

TECHNOLOGY FOR COMPETITIVE ADVANTAGE IN COOPERATIVES

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Today's is the age of Liberalisation. So many multinationals are entering in to all types of businesses & cooperative business is not exception for that. For example multinationals have entered into businesses like banking, food processing, fertilisers etc. These multinationals are working very efficiently by achieving high level of operational efficiency, customer service, communication and excellent management information system with the help of latest information technology. In order to compete with them cooperatives in India also have to make use of the latest information technology and improve the said areas to attract customers who have started thinking of getting services from multinationals because of their efficient service. Both cooperative institutions and government bodies controlling the cooperatives can improve a lot, by introducing computerisation in systematic fashion. Role of management and top government officials taking the policy decisions is very much important. So computerisation or adoption of latest information technology to improve overall efficiency is need of the day.

Cooperatives

A Cooperative organisation is a business organisation voluntarily formed and served by its members to solve social and economical problems of their choice. It comprises members, Board of directors, employees and business activities.

The Indian Cooperative movement is by far the largest movement in the world. Over four lakh cooperative societies with a membership of 197 million, working capital of Rs 13,13,843 million spread over an extensive network covering 99.5% of the villages and 67% rural households constitutes the Indian Cooperative movement. The contribution of Cooperatives to National Economy is also indisputable in almost all sectors. In India cooperatives operate in almost all important sectors like Agriculture, Agro-processing, Fertilisers, Marketing, Credit, Dairies, Spinning, Handloom and Handicraft, Sugar, Fisheries etc. World over cooperatives have significant achievements to their credit like multipurpose cooperatives in Japan, Cooperatives for distribution of electrical power in America, Travel system and holiday resorts in Romania, Manufacturing of household appliances and Refrigerators in Basque region of Spain, Housing cooperatives in Poland, Oil refinery in Sweden, Insurance system in Malaysia etc. In our country though cooperatives are not operating in some of the areas in which cooperatives are very much successful in other countries, there is every possibility that cooperatives may enter into these areas in which corporate sector and public sector have been enjoying monopoly. To be successful among Corporate and Public sector organisations, for Cooperatives the only way out is to become competitive.

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In India Co-operatives are popular because they have proven capability to reach grass root level and have displayed faith in co-operatives. The area of operation of some of these cooperatives is limited to particular area where as for some of the cooperatives area of operation is a complete nation. All these cooperatives are registered with Government cooperation being a state subject in India.

Computerisation : the new requisites of business

Success is not singular, it means efficient operations and desirable returns from any business activity. Operational efficiency, Customer service, Communication and Management information system are the four important parameters to ensure success of any business organisation. These parameters can be improved to a great extent with the help of Computer and Information Technology (IT).

Change in Technology in recent years

Computer is an electronic device capable of storing the information, processing the information and give the necessary results quickly. In the early years when personal computers were newly introduced they had only 640 KB main memory (Approximately that much information which we can store in 100 pages note book) without hard disk (Secondary storage) to store information permanently. The use of computers was limited to particular area. Those machines were having clock speed only of 12 Mhz in comparison to latest computers having clock speed of 200 Mhz. In those days computers as well as the accessories were quite expensive. But after that there were dramatic developments in electronic technology with respect to size of accessories, speed of machine, type of display as well as cost of machine. Then machines of XT (Extended Technology) category came into existence which were having hard disk (20 to 40 MB) to store information permanently. Due to introduction of new softwares in short span of time, the main memory, hard disk capacity and speed of machines started becoming constraints. Then there was again some development and ATs (Advanced Technology machines) were introduced which were having double the speed of XTs and more capacity main memory and hard disk to store more information. When these changes were taking place in hardware technology (All parts of machine) there were lot of developments in software technology (collection of legal and proprietary computer programs) as well. More and more user friendly softwares came into existence. These softwares were memory hungry because some of the routines used to be memory resident and some of them used to occupy lot of hard disk space. Due to which hardware industry was forced to introduce machines with better display devices, more memory capacity and speed. Then came the concept of GUI (Graphical User Interface) in which user doesn't need to remember all the commands to get the necessary work done by computer. If user is clear about the things which are to be done then what remains is just selection of different menus, submenu items which are shown in form of icons. This concept got so much popularity that it revolutionised Information Technology (IT) industry. As all these type of softwares were memory hungry new machines kept on coming. Now-a-days we can get personal computers having better colour display quality, higher speed (100-200 Mhz) i.e. 10-20 times faster than that of XT and lot of memory space for both main memory and secondary memory. As mentioned above in the initial stages cost of computers was very high and thus small cooperative organisations can not afford computerisation due to high cost involved. But due to developments in

electronic technology and government policies cost of computers kept on decreasing and now situation has reached the state that any individual also can afford to purchase a personal computer with good display quality, speed and better memory. So computerisation of small Cooperative organisation is also not a difficult task.

