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The Role of Information Technology in Women's Empowerment: A Discussion in the Context of Bangladesh

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Abstract

In Bangladesh, there have been notable developments in the area of women's empowerment. Women's participation in various fields including politics, economy, government and private sector jobs is increasing. One of the key elements of empowering women is their economic independence. When women achieve self-sufficiency, they find it easier to express their views and engage in various aspects of life, including personal, familial and social spheres. At present, information technology (IT) is significantly influencing the economic independence of women in Bangladesh. IT is transforming the landscape of opportunities available to women. Through the benefits of technology, women can now prioritize access to education, job opportunities, entrepreneurship and social involvement. With the rise of mobile phones, internet access, and digital platforms, women in Bangladesh are increasingly able to obtain information from home, participate in online education and engage in income-generating activities such as freelancing and e-commerce. Initiatives like Digital Bangladesh and ICT training programs specifically designed for women have further accelerated this progress. However, the digital divide continues to be a substantial barrier, especially for women in rural and marginalized communities who face challenges related to limited access to technology, digital literacy and cultural barriers. By addressing the barriers, IT can become a transformative force that enables Bangladeshi women to overcome socio-economic constraints, enhance their representation and contribute more actively to national development. This paper explores the multifaceted role of IT in advancing women's empowerment in Bangladesh.

Keywords

Women, Technology, Economic Empowerment

1. Introduction

The success of women in Bangladesh is exemplary and can be followed all over the world. Our government has adopted various plans and strategies for women's development, women's workplace, women's empowerment and establishing equal rights for women. As a result of the successful implementation of these policies and strategies, significant progress has been made in gender equality and women's empowerment in Bangladesh (Islam & Abdullah-Al-Hossienie, 2008). Women's participation is increasing in various fields, including politics, economy, and public and private employment. One of the most important aspects of women's empowerment is their economic freedom. When a woman is self-reliant, it becomes easier for her to have an opinion and participate in all areas of personal, family, and social life. Currently, technology is having a special impact on the economic emancipation of women in Bangladesh. By using technology, women are getting opportunities to work in various fields both at home and abroad. In other words, technology offers opportunities for direct, interactive communication even by those who lack skills, who are illiterate, lack mobility and have little self-confidence. Nowadays, we find more women are employed in various knowledge based industries such as computer-aided design, graphic design, composing etc. With this growing number of women's employment, the job environment is becoming more convenient and friendly for women. This changed scenario indicates a positive attitude towards women's employment (Jagonews24, 2016).

So we can say that technology has helped women's society to turn around. Even the section of women's society that had no access to technology has also benefited from this. Women are showing equal skills in using technology. Women have chosen various employment options, including technology-based entrepreneurship, to escape unemployment and poverty. As a result, Bangladesh has made great economic progress in recent years. The status and position of women have also changed. Currently, women's participation is visible in almost all sectors of society. However, since not all classes of people have equal access to technology, the benefits of this progress have not reached everyone equally. The question is how much existing technology is women-friendly. About 55 percent of women are still excluded from technology in terms of access and benefits (Tyers-Chowdhury & Binder, 2021). In Bangladesh, roughly 50.2% of women do not use internet services, meaning about half of the female population remains completely offline (Bonik Barta, 2026). We have the highest gap between men and women in receiving mobile internet services at 40% among Asian countries. The gap is 30% in India, 38% in Pakistan and 8% in Indonesia (Dhaka Tribune, 2024).

2. Objectives

The main objectives of the study are:

- To analyze how access to information technology contributes to women's socio-economic empowerment in Bangladesh.
- To identify the factors affecting women's empowerment.

- To evaluate the impact of government and non-government initiatives aimed at promoting digital inclusion for women in Bangladesh.

