Investigation on Development Barriers of Electronic Insurance in Iranian Insurance Companies Case Study (Insurance Companies in Mazandaran Province)

Majid Mahdinia*

Department of Management, Islamic Azad University of Babol, Iran

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*Corresponding author: Majid Mahdinia, Department of Management, Islamic Azad University of Babol, Iran. Tel: +989113000169; E-mail: majid.mahdinia1987@gmail.com

Abstract

Electronic insurances are from important phenomenon that used from information and communication technology and also are from information management that has depth evolution in the way of selling insurance and delivering of damages, through from side increasing the communication with insurer and with another side make the domain of virtual selling and buying of some insurance widely. In this research we pay attention to barriers of electronic insurance and getting some alternatives for expanding and developing electronic insurance in Iran insurance market more competitive and so increasing the welfare of consumers [21].

In the first of third thousand many of chores has effected from basic converting and pursue the business people and countries to more competitiveness and participation and the world is the evidence that it makes easier and jointdefenter groups of expanding communication that shows the world as monolith. The evolution from communication of technology and with aid of it business trade as inseparable part in the process of globalization has the speed that many of countries can reduce their distance with expanding the national structure and find their position in the global economy. This way has new concept with the name of “new economy”[8]

Electronic trade since 1996 mean 3 years after the entrance of internet has shown in business. Internet cause to converting the electronic trade to one of the lowest cost for doing business actions and after a while it can has wide verity from business actions [29]. Insurance industry as one of the most important parts of country economic has especial position and right now insurance services with two ways of traditional and electronically are performing in developed country and developing country that electronic insurance according to aims and being in international economy has special position and it cause that some of private insurance company doing electronically insurance in their schedule [1]

Electronic insurance is one of the most important phenomenon that achieved from using information and communication technology that has depth evolution in selling insurance and damages while from side increasing the relations with insurer and from another side making the domain of virtual buying and selling of some insurances widely [7] in the case of main struggles and restrictions in electronically insurance [21] in an article counts some of conditions that may problem for online selling of insurance that making unwanted insurance contract , unobvious chief of final risks in internet transaction,

Introduction

Insurance or totally financial institute are from industries that electronic trade can has special rules in their growth and expanding. Unless today’s the most structures of insurance systems in the world have based on the information this industry with low speed adopt itself with new and digital technologies and less has seen that it allows to entrance of technology to this case[20] using from this new phenomenon (electronically trade) in insurance industry doubtlessness is not only way to effecting on the operating of insurance companies but also it inspire the way of supervisor performance in insurance industry. Today’s in most of developing countries internet from side make easier and cheaper the availing to insurance markets and from another side it causes to make market clear that these cause to making insurance market more competitive and so increasing the welfare of consumers [21].

With attention to these brief expressions with aims to investigate of expanding barrier of electronic insurance in Iran insurance body corporate we survey the importance and essential of keeping attention to electronic insurance and discussing the question of research and relating hypothesis to solve the problem and define the phrase and we apparent the expand barriers of electronic insurance in Iran insurance body corporate in Mazanaran province.
deliver uncompleted information that can effect on contract and electronically signature and et cetera are some of these condition of problems.

**Literature Review**

With using of information technology in insurance industry that are being shown in electronically insurance; geographical and time restrictions deny and wide evolution will created in information system of insurance industry that from side increasing the relation with insurser and with another side make the domain of virtual buying and selling of some kind of insurances widely [7] some other factors that causes to insurance industry goes to electronic are high operational cost, long term of responding process to costumer, high overhead and non-using of technology in competitiveness advantage [12] the collection of these factors cause to different countries in the world do for providing and setting policies in electronically trade and reinforcement facilitate it rapidly [9].

In this research with using of ramifications model of Mirzaei Ahranjani (behavioral structure and environment factors) and with adding forth aspect with the name of nature factors that achieved from research and studying of electronic trade organization, economic department and the article of Dr.Amirhosein Amirkhani in the case of IT in insurance industry; we investigate the barriers and alternatives for performing electronic insurance in Iran insurance company. According to this model undeveloped of electronically insurance as a dependent variable and environmental, organizational, behavioral, and nature barriers as independent variable has been chosen.

