The Use of Information Technology in Insurance Sector

Introduction:

In the present scenario everyone is using computer one way or the other and whenever you go to the market for shopping in any departmental store there you will find billing is computerized. The most common item now a days is a Mobile

Phone which uses the information technology to send the data or store the data like phone numbers or the messages. In the latest mobile sets songs can also be stored and the mobile phone instrument can be used as computer. The innovation in the computer field is taking at very high pace. Under this chapter we will not teach the working of the computer or any language. We are going to explain how the computer can be useful in the insurance sector.

Objectives:

At the end of this Paper you will be able to know: About Information Technology How is it used in Insurance sector I .e Life Insurer as well as General insurer.

MEANING OF INFORMATION TECHNOLOGY: -

The devices and techniques used to store, process, manage transit and communicate information, encompass various technologies such as computing, microelectronics and telecommunication is known as Information Technology. There is revolution in the Information Technology after the advent of computers starting with first Generation Computers to the latest Pentium microprocessor based Personal computer. It has been further revolutionized with the development of software packages for specific area from stand alone personal Computers to Local Area Network and ~Wide Area Network and Main Frame computers. These computers can be used by many users simultaneously known as Multi-user environment. You know very well that the volume of transaction is very large in any insurance organization. The data and information are to be stored for a Longer period because insurance contracts are long term especially life Insurance contracts. The Insurance organizations have the network all over. the countries even in foreign countries. Moreover, the transactions are of repetitive nature therefore, it has become necessary to seek the help of machines to process the data. Initially, the Insurance companies used adrenal machines and punch card equipment for creating, storing and processing data. But these machines were severely limited in their capacity. These were mechanical machines or Electra mechanical machines therefore, their speed, capacity and flexibility was much limited, But even the computers had some limitations initially, But these difficulties have been overcome with the help of the recent developments in telecommunication, which are used to aid computer technology.

INSURANCE RELATED APPLICATIONS:

(1) Life Insurance Applications
(a) Life Administration Module:

Policy servicing of existing policies:
The existing policyholders may require various services after taking the insurance policy For eg: Change of Nominee, Change of address, of change in mode of payment, assignment of the policy, Claims payment etc. These changes or payment can be made very easily through computers.

New Business:
As and when the new business is acquired the initial data of a policyholder is quite large and as stated above the data is to be maintained for longer period therefore storage of data in computer is useful

Renewal notice/Billing:
Renewal notices to be sent for the payment of the premium and with a no. of policyholders are very large and the renewal is on different dates. The computer generates the renewal notice at very high speed and does it automatically. The inter-mediatory bills are generated very fast and quickly.

Loans:
The Policyholders do take loans and the insurer has to maintain the records as the insurer has to recover the loan from the policyholder along with the interest. The recovery of loan may be regular or recovery at the time of payment of claim

(b) Statistics and MIS Claims:
As the data in computer can be stored for longer period the data may be useful for the insurer to prepare the type of policies are sold in the market and type of claim arisen in the particular region. These types of data will be useful for management to take any decision.

(c) Archiving of historical data and imaging Systems:
As the past data is available with life insurer therefore they can design the new products and price them accordingly.

 (2) General Insurance Applications:

 a) Front Office System:

- Policy Management and underwriting system
- Co-insurance
- Reinsurance
- Claims Management System
- Financial' Accounts and Audit
- Statistics and MIS

b) Reinsurance System.
- Inward insurance
- Outward Insurance
- Reinsurance AccountMIS.

c) Risk Management System

(3) Other Applications

a) Investment

- Term Loan.
- Money market.
- Investment Accounts.
- Market Operations

(b) Personnel System.
- Payroll system
- Performance Appraisals
- Attendance and leave system PF.