Concept of Networking

When machines with high speed and memory capacity started introducing, number of applications on computer also started increasing. In early days use of computers was limited in very few areas but later on, more and more areas were computerised. People started keeping information in the form of databases so that they can manipulate the same as and when required. And then they felt the need of sharing the information with each other instead of entering the same information at more than one place. In few cases as there was constraint of resources like printer, memory etc. it was needed to share these resources as well. And that is why, concept of networking came in. A computer network is group of machines connected together so as to share the resources. There are two types of networks LAN (Local area network) and WAN (Wide area network). The first one is limited for a particular area i.e. in the radius of 1 km whereas for other one there is no limit as such because computers connected on WAN communicate with each other with the help of telephone line and device called as MODEM.

Necessity of adopting new technology

As mentioned earlier for any business to be successful the four areas should be very powerful

Operational efficiency
Customer Service
Communication
Management Information System

Operational efficiency

Nowadays a concept called Paperless Office has gained a lot of popularity. This kind of a thing is possible only when we have a powerful tool like computer using which we can create our day to day documents using Word processors available now a days in the market and store them in a form of electronic file. These documents can be retrieved as and when necessary because they are saved in a form of electronic file. The word processing softwares available nowadays in the market have lot of facilities like Spell check, Grammar check, changing the character size etc. Using these features, one can make the document more impressive. There are packages using which we can create all type of statistical statements as well as graphs. We can prepare our presentations using different softwares available, add sound and animation effects. We can store our data in form of database and manipulate it as and when required. Using all these softwares we can save lot of manual work and lot of repetition and in turn increase operational efficiency.

Customer service

This is the area which has gained a lot of importance in past few years. It is an age of competition and customer will definitely prefer the company/organisation which gives them better service. And whenever there is a question of customer service time factor plays a very important role. Everybody is so busy in today's life that no one has time to wait. In banking type of organisation if customer is requesting a monthly statement of his cash credit transaction and person sitting at the counter asks him to come on next day then the customer will not be a very happy person because depending upon the same, customer needs to take some decision. In such situations computer can play a very important role. The same statement will be available to a customer within few minutes in a computerised environment. That is why a concept of single window transaction has got a lot of popularity nowadays, wherein customer can approach any of the counter and take up the necessary transaction. Many of the Multinational banks as well as some of the National banks have introduced ATM (Automated Teller Machine) facility using which customer can deposit and withdraw cash after office hours also. Few of them have got a countrywide network due to which customer can do his transaction irrespective of the location of the bank. All these things have definitely improved customer service. The banks who have introduced computerisation might have already tasted the benefit of computerisation by way of increase in their business, productivity and profitability. There are examples like Indian railways and most of the Air line services who have computerised their reservation system using a Wide Area Network. Because of this computerised reservation system nowadays it is possible for anyone to reserve a seat from anywhere to the required destination and vice versa. Indian Railways and Air lines have definitely improved customer service as a result of adoption to new technology.

Communication

This is a very vital issue for all the businesses to be successful, may it be internal communication or outside communication. The communication should be clear and very fast. Nowadays there are so many facilities like E-mail, Electronic Data Interchange (EDI), Internet etc. using which we can improve it a lot. Using these facilities communication can be done fast and it will help for quick decision making.

E-mail : This is a facility using which we can communicate with remote sites very fast and that too economically. Concept of E-mail is very simple. It is a computer-to-computer communication through a telephone line and the device called MODEM. It is very much similar to our regular communication through post in which we write a letter, put the address, put necessary stamps and post it. In case of E-mail it is same, we have to write a message, put the address of a person to whom we want to send it and give instruction to computer to send it to destination. The mail will go to the mail box and the person to whom we send mail can retrieve the mail at a time convenient to him. Here we don't have to pay immediately because we will be charged on the basis of number of hours we use E-mail facility. E-mail facility is provided by few private companies as well as it is a part of Internet facility provided by VSNL (Videsh Sanchar Nigam Ltd.) now as per the new policy of the government Internet service can be provided by private vendors as well. E-mail facility is a part of Internet connectivity. Once we have internet facility we don't have to get separate E-mail connection. Using E-mail we can send text files as well as other type of files such as files from other softwares like FoxPro, Lotus, MS-Office etc.

