CHAPTER - 2

LITERATURE REVIEW

2.1. Introduction

An effort is made here to review the existing studies on the topic of study. This review is meant to throw light on the nature and scope of these studies and to determine the research gaps. In fact, review of literature improves the theoretical background for the study through a review of relevant theories.

The significance of Life Insurance segment to India and all of world has drawn many scholars, academicians and management experts and others to write on the subject. Insurance has been addressed from different angles by various scholars.

2.2 Insurance

Insurance means a promise of compensation in any potential forthcoming losses. It simplifies financial protection by reimbursing losses in disaster. There are many insurance companies offering different insurance options to choose from. Life insurance, health insurance, automobile insurance and home insurance are the most popular insurance policies.

Insurance is associate umbrella against a period. Individuals would like umbrella once the climate is rainy. The man has perpetually been in search of security and protection from the start of civilization. At constant time “Risk” is inevitable in life and any commercial activity.

In his book titled “Customer Driven Services Management,” Balachandran,S. (2001) opines the rapidly growing insurance industry is becoming a client driven sans a customer centric industry. He is of the opinion that the insurance industry can sustain its growth only when the insurance products are attractive to customers. Not only does this serve the purpose of making profits but is also a source of income generation.
A significant positive connection between the level of premiums to total assets and insurers’ effectiveness has been reiterated by Agiobenebo and Ezirim (2002).

Using the DEA method, Diacon et al (2002) assessed the efficiencies of insurance industries in UK, Germany, Switzerland, France, Netherlands, and Italy and concluded that a country’s insurance is a vital decision-making unit. The results of his study showed that the UK had the most effective insurance industry, while the Italian insurance industry had the most inefficient performance.

The research by Kugler and Ofoghi (2005) on using the net written insurance premium highlighted the being of a long term relationship amongst insurance market size progress and economic growth. They also concluded that the causality from Gross Domestic Product (GDP) progress to insurance market size growth was greater than the causation from the other side.

Using the time series data from 1830 -1998, Adams et al. (2006), analyzed the historical relationship between banking insurance and economic advancement in Sweden.

For the entire relegated period, the researchers found that, on the one hand, banking had the predominant influence on both the economic growth and the demand for insurance. Whereas, on the other hand, the results indicated that the insurance market appeared to be driven by the degree of economic growth.

Investigating the monetary performance of Spanish insurance companies, Lithuania, and Ukraine, Hrechaniuk et al. (2007), in their study displayed a strong association between insurers’ financial performance and the development of the written insurance premiums.

In his paper “Globalization: Impact on Insurance”, Ramana (2007) observes that in the new business environment, the entrance of foreign players cannot be closed but they may be controlled and managed. The foreign entrants try to raise their market share with penetrating into new geographical markets/areas with effective and suitable marketing strategies in accordance with the given regulatory policies and other socio-political conditions.
In Nigeria, Omar (2007) on evaluating the users’ attitudes towards life insurance found that there was an absence of trust in the insurances companies. He concluded that this attitude is due to the lack of knowledge of the products offered.

Yao et al (2007) examined the mechanical efficiency of 22 Chines Insurance firms over a time period of 1999 to 2004. The methodology used was DEA, wherein the study calculated the efficiency scores and identified the key determinants of efficiency by running it through regressions analysis. The researcher hypothesized that firm size, ownership structure; human capital and mode of business are significant factors affecting firm performance. The results of their study found that most of the 22 firms had improved the technical efficiency but had to be more committed in increasing the inputs to produce the same quantity of outputs to face the hard competition in the Chinese Insurance Industry. However, the recommendation was that in order to increase their productivity, the firms may concentrate either by improving their technical efficiency or by making technical advancement.

The results of a study on the relationship between economic developed and insurance development conducted by Arena (2008) found that the insurance activity does promote economic development.

The way national culture affects consumption patterns of life insurance across 41 countries, in a period of 25 years was investigated by researchers Andy C.W et al (2008). They surmised that consumers are likely to respond according to their cultural prescriptions with the result of uncertainty, complexity and ambiguity in Life Insurance products. Life insurance services are abstract, complex and focuses on uncertain future benefits. The findings showed that individuality definitely has a significant, positive effect on life insurance consumption, but power distance and gender have significant negative effects. The results are strong, even after controlling for economic, institutional and demographic determinants.

Luhnen (2008) research revealed that independent agent insurers were less efficient than the exclusive agent insures. He also concluded that the specialized insurers were found to be more technical and cost efficient than those who spread their business across several lines. However, the mutual ownership was found to be more efficient than stocks and in line with much of the literature on insurance.
In their research paper, Basavanthappa and Rajanalkar (2009) identified that the private insurance companies have to perform well over a year. More Opportunities are created over a period of a year as the market share of private life insurance companies, most often than not, show an increase in a year. Competition is very stiff in this sector and hence is beneficial to all. Insurance companies must introduce innovative products and provide various facilities to the customer if they want to have a competitive advantage over the other insurance companies.

Xiaoling Hu Cuizhen Zhang Jin-Li Hu Nong Zhu, (2009) examined the efficiencies of foreign and national life insurance suppliers in China. Taking into consideration certain attributes of firms. They also discovered the relationship between efficiencies of insurers and ownership structure. The study findings revealed that the variation in the efficiencies was due to the insurers’ market power, distribution channels utilized and the ownership structures of the firms. The research results focus the importance of deregulating the segment to allow a further development of each individual insurer or mergers and acquisitions of insurers so more efficient resource utilization can be done through economies of measure.

An analysis of the impact of demographic variables of Nigerians’ attitudes to insurance was carried out in a study conducted by Tajudeen Olalekan Yusuf, Ayantunji Gbadamosi, &DallahHamadu (2009) in Nigeria. The conclusion was that specifically age, marital status, education, profession, household income — all has a significant impact of varying grades towards insurance.

Findings of yet another study in Ghana on the African continent, by KwadjoAnsah-Adu Charles Andoh Joshua Abor, (2011) provided insights into the cost efficiency of insurance companies. The study evaluated the efficiency using a cross sectional data of 30 insurance companies using a two stage process over the period 2006 - 2008. The first stage was to define whether the insurance companies were cost-effective and secondly to test the determinants of efficiency of the insurance companies under study. Applying a data envelopment analysis that allows the inclusion of various inputs and outputs in the production frontier, the researchers evaluated the efficiency scores. To identify the key determinants of the proficiency of the Ghanaian insurance industry, the regression model was utilized and the observations was that the drive for
market share and the ratio of equity to entire invested assets were significant determinants of efficiency in an insurance firm.

The underlying factors of profitability of the Insurance business in Bosnia and Herzegovina were examined by Pervan et al (2012). A strong negative influence of claims ratio to profitability was found to exist. The researchers further found that market shares and demographics of the age factor had a strong positive influence on insurer’s financial performance. However, theoretically speaking, if an efficient company is able to exploit its profits on its net premiums and also its net underwriting incomes, then, it should be capable to have growth in profits.

