Factors Hindering ICT Implementation In Indian Insurance Industry: An Empirical Study

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INTRODUCTION

Insurance sector has taken a center stage in channeling funds from the public to develop projects which prove helpful to the society. The main objective of insurance companies is to collect the premiums with a promise to compensate the insured in case of any risk against which the policy is taken. The customers are required to have knowledge of the kind of policies available with the insurers through the agents or direct from the company. Similarly, the policyholder has to report to the company incase of any loss of property or life for which the policy has been taken. Agents of insurance companies and brokers are the intermediaries linking the insurer with the insured. There is a need for information interchange between the two (or sometimes more) parties involved in the insurance business from the time of signing the contract till the claim is paid. Information, therefore, remains to be the axis around which the insurance transactions revolve.

In the present era, no insurance company can survive in the market without investing heavily in information technology. Technology has changed the model of business in all sectors; specifically in the service sector. Man-to-man interface has been replaced by man-to-machine or sometimes machine-to-machine interface. The Insurance sector has not been left behind and the clever participants have sliced the opportunity to their advantage. Information and Communication Technology (ICT) has been implemented to varying proportions in various levels of the insurance sector. ICT has impacted the insurance companies, the intermediaries as well as the customers and the services offered by insurers are a result of technology-centered products.

This has prompted the researchers to take a closer look at the role played by ICT in the insurance industry and whether it impacts the sector positively or negatively. A thorough study of the impact of ICT in the insurance industry is imperative to investigate the future survival of this sector in the changing scenario and how the consumer is coping with the change. The current piece of study is our humble attempt to find out the obstacles or barriers in the way of ICT implementation and to trace the impact of ICT adoption in the insurance industry. The new technology can be applied literally in all departments of the insurance industry; it can be applied in sales and marketing, in advertisement and sales promotion, in intermediation, in receipt of premium from policyholders, in recruiting new employees and agency force, in product branding and in settlement of claims.

Obviously, no one can predict exactly how information technology will affect insurance in the future. But it is sure to lead to cutting costs to blurring functional distinctions and to crossing jurisdictional and geographic lines. That is what it has done over and over in the past. It is starting to do so now in insurance as in many other businesses (Stewart et.al 1998).

The paradigm shift from the conventional insurance business to e-insurance business is slowly making its appearance felt. The huge bundles of files are slowly disappearing from the company desks as they give way to desk-tops. Where the change is leading is unforeseeable, but change is inevitable (Stewart, et.al 1998).Overall, the insurance industry has been slow in implementing the ICT applications as compared to other sectors like; telecommunication, banking and entertainment etc. even though the insurance industry provides appropriate model that combines both B2C and B2B applications. And when compared with other forms of commerce, the overall impact of e-commerce is still relatively small; however, it is growing rapidly (Garven 2001).

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OBJECTIVES OF THE STUDY

Every research has its own objectives on which it is conducted. Hence, this study is an attempt to unveil the various factors responsible for preventing the rapid advancement of information and communication technologies in the insurance industry. Also, another objective of this research paper is to investigate the acquaintance and extent of information and communication technology implementation in the insurance industry.

LITERATURE REVIEW

The recent past researches provides evidence that indeed the insurance industry is becoming dynamic in terms of the way services are distributed to clients and the mode of customer purchases. It is clear from many studies focusing on modern way of insurance distribution that technology bases channels are on the rise. Financial institutions and concerned firms are realizing that the mushrooming technologies offer better services to clients. Stewart, et.al (1998) examined the technological improvements in handling information. They traced the evolution of agent licensing over the years and its changing public and private purposes. The study found out that the recent advances in the insurance business has come along with many benefits including lowering the cost of offering the services, dismantling of borders of function and increasing the customer base. WTO, (1998) argues that e-commerce may, however, be simply defined as the production, advertising, sale, and distribution of products via telecommunication networks. Most of the discussion on e-commerce is limited to the internet, the medium with which electronic commerce is primarily associated.

Graven (2000) examined the role of e-commerce in the insurance industry and observed that the internet creates many opportunities as well as challenges to insurers. E-commerce will cause insurers to move away from a product oriented approach to more of a consumer oriented approach. This will be a natural consequence of the high degree of transparency in pricing brought about by the internet. Further, by making insurance more affordable, e-commerce will help to increase the overall level of private insurance coverage in society. SwissRe (2000) indicated that the suitability of insurance products for internet distribution varies depending mainly on how much individual advice the product requires. Standardized products, which can be described easily, are more suitable for internet distribution than complex and expensive products. Products particularly suited for internet distribution are private motor, household, private liability and term life insurance.

