Need for imparting consumption skills to customers and information intermediaries for better utilisation of electronic information*

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Abstract: Just like production skill enable an individual to become more productive, consumption skill enable individuals to be more productive in their use of products and services. Consumer goods and services like TV not only require low consumption skill but also are strongly supported by aggressive marketing and intensive individual drive on the part of customers. On the other hand, using a library, reading a book, accessing electronic information, appreciating art, etc., require adequate high level consumption skills on the part of the customers and intermediaries. The paper discusses the importance of imparting consumption skill to customers and information staff who have to access electronic information. It highlights the recent shift in service industry from relieving logic to enabling logic and the new role of customer as coproducer of services. The paper mentions some efforts of customer interface designs in this direction and finally concludes that inadequate skills among customers and information intermediaries have resulted in sub-optimal access and use of electronic information.

Keywords: Consumption skill; electronic information; user-education; Customer-enabling logic; prosumer; organisation-customer interface.

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1. INTRODUCTION

Despite tremendous publicity and excited curiosity about IT in   general and electronic information   in   particular, substantial   under-utilisation of imported IT   products, services, tools and means can be seen everywhere. It is not difficult to find places where computers are used almost like typewriters under the name of computerisation and a general lack of integrated approaches. If we look at the trends in information industry right from microfilm technology to advances in expert systems, baud rates and   electronic document delivery we have often bought 'sword' (instead of knife) and used it to cut apple and called it an   'experiment'.   On the other hand, IT and   electronic information have contributed significantly to paper pollution by way   of   bringing out more   and   more   information   about   'electronic information' in paper form.

One of the important reasons for under-utilisation of   electronic information is lack of requisite level of working   knowledge   and consumption skills   among   customers   and information   intermediaries. Information intermediaries is a vague term which not only encompasses other than library and information professionals but also varies widely in the skill   needed for performing their functions. In this presentation   intermediaries mean those who accept delegated searches and undertake access and search of electronic information.

Mentally   and technically preparing   customers   and intermediaries at all levels and their effective management are most fundamental for the successful dissemination and access of electronic information. Regretfully, the general   level of knowledge, skill and competence of intermediaries is   quite low with probable exception of few personnel working in advanced institutions where ample opportunities are available to gain hands on experience [1,2].

Skills in IT can be gained only when one gets hands-on training and experience   in   laboratories   under   simulated   conditions   or   in real life situations. The graduates and post-graduates turned out by library schools do not possess adequate skills and expertise to confidently interact with IT   specialists,

provide their requirements and evaluate what is recommended by IT specialists. A BLR&DD sponsored project to examine the effects of new technology on the labour market and demands for information services within the UK carried out by Technology Change Centre [3] has concluded that the demand for traditional skills is likely to tailoff and many of the traditional skills will not be required in the future except in small selective areas. The report identified some eleven categories of information jobs and our library schools in India can hardly cater to 2-3 categories of jobs. Another similar investigation on the forces of change in library schools in United States, Canada and the UK found decline in applications to library programs in universities due to lack of introducing students to technology [4]. Even those   professionals who are already on job are severely handicapped if they do not have enough scope, opportunities and self- initiation to absorb and update the necessary skills, expertise and knowledge relating to IT. Another important aspect of managing people (both library staff and   IT personnel) in this area is lack of interpersonal information sharing   and   the resultant covert non-cooperation   and   trade secrecy.

2. USER-EDUCATION AND INSTRUCTION SERVICES

Traditional   user-education   and   instruction   services   have almost remained on paper and most of it has fizzled out giving way to superficial and occasional   user-orientation rather than imparting skills. We   are   awefully inadequate and bad in providing systematic and regular user instruction   services. There are hardly any locally developed user- education modules to proudly present to   an   average   user. Majority of libraries do not have regular user- induction and   orientation programmes except providing a copy of rules and regulations of the library.   Libraries have not only to find ways and means of inducing and inducting the marginal users and nonusers but also make use of IT to take library to the users.