The aim of this research is helping to performing and expanding electronically insurance in corporative Iran insurance company from investigating and identifying the barriers of expanding electronically insurance and getting alternatives for improving and expanding electronically insurance. Time domain of this research is in 2012 and place domain of it is in the area of all branches and agencies of Iran insurance company in Mazandaran state.

**Hypothesis**

While according to investigating of research literacy cannot make special orientation for discussing the relation or between variables of research should pay attention to special question of research [6] in the other hand in researches that we following the quiddity of a phenomenon or we seek the idea of people about a phenomenon we should design a question and in some cases that we want to know about causal relationship or regression between two or more phenomenon we use from hypothesis [45] in this case according to conceptual model we discuss the main question and our research hypothesizes.

Main question of research: witch are the expand barriers of electronic insurance in corporative Iran insurance company in Mazandaran state

**Hypothesis 1**

Organization factors have significant effect on undeveloped and performing of electronically insurance in corporative Iran insurance company.

**Hypothesis 2**

Behavioral factors have significant effect on undeveloped and performing of electronically insurance in corporative Iran insurance company.

**Hypothesis 3**

Environmental factors have significant effect on undeveloped and performing of electronically insurance in corporative Iran insurance company.

**Hypothesis 4**

Nature factors have significant effect on undeveloped and performing of electronically insurance in corporative Iran insurance company.

**Research Model**

Each conceptual model is as a start and basic for doing studies and research with the style that shoes mentioned variables of research and relation with them [23] in the other hand, can say that conceptual model with idealist style or mind plan and analysis instrument [26] is a strategy for starting and performing the research such that has expected in performing the research variable relationship and communications between them has investigated and examined and according to necessary, adjustment has performed and also some factors added or lowered [35].

In this research we use from Delphi method or Poll for insurance agencies in Mazandaran province especially for agencies of Amol city 98 agencies exactly and data is collected by questionnaire which has been designed as Likert spectrum. According to theoretical target of research that used from Tuesday ramifications famous model [26] and according to researches and studies of electronic trade organization and UNCTAD and economic information department and also the experiences of Dr.Amirkhian in IT insurance industry we arrive to other factors that author give it name of nature factor. This group of barriers is more supervisors of shape complexity and nature variety of subject (electronically insurance). As the nature of risk rate of insurance courses need to more information and factors, the sale of products from internet will be more difficult (UNCTAD, 2002) in addition to law and supportive struggle internet selling complex nature problem include the complexity of some insurance products that is one of the major struggles of insurance companies in making electronic their process (EIU, 2007) so we arrive to four aspects model that is shown below: (Figure 1)
Analysis of Data and Information

After collecting essential data and information by questionnaire all of them should be encoding then they should inter to the spss software then as we classify descriptive statistics for counted data and finally for proving or denying designed hypothesis in the research with scientific method we have used from appropriate tests. For analysis general data and demographic (like age, sex & education) majority we use from descriptive statistics buy excel software. In this research with using from different methods of inferential statistics the questions of research have been analyzed this analysis is as follows:

Cranach’s alpha Test

Ratio Cranach alpha used for measuring the rate of one-dimensional for attitude and other factors that there measurement is not easy. This test that is from the ratio one of Cranach alpha is for validity of questionnaire that design according to Lykert and the answers are multiple [2].

\[ R_a = \frac{j}{j-1} \left[ 1 - \frac{\sum S_i^2}{S^2} \right] \]

\( R_a \) : ratio Alpha
\( j \) : number of sub-questions
\( S_i \) : ANOVasubjth
\( S \) : Total variance

Kalmuguruf-asmyranf Test

This test is used for distributing the statistic society. It is simple way for assimilation of experimental data with chosen distributing statistics [2]

