

# Empowering Women Entrepreneurs through Information and Communication Technology (ICT): A Case Study of Bangladesh

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**Abstract** This paper in light of a proficient audit which concentrates on women entrepreneurship in Bangladesh and significance of information and communication technology (ICT) in engaging ladies business visionaries and what are the initiatives are taken to enhance in this part in our nation. The objective of this paper is to investigate and analyze how ICTs benefit women entrepreneurs to keep a running improvement in women empowerment in Bangladesh. This article also evaluates the current collaboration between the women entrepreneurs and ICTs in Bangladesh. Bangladesh is a developing country. The role of entrepreneurship is imperative for developing any country. In our country women always deprived of their rights. There is a concept in our society that women can only manage their home. The rate of literate of women is very low. However, now a day's women are more conscious about their right. The number of educated women is also increasing day by day. Women become self-independent. Entrepreneurship creates an excellent opportunity to make women self-independent. Enterprise means to start a new venture. Now women create her venture. For example, they can launch a boutique shop, a food shop. Entrepreneurship is a precious tool for empowering women. Today the age of globalization and Information and Communication Technology (ICT) is an essential element in this globalized world. ICT give a vast opportunity for women entrepreneur to empowering themselves.

**Keywords** Women empowerment, Women entrepreneurship, ICT

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## 1. Introduction

Entrepreneurship has been regarded as one of the important determinants of industrial growth both in the developed and in the developing countries. Despite its importance for the economy, the emergence of women entrepreneurship is a new phenomenon all over the world. Female entrepreneurs have become important players in the entrepreneurial landscape [1]. Nowadays the women of Bangladesh are no more only housewife and insider worker. They came out from home and took the challenges to change the economy, politics, and social culture in Bangladesh very rapidly. ICTs have provided a wide range of opportunities for development of women. It is a powerful catalyst for the political and social empowerment of women and the promotion of gender equality [2]. IT has redefined the traditional role of women and the dissemination of technology usage has benefitted the women in a large scale [3]. Women are increasingly adopting ICT for various

business related tasks like preparing letters and memos, producing a report, data storage and retrieval, budgeting, planning and analysing problems and alternatives [4]. ICTs have been a dominant force in women development since they provide and foster communication which enhances the exchange of relevant information for marketing, purchasing and also knowledge creation and dissemination [5].

## 2. Background of the Study

The world witnesses a data and innovation transformation. This rebellion has touched each part of individuals' life including women's empowerment. The production of a domain for women where they can settle on choices of their own for their advantages and also for the general public alludes as the expression "Women Empowerment." Women are becoming more involved in the business world nowadays. In this period of Modern Technology, nothing is autonomous of Information Technology on the off chance that it needs to continue with a fast advance. Women play a crucial role in every field of different sectors along with men. So, women's empowerment can be speeded up through the use of information technology in various aspects of it. At present, female entrepreneurs are offered new opportunities by ICTs

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to start and grow businesses. Through new as well as traditional forms of ICTs, women entrepreneurs are reaching out to customers, becoming more efficient and building their businesses in ways they could not do before. Hence it is necessary to introduce the women entrepreneurs to the terms and use of ICTs to ensure women empowerment.

### 3. The Scenario of Women in Bangladesh

The literacy rate in Bangladesh is lower for females (55.1%) compared to males (62.5%) - 2012 estimates for the population aged 15 and over [6]. During the past decades, Bangladesh has improved its education policies; and the access of girls to education has increased. In the 1990s, girls' enrolment in primary school has increased rapidly. Although there is now gender parity in enrolment's at the primary and lower secondary school level, the percentage of girl's drops in the later secondary education years [7]. Women in Bangladesh are in many ways inferior to and dependent on men from early childhood. When the girl reaches puberty, her marriage will soon be arranged, and the family will pay the husband's family a dowry to marry off their daughter to him. The girl will after that pursue the rules of Purdah and live in seclusion. Women that can obtain Purdah strictly show high social status. Only poor women have to go outside to work [8]. Violence against women is common in Bangladesh [9]. Even if the constitution promotes equal rights to women, women still suffer from discrimination and violence that occurs in the home, at the workplace and on the society level as well [10]. The women in rural Bangladesh are hard working. Foremost, they perform heavy household work throughout the days. Women's contribution to the family income is not recognized to the same extent as men's, but they are however involved in many activities, such as post-harvest activities, farming, fuel gathering, rice husking, making and selling handicrafts, and rearing domestic animals. Although women's work is hard and time-consuming, such work does not provide them equal status to men. A woman seldom earns money on her own but is financially dependent on her father, then husband, and after that, her son for economic security [11]. Only one-third of the women in Bangladesh can read or write, but the school attendance has increased since the past decade. To improve the literacy and education level of girls and females, the school fee is removed for girls the first ten years of school, twice as many years as for boys because the families often are reluctant to pay for their daughter's education [12].