(C) Office Services:
- Purchases
- Inventory
- Tours and Travels etc

Corporate Accounting System General Insurance Applications Let us discuss about Front Office System In the General Insurance Industry. These applications can be written in any language and they may differ from Office to Office of The different Insurance Companies. The software namely GENESIS~ is being used by General Insurance Companies. On-line Front Office System is the first step towards computerization of any insurance Company and a well designed system at the front offices has following advantages to the company. To carry out business transactions efficiently Easy to handle growing volume of business and variety of Business (No. of documents processed, Variety of policies issued, Volume of business)

- Efficient customer services
- Reduction in office expenses
- MIS for the Branch Managers.

A good Front Office System should allow Insurer, Under writers ,and agents to manage the day to day operations of the office. The system should be capable of administering all stages of policy development from questions to new business, through adjustments by way of endorsements and renewals of policies. Coinsurance, Claims re-insurance and all accounting functions.

The main components of the Front office System are given below: Policy Management including Underwriting (Policy acceptance and printing and customer services)

- Co-insurance
- Re-insurance.
- Claims.
- Statistics & MIS Accounts

POLICY MANAGEMENT INCLUDING UNDERWRITING:

Policy Management has provisions for policy acceptance, client interaction window and policy printing. They should be able to store policies and the system should allow immediate access to a client portfolio. The policy management system generally has provisions for dealing directly through a broker or an agent or branch office. Generally in a good *Policy* Management system The Policy" is able to handle multiple and mixed risk seven if these risks are located at multiple locations. Policy management system has following additional features:

- User configured screens
- Provision for questions
- Policy production (including printing)
- Renewals
- Endorsements
- Coinsurance

The front office system should have the facility to handle Coinsurance policies. The provisions should be such that underwriter simply states whether the insurer is acting as lead insurer or follower. They should then automatically pass the retained premium to the relevant reinsurance. Claims payment should activate co-insurer recoveries wherever necessary.

Reinsurance:

The Front Office system generally has facility to handle all types of proportional reinsurance including Surplus and Quota Share Treaties: The system should be capable of setting up treaty layers by class of business with exposure levels varied according to the EML (estimated maximum ion).The system generally has the provision to incorporate proportional reinsurance ceding automatically into any claim payments or recoveries. The reinsurance module automatically produces reinsurance Bordeaux for each cadent.

Claims:

The Front Office System includes an integrated claims system to record, progress and monitor claims, experience by Policy Clients brokers, Branch and risk covered. Some of the features of a claims module are given below Movement history or duration of claim Analysis of claims with user defined screens Automatic recovery from reinsurers Incurred but not Reported (IBNR) causation and catastrophe recording and exception reporting other routine enquiries. Generally the claims system provides all the facilities required to manage reserves, payments. Recovery, accounting, claims history recording, statistics, various kinds of ratios, and

'runoff. The claims system also provides claims experience information at the time of renewals and monitors motor claims in order to accurately manage 'no claims' bonus.

Accounting:

Front Office System allows accounting for all transactions, which occur in the operating office. The accounting is generally integrated to policy management system and should automatically produce debit/credit notes, renewals notices, cover notes, reminders, statements, Bordeaux, remittance advices etc. The system should be able to handle taxes~ duties, reporting requirements as well as automatic calculation of midterm adjustments:

Statistics & MIS

The statistics module should allow production of comprehensive statistical, analytical and management information, Reports should be in any different formats and should include detailed audits, performance reports for management, should have provisions for exception reports for underwriting purposes and cumulative reports for statutory returns.

LIFE INSURANCE APPLICATIONS

(1) The Operational Offices

The Operational Office is engaged in procuring of new business and servicing of policies, Hence it has to maintain three types of data in respect of the policies being serviced by it.

(2) Billing

Records containing policy number, name and address, installment premium etc. for printing receipts and notices

(3) Premium

Records containing policy number, name and address, agency code number, installment premium, commission etc. For preparing commission bills.