Priti Jha, Bindu Roy (2015) stated that actually, man has no control over its life and results of its human activities. It means that there is always the doubt of the results of human endeavour. From the moment of birth, until the end of life, all material possessions are also continuously exposed to Uncertainty. So, we can say that "the fundamental fact of life is Uncertainty" This uncertainty leads to fear of life risk. By taking all protections to avoid chance can be satisfied. In spite of all precautions, it requires more efficient method to contract with the problem of risk in our new world. In various ways, we can deal with the risk, but insurance is almost the best methods to contract with the risk.

Insurance may be a cowl used or protective oneself from the chance of a loss. It's vital to grasp that risk may be a part of any person's life which it will increase as an individual will increase in age, responsibility, and wealth. Insurance is risk coverage against money losses and will not be taken as an associate degree investment instrument. There are the main two parties concerned in this- the insurer and therefore the insured. The insurer is that the insurance syndicate can give the quilt to the insured against monetary losses. The insured could also be a personal one or a gaggle of individuals like owner, memberships of society, etc. (Priti Jha, Bindu Roy, 2015)

2.2.1 Indian insurance

The origins of Indian Life Insurance dates back to the year 1818 and it believed to have come from Britain. The first insurance company started in Calcutta and was called the Oriental Life Insurance Company. Most of the insurance companies set up at the time were solely meant to service the wishes of the Europeans, and not for the
local Indians. In later years, with the pioneering works of individuals such as Babu Muttylal Seal, external life insurance companies came to give protection to the Indians. Be that as it may, substantial additional premiums were levied on the Indians, considering that the life of Indians was of a low standard. Bombay Common Life Confirmation Society proclaimed the introduction of first Indian life insurance companies in the year 1870 and secured Indian lives at ordinary rates. Thereafter, the Indian venture into Insurance grew rapidly and insurance organizations soon ventured out to advertise the message of public safety and insurance to the people at large.

The current scenario in India is totally diversified and rigorous. Customer centric products and services, as well as the expert guidance, have become the backbone of the Indian insurance industry. The insurance service providers are now offering a diverse range of innovative products because of the necessities of the customized solution of the problems from the customers at the competitive prices. As a result, the situation is that of intense and severe competition currently prevailing in the Indian insurance market. “Liberalization is an opportunity to be exploited, not necessarily a threat, “says NeetuAndot (1997) in her article “Liberalization Challenges and Reforms before Indian Insurance Industry”. Flexibility and catering to the desires of the customer is the hallmark for continuous growth by Indian Insurance companies.

Insurance industry in India, like other industry, has to meet one challenge several times. This is an undeniable fact put forth by authors Mishra,K.C. and Simita Mishra (2000) in their article titled “Insurance Industry: Recipe for a Learning Organization”.

In their book on “Insurance Business Environment”, Balasubramanian, T.S. and Gupta, S.P. (2000) explain in detail the scenario of the Insurance systems, not only in India but also the world over. The authors have given a detailed analysis of the effect of globalization and liberalization on the business environment of Insurance for a better understanding of the challenges played by the Insurance industry. “Indian Insurance Industry–Transition and Prospects” by authors Srivastava,D.C and Srivastava S (2001) gives an in-depth analysis into the financial significance of the insurance business and its contributions to the Indian Economy. It also discusses the effect of liberalization and the entrance of the private players sector on the challenges of the Indian insurance industry.
In her study, Kumari Hymavathi. T (2002) concluded that the performance of insurance business shows a favorable growth on the basis of an analysis on a firm’s financial performance. In her paper, “Performance Evaluation of Indian Life Insurance Industry in Post Liberalization”, she states that with the coming of the private sector, the life insurance industry has achieved a terrific growth in the sum of premium collected.

Kundu S. (2003) examines the various issues of the insurance industry after the entry of new players into the Market of Indian. His study on “What’s next in India’s Insurance Market” discussed issues on a low insurance penetration in India despite its huge population. He attributes this to the fact that in the present day, customers are not only looking at the products but more so at the integrated financial solutions that can offer the stability of returns along with total protection. The study highlights the significant role that technology will play in aiding design and launching the innovative products for customers. In turn, technology driven marketing will endeavor to build long term customer relationships.

Yet again, with globalization and liberalization changing the scenario for the insurance sector, Kapse S. and Kodwanid G., (2003), have put forth their arguments to support their view that it is a good opportunity for the insurance sector to expand its market base. Finally, their extensive study on “Insurance as an Investment option” gives recommendation for improving and modifying the features of products to make them more liquid or short term schemes.

In the Indian liberalized environment, nationalized insurance companies will carry on to maintain their principal position in the market, at least in the predictable future is an observation put forth by SudarsanReddy, Mohan Reddy and Sivarami Reddy (2004) in their study “Liberalization of Insurance: Opportunities and Challenges”. The study suggests that it is for the insurers to take advantage and offer new products with better packaging and improved customer services, given the huge potential of the Indian market. The authors foresee that in line with the global trend of financial service convergence, product innovation and channel diversification will gain momentum.
According to Pasha (2004), India has the highest number of life insurance policies in force worldwide.

Krishnamurthy S, Mony S.V., Jhaveri N., Bakhshi S, Bhat S and Dixit M.R., (2005) carried out a study on “Insurance Industry in India: Structure, Performance, and Future Challenges”. The status and development of Indian insurance industry after liberalization and future challenges and chances with regard to insurance has been discussed in detail in this study. They opine that the future growth will depend to a large extent on how the insurers are able to change the mindset of the Indian customers and create an awareness of the importance of insurable risks and how effectively can the insurers reach the expectations of customers. The reformation process has increased competition, provided a number of alternatives to the customer and thus improved the efficiency level in the industry. An additional thought by the authors was that insurers not only have responsibilities to the social sectors but need also address the rural sectors.

A Swiss survey study reports that India has achieved 9th rank in the life insurance business amongst the 156 countries surveyed. It adds that the Indian contribution has improved from 1.98% in 2008 to 2.45% in 2009 in the global insurance. (Swiss Re Report, 2009).

In the opinions of Shendey B K and NeelkantRao (2010), in a paper titled “Trends in Insurance Industry in India since 21st Century”, the monopoly of the LIC has been challenged by the privatization of the insurance and this has managed to the growth of this sector. With the advent of liberalization of the insurance, the whole life insurance premiums have increased four-fold. The writers have stated that to increase its policyholder base, the insurers continuously focus on product innovation and new schemes.

In their study, C. Barathi, Balaji C. D. and Meithei Ch. bohal (2011) have studied the impact of global slump on the rapidly developing Indian insurance market. According to the researchers, in order to improve the coverage and penetration of life insurance, the insurers can effectively implement strategic alternatives in untapped areas. The approvals of the study focus on the launch of innovative strategies and products to
target new market segments. In doing so, the insurers should be able to achieve sustainable growth and development thus ensuring profitability of the business.

