## Role of the Digital Age: An Analytical Study of Technological Impact on Women's Empowerment in Punjab, Pakistan

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## Abstract

*The digital age has revolutionized the way we connect, live, and work. It has transformed to reshaped the society, with offering the chances of productivity and efficiency in every walk of life. Today, Pakistani women are increasingly using technology to access education, information and economic opportunities. It has the potential to endow women in many conducts. In Pakistan, particularly in the province of Punjab, swift technological expansions have unlocked new ways for women to empower themselves. This study examines the role of digital technology in women's empowerment in Pakistan particularly in Punjab. Mixed-methods approach has used to investigate the proposed topic by surveying 72 women in Punjab and conducting 10 in-depth interviews to gain a deeper understanding of their experiences with technology. The findings show that technology has had a positive impact on women's empowerment in Punjab, especially in terms of education and economic opportunities. However, the study also identified several challenges, such as limited access to technology, digital literacy gaps, and cultural barriers. Furthermore, this study highlights the importance of implementing targeted interventions to address these challenges and ensure that women in Punjab take full advantage of the opportunities offered by the digital age.*
***Keywords:*** *Digital Age, Technology, Women's Empowerment, Punjab, Pakistan, Socio-economic Impact, Gender Equality, Digital Inclusion*

## 1. Introduction

The digital age has brought about fundamental changes in how people comprehend, connect, and deal. It has the potential to endow women in many conducts. In Pakistan, particularly in the province of Punjab, swift technological expansions have unlocked new ways for women to empower themselves (Batool & Afzal, 2023). Women in Punjab, Pakistan are progressively using technology for health, education, and economic improvement. Likewise, digital platforms are also supporting women's involvement in the digital economy by accessing markets and preliminary starting their peculiar businesses (Shahbazi, Hakimi, Ulusi, Rahimi, & Quraishi, 2024). They also improve women's access to, vital resources, healthcare, and financial services. But at the same time, women are still facing many social, economic, and cultural obstacles in some areas of Punjab, Pakistan, such as traditional norms are patriarchal societies often confine women's mobility, decision-making and independence (Saddhono, Suhita, Rakhmawati, Rohmadi, & Sukmono, 2025). But we can't deny the role of technology in their lives because with advancements in digital technology, women in Punjab, Pakistan are increasingly using these tools day by day to improve their socio-economic status and to encounter all these traditional norms and challenges (Meena, 2023). The proposed study aims to explore the role of technology to empower Pakistani women particularly in Punjab. As digital age has introduced significant changes today in how people access information, communicate, and participate in the economy (Rajput, 2021). Mobile phone and internet penetration have increased substantially in Punjab, Pakistan's most populous province, and women are becoming more confident in using technology (Qadri, Ghani, Abbas, & Kashif, 2024). Targeted initiatives, such as digital literacy programmes, improved access to technology, and social and cultural support, could help overcoming these obstacles. Women entrepreneurs gain many opportunities through digital technology (Meena, 2023). This change aligns with the UN's Sustainable Development Goals by 2030. Digital tools that help women balance work and home life can also contribute to closing the gender pay gap (Shahbazi, Hakimi, Ulusi, Rahimi, & Quraishi, 2024). These tools facilitate women's ability to work outside the home, supporting their career ambitions while managing family responsibilities. This progress significantly advances Sustainable Development Goal 5 (Jaiswal, 2025). Many established companies now maintain online profiles for their operations, while new ventures are emerging as fully online businesses. This shift is partly due to lower initial investment requirements. It also offers women more opportunities to establish their own businesses. E-commerce involves trading goods, services, or data online (Nguyen, 2022). This process uses computer systems and the internet. E-commerce involves exchanging electronic messages and using computer systems for business transactions. It transforms business relationships between groups and between businesses and consumers, creating value (Oyeyemi, et al., 2024). Women in Pakistan face barriers to economic participation, such as limited access to education, funding, and skills training. E-commerce presents a promising avenue, empowering women to start businesses that can increase family income. Economies benefit from reduced costs and access to a global customer base (Qadri, Ghani, Abbas, & Kashif, 2024). This study underscores the importance of technology in empowering women in Punjab, Pakistan. By providing women with education, economic opportunities, and social connections, technology can be a key tool for empowerment. It also examines how digital tools have helped women find work and the challenges they encounter as online business owners. However, tackling these challenges is essential to ensuring women's full participation in the digital economy.