3. Methodology and Sources of Data

The present study is categorized as explanatory. This study is based on primary and secondary data. For primary data, a female outsourced worker was interviewed to gather preliminary information relevant to the study. The information obtained during the interview was documented. Further a thorough examination of pertinent documents and published sources is carried out to investigate the research goals. The secondary data is obtained from annual reports of various organizations dedicated to women's rights, Government Gazettes, national newspapers, relevant articles and literature, as well as various websites. These sources offer important information about the topic and assist in understanding current trends, difficulties and the policies that have been implemented. The data that has been gathered is carefully examined, studied and explained in a structured way to gain a full grasp of the research subject.

4. Women's Empowerment

The notion of empowerment was first emphasized by the World Bank in its World Development Report for the years 2000-2001 (World Bank, 2001). According to the World Bank, empowerment refers to the process of increasing the ability of an individual or group to make intentional choices and to convert those choices into favorable actions and results (Alsop et al., 2006). Women's empowerment is defined as the journey in which women become conscious of the imbalanced power relations influenced by gender and obtain a more significant opportunity to express their opposition to the inequalities that exist within the household, workplace, and community (United Nations, 2014).

Women's empowerment is the process by which women develop their ability, self-belief, capital and authority to make their own decisions and take control of their lives. Analytically, it is a multidimensional idea that covers many different areas, including economic, social, political, educational and legal aspects. Historically, women have experienced discrimination and inequality in education, employment, and healthcare sectors. In the context of Bangladesh, the empowerment of women includes providing them with educational resources, skill development, and equitable job opportunities, allowing them to attain financial independence. Women with economic empowerment can assist their families and play a role in reducing poverty.

5. Importance of Women's Empowerment

Women empowerment is essential for the sustainable development of Bangladesh. In Bangladesh about 50.8% population is female (World Bank, 2007). The number of working women in Bangladesh was about 24.51 million (BBS, 2023). According to various reports, although the number of working women is high, their partici-

pation in the workplace is still very low. But to ensure women's empowerment, Article 28 (2) of our Constitution states that men and women shall enjoy equal rights in all aspects of state and public life (Ministry of Law, Justice and Parliamentary Affairs, Bangladesh, 2019).

Many women, especially in rural areas, still face social, economical and cultural barriers that limit their opportunities and potentials. Every woman must be ensured involvement in economic and social activities through which women's empowerment can truly be realized. Women's empowerment does not mean opposing men, but rather fighting against patriarchy, fighting against gender inequality. To establish women's empowerment, women must be given dignity in all spheres of society and all forms of violence against women must be prevented.

6. Women in IT Sector

Although information and technology entered Bangladesh a long time ago, in the 21st century, IT has become a big part of our daily lives. In this era of digitalization, information technology is being applied in all aspects of life and work. Women's participation in the information technology sector is increasing and this picture is gradually changing. While this sector was once considered a male domain, women are now proving their mettle in everything from educational institutions to the workplace, and even in ventures like e-commerce. Currently, about 20%-25% of women are involved in this sector in the country. Besides, women's participation in management roles within the IT sector stands at 15%. On the other hand, women's participation in India's IT sectors stands at approximately 32% (Invest India, 2023). A study has shown that about 25 percent of female students are studying computer science or ICT-related subjects in universities in Bangladesh (Daily Janakantha, 2022). Although this is not half of the total number of students, but it indicates a positive change. Interest in science subjects is being developed among girls from the school level, which is encouraging them to choose engineering or IT careers.

Meanwhile, the current government has taken various initiatives to increase women's participation in the IT sector and build a digital Bangladesh. The Leveraging ICT for Growth, Employment and Governance (LICT) project, funded by the World Bank, aims to develop more than 10,000 skilled women in the IT sector and is conducting various incentive campaigns to ensure that at least 30 percent of women participate (Bangladesh Songbad Sangstha, 2022).

7. Role of IT for Empowering Women in Bangladesh

Nowadays, IT in Bangladesh is playing a vital function in empowering women by facilitating access to education, economic opportunities and information, thereby assisting them in overcoming socio-cultural obstacles and engaging more comprehensively in our society. By closing the digital gap and fostering digital literacy, IT can enable women to achieve greater economic independence, access necessary services and take part in decision-making processes. Some specific ways to em-

power women through IT are.

