

MARKETING OF LIBRARY SOURCES AND SERVICES

M.L.I.Sc.

DLSM21 – SECOND SEMESTER

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MARKETING OF LIBRARY SOURCES AND SERVICES

UNIT - I: FUNDAMENTAL CONCEPTS

Need of Marketing and Promotion of Library and Information Services - 7S of Marketing Strategies of Libraries - Objectives and Philosophy - Marketing Environment - Marketing Information System - Market Segmentation - Marketing Mix

UNIT - II: Strategies and Techniques

Strategic Planning- Marketing Research - Marketing Process

UNIT - III: Promotion of LIS Products and Services

LIS Products and Services as a Marketable Commodity - Pricing, Distribution Channels and Communication Strategies - Advertising, Sales Promotion- Public Relations - E-Marketing

UNIT -IV: Management of Library and Information Centres

Management Functions - Systems Approach - Organisational Behaviour - Managerial Quality and Leadership - Human Resource Planning and Development

UNIT - V: Information Analysis, Consolidation and Re-Packaging

Information Analysis and Consolidation: Concept, Need and Purpose -Packaging and Re-Packaging: Concept, Need, Purpose and Criteria - Information Consolidation Products: Concept, Types, Design and Development

UNIT - I

FUNDAMENTAL CONCEPTS

1.1 Introduction

Need of Marketing and Promotion of Library and Information Services - Library and Information Services Need to Be Promotion - 7s Of Marketing Strategies of Libraries - Objectives and Philosophy - Marketing Environment - Selecting Target Market - Marketing Information System - Market Segmentation - Marketing Mix (14L)

1.2 Need of Marketing and Promotion of Library and Information Services

Now days, library professional is rapid changes by the experience. Different types of internal and external factors are reshaping the role of libraries. Due to increasing different type's information tools and technique in this digital age, Librarian must be thinks about marketing and promotion of library and information services and product for their users. Following reasons to be require for the implementing marketing and promotion in the Library professional.

- ✓ Library is non-profit organization. The basic objective of marketing and promotion of Library and Information service and product are to achieve high-level customer's satisfaction and fulfill objective of their parent organization.
- ✓ The information explosion playing very important role for promotion and marketing of library resources.
- ✓ The technology revolution
- ✓ Increasing the library expenses and library budget cuts
- ✓ Increase of users oriented services
- ✓ Competition between vendors, distributors and publisher
- ✓ Due to TV, Internet, Mobile and social media. Reading habits of peoples declining.
- ✓ Marketing helps the librarians to upgrade their reputation within their organization and as a profession within the society.
- ✓ Marketing approach is very useful to libraries to improve their image and to attract more users.

It has been observed by many researcher that most libraries do not market and promotion of their information resources, services and facilities very well. Library resources are very expensive, if users are not utilization of proper resources than there is wastage of money, time, energy and space. Libraries especially academic and reference libraries has invest huge amount

of money on collection development, processing and storage of information resources hence today's need is implementing marketing and promotion in the library professional.

1.3 Library and Information Services Need to be Promotion

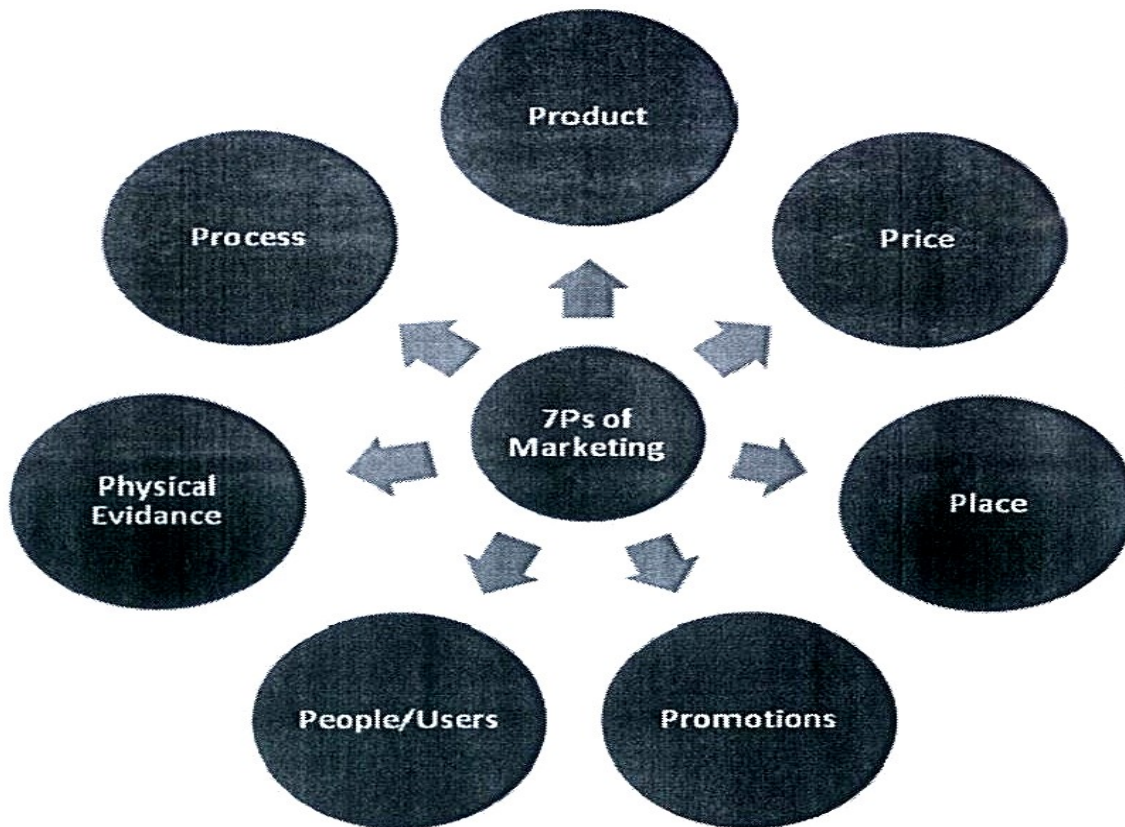
Libraries have many products and services which need to be promote and market to the society or users. Marketing means not only develop new products and services but also to aware to the users about existing product and services.

- ✓ Indexing Service
- ✓ Abstracting Service
- ✓ Current awareness Service
- ✓ SDI
- ✓ Reference Service
- ✓ Referral Service
- ✓ Document delivery service
- ✓ OPAC
- ✓ Inter library loan service
- ✓ ICT based library service
- ✓ User orientation service
- ✓ New arrival list service

1.4 7Ps of Marketing Strategies of Libraries

According to our former president of India Dr.Sarvepalli Radhakrishanan "A library is heart of any institution". Library is play very important role in the development of students, staff and institute. The Library has many services and products which are to be need of marketing and promotion. Each library needs to be identifying that what it want to market and how. Marketing is not about only developing and promoting new services and products but marketing create awareness between the users about the products and services.

There are 7Ps in the marketing which are key concept of marketing task. It is used to perform strategic functions. The seven principals is provide vital role of marketing in Library and Information service and product.



(Sources: Marketing Management by Philip Kotler, 11th Ed.)

Product

The library is having good number of collection for the Users. There are different type's text books and reference books, Journals and Magazines, Audio-visual collection, Newspapers, Project report, Dissertations, Directory, Handbooks, bound volumes and e-resources available in the library. Library has providing different type's services to the user like reference services, Bibliography services and etc. These are library products and services to be need maximum utilization for the users.

Price

The price means the amount a user's pay for the products. The Library is non-profit organization. Every library should plan of spend some amount for promoting and marketing of library services and it mention in the annual budget. The library should try providing maximum services in minimum cost to the users.

Place

The place (location) of library should be reachable and convenient for the users. The library should expand services area to where users can easily access its information services. Now days the internet is very important platform for the reducing place problem. The social

media, E-mail, Webpage, what's app are latest technologies tool for the providing and promoting library and information services easily.

Promotion

Promotion is very essential tool of library for providing better library and information services to the users. Main objective of the promotion is informed about resources available in the library. There are different types of promotion available in the marketing process like publicity, public relations, personal representative, advertising, and sales promotion. Library should arranging library orientation program or awareness program on beginning of the year for the new comer students in every year for the promotion of library resource, services and systems.

People/Users

People or Users is very important part of the any program, organization or systems, without users it is not successful. User's response, feedback is very important for the successful of the program. In the library and information professional, the user's involvement is play important role in promoting and marketing of the library services. User's feedback is to help to improve services and systems of the library.

Physical Evidence

In every sector of business and management physical evidence is support in marketing program and promotion by providing authentic information to the users. In the library, user's need authentic information and physical evidence help to users in satisfaction.

Process

There is some process, mechanism or procedures for the providing library services to users. Its aim is that right information services are receiving right person in the minimum time. There is not waste of time of the users. Hence the process should be maintained by the library.

1.5 Objectives and Philosophy

On the basis of a definitional analysis of marketing, one can identify the following as objectives of marketing of information services and products:

1. To enhance use of information sources & services
2. To increase customer satisfaction
3. To generate resources for running the service
4. To facilitate production of user-oriented rather than producer-oriented products.
5. To help in the design, implementation and evaluation of the Marketing Programme.

The above objectives have been formulated so as to overcome the four barriers to adoption of marketing approach by information professionals, namely:

- ✓ **Attitudinal:** happy with satisfying a limited clientele, that too when asked for.
- ✓ **Structural:** staff coming in to contact with clientele are not information professionals and hence there is no staff to think from the point of view of the Client.
- ✓ **Systemic:** library and information systems developed do not seem to allow the client or clients point of view inside the system
- ✓ **Environmental:** The culture, still believes in that information should be free.
- ✓ In other words, the need of the hour is for information professionals to shift the emphasis from product-orientation to client orientation and adopt a marketing approach so that both provision and use of information is facilitated.

Philosophy

Marketing is now a day very well accepted and adopted techniques for promoting and expending the use of library and information science products and services. Even five laws of Dr. S.R. Ranganathan are soul of marketing philosophy applicable in library and information science.

Philip Kotler gave the marketing concept in a non-profit organization in 1970s and the concept was sharpened in 1980s, thus, attracted the world of librarianship for adopting its merits for strengthening the image of library profession. Drucker suggests that “good marketing renders selling unnecessary”. The aim of marketing is to make selling superfluous. The aim is to know and understand the customer so well that the product or services fits him and sells itself (Bakewell, 1990). Marketing is indeed a mix of persuasion, with all its associated ethical issues and information. In marketing both traditional as well as electronic tools especially of social media tools are being used to achieve its goals and objectives. The use of social media in the

marketing of library and information services focuses on how, in the Internet age, data can be easily accessed anywhere, anytime and stored in different locations such as digital libraries, knowledge portals, web servers, etc. The use of social media in the marketing of library and information services focuses on how, in the Internet age, data are easily accessible anywhere, anytime and can be stored in different locations such as digital libraries, knowledge portals, web servers, etc. Social media are published and distributed in a social environment such as blogs, wikis or video hosting sites - a new type of online community designed to create an identity and show people presence on the bigger networks.

Since the application of marketing management tools and techniques are widely applied in libraries and information centres, lot of scholars have done research and have published a highly qualitative paper which helps library and information professionals to understand various dimensions of marketing management and its philosophy and the scope of its application in libraries.

1.6 Marketing Environment

Analysing the environment for marketing opportunities is commonly done keeping in view many aspects. The tool often used to gather information about external forces and internal capabilities is SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis, which involves capturing the strength and weaknesses of an organisation or service and the opportunities and threats represented by environment trends. All organisations, public or private, small or large, profit making or non-profit making, manufacturing or service, exist within an environment that affect the work they do and how they do it. Assessing the organisational environment is necessary to offer customised information services to users. This emphasises the importance of gathering information from a wide range of sources so as to make informed decisions. The past decade has witnessed significant changes and advancements in the various aspects of human life. The directions, restrictions and constraints that are imposed by the environment in which a library operates are not different from those in other organisations. Even a library operates in a wider context or environment forming a dynamic relationship with other organisations. This phenomenon determines the conditions, which have a direct impact on library management.

1.7 External Environment

External pressures on libraries come from the changes taking place outside the library world. It may be seen in context of local, regional and international impact on libraries and information centres. The different dimensions for example, economic, technological and socio-political dimensions embody conditions and events that have the potential to influence the organisation in many ways.

Technological Dimensions: Technology is the key to business of every organisation. Technologies offer better-featured products, needs less space but more capital and skills. The most noticeable developments are in the fields of information communication and networking technologies. They are used for processing, storage, retrieval and transmission of large volume of information across geographical zones within no time. New technologies offer new and improved services in a variety of ways, such as:

- ✓ Creation of new or improved services.
- ✓ More involvement of users/customers in operational tasks by offering self-service system.
- ✓ Bridging the gap between small and large libraries as IT provides an opportunity to use the resources, services, products from remote locations through resource sharing and networking.
- ✓ Accessible data bank, which would be helpful in recognising the users' information needs in a better way. Need recognition helps in strengthening relations with the users.
- ✓ Personalised direct mail communication and machine interaction is also possible.

Globalisation has resulted in ease of access to information around the world, round the clock. Many national and international information networks exist for free flow of information. The globalisation of information has created the quality consciousness among users and has also increased the expectations of the user groups to a great extent.

Technology is dramatically influencing service strategies such as:

- ✓ Modern communication infrastructures make possible service delivery at global level;
- ✓ The increasing reliance on IT in offering services not only globalises but also provides opportunities to know the services offered globally; and
- ✓ The changing nature of services due to advancement in technologies, which are radically

altering the methods by which library and information centres can globalise their services.

Economic Dimensions: New economic thinking has resulted in numerous changes. Public sector enterprises involved in health, insurance, banking, telecommunications, public transport, universities and libraries are under threat and the governments of most of the countries now prefer as a matter of social as well as economic policies allows privatisation. Present day library and information centres are unable to maintain their acquisition and services at previous level with the finances made available by the state agencies, which has been cut down or have remained static for the last many years. A major portion of the library budget goes for the staff salary and it has become very difficult for libraries and information centres to cope up with the rising cost of literature with limited budget for acquisition. Similarly, there has been a great necessity of funds for acquisition of newer technologies to enhance service capabilities and output of products. There is also a threat from competitors to maintain quality services, as in market economy public and private sectors would co exist for free flow of information. Commercial firms engaged in production of information and its organisation and retrieval would also charge for such services. Thus, the main challenges before libraries and information centres managers are to:

- ✓ utilize resources properly and efficiently;
- ✓ mobilize resources to meet financial needs; and
- ✓ Make services and products qualitative and competitive through accountability.

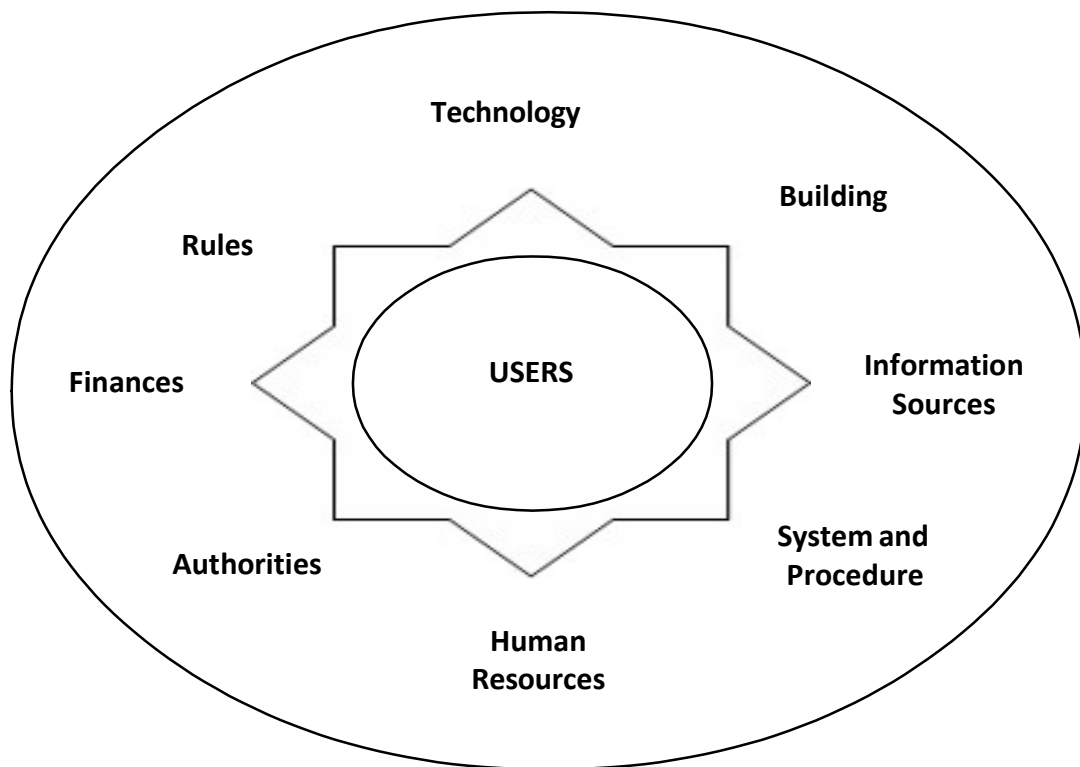
This has put libraries to market their services and products and charge for value-added services, to enter into joint ventures and alliances and to bring operational efficiency and effectiveness, etc.

Socio-political Dimensions: The process of democratization at the grass root level in the form of local bodies at village, block and district level, policies of up-liftment of weaker sections of the society, concept of social justice, total literacy campaign, etc. are leading to the change in people's attitude, habits, value and belief. At the same time, disinvestment policies of the governments affect ownership share of the enterprise and their libraries are to take the initiatives in tune with the organisation they serve. Such initiatives are needed with regards to goal-setting, developing vision, building cooperation, responding and reacting to the new situations in the new environment.