### 4. Women Entrepreneurship in Bangladesh

Entrepreneurship recognized as the engine of growth in economies worldwide. Over the past 20 years, female

owned businesses grew dramatically in number, revenues, and employment. For example, in Norway and Canada nearly 60-65 percent of the new businesses were started by females [13-15]. Females are increasingly turning to entrepreneurship as a way of coping with the "glass ceiling" that seems to prevent them from reaching to management levels in organizations [16]. Others find that entrepreneurship provides them with greater satisfaction and flexibility [17, 18]. Entrepreneurship has become an important profession among the women of Bangladesh today at various levels of the society, both in the urban and the rural areas. The reason for the interest varies according to the different classes of the society [19]. Where women of the poorer sections of the society, especially in the rural areas, have been forced into off-house income through entrepreneurship for economic solvency; the women of the middle-class families, who have always lived restricted lives, have today, ventured into entrepreneurship as a challenge and an adventure into a new world of economic activity. On the other hand, many women have taken up enterprise and become businesswomen not necessarily to earn and survive and raise the living standards but to form their careers and become professionals to establish their rights through the development of a sector and thereby contribute towards the progress of the society and the nation [20]. The biggest challenges affecting women entrepreneurs are cultural differences and practices, economic status of their country and their family which affects financial viability, biased gender roles and expectations, limitations to legal avenues and capital funds, support group to build business confidence and share skills and knowledge, economic sanctions, and inability to utilize ICT to source, build, access markets. An enhanced program for sustainable entrepreneurship status for women through ICT must have regional cooperation and shared vision to seek support and push their agenda from their government to help women-led businesses, access to loans and simplified loan process, provide baseline data and other data source, create a pilot program, develop ICT learning tools and capabilities to access market and develop ideas [21].

### 5. Women's Empowerment through ICTs

In today's technologically advanced world, Information and Communication Technology (ICT) has initiated a multiplicity of changes in several spheres. ICT has become a key solution for comprehensive development starting from poverty eradication and empowerment of minority groups, such as women and minorities in Global South [22-26]. ICTs are consistently hailed as one of the most effective tools for economic development. Moreover, this helps women entrepreneurs in a tremendous way for the improvement of their business. Women's empowerment and capacity building in numerous ways, frequently with

synergetic effects [27].

- Training in the use and design of computer applications, such as e-mail, word-processing and design applications build marketable skills.
- Marketable skills create alternative possibilities for income generation and the possibility of upward mobility
- Increased agency and self-confidence allow women to travel more and develop a wider network of contacts. Such travel and networking expose them to the availability of more economic opportunities.
- ICTs open new avenues for education, communication, and information sharing.
- ICTs can be a valuable tool for the organization and mobilization of women's advocacy and interest group
- Education and information increase knowledge about the world and the political, economic, social and cultural factors that shape women's lives.
- Finally, women's empowerment and a country's level of economic development are inextricably linked. However, still, one must not be seduced into believing that ICT-enabled development projects for women are panaceas, but be mindful of the very significant challenges faced by women in ICT-based businesses.
- Indeed, the IT sector remains one of the most gendered sectors. Women face barriers to the use of ICTs, mostly lack of training, lack of access, the high costs of equipment and connection as well as software and hardware applications and designs that do not reflect the needs of women. These barriers are often exacerbated by extreme poverty and highly patriarchal social structures that relegate women to a much inferior status.

## 6. The Increasing Use of ICTs by Women Entrepreneurs

ICTs are potential tools for women entrepreneurs. On the global stage, they are transforming how business is done, opening up opportunities for larger numbers of entrepreneurs to enter global value chains. E-commerce, which involves the buying and selling of goods and services on the Internet or other electronic platforms, is making it possible also for micro-entrepreneurs to engage in a trade by creating "virtual storefronts" on websites with online catalogues and marketing or selling their products to the global market. This is a capacity which was previously largely confined to larger companies.

