Integrating System Dynamics Approach for Reinventing Life Insurance Industry in India

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Abstract

Insurance sector, as a whole has contributed to the development of any economy through generation of employment opportunities and acceleration of industrial growth through generation of investible funds. It also provides an essential social security net in developing countries. Although Life Insurance Industry in India has its own significance and well placed in the context of Indian economy but it is not free from problems. Customer satisfaction is the true differentiator for the success of any business and is more so in insurance, where the products are perceived to be intangible. Three main aspects are awareness level, service quality and satisfaction level of policyholders. The insurance industry has undergone a massive change over the last few years and the metamorphosis has been noteworthy. The faster changing economic scenario, social values and structures, political attitude, cultural patterns, developments in Information Technology leads to paradigm shift in life styles of urban and rural resident. Their cumulative impact introduces elements of uncertainty in the possible developments in all sectors. At the same time insurance industry does not remain untouched. Development in other parts of the world, which is witnessing sweeping changes in terms of convergence of financial and insurance markets through bank assurance, replacement of reinsurance contracts by financial instruments, sales of insurance through unconventional distribution channels and consolidation through merger and acquisitions will also have their impact on the Indian insurance industry. Under the broader context of reinventing the Life Insurance Industry, Researcher is intended to explore the obstacles arising due to the related policies, latent gaps causing lack in customer satisfaction, gaps among customer expectations and life insurance policy coverage provided by insurers. For this purpose, researcher is going to apply various data analysis tools like Content Analysis and System Dynamics to form a workable model to represent the suggestions for necessary changes in the present scenario which can assist in resolving the gaps existing at present.

Keywords: Unconventional distribution, system dynamics, customer satisfaction, information technology

I Introduction:

Insurance can be visualized as a fundamental pillar of risk management system in any country. Risk is an integrated dimension of our lives. Every insurer offers a wide line of products for individuals as well as businesses and with respect to offer protection against risks, also to assure their financial security. They are also a crucial part of the financial intermediation chain in any country and they are source of long-term capital for long-term projects and infrastructure. Through their participation in financial markets, they also provide their assistance in stabilizing the markets by evening out any volatility. The insurance sector is broadly divided into life, health, and non-life insurance. Individuals, families, and businesses experience various risks such as risk of premature death, decline in income because of retirement, health-related risks, risk due to loss of property, legal liabilities related risks. The insurance companies offer a wide range of protection plans related to life insurance, health insurance, pension and retirement income, property insurance, legal liability insurance, etc. Moreover, insurers offer some customized products to meet the specific needs of businesses and individuals.

With the passage of time, insurance in India is facing a paradigm shift from the product-oriented to customer-oriented. Comprehensive coverage offerings to specific coverage offerings are available at present. Former chairman of insurance watchdog IRDA, Mr. J. Hari Narayan states that “Insurance industry in India is set for some serious shifts. Indian insurance industry had matured from its state of childhood to early adulthood. He said that in countries like UK, the agents have adopted themselves to latest form of marketing and very soon...
such changes will also be introduced in India”. It is clearly visible that the potential of Indian insurance industry is huge as number of life insurance policies is growing exponentially and resulting into annual growth rate around 15-20 percent. Gross value of the Indian insurance market (2004-05) is expected to be at Rs. 450 billion (US$10 billion). Government sources also state in the same direction that the contribution to the country’s gross domestic product (GDP) by insurance and banking services is 7 percent out of which the gross premium collection forms a significant part. The funds available with the state-owned Life Insurance Corporation (LIC) for investments are 8 percent of GDP.

II Significance of the Study:
To be globally competitive, insurance sector will have to concentrate on generating world class products and services at competitively lower prices. It has to necessarily reposition itself in terms of right strategies and competitiveness.