Many of the library and information centres have taken serious initiatives and have attempted to serve in such an environment. Many are yet to formulate their response to the changing environment. They need to think through their vision, goals and objectives, organisational culture, organisational and functional strategies, etc.

1.8 Internal Environment

Alongside external dimensions of environmental changes, there are also internal dimensions which library and information managers need to take into account. The internal dimensions include physical resources, systems and people. The whole spectrum is shown in the following Figure



Internal Environment

All the internal resources, for example, human, finance, information systems and procedures, rules, technology, facilities, etc. are there to serve users better. Thus, the important elements of the internal environment may broadly be grouped into three, namely physical resources, systems and people. These are influenced greatly by user's choices, preferences and

needs.

Customers: User is considered the king around whom all activities of the library revolve, library and information centres exist to meet the needs of all its users, user is the focal point of all information activities and library and information centres are incomplete without users. It is mainly because of central position of user in all components of the library. User is “the most important entity in all kinds of libraries- public, academic and special. User may be a reader, patron, customer, client or anyone who makes the use of services in a library set-up.”

Physical Resources: The most important dimension of the service quality that represents evaluative criteria being used by users are physical facilities, information sources, equipment, communication material, etc. These are required for the comfort of users to sit and study in the library and for producing value-based services /products for them. All aspects of physical facilities must be planned and maintained to ensure convenience, safety, cleanliness and comfort. Information resources must be exhaustive, up-to-date, and balanced in order to provide pin-pointed and timely delivery of information and services with the help of modern equipment. Cozy and inviting atmosphere of the library will attract users to come again and again and value-based services will ensure increased satisfaction among them. The concept of library is changing to the extent of library without walls. Library services offered online must also address the requirements of the users and geared towards meeting them efficiently.

Systems: In a library, systems comprise of the service operations, where inputs are processed and the elements of the service products are created and service is delivered. Activities include classification, cataloguing, indexing, charging and discharging, rules and regulations. Every system and procedure must be designed and operated to meet the needs of users, aiming at making simplicity in use, accuracy, reliability, timeliness, completeness, etc. so that some trust about the services is developed among users.

People: People, include library and information professionals working in various sections of the library working at different levels, i.e. lower, middle and top, skilled, semi-skilled and unskilled, professional, semi-professionals and non- professional. It is the value, belief and approach of employees that will reflect in the organisation they work. The management structure and style must support each employee to give some intangible value to its users – internal and external. People involved in library and information services require good knowledge of both

systems and physical resources and must be competent to use their knowledge to create customised offerings to users and an ability to communicate about the value of services to them.

In formulating a marketing strategy, the library management has to adapt to its environment as understanding the environment would help the library in not only altering its existing marketing mix but in identifying new opportunities by selecting an appropriate market to serve.

1.9 Selecting Target Market

Selection of an appropriate market is important for the success of marketing efforts. A market includes all the people who have some stated interest in a particular product or service or who could be expected to have one in future. The process of market segmentation is fundamental to the whole idea of marketing as it focuses on the user, i.e. a library's present or prospective user, rather than the product, i.e. the library's collection and services. A basic tenet underlying marketing strategy is that there are distinct market segments each with its own needs, wants, desires and interests. Market segmentation is the division of market into distinctive groups of buyers who may require different products or marketing mixes. It is the division of market into homogenous groups, which will respond differently to marketing mix variables i.e. the 4Ps of product, price, promotion and place. It is the division of heterogeneous market into homogenous groups. Segmentation is important from the point of view of marketing as different buyers have different needs. Each group or segment can be targeted by using different marketing mix to reach potential buyers with most customised offering as possible. Very often, a librarian builds up library collection by assuming the needs of the users. Library market segmentation takes into account the fact that library users who request a product or service are all individuals who are unique in some way.

Market segmentation is done on the basis of the two market variables: classification variable and the descriptive variable.

1) Classification variable is used to divide the market into following segments:

Geographical segment – This involves division of the market into different geographical units e.g. states, regions, countries, etc. It consists of users who live in a particular geographical locality. These markets determine the type, size and site of the library and information centres as well as

opening hours and services offered. The managers of public libraries should look out for geographic location requiring library services and serve the user community accordingly. Rural area which is remote and isolated can be best served by mobile library services. Special libraries serving industries and R&D organisations having branches located in different regions will have to consider specific needs of each location and develop services accordingly.

Demographic Segmentation – In this case the market is divided on the basis of demographic variables like age, sex, occupation, income, race, etc. Demographic market segmentation is one of the most popular methods of clear market needs and information relating to these markets is readily available. Demographic markets may be identified by age, sex, nationality, income, occupation, religion, social needs (like hobbies, sports, some form of entertainment, etc.) and physical needs (for physically handicapped).

Psychographic Segmentation – Dividing the buyers on the basis of socio-economic status, lifestyle, hobbies or personality traits is psychographic segmentation. This type of market segmentation examines attitudes, livingstyles, personality and social classes, people who have a past history of using libraries have to be reminded of the library services and their use.

Behavioural Segmentation – Buyers are divided on the basis of their product knowledge, usage, brand loyalty, attitude, response to marketing factors, etc.

II) Descriptive variables are used to describe each segment and distinguish one segment from the other. Descriptive variables must be easily available measures and it can be linked to easily obtainable measures that exist in the secondary sources. The strength of market segmentation lies in the fact that it is based upon the end user rather than on products or services. The end user is assured of a service which satisfies her/ his individual needs rather than a mass market general offering. Once the library identifies the potential market to serve, it needs to select those for which it will provide a product or service. This process is known as ‘targeting’ which involves strategies for appropriate market segmentation, for example:

- bringing all users at one place who have similar or identical needs and the organisation goes after the whole market with single offering;
- dividing the mass market into smaller groups or segmenting and designing

separate services and programmes for each group; and

- concentrating upon a small number of users or specific areas of services and providing in-depth services in a few areas or serving a small percentage of the users.

Once it is decided about the target group and the service (new or existing) to offer to the target group, it is required to put all efforts to make it qualitative. Everything done by the librarians about the library and its services must support and reinforce it.

1.10 Marketing Information System

Dynamic capabilities defined as a firm's behavioral orientation to constantly integrate, reconfigure, renew and recreate its resources and capabilities, and most importantly, upgrade and reconstruct its core capabilities in response to the changing environment to attain and sustain competitive advantage. Dynamic capabilities are not simply processes but embedded in processes. Processes are often explicit or modifiable structuring and combination of resources and thus can be transferred more easily within the firm or across firms. Capabilities refer to a firm's capacity to deploy resources, usually in combination and encapsulate both explicit processes and those tacit elements such as know-how and leadership embedded in the processes.

1.11 Marketing of Information

The concept of applying marketing information is not to increase profit but to increase user satisfaction and increase the funding (Gupta, 2003). This marketing information also draws users' attention (Onoyeyan, 2015), to the available information resources and effective utilization of the services. The marketing of information promotes information products and services offered by University libraries by adopting various marketing strategies

1.12 Need and purpose for marketing of information

The major inputs which are essential for any business, industry, teaching, research and development are considered to be only four M's: Men, Money, Material and Machines. In recent years one more input which has become essential is „Information“. This is considered to be a very important commodity and the present day power equation is: Information = Knowledge = Power. Hence Information is Power and it is life saver for industry, business, etc. This value of information content of information services/products has made them commercial. It is a fact that

the information provided helps the users directly/indirectly in earning money, increasing knowledge or solving problems, etc. and thereby to earn money. In order to provide correct and timely information, Library information centre has to invest and regularly spend money for hardware, software, manpower and collection development etc., to keep the information input base up-to-date. Information Technology has resulted in virtual libraries. Users are no longer limited to their own library information centers. Library and information professionals have also now to cater beyond electronic libraries there is a need to go for marketing of information.

There is a great demand for information but the financial resources of library information centers for development of information services/products are limited. Since global competition in information field has increased, therefore, timely supply of right information is possible through advanced. Library information centers now suffering from lack of support and grant from public and private sectors.

1.13 Market Segmentation

Market Segmentation is the segmentation of the clientele / users on the basis of the individual differences and group similarities. Essentially, segmentation is the division of the library or information center market into smaller, more manageable groups that have like characteristics. Marketing mixes can be fine-tuned to serve the needs of these groups or segments and marketing communications targeted more precisely. It is believed that the practice of segmenting markets would lead to better use of resources and services since those resources and service can be targeted with maximum effectiveness.

Paul Green and Donald Tull (1978) in their book *Research on Marketing Decisions* have set four criteria for market segmentation:

- ✓ Segments must exist in the environment (and not be a figment of anyone's imagination).
- ✓ Segments must be identifiable repeatedly and consistently.
- ✓ Segments must be reasonably stable over a period of time.
- ✓ One must be able to efficiently reach the segments through specifically targeted

distribution and communication initiatives.

1.14 Characteristics of Segmentation

A market segment needs to satisfy the following criteria if it is to be targeted successfully:

- ✓ It should be homogenous i.e., the characteristic variables of the group need to be identifiable and strong enough to warrant different treatment.
- ✓ It should be accessible for targeting to succeed. An identifiable segment may be available only at particular times, student populations in term-time, twilight shift workers, etc.
- ✓ The segment size should be measurable and justify targeting. This does not always mean large numbers but cost-effectiveness should be a primary question for librarians and information managers.
- ✓ Appropriate or natural segments will be identified as prime targets when there is a positive answer to the following questions
 - *Awareness* — can they be made aware successfully?
 - *Availability* — can the service be made available to them effectively?
 - *Affordability* -- can the segment afford to use the service?
 - *Acceptability* -- can the service be made more acceptable to them?

1.15 Methods of Segmentation

Market Segmentation involves the identification of the users (target groups) - actual and potential, and their needs assessment. This would involve collection of information on the institutional projects and programmes as well as individual user's interests and needs.

In the designing of the user study, the objective of the study, the variables to be studied, the model to be followed, the population sample to be studied, the data collection methods to be adopted, the analytical methods to be followed are to be determined with care. In its turn, a study of clientele facilities the identification and analysis of their needs which may be categorized as Functional / Problematic / Social / Emotional / Epistemic needs. Another categorization would be for retrospective searches, current awareness, browsing, specific information, problem-

solving, managerial decision-making etc.

While the methods of dividing the market into segments are many, it is often a combination of methods that leads to success. Segmentation can be by subject / institution / volume of use / age groups (Adult, Young, Children, etc.) / special interest groups, such as, faculty, students and researchers. Ultimately the goals of Market Segmentation are to predict and influence customer or user behavior.

Markets can also be divided by:

Geographic Segmentation: By Country, Region, State or City

Demographic Segmentation: According to demographic segmentation variables such as age, sex, income, occupation, race, nationality, religion, education, family size and family life cycle stage (Bachelor stage, newly married couples, Married couples with dependent children, older couples with the head of household still working or retired, etc.)

Geo-demographic Segmentation: According to where they live (A classification of residential neighborhoods (ACORN System): Modern family housing, higher incomes, high status, non-family areas, Multi racial areas, Social class Grades: Upper middle class, Middle class, Lower middle class, Skilled working class, Working class, Pensioners).

Behavioural Segmentation: Differentiates target markets according to usage rates, willingness to innovate or user perception of benefit.

Lifestyle Segmentation: Attempts to profile a person's way of living and acting. VALS approach (Values and Lifestyle Segmentation) classifies the population into a number of categories: Sustainers, who are disadvantaged but fighting hard to escape; Belongers who are conventional, nostalgic, and generally reluctant to experiment; Achievers who make things happen and enjoy life; Societal conscious who have a marked sense of social responsibility.

Psychographic Segmentation: is based on the practical applications of psychographics, wherein personal, psycho-graphical, social and cultural factors that govern user behavior are considered. Thus Marketing Research and Segmentation study is a User Needs Assessment study with stress

on economic aspects and constraints, as well as on alternate products or services. Table 2. gives a Market Segmentation of user groups and the services / products targeted to them. This is one of the essential and important steps in marketing as it facilitates in the development of an appropriate “Marketing Mix” for each audience or target market. The marketing mix deals with 4 “Ps” - - Products, Promotion, Price and Place - - together with the 5th “P” “Processing”.

Table 2 : Market Segmentation: User segments *vis-à-vis* Services & Products

	Reader Guidance		X	X	X
	Ready Reference	X	X	X	X
	Literature search		X		
	Referral Service	X	X	X	
Current Awareness Services					
	Notification of current papers, etc		X		
	Research-in-progress bulletin		X	X	
	SDI	X	X	X	X
	Notification about conferences	X	X	X	
	Newspaper Clippings	X		X	
	Patents Information service	X	X	X	X
	Standards Information service		X	X	X
Condensation & Differential Presentation					
	Abstracts		X	X	
	Extracts	X	X	X	X
	Management Digest	X	X	X	
	Technical Digest		X	X	X
	Technical Note	X	X	X	X
	Product Information Bulletin (in language)		X	X	X
	Product Information Bulletin (in language)		X	X	X
	Commercial Intelligence Market Information	X		X	

	Forecasts & Trend notes	X	X	X	
	Company profiles	X			
	Notification of contracts & tenders	X		X	
	Environmental Scanning: Regulatory, Social, Economic, Technological	X	X	X	
	Technology Transfer Information	X	X		
	New Innovations		X	X	X
	MIS	X	X	X	
	Techno-economic surveys	X	X	X	X
	Data Service		X	X	X
	Information Analysis & Products thereof	X	X	X	
	State-of-the-art report & Trend report	X	X	X	X
	Critical compilations, etc	X	X	X	

1.16 Common Services

- ✓ Translation
- ✓ Reprography
- ✓ Exhibition organization
- ✓ Editorial & Technical writing
- ✓ Preparation of charts, maps, etc
- ✓ Organisation of seminars, workshops, etc.

Note: (a) = Top Management, (b) = R & D, (c) = Middle Management, (d) = Technicians

1.17 Strategies for Market Segmentation

It is absolutely necessary that librarians identify those parts of the mass market, which they can most effectively serve. There are three strategies that can be adopted:

- ✓ Undifferentiated Marketing
- ✓ Differentiated Marketing
- ✓ Concentrated Marketing

Undifferentiated Marketing: In this type of marketing, all users have similar needs and the library caters to the whole group with standard services and products. In other words, those services and products, which appeal to broadest number of users, are provided. This strategy is resorted to when there are financial constraints and special services are to be curtailed

Differentiated Marketing: On the other hand, differentiated marketing is the dividing of the target market into smaller groups and designing of separate services and products for each group. In this strategy, the library recognizes the different needs of users and each individual group needs are examined and appropriate services are provided. Obviously, this approach involves additional staff costs, administrative and promotional costs.

Concentrated Marketing: Concentrated Marketing occurs when the library concentrates upon a small number of sub markets and provides in-depth services in a few areas thereby serving a small percentage of the market place. For example, a specialist library may decide to concentrate on Selective Dissemination of Information and High Speed Reference Service. In other words, prioritizing is resorted to among the users in provision of services.

1.18 Marketing Mix

The American Professor of Marketing E. Jerome McCarthy proposed a four Ps classification in 1960, which has since been used by marketers throughout the world. Further few year back in 1981 Bernard H. Booms and Mary J. Bitner marketing mix is also called the 7P model or the 7 Ps of Booms and Bitner. This service marketing mix strategy extends the original marketing mix model from four to seven elements. While Jerome McCarthy has only defined four verifiable marketing elements, the 7Ps are an extension as a result of which this services marketing mix can also be applied in service companies and knowledge- intensive environments.

Product: Product is all necessary components and elements to do a service which generates value for customer/users. In which customers favour those products which offer the most quality, performance and innovative features. Marketing personnel of product-oriented organizations should focus their effort on making quality products and improving them over time. For instance, supplying products with a credible brand and attractive package increase the sale in addition to the satisfaction of customer/users.

Price: Price and other costs show the management of various costs endured by customers/users in achieving the advantages from generating the services. It is a flexible and influential element, which determines the revenue/profitability/ market share for the organization. On the customer's point price is a determinant factor because most customers depending on their income level consider the price before they purchase the product.

Place: Its represents the distribution channels that the organizations utilize to convey their physical products or services to the end user. Distribution channel designer must understand the service output levels that are expected by target customers.

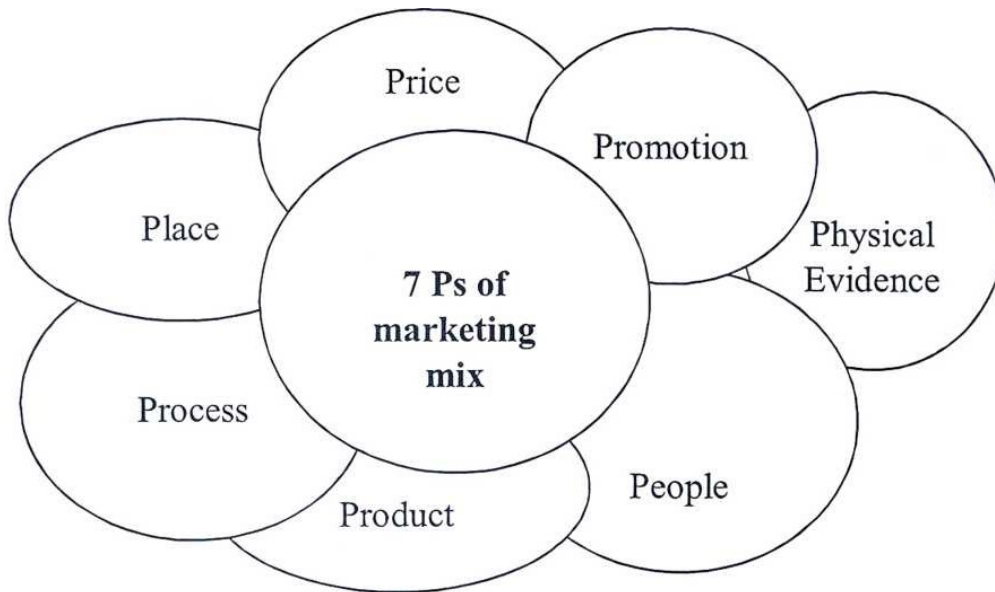
Promotion: In this process involves the function that marketer communicates with customers in order to acknowledge the product. Marketer needs to plan strategies to attract the present and potential customers to the product. The value and importance of promotion for service organization is in the benefits achieved from buying their services.