**1.1 Research Questions**

RQ#1. How has the digital age impacted women's empowerment in Punjab, Pakistan?

RQ#2. What are the main technological factors affecting women's empowerment in Punjab, Pakistan?

RQ#3. How do women in Punjab, Pakistan, perceive the role of technology in their lives and empowerment?

**1.2 Research Objectives**

The main aim of this study is to investigate the impact of technology on women to empower themselves with a focus on education, economic opportunities, and social improvements. It also examines the role of digital literacy in women's rights and how it influences their technology use and socio-economic status in Punjab, Pakistan. Additionally, the study analyses how technology enables women in Punjab to access new economic opportunities such as online employment and entrepreneurship. Furthermore, it explores the social, cultural, and economic barriers that hinder women in Punjab from adopting and using technology.

**1.3 Research Methodology**

This study used a mixed approach. It surveyed 72 women in the most renowned 5 cities of Punjab, Pakistan, and gathered data through a Google form sent online to women in Punjab using a structured questionnaire to gather information about their access, digital literacy, and experiences with technology. Additionally, the study conducted 10 in-depth interviews with women who have used technology for educational, healthcare, and economic purposes. Responses were then analyzed using descriptive statistics and logistic regression techniques. After collection, the data were coded, synthesized, and analyzed using the versatile data management and analysis tool SPSS.

**2. Materials and Methods**

The nature of the topic is broad and exploratory. This study used a mixed-methods approach. It combined different research methods and followed a phenomenological research design. Data was gathered from random women in Punjab, Pakistan using a proportionate sampling method.

**2.1 Population and Sample Size**

The population for this study includes women living in Punjab, Pakistan, five major cities of Punjab are selected, namely Faisalabad, Lahore, Rawalpindi, Multan and Bahawalpur, who have access to digital technologies such as mobile phones, the internet, and social media. The population is diverse, representing women from different socio-economic backgrounds, ages, and locations within Punjab. The study's sample consists of 72 respondents who took part in the survey and 10 women who were interviewed. Survey participants were selected using a convenience sampling method, while interviewees were chosen based on their experience and expertise in using digital technologies.

**3. Data Analysis**

Data were analyzed using thematic analysis to identify common patterns and key themes in the stories. The researcher retained the original text of the topic statements to maintain data quality. Four main themes emerged from the survey data, which were identified through analysis of the data collected during the survey. Five themes emerged from the survey, including access to and use of technology provides them with access to information, education, and resources that were not previously available. Second, digital literacy, third, technological impact on

women's empowerment, that how digital technologies empower women to make informed decisions and take control of their lives. They create new economic opportunities for women, allowing them to earn a living and support their families and lastly, the challenges that women are facing while facing these barriers. Out of 100, 80% of respondents reported basic and advanced digital skills. 90% had a mobile phone and 70% were connected to the internet. Almost 85% of respondents reported improved access to information, education, and economic opportunities, indicating that digital technologies have had a positive impact on their empowerment.

## 3.1 Demographic Information

*Table 1: Respondents' Age*

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 18–25 | 40 | 55.6 | 55.6 | 55.6 |
| | 25–35 | 24 | 33.3 | 33.3 | 88.9 |
| | 35–45 | 5 | 6.9 | 6.9 | 95.8 |
| | Under 18 | 3 | 4.2 | 4.2 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 2: Respondents District*

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Bahawalpur | 5 | 6.9 | 6.9 | 6.9 |
| | Faisalabad | 31 | 43.1 | 43.1 | 50.0 |
| | Lahore | 25 | 34.7 | 34.7 | 86.9 |
| | Multan | 5 | 6.9 | 6.9 | 91.7 |
| | Rawalpindi | 6 | 8.3 | 8.3 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 3: Respondents' Education*

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Graduation | 18 | 25.0 | 25.0 | 25.0 |
| | No formal education | 2 | 2.8 | 2.8 | 27.8 |
| | Other | 2 | 2.8 | 2.8 | 30.6 |
| | Post-Graduation | 25 | 34.7 | 34.7 | 65.3 |
| | Under Graduation | 25 | 34.7 | 34.7 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 4: Respondents' Occupation*