\( H_0: \) distributing in sample is slate \( \quad \) \( \text{Sig} \geq 0.05 \)
\( H_1: \) distributing in sample is not slate \( \quad \) \( \text{Sig} \leq 0.05 \)

Hypothesis Testing Using T-Test for The Status of Each Variable

This test is for evaluation of slate or dissimilarity of sample average with society average in the style it used that standard deviation being passive [2] for determination of average of every expanding barriers of electronic insurance.

\[ T = \frac{\bar{Y} - \mu}{s/\sqrt{n-1}} \]

Friedman Test for Ranking Variables

This test is for comparison between some groups according to rates of their average and it appears that can this groups being from one society or not? Scale in this test should be minimum ratings. Friedman test for two ways analysis of variance (for non-parametric data) and it used for comparison the classified average for different groups [2]

\( H_0: \) there is different between variables \( \text{Sig} > 0.05 \)
\( H_1: \) there is not different between variables \( \text{Sig} \leq 0.05 \)


For measurement of this research hypothesis in the first level use from T-test then for comparison between the variables of hypothesis specially use from Friedman variance analysis test that the results of this tests approved all hypothesis.

The first main hypothesis of this research is that organization factors have significant effect on lack of expand and performing electronic insurance in corporative Iran insurance company. This factors include some materials like lack of expert human, weakness of performance structure and coordinator, internal weakness of technology and inadequate of budget. According to research results organizational factors have significant effect on undeveloped and performance of electronic insurance of Iran corporation insurance company, this means that weakness in one of them cause to undeveloped in another. Also statistics results and its test show that and accept this hypothesis and prove the existence of this relation.

Hypothesis number two is about behavioral factors have significant effect on undeveloped and performance of electronic insurance of Iran corporation insurance company that these factors include some factors from people resistance against change and lack of supporting of senior managers. Investigations show behavioral factors like organizational resistance against of change because of scare for losing job and lack of security in job and existence of some powers with traditional method are part of important struggles of electronic insurance, so existence of meaningful relation between these factors and undeveloped and also performance will appear. According to research results it seems behavioral factors have significant effect on undeveloped of Iran corporation insurance company, this means that weakness in one of them cause the weakness in another. Statistics found and its test also explains this case and accepts this hypothesis and the existence of this relation.

Hypothesis number three is about environmental factors have significant effect on undeveloped and performance of electronic insurance of Iran corporation insurance company that these factors include elements such as the lack of communication media, weak legal grounds, cultural weakness and overall development cost. Also investigations show this relation between these tools and suitable substrates environment and develop of electronic development. Statistics results and its test also explain this case and accept this hypothesis and the existence of this relation.

Hypothesis number four is about nature factors have significant effect on undeveloped and performance of electronic insurance of Iran corporation insurance company that these factors include elements such as the complexity of insurance courses and inspection necessity and damage assessment as person. Studying shows that can’t disregard the relation between nature barrier; undeveloped and internet selling of electronic insurance. Statistics results and its test also explain this case and accept this hypothesis and the existence of this relation. Also statistics results and Friedman test between main variables, nature factors; nature factors have the highest rate (77.2) and behavioral factors have the lowest rate (66.2)

Research Restrictions

The most important problem in performing this research is lack of cooperation or weak cooperation of statistic society population in Mazandaran state that is being tried to diligently pursue and making formal relation and also making informal relation with using of behavioral science techniques catch competent cooperation.

Results

Investigation has shown in the relation with the first hypothesis organizational factors have significant effect on undeveloped and performance of electronic insurance of Iran corporation insurance company and according to Friedman test, organizational factors have not difference in variables. Also in second hypothesis has announced that behavioral factors have significant effect on undeveloped and performance of electronic insurance of Iran corporation insurance company and Friedman test shows that there is difference between variables in sample and between behavioral variables, people resistance has the highest rate (1.7) and lack of supporting of senior managers has the lowest rate (1.3).