7.1. Educational Empowerment

Information Technology plays a crucial role in the educational advancement of women in Bangladesh, breaking through conventional obstacles to knowledge. Through governmental programs like Digital Bangladesh and initiatives such as Tottho Apa, women in rural areas are gaining access to the digital literacy and education they rightfully deserve. Different digital instruments, such as computers and smart phones are allowing women to fulfill their domestic obligations while improving their skills.

7.2. Economic Empowerment

The role of Information Technology is pivotal in the economic empowerment of women in Bangladesh. Digital platforms provide women with easy access to market insights, opportunities to connect with customers and updates on pricing, demand and business opportunities. Numerous online training programs and digital resources facilitate the development of their entrepreneurial and technical skills, allowing them to confidently launch and manage their own businesses. E-commerce platforms and social media-driven enterprises allow them to reach broader markets from their homes. The flexibility to work at any time and from any location serves as a catalyst for achieving financial independence. By earning extra income through freelancing, online businesses, and digital services, women are enhancing their economic position and contributing positively to their families and communities.

7.3. Social Empowerment

IT plays an essential role in advancing the social empowerment of women in Bangladesh. It supports women in gaining knowledge, developing their skills and participating actively in their communities. This access to information enhances their perspectives and strengthens their confidence. Digital platforms make women more cognizant of vital social issues, including gender equality, child marriage, domestic violence and women's rights. Women can share experiences, seek advice and receive emotional support by using IT. Successful women in the IT sector serve as role models, inspiring others to pursue education and careers in technology.

8. Government and Non-Government Initiatives

In Bangladesh, both government and non-government entities have launched numerous efforts to foster digital inclusion for women. The government has rolled out programs focused on digital literacy, ICT training and technology-driven public services aimed at increasing women's access to information technology. Programs such as digital centers and skills development initiatives are designed to boost women's technological expertise and job prospects. Additionally, the Joy-

eeta Foundation, a non-profit organization affiliated with the Bangladeshi government, is dedicated to empowering women entrepreneurs economically. This initiative provides women with training and equips them with skills in digital marketing. On the other hand, non-governmental organizations also offer training in information technology, support for starting digital businesses and chances to run online businesses, especially for women in rural areas. A program is being carried out with Plan International Bangladesh and Telenor to improve digital access for women in rural and less privileged areas, with a strong emphasis on empowering women. These programs are helping women build digital skills, access financial services, get involved in online business and become more financially independent.

9. Recommendations

9.1. Security and Legal Assistance

Women are often victims of bullying in some way or the other. Therefore, strict cyber security laws must be enforced and justice must be ensured. An online reporting system can be introduced for women who are victims of harassment. Cyber security cells should be activated in every district and women should be encouraged to file complaints.

9.2. Skills and Training

Special training on the use of technology should be introduced for rural and urban women. Special projects should be further strengthened to increase women's participation in the IT sector.

9.3. Economic and Social Support

Low-interest or interest-free loans should be provided for women entrepreneurs. Government and financial can launch specific funding schemes, grants and incentives to support startups.

9.4. Family Awareness

Social awareness campaigns should be conducted to remove negative family attitudes towards girls' use of the internet. Community seminars, school programs, and media campaigns can highlight the benefits of digital skills and online careers.

9.5. Infrastructure and Policy

It is essential to collect gender-specific data on women's digital engagement and safety in order to create effective policies. The existing National Women's Development Policy should be amended to include detailed provisions related to the use and protection of technology.