Charumathi, B. (2012) Found that The Indian life insurance industry is the least profitable market for its shareholders among all Asian countries due to falling in fresh business premium in 2010-11 it has reported net profit of Rs. 26.57 billion in 2010-11 as against net loss of Rs. 9.89 billion in 2009-10. However, the life insurers’ features that are linked to profitability have not been considered in the Indian conditions. In this context, his study tried to model the reasons determining the profitability of life insurers operating in India taking areturn on theasset as thedependent variable. His study sample included all the 23 Indian life insurers (including 1 public and 22 private) and it used the data pertaining to 3 financial years, viz., 2008-09, 2009-10 and 2010-11. For this aim, firm specific features like leverage, size, liquidity, premium growth, underwriting risk and equity investment are regressed against Return on Properties. The study concludes that profitability of life insurers is absolutely and significantly influenced by the size and liquidity. The control, premium progress and logarithm of equity investment have negatively and significantly influenced the profitability of Indian life insurers.

In most developing countries, the insurance industry greatly contributes to the financial sector of their respective economies, thus providing a significant social security net. India’s growth in the insurance has been phenomenal and the massive metamorphosis that the country has undergone in the last few years is noteworthy and cannot be ignored. Over the last decade or so, in India, innumerable private and government insurance companies have mushroomed all over the country and have become synonymous with the term ‘insurance’. (Arnika Srivastava. Sarika Tripathi. Amit Kumar, 2012).

Kotgiri (2013) carried out a comparative study on the development of the Indian insurance business and the trends of customers’ investments in particular plans. The focus of the study was on the number of investments made, attitudinal change of customers’ investments and the types of business organizations.
In a comprehensive study by Amlan Ghosh (2013), the findings showed a long term relationship between the life insurance industry and the economic development in India. Using the Granger test of causality, he found that the life insurance sector improved the overall economic growth of India and that the reverse was insignificant. Further analysis revealed the long term relationship among life insurance industry and economic improvement in India. The study concludes that this relationship would help one to understand the ramifications of the life insurance development post the reform era.

The chief purpose of a unique study by Sinha (2013) was to analyze the chosen sample of the giant players - Bajaj Allianz Life Insurance and ICICI Prudential Life Insurance – to determine the level of accuracy of the insurers in the Indian insurance industry. Applying the methodology of the Caramels framework developed by the IMF for determining different parameters, the study focused on determining the soundness of organizations. However, the analysis and clarification showed mixed results. Several grey areas were found on analysis of the strengths and weaknesses of the sample under study, and there was tremendous scope for improvement.

Bawa, S. K., & Chattha, S. (2013) stated that a major contribution towards the development of the industry is the performance of a company which in turn leads to the overall success of the economy. This study examines the financial performance of Indian life insurers on the basis of various factors. Generally speaking performance can be estimated by measuring the firm's profitability and insurers; however the researchers, in this study focus on the effect of liquidity, leverage, solvency, and size and equity capital on the profitability of Indian life insurers. The data analysis covered a sample of 18 Indian insurers within 5 years from 2007-08 to 2011-12. Using a multiple linear regression model to examine the impact of the variables, the study’s findings showed that profitability of life insurers was positively influenced by liquidity but negated its relation to capital. Profitability did not display any relationship with solvency and insurance leverage.

Anagol, S., Cole, S., & Sarkar, S. (2017) conducted a sequences of field experiments to assess the quality of advice provided by agents of life insurance in India. Agents overwhelmingly recommend inappropriate, strictly dominated products that provide great commissions to the agent. Agents provide to the beliefs of uninformed clients,
even when those beliefs are incorrect. They also found that agents appear to effort on maximizing the premiums amount that customers pay, as opposed to concentrating on how much insurance coverage clients need. A natural experiment requiring disclosure of commissions of specific product results in agents recommending other products with more commissions but no discover requirement. A follow-up agent survey sheds light on the level to which poor advice reflects both the commission incentives and agents’ limited product information.

### 2.2.2 Life Insurance Corporation (LIC) in India

The LIC was found in 1956 after the Parliament of India passed the Act of Indian Life Insurance that nationalized the private insurance in India. Above 245 insurance companies were merged and create the state owned Life Insurance Corporation.

A quantitative study to assess the levels of the scopes of service quality and its relation to the level of client satisfaction was carried out by Gayathri. H., M. C. Vinaya, and K. L akshmina (2005). The results showed lower levels of scoring by LIC in all the five scopes of service quality. Multiple regressions were developed for a sample of four companies based on the dimensions of SERVQUAL in relation to customer satisfaction. Conclusions of the study stated that to survive the competition in the souk and create a competitive advantage, the companies under study should focus on improving their product and service.

Post globalization of financial services and liberalization of economy, new entrant into the LIC are posing a stiff competition to the already existing players in the Indian insurance. To determine and examine the progress and development of LIC business’ prior to and post liberalization.

Murthy R. Babu and Ansari D (2009) conducted a study to prove their point. Undoubtedly, there has been a significant growth post entry of the new entrants on private sector which has led to the gradual decline of the market share of the LIC over the years. This study recommends the implementation of an effective market strategy with innovative products with quality customer services to existing policyholders. LIC should endeavor to increase its customer base to increase insurance density and reach the expectations of Indian insurance market.
According to Rajendran R and Natarajan B (2010), The Indian Life industry has not achieved much and is way below when in comparison to insurance industries in developed foreign countries. They surmise that the reasons for below standards of achievement are due to LIC’s lack of quality standards, lack of education and awareness of future savings, low capital income and lack of employment opportunities.

Bedi and Singh (2011) found that in the execution of Indian Life Insurance, there is an enormous development and LIC because of the approach of LPG and because of the rise of private area and opening up for remote players.

Shashi P (2013) has endeavored to determine the utility of the strategies implemented by LIC in the changing scenario of the Indian society. This study also suggests how these styles have helped LIC to maintain its leading position in the Indian Life insurance market.

Subsequent to the outline of the Insurance Regulatory & Development Authority (IRDA), and especially privatization, the Indian insurance industry has become a titan industry is echoed by Nena, S. (2013) in her study. one of the greatest significant public sectors which play an excellent job in selling its products is Life Insurance Corporation of India.

However, she says that over the past decade or so, competition has become very stiff in this sector with the appearance of many private players. Hence, the objective of her research was to determine the progress and development post this period. The study then analyses the main source of income earned by the sampled unit, predominantly, the premium earned. Further to this the researcher also analyzed the important heads of costs of LIC to measure the performance in the period of research.

In their study Sharma, V. & Chauhan, D.S. (2013), analyzed the performance of public sector versus the private sector of life insurance companies in India. Despite the threat of the prospects of LIC being affected by privatization, LIC continues its dominance in the sector is an observation made by the authors. Another finding was that the private insurance companies endeavor to increase their shares.
Bapat, H.B., Soni, V., Joshi, R. (2014) compared the product offerings from the largest sector LIC of India and ICICI Prudential Life Company limited applicability of SERVQUAL scopes to the current product offering.