This research has also been performed to review the related published literature for exploring the various impacts on life insurance sector in India. This sector has portrayed commendable expansion in post liberalization period specifically from year 2001 but it has also witnessed decline trend worldwide after global economic crisis of year 2008. This study deals with assessing various shifts in the regulations related with insurance sector and identifying the impact of these shifts on the growth. Insurance sector is the one among the fastest expanding sectors in India which indicates higher growth capacity. The insurance industry has been stagnant for last few years with penetration at 3.2 for Life and 0.8 for General Insurance. However, things seem to be looking up with proposed hike in FDI in 8 Insurance Companies.

II Literature Review (Synthesized form):

Reinventing Life Insurance

Emerging challenges

- Indian life insurance, Shah et al. (2013)
- Emerging Challenges and Directions in Life Insurance Sector, Dr. Mahalaxmi Krishnan (2012)
- Economic reforms and world economic crisis: Changing Indian life insurance market place, Dr. Yogesh Jain (2013)
- A study of the impact of liberalization on the Indian life insurance industry, Kshetrimayum Sobita Devi (2011)

Emerging Opportunities

- Revival of Indian Life insurance sector, Sanket Kavatkar (2013)
- Insurance development and economic growth, Han et al. (2010)
- Global Insurance Outlook, EY (2014)
- Micro insurance in India: Trends and strategies for further extension, Rajiv Ahuja (2005)
- Insurance Act and IRDA Act, 2015
S. Krishnamurthy et al (2005), in their published research paper “Insurance Industry in India: Structure, Performance and Future Challenges”, has clearly indicated about present condition and growth of Life Insurance Sector in India during post liberalization period. Moreover, it represents possible opportunities, upcoming challenges associated with this sector. Kumar, (2005) states that private life and general insurance players have launched a wider line of insurance products and also made a setup for brand promotion as very important component of their new strategy. Kulshrestha and Kulshrestha, (2006) quoted that need of life insurance policies in rural India was growing at the rate of 18 percent per annum as compared to 3.9 percent in urban regions which provides immense opportunity for life insurers to perform. Rastogi and Sarkar, (2006) deals with improving competitiveness: the case of the life insurance sector in India recognizes the various reasons and objectives with which the sector was reformed in the year 2000. Barathi, Balaji and Meithei (2011), in their study “Innovative Strategies to Catalyze Growth of Indian Life Insurance Sector: An Analytical Review” have explained regarding the global recession’s effect on the fastest expanding life insurance sector in India. Authors explored that the entry of many private companies has created a transformation in insurance marketing. Sheela, (2007) studied that the Indian market includes urban and the rural areas offers remarkable growth opportunities for insurance companies. At present, crucial need is to understand the changing habits and needs of customers and their occupational structures. Chakraborty, (2007) have examined in his research paper that the in India, insurance sector has undergone a remarkable development with the entry of new private players.

III Objectives of the study:
Under the broader context of above mentioned study, researcher is intended to conduct research focused to following dimensions:
1. To study the various challenges faced by the Indian Life Insurance.
2. To explore the solutions to deal the current gaps in the Indian Life Insurance.

IV Research Design and Methodology:
The nature of present study is descriptive and exploratory, where data has been collected on secondary basis from various sources such as published research papers in national and international journals; published reports, newspapers, websites and books. Researcher has used content analysis technique to analyse the collected secondary data. Further, to represent a replicable model, System Dynamics technique has been used to form a stock flow diagram considering various opportunities and challenges related to the Life insurance sector’s growth in India.

V Indian Life Insurance Sector: Challenges Ahead
In India, life insurance sector was commenced in financial year 2001, when initial bunch of players in the private-sector launched with their operating activities. If we consider its age since year 2001, it can be stated that this sector is just stepped into its teen age. As some of the parent companies will verify, it is the most challenging phase in the development of a growing child. This is the similar case with private players of life insurance sector, which is actually passing through the challenging times at present. The emerging challenges faced by the life insurance sector are:

i) Product related Innovation:
As customers asking for further levels of customization, product related innovations are among best techniques for companies to expand their market share. It also results into increased efficiency as companies are now able to maintain reduced unit costs, offer enriched services specifically through online portals, can improve flexibility to pay increased commissions and results into higher sales volume. Regulatory changes; broadly those which are linked to portability of health insurance and also with the micro insurance which altogether offers considerable capacity to all the insurance companies to be more innovative, while others such as product design guidelines is likely to stifle innovation, if not conceived and implemented in a specific manner.

