

**KNOWLEDGE BASED SERVICES WITH INFORMATION AND  
COMMUNICATION TECHNOLOGIES (ICT) SUPPORT--  
A TOOL FOR WOMEN EMPOWERMENT**

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### **Abstract**

This paper highlights the importance of making women economically powerful, especially in the Indian context. In India the birth of a girl child is still considered as a misfortune for the family and often eliminated in her mother's womb. This paper suggests that one solution to this problem is to make a girl child economically strong and at the same time her traditional role as a home maker is also not affected. Information and Communication Technology alongside a knowledge based service sector offers the empowerment tool that women require.

**Key Words:** Knowledge Based Service Industry, Information and Communication technology, and Women Empowerment

### **INTRODUCTION**

The declining sex ratio in India is certainly alarming. The main reason behind this is that girls are considered to be a liability whereas boys are considered as assets. This mind set will only change if girls are also made financially sound and at the same time their traditional role as home maker is also maintained. Once women get into economic related activities, money becomes not just a means to survival but it also brings empowerment. The tragedy is that traditions, laws and male behavior restrict women's scope for economic activities. Now that they are economically weak they are being eliminated in their mother's womb. What an irony? The following example also illustrates the power of finance: 'Finance is a gun. Politics knows when to pull the trigger.' In these few words the taciturn Mafia boss Don Lucchese in *The Godfather Part III* highlights the inextricable link between money and power, which together represent most significant influences on society and gender throughout history.

The worst affected segment is the middle class, which is trying to move upward by improving their financial status hence the focus of this group is on high paying jobs or setting up ventures which gives high rates of return. The high income group or the moneyed business class of India wants at least one male heir to carry on their legacy.

They can afford to have a number of daughters till they have the son. In the lowest income group girls are a financial help right from their childhood. Either they start working as a household help (mainly in urban areas) or helping the mother in household chores and looking after their younger siblings when mother is out earning a livelihood.

With the knowledge based economy we can create a win-win situation for all – organizations, female employees, and families. With the help of Information and Information Technologies now it is possible to go in for flexi hours, reduced work schedules, work at home, individual work schedule etc. This way they can look after their family responsibilities and the same time their career growth is not affected. Wherever such systems are introduced companies say they have seen employee productivity go up. These employees appear more comfortable with work, since their focus is on increasing their efficiency rather than trying to do their work load in a fixed amount of hours and also worry about their home.

From Sita (the heroin of the famous Indian mythological epic Ramayana who at a tender age decided to accompany her husband and brother-in-law to wander through the jungles for fourteen long years but later on when her husband doubted her integrity she did not return to him but entered the earth from where she had come) to Sunita (the young scientist who made giants like Coco Cola and Pepsi dance on their toes on the issue of pesticide in cold drinks), women have shown that mentally they are as strong as men or maybe stronger because in spite of the fact they have been given an inferior status across the global as compared to men, they have excelled in almost all branches of knowledge. We can see examples from Indian literature and mythology that even in their traditional role as mother, wife, sister, daughter or sister-in-law they have often helped men when they have faced any problem in their professional life. For example, once when Emperor, Akbar, asked the famous court wit Birbal when a person's desires end. Birbal had no answer. When his mother came to know about his problem, she just gave him a handful of ashes from kitchen oven and Birbal got the answer that a person's desires ends only after his death

### **WOMEN AND INFORMATION TECHNOLOGY**

It is precisely in the context of women's autonomy and choice in poorer countries and in less affluent communities that it is now pertinent to focus on the impact of information technology on employment opportunities. In doing so, it is important to bear in mind the distinctive features of the current revolution in the mode of production, which is primarily knowledge-intensive. IT comprises a set of technologies that actively process information rather than merely storing or transmitting it. Computers, the key hardware, and non-material software systems form its essential core.

The convergence of computing, telecommunication and satellite technology in recent years alters the structure of work not only in the economies that are at the centre of Research and Development in this field, but also in countries that primarily adapt and adopt these technologies for market orientation. Even in nations which are in economic terms relatively poor, IT substantially changes the traditional production process as well as the marketing of goods and services produced. The demand for components of IT-related hardware - such as microchips or for information-processing activities - such as data entry or software programming - creates new areas for employment in developing countries. In addition, the telecommunication revolution, which allows companies to shift parts of their manufacturing and service production to geographically distant locations, makes it possible for low-wage countries to receive some amount of labour-intensive relocated work from the first world countries. The evolving international division of labour now encompasses a vast range: from the production of semiconductors or telecommunications equipment to service-related software programming and data entry.

In this scenario, it has not been easy to ascertain whether women, in aggregate terms, have benefited from the information revolution or lost out. In some spheres, women, especially older women, are now threatened with imminent technological redundancies, especially in manufacturing. The skills needed for traditional labour-intensive assembly-line work have given way to new requirements for polyvalent, cognitive skills. The spread of information processing work, especially in banking, finance or telecommunication, by contrast, has opened up new opportunities for women who are computer-literate and young enough to learn newer skills. In the sphere of self-employment, information technology, heralds new possibilities for women and men; yet women, more than men, fail to achieve their potential because of their lack of access to business and marketing skills.

## **WHAT ARE KNOWLEDGE BASED SERVICES**

Knowledge-based business services are often considered to be one of the hallmarks of the knowledge-based economy. The sector consists of firms that have emerged to help other organizations deal with problems for which external sources of knowledge are required. There are practically as many kinds of knowledge-based business services (KBBS) as there are areas of knowledge, so naturally there is considerable diversity in their evolution, structure and use. Nevertheless, KBBS embrace several sectors and, have displayed more rapid and sustained growth rates than those of other economic sectors. This has made them quantitatively more prominent both in developed and developing economies; their role in trade as well as in employment generation is therefore being closely observed and evaluated. At the same time, their importance is growing in qualitative terms, as they become increasingly influential sources of, and channels for, new knowledge. The performance of KBBS does affect the performance of those organizations that are their clients, and thus the dynamism of the KBBS sector impacts on the whole economy. Knowledge based service sector can be broadly divided into three categories, namely;

### **1) Computer Related Services**

- Hardware consultancy
- Software consultancy and supply
- Data processing
- Database activities
- Maintenance and repair of office, accounting and computing machinery
- Other computer related activities

### **2) Research Related Services**

- Research and experimental development on natural sciences and engineering
- Research and experimental development on social sciences and humanities

### **3) Miscellaneous**

- Legal activities
- Accounting, book-keeping and auditing activities; tax consultancy
- Market research and public opinion polling
- Business and management consultancy activities
- Management activities of holding companies
- Architectural and engineering activities and related technical consultancy
- Technical testing and analysis
- Advertising
- Labour recruitment and provision of personnel
- Miscellaneous business activities
- Photographic activities

## **WOMEN AND KNOWLEDGE BASED SERVICES**

One of the most recent developments is the huge IT infrastructure, consisting of network, connectivity, client-service architecture and several computers. It is possible now to connect the women sitting at home with the outside business world. The need of the hour is to train women in the various knowledge intensive fields and have knowledge networking. The social pressures of having to balance the demands of family and career, will be solved by taking up home-based teleworking. In the process, their employment status, in many cases, changes from that of full-time employee to freelance consultant. The freelancer faces the problem of insecurity of work and gets excluded from benefits and pensions. Yet there are compensations, in terms of flexibility in time, and the opportunity to be with the children.

From a recent study done in the European Union (EU-25) regarding a knowledge based services it was found that female workforce was 56 per cent, even higher than for the total service sector, which was 53 per cent. The percentage of women in the knowledge based service sector was:

- Latvia -- 76 percent
- Lithuania – 75 per cent
- Estonia – 71 percent
- Poland -- 70 percent
- Slovakia – 70 percent

If this model can be replicated in India the resentment against girl children will definitely go. Not that each and every female can be trained in any one of the areas of KBBS mentioned earlier but if they have the mental ability then they should be encouraged to learn the skill and knowledge required to operate anyone or more of the KBBS. By using their skills and networking facility they can earn a substantial salary even from their home. Information Technology can also help other women. Information and Communication Technologies (ICT) are for everyone and women have to be an equal beneficiary to the advantages offered by the technology, and the products and processes which emerge from their use. The benefits accrued from the synergy of knowledge and ICT need not be restricted to the upper strata of the society but have to freely flow to all segments of the women population. The gamut of areas in which ICT can put a greater control in the hands of women is wide and continuously expanding, from managing water distribution at the village-level to standing for local elections and having access to lifelong learning opportunities. ICT in convergence with other forms of communication have the potential to reach those women who hitherto have been not been reached by any other media, thereby empowering them to participate in economic and social progress, and make informed decision on issues that affect them

## CONCLUSION

ICT opens up a direct window for women to the outside world. Information now flows to them without distortion or any form of censoring, and they have access to the same information as their male counterpart. This leads to a broadening of perspectives, building up of greater understanding of their current situation and causes of poverty, and initiation of interactive processes for information exchange. Further, such forms of networking open up alternate forms of communication to those offered by the conventional or the government controlled media sources, and therefore catalyses the empowerment process. For example, when a devastating cyclone hit the south-eastern shores of India in 1999 killing hundreds of people, the women folks were able to comprehend through the internet that the scale of disaster was much higher because of the negligence and ill-preparedness of the State governments disaster mitigation agency as a cyclone of similar intensity in US had led to the loss of only nine lives. The opening up of alternate forms of communication with the external world made the women more informed and they were empowered enough to realise that their real causes of poverty were not natural disasters but ineffective state governance mechanisms. A link was therefore established by the women between bad governance and poverty- their first step to empowerment as they were able to identify the causal loop to their poverty and the players involved.

ICT makes the role of time and distance less significant in organising business and production related activities. As a result of the technology, a high proportion of jobs outsourced by big firms are going to women. Women therefore can work from anywhere and at anytime and raise that extra income to become more financially independent and empowered. Recently, companies like Ford and General Electrics have moved their back-end operations to Asia and employ a large number of women workers who have basic information technology and data management skills. New areas of employment such as telemarketing and medical transcription have also opened up tremendous job opportunities for women. These jobs are definitely underpaid and fall at the lower segment of ICT jobs; nevertheless, they are opening up avenues where none existed before. Keeping this trend in mind women can now get trained in any one of the knowledge based areas and with the help of ICT can be part of the highly paid work force. Using and benefiting from ICT requires learning, training, affordable access to the technology, information relevant to the user and a great amount of support (to create enabling environments). The challenges are many but with government support and socially motivated programs (like gender-sensitive programs—where deliberate steps are taken to remove barriers to women's participation and actively encouraging women's involvement) women can also become financial pillars of the society.

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