Bibliographic instruction as part of user education aims   at instructing   or raining users to make optimal use of information resources and save time in their literature search within specific subject disciplines. CD-ROM, as a good medium for learning, teaching and bibliographic instruction, can help

assisting and training users in use of CD-ROM as well as for bibliographic instructions. Many studies and surveys have revealed that CD-ROM databases are more effective and less costly than the alternative methods for both learning and teaching bibliographic instructions and there is a dire need for end-user training to enable them to access needed information privately and independently. The purpose of training is three fold: (i) to make the end user searching as easy and as comfortable as possible, (ii) to minimise waiting time at the workstation, and (iii) to avoid resorting to time consuming trial and error mode. New technologies are pretty easy to use but few can be effectively used without training. The need for training can be ascertained from the signs of novice users sitting in front of the workstation with lots of beeps, moving from index to index and long periods of inactivity as well as users desire to search themselves. At ISRO Satellite Centre (ISAC) library we provide manuals, fip charts and personal assistance in addition to periodic training programmes [5].

As a logical extension of user education, there is a need for imparting informal training to users of libraries in organising personal information systems consisting of references, notes, abstracts and documents in various forms like registers, notebooks, files, loose sheets, cards and desk diaries, etc. Well organized personal information system facilitates and stimulates better and more intensive utilisation of accumulated information that in turn stimulates creative thinking and that lead to improved style of intellectual work of user. In other words, personal information system prevents information once gained from being lost, intensifies the use of available information resources, improves organisation of knowledge, provides opportunity for creative use of information, allows for linking of facts and ideas and helps to discover hitherto unseen elations, associations and conclusions [6]. Using the knowledge and experience of management of bibliographic environment, librarians can help their patrons in searching literature through online or CD-ROM databases and further processing of downloaded data through PC using several online utilities and off shelf software in addition to organising traditional personal collection [7].

3. CUSTOMER-ENABLING LOGIC

The `industrial economy' was characterised by `specialisation-relieving' But the present `service economy' is showing a trend towards `specialisation-enabling' and enriching the individual's activity options. In other words, present-day goods and services are designed in such a way that the individual can save time, become more and more independent of location restrictions, squeeze more accumulated knowledge into every time-location unit and be better able to use his own knowledge and resources for things he could not do before.

The increased level of knowledge of typical customers lead them to be more actively interested in what their service providers provide and how they function. The increased access and acquisition of information and knowledge by customers not necessarily make them wiser but influences customer-provider relationships. Customers are moving away from the consumption pattern of mass production society leading to higher differentiation of lifestyles. The implication is that each customer is unique in his requirement and behaviour and he is to be handled in a more individualised way. Customers are naturally interested in the roles they play in increasingly individualised and unique value-creating process. Therefore, they get more and more involved in what their providers do with them. These demands for a differentiated and unique input to produce a differentiated and unique output is largely enabled by new technological developments. Thus, the increasing knowledge of customers today coincides with an almost explosive increase in their needs for advanced knowledge. As the consumption patterns and service business problems of customers become unique and more and more complex, they must find more effective ways of using their own resources and knowledge.

One of the fundamental dimensions of service logics is enabling verses relieving logic. It is the most interesting dimension along which there is an universal change process in the provider-customer relationships (i.e., reshuffling of tasks between providers and customers). Industrial society essentially `relieved' customers of the need for performing certain functions

because they could profitably be performed with scale advantages in specialised units. The service economy tends to give back opportunities to customers and make it possible for them to do things for themselves what they could not do before. A key feature of enabling logic is that it increases the knowledge transfer component in the service provider's offering. In other words, the nature of value production is changing and the relationship between the players is becoming more complex. It becomes more interdependent and reciprocal rather than sequential.

Generally relieving relationships are established between service provider and customer for activities which are outside the core activity of the customer. On the other hand, in enabling relationship the provider deliver the knowledge and tools necessary for performing the task per se which is now done by the customer. Enabling relationships will become more prominent in the future, and that `relievers' will get tougher competition from `enablers'. Enabling logics are quite interesting and contribute to a better overall resource utilisation [8].