People/Staff: Personnel are the main component in providing services. Peoples or staffs are relatively a new element in marketing mix as its importance for the development of strategies has only recently been realized. Peoples have its own tools to contribute in the marketing mix such as employer, management, culture, and customer service.

Process: It is a way in which a service is delivered to the end customer/users. It ensures availability and sustainable/proper quality of services. The task and role of this component of marketing mix is to balance service, demand and supply.

Physical evidence: It refers to the environment and facilities needed by libraries to provide services to their customers/users. It also covers all the tangible, visible touch points (complete

environment) that your customer/users will encounter before they buy.



Seven Ps Marketing Mix

KEYWORDS:

Marketing of Library and Information Services: Librarianship is experiencing rapid change. Various internal as well as external factors are reshaping the role of libraries. Librarians and information specialists have debated the idea of marketing for the information sector. Several things have compelled us to learn about marketing and using it.

7S of Marketing: The McKinsey 7S model is a useful framework for reviewing an organization's marketing capabilities from different viewpoints. Developed by Tom Peters and Robert Waterman during their tenure at McKinsey & Company in the 1970s, this model works well in different types of business of all sectors and sizes, although it works best in medium and large businesses.

Marketing Information System: Libraries and information centres of all types and sizes are faced with the need to market. Librarians and information professionals must learn strategy effectively for the market and advertise their services.

Market Segmentation: Market Segmentation is the segmentation of the clientele / users on the basis of the individual differences and group similarities. Essentially, segmentation is the division of the library or information center market into smaller, more manageable groups that have like characteristics.

Question

1. List out factors that affect external environment of an organization
2. Define market segmentation

References

- Coote, H. *How to Market your Library Services Effectively*. 2nd ed. London: ASLIB, 1997. Print.
- Cronin, B., ed. *The Marketing of Library and Information Services*. London: ASLIB, 1981. Print.
- The Marketing of Library and Information Services*. 2nd ed. London: ASLIB, 1992. Print.
- DeSaez, E. *Marketing Concepts for Library and Information Services*. 2nd ed. London: Facet Publishing, 2002. Print.
- Fisher, Patricia H. *Blueprint for your Library Marketing Plan*. Chicago: American Library Association, 2006. Print.
- Gupta, D.K., and A. Jambhekar, eds. *An Integrated Approach to Services Marketing: A Book of Reading on Marketing of Library and Information Services*. Mumbai, India: Allied Publishers Private Unlimited, 2003. Print.
- Rejean Savard. "Marketing Library and Information Services". *Encyclopaedia of Library and Information Science-3* (ELIS-3). Taylor & Francis. (Forthcoming)
- Hart, Keith. *Putting Marketing Ideas into Action*. London: Library Association Publishing, 1999. Print.
- Jain, Abhinandan, et al., eds. *Marketing Information Products and Services: A Primer for Librarians and Information Professionals*. New Delhi :Tata Mc- Grawhill, 1999. Print.
- Kapoor, S. K., and Amitabh Chatterjee, eds. *Proceedings of the IASLIC 13th National Seminar on Marketing of Library and Information Services in India*. Calcutta:IASLIC,1988. Print.
- Rowley, Jennifer. *Information Marketing*. Adlershot: Ashgate,2001. Print.

Renborg, Greta. *Marketing Library Services: How it all began. Proceedings of the 63rd IFLA General Conference*, 1997. Web. <<http://www.ifla.org/IV/ifla63/63reng.htm>>.

Savard, Rejean. *Guidelines for the Teaching of Marketing in the Training of Librarians, Documentalists, and Archivists*. Paris: UNESCO, 1988. Print.

Siess, J.A. *The Visible Librarian: Asserting your Value with Marketing and Advocacy*. Chicago: American Library Association, 2003. Print.

Ranganathan, S. R. *Five Laws of Library Science*. Madras: Madras Library Association, 1931. Web. <<http://dlist.sir.arizona.edu/1220/>>.

Walters, S. *Marketing: A how-to-do-it Manual for Librarians*. NY: Neal-Schuman, 1992. Print.

Weingand, D. *Marketing for Libraries and Information Agencies*. Norwood, NJ: Ablex Publishing Corp, 1984. Print.

Wood, E. *Strategic Marketing for Libraries*. Westport, CT: Greenwood Press, 1988. Print.

UNIT – II

STRATEGIES AND TECHNIQUES

1.1 Strategic Planning and Marketing of LIS Products

In marketing the strategic planning plays a vital role. Strategic plans are useful for libraries and information centres as they focus on the library's programs and services. Poustie stated that "Strategic planning is an organizational management activity that is used to set priorities, focus energy and resources, strengthen the operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment" (Poustie, 1995).



Figure: Strategic Planning Cycle (Kotler, Philip)

2.1 Strategic Planning: Advantages

Strategic planning, according to Dodsworth serves following purposes: "Clearly define

the purpose of the organization,

- ✓ Establish realistic goals and objectives
 - ✓ Help in creating feeling of ownership of the plan
 - ✓ Focuses the resources on the key priorities
 - ✓ Produces great satisfaction and meaning among planners
 - ✓ Give ear to everyone's opinions
 - ✓ Help in achieving more efficiency and effectiveness
 - ✓ Establishes a mechanism for updating with relevant information as and when needed
- (Dodsworth, 1998)

1.1.1 Definition of Marketing

Kotler has rightly defined: "Marketing is the analysis, planning, implementation and control of carefully formulated programs designed to bring about voluntary exchanges of values with target markets for the purpose of achieving organizational objectives. It relies heavily on knowing the organization's offering in terms of target market needs and desires, and on using effective pricing, communication, and distribution to inform, motivates, and services the market."

Marketing is the ongoing process of creating a connection between the library and its users. Research is a key element of marketing. Librarians must match what the library offers with what users want and need. Then, the library must demonstrate its value in meeting a customer's need to continue the cycle.

1.1.2 Need Library Marketing

Emphasis should be focused on library user's needs.

- ✓ Library should first determine library user's needs and then think how to make and deliver information to fulfill those needs.
- ✓ In terms of marketing approach in the library helps to the future growth of more effective usage of information centers.
- ✓ Long term goals should be oriented, so the service could be extended.

- ✓ Marketing means a systematic change in the traditional attitude of librarians towards acquisition, organization, processing, storage, retrieval and reproduction of information.
- ✓ The concept of marketing is comparatively a new area to library.
- ✓ The basic need is to create the demand and interest among readers to use the library resources and services.
- ✓ To promote the use of available reading material in the library and create alertness among the users.
- ✓ To optimize the use of information within limited resources and manpower.
- ✓ Limited budget for library needs to market services and generate funds for library to improve the image of the library.
- ✓ Due to information flare-up, researchers require exact and reliable information for their research and study.

1.1.3 Benefits of Library Marketing

A well-organized library marketing program will bring the following benefits:

Establish Brand Recognition: The primary and most important benefit of marketing is brand acknowledgment. Marketing strategies help to imprint a brand in the minds of customers. This ensures that customers seek a particular brand of a product, rather than the brand seeking out its users.

Gain and retain user: Once a brand has gained its ground and established its users, marketing enables it to preserve its users. This is essential so that the brand does not lose ground to products that newly come into the market.

Identify real customers: Marketing strategies allow a business to identify potential and actual customers. Instead of trying to force a product or service on unenthusiastic customers, marketing helps to target customers who have the real need.

Save time: Marketing, and more so, effective marketing will help reduce the break-even period of a business. By promoting a product or service through effective marketing, a business can promote its sales.

Establish trust: Repeated and effective marketing ensures that a product remains in the minds of its intended customers. Trust is created over a long period of time and marketing is an effective way in establishing it.

Encourages referrals: Marketing encourages new customers to seek information about the brand. By making a product seen and heard frequently, a business also increases the chances of word-of-mouth referrals. The chances of suggesting an often-seen product is higher when compared to something that you do not see frequently or are unaware of.

Address issues: The various means of marketing a product can also act as a means of clearing inhibitions or misunderstandings about the quality or nature of a product or service.

1.1.4 Marketing Techniques in Library

Libraries as profitless organizations have three major constituencies:

- ✓ They provide services to the clients.
- ✓ They receive funds from parent institution.
- ✓ Help full and Supporter organizations.
- ✓ As profitless making organizations, library and particular centers cannot avoid marketing practices. But why should libraries market their services? Four reasons are outlined below:
 - ✓ Marketing as an aspect of management enables library and information managers to know and understand the needs of their clients. This knowledge will help them to make good management decisions, which will in turn help in providing services to clients more professionally.
 - ✓ Information as well as Library managers are not only interested in the group of people who do use the services, although they are interested in non-users. Marketing will mostly help library and information management and provide appropriate information as per library as well as information management for their requirements.
 - ✓ Librarians and information manager's urgency to represent their services as an indispensable part of the organization within a community and justify their claim that their clients may perform efficiently or effectively without a library service. By the help

of marketing techniques will help libraries and information services get more funding from their patrons.

- ✓ Marketing may help to improve the image of the library and information profession.

1.1.5 Marketing Strategy

The plan specifies marketing strategies, the promotional methods chosen to suit the target audience and meet your confirmed goals.

- ✓ Strategies in the plan depend on the user group and/or the service being offered. The “marketing mix” that you need to consider consists of the four Ps (product, place, price, promotion).
- ✓ Select the Products research determined were needed, calculate the Price or budget to develop and sponsor the service, and choose Promotion methods targeted to your users.
- ✓ Strategies include public relations, advertising, direct mail, telemarketing, Internet, public service spots on TV, local radio station, monthly book review column in your local paper or in a blog, visual displays, press releases, comprehensive media campaign, podcasts, etc. Methods are based on appraisal of users and the nature of the product.

1.1.6 Library Products

- ✓ Catalogues
- ✓ Patents and inventions
- ✓ Results of R&D projects
- ✓ Technology briefs
- ✓ Feasibility studies
- ✓ Technological articles in books and reports
- ✓ Handbooks. Encyclopedias and manuals
- ✓ Publication of science and technology agencies
- ✓ Publication of trade and industries
- ✓ Directories of sources of technologies and technology information
- ✓ State of art reports

- ✓ Reviews
- ✓ Current content files
- ✓ Newsletters/Bulletins/Brochures
- ✓ Profiles of specialists
- ✓ Compilation of need based bibliographies
- ✓ Web services and Home page designing
- ✓ In-house generated information products
- ✓ Information consolidation and repackages of information
- ✓ Specifically organized package of information for special groups of users

1.2. Marketing Research

Marketing Research is useful for improving marketing decisions and understanding of marketing phenomena in any marketing situation. It is especially useful for Marketing of Library and Information Products and Services. It is essential to effective strategic planning and implementation and its consideration needs to be a continual process for most libraries and information services in the present complex and constantly changing world. The information generated by marketing research can be put to effective use in forecasting, planning, instructing and illuminating the whole management decision-making process (Rowley, 2001)

While Kotler (1982) defines that, “Marketing Research is the systematic design, collection, analysis and reporting of data and findings relevant to a specific marketing situation or problem facing an organisation”, Green and others define “Marketing Research is the systematic and objective research for and analysis of information relevant to the identification and solution of any problem in the field of Marketing”. In other words marketing research is a process whereby the information necessary for decision making in marketing is generated.

It is useful for improving marketing decisions and understanding of marketing phenomena in any marketing situation. The decisions to be made are: Identification and selection of marketing opportunities, design of marketing strategy for tapping the selected opportunity, design of marketing mix elements, i.e. Products, Price, Promotion and Distribution; and feedback & control of marketing effort.

Thus, marketing research is active and aim- oriented; it draws on statistics, psychology, sociology and anthropology. It looks at marketing mixes, pricing research, the effectiveness of

advertising and investigates the whole of marketing communication.

1.2.1 Stages in Marketing Research.

The stages in marketing research proper are the same as in the scientific approach and include:

1. Identification of the problem (for example: why does library use stagnate at round 20% of the population?)
2. Which segments of the market make no use of databanks? Why not? How can a specific segment be reached?)
3. Review of Literature
4. Formulation of Objectives
5. Selection of Methodology
6. Data Collection
7. Data Analysis and Drafting Report

1.2.2 Types of Marketing Research

Perrin, Cheron and Zins identify three major types of marketing research: Exploratory, Causal and Descriptive (Figure 2). While Exploratory research is rarely conclusive and is associated with data-gathering methods which are cheap and relatively simple to apply like use of secondary data 85 case studies, the purpose of Causal research is to establish the cause effect relationship between the variables affecting a marketing situation and employs very sophisticated types of methodology including experimental methods and sophisticated statistical methods. On the other hand, Descriptive research is the commonest type of research in information services, particularly for the identification of customer

Exploratory Research

- Secondary Data
- Case Studies

Causal Research (Experimental)

Descriptive Research

- Observation
- Questionnaire
- Diaries

- Personal Interviews
- Group Interviews
- Telephone Interviews
- By Correspondence

needs. In Descriptive research, the methods employed are : Observation, Questionnaire, Diary method, Personal 85 Group Interviews, Correspondence etc. Depending on the situation, these methods are used either singly or in combination.

1.3. Marketing Research in Information Context

Marketing research for information services involves the study of Communication and Behavioral patterns of the users and those to whom he has delegated his search. It is necessary that the research activity must continuously study the changing needs of users to avoid basing strategies on past, no longer applicable assumptions. Marketing research is especially applicable to answer questions about the basic elements of what marketing professionals have identified as the marketing mix Products, Promotion, Place, and Price. Research is necessary in each of these areas to maximize final acceptability and success of the information product.

While Product research is concerned with such elements as content, coverage, currency, format, frequency, graphics, packaging/repackaging, indexing and production capability; Place Research is concerned with existing distribution methods and the cost of alternative means of distribution of the product. On the other hand, while Promotion Research must determine (after considerable trial and error) the most effective means of promotion of products, Price Research requires complete data on the cost of production, basic financial^v policy and profitability goals of the organisation/library, competitive products and services etc. (Reed, 1992)

Marketing research, therefore, would involve the steps of data collection, data analysis, data interpretation, presentation of research, and feedback or follow-up (Ritchie, 1994). A diverse group of techniques and methods are appropriate and effective at each stage of Marketing Research.

1.3.1 Marketing Process

Marketing approach can be used to make the existing planning process of a library more accurate. D.E.Weingand (1995) indicates the following fusion of planning and processes of marketing. Once this fusion of planning and marketing takes places, a time would come when the annual reports of libraries and information centres would look like that of any business organization indicating the targets set at the beginning of the year and the performance achieved rather than, a mere indication of how many books have been acquired, how many new members came into the fold. Moreover, organizational planning and performance evaluation will lead to individual staff planning and performance evaluation which, in turn, would lead to the much needed vitality in the information profession and management. This synthesis of planning and marketing and its positive aftereffects would lead to the organic and dynamic sustenance, and growth of libraries and information centres. At least, a map of the organizational functioning would be available to guide the information managers to monitor and interfere as and when needed.

KEYWORDS:

Marketing in Libraries: Marketing has been gaining importance in libraries globally. Self-support policies, increasing competitiveness in the marketplace, rising customer potential and widening access to information are some of the main reasons for this trend. To survive in such time, library and information centers must identify their user's needs and integrate this information into the everyday working of the library.

Marketing Research: Market research is defined as the process of evaluating the feasibility of a new product or service, through research conducted directly with potential consumers. This method allows organizations or businesses to discover their target market, collect and document opinions and make informed decisions. Market research can be conducted directly by organizations or companies or can be outsourced to agencies that have expertise in this process.

Reference

- Kaur, A., and Rani, S. (2008). Marketing of information services and products in university libraries of Punjab and Chandigarh (India) An attitudinal assessment of library professionals. *Library management*, 29(6/7), 515-537.
- Kopperundevi, S. (2015). Feasibility of Marketing Information Products and Services in College and University Libraries. *Journal of Library, Information and Communication Technology*, 5(3- 4), 56-63.
- Kotler, P and Keller, K. C. (2016). *Understanding Marketing Management InMarketing Management by Philip Kotler...* [et al].South Asia: Pearson Education Limited. Pp.3-6
- Papegowda,M and Srinivas,V (2012). Marketing of information products and services In: *Transformation of agricultural libraries in collaborative era* edited by M.S.Pathania ... [et al]. Hyderabad: BS Publications.pp.468-472
- Sahu, Rakhraj and Yadav, Sharwan (2015). E-Marketing of library and information science In: *Integrating ICT in agricultural libraries in India: policies, issues and challenges* edited by S.S.Rawat ... [et al]. Izatnagar: ICAR.pp.186-190
- Shah, Chandresh A and Mahapatra,Rabindra K(2014). Marketing and promotion of library and information products and services in digital era In *Information access in digital libraries* editors by Madan Kumar Stanley... [et al]. New Delhi: New India Publishing Agency.pp.247-254.
- Shah, Chandresh A and Mahapatra,Rabindra K. 2014. Marketing and promotion of library and information products and services in digital era In: *Information access in digital libraries* edited by Madan Kumar Stanley... [et al]. New Delhi: New India Publishing Agency.pp.247-254.