Yadav, R. K. (2014) in his study based on an analysis of secondary data gathered from the annual reports of the IRDA found the LIC that this is due to their prompt claim settlement, highest premium collections and sales of the highest number of policies. Sales of policies are the highest revenue generators and delayed settlements affect sales. He states that an important feature of any life insurance is that the customer wants prompt claims settlement.

PritiJha, Bindu Roy (2015) explains that risk is a part and parcel in human life and therefore one can take all defenses to avoid the fear of risk. LIC India is the major player of all life insurance companies in India. According to this study, LIC India can improve its business by adopting and adapting new marketing strategies and solicit more policies that the promotional strategies be more creative to increase the awareness of its policies to the customers.

Yadav, R. K., & Mohania, S. (2015) using secondary sources of data, conducted an exploratory study on the claim settlement process of the premier companies of life insurance corporation in India namely LIC, India and ICICI Prudential life insurance company. With a rapidly growing market due to an ever enhancing number of policies, the number of claims has also been increasing. Therefore the need for prompt settlement of claims is the need of the hour. Conclusions of both samples reveal that both companies follow the claim process efficiently. Despite being efficient, it was found that LIC, India was not so transparent and approachable in its claim settlements as ICICI Prudential life insurance. ICICI continues to lead the private life insurance sector with their customer preferences and setting standards through its settlement process.
2.3 Information Technology (IT)

Information technology is the apply of any networking, storage and other gadgets, base, and procedures to make, process, secure, store and exchange total forms of electronic data. Also, office automation, multimedia, and telecommunications are also parts of Information technology.

Above the past few decades, modern business organizations have been investing increasingly substantial amounts of money in information technology with the objective of progressing in their operational efficiency and competitive skill in the industry. The important role that IT plays in the new business is unquestionable. Actually IT is as a serious factor for business enterprises to survive and to grow further; however, experiential indication in support of these expected benefits has been mixed

Clemons (1991) pointed out that Information Technology is essential to the delivery of any new strategic effort in manufacturing, distribution, sales, or service. He argued that portion of the problem in justifying IT investment comes from viewing even strategic opportunities to invest in IT as projects, to be judged on their expected value and capital budgeting criteria. He further suggested that managers consider factors such as tangible and intangible benefits and prices of undertaking the program, the risks of proceeding with the program, expected competitive impact and a possible partnership with competitors.

Furey (1991) discovered that information technology (IT) practices could help upgrade customer service by expanding accommodation, gathering administration execution information for administration utilize, and offering additional services.

Powell and Dent-Micallef (1997) findings showed that IT could enhance performance by leveraging paired human and commerce resources and that IT in itself did not improve performance.

Later, Byrd (2000) posted an even more comprehensive definition:

“IT infrastructure elasticity is the ability of the infrastructure to support a wide variability of hardware, software and other technologies that can be easily diffused
into the overall technological platform, to distribute any type of information (data, text, voice, image, video) to anywhere inside of an organization and beyond, and to support the design, development and execution of a heterogeneity of business applications.”

The most evident case is maybe the keeping money industry, where through the presentation of IT related items in the internet managing an account, electronic installments, security ventures, information trades (Berger, 2003), banks now can give more assorted services to clients with less labor. Seeing this example of development, it appears glaringly evident that IT can realize the proportionate commitment to profits. Existing reviews have finished up two positive impacts in regards to the connection amongst IT and banks’ execution. To start with, IT can lessen banks' operational costs (the cost advantage). For instance, the internet helps banks to lead institutionalized, low esteem included exchanges (e.g. charge installments, adjust request, account exchange) through the online channel, while centering their assets into particular, high-esteem included exchanges (e.g. independent company loaning, individual trust administrations, speculation saving money) through branches. Second, IT can facilitate exchanges among clients within a similar system.

Melville et al., 2004; and Wade and Hulland, 2004 reasoned that IT enhances business performance through enhanced specific business processes, capabilities or structures.

Baccarini et al. (2004) on examining the risks in IT projects are of the opinion that risk management is essential for the completion of any IT project as such projects are renowned for their high failure rate. Interviews with IT professionals working for leading firms in Western Australia revealed the following shortfalls: weaknesses of personnel, unreasonable project schedules and budgets; expectations were unrealistic; requirements in completed and delayed delivery of software led to loss of opportunity.

Subramania (2004) examines supplier benefits from IT in supply chain relationships. His research reveals that between patterns of IT appropriations and firm operational performance, the firms’ relationship-specific investments play a intermediating role that is crucial for operational efficiency. Import business processes which may mediate the effect of IT on supply chain integration include dimensions such as coordination and cooperation.
According to Arun et al (2006), a significant key resource that impacts supply chain process integration and firm performance is the firm’s IT integration capability.

Huang et al., 2006 opines that IT integration capability is a significant attribute in reaching the desired growth and competition in today’s businesses. Additionally, it may make up a major portion of the firm’s capital investment.

Bullon, 2009, however, refers to IT as the total investment and expenditure. It includes the know-how in computing and communication technology which includes the hardware, software, processes and overhead all the people dedicated in providing these services.

The computing technology, advanced electronics and organizing technology together make today's Information Technology. The exchange with PC which is through information and yield implements has changed its shape and medium. The main interface with PC was the punched card. Today the like console or indicating and clicking gadget like the mouse are in like manner utilized. Digitizers have presented the adaptability of making an interpretation of maps and figures to PC memory. Scanners have added picture catch office to PCs. The touch screen additional items and touch boards would acknowledge finger touches as though they were mouse clicks. The capacity gadgets have changed from cumbersome and consecutive get to attractive plates and tops to helpful and adaptable floppy circles, hard plates. Optical plates offer mass stockpiling abilities. Today's reduced plates with a high stockpiling limit of 600 MB onwards are supplanting ideas of distribution of books manuals and reference book or some other business information with generally less cost (Dinesh Haresh Nebhani 2010).

2.3.1. Information Communication Technology (ICT)

Different types of information such as audio, video, text, and data can be processed through ICT encompassing technologies. This, in turn, facilitates different forms of communications among human agents and among information systems. (Chowdhury, 2000)

A firm’s growth and performance can be enhanced through ICT management techniques and through e-commerce, thus facilitating significant cost savings.
Therefore, regarding to Vu (2004), ICT is a vital enabler in enhancing the proficiency of a firm and competing with other stalwarts of the industry by promoting better communication and interaction with their respective customers.

Ebiujuwa (2005) states that ICT are merely electronic devices and will collect, process, storage, transfer and dissemination of information.

The role that ICT plays in the modern economic growth and development of a nation is highlighted in a study by Kramer et al (2007). They surmise that ICT offers instant connectivity by enhancing efficiency, transparency and accuracy. Additionally ICT reduces transaction costs and improves productivity.

The utilization of ICT in the insurance industry is applicable and advantageous considering the huge part of insurance in the economy. Among other, insurance advances business activity by giving monetary middle person services important to incite economy development (Liedtke, 2007).

The pertinent need of a national economy is an effective ICT network that provides necessary information that foster necessary structural connectivity for sustainable growth in any industry, agriculture or services sector (Anie, 2011).