Enabling strategy looks like defensive and act of encouraging clients to be competitors but it helps to cement the customers relationship and makes the customer more successful. It is here that people who provide IT based services have to underline that the more professional our clients become, the more opportunities these are to interest them in our new ideas and services. In order to cope up with the increasing trend of enabling logic of service economy, extensive provision for imparting consumption skills is necessary.

4. PROSUMER: CUSTOMER PARTICIPATION IN SERVICE PRODUCTION

Service is a social process and management of service is the ability to direct this process. Service organisations are more sensitive to the quality of their management than any other kind of organisation. How the client can be made into an active participant in the service delivery system is the core of service management. Changed behaviours of clients were both a result of and a prerequisite for a service system. Clients are drawn into the service delivery

system in a striking way. The design of the system is such that clients and employees are unexpectedly linked. The customer is not just an onlooker; his presence in this particular context created a social dynamic which makes the employees conscious of their roles and their prestiges, which in turn helps to create a genuine new experience and a sense of participation in the customer. A well designed service delivery system makes all the participants (i.e., the employee, the client and any other organised but not employed participants) feel better and emerge with enhanced self- esteem.

Often the production and even consumption of service takes place before the eyes of the customer instead of being hidden from him and a degree of quality control is incorporated into service delivery system. This emphasises importance of harmony and mutual support between the main parts of the   service delivery system i.e., staff, client and physical   setting.

One of the important ingredients of a service package is transfer of know-how. An inherent dilemma (or a problem or a possibility) in service organisations is to supply service or provide know-how. "In the service management system the client appears twice: as a consumer in the market segment and as part of the service delivery system. The two aspects of   the relationship with the client are interconnected, since it   is of course the totality that the client himself will evaluate. Part of what the client sees as the output of the service company consists of how much and in what way he has to participate in the provision of the service, and what problems and satisfactions are involved in   this process"[8, p79].

Toffler [9] sees the rise of the prosumer as part of a   general trend towards a reorganisation of society whereby   much of the specialisation of industrial society is being swept away by `The  Third  Wave'.  `Self-service' appears to be the only possible way of maintaining the performance of people-intensive services with a limited potential for   productivity improvements. In   people-intensive   service   sectors, costs will rise more rapidly than productivity, and   the market will not be able to bear the increase; it will   therefore   prefer   self-service.   Increased   client   participation is also described as an active strategy for achieving cost effectiveness

Participation of clients in production of services could be physical or intellectual or emotional. An ability to involve the client appropriately and emotionally is very often what makes the difference between success and failure.   The successful organisations managed to transfer not only service but a great deal of know how (so that the client would know   what to do when problems arose).

5. ORGANISATION-CUSTOMER INTERFACE

Organisation-customer interface is extremely important and delicate task for any service organisation. Interface design is a crucial variable which determines much of the strategic positioning   of the organisation, and it has   profound operational consequences. There are many dimensions which characterise the Organisation-client interface. They are (i) people-equipment dimension (ii) the degree of freedom of   choice (iii) degree of integration (iv) duration (v) others, i.e., temporal   aspects of relationship,   its   spatial characteristics, who dominates the interfacing process and how. At present, there is over-emphasis on design of people-equipment interface than others in library and information field.

In terms of function, the client can participate in many different ways. (i) Providing specification of the service including diagnosis of the problem, the data for diagnosis.   It is always an important operational choice for the service organisation to decide how far the client should be allowed   to participate in the specification. (ii)   Coproduction is concerned with client does some of the (physical) work which could conceivably have been done by the service organisation. (iii) Quality control. (iv) Maintenance of ethos: The   service Company may decide to incorporate client   participation and client interaction as part of the service   delivery process for the simple reason that it   provides benefits   to   its   employees in   terms   of   interesting experiences, excitement or valuation feedback (i.e., client   may influence ethos, motivation and productivity of staff). (v) Development: The client can also participate in the development of the whole service system. (vi) Through word-of-mouth or formal reference client may participate in selling/ marketing.

6. NEED FOR IMPARTING CONSUMPTION SKILLS

Deficiencies in relevant information will cause distortions   in the demands. Apart from production skills like labour   market information and technical skills imparted in our education and training systems, there is a need to provide balancing amount of consumer market information and skills   called consumption skills to consumers and intermediaries. Just like production skill will enable an individual to produce more, consumption skills will enable individuals to be more productive in their use of services.