UNIT – III

PROMOTION OF LIS PRODUCTS AND SERVICES

1.1 LIS PRODUCTS AND SERVICES AS A MARKETABLE COMMODITY

We are in digital age and maximum majority of users depending upon the digital information due to the importance of time and efforts. In this context, the proper uses of academic libraries are less as expected which makes the variety of challenges to libraries. These effects on the variety of information in terms of products and services in an academic library. Hence, we need to make the deliberate balance of the use of digital contents as well available contents in the library. Information Marketing is one of the tool to promote and make aware to the curious users for the unique collection of the products and services available in the academic libraries. Marketing is not only promotional tools for products and services but it also help to set a mind of the users to know more regarding the library's activities and why they should use the library.

Marketing includes the set of strategies and techniques which is managed by the higher level administrative authority such as librarian but all the library personnel are involved in the process of marketing. The promotional method of marketing are also helpful to convey the products and services availabilities and tell about the value of resources to the target users. Library may contain Information products and services in a multiplicity of formats. Thus, to maintaining the balance with respect to the current situation, library should adopt marketing strategies which help to meet the organizational mission, goals and objectives.

1.2 INFORMATION AS A COMMODITY

The attributes that describe information are:

Public good characteristics' Like streets, roads, highways, national security, public difficult to

privatize information. However, there have been attempts to privatize information in some form or the other; for instance the patents, copyrights etc. The fact remains that it is mainly a public good. These characteristics of information have given rise to much discussion among economists and scientists. One line of thought is that it is only partly a public good and its markets can be developed. On the other hand, some opposed to the privatization of libraries etc., information is also considered a public good. The same bit of information may be owned by more than one person and it is difficult to exclude non payers from the benefits of consuming or processing the information, in this sense it is a public good. Though it is difficult to find out the border line between the public and private goods, it is obvious that many available information products and services have some characteristics of public goods. Most of the stock of valuable information is produced or financed by government which makes it information on the basis that the wide use of information gives rise to benefits to the individuals as well as to the society as a whole. So it should be treated as a public good only.

Indivisibility: Information as a public good is supplied to the community as a whole, which means that, benefits accrue collectively to the society. In this sense, one can say that it is not divisible into units, which can be provided to the whole, even though most of it may be useless to the individuals. On the contrary, if we see the recent developments like SOI where each individual is provided with the information actually required by him, then we can say that it is divisible like other commodities. In this sense, information can be considered as a commodity which has high potential of marketability.

Inherent uncertainty and risk in transition: The inherent risk in the purchase of information is related to its other attributes. A customer cannot be certain of the value of a bit of information until he knows what it is. For a customer there is risk in a sense that, when he/ she purchases a bit of information, he/ she cannot be sure of its value i.e., whether it will be of any use to him/her or not. On the other hand, if he has perfect knowledge about what information was being offered to him/ her for sale, then he would no longer need to purchase it. This way it becomes difficult for the producers of the information, to assess the demand for information.

1.3 Advertising, Sales Promotion

Advertising is the most visible component of marketing and is defined as the entire range of techniques for direct communication with the market. Unlike PR, which is a continuous process and an indirect communication, advertising adopts a direct approach and is a sporadic activity. The difference between advertising and public relations as ingredients in the communication mix is the level of control, which managers exact over the content of the message transmitted by these two channels. While the advertising message is determined directly by the organization, in PR the manager ‘prepares the ground’ for the communication (organizing events, press communiques, etc.), but the final content of the message is beyond his control. (UNESCO, 1989).

Some of the common and relevant activities for librarians and information professionals under PR and Advertising (Kotler, 1994) are as follows:

Public Relations	Advertising
Press Kits	Print & Broadcast ads
Speeches	Packaging
Seminars	Packaging inserts
Annual reports	Motion pictures
Charitable donations	Brochures & booklets
Sponsorships	Posters & leaflets
Publications	Directories
Community Relations	Reprints of ads
Lobbying	Display signs
Identity media	Point -of -purchase displays
Company magazine	Audio-visuals
News (events / people / products)	Symbols & logos

(After Kotler, 1994).

1.4 PLANNING FOR ADVERTISING

There are four stages in the planning of any effective piece of advertising:

The setting of the objectives - - involves identification of the target customer, the required stimulus (to publicize a product or get consumers to like or buy it) and an exercise in

quantification.

The determination of the available budget Creation of the advertising message - - this is the creative stage in advertising, which is divided into three phases

- i) Select the concept behind the message
- ii) The content
- iii) Format.

(In regard to content, 2 basic questions to be asked are 1) what can the library and its information products offer to users, 2) what advantages can the user personally derive from the products)

Selection of the medium or media most appropriate for the message. (On the spot distribution, postal delivery, door-to door delivery of leaflets or booklets; Badges, bookmarks, and other similar articles; Posters; Advertising in newspapers and journals; Radio and T.V. can reach a very wide public).

1.5 CHECKLIST OF QUESTIONS FOR ADVERTISING

Gopinath (1998) has given the following set of questions which need to be considered while designing an advertisement:

1. Does the service or product have significant advantages as compared with alternative products capable of satisfying the same need?
 - a) Who are the prospective users and what are their characteristics?
 - b) What wants or needs is the information product capable of satisfying?
 - c) Are these wants basic, such as, the desire to satisfy the information needs for improvement of career, profession, research / innovation?

Are there any characteristics of the product / service which if highlighted will motivate the client to buy? Will underlying social and environmental conditions influence the demand of

the product either favorably or unfavorably? Among such conditions may be included:

- a) Changes in field of research.
 - b) Changes in profit pursued.
 - c) Impact of technological developments.
 - d) Impact if institutional changes.
 - e) Impact of personal changes
 - f) Impact of political /economic changes.
1. Will the product encounter sales resistance on the part of prospective buyers because of the price and the product?
 2. How much will an adequate program of advertising to consumers or users cost, for calculating cost' benefit analysis?
 - a) During the first year?
 - b) During a trial period?
 3. How much sales of the generic types of information product be expected to increase as a result advertising?
 - a) The first year
 - b) During a period long enough to provide (3 to 5 years)
 4. Will the extra gross margin resulting from the sale increase, cover the cost of the advertising program and make a contribution to a long range profit?
 5. What feedback mechanism is provided to asses impact of advertisements for information products

1.6 PROMOTION

The fourth P in marketing after Product, Price, an Place stands for Promotion, i.e. the communication activity.

The basic purposes of promotion are to:

- ✓ Attract and hold the attention of the clients (both potential and actual);
- ✓ Make the clients aware of the product or service and the organization providing it;
- ✓ Position the product or service and the organization in the minds of the potential clients in

a unique and favorable manner;

- ✓ Motivate the clients to actually buy the product or service; and
- ✓ Constantly reinforce the message on the clients.

Pierce Levasseur defines promotion as follows “The purpose of promotional activities, which provide backing for the advertising campaign and the work of the sales force, is to stimulate the sales of goods or services by various means other than advertising or sales but drawing on both.”

1.7 PROMOTION OR ‘MARKETING COMMUNICATION’

- ✓ is the key element to marketing
- ✓ must be clear and state what is being promoted, why and to whom and what the effect is
- ✓ is not synonymous with marketing in which significant data gathering and analysis is done
- ✓ is- a tool of the overall strategy
- ✓ is campaign to communicate with a specific group of users about a specific service/resource (HINARI)

1.8 PROMOTION INCLUDES

- ✓ Institutional or Library websites
- ✓ Training workshops, seminars or meetings
- ✓ Direct mailing -- targets limited audience and personalized
- ✓ Advertisements, banners and posters — attempts to reach a wide audience but with a simple message
- ✓ Leaflets and newsletters — reaches a wide audience, can convey considerable information; limit to one topic
- ✓ Events -- reaches a wide audience; can convey considerable information and allows interaction between staff and users
- ✓ Word of mouth -- referrals by teachers or colleagues and library staff particularly with users. (WHO.)

1.9 EVALUATION NOTES

- ✓ if the library or health information center has been successful in achieving the objectives of marketing
- ✓ confirms if the users' needs have been correctly identified and met
- ✓ measures performance objectives (data on institution's use)

Thus, Promotion involves mechanisms by which the target groups are informed about the resources available, services and products offered by the library / information center. Essentially, the purpose of promotional activities is said to be *to Communicate, to Convince, and to Compete*. Therefore, the promotional packages need to be so designed as to achieve these objectives. In this context, the information collected in the market segmentation stage would be useful. Some of the questions that need to be answered at this point of time are:

- 1) To whom are we addressing the promotional material;
- 2) What is the message sought to be communicated? Draw attention, provide information, persuasion?
- 3) What are the promotional mechanisms available? Which is the best? What are the alternatives?
- 4) What are the points to be considered in the design of promotional packages? What resources are necessary?
- 5) What is the role of the library staff in promotional activities?

It is believed that “word of mouth” campaigns are the best mechanisms for promoting the use of libraries. Alternate mechanisms include: Direct contact with target groups either by mail or in person; Indirect contacts through the medium of brochures pamphlets, posters, guides, handbooks, newspapers releases, tape-slide shows, video, radio transmissions etc., exhibitions and demonstrations, etc. It should, however, be remembered that promotional activity is not a one-time affair but is a continuous process. Further, while each mechanism has its own advantages, it would be ideal if different approaches were adopted at different points of time. Perhaps, the most effective way is through the library staff who should be courteous, efficient, and possessing the necessary knowledge and skill.

Some, however, believe that a very well-directed user education / information literacy

programme (or user sensitizing programme, as is often referred to nowadays) will promote better utilization of the library. But sufficient care needs to be exercised in designing, developing and implementation of user education programmes.

1.10 PUBLIC RELATIONS

The term Public Relations (PR) covers the entire range of techniques for indirect communication with the market. PR is defined by the UK's Institute of PR as "The deliberate, planned and sustained efforts to establish and maintain mutual understanding between an organization and its publics." PR in libraries is more- truly communication in that it is a two-way process depending on feedback in both directions and is a dialogue with the library community.

PR functions include: counseling based on understanding of human behavior; analyzing future trends and predicting their consequences; a search in public opinion, expectations and advising a necessary action, establishing and maintaining two-way communication based on truth and full information, preventing conflict and misunderstanding, promoting mutual respect and social responsibility. PR also has been defined as "a management tool function, of continuing and planned character through which public and private organizations and institutions seek to win and retain the understanding, sympathy, and support of those they are or they may be concerned "or" the deliberate, planned, and sustained efforts to establish and maintain mutual understanding between organizations and their publics. The aim of PR is to be understood by the market and not to manipulate it, as some people seem to think. The basic principle is that "it is easier to persuade the public to use the services of a library that creates a favorable impression."

In other words, PR is about image-building and is to be handled with great care. In case of non-profit organizations like libraries, potential patrons and donors are an important PR target. In regard to actual users or patrons, good PR helps in retaining their loyalty. Of course, for this purpose, managers wishing to ensure "visibility" of their libraries should adopt appropriate PR measures depending on the context — briefings and press releases should be used to announce less important events such as those organized in public libraries. However, to get a good impact, PR communications should be precise, concise, meaningful and understandable by the target audience.

Apart from users, great care is needed in handling relations with administrative and

political authorities on whom the information service depends for its very existence. In essence, in the information context, more importance to PR should be given than it has been given currently.

1.11 E-MARKETING

Waugh and Booty says that “E-marketing is referred to those strategies and techniques which utilized online ways to reach target customers. There are millions of Internet users that daily access different websites using a variety of tools like computers, laptops, tablet and smart or android phone devices, and the number of internet users is increasing very rapidly. So, every business seems to be jumping on the internet marketing bandwagon. The internet is a most powerful tool that can put any business on solid footing with market leader’s companies. There are many free as well as an economical way on the internet to promote your business. Successful companies must ask themselves some tough questions about how they will promote their business online? What their company expectations are? And what will be their plan to meet those expectations? After answer all these questions a company should design an effective marketing plan. Therefore,

- ✓ E-Marketing is the process of marketing a brand using the Internet. It includes both direct response marketing and indirect marketing elements and uses a range of technologies to help connect businesses with their customers.
- ✓ E-marketing means using digital technologies to help sell your goods or services. These technologies are a valuable complement to traditional marketing methods
- ✓ E-Marketing or electronic marketing refers to the application of marketing principles and techniques via electronic media and more specifically the Internet.
- ✓ E-marketing examples are email or social media advertising, web banners and mobile advertising”. (Waugh and Booty, 2007)

1.12 ORGANIZATION LOOKS AT E-MARKETING

Waugh and Booty says that an organization must focus on e-marketing to achieve one of the following:

- ✓ Business can be escalated using the growth scale metrics of digital technologies
- ✓ Speed of business is one such aspect that adds value to any business.

- ✓ Reaching out to the target audience with the help of the mobile marketing which is very easy these days.
- ✓ Businesses can be more efficient using information technologies by reducing the cost associated to other processes. (Waugh and Booty, 2007)

1.13 E-MARKETING METHODS

They are: Search engine marketing (SEM), which allows firms to target consumers through advertisements; Online Public Relation using press releases via email or on the website and submitting them to online news feeds. (Waugh and Booty 44);

E-Mail Marketing: It is a method of distributing information about product or service, thus, it is also known as direct marketing;

Banner Advertisement: Banner is a placement of ads on the website for a fee though it is an expensive way of doing marketing;

Viral Marketing: It uses email to transmit a promotional message to another potential customer. (Waugh and Booty 45),

Blog Marketing: Blog marketing is the process of reaching business prospects using a blog. (Waugh and Booty, 2007).

1.14 STEPS TO START E-MARKETING

- ✓ Building Effecting Website
- ✓ Designing Compelling Messages
- ✓ Sending strategic newsletters
- ✓ Online Advertising
- ✓ Managing customer database

1.15 ADVANTAGES AND DISADVANTAGES OF E-MARKETING

The advantages of e-marketing “include extremely low risk, cost savings through

automation and brilliant application of electronic media, rapid response from both marketers and end users, greater ability to measure and collect data, the ability to enter the market simply through customization, greater interactivity, greater exposure to products and services, and unlimited and universal availability” (Waugh and Booty, 2007). Shortcomings include technology reliability, security, privacy issues, and operational costs due to the ever-changing environment. (Waugh and Booty, 2007).

1.16 E-MARKETING IN LIS

- ✓ The term e-marketing in LIS means applying e-mail, and its tools to conduct marketing activities and achieve different marketing objectives of the library.
- ✓ E-marketing enables the library service and products to keep in touch with its customers in a quick, flexible, and cost-effective way.
- ✓ Today, libraries are using the web to provide products & services, to market products & services, or as a part of the marketing process.
- ✓ Encourage the new members to join the library and lapsed members to return.
- ✓ Speak to the customers in a less formal way and open avenues for them to respond.

1.17 TOOLS OF E-MARKETING IN LIS

- ✓ E-mail
- ✓ Face book
- ✓ Blogs
- ✓ Twitter
- ✓ Flicker
- ✓ Mobile technology

The new technologies are available today are much powerful than those available few years back. With changing technological environment libraries and other information institutions are also using these technologies for improvement of their services as well as marketing their services and products by different electronic Medias. But still the use of e-marketing to promote the services and product of libraries is limited. (Waugh and Booty, 2007).

KEYWORDS:

Commodity: A commodity is a basic good used in commerce that is interchangeable with other goods of the same type. Commodities are most often used as inputs in the production of other goods or services. A commodity thus usually refers to a raw material used to manufacture finished goods.

Advertising: Advertising is a marketing tactic involving paying for space to promote a product, service, or cause. The actual promotional messages are called advertisements, or ads for short. The goal of advertising is to reach people most likely to be willing to pay for a company's products or services and entice them to buy.

E-Marketing: E-Marketing is an area of marketing that is based on achieving targets by using electronic communication technology on the Internet.

Reference

- Cronin (B): Marketing of Library & Information Services, 1981. ASLIB. London.
- Desaeef (EE): Marketing concepts for libraries and information services.
- Eiblun (P): The Broker: An integral part of the information chain. (Information Today, 8, 9; 1991; 16-17).
- Green (Paul) and Tull (Donald): Research on Marketing Decisions, (1978) *Quoted in:* Neal (William D). Principles of Market Segmentation, ([www.mktgsensei.com/... / Segmentation/Principles%20of%20Market%20S...](http://www.mktgsensei.com/.../Segmentation/Principles%20of%20Market%20S...))
- Kiani (G). Marketing opportunities in the digital world (Internet Research: Electronic Networking Applications and policy.8, 2; 1998; 185-194)
- Kotler (P) Marketing for Non-Profit Organisation Ed 2. 1982- Englewood cliffs. New Jersey. Prentice- Hall.
- Macartney (N). Revenue earning and cost recovery.
- Majaro (S) The essence of marketing. 1993. Englewood cliffs. New Jersey. Prentice-Hall.

UNIT -IV

MANAGEMENT OF LIBRARY AND INFORMATION CENTRES

MANAGEMENT FUNCTIONS

1.1 INTRODUCTION

In the earlier unit you have been introduced to the concept of management and various, schools of thought that emerged over the years. In this unit we will deal with the functions of management viz., Planning, Organising, Staffing, Leading and Controlling. The subject of management can be studied by following different approaches. But going by the functions of management, following the operational approach is more logical and helpful. Managers engage in certain basic activities that are often referred as functions of management. The five managerial functions are:

- **Planning** - involves decision on the objectives to be pursued in future and what to do to achieve those objectives;
- **Organising**-refers to grouping activities, assigning activities, and providing the authority necessary to carry out these activities;
- **Staffing**-covers forecasting human resource requirements, recruiting, selecting, training, selecting and developing human resources;
- **Leading** - directing and channeling human behaviors towards accomplishment of objectives;
- **Controlling** - establish standards and measure performance against objectives and take corrective measures, if deviations are there.

A plan is a well-thought-out scheme or programme made in advance and complete in

all aspects, that sets the objective of the group and the way it is to be achieved by marshalling the financial, material and manpower resources.