Andrianaivo and Kpodar, (2011) are of the opinion that investment in ICT development has numerous benefits which include improvement of information flow, improving arbitrage abilities, fostering price discovery and substitution of expensive physical transport by spreading market networks.

The growth of the global economy and the quality of life of the world’s inhabitants has no doubt made rapid advancements with the coming of Information and Communication Technology, is the consensus of Doong, S. H., & Ho, S. C. (2012). Their study examines the expansion of ICT in a global context. Secondary data was collected from 136 countries over a period stretching from 2000 to 2008. The researchers have followed a methodology which many of the earlier studies had applied. This being an index approach to represent the ICT status of a country due to the multivariate nature of data. This raw data was reduced to an ordinal number representing a country’s ICT developmental level. Using data clustering and
multimedia ranking, the researchers discovered ICT development lanes and further to this conducted data analysis on gross national income and different fixed effects.

Fadun, O. S. (2013) empirical study to identify the imperatives for the adoption of ICT to promote operational efficiency in the insurance business was conducted in Nigeria with a sample of 152 respondents drawn from 18 insurance companies. The study to determine the influence of ICT on the profitability of insurance companies concluded that the adoption of ICT had a positive relationship with the insurance company's profitability. The implications of their findings are that ICT adoption will improve the efficiency and quality of service, thereby maximizing their profitability. Another noteworthy highlight of the study was that the insurance companies should constantly update their ICT facilities in interpretation of its impact on quality of service delivery and profitability.

Using the orthogonal transformation approach, Binuyo, A. O., & Aregbesola, R. A. (2014) analyzed data gathered from a dynamic panel environment to examine the influence of ICT on the performance of the South African Banking Industry over the period of 1990 to 2012. The strength of the results was stated by residual integration regression analysis using Pedroni and Kao method. The findings indicated that implementing ICT increased return on capital employed as well as return on assets in the banking industry of South Africa. It was discovered that as compared to the investment in ICT, the greater contributing factor to performance was the cost efficiency of the ICT.

2.3.2 Impact of Information Technology on different Industry

The idea that the IT function assistances different roles in different organizations and that may evolve over time has been widely argued in past research. Relationship between IT investment and firm performance.

2.3.2.1 No relationship Or Negative relationship

Some previous studies have reported disappointing productivity of IT capital. For example,
Results of a survey conducted by Turner (1985) on 58 savings banks found no important relationship existed between IT investment and bank performance.

As early as 1988, Roach reported that huge investments in IT failed to enhance national productivity growth in a study on the American manufacturing industries. Statistical data of his research showed that output per production showed an increase by 16.9% in the mid-1970s and 1986, whereas output per knowledge worker went down by 6.6%.

Conclusions showed no correlation among investments on computers, profits and productivity in a research study by Strassmann (1999) where is objective was to determine if there was a correlation between IT and return on capital in a sample of 38 firms from the service sector.

Barua et al. (1991) scanned the effect of information technology investment on variables like capacity utilization, quality, inventory turnover, relative fee and new product outline. Although a relation was found in three out of the five variables, no significant impact was found on the overall performance measures for the firms.

Loveman (1994) also concluded that investments in IT showed no net contribution to total output. Using the Management of the Productivity of Information Technology (MPIT) database, maximum of the elasticity guesses of IT investments were not statistically distinguishable from zero.

Forza (1995) obtained no significant results for the impact on quality assurance in his empirical research. His research objective was to determine the positive impact of information and IT on customer performance and continuous improvement.

Mitra and Chaya, (1996), in their study, found that investment in information technology had a significant negative effect on the cost effectiveness of the firm.

### 2.3.2.2 Positive relationship

Many studies have actually revealed mixed findings whereby only certain, if not all, elements of the positive relationship between IT investment and firm performance and efficiency of IT were found. The previous decade has witnessed a supreme growth in investment in IT applications.
In the words of Bakos and Treacy (1986), there are three perspectives for the use of IT.

Firstly, those organizations who are trying to expand their proficiency and effectiveness of the current status. Secondly, Players within the industry who are trying to outperform other participants in a competitive rivalry. Thirdly, those external parties weighing the positive and negative of making an entry in the industry.

The results of a research to determine the payoffs or benefits from computerization in organizations of government by Northrop, Kraemer, Dunkle, and King (1990) found that major advantages construed from the ranges of accessibility of information, operational performance efficiency and communications with the public.

Harris and Katz (1991) study highlighted the fact that firm performance is correlated to the level of investment intensity. It was also their belief that investment in advanced information technology is related with lesser growth in operating costs.

The relationship between the three categories of IT investment: transactional, informational and strategic and organizational performance was reviewed by Weill (1992). The researcher found that there was no relationship between the investment on IT and performance when any single measure was used in the analysis. As the term suggests Transactional IT is used for the transactions and is foreseen to have its primary impact through increased productivity and efficiency. Informational IT is the data bases from which information is extracted to analyze customer behavior enabling the customization and improvement of products and facilities to increase efficiency gains. While strategic IT is that category which enables strategic initiatives and innovations aimed at gaining a superior market share.

Mahmood and Mann (1993) concluded from a study on 85 organizations from Computerworld’s Premier 100a list that there existed an optimistic and significant correlation between certain investment measures and organizational performance. Adding to this they also found that strategic and economic measures, as a group, were significantly related to IT investment measures.
An investigation into the relationship between investment of IT and firm performance revealed controversial evidence regarding the claim that IT investments added value to firms systematically (Brynjolfsson (1993)).

Later in 1995 Hitt and Brynjolfsson, in yet another study highlighted the positive correlation between technology and performance.

Urgo, (1996) cautioned that replacing employees on the side of technology must be handled with care against the popular belief that information technology has a positive impact on the performance of a firm.

In an era of globalization, the survival of small and medium sized firms, such as those found in Korea, must turn to computer technology, information sources and telecommunications in their operational management. Firms that endeavor to create a niche for they must utilize technology that would help in discriminate their products and services by improving their quality.

Mitra and Chaya (1996) examined a sample of 448 large and medium-sized U.S.companies during 1988–1992 to analyze the impact of IT investment. They found that advanced IT investments were related with lower average production costs, lesser average total costs, and upper average overhead costs. They also found that larger companies spent more on IT as a percentage of their incomes than smaller companies. However, in their results, IT did not reduce labor costs in organizations.

Lederer and Salmela (1996) observed that IT function serves different characters in different organizations and those characters may evolve been discussed in past researches. They reflected the role of IT to be an essential aspect of the firms’ internal surroundings that influences information system Information system defined as networks which are developed into large-scale systems that often critical to personal and business operations in an organization.

Dewan and Min (1997) found that information technology and performance of firms have a positive relationship.