Many activities are quite demanding in terms of the skills   required to enjoy them to the full. Even leisure time   become   boring   without   sufficient consumption skills and in such   situations people resort to low skill activities   like   watching TV. Teen-agers are often bored (and even resort to crime   and vandalism for excitement) due to lack of   adequate/better leisure facilities and lack of consumption skill if facilities are available. Activities like using a library or a database, reading a book, appreciating an art,   etc., require adequate and high level consumption skills on   the part of customer. Even low skill activities like watching TV and movies require `appreciation' training and skill to make maximum benefit out of the activities. This very much answers the question why reading habit keeps declining and watching TV is on the increase.

In the modern environment, consumers look for stimulation,   but what is stimulating for one person is often not   stimulating for another and more particularly to the same   person after he has experienced in time and time again. This is very much related to the extent   of   consumption   skills expected of the activity and actually possessed by the   consumer. Demands in the modern world are highly volatile and are fragmented with increasing affluence. New products may attract a large number of customers very quickly because they are new and have a high novelty value and hence provide stimulation. But if the customers lack adequate skills or   they are not trained in required consumption skills before   their stimulation fades away they are not likely to sustain interest in the new product or service. On the other hand, those who receive right training in consumption skills when they are subjected to

stimulation of a new product or service the demand for the product service will constantly increase due to repeated experience despite reduction or withdrawal of stimulation.   Yet the learning of skill continues through repeated use / experience as the nature of experience changes and skill levels increase. It is in this snake and   ladder game that a large majority of information intermediaries   and consumers are likely to become drop-outs after an initial   stimulation or excitement(over excitement?) from electronic information.   In other words, the demand for access and use   of electronic information and IT services has the chance of   either increasing rapidly (as in the case of those who   receive appropriate and adequate consumption skills as the   right time and the novelty is retained) for few or decreasing   rapidly in large number of cases where there is no training   for consumption skills and no stimulation and the novelty is let to die away [10].

Electronic access to information has a very high `latent' or  unfulfilled potential demand.  It is difficult to monitor and      ascertain `latent' demand than 'revealed' demand. 'Induced'   or 'generated' demand is new demand stimulated by the   provision of new facilities and services, over and above any   latent demand that may be satisfied. Unless this `induced'     demand  is well satisfied in a reasonable time (i.e., till      stimulation  exists)  the same is likely to become  what  are      called `diverted' and `substitute' demand.  These are cases where some customers switch from one facility or service to another (normally new) which has   better   stimulation.     Diverted  demand  refers to switching from  one  facility  to      another  whereas  `substitute' demand is switching from one activity to another(within a facility). In demand analysis of leisure goods, it is felt that leisure items appear   temporarily (and incorrectly) price elastic because they are   luxury goods and essentials like food items are price   inelastic because people have to buy them whatever the price.   The   essential determinant of price elasticity is   the availability of substitutes. Whereas there are no suitable alternatives to potatoes and vegetables, consumers have the alternatives to reading a book or visiting a library. Unlike essentials,   most   of the leisure   goods have   income   inelasticities greater than one indicating that they are luxury goods. As people get richer they spend a large   proportion of their income in these items.   Unfortunately   books, magazines and newspapers are exceptional since they   have negative income

elasticities, i.e. expenditure on these items falls as income rises.   This is devastating finding of   West about books and libraries. We need to check the same in our own environment.   The lesson of demand analysis is   that imparting high level consumption skills to customers and   intermediaries is crucial in order to   properly   encash   on stimulation of new technology and induced demand.

7. CONCLUSION

Having noted that electronic information is under-utilised,   it is necessary to provide more explicit education and training to both end users as well as   information intermediaries. Such   a training   and   instruction   services should necessarily aim at imparting consumption skills of   higher order. The need for imparting consumption skills to customers and intermediaries is in congruent with   the prosumer role of customers as well as customer-enabling logic of present day service management and the need for effective design of organisation-customer interface.

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