Vress (2002) examined that 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 online sale of policies. But the growing number who have embraced technology is most encouraging. The new information and communication technology is making it easier for insurers to break up the value chain. Individual functions, such as underwriting, policy administration, claims management, investment of risk management can be optimized within the business divisions or outsourced to a rapidly growing number of specialized external providers. Claims management, underwriting and some parts of risk management are particularly suitable for outsourcing to specialized providers. Rising cost pressure will cause traditional providers to review their fully integrated business model. (UNCTAD, 2002)

Turban et.al (2003) concluded that the internet enables new entrants to the market to avoid the expensive and lengthy process of setting up traditional distribution networks. E-commerce lowers market entry barriers and increasing competitive pressure in the insurance industry. Swiss Re (2004) argued that, while the focus in the early days of the internet was on selling products to consumers (business-to-consumers, or B2C); the emphasis is now shifting towards commercial clients (business-to-business, or B-B). The B2B segment is likely to be the most important focus of the internet distribution in the future. The above review clearly unveils the facts that ICT is a very important advancement for the insurance industry, especially in services provision, as it reduces costs and increases client base. At the same time, ICT implementation has come along with many challenges also. Insurance borders are dismantled making it easy for non- insurance companies to enter into the business.

RESEARCH METHODOLOGY

The data for this study has been obtained from a primary survey of 300 respondents from the corporate insurance sector using well-structured comprehensive questionnaires. The questionnaires were prepared in two phases. In

the first phase, unstructured in-depth interviews were conducted to create initial questionnaires. Further, expert opinions were collected and improvements were made to the survey instruments. In the second phase, a pilot survey was conducted with 13 employees of a prominent general insurance company in Amritsar city, to evaluate the understanding, alternative response options and determining whether some other response should be provided. Finally, after the necessary changes had been made, the instrument was canvassed to employees of insurance companies in selected cities. The internet was also used to send email attached survey instrument to different branches with the help of email addresses given during interview and from the websites. Analysis was done using some statistical techniques including cross tabulation, mean score analysis, analysis of variance (ANOVA), percentages. Chi-square test was also applied to test the statistical significance.

EMPIRICAL FINDINGS

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ACQUAINTANCE IN THE INSURANCE INDUSTRY

The demand of insurance services is intensifying. Financial intermediaries other than insurance companies are diversifying their nature of service provision and opening the doors for insurance business, hence making the industry to have more players and thus become competitive. The acquaintance of insurance employees with ICT systems was enquired and Table 1 shows the results.

It was revealed that the majority (67.3%) of the respondents were acquainted with Information and communication technology. This shows that insurance employees are aware of the mushrooming I.T systems in the financial service industry and it will enable easy implementation. Further, it was indicated that the private sector (73.8 %) is more acquainted with ICT systems than the public sector (56.7%). This might be due to the nature of freedom given to the private sector in making some decisions quickly. But in the public sector, long implementation procedures are needed which enables them to be late bloomers.

Table 1 : Corporate Acquaintance With ICT

Variable	Response		
	Public	**Private**	**Total**
Very low	8 (6.1)	4 (2.4)	12 (4.0)
Low	12 (9.1)	11 (6.6)	23 (7.7)
Average	34 (25.8)	29 (17.3)	63 (21.0)
High	39 (27.3)	61 (36.3)	100 (33.3)
Very High	39 (29.6)	63 (37.5)	102 (34.0)
Total	132 (100)	168 (100)	300 (100)

IMPLEMENTATION OF ICT IN INSURANCE INDUSTRY

In the recent days, the financial service industry is spending more on the implementation of information and communication technologies. The implementations include hardware and softwares to enable new programs to work well. Also, other expenditure is apportioned for imparting new IT skills to employees and hiring IT experts.

Table 2 shows that hardware, network (computer systems, internet, intra and extranet) implementation (WAS, 2.78) is much more among the institutions surveyed. However, the private sector seems to have implemented much more (WAS, 1.56) than public (WAS, 1.22). Advanced software packages and systems have also been implemented (WAS, 2.09).The IT experts (WAS, 1.67) and skilled staff (WAS, 1.30) is yet to be emphasized and looked at since these are the people who will operate the implemented systems. It was revealed that insurance companies are ignoring the fact that IT experts and skilled staff implementation is part and parcel of the whole process of ICT implementation.

Table 2 : Extent of ICT Infrastructure Implementation In The Insurance Industry

S.No.	Variable	Sector	N	WAS	Mean	S.D	S.E
1.	Hardware and network (Computer internet, intra/Extranet, e-mail, modem)	Public	132	1.22	4.22	0.95	0.082
		Private	168	1.56	4.60	0.69	0.052
		Total	300				
2.	Software (public and specialized/ advanced packages, standardized processes and systems)	Public	132	0.879	3.88	1.15	0.099
		Private	168	1.208	4.21	0.92	0.071
		Total	300				
3.	I.T experts	Public	132	0.614	3.61	1.05	0.091
		Private	168	1.060	4.06	0.96	0.073
		Total	300				
4.	Skilled staff (in e-commerce)	Public	132	0.273	3.27	1.33	0.120
		Private	168	1.030	4.03	1.05	0.081
		Total	300				

OBSTACLES HINDERING ICT IMPLEMENTATION

(a) Technological Obstacles

The wave of information technology with lots of advantageous fruits is being blocked by many factors. Amongst them are the scarcity of technological skilled staff, security reservations, low internet usage and others. Table 3 reveals that security reservations (Mean, 7.45), scarcity of staff (Mean, 7.27), and non-conformity of current products and services to online offers (Mean, 7.19) were reported to be mostly affecting the implementation process of IT systems for both private and public insurance companies. However, other factors like low intention of internet usage (7.18), complicated e-commerce technologies and products were also reported to be affecting the implementation of ICT, though not as much as the above mentioned factors. This unveiled the fact that insurance companies are only looking at the boons of technology without thinking about some of the banes.