“Developed countries are receiving positive and significant returns on their IT investments "is the verdict by Dewan and Kraemer (1998) based on the evidence after examining data from 17 advanced countries.
Tam, K. Y. (1998) Examined that the business estimation of information technology (IT) investments has gotten extensive enthusiasm from both scholastics and the business community as of late. The focal question is whether the huge measure of IT capital put resources into the most recent couple of decades has had any effect on the execution of the contribute planes; they contended that these three measurements are not really causally related. In vision of IT spending information gathered in the United States, they demonstrated that while IT capital is connected with firm-level productivity, it has little relationship with business executives.

SubhasishDasgupta Joseph SarkisSrinivasTalluri, (1999) research objectives were two-fold. Firstly to explore the IT, s impact on firm productivity and the reasons for the significant attention in the information systems. Secondly, under conditions of both constant and non-constant returns to scale assumptions, to determine the influence of IT investment on firm productivity.

Jeonpyo Noh’s (1999) study supports the disagreement that profits of information technology investment could be identified. His study of Korean firms revealed that the level and form of technology used significantly contributes to the performance of the marketing function.

Bharadwaj (2000) explained IT capacity as “the ability to mobilize and utilize resources based on IT through the combination or coexistence of other resources and capacities that exist in the firm”.

Lee and Menon (2000) used DEA and SFA to analyze the financial data of 83hospitals during 1976-1994. They found that hospitals that were categorized by great technical efficiency likewise used a greater sum of IT capital than firms that presented low technical efficiency and that a set of hospitals presenting high technical efficiency also presented low allocate productivity, indicating that, whereas processes might have been efficient, budget allocation between various categories of capital and labor had not been efficient. Moreover, they found that IT labor had a negative contribution to productivity and that non-IT capital had a greater contribution to productivity than IT capital.
Wong (2001) employed the Cobb Douglas approach to probe the impact of IT investment on overall productivity in the Singaporean economy. The Cobb Douglas production function divides capital stock into an IT component and a non-IT component. The findings revealed a positive and significant coefficient of IT capital. This implies that the return on investment (ROI) exceeded 88 percent.

Burns and Vaivio (2001) believe that progress in information technology will help in forcefully driven innovations. This, in turn, will assist organizations from within and around in collecting, analyzing and communicating information. The strategic facet of information technology is a significant perspective.

Shao and Lin (2002) discovered that in the production process, information technology has a positive impact albeit IT investments are treated as firm specific or a production factor.

Tippins and Sohi, (2003) are of the opinion that many firms have begun to mature strategies that know information technology as a source that simplifies the utilization of information.

It can be seen worldwide, the great attention being paid to information technology with companies make massive investments. Jeffers (2003) discovered that firm performance is according to the potential contribution of IT. A main aspect in determining of viability and competitive edge of the firm is the IT and its other resources in leveraging customer service performance.

A theoretical framework was developed by V Sambamurthy, Bharadwaj and Grover (2003) to define the impact of IT infrastructure capabilities on the skill of the firm to manage its customer base. The authors found that deployment of appropriate resources would increase its customer base.

Lee, I. (2004) stated that recent information technology (IT) advances have quickly changed the ways firms activate their businesses. IT allows firms to remodel business processes, strengthen their customer relationship management, and develop a new business model. Information-intensive businesses associations are using IT to products new information, manage present knowledge, distribute information, and facilitate the inter-and intra-hierarchical coordinated effort. While IT helps
associations improve profitability, recent e-commerce development has created profoundly competitive market surroundings over all industries.

For the implementation of different projects and fostering association with other business units, Melville et al (2004) established that managers of IT should possess the abilities required of an IT manager namely skills in identifying and planning IT projects, resource allocation and leadership in directing and motivating team building.

To examine the effects of information technology IT, Shirley J Ho (2006) developed and tested a model. She opined that the US Banking Industry can improve its performance either through reduction of operational costs (cost effective) or within the same network facilitate transactions among customers (network effective). As it was difficult to identify which of the two dominated, the reasons were attributed to have been in econometric methodology and measurement. Stressing the heterogeneity of banking services, Ho endeavored to clarify the inconsistency through the differentiated model by network effects. Using a sample of 68 US banks, her interpretation of the analysis found that due to adoption and diffusion of IT investment there was a decline in the bank profits, thereby reflecting negative network effects in the industry.

The findings of a study by Jamshed J Mistry (2006) documented the significance of transaction IT on the cost drive relationships in the labor cost models in both the demand deposit and commercial loan functions. Utilizing the data base by the Federal Reserve Bank on functional cost and profit analysis, Mistry (2006) estimated a model on a cross-sectional sample of 121 banks. Included in his documentation was that the role of the strategic IT in the driver models for the demand deposit function but not for the commercial function.

Ho, S. J., and Mallick, S. K. (2006) analyzed that the use of information technology (IT), extensively alluding to PCs and fringe gear, has seen huge growth in administration enterprises in the current past.

Chen &Tsou, (2007) say that to allow innovative, functional operations and provide business network, organizations are making massive investments in IT.
R. Ramirez et al (2010) examined information technology, process redesign, and performance of firms in three ways: firm's analyse whole IT and BPR portfolio, study production and market value presentation effects, and manner analysis using a unique data from 228 firms amongst 1996 and 1999. They found a depending relationship between IT, process redesign, and performance. The communication of IT and BPR portfolios is positively linked with firm productivity and market value. However, they found mixed evidence of a difference in these impacts across different types of BPR.

Nirvikar Singh (2008) said that IT could enhance proficiency, make creating nation firms all the more all-around focused, and convey many advantages to well-off customers in these nations, whose utilization examples are near those of the developed world. From this viewpoint, IT is a rich-world instrument, of constrained importance to the poor masses of creating nations, which need fundamental well-being, sanitation, and training. On the other hand. There have been various endeavors to tackle the energy of IT in developing nations, to attempt to enhance the conveyance of such fundamental services, and additionally give different administrations that may have been reflected out of reach to poor, secluded villagers. Many contextual analyses, daily paper articles, and sites portray different accomplishments in the utilization of IT to enhance the lives of the poor in poor nations.

An overarching framework to define the effect of IT at the organization level was construed by Tim Jacks, Prashant Palvia and Richard Schilhavy (2011). The framework, on the one hand, classifies measures of impact of IT on productivity, profitability and intangible benefits. Whereas, on the other hand, the antecedents of the impact is categorized IT resources and capabilities, IT/business alignment and external factors.

Dewan, S., & Ren, F. (2011) They empirically investigated the impact of information technology investment on firm’s return and risk economic performance, highlighting the controlling role of the firm boundary plans of expansion and vertical integration. Their finding indicates a sharp contrast amongst the both direct and interactive effects of IT on the return and risk magnitudes. While the direct effect of IT investment is to raise the risk for a given level of return. Appropriate boundary strategies can moderate the impact of IT on firm performance with growths return and reduces risk. This interaction effect is strongest in service firms, in firms with extraordinary levels of IT.
investment strength. Their results delivered new visions into how IT and firm boundary strategies interact to affect the danger and return performance of firms.

