Learning Objectives :

Understand

1. The Need for Information Technology

2. Technologies for Insurance

3. IT Applications in Functional Areas

4. Insurance and Electronic Commerce – E-insurance

5. Information Technology & LIC

6. IT department in an Insurance Company

Structure :

The Need for Information Technology

The rapid innovations in the field of information and communication technology has posed serious challenges for the insurance industry in India.

The use of this technology in all its operations is strategic as

it has direct impact on productivity of resources.

it has sweeping impact on reducing cost of all activities.

The Need for Information Technology

To meet growing competition with arrival of private players, role of IT in Insurance has assumed critical importance.

IT was used traditionally but in a compartmentalized manner.

But now innovations in IT can be integrated for use in

- Speedy & accurate issuance of documents.
- Expeditious disposal of claims
- Proper building of accounts and records

To result in Quality Assurance & Efficiency!

Technologies for Insurance

IT and software solutions, allowing cross-border trade to become electronic and paperless, are increasingly on offer to importers, exporters and shipping companies and financial institutions. Here is a list of technological advancements that can enhance performance of insurance companies.

Database Management Systems

Insurer needs to i] track and measure responses; ii] review factors like lapsation, cash value, premium and competition.; iii] characteristics of persistency, customers and agents.

Database Management Systems

Insurer needs data at least for 10 years to carry analysis of these factors.

Current IT allows insurer this facility by providing power to keep tens of millions of policies on a device with vast data on per policy, customer, agent etc.

Using this database technology insurance companies get comprehensive performance, loyalty and lost opportunity.

Data Warehouse

Data warehousing technology is based on integrating a number of information systems into a 'one stop shopping' database to achieve vision of making a company national in scope but regional in focus.

Data warehousing allows managing by profit levels with an integrated approach rather than by limiting losses.

Data mining can be used as a means to control costs and increase revenue resulting in enormous earning for effective users.

Decision Support Systems

Companies need to utilize decision support systems by implementing data warehouses that pull information from existing legacy systems into a customer information database.

Such decision support systems will equip the insurance managers with ability to allow for customized products and services that are more in line with what customers want.

Group Linking Software

Group Linking Software enables sharing of information and particularly suits document heavy insurance business.

Tracking of policy application shows how information that is input and accessed from a number of locations can increase efficiency.

Imaging and Work Flow Technologies

The proposal forms may be scanned into an imaging system, data may be extracted for update to computer and for automated underwriting workflow may be implemented .

Mapping

Insurers to meet different needs, such as identifying loss prone areas, can use Mapping technology.
It helps the insurer to analyze the extent of its network i.e. the insurer can determine whether it has too many or too few agency force in a particular area.

Call center Technology

24x7, call center concept based on interactive voice response services [IVRS] is assuming importance in gaining, maintaining and retaining profitable customer. This is major jump from traditional employee based information services through telephone land line for a few hours a day.

Video Linking

Two remote units of an insurance company or insurer and broker at two different locations can now discuss risk inherent in a proposal underwrite business using a video linking facility.

Cat Models

Catastrophic models use data from the recent spate of natural disasters that helps develop more predictions of insurers' property exposures in future disasters. 'What if' scenarios of probable maximum loss can be tested to limit exposures to catastrophic losses.

Intranet, Extranet and Internet

Intranet connects different offices of the same business to permit exchange of data.

Extranet allows the business to communicate with business partners like suppliers, bankers, regulators, customers on the electronic channel.

Internet is a global network of many computer networks Insurers can browse many useful sites on the internet.

IT Applications in Functional Areas

Marketing

The scope starts from acquainting customers to insurance products ⟶ ⟶ claims settlement ⟶ selling new products ⟶ developing new customers for the product.

IT is used to integrate pricing, promotion and all strategic activities of marketing.

IT Applications in Functional Areas

IT can be successfully applied to -
Consumer Awareness
Customer Services
Market Research
Consumer Targeting & Segmentation
Processing
              premium payments
              claims settlement
              tracking brokers / agents

Finance
Human Resource Management
Research & Development

Insurance & Electronic Commerce, E-insurance

Use of internet by Insurance Industry results in

improvement in customer's service; cost reduction in selling goods /services or information to an expanded global customer base.

Insurance industry like banks and brokerage must hitch to e-commerce band wagon. Of the total inter net users only 5% are observed to have used insurance service on line.

Insurance & Electronic Commerce, E-insurance

The slow pace of e-insurance is defended by observing that

    insurance is not bought but sold

    insurance cannot be commoditized

    sale needs several face to face interactions.

Thus by its inherent nature insurance is not amenable to internet medium.

Insurance & Electronic Commerce, E-insurance

International trends

Convergence effect of IT is felt in developed countries. In its competition with banking, mutual funds and other financial services, Insurance will lose its battle if it fails to offer enhanced levels of service.

Insurers are, therefore, mobilizing their online sales and customer account management capabilities. This allows them to decrease cost of policy administration through outsourcing costly administrative activities.