Micro insurance is essential for socio-economic dimension (prosperity and financial inclusion) and broadly important from insurers’ point of view for new opportunities of sustainable profitable growth in future.
ii) Distribution channels:
Insurance companies require expanding their distribution network to enhance market penetration. In the recent years, the sector has experienced and gained evolution of other efficient channels of distribution. Now, The basic distribution channels used by insurance companies include distribution through online portals, direct selling agents, banc-assurance, brokers, corporate agents such as non-banking financial companies (NBFCs) and tie-ups of para-banking companies with local corporate agencies (like NGOs) in remote regions. According to the sector, the role of agents as well as brokers has initiated shifting from merely a prospecting and selling role to an advisory and service-oriented role. The IRDAI's directions on tie-up with 3 Banks for each will have severe impact on exclusive arrangements. Payments Banks can bring about a dramatic change in this sector.

iii) Costing Challenge:
Among the various challenges faced by the life insurance sector, the region that has gained possibly the maximum attention of this sector during the last past five years has been the large operating cost base. Life insurers have taken corrective and effective safeguards to decrease their cost base in the past few years but still there is a long way to go.

iv) Recent regulatory changes:
A number of regulatory amendments have been made in the last five years. Year 2010 was the product centered year. The key areas where changes have been made include caps on commission to channels for distribution of ULIPs policies, caps on surrender charges and minimum assured returns on pension products. Such regulatory amendments enforced since September 2010; have significantly narrowed down new business gains on ULIP policies. Now, companies are bound to decrease commission rates (commissions to the agency channel, for instance, have decreased to around 5-6 percent) and explore further ways to decrease operating expenses. As per the amendments to insurance act and IRDAI act, Minimum defined returns on pension products have also impacted sales.

v) Challenge of profitability:
In the present time, major challenge to the insurance sector in India is profitability. Insurance sector was privatized before a decade but still profitability/returns are difficult to achieve for most of the insurers both in life and non–life insurance sector. Life insurance sector has been struggling to achieve profitability against high operating losses. Cumulative losses for private companies in life insurance are in excess of 16,000 crores. Almost 75 to 80 percent of the capital requirement has been to fund operating losses and not for solvency requirements. Increasing pressure from shareholders to limit additional capital contribution, has forced the industry to change its focus to enhancing profitability. Tightening regulation has further increased this pressure.

vi) Less focus on end customer related services:
This is one of the reasons causing declining in premium collection for the life insurers in India. There is limited focus on the end customer related services and the intermediary is being given a more prominent position by insurers. Service goes beyond delivery of policy/document or processing customer requests; it involves the delivery of value and feeling of trust. The life insurer comes in contact with the customer at several points in time. Claims settlement, traditionally, is regarded as one of the most painful areas of an insurance contract. The insurance company that handles its claim settlement process efficiently not only saves costs but also enjoys most popularity in the industry. Mis-selling has grabbed the attention of the industry in recent times. Each distribution channel was faced with typical challenges in customer servicing. For instance in case of direct channel and tied agents, product understanding along with customer handling is key. In case of bancassurance, the life insurer should ensure that the bank provides efficient services. The onus of the contract is with the insurance company; therefore, any incorrect details provided by the bank may land the life insurer in trouble with the regulator.
VI) Exploring sustainable growth path for Indian life insurance sector:
The Jan Dhan Yojna and allied schemes can have severe impact on profitability. Despite of all the recent upheaval, it is expected that insurance sector to continue outpacing the speedy growth of the economy. The insurance sector is expected to achieve US $350–400 billion as premium income by year 2020, making India as top 3 life insurance market and a top 15 non–life insurance market by 2020 worldwide. To achieve this target, a set of suggestion can be implemented which are explained as below:

i) Requirement of Structural changes in Agency model:
Segmenting the sales force and aligning actions with different associated segments. To successfully meet this, insurers are required to focus the following three problems:
- What is the proper level of segmentation – only agent, agency manager or branch level? The important challenge is to identify the proper level to segment at and how to relate among the different levels.
- What are the various basis of segmentation – profile, Performance, vintage etc.? The key is to make it simple and yet workable, otherwise this has the scope of being complex and wasteful.
- What are the action plans for various segments? It is typical to have workable points and real differences for the segments.

ii) Technological advancements transforming ‘big data’ into actionable insights:
As the insurance industry reaps productivity gains from the most recent wave of automation, new technologies are significantly enhancing operational efficiencies, increasing revenue opportunities and improving the customer experience. The important new technological developments for the insurance industry are:
- The growth in tablets and smartphones, along with cloud computing, which provide constant access to the internet.
- The explosion of computing power and storage, enabling the accumulation and analysis of extremely large amounts of data.

The growth of internet connected devices and sensors, which are projected to reach 50 billion by 2020, will have a significant impact on the availability of real-time information – a trend often referred to as ‘big data’. Insurers who can exploit this information for better pricing, underwriting and loss control will have a distinct competitive advantage over their peers. Advances in Artificial Intelligence techniques, such as machine learning, natural language understanding and intelligent decision-making will allow insurers to advance from using technology for transaction processing to decision-making. Today, analytical techniques are used for making ad hoc decisions using structured data.

iii) Reactive to preventive business model:
By 2020, a number of biotechnologies will be available at the nano-scale, providing the ability to embed devices and sensors unobtrusively within the human body. The nanotechnology drug delivery market is expected to grow at a CAGR of 21.7% between 2009 and 2014, and reach almost $16bn by 2014.5 Such nanotechnologies have the potential to dramatically improve health outcomes through enhanced monitoring and preventive control of chronic disease which will result into less death risk of the insured turning into low number of claims.

iv) Rising focus on rural market:
More than two-thirds of India’s population lives in rural areas without proper access to insurance products. Micro insurance is seen as the most suitable channel to ensure coverage in these areas. Poor insurance literacy and awareness, high transaction costs and inadequate understanding of client needs and expectations has restricted the supply for micro-insurance products. As a result, the market remains significantly underserved, creating a vast opportunity to reach a considerable number of customers. Insurance Regulatory and Development Authority has been endeavoring to enhance penetration of micro insurance through multiple initiatives and believes that there is tremendous scope for growth. According to the regulatory body, various ways to enhance penetration involves per policy costs as ticket size is small. One way is to go for group schemes due to their low cost of distribution, low overhead costs, easy underwriting norms, and support of nodal agency in remittance of premiums and claims. This is easily accessible through community leadership.

v) Using social media as a concrete distribution channel:
As social networking platforms like LinkedIn, Facebook, Google plus and Twitter have experienced fast growth and continue to gain ground with the same pace in the insurance industry. Insurance companies will require broadening their strategies related to social media platforms. They should assist their agents understand
the implications of this trend on their role as advisors and how to best leverage it. For assessing the standard of services being offered and various demands of the customers, Social media channels can also be utilized. It can be achieved with the support of focus groups and discussion forums where customers are supposed to interact with each other and also with company experts. Distribution channels can also be used to launch media campaigns—targeting the customer segment that has an extensive online presence—comprising new product launches and related education.