Internet : It is a Network of Networks located all over the world. One can get any type of information on Internet according to own choice. Really speaking due to this there is a flood of information. It is upto an individual or organisation how to best utilise the network and information available on it. Some organisation use it for advertising their product, some of them use it to see the performance of their competitors as well as to display performance of their own company. This facility has virtually shrunk the global information to the size of a pocket diary. Access to far away buyers and suppliers and negotiations have all become very fast and a lot easier than ever before.

Management Information System (M.I.S.)

It is an integrated man-machine system for providing information to support operations management and decision making in an organisation. In any organisation, a lot of time goes in data collection, processing, documenting and communicating to needy people. Major portion of the overheads goes into this type of work. Information required by each person varies. Information being a processed product it takes some time to search data and may require difficult processing path. Information has time value, unless processed in time and communicated it has no value. Besides, the information should be complete, accurate, valid and reliable. All things can be achieved to great extent using a powerful tool i.e. Computer due to its capability of handling voluminous data, complex processing of data, validating data and transactions, quick search and retrievals, mass storage, communication with any destination on time. It is not that MIS is not possible without computers, eventhough when computers were not there we used to process data and generate required information. But as mentioned earlier time factor plays a very important role in generating information and here computer has upper hand than that of manual work.

Application of Computers in Cooperatives

It has been observed that many of the cooperatives are unaware about the benefits of computerisation. They are still following the orthodox manual procedures to manage their business through manual procedures. There are few exception to this. Two third, rather more than that are not taking the advantage of latest Information Technology. The cooperative organisations can be broadly categorised as per area of their operation. Area of operation for some of them is limited to particular area where as some of them are scattered over larger geographical area. Irrespective of this categorisation every organisation should first think of using computers in day-to-day operations for correspondence, statement preparation, report preparation, presentation etc. which will increase operational efficiency to some extent then they can decide priority areas in their organisation and start - computerising one by one. Professional and systematic approach is desirable while computerising the organisational activities. All cooperative organisations have a hierarchical structure i.e. for first type of cooperatives, there are branches and head office and for those cooperatives which are spread in larger geographical area may have branches, divisional/regional office and main head quarters. All the branches, regional/divisional offices have to send a lot of information to higher level of the same organisation and finally head office has to send it to the governing body, federation and Government. If the work is handled manually it is found that it not only gets delayed but also mutilated many times due to one reason or other. As mentioned earlier branches working at primary level have to communicate a lot of information to their head office, which needs to be analysed and studied over there and then send or reported to the main governing body, federation or Government. At present the information which is supposed to reach next day is reaching to the headquarters after eight to ten days which makes it difficult while taking decisions

for management and also completing some of the statutory requirements by sending required reports. Here technology can play a very important role. Now a days one can use E-mail/EDI facility which is economical as well as fast also to transmit required information wherever required. The information can be compiled at branch level and then can be transmitted. This will save a lot of time as well as efforts in preparing such reports and in turn, increase an operational efficiency a lot. In a fast moving world and situation of dynamic markets, businessman only grow when it operates with on-line information of the market and its players. Now a days in order that any business to be successful they have to advertise their products or services through proper media of advertisement. There are so many channels available like Radio, Television etc. there is one more channel available now a days i.e. Internet. One can use this medium to advertise their products or services effectively. Now a days there are lot of people who access internet regularly, they can see the advertisement and read about the products/services. One more advantage of internet is one can see performance of the competitors with the help of Internet so as to bring improvement in the business. For developing a powerful Management Information System in any organisation related to areas like Personnel, Purchases, Sales, Stores, Finance and Accounting, Planning etc information should be computerised. Because these are the areas from which information is sought for operational purpose as well as policy decisions. For government bodies computerising their day to day activities will help a lot, because they are the one to whom every cooperative organisation has to send their various types of reports as a statutory requirement. For these government organisations to take policy decisions the information stored in computer becomes handy and useful. As far as Government Cooperative department is concerned, slowly they have also started realising the necessity and importance of computerisation. Because the volume of documents and information through these documents is so voluminous that it is becoming virtually impossible for them to analyse that information. As presently, the work is done manually there is a lot of duplication of work and many a times there are undefined delays, which is definitely not desirable because these Government bodies are the one who take the policy decisions depending upon the performance of different cooperatives. Due to change in government policies many of these type of Government organisations have started computerising the activities. But they should also do their computerisation with a professional and systematic approach. In case they need a technical help they can take the help from government bodies which have specialised members in the area of Information Technology and Computers.