1.2 PRINCIPLES OF PLANNING

Planning provides a total scenario. It is a blueprint for action. It aims at overcoming any uncertainty imposed by fluctuations, emphasises objectives, aids control and helps attain objectives economically and according to a schedule. Successful planning consists of setting objectives, premises, choosing the course of action, making subordinate/unit plans and budgeting. Planning does not end with overall scenario building, but proceeds to determine the inter and intra-relationships of various factors, both internal and external. Different types of plans are made, such as long-term, short-term, contingency and departmental. The planning process can also be considered in terms of (a) strategic planning, (b) operational planning, and (c) task programming. Strategic planning involves (a) setting goals, (b) specifying objectives, (c) identifying environmental forces that effect activities and resources, (d) formulating policies and strategies, (e) taking care of challenges of change, and (f) preparing strategic plans of action. Operational planning deals with formulation of detailed plans for actual implementation of the strategic plan by creating the requisite organisation, acquiring resources, their allocation and utilisation. There could be more than one operational plan. Task programming consists of analysing each operation in the operational plan as a specific task or activity and specifying procedures and resources required for completing each task.

Good planning is based on certain principles. The most important of these are briefly discussed in the following paragraphs .

1.3 PRINCIPLE OF COMMITMENT

Long-range planning reduces uncertainty and helps in coping with the inherent ambiguity of management itself. A long-range plan commits the policies and resources over the entire period of plan/operation. Thus today's decision will also have futuristic

effects. For instance, a large investment on computers for information processing made today, commits the funds as well as information processing policy for a fairly long period of time to come. Short-range plans are meant to meet near-time objectives within the framework of the overall plan. Planning is effective only when short-range plans form an integral part of the long-range plan and different short-range plans are co-ordinated properly.

1.4 PRINCIPLE OF FLEXIBILITY

A plan should be flexible. This enables easy adjustment to changes and better chances of survival in a crisis. A decision to choose modular construction for a library building is a built-in flexibility in library planning.

1.5 PRINCIPLE OF ADAPTABILITY

A constant review of plans indicates whether the enterprise activities are moving in the planned direction. Major deviations from the set course necessitate redrawing of plans to meet changed conditions. A built-in flexibility does not automatically revise plans, but adaptability in the planning process does. Planning is therefore, a continuous process. The planning process begins with setting objectives and then proceeds to premising, decision making and developing policies and strategies required for executing the plan.

1.6 OBJECTIVES

Modern management lays heavy stress on objectives. A plan must lead to the attainment of some objectives. The answer to the question "why an enterprise exists" is its purpose or mission. When the purpose is defined in specific terms, it becomes the output of the system and the mission then becomes the goal. When the goal is narrowed down to a further specificity, this gives rise to objectives. Goals are more comprehensive in nature and objectives follow goals. Activities then follow objectives Thus, mission-

goal-objective-activity forms a hierarchy of levels;, decreasing in comprehensiveness and scope as one moves from mission to activity. Each library has to derive its own hierarchy of mission, goals and objectives. Setting clear and achievable objectives lies at the centre of planning: In fact, Management - by Objectives (MBO) is built around objectives.

1.7 SURPLUS AS A GOAL

In business and industry, the ultimate objective is to make profit. Profit is the surplus of income over expenditure. The desired surplus set in quantitative terms will be the overall objective. The objectives of non-profit enterprises including libraries will have to be of value or usefulness.

1.8 VERIFIABLE OR MEASURABLE OBJECTIVES

Purposeful management aims at making the objective verifiable. Only then does control become meaningful. Verifiability enables one to know whether the objective has been attained and, if so, to what extent, at what cost, and in what time. Where the managing is of services, the objectives should be reflected in the form of some representative physical entities or qualitative values. For instance, a public library may state the objective in physical terms of the population to be covered.

1.9 VARIETIES OF OBJECTIVES

An enterprise, being a system, is made up of systems, parts and components, such as divisions, departments, sections, services, products and programmes. For making management work, it is essential to set objectives for each constituent unit or function. Success in achieving the overall objectives of the system depends on the attainment of these part objectives. Delay or non-fulfillment of a crucial part objective will affect the related objectives seriously. Different activities within an area give rise to a number of objectives or multiple objectives. The essence of purposeful and efficient management

lies in demarcation and timely coordination of the various objectives.

1.10 PREMISING

Planning proceeds on the basis of facts, assumptions, background and objectives. Assessment of factors that go to make a plan, and anticipating the type of environment in which the plan is to operate, is premising. Different sets of premises yield different plans. If the premising is wrong, the plans are bound to be affected. Premising is concerned with both the internal and external environment. Internal factors consist of existing and planned investment, forecast of turnover, policies and organisation structure, available expertise and other factors that affect the plans and their execution. The external environment includes political, economic, social and technological conditions, the capital market and market conditions for the products and services, labour and materials. Premising takes both the quantitative and qualitative aspects into account. Confidence of the clientele in the reliability of services provided by a library is an example of the qualitative aspect of premising. Premising has to deal with uncontrollable elements which are of political, social and governmental origin; partially controllable elements e.g., market share of a Company's products; and management-controlled elements, e.g., access time in libraries.

1.11 FORECASTING

Forecasting is a central feature of premising. It is of two types - exploratory and normative. While exploratory forecasting is based on an intelligent interpretation of past and present trends, facts and events to obtain a possible outline of the future, normative forecasting begins with the specification of a goal or end state and proceeds to identify the stages to be gone through to attain that goal. Forecasts rely on data drawn from national and local surveys, internal reports and studies and relate them to enterprise premising. Community analysis is a useful technique for identifying a library's market. Forecasting of social and political factors is mostly judgmental, while that of economic

factors is based on mathematical and statistical models, simulation and computer programming. The Delphi technique, and goal oriented forecast have been found useful in forecasting technological trends.

1.12 DECISION-MAKING

The essence of decision making is choosing from among options. The process of decision-making involves premising, identifying and evaluating alternative courses and selecting.

1.13 SOUND DECISION-MAKING

Sound management decisions are those that result in the attainment of the objectives at a minimum cost, in the shortest possible time and in the stipulated environment. It differs from scientific decision-making wherein imagination, positive subjectivity, social, cultural and human factors play only minor roles. Library management, being a people and mind oriented activity, involves more of managerial than scientific decision-making. Sound decision-making entails thinking about and developing alternatives. It is a creative process. Where there are many alternatives, their evaluation takes up avoidable time. In such situations, managers use the principle of limiting factors (strategic factors).

1.14 LIMITING FACTORS

These act as constraints in the attainment of objectives. An alternative course to be considered must be the one that overcomes the limiting factors. For many library development plans, space is found to be a limiting factor.

1.15 EVALUATION OF ALTERNATIVES

Comparison of alternatives is easier when results are stated in concrete terms.

Examination of critical components of the alternatives and their likely behaviour in the face of changes in the external environmental forces, are important factors in evaluation. It requires foresight and the right perspective to assess the possible effects of future political, economic, technological and social changes on the decisions and the ability to predict them accurately. A decision should withstand dynamic conditions. Decision models can be constructed and, by changing the variables, models giving the desired results can be chosen. Operational research, systems analysis, and decision theory are the important scientific tools commonly used for evaluation and selection. Other methods include the use of marginal analysis, cost- benefit analysis, research, past experience and experimentation. As many libraries function in a political environment, library decision makers need to address themselves to the issues arising from political analysis.

1.16 POLICIES, STRATEGIES AND TACTICS

Policies are guidelines to decision making and stipulate the boundary within which the plan operates. On the other hand, strategies indicate the course of action to be followed for the attainment of goals. Policies and strategies often converge. Tactics are action plans devised for carrying our strategies. Strategies are developed and employed in all areas of management to achieve specific results: They also affect policies and the organisation structure.

1.17 MANAGEMENT INFORMATION SYSTEM (MIS)

Planning, particularly the decision making part of it, and controlling, have come to depend increasingly on information and data. It is the function of the Management Information System (MIS) to collect and transmit all relevant data pertaining to operations as well as information on managerial applications. In recent years, MIS function has become a part of the Electronic Data Processing (EDP) department.

Two types

- Transaction Processing

- Management Information.

The former covers almost the entire range of corporate activities - from inventory to finance, budget, engineering, production, and marketing through research and development. The mass of data to be handled is enormous and endogenous in nature. On the other hand, the scope of management information is extensive and includes information from outside the enterprise in addition to transaction processing.

SYSTEMS APPROACH

2.1 OBJECTIVES

After reading this Unit, you will be able to:

- Understand the concepts of system and systems analysis and design;
- Describe the principles followed in the process of analysis and design; and
- Identify the techniques used and the steps taken in the process,

2.2 INTRODUCTION

This Unit elucidates the concept of systems analysis and design. On studying this unit you will be able to recognize that analysis and design together are a single compound concept and that the analysis phase is the starting point for the design phase. What is determined in the first phase gets validated in the second phase. It further explains the characteristics of systems, what constitutes library as a system, how in the analysis phase the interrelationships and interdependence among the component parts are identified in the analysis phase, and how the system's total requirements are determined. Using the same data collected in the analysis phase, a new system is designed finally. The Unit also explains the process of designing a system and the principles followed and techniques used in it.

2.3 SYSTEMS

The word system can be defined in many ways. The dictionary meaning of the word 'System' is, a group of things or parts working together as a whole. A system is a set of entities or elements, which are integrated and bound by a functional relationship to serve a purpose. They are so integrated, that a change in the functioning of one and Control entity affects the effectiveness of others, and thereby the overall functioning of the set as a whole. Thus systems involve components or subsystems, which are placed in a defined relationship to one another. Semprevivo (1982) defines a system as "a series of interrelated elements that perform some business activity, business function, or business operation." The point that is stressed by other definitions as well is that a system involves components or subsystems, which are placed in a defined relationship to one another. A system, then, is a set of objects brought into a whole for a common purpose. They are interrelated and interdependent. Any grouping of elements in a system that includes some

but not necessarily all of the elements is called a subsystem. It is important to note that any system may be a part of a larger system and may itself be composed of subsystems. In short, a system is an organisation that can be reduced to its component parts on the basis of their functions. Each functional component part is then a subsystem, which in turn can be reduced to its own component parts.

A system can be described in terms of inputs, processes, outputs and the various controls operating on it, as suggested by Brophy, 1986.

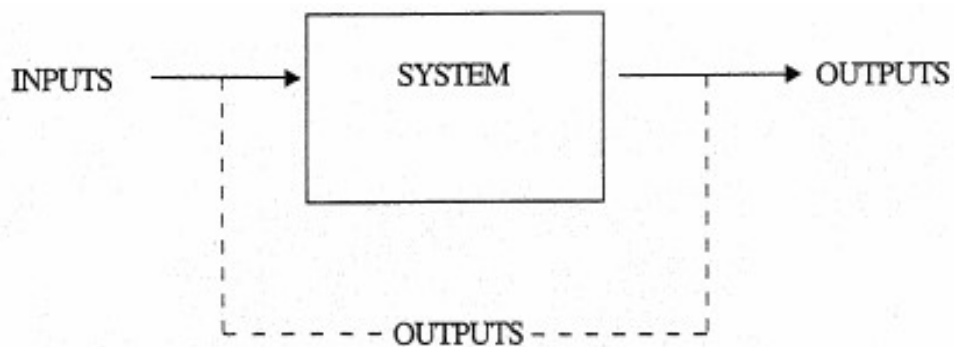


Fig. A System

Murdick and Ross (1975) have identified **Different Types of Systems**. These are:

- **Conceptual Systems** - These systems are basically concerned with theoretical structures as in General Theory of Relativity, Economic Theory etc.
- **Empirical systems** -These systems in contrast to the conceptual systems are concrete operational systems made up of people, materials, machines and other such components.
- **Natural Systems** - An example of such a system is an ecosystem or 'the entire ecology of life'.
- **Man-made Systems** -Example of such a system is the manufacturing system of a company.
- **Social Systems** - These systems are made up of people and comprise interpersonal and inter group relationships.
- **Man-machine Systems** - These systems exist in business and industry.

- **Pure Machine Systems** - These systems are rare. Example could be a self-sufficient system like an electrical power generating system, with self-repairing capabilities.
- **Open system** - This system freely interacts with its environment.
- **Closed system**-This system does not interact with its environment.
- **Stationary systems** - These are systems whose properties and operations do not vary with time. An example of such a system would be a manufacturing unit producing the similar items.
- **Non-Stationary systems** -These systems vary with time. An example of this system is a R&D department or any other system that keeps evolving or changing with time.
- **Reactive systems** - These systems interact with their environment in order to improve their functioning and thus keep evolving.
- **Non-adaptive systems** - These systems do not change with respect of the environmental factors.

In a typical library and information system, for example, all major activities such as acquisitions, serials control, information storage and retrieval, user services and administration and planning are a set of elements, which are interdependent because of the common purpose they intend to serve. Providing library and information service is the common purpose that binds or unites them into a set or system. All major activities of this system from acquisition to management are thus, its subsystems.

2.4 Library as a System

Library can in fact be identified as a complex system. Seven basic subsystems that make up the library system, as identified by Hays and Becker, are acquisitions, serials control, circulation control, cataloguing, interlibrary loans, reference and administration and planning. Chapman and others list all these except inter-library loans, which understandably can form part of either circulation control or reference subsystem. These can be restated as acquisitions, serials control, information storage and retrieval, user

services and administration and planning. Here, then, our library and information system has been reduced to its component parts which together serve the common purpose of providing library and information service. This common purpose binds all these component parts into an integrated whole. They are interrelated functionally and, therefore, are interdependent. For example, a change in the functioning of the acquisitions subsystem can affect the effectiveness of the user services subsystem. Similarly, a change in the functionality of information storage and retrieval subsystem can also effect the effectiveness of user services subsystem and that of the system as a whole. Thus, these subsystems are not only interrelated because of the common purpose they serve, they are also interdependent. Because of this interdependence among them, a change in any one component may affect the functioning of the whole system. The library is, thus, a system. This system can be graphically illustrated. Chapman and others have presented the model library system in the following manner,

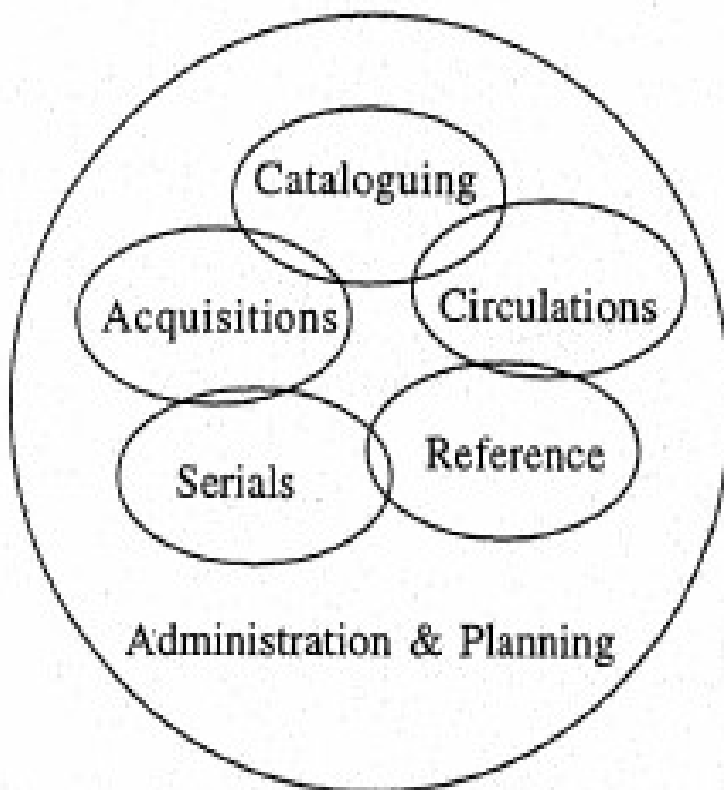


Fig. 5.2: Graphic Presentation of a Model Library System of Chapman et. al.

The above illustration is a presentation of well-defined functional interrelationships among the component parts of the library and information system. Because of these functional interrelationships the system is capable of achieving its objective. When a library is viewed as an integrated system the interdepartmental boundaries appear superficial and fade away.