The third hypothesis shows that environmental factors significant effect on undeveloped and performance of electronic insurance of Iran corporation insurance company and Friedman test announce that there is difference between variables in sample; also between environmental factors legal variable has the highest rate (2.83) and overall cost of develop has the lowest rate (1.99). In addition in the fourth hypothesis has announced nature factors have significant effect on undeveloped and performance of electronic insurance of Iran corporation insurance company and Friedman test shows that there is difference between variables in sample and also between nature factors necessity inspector has the highest rate (1.66) and complexity of insurance courses has the lowest rate (1.34).

Discussion and Suggestions to Conclusion

The research that in this part has investigated is there research paper of Amirkhani and Motaghisabat (2009) with the name of investigation of develop barriers of electronic insurance in corporative Asia insurance that with inspiration from ramification model (behavioral, structural and ground factors) and with adding the four aspect as nature factors to this model, they investigate the barriers and performance of electronic insurance in Asia insurance. Research main hypothesis investigate the existence of relation between structural, behavioral, ground and nature factors with undeveloped electronic insurance in Asia insurance; for analysis of that they used from sign tests (binomial), Pearson’s correlation, linear regression, analysis of variance and Friedman. The tests and related analysis of this research proved that all of remain factors were the barriers of performance and developing of Asia insurance, according to Friedman test between structural factors the Weak administrative structure variable has the highest rate (2.67) and human weakness variable has the lowest rate (2.38). In the ground factors Weak infrastructure and cultural variables has the highest
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rate (3) and VariableWeakTelecommunication has the lowest rate (2.19). In behavioral factors VariableNonSupportthe need formanagers has the highest rate (1.55) and VariableChangeinpersonnelresistance has the lowest rate (1.45). Between nature factors NecessaryInspection andevaluation variable has the highest rate (1.58) and VariableComplexityofinsurance courses has the lowest rate (1.42). Meanwhile, according to linear regression test arrangement of importance and effectiveness of main factors base on Beta ratio are nature, behavioral, ground and finally structural. Also in this research with T-test we achieve this results that all nature, behavioral, environmental and organizational factors have significant effect on undeveloped of electronic insurance in Iran corporation insurance company and according to Friedman test, between structural factors VariableWeakAdministrative structure has the highest rate (2.58) and Weakness oforganizational Technology Variable has the lowest rate (2.16). Between behavioral factors VariableResistancepersonnel have the highest rate (2.83) and the macroVariable costs of develop has the lowest rate (1.99). Between nature factors the necessity of visit variable has highest rate (1.66) and complexity of insurance courses Variable has the lowest rate (1.34). The results of tests between main variables show that nature factors have the highest rate (2.77) and behavioral factors have the lowest rate (2.26).

Suggestions

In organizational aspect should express that according to Friedman test this factor has more effect than other factors on dependent variable, so appropriate context for detecting emerge and appearance of this factor certainly can help to insurance companies in performing the electronic insurance, so insurance companies can with using of same language and joint program doing essential action in IT field, also central insurance pursue insurance companies to performance IT program and electronic insurance with making standard the electronic insurance and making an appropriate basis. In behavioral aspect we suggest educate information and other persuasive actions and doing basis actions in the field of economic, law, technical and the most important of them cultural field as doer alternatives. Also in environmental aspect we suggest that company do for creating and developing appropriate basis of telecommunicating for establishing electronic insurance in the country with cooperation of relevant organizations and doing the essential actions for detecting worry of insurer and customer for increasing trust between insurer and insured for exchanging electronic data. But in the nature field with paying attention to the first position of this factor between all factors according to respond to appropriate basis for detecting emerge and appearance of this factor; it has especially in trend of growth and sublimation of electronic insurance, so we suggest that insurance companies do for simplification and decreasing the complexity of them and parallel with keeping attention to capacity and ability should do for performance of electronic trade, so in short term price announcement of insurance to online way and then starting electronic insurance with newer shape like individual or personal accident insurance that have less complexity and base on that distributing to whole insurance industry.

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