Mobile phones, SMS, e-mail and Internet-based telephony (such as Skype) are now increasingly used by women entrepreneurs to correspond with and reach prospective and established customers, as well as business associates and partners. The dissemination of marketing, sales quotations, and other product and service information through different ICT means are for many already standard

practice.

When used, ICTS can enable women entrepreneurs to achieve greater levels of profitability, by making internal processes (such as order processing or customer contact information management) more efficient and by enhancing the effectiveness of externally-directed business activities. In many low-income countries, the use of a mobile phone has allowed women entrepreneurs in diverse sectors to save time on travel, expand outreach, receive orders and in some cases transfer money. Instead of going from town to town, going from one person or two, women can use the telephone to call the person they were going to. It saves time. It saves money. It saves energy. Moreover, women have many things, family causes, a lot of them, so time is scarce. With ICTs, time for a woman becomes manageable [28].

## 7. Institutional Initiatives for ICT Development among Women Entrepreneurs

### 7.1. Necessity of Institutional Initiatives

ICT can benefit women in many ways. It can facilitate their participation in different sectors and different regions. ICT has a strategic link with poverty reduction. The Internet, email, and mobile phones top the list of new tools. Now buying selling or renting ICT equipment itself is a source of income. The cell phone has already ushered in such income among many a rural woman in Bangladesh. The computer training institutes in our country should set the course curriculum by the need and demand of our nation. Access to the Internet is still very limited for several reasons, like poor teledensity, poor electricity, reduced affordability of computer and knowledge about the Internet. Public Internet access is very restricted in the private telephone centre and cyber cafes [29].

### 7.2. Different Institutional Initiatives in Bangladesh

Bangladesh is a densely populated country, and half of her total population is women. Development in all spheres of this vast population is highly needed to ensure the long-term economic stability and prosperity as a priority. Women empowerment is, therefore, a development challenge for ours as most of the women are not involved in economic activities. Under the Government Digital Bangladesh policy and the thrust sector initiative, an atmosphere exists for accelerated growth and meaningful engagement through active interaction and transforming the country into medium income economy and achieve Vision 2021 by ensuring the full participation of women in economic activities.

This is a great opportunity for the women because this political assurance has created internet connectivity almost all over the country and related infrastructures are also developing. Women can take this opportunity, but they need

to be trained properly [29].

#### 7.2.1. SMEF

'Small and Medium Enterprise Foundation (SMEF),' widely known as SME Foundation, is an apex organization in Bangladesh for promoting micro, small and medium enterprises (SMEs). SME Foundation has been facilitating SME development all over the country through providing entrepreneurship and skill development training, technological supports, collateral free credit facilities with a single digit interest rate, ICT supports, business advisory services, research and policy advocacy services, supports to the government for SME related policy implementation, etc. The Foundation is providing a particular emphasis on the women empowerment issues to ensure the full participation of women entrepreneurs in the economic development process of Bangladesh [30].

#### 7.2.2. a2i Program

'Access to Information (a2i) Program' of Prime Minister's aims to improve quality, widen access and decentralized the delivery of public services to ensure responsiveness and transparency. The 'a2i Program' has established 4,547 UNION DIGITAL CENTERS, one-stop service outlets operating Union Parishads (UP, the lowest tier of local government) of the country [30]. An interesting component of these computerized focuses is that these are controlled by neighbourhood private business visionaries where ladies business visionaries were observed to be extremely proactive. 4516 female business visionaries constitute the 50 percent of all entrepreneurs included in Union Digital Centre (UDCs) and together they were acquiring BDT 1.3 billion (USD 16 million) every year from these UDCs as of January 2013 [31]. UDCs have effectively turned out to be fiscally maintainable as 3,859 centres are making benefit and 633 centres are winning not exactly their consumption. UDCs are gaining an interest of 24.30 million taka for each month all things considered with every inside procuring 5,410.26 taka on month to month premise [32].

#### 7.2.3. BWIT & MoU

'Bangladesh Women in Technology (BWIT)' is a forum for Bangladesh's ICT sector of women entrepreneurs, professionals, and corporate forerunners, who are currently leaders in the ICT sector in the country. SMEF in collaboration with a2i and BWIT has taken the initiative to create and develop women ICT entrepreneurs all over Bangladesh. In this perspective, a tripartite Memorandum of Understanding (MoU) has been signed among SMEF, a2i and BWIT to launch "Women ICT Entrepreneur Development Program' among the grass roots [30].