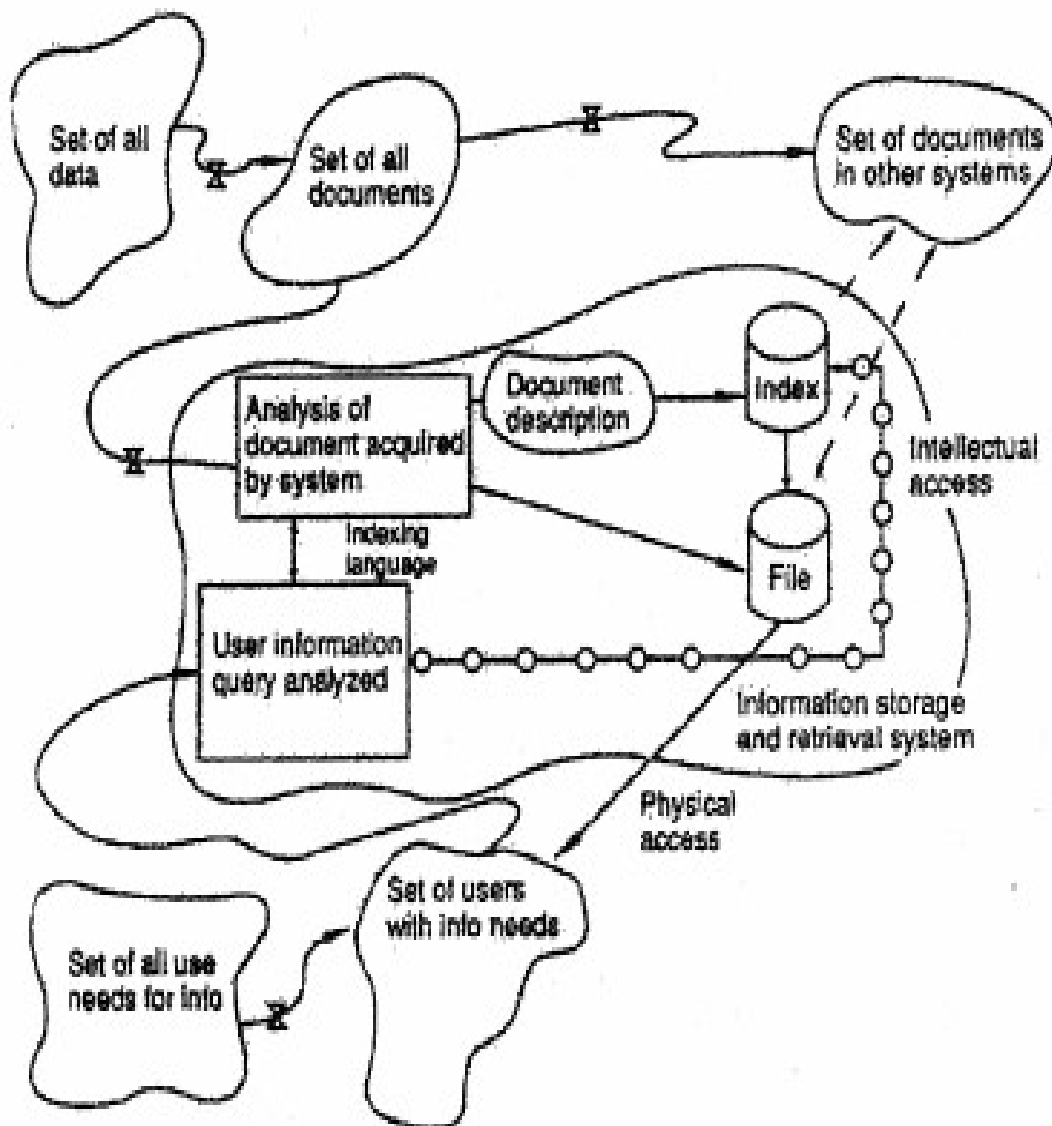


Fig. 5.3: Library as an Information Storage and Retrieval System
(Source: Kraft and Boyce)

Library is an open system that "interacts with its larger environment by drawing from that environment and exporting to that environment", (Stuert and Eastlick, 1981). It can also be seen as an information storage and retrieval system. The inputs are the documents (journal, books, reports etc.) and expressions of the needs of users seeking information. The collection in the stacks, vertical files, and catalogues, for example, is clearly storage. The processing is the analysis, representation, and organisation of requests and retrieval of appropriate information from the collection in response to these requests. The output is the dissemination of the desired information to the client. The concept of control is realised by the administration of the library (Kraft and Boyce, 1991).

Moreover, library is a dynamic organisation with all its complex interactions and discontinuities. "Changing one policy can produce anticipated changes in apparently unconnected areas of service" (Brophy, 1986).

2.5 SYSTEMS ANALYSIS

Having understood the meaning of system let us now try to understand the meaning of systems analysis. Harold Boroko (as quoted by Werner Kunz and others) defines the term systems analysis as 'a formal procedure for examining a complex process or organisation, reducing it to its component parts, and relating these parts to each other and to the unit as a whole in accordance with an agreed upon performance criterion' (Methods of analysis and evaluation of information needs'. Verlag Documentation, 1976). Following this definition, library as a system can be reduced to its component parts and these parts can be related to each other and to the system as a whole according to an agreed upon performance criterion. In the case of the library and information system, increased effectiveness can easily be such a performance criterion.

Such an exercise, then, will be a library systems analysis.

The reduction of the system to its component parts is the beginning of systems analysis. Relating these parts to each other and to the unit as a whole is the completion of the analysis. Such an analysis is undertaken while designing a new system, e.g. computerisation. Analysis is the starting point for designing a new system. Systems analysis and design together are thus a single compound concept. At this stage it is possible to see how the process of systems analysis works. Just as a system is reduced to the subsystem comprising it, so also each subsystem is reduced to its component parts. Several interrelated operations carried in a subsystem form its component parts and each of these consists of functions, decisions and actions.

2.5.1 STEPS IN SYSTEMS ANALYSIS

The process of System Analysis can be considered from two angles: one is from the point of view of problem solving and the other from the point of view of development of new systems.

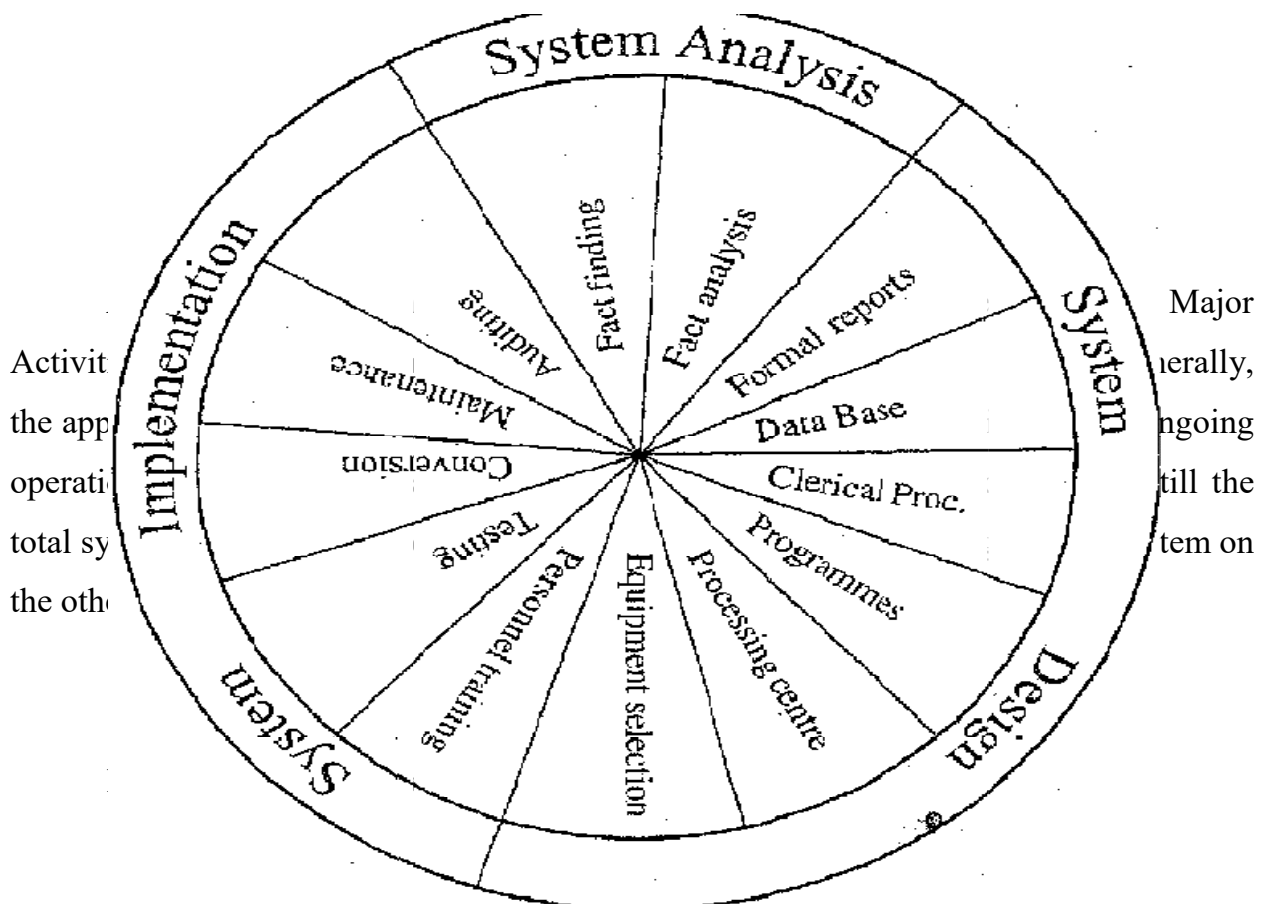
From the point of view of problem solving the following six basic steps are carried out:

- i) Definition and formulation of the problem;
- ii) Development of alternative solutions;
- iii) Construction of models which formalise the alternatives;
- iv) Determination of the cost/effectiveness of the alternatives;
- v) Presentation of recommendations; and
- vi) Implementation of the chosen alternatives.

The application of systems analysis to the development of system generally takes greater time period than in the case of problem solving. The activities performed during the development of a system can be identified in three phases:

- 1) System Analysis
- 2) System Design
- 3) System Implementation.

A 'Systems life Cycle' depicted in **Figure 5.5 indicates** the three phases of an Information System Development in relation to the major activities of each phase.



Take, for example, the acquisitions subsystem and we find that it consists of the following operations:

- a) Search
 1. In the library catalogue for
 2. In the 'on order' file
 3. If yes, report

- | | |
|----------------------------|---------------------------------------|
| | 4. If no, proceed |
| b) Accounting: | 5. Check budget |
| | 6. If no, report |
| | 7. If yes, update expenditure account |
| c) Ordering | 8. Version |
| d) Receiving and Checking: | 9. Check against order |
| | 10. If incorrect, return |
| | 11. If correct, enter |

Our analysis of the acquisition sub-system tells that it consists of four operations, namely (a) search, (b) accounting, (c) ordering, and (d) receiving and checking. These four operations collectively consist of eleven elements of which 1,2,5 and 9 are functions, 8 is decision and the rest are actions.

2.6 Systems Design

Briefly, systems design is what a systems analysis is undertaken for. The analysis phase is the starting point and the design phase is the culmination of the total exercise of systems analysis and design. The existing system is analysed in order to design an alternative which is thought to be more efficient, more productive and more rewarding. We have seen that an analysis of the existing system results in an evaluation report. The report contains data on the merits and demerits of the existing system as also suggestions on the changes that are necessary for evolving a better system. The design phase, thus, uses the data collected in the analysis phase. What is determined in the analysis phase is validated in the design phase. It is advisable to first discuss the general considerations in systems design.

2.6.1 General Considerations

The changes suggested in the evaluation report are in fact the corrective measures that ought to be adopted. These measures are adopted in the light of three considerations,

namely goals, cost factor and unit cost. Let us now discuss them one by one.

Goals: The goals and objectives of the system have to be reviewed with reference to new and-augmented requirements. Appropriate modifications in either or both are made in order that, the projected system may achieve the desired goals.

Cost factor: Establishing a new system may mean a large capital outlay and increased incurring expenditure. For example, the computer and the peripherals, stationery and the personnel demand nonrecurrent as well as recurrent financial support. The cost factor is, thus, very significant. The economic feasibility of the projected system has to be studied. Such a study will enable the management to take the decision about establishing the alternative system, either as desired or as possible.

Unit cost: The estimated unit cost of each output from the projected new system is compared with the existing unit cost. If the new system can cut costs considerably, its establishment is amply justified. For example, the cost of cataloguing a book in American libraries came down to \$1.5 from \$15 after the establishment of OCLC network. More and more American libraries were tempted to participate in the network. This is the parameter of unit cost that is of great importance in design making.

2.6.2 Design

If the analysis phase results in the determination of requirements, the design phase is concerned with the validation of these requirements to meet the system's revised goals, with the revision of goals there is revision of outputs and consequently of inputs. Thus, the difference between the analysis and the design is of approach only. In the design phase, new procedures are worked out to meet the- projected requirements. The elements of the system remain unchanged. The subsystem and the operations are these elements. Basically the design phase consists of the following four steps.

The First Step: In this, all functions are replanned so that they may be correlated. The replanning helps to eliminate duplication of records and ensure a logical sequence of all activities to be performed. Because of the interdependence among workers the authority of the heads of subsystem is defined in order to increase the operational effectiveness of the total system. New worksheets in place of old ones are prepared. The new work sheets state - new requirements and modified outputs to meet them.

The Second Step: As the second step of designing all procedures conceived are reduced to writing. They are described in detail in a logical sequence and supported by flow charts. This is done for each operations. The description and flow charts together comprise the procedural manual. The manual covers all activities and illustrates the flow of work.

The Third Step: This step is devoted to designing appropriate manual procedures. Manual procedures exist and are indispensable even in a highly computerised library system. Information has to be gathered and transformed as input. Even outputs have to be processed manually. Good manual procedures, when described fully, are very helpful in transforming the system from manual to automate. At this stage it is also necessary to ensure the appropriateness of procedures. For example, they should furnish the outputs needed; have a definite purpose in the generation of outputs; justify each function; establish a smooth work flow; and prevent bottlenecks. The procedures should also ensure the full use of available equipment

The Fourth Step :This step consists in designing the printed forms. These are used in transmitting information and storing and avoiding its repetitive transcription. The design of forms is, therefore, guided by requirements and decisions. The forms should be so designed as to allow the recording of information item by item in the logical order of elements. A single form as far as possible should serve several purposes, e.g., a book order form can be at the same time used as : (a) on-order record, (b) process slip and (c) notification to the requestor. The form should provide for checking of boxes and should keep writing to the minimum and should be of standard size to facilitate filling.

Wherever economical, commercially available forms can be adopted, if they meet the data needs of the system. Lastly, the form should be redesigned if necessary.

ORGANIZATIONAL BEHAVIOR

Organisations are becoming complex and diversified. Earlier management studies concentrated on the efficient performance of the employees and the main purpose was improvement of the productivity of workers. Hawthorne studies were among the first studies that highlighted the significance of the human element in the organisation. Organisational behaviour emerged out of human relations and management fields. It draws significant ideas from psychology, sociology, anthropology, political science and economics. Whenever people interact in organisations, many factors come into play. Organisational studies attempts to understand and model these factors. Perception, learning and motivation are various factors that shape human behaviour. Motivation is the major drive behind human action. Various theories of motivation have been given by researchers. These theories fall into two groups: Content based and Process based theories. Content based motivation theories focus on explaining the nature of individual needs and process based theories highlight the psychological and behavioral processes involved in motivation. Organisational behaviour has become significant in the management of library and information centres as they are becoming complex organisations providing a wide range of information services. Organisational behaviour can be defined as the study of the behaviour of people and their relationships in organisations for the purpose of applying such knowledge toward improving organisations effectiveness.

3.1 ORIGIN OF ORGANISATIONAL BEHAVIOUR

Organisational behaviour emerged as a unique field of study during the early 1960s. It is built upon contributions from a number of disciplines like psychology, sociology, social psychology, anthropology, political science etc.

Psychology is a discipline that has had the greatest influence on the field of organisational behaviour as it seeks to understand and predict individual behaviour. Most of the psychological theories concerning perception, learning, personality, training, leadership effectiveness, needs and motivational forces etc. have been applied in organisational behaviour for understanding of how people behave in organisations and various other factors like job satisfaction, decision making processes, performance appraisals, employee selection techniques, job design and work stress etc.

The discipline of sociology is concerned with the study of social systems and the interactions of people within a social setting. It studies people in relation to their fellow human beings. Group dynamics, organisational culture, organisation structure, communications, power, and conflict are some of the areas within organisational behaviour where sociologists have made valuable contributions. The fields of sociology and social psychology have added to our understanding of group behaviour in organisations.

The field of anthropology is concerned with the study of relationships between individuals and their environments. Groups of individuals living together create a body of shared ideas called culture, which is reflected in their language and beliefs. Anthropologists study cultures and environments that has contributed to the understanding of differences in fundamental values, attitudes, and behaviour between people in different countries and in different organisations.

Economics, political science and history are other disciplines which have added to the field of organisational behaviour. Political science is concerned with the study of behaviour of individuals and groups within a political environment. It has helped in understanding structuring of conflict, allocation of power, and how people manipulate power for individual self-interest. Economics has helped in our understanding of individual and organisational decision making processes.

3.2 GOALS OF ORGANISATIONAL BEHAVIOUR

The goals of organisational behaviour, as suggested by Cherrington et. al. (1989) are description, explanation and control of behaviour in organisations.

Description - Description of a problem is the first step towards understanding or explaining it. The first goal in studying organisational behaviour is to recognise and describe events that are predictable and occur with regularity. The focus is on labeling and defining organisational events.

Explanation and Prediction - The second goal of organisational behaviour is to explain and predict the events that occur. The identification of the forces contributing to these events helps us to predict their occurrence in future. Explanations are generally more complicated than descriptions. Theories are developed to explain various observances. These theories represent the various efforts to explain the relationships between variables and motives behind people's behaviour.

Control - The third goal of organisational behaviour is to control the behaviour that occurs in organisations. A variety of techniques and interventions to change the behaviours of individuals, groups, and organisations are there in organisational behaviour. However, controlling of behaviour has certain ethical issues attached to it. Idea of using organisational behaviour knowledge to control the behaviour of people at work is not well accepted by people, and is often criticised as coercion or manipulation. The managers should attempt to control behaviour in a way that contributes to both individual growth and organisational goal behaviour.

3.3 LEVELS OF ANALYSIS IN ORGANISATIONAL BEHAVIOUR

There are three levels of analysis for conducting the study of organisational behaviour. The three levels are like building blocks and each level is constructed upon the previous level. These levels are:

Individual level - At this level events are diagnosed in terms of individual behaviours and

interactions in given situation.

Group level- At this level, the focus is on group dynamics, group roles, and status.

Organisation level - At this level the events occurring within the context of organisation structure are analysed.

3.4 ORGANISATIONAL BEHAVIOUR IN LIBRARY AND INFORMATION SCIENCE

Organisational behaviour can be defined as the study of the behaviour of people and their relationship in organisations for the purpose of applying such knowledge towards improving an organisation's effectiveness. Organisational behaviour is specifically concerned with employment related environments. It emphasises behaviour as related to jobs, work, absenteeism, employment turnover, productivity, human performance and management (Robbins, 1991). It helps in the development of human relations skills thus enabling the managers to analyse individual behaviour to deal with behavioral problems within the organisation.