10. Case Study 1

Ayesha Akhter, a 35-year-old woman. She got married before completing her CSE

honors from a private university. With a supportive husband and two children, she devoted her early married life to family responsibilities. However, once her children began attending school regularly, she found herself with valuable free time and a strong desire not to let it go to waste. She wanted to use her education and skills. Afterward, she spoke with her husband and made the decision to start outsourcing work from home. She completed a short-term professional course to improve her technical and freelancing skills. Later on, she began outsourcing work from her home. At first, attracting clients was a challenge. Within six to seven months, her workload grew significantly. She often worked late into the night to meet deadlines, showcasing her dedication and professionalism. The extent of her work was increasing each day and it was becoming increasingly difficult to handle everything on her own. Realizing this, Ayesha hired five women who already had fundamental outsourcing skills. Over time, her team expanded to ten women. Today, she successfully manages this small outsourcing group, empowering other women while balancing her family responsibilities. After deducting her expenses, she earns an average of 70,000 taka each month and enjoys both financial security and family joy.

11. Conclusion

Women's empowerment is a major goal of the Bangladesh government. That is why special importance has been given to women's empowerment in the 8th Five Year Plan in the light of SDGs. The government has taken various steps to advance women in every field. Everyone must come forward for the overall development of women, including increasing the use of information technology for the development of women. Various steps must be taken to promote and create awareness on this issue at the government and private levels. In addition, information technology-related infrastructure must be built so that thousands of women can find the path to development and liberation.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Alsop, R., Bertelsen, M. F., & Holland, J. (2006). *Empowerment in Practice: From Analysis to Implementation*. World Bank Publications.

Bangladesh Bureau of Statistics (BBS) (2023). *Quarterly Labour Force Survey 2023.* https://objectstorage.ap-dcc-gazipur-1.oraclecloud15.com/n/axvjbnqprylg/b/V2Ministry/o/office-bbs/2024/12/8cf9c77aca1c4142841a35c6f2b07911.pdf

Bangladesh Songbad Sangstha (2022). *Narir Khamotayane ICT*. https://www.bssnews.net/bangla/national/28754

Bonik Barta (2026). BBS Survey Reveals Half of Women in Bangladesh Still Outside Internet Services. *Daily Bonik Barta*. https://en.bonikbarta.com/technology/xluxkhP9rKzkrgCA

Daily Janakantha (2022). *Projukti Sektore Narir Dhakkhata.*

https://www.dailyjanakantha.com/science-technology/news/665497

Dhaka Tribune (2024). Report: Bangladesh Tops Asia with 40% Gender Gap in Mobile Internet Usage. *Dhaka Tribune*. https://www.dhakatribune.com/bangladesh/346828/bangladesh-tops-asia-in-mobile-internet-gender-gap

Invest India (2023). Technology Driven by Women: An Indian Scenario. *Invest India*. https://www.investindia.gov.in/team-india-blogs/technology-driven-women-indian-scenario

Islam, M. S., & Abdullah-Al-Hossienie, C. (2008). *Role of Information Technology in Socio-Economic Development of Bangladesh: An Overview.* https://www.researchgate.net/publication/389826114

Jagonews24 (2016). *Totthoprojukkie Narimuktir Disha.* https://www.jagonews24.com/technology/news/97564

Ministry of Law, Justice and Parliamentary Affairs, Bangladesh (2019). *Laws of Bangladesh*. http://bdlaws.minlaw.gov.bd

Tyers-Chowdhury, A., & Binder, G. (2021). *What We Know about the Gender Digital Divide for Girls: A Literature Review. UNICEF Gender and Innovation Evidence Briefs-Insights into the Gender Digital Divide for Girls*. UNICEF.

United Nations (2014). *Women's Rights Are Human Rights*. https://digitallibrary.un.org/record/787840?v=pdf

World Bank (2001). *World Development Report 2000/2001: Attacking Poverty. World Development Report*. https://documents1.worldbank.org/curated/en/230351468332946759/pdf/World-development-report-2000-2001-attacking-poverty.pdf

World Bank (2007). *Empowerment in Practice: Analysis and Implementation*. https://documents1.worldbank.org/curated/en/228391468316433744/pdf/429950WP0Empow10Box327342B01PUBLIC1.pdf