participants declared that they have familiarity with computer so there exists another sign of participant’s close connection with the issue which has been investigated by means of questionnaire.

8. Integrated Statistical Test of T-Student:

Table 1. Statistical Profile of the Respondents

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>(\bar{x})</th>
<th>S</th>
<th>t</th>
<th>d.f</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>3.1552</td>
<td>0.7174</td>
<td>2.731</td>
<td>164</td>
<td>Acc.</td>
</tr>
<tr>
<td>H2</td>
<td>3.4742</td>
<td>0.7079</td>
<td>8.604</td>
<td>164</td>
<td>Acc.</td>
</tr>
<tr>
<td>H3</td>
<td>3.3382</td>
<td>0.6229</td>
<td>6.973</td>
<td>164</td>
<td>Acc.</td>
</tr>
<tr>
<td>H4</td>
<td>3.3368</td>
<td>0.6829</td>
<td>6.335</td>
<td>164</td>
<td>Acc.</td>
</tr>
<tr>
<td>H5</td>
<td>3.2412</td>
<td>0.6715</td>
<td>4.614</td>
<td>164</td>
<td>Acc.</td>
</tr>
</tbody>
</table>

As it was shown in table 1, for the first hypothesis and \(t=2.731\) with 164 degree of freedom, null hypothesis is rejected while research assumption is confirmed.

As it was shown in table 1, for the second hypothesis and \(t=8.604\) with 164 df., null hypothesis is rejected while research assumption is confirmed.

As it was shown in table 1, for the third hypothesis and \(t=6.973\) with 164 df., null hypothesis is rejected while research assumption is confirmed.

As it was shown in table 1, for the fourth hypothesis and \(t=6.335\) with 164 df., null hypothesis is rejected while research assumption is confirmed.

As it was shown in table 1, for the fifth hypothesis and \(t=4.614\) with 164 df., null hypothesis is rejected while research assumption is confirmed.

9. Friedman Test

In order to rank and determine the degree of importance of each hypothesis, T-test was being used.

Table 2. Statistical Profile of the Respondents (Friedman)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Chi-Square</th>
<th>d.f</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>41.140</td>
<td>4</td>
<td>Not Acc.</td>
</tr>
</tbody>
</table>

\(H_0\) : All the factors in TELOS model have the same effect on presenting e-insurance services in Asia insurance company.

\(H_1\) : All the factors in TELOS model have different effects on presenting e-insurance services in Asia insurance company.

As it was shown in table 2, the null hypothesis is confirmed and the research assumption is rejected.
10. Results

Data gathered in previous stages were analyzed using the research model (TELOS) and the summary of the results shown in Table 1 describes the state of being feasible of presenting e-insurance services in Asia insurance company. The respondents' answers indicated that according to TELOS model factors, Asia insurance company has the capability of presenting e-insurance services within. Table 2 has shown us the rank of each factor that plays an important role of presenting e-insurance services. Economical factor stays at the first level, operational factor follows it at the second level. Then comes legal factor. Seasonal factor comes at the fifth level and at the end technical factor is of importance.

References
4. BMI (2005), "Iranian Performance In the Recent 8 Years", Bimeh Markazi Iran (Central Insurance of Iran), Iran.
6. E-Centre, UK.
16. www.amazon.com
17. www.bimehasia.com