Various psychological, technical, sociological and political changes affecting the library and information centres highlight the need for successful and effective management. Manager of a library and information centre must study organisational behaviour to know about individual behaviour and thus apply it to make the organisations work more effectively. In library and information centres, as in other organisations, management can be divided into three levels.

Top Level -This comprises the director, the assistant and associate directors. Top management is responsible for the overall functioning of the entire organisation.

Middle Level - This involves the department heads who are or concerned with the effective functioning of individual areas of the Library.

Lower Level-This level includes supervisors who lead the activities of individual workers to accomplish the organisational objectives

In last few years, as a result of organisational changes, the high pyramid style has changed and flattened. However, the managers at all the levels have to perform the function of leading and directing. This is a difficult job because it involves dealing with human behaviour. Understanding human behaviour is not easy as people are complex and complicated. Keith Davis and John Newstrom have stated, "There are no simple formula for working with people. There is no perfect solution to organisational problems. All that can be done is to increase our understanding and skills so that human relations at work can be upgraded." A library and information center manager should be aware of four basic assumptions about people as suggested by Davis and Newstrom:

Individual differences: Each person is unique. Though people have much in common there are individual differences and because of these differences, no single standard method of dealing with employees can be used.

A whole person: A person's traits and qualities are part of his entire personality. Any management technique to develop a better employee should also be concerned with developing a better person in terms of growth and fulfillment.

Motivated behaviour: Behavioral sciences have enabled us to understand the causes behind individual behaviour. People are motivated by their needs, and desires.

Value of the person: This states that people working in an organisation must be treated with respect and dignity and not just as machines.

Motivation is the drive behind all human action. As Locke has stated:

"The issue of how to understand and influence human motivation has proven to be one of the most recalcitrant problems in human psychology. The fundamental reasons for this

are that motivation at root comes by the individual. Since motivation is "inside" the person, it cannot be observed directly, and since individuals possess freedom of choice ... people cannot be controlled directly from the outside."

Staff motivation is being considered as the most important condition for an effective and efficient library and information centre. Library and information centre managers should try to explore the various motivational issue. The satisfiers, or the motivators, are those aspects of job, which are concerned with the actual context of the job. The dissatisfiers or the hygiene factors, pertain to the context of the work. Manager should motivate employees by providing them an environment that makes them work towards the goals of e-organisation. Thus by motivating the employees manager can improve the employee performance and organisational effectiveness. Understanding motivation helps in analysing employee's behaviour.

Today, the emphasis is on the reduction in the hierarchical structure of organisations. As library and information centres are becoming more diversified and complex, they should try to maintain a relatively small hierarchical task differentiation. Consultation and discussions should be encouraged. Katzell and Thompson have stated that a manager should try to:

- ✓ Ensure that worker's motives and values are appropriate for the jobs assigned to them.
- ✓ Make jobs attractive to and consistent with worker's motives and values;
- ✓ Define work goals that are clear, challenging, attractive, and attainable;
- ✓ Provide workers with the personal and material resources that facilitate their effectiveness,
- ✓ Create supportive social environments;
- ✓ Reinforce performance;
- ✓ Humanise all of these elements into a consistent socio-technical system.

All the research done in the field of organisational behaviour and the various theories proposed, provide a framework for managers that can be used in dealing with individuals in the organisation. The manager of a library and information center must know about the research relating to motivation, leadership, and communication and use this knowledge as and when required. Organisational behaviour enables the managers of library and information center to apply the knowledge gained about individual groups and the effect of organisation structure on individual behaviour so as to improve the efficiency of organisations. Organisational behaviour helps them to gain knowledge about motivation leadership skills, communication process, attitude development, conflict handling etc.

In view of the constraints of finances, global competition, changing trade policies there is a need for organisations to use their resources, including human resources', effectively. A manager's knowledge and understanding of motivation and employee behavior can be helpful in achieving organisational goals effectively. The significance of the study of organisation behaviour in the field of library and information centre cannot be ignored

MANAGERIAL QUALITY AND LEADERSHIP

4.1 MANAGERIAL QUALITY AND LEADERSHIP

This unit examines managerial quality and leadership. This theme is closely related to the managerial functions of motivating, directing and communicating. The performance, efficiency and effectiveness of any organisation including libraries and information centres depend significantly on the managerial quality of the organisation, The managerial quality in turn depends substantially on the quality of the leadership in the organization.

4.2 DEFINITION OF LEADERSHIP

It is difficult to qualitatively define leadership. It is easier to give examples of leaders than to define leadership. Leadership involves various dimensions and attributes. It requires vision, courage, understanding, determination, decisiveness, sense of timing, capacity to act, ability to inspire, etc. A leader is often judged by his/her mettle in a crisis. For example, Winston Churchill during the London Blitz, John F Kennedy during the Cuban missile crisis, Indira Gandhi in the 1971 Bangladesh war, Margaret Thatcher during the miner's strike, Mikhail Gorbachev's break with communism and the cold war. In these turning points, leadership made a crucial difference in the modern history. It is the same in case of leadership in organisations.

4.3 LEADER VS. MANAGER

'Leadership' focuses on human interactions and on 'influencing others' whereas 'management' is concerned with procedures, results and the 'process of getting things done'. 'Manager' often refers to a formal position in the organisation. Such roles are created only in organised structures. On the contrary, there could be leaders of completely unorganised groups. In addition, a 'leader' may not have a formal title and he/she depends on his/her personal qualities to influence followers. A person emerges as a leader but a manager is always appointed to his/her position. Naturally, a manager will always have some formal authority which he/she exercises through a rational-intellectual process to establish the internal environment in which work will be done and objectives

achieved. A leader need not have formal authority, only informal power. There is always a mutuality of objectives between a leader and his/ her followers but clash of objectives are likely between a manager and his/her subordinates. To influence subordinates a leader relies on his/her leadership power. Five basic sources of leadership power identified, are, coercive power, reward power, legitimate power, expert power and referent (charismatic) power. The first three are based on formal organisation role and the last two are individual oriented. One aspect that distinguishes an effective leader is how the leader uses the instrument of power.

4.4 FUNCTIONS AND ACTIVITIES OF LEADERSHIP

Let us now look into other functions and activities of leaders. To a large extent the functions and activities of leaders are contingent upon the situation in which leaders work and they are found to vary with a number of factors. All the managerial functions are applicable and a majority of them are carried out by formal leaders. Some of the common activities and functions are mentioned below:

Arbitrating and mediating: Resolving the disagreement by arbitrating or making the decision on the course of action to be taken.

- ✓ ***Suggesting:*** Suggesting often permits the subordinates to retain dignity and a sense of participation
- ✓ ***Supplying objectives:*** A leader defines and supplies objectives that will allow members to work together
- ✓ ***Catalysing:*** Where some force is required to start or accelerate movement, a leader acts as a catalyst and prods subordinates into action.
- ✓ ***Providing security:*** A leader provides some sort of personal security to workers by maintaining a positive, optimistic attitude even in the face of adversaries.
- ✓ ***Representing:*** A leader as a representative serves as a symbol of the organisation and speaks for the organisation, clarifies the organisations position and hence compels outsiders to think of the whole organisation in terms of their impression

of the leader. In essence, he/she represents the organisation.

- ✓ ***Inspiring and Zeal building:*** Appreciating the works of the subordinates, a leader inspires them to enthusiastically accept organisation goals and contribute more towards goals.
- ✓ ***Praising:*** Having the interest of workers sincerely at heart a good leader pats them for their good work.
- ✓ ***Goal setting:*** A leader contributes significantly in establishing goals and objectives of the organisation.
- ✓ ***Executing:*** As a manager, a leader not only contributes for planning but also takes responsibility for executing the plan,
- ✓ ***Expertise:*** *A leader is supposed to be an expert in the principal activities of the organisation.*
- ✓ ***Bearing Group Responsibility:*** A leader acts as a surrogate for individual responsibilities of his or her subordinates,
- ✓ ***Purveying Rewards and Punishments:*** Leaders not only are required to encourage, upgrade and promote deserving workers but also to disapprove, transfer and fire poor workers.
- ✓ ***Exemplifying:*** A leader serves as a model for others to emulate and functions as an ideologist.
- ✓ ***Father figure:*** As a father figure, a leader serves to fulfill an emotional role for the members of the group.\
- ✓ ***Scap goat:*** A leader provides; a ready target for the aggressions of the members of the group.

4.5 LEADERSHIP IN LIBRARY AND INFORMATION CENTRE MANAGEMENT

Based on the confidence of long practice, libraries were managed for a long time with autocratic or paternalistic style. There was a general acceptance that power and authority rested naturally at the top of the library hierarchy. It is very much doubtful whether the same autocratic or paternalistic leadership style would be viable today. There

has been steady and observed movement away from the autocratic, paternalistic and hierarchical style of leadership into an era of participation, consultation and delegation. The process of decision- making is more widely spread through the organisation than before.

The external influences such as increased power of unions, economic pressures, labour and industrial relations legislation have substantially influenced managerial style. Even the general political climate is more hospitable to participation and consultation styles of management based on newer developments in theories of human behaviour and vehemently opposed to autocracy and authority. As a result "Hard orders are frequently displaced by acts of persuasion and suggestion; authority by influence, and autocratic control by a participation matching of interests, skills and ideas.

Good results and `high performance were occasionally achieved by strictly adhering to orders and following directions from the top, but often such styles led to resentment from those who wished to make a larger contribution to decision-making. While firmly directed, non- consultative methods are required from special occasions like crises, generally the planning and direction of library teams requires recognition of the value of member participation. "The situation in the modern library is such that expertise, creativity, intelligent and constructive thought and qualities of leadership can be found at all levels".

Management of libraries and information centres in India is not only a very small subset of overall management in India in terms of leadership styles and managerial quality, but also a logical extension of management of early libraries. The significant difference in managerial quality and leadership styles of libraries and information centres from that of the rest of the stream could be traced to certain basic differences in the nature of libraries and information centres themselves. Firstly, they are not-for-profit service organisations. Secondly, information centres are of very recent origin. Thirdly, a very large proportion of libraries and information centres are supported from public fund. For these reasons, the styles of management of information centres are more likely to be

democratic and participative than gigantic Indian business houses. Unfortunately, there is no worthwhile research in library and information science on these aspects to pin pointedly understands the situation.

HUMAN RECOURSE PLANNING AND DEVELOPMENT

5.1 HUMAN RESOURCES

Human beings constitute the most important and valuable resource of an organisation, based on the belief that employee commitment to work in an organisation is a fundamental prerequisite to organisational success. Such commitments can be ensured only if actions towards personnel are undertaken with the highest degree of integrity and respect. This presupposes a continuing healthy relationship between employees and employers. Consequently human resources management places an emphasis on strategic thinking towards employees, personnel planning, extensive personnel and organisational development and such others.

5.2 HUMAN RESOURCES MANAGEMENT

Expressions such as personnel, human resources management, industrial relations, employee development are used by different writers to describe, units, departments or groups concerned with people in organisations. The term though many people still prefer instead of management. The more modern and accepted expression, however, seems to be human resources management.

A formal definition of Human Resources Management is that it is a function performed in organisations that facilitates the most effective use of employees to achieve

organisational and individual goals.

HRM comprise a number of activities that includes the following:

- ✓ Equal employment opportunity programmes
- ✓ Task analysis
- ✓ Human resources planning
- ✓ Employee recruitment, selection and orientation
- ✓ Career development and counselling, performance evaluation, and training and development
- ✓ Compensation and benefits
- ✓ Safety and health
- ✓ Labour relations
- ✓ Discipline, control, and evaluation of personnel function
- ✓ Work scheduling
- ✓ Quality of work

5.3 WHAT IS HUMAN RESOURCE PLANNING?

Human resource planning is the process that helps organisations to provide adequate human resources to achieve their current and future organisational objectives.

Nature and Scope: HRP includes present as well as future needs for employees of various types in an organisation, comparing these needs with the present workforce, and determining the numbers and types of employees to be recruited. Persons can be recruited and selected from outside the organisation or selected out of the organisation's potential group and fit them into the organisational set up to get the best out of them. While extracting the best out of the employees, the organisation has also a responsibility to protect the interests of employees in terms of their career prospects, adequate compensation for their work, providing the best work environment and developing a culture of interpersonal, intrapersonal, employee- employer relationship and introduce

quality consciousness among everyone to produce the best.

Planning, an Analytical Process: But before we discuss human resource planning, we shall recapitulate what we have learnt about planning. Planning is an analytical process involving:

- ✓ Determination of desired goals, objectives, and set targets of achievements within a time frame in a phased manner; all these with a vision of the organisation's future growth and development;
- ✓ An assessment of the fixture in relation to environmental changes, professional A trends, technological advances, and their influence on all aspects of developments;
- ✓ Selection of activities, programmes and projects to accomplish set goals and targets, from among alternatives available, fixing priorities;
- ✓ An estimation of resources required in terms of finance, equipment, machinery, manpower and others;
- ✓ Preparation of a written plan document;
- ✓ Providing an action plan for execution.

These plan exercise will have to be done for the mobilisation of human resources in a library/ information centre, use these resources effectively, to produce quality products and offer services of the highest quality.

5.4 NEED AND PURPOSE OF HUMAN RESOURCE PLANNING

The major reasons for a formal exercise on human resources planning are:

- ✓ to be more effective and efficient in the use of human resources;
- ✓ to evolve a more satisfied and better developed employees;
- ✓ to be prepared for meeting any unforeseen circumstances to carry out the plan without sacrificing targets to be achieved, allowing for essential changes, maintaining performance quality.

Human Resource Planning should, obviously, precede all other HRM activities. Recruitment scheduling, selection of candidates to match the requirements, deployment and related placement decisions, training, personnel development, etc. cannot be properly done, if there is no planning of human resources. As stated earlier, a plan serves as a guide in every one of these activities that together constitute personnel management. Employees who work for an organisation that use good human resources policy and planning have a better chance to participate in planning their own careers and to share in training and development experiences. It can be safely assumed, therefore, that employees are likely to feel that their talents and professional competencies are important to the organisation and in consequence, they would have a better chance of utilising their proficiencies.

5.5 ELEMENTS OF HUMAN RESOURCE PLANNING

Human Resource Planning has to reckon with a set of elements, constituting the different component parts of HRP. These are:

- ✓ Estimating manpower requirements quantitatively and qualitatively;
- ✓ Recruitment and selection of personnel;
- ✓ Induction and deployment;
- ✓ Personnel development;
- ✓ Overall assessment of performance and fine tuning

5.6 HUMAN RESOURCES PLANNING FOR LIBRARIES AND INFORMATION

Libraries and information centres as they are today in India, are not for profit organisations and are in the group known as service sectors. While there are many in-service sectors like banking, insurance, health services, etc. operating on a business basis, earning profits on their services, library and information services cannot be compared with these service sectors, although there are certain library and information services which offer services only at a price. This is one of the biggest constraints that these

information institutions are to cope up with at present.

Most of these information institutions are operating as constituent part of various institutional complexes like R&D establishments, Universities, Government Departments and others, and therefore, are largely conditioned and controlled by personnel policies and plans of the parent organisational complexes. While there are benefits to personnel operating in libraries and information, arising out of this practice, independent thinking with reference to devising plans and policies exclusively for information personnel is yet to commence. No systematic studies appear to have been made dealing with management problems, much less personnel problems.

In this situation, personnel plans and policies discussed here would perhaps appear to be only of academic interest. However, situations are bound to change; and they are slowly changing indeed. Various compulsions like fund crunch, increasing demand for information, emerging business approaches in information products and services, consequent emphasis on quality, and market characteristics with competitors, etc. are driving information institutions to rework their operational structures and organisational developments to function more effectively in a commercial environment. In this context all that have been discussed in this unit would be relevant and useful.

While preparing a plan document on human resource development, following must be noted:

Such a plan would derive its initial guidelines and strength from the broad goals that would keep users and their information needs at the centre, building up collections and stocks, relevant and appropriate to user needs, with facilities for access and availability, and well-conceived user services.

On the basis of the above objectives and goals, the steps in personnel planning would constitute the following:

- ✓ Estimating personnel needs for the present and future, using techniques of forecasting; Establishing result oriented recruitment and selection procedure for new staff; Inducting new staff to the organisation, applying techniques that would be conducive to retain the best and ensure excellence in all aspects;
- ✓ Progressive policies of personnel development to treat the staff with respect and concern for their future, applying appropriate methods and techniques, suggested in this unit;
- ✓ Ensuring quality to products and services, keeping customer satisfaction as the primary objective;
- ✓ Evaluating results at periodic intervals to improve efficiency and effectiveness.

5.7 HRD IN INDIAN LIBRARIES AND INFORMATION CENTRES

Human Resources Development, as has been discussed above, does not seem to be operative in any library and information centre in India. Human resource aspects are handled, by and large, by parent organisations to which the L/IC is attached. The administrative departments deal with personnel, mostly in relation to salary and allowances, discipline and control, training and deputation to conferences, performance appraisal in a limited way, and a few others. Many of these developmental process are confined only to certain levels and do not percolate to dower levels. No HRD department, exclusively to take care of all human resource problems appears to be in existence in any library/information centre. As libraries and information centres are growing, particularly with reference to collection and services, and sophistication in terms of computerisation and networking, it is necessary to give full attention to human resource development. Some of the aspects, among others that might help L7ICs to contribute substantially their share in supporting efforts towards socioeconomic activities, may include:

- ✓ Personnel planning
- ✓ Orientation, introduction to L/IC's goals, objectives, targets and activities
- ✓ Productivity, customer satisfaction

- ✓ Quality of products and services
- ✓ Acquisition of new knowledge and skills
- ✓ Task analysis for proper deployment of personnel
- ✓ Performance reviews and appraisal
- ✓ Motivational aspects
- ✓ Developmental supervision
- ✓ Counselling and monitoring

Professional education and training institutions also should share responsibilities to induct research in HRD; initiate efforts for plans and programmes to study the diversified requirements of personnel in libraries and information centres. Studies are necessary to assess the manpower needs for the present and future activities and regulate the supply of the different categories of personnel required. Quality and value added information systems and services and achievement of excellence are to be inculcated into the profession through appropriate motivation programmes by professional associations and societies.