Insurance & Electronic Commerce, E-insurance

E-Insurance in India

Insurers are still wondering whether they can sell insurance online in India.

They are waiting for
1] full penetration of internet into India.
2] Clear cut regulations for e-commerce.

Meanwhile insurers are designing / developing strategies to deliver services to well segmented customers along with applicable distribution channel strategy.

Insurance & Electronic Commerce, E-insurance

Benefits of E-Insurance

Better and cheaper collection of information.

Speed of response [issue of policy & claims settlement]

New ways to do business in competitive market.

Flexible pricing and customized services.

Global accessibility.

Insurance & Electronic Commerce, E-insurance

Benefits of E-Insurance contd

Increased sales w/o additional staff.

Immediate premium collection and fund transfer.

Reduced cost per transaction.

24*7 availability

Real time knowledge based building.

Insurance & Electronic Commerce, E-insurance

Life Insurers on the Web

Most private players have their web sites. They offer data on products, basics of insurance, FAQ, data on tax benefits, ready reckoner for premiums and in some cases form that can be down loaded.

They also serve as a virtual community for insurance professionals.

Insurance & Electronic Commerce, E-insurance

Major Factors Affecting E-insurance

Growth of internet in India

Competition Pressure.

Customer Retention.

Cross sells, customer loyalty & retention.

Costs – initial costs will lead to permanent savings later for ever.

Insurance & Electronic Commerce, E-insurance

Major Business Challenges

- Study has shown that the cost of distribution decreases with the increased value of connection. Products with high fixed cost but low value like travel, credit insurance will now become cost effective with online sale.

- Insurance companies using e-commerce may re-engineer , outsource and/or streamline their management functions, or marketing & distribution arms.

Insurance & Electronic Commerce, E-insurance

Major Business Challenges

Customers could get better and different services through internet. They can have rating agencies evaluation of insurers. They can access quickly status of their claims, next annuity or NAV of their mutual fund.

Will this mean the death of the Agent! Yes internet takes away paper and money routines but the role of agents as advisors is not affected & will be critical.

Insurance & Electronic Commerce, E-insurance

Technological Challenges

Database Security.
Web server security
Password Sniffing
Network Scanning Programmes
Physical Security
Web Access Security
Transmission Security
Privacy

Information Technology & LIC

LIC embarked upon automation in 1964 and have computerized their branches. Several modules are being added. Metro Area network has been built for front end operations in Mumbai. Wide Area Network is built for Zonal offices.

Interactive Voice Response Systems {IVRS] are functional over 50 centers. Multi media Kiosks and Info centers are also set up. It has its own website & electronic payments of premiums are now a reality.

IT Dept. in an Insurance Company

Functions:

Provision of hardware & software resources.
Adoption of the latest technologies for competitive advantage.
Training employees at all locations.
Advise top management on Business Process Re-engineering.
Develop, implement and maintain insurance related applications.
Maintain network.

IT Dept. in an Insurance Company

Set Up:

1. Technology Manager-

Evaluation & acquisition of new technologies in hardware, software networking & packaged solutions.

Recruitment & supervision of system & network engineers.

Conducting various training programs.

IT Dept. in an Insurance Company

Set Up:

2. Systems Manager-

- **Systems analysis and design.**
- Functional specifications.
- **Development of application and user manuals.**
- Assignment of work to project leaders, system analysts and programmers.
- **Evaluation of studies**

IT Dept. in an Insurance Company

Set Up:

3. Network Manager-

> **Network administration [including LAN]**
>
> User administration, systems security, e-mail etc.
>
> **Controlling and supervising network administrators.**

IT Dept. in an Insurance Company

Set Up:

4. Operations Manager-

Maintenance of hardware.

Job scheduling, back ups and file control.

Assigning work to operators administrators.

Training users

Controlling data flow

Key Terms

Information Technology   **E-Insurance**

DBMS   Portals

LAN   **WAN**

Activity

Visit the website of a few insurance companies.

Conceptualize the various modules including the premium calculator, products description, claims management , advertisements etc.

Summary

The rapid innovations in the field of information and communication technology have posed serious challenges for the insurance industry in India. The use and application of information technology in wide variety of insurer's operations has now become strategic in the sense that it has direct impact on the productivity of resources and a sweeping impact on reducing the cost of various activities.

Summary

The technological advancements that created a revolution in IT also for the insurance industry are new DBMS, Decision Support Systems, Intranet, Extranet and Internet, etc.

Summary

IT may be used in various areas of insurance companies like underwriting, policy servicing, claims, marketing etc. E-Insurance is an emerging concept now popular in India. Every insurance company now has website offering features like premium calculation, description of products and services, claims reporting, policy servicing etc.

Suggested Readings

1. Information Technology, IC21, Insurance Institute of India, 2000.

2. DC Srivastava, Indian Insurance Industry, Transition and Prospects, New Century Publications, 2001.

The End !

Congrats! you have completed all your sessions!

Good Luck…

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