Perez-Arostegui, M. N., Benitez-Amado, J., & Tamayo-Torres, J. (2012) results indicate that not only IT alone play a definitive role to sustain a competitive edge, but it also requires the moderating effect of leadership practice on this relationship. The researchers analyzed the impact of IT competencies consisting of IT infrastructure, IT technical and managerial competencies and IT strategy with firm strategy to determine quality performance.

The study found only a partial impact on the quality performance considering the IT competence the dimension of IT technical knowledge by itself did not influence the quality of performance but complemented with effective leadership practices would greatly enhance the quality performance.

Mithas, S., Tafti, A. R., Bardhan, I., & Goh, J. M. (2012) analyzed archival data of 400 global firms from 1998 to 2003 and concluded that IT has a positive impact on profitability. Discretionary investments, like advertising and R&D, had a lesser impact than investments on trades and profitability. While there is evidence for IT-enabled revenue growth, there is no impact of IT on profitability through operating price reduction. In other words, through IT-enabled revenue, firms have greater success than through IT cost reduction. Implications are for the managerial cadre is to exercise decision in expenditure on IT advertising and R & D. The results also imply that greater priority be given on expenditure to IT projects with growth potential rather than focusing mainly on cost savings.

G. V. Vijayasri (2013) examined the India’s IT industry and also studied the impact of IT on the Indian Economy. With the fast advance of the IT industry in India has begun a new class of entrepreneurs with innovative corporate practices. The phenomenon of brain drain has been reversed, as a result of which India’s brand equity has witnessed an upward growth and has thus attracted foreign direct investment (FDI), leading to other benefits. Over the decade, says the author, the IT part has grown many times over with the GDP growth quite similar to the USA. Special subsidies or export incentives are improbable to stimulate the growth of the IT
sector. According to G.V Vijayasri, it is for the state governments in India in formulate policies to motivate the IT sector.

Most of the studies on India’s IT industry trace the history of India’s phenomenal growth in this industry and its revolutionary effect on the lives of the Indian people.

Rahul Chattopadhyay (2015) also makes mention of IT, in general covers all parts of its management and processing information. With over twenty million human resource personnel, there has been a twenty fold increase in the export revenues, thus contributing to the growth of the Indian economy. This study demonstrates how to analyzing the development and performance of IT industry in India. Variables studied in this paper include composition, revenue, exports, wealth making size and share and localization.

2.4 Impact of Information Technology on Insurance

New and advanced technology gives the policyholders better, more extensive and speedier access to services. The outcome of Information Technology in the Insurance business is being felt very speedy. In the initial years, IT was used more to implement back office capacities like customer preparing, upkeep of records and accommodating intermediary accounts.

Bender (1986) carried out a survey to examine the financial effect of IT on 132 life insurance firms. Analysis was carried out to assess organizational performance in terms of total operating expenses to total premium income. Findings of his study revealed there could be a positive impact if investment in IT was at an appropriate level. Adversely, an optimal investment in IT for companies was achieved at a level between 20 and 25 percent of total operating costs.

To determine the correlation amid organizational performance and the intensity of integration and coordination of organizational activities through IT investment in the insurance industry, an investigation was carried out by Harris and Katz in 1991. Data collected was analyzed on a yearly basis and results showed a decreased ratio of IT costs to premium income (IT cost efficiency ratio) as compared to top-performing life insurance organizations relative to weak performing insurance organizations. Again findings on the basis of a longitudinal data analysis of improved organizational
performance indicated increased premium growth and IT expense ratio growth but
decreased operating and non IT costs growth, as also with IT cost efficiency growth.

Comparing two approaches of econometrics and mathematics, Zi (1994) evaluated
technical versus locative efficiency in the life insurance market.

Lorin M. Hitt (1999) explains that for maintaining and enhancing operating efficiency
and pursuing new strategies, life insurance companies are greatly dependent on
information technology (IT). New strategies include direct delivery, customer
segmentation and product innovation. This study concludes that the commitment to IT
by an average life insurance company is staggering.

Anthony Guldens' structuration theory was used as a framework for investigating the
early adoption and computerization by life insurance firms in the 1950s by JoAnne
Yates (1999). This study explains how the theoretical background helps to understand
the choices made on the patterns of technology that were used in the early computer
era despite the presence of new technology and advocates the usage of new
technology. In the cases of technologies perceived as innovative, the past conservative
influence was underestimated. Yates further endorses that the structuration theory
more often leads to expectations of reinforcement of existing structures/models. This
theoretical background also helps in the interpretation of the exceptions to those
earlier patterns that have in turn led to the innovative uses of computer technology.

Berger et al. (2000) is of the opinion that investments in quality information systems
have led insurers concentrating their efforts on quality customer service and delivery.

Karimi et al. (2001) believes that IT based customer services by insurance and
banking sectors are profitable and advantageous to the firms offering it. Benefits
include improved product and service quality, improved customer satisfaction, higher
productivity and enhanced financial performance.

Jarvinen et al (2001) executed that there is an immense variety in the measure of
capacities and information given on the Internet between different insurance
companies around the world.
Dasgupta, P., & Sengupta, K. (2002) in their paper investigated the impact of e-commerce on the insurance industry in India. New internet infrastructure development and economic reforms have broken the monopoly held by the Indian insurance market leading to a healthy competition from foreign alliances. This study focused on the development of the Indian insurance industry. The scholars endeavored to identify characteristics of online insurance that could improve the conventional model thus paving the way for the Indian insurance to go digital.

The utilization of IT, extensively alluding to PCs, fringe gear and proper programming have seen enormous development in service businesses in the current past. The clearest case is, maybe, the managing an account and insurance businesses, where through the presentation of IT related items in the internet saving money and insurance, electronic instalments, security investments, information trades (Berger, 2003).

The internet clients and the obtainable internet services have been duplicated. The internet endeavours should be shielded from any hazard that could achieve salary or critical information misfortunes. Also, the internet ventures ought to be safeguarded with a specific end goal to get pay if there should arise an incidence of a security infringement or a mechanical harm. The traditional insurance, as indicated by many driving insurers, can't ensure the hazard administration and cover the web companies' requirements for insurance (Kesan J., Majuca R. and Yurcik W, 2004).

The impact of information technology on productivity in the healthcare industry was explored by Myung Koa, Kwetu-MuataOsei-Brysonb (2004). A regression spline (RS)-based approach for analysis suggests that investments in the IT have a positive effect on productivity subject to certain conditions. The IT impact is not uniform but is subject to conditions both by the amount capitalized in the IT stock and the investments in non-IT capital.

Ray, G., Muhanna, W. A., & Barney, J. B. (2005) conducted an empirical study to explore the extent of impact of IT on customer services. A cross-sectional sample was drawn from competing firms of Life and health insurance in North America. The study also attempted to determine the variance effects of resource in IT and the abilities on the performance of the customer service process. The conclusions suggest
that tacit, socially complex, firm specific resources clarify variation in process performance through firms and those IT resources and capabilities minus these attributes do not.

A study to discover the impact of information technology on the level of premiums paid for separate health insurance was showed by Pauly, M. V., Herring, B., & Song, D. (2006).