Table 3 : Technological Obstacles Hindering ICT Application In The Insurance Industry

S.No.	Variable	Sector	Total	WAS	Mean	S.D	S.E
1.	Low internet technology usage and few users	Public	132	0.386	3.39	1.21	0.11
		Private	168	0.786	3.79	1.16	0.08
		Total	300				
2.	Security reservations of new technology	Public	132	0.409	3.41	1.27	0.11
		Private	168	1.042	4.04	1.07	0.08
		Total	300				
3.	Expensive and complicated technologies of e-commerce	Public	132	0.295	3.30	1.24	0.11
		Private	168	0.571	3.57	1.16	0.08
		Total	300				
4.	Non-conformity of current products and services to online offers	Public	132	0.492	3.49	1.26	0.11
		Private	168	0.696	3.70	1.13	0.08
		Total	300				
5.	Product and service complexity and low interest products	Public	132	0.295	3.30	1.20	0.10
		Private	168	0.571	3.57	1.16	0.08
		Total	300				
6.	Scarcity of technology skilled staff	Public	132	0.636	3.64	1.21	0.10
		Private	168	0.631	3.63	1.25	0.09
		Total	300				

(b) Corporate Obstacles Hindering ICT Implementation

The study also identified some corporate obstacles apart from technological ones, which are proving to be a hindrance in the fast developing of information technology in the insurance sector. Table 4 indicates that the low intention of selling online was the major problem (Mean, 7.44) from both private and public companies.

The traditional attitude of Indian companies towards change (mean, 7.15) was also reported to be one of the major factors hindering the spread of new technological advances. Further, the respondent indicated that the internal conflicts and negative reaction from intermediaries, agents, brokers etc. (mean, 6.30) and lack of appropriate registration and regulation (mean, 6.47) were not considered as major hindrances in ICT implementation.

Table 4 : Corporate Obstacles Hindering ICT Application In The Insurance Industry

S.No.	Statement	Sector	Total	WAS	Mean	S.D	S.E
1.	Low intention to sell online	Public	132	0.492	3.49	1.26	0.11
		Private	168	0.946	3.95	1.25	0.09
		Total	300				
2.	Traditional attitudes of Indian companies	Public	132	0.629	3.63	1.12	0.09
		Private	168	0.518	3.52	1.32	0.10
		Total	300				
3.	Inflexible organizational chart and resistance to change	Public	132	0.523	3.52	0.94	0.08
		Private	168	0.542	3.54	1.18	0.09
		Total	300				
4.	Internal conflicts and negative reaction from intermediaries, agents, brokers etc.	Public	132	-0.038	2.96	1.18	0.10
		Private	168	0.440	3.44	1.26	0.09
		Total	300				
5.	Lack of appropriate registration and regulation (e.g., copy right and digital signatures)	Public	132	0.083	3.08	1.31	0.11
		Private	168	0.393	3.39	1.36	0.11
		Total	300				
6.	Lagging of other supportive sectors (e.g., banks and telecommunication companies	Public	132	0.189	3.19	1.31	0.11
		Private	168	0.583	3.58	1.25	0.09
		Total	300				

IMPLICATION OF THE STUDY AND CONCLUSION

The study can be considered very important in many aspects for insurance companies, regulators, legislators and for the government also. Insurance firms and other financial institutions in India planning to offer technology-tailored products and services need to focus more on training their employees with information technology skills to make use of the hardware and software already implemented. It was observed from the study that many insurance firms surveyed are focusing on implementing ICT systems but have forgotten those who will make them work. Among the factors hindering proper implementation of IT systems were low intentions of firms selling their products and services online, traditional attitudes and security reservations.

This will snap insurance firms to increase their intentions of selling online since modern customers need online purchases as they are convenient for them. Also, traditional attitudes have to be changed if insurance firms want to capture the niche in the modern competitive market. Financial institutions offering or intending to offer insurance services and products should understand that in future, customers will demand products and services and not insurance offices. Therefore, the winner will be those companies who have the ability to fulfill the customer's demands. The study will be helpful to the legislators and regulators to realize the importance of setting up machineries to look after the security standards of products and services provided using various ICT systems. Laws should be properly defined to implicate the cyber criminal who may be out to crack and hack the network supporting the provisions of insurance services. The way forward seems easy when regulators, legislators, financial institutions and clients will come together, and cooperate to implement ICT systems in harmony.

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