KEYWORDS:

Management Functions: At the most fundamental level, management is a discipline that consists of a set of five general functions: planning, organizing, staffing, leading and controlling.

Systems Approach: The systems approach implies that decisions and actions in one organizational area will affect other areas. For example, if the purchasing department does not acquire the right quantity and quality of inputs, the production department wont be able to do its job.

Organisational Behaviour: Organizational behavior (OB) or organisational behaviour is the: "study of human behavior in organizational settings, the interface between human

behavior and the organization, and the organization itself".

Human Recourse Planning: Human resource planning (HRP) definition: Human resource planning is a technique company uses to balance its flow of employees and prevent situations such as team member shortages or surpluses. This also ensures that the business has the right people with the appropriate skills and ability to build a strong workforce.

Question:

- Discuss the important principles of Planning
- Define the term 'system' and identify the factors that shape library as a system
- Briefly state the steps involved in designing a system

Reference

- Burch, John G. and Starter, Felix R. (1974). Information System' Theory and Practice. California: Hamilton.
- Chapman, Edward A. [et al] (1970). Library Systems Analysis Guidelines. New York: Wiley Interscience.
- Dennis, Alan and Wixom, Barbara Haley (2002). Systems Analysis Design. 2nd ed. New Jersey: Wiley.
- Hoffer, Jeffrey A., George, Joey F. and Valacich, Joseph S. (2004). Modern Systems Analysis and Design. 4th ed. New Jersey: Prentice Hall.
- Kraft, Donald H. and Boyce Bert R. (1991). Operations Research for Libraries and Information Agencies: Techniques for the Evaluation of Management Decision Alternatives. NY: Academic Press.
- Kendall, Kenneth E. and Kendall, Julie E. (2004). Systems Analysis and Design. 6th ed. New Jersey: Prentice Hall.
- Murdick, R.G. and Ross, J.E. (1975). Information Systems for Modern Management. 2nd ed. Englewood Cliff, NJ: Prentice-Hall.
- Narayana, G.I. (1991). Library and Information Management. New Delhi: Prentice- Hall of India.
- Semprevivo, Philip C. (1982). Systems Analysis: Definitions, Process and Design. 2nd ed. Chicago: Science Research Associates.
- Stueart, R.D. and Eastlick, J.T. (1981). Library Management. 2nd ed. Colorado:

Libraries Unlimited.

- Valacich, Joseph S., George, Joey E. and Hoffer, Jeffrey A. (2003). Essentials of Systems Analysis and Design. 2nd ed. New Jersey: Prentice Hall.

UNIT - V

**INFORMATION ANALYSIS, CONSOLIDATION AND
RE-PACKAGING**

INFORMATION ANALYSIS AND CONSOLIDATION

1.1 MEANING AND SCOPE

“Information analysis, consolidation and repackaging” refers to a process, which culminates in creation of a user-friendly end-product in printed or non-printed form, which is commonly called Information Consolidation Product or IACR Product or simply Information Product. When such a product is brought out on a regular basis, it is often termed as a service, such as abstracting service, indexing service, and digesting service. The activities involved in this process include “selection, evaluation, analysis, interpretation, and synthesis of a body of information in a clearly defined specialized field with the intent of compiling, digesting, repackaging, or otherwise organizing and presenting pertinent information in a form most authoritative, timely, and useful to the differential requirements of the different categories of users”. It is obvious that the work of consolidation cannot be done without first analyzing the information and that the new product emerging out of consolidation work invariably differs in structure/format and/or medium from the original. Thus, there are three main facets of ICAR: information analysis, information consolidation and information repackaging.

1.2 INFORMATION ANALYSIS

The term “Analysis” refers to a process of detailed or thorough examination or study of anything deemed to be a whole either in the form of a compound or of a complex in order to determine or separate its fundamental elements, or functional

ingredients or component parts, for the purpose of understanding its nature, and describing it precisely, determining its essential features, elucidation, clarification, and explanation, in terms of its message, meaning, logical use, etc.. In the context of information, the process of “analysis” is essentially an intellectual one; and the result of performing the operation does not, by itself, give rise to any new information. It may, however, be pointed out that “information analysis” does not always mean the same thing. While in the context of indexing it denotes subject analysis, it is considered to mean “critical evaluation” when one refers to an information analysis center.

1.3 INFORMATION CONSOLIDATION

The term “Consolidation” refers to “a process of unifying firmly and coherently two or more loosely aggregated units in which the units of input undergo substantial changes to get converted into output”. In the context of “information consolidation,” it means bringing together the related information through analysis and arranging the aggregates of related information in a coherent sequence or logical structure, so that the user can get a unified view of the contents. This may involve merging, restructuring, and rewriting of information.

1.4 EVOLUTION OF THE CONCEPT OF INFORMATION CONSOLIDATION

The analysis of the barriers to the use of information and the attempts to find solutions led to the concept of information analysis, consolidation and repackaging of information. Further, the idea of consolidated information comes from the discussions on information problems in developing countries. A number of United Nations Organisations have been actively seeking solutions to the information problems in developing countries. UNESCO is the most active institution engaged in these types of activities. The following three meetings sponsored by PGI, UNESCO were mainly concerned with the barriers to the use of information. Information analysis and consolidation was suggested as viable

solution to this problem.

The first meeting of the UNISIST Working Group was mainly centred on the need and importance of information analysis centres to support scientific research in developed countries. At the same time the Working Group recommended that due consideration should be given to the means for improving the existing situation in developing countries.

At the second meeting, the Working Group discussed in detail the term “information consolidation”. Information consolidation was defined as the process of compression of relevant documents in order to provide definite user groups in developing countries with reliable and concise information in usable form. The Working Group felt that information consolidation activities might not be restricted to information analysis centres and can be performed by individuals as well as other institutions. The Working Group defined the term “**ic**” as “the responsibilities exercised by individuals, departments or organisations for evaluating and compressing relevant documents in order to provide definite user groups with reliable and concise new bodies of knowledge”. The individuals and institutions or their components carrying out these functions were referred to as “Information Consolidation Units (ICUs)”. The second meeting in its Final Report listed a number of recommendations for action in the field of information analysis and consolidation including an Action Plan for implementation by UNESCO during the period 1979-1982. Following were the recommendations made by the Working Group:

- ✓ Support should be provided for the establishment and operation of information consolidation units (ICUs) in areas most important to social and economic development;
- ✓ ICUs should be linked to national focal points to ensure coordination of activities at national level; and
- ✓ ICUs should preferably be located within major research and technological institutions and should respond to the identified needs of the country or region

expressed through the user community.

Consolidation was set up at Tata Energy Research Institute (Now The Energy and Resources Institute (TERI)) which produced following publications: *Wind Pump Handbook, Biogas Handbook and Cooking Stoves Handbook*. UNESCO also published a *Handbook on Evaluation, Restructuring and Repackaging of Scientific and Technical Information* by Tefko Saracevic and Judith B. Wood (PGI-81/WS/16) for providing guidelines for creation and operation of Information Consolidation Units.

In the third meeting a number of recommendations were made. One of the points discussed in depth was the linkages of information consolidation products to extension services in agriculture and health fields so as to ensure maximum application in the field. In order to have maximum impact, it was considered necessary that handbooks and manuals be done in close collaboration with respective extension services. The Working Group recommended that in promoting establishment of ICUs, focus should be on such areas which seem immediately useful to grass-roots development such as inland fisheries, off-farm employment, women's studies, appropriate technology, kitchen garden cropping, approaches to organising rural people for participating in opportunities for development, etc. Guidelines for the establishment of Information Consolidation Units were brought out during the third meeting. The Working Group also brought out an Action Plan for implementation by UNESCO during the period 1984- 1987.

Among the information analysis and consolidation (IAC) products that have emerged as solutions to the effective and more beneficial use of information are scientific and technical reviews, state-of-the-art reports, handbooks, business, commerce and market reports, technical writings, popularization of science writings, extension services in agriculture for farmers and in health services for the general public. Each product that is developed is for a well defined user group. S&T reviews are meant for the specialists, business, commerce and market reports are produced for the people in business and industry and extension services in agriculture are for farmers and health services for the general public. In the development of these specialised products the concept of a well defined

user group is always kept in mind. In developing these products, analysis, synthesis, consolidation and repackaging of information is carried out keeping the target users in mind.

1.5 PACKAGING AND/OR REPACKAGING OF INFORMATION

While restructuring deals with the contents of IAC product, packaging deals with the media and format in which information is to be presented. The media can be print, microform, audio/visual, electronic, as well as oral. Format is the arrangement and presentation of information in any of these media.

The methods of packaging of information were always influenced by the technology of the day. Printing technologies were used in earlier periods for the purpose. Later on, many technologies came to challenge print e.g. film, audio, video, cassettes and now computer and other electronic technologies have left their lasting imprint on information packaging. A number of media are now available and new areas are constantly developed presenting wide range of choices. The important media for information packaging can be categorised into:

- ✓ Print media,
- ✓ Audio-visual media,
- ✓ Electronic media, and
- ✓ Interpersonal contacts (as a medium).

The selection of media in information consolidation should be user-oriented. In user-oriented packaging it is helpful to think first about users, their background and requirements and then about appropriate media and formats.

Likewise, a number of formats are available to be used for arrangement and presentation of consolidated information in any of the media. Format for the IAC product should be such that it not only enhances the use of the IAC product but also should contribute towards comprehension, assimilation and recall of its contents by the user. For this, different media and formats are adopted for different groups of users. For instance, if similar type of IAC product carrying the same message (such as creating awareness of a new technology useful for all levels of users or a breakthrough in cure of some chronic disease) is to be prepared for different groups of users, the level of treatment of the subject, technical details covered, media and format will be different for each group, though the message to be conveyed will be the same. For instance, oral communication is preferred by rural people, children react positively if a message is conveyed through a story line and for illiterate people a message can be conveyed more effectively through audio/visual media or through personal communication.

While packaging of information is physical recording, arrangement and presentation of information in a given medium and in a given format. The repackaging of information is rearrangement of physical media/ or forms to present the same information for another group of users so that it is appropriate and helpful to that target group. The rationale behind the term repackaging is making information available to illiterates and other groups for whom the usual formats used for conveying the information would pose a barrier to access.

For example in India, the Indian Council of Agricultural Research, engaged in research in the field of agricultural sciences, has brought out 44 documentary films for the farmers on the farmer friendly technologies developed by the Council. Films are on topics such as sheep rearing, honey production, shrimp culture, fodder production, hygienic milk production and milk processing and packaging, etc.

Repackaging is not a new idea, but changes in technology have enhanced the process, creating the potential for better service. Saracevic and Wood (1981) and Bunch (1984) were the first to use the term in their publications in describing how an information service selects appropriate material, reprocesses and packages the information, and arranges the material in a way that it is appropriate and helpful to the user. These studies mostly focused on scientific and technical information and community information.

1.6 INFORMATION REPACKAGING

The term “Packaging” refers to the process of physically arranging some materials and providing a covering for easy handling. In the context of information packaging, it indicates “physical recording, arrangement and presentation of information in a given medium and a given form”. Thus, two aspects to be considered in this context are packaging medium, i.e., the physical medium on which the information is recorded and displayed or presented to the users, such as print medium, audio medium, audio-visual medium, and digital medium; and packaging format, i.e., the arrangement, shape, and layout of information in a given product on a given medium. Repackaging of information, therefore, means rearrangement or change of physical medium and/or the form in which the information has been presented. This is done to suit the requirement of a user or user group.

1.7 DISSEMINATION AND COMMUNICATION

After an IAC product is developed, the next step is its active and effective dissemination to the target users and its effective utilisation by them. Dissemination relates to transmission of information to users. It requires determination of the channels by which information products will be delivered to the users. Communication is closely related to dissemination, but it is a broader concept. Communication is a process by which information is transferred through a given channel (or channels) from a source or a sender to a destination or recipient. The process can be in both directions involving feedback from the recipient. Some of the important channels for dissemination of information consolidation products

include:

- ✓ **Interpersonal Delivery:** The product is delivered personally to the users.
- ✓ **Group Personal Delivery:** The product is delivered to a whole group of users in a meeting or through demonstration.
- ✓ **Strategic Placement:** The product is placed in locations frequented by users to pick on their own.
- ✓ **In-House Dissemination:** The product is circulated within the organisation.
- ✓ **Local Depositories:** The product is disseminated through local information centres and libraries.
- ✓ **Mass Media:** The product is delivered or announced through mass media such as newspapers and magazines as well as through broadcasting i.e. radio or television.
- ✓ **Mail:** The product is delivered through direct and mass mailing.
- ✓ **Computer Networks:** The product is delivered through computers via telecommunication networks; online databases; electronic mail or computer conferencing.

MARKETING OF CONSOLIDATED INFORMATION PRODUCTS

The work of an Information Consolidation Unit is not complete with the making of a product or provision of a service. Active and effective dissemination is needed to make the product reach the hands of the users. Otherwise, the product or service will remain unused. Conscious and deliberate efforts should be made to market the product and make users aware of its services and benefits.

In the information profession there is often an opposition to active marketing on the ground that it introduces an element of commercialization in information work. The argument is that the commercial aspects have a distorting effect on information products and services which should be appreciated on their own intrinsic merit. This philosophy may be good in cases where information services and products are fully subsidized on a continuous basis and where cost-effectiveness is not called for. This attitude needs to be changed in the case of non-subsidized IAC products.

Marketing involves market research and analysis, segmentation of users into groups with similar characteristics, values, needs and information benefits, development and targeting of information consolidation products to the given user segments, user education and evaluation.

KEYWORDS:

Information Analysis: The term “Analysis” refers to a process of detailed or thorough examination or study of anything deemed to be a whole either in the form of a compound or of a complex in order to determine or separate its fundamental elements, or functional ingredients or component parts, for the purpose of understanding its nature, and describing it precisely, determining its essential features, elucidation, clarification, and explanation, in terms of its message, meaning, logical use, etc.. In the context of information, the process of “analysis” is essentially an intellectual one; and the result of performing the operation does not, by itself, give rise to any new information.

Information Consolidation: The term “Consolidation” refers to “a process of unifying firmly and coherently two or more loosely aggregated units in which the units of input undergo substantial changes to get converted into output”.

Information Repackaging: The term “Packaging” refers to the process of physically arranging some materials and providing a covering for easy handling. In the context of information packaging, it indicates “physical recording, arrangement and presentation of information in a given medium and a given form”.

Questions

- What do you understand by the terms packaging and repackaging of consolidated information?
- Explain the meaning of the expression “information consolidation”?

Recommended Books

- Bakewell K G. (2017) Managing user-centred libraries and information services. Ed. 2. . Maxwell, London.
- Bhattacharya, G. “Information Analysis and Consolidation: Some Basic Considerations”. *DRTC Seminar* (1981): Paper AA. Print.
- Canada: International Development Research Centre. *Specialised Information Analysis Centres in International Development*. Ottawa:IRDC,1984. Print.
- Carpenter J and Davies R. (2015). Research and Development, British Library, London.
- Coote Helen and Batchelor Bridget.(2017). How to market your library services effectively. Ed. 2. Aslib, London.
- *First Meeting of the UNISIST Working Group on Information Analysis Centres: Study Report on the Role of the Information Analysis Centres in World Science Information Networks*. Paris:UNESCO,1975. Print.
- First meeting of the UNISIST Working Group on Information Analysis Centres. Unesco, Paris, 1975.
- Helinsky Z. (2018) A short-cut to marketing the library. Chandos Publishing, Oxford. Kotler (Philip).(2016) Marketing management. Ed. 12. Prentice Hall, Delhi.
- Kertsz, F. *Paper Presented at the Third Meeting of UNISIST Working Group on Information Analysis and Consolidation 12-16 Sept. 1983: Draft Guidelines for the Establishment of Information Analysis Centres and Information Consolidation Units*. Paris:UNESCO,1983. Print.

- Saracevic, T. *A Course in Information Consolidation: A Handbook for Education and Training in Analysis, Synthesis and Repackaging of Information*. Paris: UNESCO, 1986. Print.
- *Second Meeting September 12-15,1978: Symposium on Information Analysis and Consolidation*. Paris:UNESCO,1978. Print.
- Seetharama, S. *Information Consolidation and Repackaging – Framework, Methodology and Planning*. New Delhi: ESS ESS Publications, 1997. Print.
- Stilwell, C., et al. *Knowledge, Information and Development: An African Perspective*. Pietermaritzburg: University of Natal ,2001. Print.
- Sturges, P., and G.Chimsen. “Information Repackaging in Malwi”. *African J of Lib. Archives and Information Science* 6.2(1996): 85-93. Print.
- Symposium on Information Analysis and Consolidation (second meeting).Colombo, Sri Lanka, 12-15 Sept. 1978.
- Third meeting of the UNSIST Working Group on Information Analysis and Consolidation. Kuala Lumpur, Malaysia, 12-16 Sept. 1983.
- UNESCO. *Final Report of the UNISIST Working Group on Information Analysis and Consolidation*. Paris:UNESCO,1984. Print.
- Wood. *Consolidation of Information. A Handbook on Evaluation, Restructuring and Repackaging of Scientific and Technical Information*. Paris:UNESCO,1981. Print.