Role of management

It is an age of competition, Corporate sector companies have already established themselves in different fields. Due to change in Government policies Multinational companies also are showing a lot of interest in India. If we look at their operations carefully we can see that majority of them are taking advantage of Computers and Information technology for improving the four parameters mentioned earlier i.e. Operational efficiency, Customer service, Communication and Management Information System. All these parameters are interlinked with each other and in turn related with profitability of the enterprise. All the corporate sector companies as well as multinational companies are always conscious about those areas and ofcourse eager to increase profitability of the company and always updating themselves with the world, taking help of Information technology. If Cooperatives have to survive and grow in this competitive world they have to take full advantage of new policies of the government and latest information technology to bring in considerable improvement in the four parameters mentioned above. And here role of management is very important as they the people who take operational as well as policy decision for their organisation. It has been observed that people expect something magical from Computer. When

management of any Cooperative organisation thinks of Computerisation they should remember that it can not be done in a very short period of time, it is a gradual process. They should also think of getting educated themselves in this new era of Computers and Information technology because there are chances that they may get misled by the parties providing hardware and software to their organisation. Then they should follow systematic procedure and do the computerisation in phased manner. To conclude with Computers and management information systems are the new tools available for updating the operations for higher efficiency in Indian Cooperatives. The role of computers will be significant in bringing about a real turn around for Cooperative business in India. Cooperatives have a tremendous strength and capability to achieve a lot more. The statistical figures given in the very first para of this article will explain on its own, the strength that lies in Cooperative sector. The important thing is that as Cooperatives operate at a grass root level, people trust them more than any other type of organisation. Therefore Cooperatives should take advantage of this factor. If they adopt latest management methods and Information technology then Sky is the limit for them.

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(Abstract)

- About cooperatives
 - Definition
 - Categorisation according to their area of operation

- Necessity for adopting new technology
 - Improving operational efficiency
 - Customer Service
 - Communication
 - Management Information System

- Change in Technology - In Technical terms
 - Improvement in speed, storage capacity etc.
 - Introduction of new softwares

- In commercial terms
 - Cost of Computers has reduced to considerable extent

- How technology can help to improve the areas mentioned above
 - For Cooperative Institutions
 - For Government bodies controlling them

- Role of Management



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Today's is the age of Liberalisation. So many multinationals are entering in to all types of businesses & cooperative business is not exception for that. For example multinationals have entered into businesses like banking, food processing, fertilisers etc. These multinationals are working very efficiently by achieving high level of operational efficiency, customer service, communication and excellent management information system with the help of latest information technology. In order to compete with them cooperatives in India also have to make use of the latest information technology and improve the said areas to attract customers who have started thinking of getting services from multinationals because of their efficient service. Both cooperative institutions and government bodies controlling the cooperatives can improve a lot, by introducing computerisation in systematic fashion. Role of management and top government officials taking the policy decisions is very much important. So computerisation or adoption of latest information technology to improve overall efficiency is need of the day.

- **Introduction**

- **Liberlisation & Privatisation**

- **Multinational companies are entering into business like Agriculture, Agro-processing, Credit etc**

- Highly efficient because they are using IT to great extent**

- **To compete with them coops also have to adopt IT to become more efficient**

- **About cooperatives**

- **Definition**

- **Indian coop movement is largest in the world**

- **Over four lakh cooperative societies with a membership of 197 million, working capital of Rs 13,13,843 million spread over an extensive network covering 99.5% of the villages and 67% rural households constitutes the Indian Cooperative movement.**

- **multipurpose cooperatives in Japan, Cooperatives for distribution of electrical power in America, Travel system and holiday resorts in Romania**
- **Categorisation according to their area of operation**

Necessity for adopting new technology

- **Improving operational efficiency using packages like Windows, MS-Office etc**
 - **Customer Service Computerisation, ATM, Anywhere banking**
 - **Communication E-mail, Internet**
 - **Management Information System, Information should be in time**
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- **Change in Technology in recent years**
 - **In Technical terms**
Improvement in speed, storage capacity etc.
 - **Introduction of new softwares**
 - **Concept of Networking**

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