(4) Valuation

Master Records containing necessary information for assessing the liability under a policy at any point of time and providing necessary statistical information to management. When, under a policy, some alterations in policy conditions are effected and the installment premium consequently gets altered! all the three files or the Policy Servicing Database have to be corrected. During mid fifties it was difficult as the only way of correcting a punched card was to punch a new card, reproducing the unaltered information from the old card and punching only the altered information. There was always chance of errors creeping into the systems. In order to avoid errors creeping into the system, the Insurance Industry was therefore continuously on the lookout for a system wherein the particulars pertaining to a policy can be maintained on a single record. So when the electronic computers were introduced, the Insurance industry was in the safeguard of its users, since the length of a record on magnetic media can be fairly large almost all the information pertaining to a policy could be contained in single record This eliminated the problem of inter-file consistency and also simplified the

process of making any alterations. After liberalization of insurance sector there are 29 insurers of life and general insurance and apart from Public sector undertaking all are using independent computer software keeping in their marketing strategy. The private players are controlling centrally therefore their module is quite different from the PSU's who are in the field for the more than 50 year. We are discussing in brief the module followed by Life Insurance Corporation (LIC) for the Front End Application for the branches:

1. NEW BUSINESSMODULE (N B Module).
2. CASH COUNTER MODULE.
3. POLICY SERVICING MODULE.
4. CLAIM MODULE.

1. NB Module:

The NB Module takes care of premium calculation, adherence to policy terms and conditions such as minimum or maximum age at entry maximum age at maturity, policy term, sum assured, mode of payment of premium etc. The program checks the validity of individual entry and does consistency checks age. date of birth and age, data of commencement age, term, and date of maturity, plan, mode of payment etc as expected in the policy conditions end underwriting rules, The Arithmetical part of the Underwriting process, as referred to above, having been taken care of in the Module, the underwriters free to concentrate on other areas such as Medical Report, Moral Hazard Report. Special Report etc, thereby enhancing the quality of Underwriting Standards. Many jobs manually done previously, such as proposal review slip typing, writing of proposal register and completion advice, outstanding deposit schedule etc has been takeover by the Computer.

2. CASH Module:

The cash module mainly caters to the needs of the cashier and some of the function of the Accounts Department. The premium receipts, policy and proposal deposit
receipts, 555, Loan and interest receipts, and Miscellaneous receipts are printed through the use of the Computers. The receipts are generated on-line and there is no need to generate Special Premium receipts(as was the practice earlier). There is no need to keep the preprinted renewal premium receipts. The Renewal Premium history file is updated, This eliminates the ledger posting (i.e. posting of the collection of the premium in the individual ledger, which is a laborious, time consuming job). The cash book, cash and cherubs collection list policy deposit schedules etc could now be printed under the CASH MODULE, thereby eliminating the manual preparation of the cash books and Outstanding Policy Deposit schedule.

3. Policy Service Module:

This module enables recording of the Change of Address, furnishing Revival and Surrender Value quotations, Requested File Maintenance (RFM) actions, displaying Policy Deposit position, displaying premium history refunding policy deposits etc.

4. Claim Module:

This module mechanizes all the jobs related with claims that are currently done manually starting from printing discharge voucher, data sheet to the final printing of various MIS statement.

Conclusion

As we have seen above how the IT is playing important role in insurance sector and not only this, the developments in telecommunication, have enabled networking of various computer systems. The computers have been interlinked same office through Local Area Network (LAN). As the company has many offices all over the country and to facilitate the customers, in network called Metro Area Network (MAN) is installed. Through this networking all the branches located in large cities have been interlinked. It is generally done through a central computer, which keeps the data of all the branches. This system has enabled the data for policies to be available at any branch terminal for any policy irrespective of the branch where the policy is underwritten. In this way policyholder is enable to make the payment of premium in any branch to get the receipt immediately. As the technology is developing very fast the crime rate IT is also increasing and to protect the public interest the Govt. has implemented Indian Information Technology Act 2000 to avoid any crime in IT sector.

Reference:-

1) Information Technology and insurance Application, Steven Martin,USA
2) Policy Management ,by Rajendra Dutta
3) www. Information Technology.in

****

Dr. AVANI F. AAL
Assistant professor
Sheth M.N.Law College
Patan (North Gujarat)