The research question under investigation was which types of buyers will have more gains from the use of new technology. They examined the differences between requesting prices and contract prices through a survey posted on an electronic insurance exchange. Given the same distributions and search costs, the researchers formulated a hypothesis that older consumers expecting to pay more price for premiums engaged in a more intensive search than the younger consumers. The study concludes that introduction of an electronic exchange that decreases the search cost should have a greater impact on the decreasing the level of premiums paid for lose who searcher less early.

Like all researchers, Anargiridou, D. C., Anargiridis, S. C., & Papadopoulos, D. L. (2007) reviewed the evolution of e-insurance in the Greek market. Thereafter, they examined the advantages and disadvantages of Greece's e-insurance and endeavored to investigate the factors for the low penetration of e-insurance in the market. With this data analysis, they reasoned that the low penetration could be reversed if the required actions were taken by the Greek Insurance companies. One of the main recommendations was that to be competitive, services could be offered on line.

Recommendations by the Microsoft Report (2009) to insurers details the necessity of providing superior quality customer services by taking into cognizance a comprehensive dimensional perspective of those customers who provide an vision on how to complement their services and sales requirements. The report continues to focus the importance of insurers streamlining their operations by equipping themselves with relevant and sufficient know how of the management process and business information. The report also says that the customer should be uppermost in the minds of insurers and optimize customer processes. This, eventually results in revenue increases, thereby improving their competition in the world market.
Ahmadi and Salami, (2010) emphatically say that despite the tremendous improvements in information technology through web services and electronic collaborations, much of the work in many organizations is still being carried out via the manual paper-based processing. They provide an example of customer orders still being received using the old method and reiterate the out dated methods of handling such documents is time-consuming and unnecessary.

Varadaraju Thamodaran, Mahalingam Ramesh (2010) explain that Information and communication technologies (ICT) are devices that people use for sharing, gathering & distributing information and a means of a communication channel with insurance providers or in groups, through the print media, visual and inter-connected computer networks. The study also states the importance of ICT tools and resources to connect and communicate with the people in rural areas. The insurance providers can disseminate awareness, create interest and stimulate enrolment of insurance.

Anirban Dutta, Partha Pratim (2010) observed that Usage of information technology to work the business could enhance the proficiency of the associations. Getting the mechanical changes business, associations can lessen their operational cost; increment the offer of strategy specifically through the website and installment of premiums through electronic installment framework. Policyholders are likewise benefited in light of these technological developments in the insurance sector. Therefore, each company is expanding their investment in information technology to bring a competition through mechanical innovation and concentrating on client fulfillment.

B. E. A. Oghojafor, S. A. Aduloju* and F. F. Olowokudejo (2011) sought answers to their research question on how IT can improve firm performance pertaining to customer service and organization’s profitability in the insurance industry. In Nigeria, where most insurance companies have a comprehensive data base of their respective customers, it was found that not all have made provisions for customers to make major transactions on line. The reason being non-integration of information technology and customer relationship management. They concluded that an effective integration of customer relationship management with information technology paves the way for improvement in quality customer services and thereby increases the organization's profitability.
Nastaran Haji Heydari, Somayeh Behestani and Poyesh Bahadori (2013) in their study used the utilized Gartner IT Maturity Model for identifying the maturity level for their analysis to determine the rate of development in the Iranian insurance industry in deploying e-commerce tools. The outcome of their study of the 18 companies showed that the then maturity level of E-Insurance was approximated at 70% of the first level. The study also established that the newly established insurance companies were in the first level of the Gartner IT Maturity model. These new companies have been capable to gain more points and this has raised their level in terms of alignment with the virtual world.

Olajide Solomon (2013) utilized the responses of a survey of 152 respondents from 18 insurance companies to examine the impact of Information and Communication technology (ICT) on insurance company's profitability. The implementation of ICT as an imperative to promote efficient service delivery in the insurance industry is a strategy to achieve profit maximization objectives is the view of Solomon (2012). The analysis demonstrated a positive relationship between ICT implementation and profitability in Insurance Corporation in Nigeria. The implications of the findings are that they can enhance efficiency, albeit their service's quality delivery and thereby their profitability. His study also emphasized the need for regular training of insurance personnel to update them on the ICT innovations from time to time so as to certify that the insurance firms make a positive contribution to the nation’s economy.

Sunday Adekunle Aduloju (2014) in his study attempted to define whether IT investments and IT managerial competencies influenced the variations in customer service performance amongst insurance companies in Nigeria. Empirical data was collected through a survey of 402 personnel from the managerial cadre of designated companies in Nigeria. The sample companies were perceived to be amongst the largest investors in IT and where customer service is widely perceived as strategic for the victory of the company. Findings revealed that while IT is a necessity, it is not a compulsive condition for sustainable competitive advantage in customer service. The correlation between IT investments and IT managerial competencies is a significant factor in quality customer service. Therefore, it is vital that the insurance companies look at developing managerial competencies alongside IT investments. Operational efficiency of insurance companies in the present day is highly dependent on
Information Technology. That the insurance companies were the first and foremost of all the business enterprises in the service sector to accept computerization in their operations is noteworthy. The Indian insurance industry has had to face utmost challenges with the rapid advent of Information and communication technology innovations. A strategic implementation of information technology has a direct impact on the efficiency of resources and an increasing impact on reduction of various other activities.

Shenoy, S., Rao, G. P., & Rao, A. (2014) highlight the fact that competition has become very stiff with the entry of private insurance and the insurance sector to play a significant role. The usage of IT in the insurance sector is not a new phenomenon, yet over the years, one may find a restricted and curtailed use of IT in some departments in insurance firms, which include the major players. The most obvious departments are accounting, legal issues and servicing, claims processing, sales management and the like.

The insurance business, in the same way as other different ventures, is confronting major developments driven by an intersection of business and technology powers filled by advancement. Insurance companies comprehend they likely need to wind up plainly more customer-engaged, simpler to work with, defter, and progressively learning rich. The interconnectivity between insurance technology and buyers' lives is expanding quickly and insurers' unquenchable yearning for more information to settle on better choices and to reflect chance precisely while at the same time driving expenses down never closes (Briggs, B., & Hodgetts, C, 2015).

2.5 Research Gaps

The review of literature mentioned in the aforesaid sections demonstrates that IT capabilities have featured on the performance of firms for several years. Most of the scholarly research focuses on the efficiency of IT in various companies in different industries. An important observation of the studies is that very few of them study the impact of IT on Operational efficiency in the Insurance sector and the performance of LIC in India. It can be seen that the efforts have been fragmented. In view of the above justifications and seeking to fill these gaps, it is imperative for this researcher to undertake an investigation into the lacking areas of Life Insurance Corporation.
Therefore, an empirical study is being planned to further comprehend the research problem in detail. This study also examined the impact of IT assets which divided in Hardware, Software, Admin and General IT on Operational efficiency. What role IT plays in product development, customer service and brand loyalty also be dealt with. Certain issues highlighting the impact on operational efficiency in Life Insurance Corporation also are examined.