Under this MoU, in the primary phase, a pilot program has already been initiated for developing about 300 women ICT entrepreneurs through conducting ten pieces of training on Graphic Design/Data Entry/Accounting/ and so forth. In different rural and urban areas of Bangladesh. The target

group of the pilot program is 300 grassroots women who have basic computer literacy and passed Secondary School Certificate exam (Grade 10 equivalent). The primary objective of this program is to create opportunities for women to be part of the supply chain. The main goal of this program is to build opportunities for women to be part of the supply chain [30].

#### 7.2.4. MoWCA

With the support of the Ministry of Women and Children Affairs (MoWCA) SME Foundation, BWIT and a2i has now jointly targeted 3,000 women to develop as ICT entrepreneur from all over the country with an emphasize to the remotest and poor areas. The target group is the poor women with a minimum requirement of S.S.C. (Secondary School Certificate) and basic computer literacy. As a result of this program, some of the women will be developed as ICT freelancer, some of them will be elaborated as ICT entrepreneurs. Besides these, a pull of ICT skilled trainers will be generated from the program [30].

## 8. Initiatives were taken by the Institutions

SMEF, BWIT, and a2i will jointly provide supports to nurture the entrepreneurs to sustain in this competitive marketplace. SMEF, BWIT, and a2i already initiated the program for providing following supports to nurture them such as [30]:

- Create ICT Entrepreneurship for ensuring empowerment of women at the grass root.
- Create opportunities for women to be part of the supply chain.
- A database will be created highlighting their profiles, and the link to this database will be posted on public and other websites. Government and corporate can readily find resources to engage these women in their efforts for inclusiveness and employment
- Job fair/matchmaking program will be arranged to create linkage with the members of the 'Bangladesh Association of Software and Information Services (BASIS)' and other similar associations/associations.
- Arrange matchmaking events by involving Bankers and ICT entrepreneurs to avail collateral free loan at a particular interest rate from SME Foundations 'credit wholesaling program.
- A forum will be created to connect and to develop expertise among them.

## 9. Initiatives need to be taken

Access to ICT at the university level has achieved a very limited success. The ICT penetration in primary, secondary and higher high school level is not satisfactory at all. Only a small number of urban schools and colleges have ICT

facilities for education purpose. There is an enormous crisscross between the market request and the courses advertised. Our country does not create an adequate number of qualified ICT experts in our instructive and preparing establishments to take into account household request. The relocation pattern of value ICT expert is disturbing. In this way, we ought to:

- Execute training program in programming designing, PC correspondence and sight and sound with the educational modules that merges the most recent innovation.
- Present 'fundamental computer skills' as a necessary subject for all understudies at Intermediate and Graduate level.
- Polytechnics and other preparing establishments ought to offer confirmation in ICT.
- Unemployed girls, ladies, and youth ought to be supported and given the need for ICT instructional classes versus advertising request.
- A national specialized training of teachers' centre should be established for solving the problem of acute shortage of quality teachers in ICT.
- Female students and educators of university and colleges should get free or subsidized access to the Internet.
- All colleges and higher instructive establishments ought to be organized for better access to learning and data.
- Essential and auxiliary level instruction ought to be underscored for augmented run return in ICT industry.
- Additional training organizations on ICT for the girls and ladies ought to be built up. Poor and worthy students, unemployed girls, women ought to be without given of cost preparing, convenience, preparing materials, and so on.
- After completion of training, a bank loan may be offered to them on easy terms to set up cyber café or computer, a training institute in urban and rural areas.
- "JAWS" talking software can be without given of cost from the instructive foundations or Government officials to the outwardly debilitated female and male students and also the common software to the incapacitated students.
- Government of Bangladesh, BTTB, and the cell phone organizations in our nation, ought to urge more unemployed women to maintain the business of telephone, FAX, PC create, and so on.

## 10. Conclusions

Information and communication technologies (ICTs), in particular, mobile phones, the internet, and computers, play a major role in accelerating business growth. ICT makes easier the barriers that a woman faces in the family and socially. The Government of Bangladesh seems to perceive the

significance of ICTs for business, and some are making critical interests in ventures that enhance ICT foundation.

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