While social media platforms gives multiple benefits to the insurers, such as these platforms exposes the industry to high scrutiny and transparency. Even relatively minor mistakes related to information presented on such platforms tend to be grabbed by the media and can result into embarrassment to the associated firms. As such, the long-term implications of increased transparency on these platforms require to be considered. It is quite clear that insurance firms know how to extract optimum utilization through social media platform in such a way that produces maximum value by avoiding risks. To achieve this objective, firms are required to define a corporate level strategy that outlines usage and management of social media platforms. The policy should be as such whichindicate the disclosures level that would be made available on these platforms, and the method through which customer queries/feedback would be managed. Firms will also requireprovidinguseful training for employees and agents so that prudent usage of social media by all linked stakeholders can be achieved.

vi) **Enabling the Insurance Distribution Process through Implication of SaaS Solutions:**

SaaS oriented solutions assist in enabling faster implementation of upgraded technology for insurance distribution and speedy execution of pilot projects. SaaS oriented solutions assist in reducing the responsiveness on internal information technology spending by centralizing the development function related to the technology and distributing just the user based interface and other required capabilities. With the help of SaaS oriented modeling, insurance companies can support their agents and brokers with a common technology platform on fee basis which would otherwise be expensive for agents to develop on their own sources. Such mutual tie ups also support to resolve conflicts with present associated traditional channels that may arise from increased direct sales by the insurer. While the usage of SaaS oriented solutions by insurance companies is still in its initial stages, insurers need to understand the importance and utility of the SaaS model to analyze how it can be leveraged to extract maximum value across multiple channels. Firms should also explore the possibilities arising from SaaS-based solutions to better collaborate with agents and brokers and to provide them with a robust platform for better customer relationship management. Delivering applications using the SaaS model while supporting it with cloud computing will help insurers provide a solid value proposition to its agents as well as brokers. At the same time, insurers should also understand the data security and regulatory risks that arise from usage of the SaaS model. Presently, these serve as biggest impediments to increased adoption of the SaaS orientation model by insurers and need to be explored as an industry. Mapping of end sale & severe penalties on Insurance Companies can shift focus on customer protection.

**VII Model for the Growth of Indian Life Insurance Sector:**

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**Map Image**

- Growth in Life Insurance sector
- UWP amendments
- Cap on Surplus cap
- Change in Commission
- Under Insurence
- Large Operating Cost
- Cost issues
- Localised business models
- Merged technological solutions
- Risk assessment program
- Health awareness program
- Implication of SaaS solutions
- Reverting Business Models
- Risk assessment program
- Technological solutions
- Under Insurence
- Large Operating Cost
- Cost issues
- Localised business models
- Merged technological solutions
- Risk assessment program
- Health awareness program
As shown in this stock flow diagram of various determinants of growth in Indian Life Insurance Sector, inflows are the variables which has the positive linkages with the stock variable while outflows are those variables which has negative linkages with the stock variable. Stock variable is a variable which gets increase or decrease. Here, the stock variable is ‘Growth in Life Insurance Sector’ whose inflows are technological advancements, social media usage, adoption of automatization, implication of SaaS solutions, implementation of preventive business model and focus on rural market. If these changes can be adopted by any insurance company then it will result into growth of their organization.

On the other hand, as per the stated stock flow diagram, outflow variable are those which causes decrease in growth rate of life insurance sector. In this study, these variables includes recent changes applied by the regulatory, costing challenges and less focus on end customers which are resulting into negative influence on the growth rate of the industry. Hence, insurer should try to find the emerging ways to deal with such issues.

VIII) Conclusion:
The past two-to-three years have been very challenging for the insurance sector in India. Specifically, in the life insurance sector, for example, Economic exertion of the country has caused slowdown in the growth of the economy. Insurance has been positioned as a form of savings and IRDA's consumer centered orientation has been adding to the challenges for the insurers. With so many speed breakers on the path, insurance sector is still attractive in India. All factors are in place for the Indian life insurance sector to blossom into one of the fastest-growing financial services markets in the world.

References: