

## Information Technology Empowers by Women

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**Abstract:** It is universally accepted that Information Technologies offer immense opportunities for the comprehensive social and economic development of the people all over the world. Without its adoption, there is no chance for countries or regions to develop. However, the potential of a technology for promoting small scale industries by women is still under development in many countries. This paper discusses the success story of a corporate sector for poverty elimination using the case study on small scale industries women. It illustrates how can effectively be used as a technology for small scale industries, which are promoted by women under self-employment scheme. This paper discusses the establishment of small scale industries which they can promote such business for their economic empowerment.

**Keywords:** Information Technologies, women empowerment, Small scale industries, social and economic development.

### **1.1 Introduction**

Information Technologies (IT) consists of computer hardware, software, Internet and other communication networks, and media used to collect, store, process and transmit information in the form of voice, text, data and images. Empowerment refers to increasing the spiritual, political, social, or economic strength of individuals and communities. It often involves the empowered developing confidence in their own capacities. In short, IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information IT revolution is the result of integration of computer technology and communication technology. IT industry includes all companies that are engaged in production and marketing of hardware, software, services and networking. IT offers flexibility of time and space. These attributes make IT a valuable resource for women especially in developing countries who suffer from limited availability of time, social isolation, and lack of access to knowledge and productive resources.

However, there are two major areas of concern that have emerged due to variation in production and consumption of IT in different countries. They are the Digital Divide and the Gender Divide. The term digital divide refers to those who can benefit from IT, and those who don't. Also, gender-based inequalities limit how women can benefit from the opportunities offered by Information Technologies (ITs) and how they can influence the developing global knowledge economy, creating a gender divide. The World Summit on Information Society in 2003 affirms that despite significant regional variation, IT development affects women and men differently and in all regions women face fundamental barriers to benefiting from Its as well as influencing IT development policies. This report highlights imbalances between women's and men's access to and participation in IT and asserts that more needs to be done to ensure that women equally enjoys the benefits arising from global knowledge based economy at all levels of IT policy and practice.

The support of women's entrepreneurial activities is an important benefit of IT, which has not been realized properly in many developing countries. However, there are isolated experiences where IT is judiciously utilized for the economic empowerment of poor women. Such experiences need detailed documentation and analysis to identify key barriers to women's participation in IT as well as some innovative areas where women can participate in IT revolution

### **1.2 Historical Overview**

As the growth of electronic information transfer based on Internet, WWW, and the availability of low cost of computer devices. Unfortunately, with the growing population of using public network (such as internet or extranet), network intrusion events happened more frequently, According to Aberdeen Group's survey,

there were 100,000 network intrusion events reported in 2002, and caused company and personal 8.75 billion USD loss. Traditionally electronic information security models are use not active mechanisms such as encryption, system guards, firewalls, antivirus and internet security soft wares etc.

Other Highlights of Indian IT industries are:

- According to the Nasscom Strategic Report 2009, Indian software and services sector provides employment for 1.93 million people.
- Its contribution to GDP is estimated to have grown from 1.2% to 7.4% in the same period.
- The Indian IT industry is estimated to top \$60 billion exports in 2010.
- The total size of the Indian domestic market is expected to cross \$15.9 billion in FY 2008-09, a growth of 41% over FY 2007-08
- Total IT Software and services employment to reach 1.9 million in FY09.

### **1.3 Methodology**

The term empowerment covers a vast landscape of meanings, interpretations, definitions and disciplines ranging from psychology and philosophy to the highly commercialized self-help industry and motivational sciences. The research report was prepared after thorough analysis of primary and secondary data collected from IT industries, promoting agencies both in government and private sector, IT professionals and related web sites.

Sociological empowerment often addresses members of groups that social discrimination processes have excluded from decision-making processes through - for example - discrimination based on disability, race, ethnicity, religion, or gender. Empowerment as a methodology is often associated with feminism: see consciousness-raising. The Indian IT industry has grown its revenues ten fold in the past decade, from \$4.8 billion in FY 1997-98 to \$47.8 billion in FY 2006-07.

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### **1.4 Background**

IT is a potential ground as it has many positive factors, which are conducive to the growth of IT industry. Some of the factors, which contribute to the promotion and growth of IT industry, are:

- Availability of educated youth
- Ease of geographical access in extent and stretch both longitudinal and lateral
- Export based trade and commerce
- Extensive telecom network reaching all towns and villages
- High literacy and phenomenal growth in education, health and other services
- Large migrant population with extensive demands for connectivity
- Potential for tourism industry

### **1.5 IT-New Opportunities and New Jobs for Women**

Revolutionary changes in IT have been reinforcing economic and social changes, which in turn have been transforming the business and the society. There are different views on the involvement of developing countries in the IT revolution. Not only do most developing regions lack economic resources and indigenous techno-scientific capabilities to develop and deploy modern information system infrastructures, but they also tend not to make the best use of the opportunities of technology transfer. Comparisons with advanced economies show poor exploitation of the IT in developing countries.

The participation of developing countries in the production of information technology (as opposed to the use of information technology in other industries) poses significant opportunities and challenges. IT industries are likely to constitute the largest industrial sub-sector. The IT effects on employment pattern are

complex and shifting. It has been observed that because of lower wages, developing countries gain skilled job IT will affect employment pattern all over the world mainly in three ways:

- As an industry, it creates new jobs in various companies;
- It will change the pattern and level of employment in other industries, which are using IT for competitive advantage;
- It will create opportunity for creating new economic activity.

It is generally believed in India, that for getting an employment in IT industry one needs to be an expert in computer. However, the fact is that a large number of young people, especially women who are matriculate or graduates in any discipline can get suitable remunerative job in IT. According to John Gage of Sun Microsystems, three fundamental changes in IT are responsible for explosion in their use to promote economic development are plummeting cost, expanding access to network, and more powerful human to machine interfaces. These three changes will continue and accelerate. Consequently, IT will permeate the poorest regions of the world over the next twenty years. ITs promise an endless stream of benefits through technologies that generate employment and economic growth, link people closer together and promote mutual understanding, and applications that serve societal needs of people.

The World Employment Report, states that ensuring that workers have access to the technologies and that they possess the required education and skills to use them are the fundamental policies that the developing countries need to consider. The report places formidable emphasis on the independence of work from any physical location. Work that is independent of location has a growing share of employment in industrialized countries. Women are often thought to benefit from the new independence of work location. Call centers and data processing in developing countries are predominantly female occupations. As per the ILO report, through telecentres, the countries like Bangladesh, India and Senegal have been able to create direct employment for thousands of women and men. Such local entrepreneurial activities are likely to have positive externalities on local economies as well. It has been estimated that women operated telecentres increases the participation of women as consumers of these services

Among the poor families, risk families are being identified based on the following nine risk factors.

- People who have no houses of their own
- People for whom potable water is not available within 150 meters of their houses in urban areas and 300 meters in rural areas
- People having no primary facilities like washroom
- At least one member of the house must be illiterate
- Dependence on only one member for the income of the family
- People who have no means to get food twice a day
- Families having children below the age of five years
- Any one member of the family is liquor--drug add IT
- If they are scheduled caste/scheduled tribe (lower caste) families
- If any four or more of the above risk factors are applicable to a family, such a family is treated as a risk family.

These micro-enterprises owned by poor women functioning in various locations have established credibility and they are getting regular work for data entry, data processing, and DTP works from various government and private organizations. They even compete with big private and government companies and emerge successful in getting state level contract for data entry and data processing. The data entry work of revenue cards for the whole state, state level B.P.L family survey, election identity cards etc. are some of the state level projects, which are being handled by these units. Some of these units are engaged in software development, web design and manufacture and supply of computers.

Despite many areas of strengths, the promotion of IT based micro-enterprises is constrained by several major and interdependent weaknesses. The factors identified as weaknesses are:

- High cost of IT training
- Insufficient number of IT trained women

- Lack of facility for micro-credit
- Lack of supporting organization

Though, the growing market due to rapid computerization and outsourcing presents good opportunities, there is little reason for complacency as there are potential threat factors. The micro-enterprises are facing tough competitions from large-scale private sector organizations. The unstable political situation and frequent bandh and hartals were also highlighted as potential threats to the growth of IT based micro-enterprises in the state.

It requires a high degree of entrepreneurship for the success of IT enterprises. One of the most important things that a woman needs in order to be successful as an entrepreneur is to become empowered. In order to become empowered, women must be able to:

- Break through barriers
- Develop a strong will to achieve objectives Indian IT Industry by Sector- Figures in Million US\$
- Know and accept her capabilities and limitations
- Know her desires and convert these into objectives
- Know that she can acquire the abilities needed
- Look at herself confidently
- Overcome shyness
- Talk and act confidently

The government with the help of NGOs, financial institutions, and private agencies should conduct intensive entrepreneurship development programmers for the educated unemployed women. They should be fully equipped to take advantage of the opportunities that the IT offers them. It is also, necessary to provide short-term training in IT to the educated unemployed in the state and encourage them to take up self-employment.

IT provides an enabling potential to improve women's lives. IT can be an important tool in meeting women's basic needs and can provide the access to resources to lead women out of poverty. It is fortunate that the state has a conducive environment for the promotion and growth of IT based activities. The state's core competence in education can be transformed into economically rewarding and employable skills by deploying the tools offered by IT.

It is a widely recognized fact that the IT revolution is resulting in a widening global 'digital divide'. The digital divide between the developed and developing countries is also being replicated within each country, widening the income gap between those who share in the digital revolution and those who live on the other side of the digital divide. Digital divide is soon becoming the most visible component of a development divide. For developing countries, the digital divide, unless tackled, has several potentially harmful consequences, including further marginalization in terms of gender, rural, urban and poor- rich gap.

### **1.6 Conclusion**

It is universally accepted that IT offers immense opportunities for the comprehensive social and economic development of Developing Countries. Without its adoption, there is little chance for countries or regions to develop. The term women's rights refer to the putative freedoms and entitlements of women and girls of all ages. These rights may or may not be institutionalized, ignored or suppressed by law, local custom, and behavior in a particular society. These liberties are grouped together and differentiated from broader notions of human rights because they often differ from the freedoms inherently possessed by or recognized for men and boys and because activists for this issue claim an inherent historical and traditional bias against the exercise of rights by women and girls. Issues commonly associated with notions of women's rights include, though are not limited to, the right: to bodily integrity and autonomy; to vote (suffrage); to hold public office; to work; to fair wages or equal pay; to own property; to education; to serve in the military or be conscripted; to enter into legal contracts; and to have marital, parental and religious rights. Women and their supporters have campaigned and in some places continue to campaign for the same rights as men. It

illustrates how can effectively be used as a technology for small scale industries, which are promoted by women under self-employment scheme. This paper discusses the establishment of small scale industries which they can promote such business for their economic empowerment.

The IT based micro-enterprises by the self-help groups of poor women have helped the demystification of the common man that a few elite ones in the society are the only beneficiaries of the powerful IT. They have begun to consider IT as a tool for attaining knowledge and development by every one. The strategy to encourage the participation of the poor women in the digital revolution is expected to reduce the gap in digital and gender divide in this state. The economic empowerment of women via IT enables them to challenge discrimination and overcome gender barriers

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