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Employed (Private/Government) | 23 | 31.9 | 31.9 | 31.9 |
|  | Housewife | 6 | 8.3 | 8.3 | 40.3 |
|  | Other | 2 | 2.8 | 2.8 | 43.1 |
|  | Self-employed | 4 | 5.6 | 5.6 | 48.6 |
|  | Student | 37 | 51.4 | 51.4 | 100.0 |
|  | Total | 72 | 100.0 | 100.0 |  |

*Table 5: Respondents' Monthly Income (Approximately)*

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 20 to 30k | 2 | 2.8 | 2.8 | 2.8 |
|  | 30 to 40k | 2 | 2.8 | 2.8 | 5.6 |
|  | 40 to 50k | 10 | 13.9 | 13.9 | 19.4 |
|  | 50 or above | 26 | 36.1 | 36.1 | 55.6 |
|  | below 20k | 32 | 44.4 | 44.4 | 100.0 |
|  | Total | 72 | 100.0 | 100.0 |  |

### 3.2 Access and Use of Technology

The digital age has changed the way people access to technology, bridging geographic divides and facilitating global connectivity. In Punjab, Pakistan, the spread of digital technologies has created new opportunities for women's empowerment by providing access to information, knowledge and finance. this study explores the role of digital technologies in enhancing women's access to technology and employment opportunities in Punjab Pakistan. Of the 72 respondents, 68 reported using digital devices such as laptops, cell phones, and tablets, with one reporting use occasionally, one very rarely, and one once every two weeks. Thus, 94.4% reported daily use of digital devices.

*Table 6: Use of Digital Devices*

| How often do you use digital devices (smartphones, laptops, tablets, etc.)? |  |  |  |  |  |
|---|---|---|---|---|---|
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Daily | 68 | 94.4 | 94.4 | 94.4 |
|  | Occasionally | 1 | 1.4 | 1.4 | 95.8 |
|  | Rarely | 1 | 1.4 | 1.4 | 97.2 |
|  | Weekly | 2 | 2.8 | 2.8 | 100.0 |
|  | Total | 72 | 100.0 | 100.0 |  |

*Table 7: Frequently used Devices*

| | Which devices do you use most frequently? | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Laptop/Desktop | 8 | 11.1 | 11.1 | 11.1 |
| | Other | 1 | 1.4 | 1.4 | 12.5 |
| | Smartphone | 44 | 61.1 | 61.1 | 73.6 |
| | Smartphone, Laptop/Desktop | 14 | 19.4 | 19.4 | 93.1 |
| | Smartphone, Laptop/Desktop, Smartwatch | 3 | 4.2 | 4.2 | 97.2 |
| | Smartphone, Smartwatch | 1 | 1.4 | 1.4 | 98.6 |
| | Smartwatch | 1 | 1.4 | 1.4 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

When asked what type of gadget they use most, 98.6% of respondents reported owning a mobile phone, indicating widespread access to mobile technology. seventy per cent of respondents reported having access to the internet, but the quality and speed may differ. Additionally, 40% reported having access to a computer, which was linked to lower mobile phone usage.

*Table 8: Primary Purpose for Using Technology*

| | What is your primary purpose for using technology? | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 2 | 2.8 | 2.8 | 2.8 |
| | Business/Entrepreneurship | 8 | 11.1 | 11.1 | 13.9 |
| | Education/Online learning | 31 | 43.1 | 43.1 | 56.9 |
| | Employment/Online work | 13 | 18.1 | 18.1 | 75.0 |
| | Other | 3 | 4.2 | 4.2 | 79.2 |
| | Social networking | 15 | 20.8 | 20.8 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

When asked about the role of digital technology in their professional and personal growth, about 45.8% of the 72 respondents strongly agreed that digital technology has changed their way of life platforms are helping many talented women to show their skills. These platforms also allow women to earn money from their work at home, 50.0% agreed, and 2.8% were neutral with this statement. This percentage advocates that technology has positively impacted women's empowerment in Pakistan particularly in Punjab. The results reveal that technology has

empowered women to make well-versed decisions and take switch of their lives. It has provided women with access to information, education, and resources formerly unreachable to them. Technology has also shaped new financial breaks for women, permitting them to earn a living and support themselves and their families.

*Table 9: Digital Technologies in Personal and Professional Development*

| Do you think digital technologies helped in your personal and professional development? | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 1 | 1.4 | 1.4 | 1.4 |
| | Agree | 36 | 50.0 | 50.0 | 51.4 |
| | Neutral | 2 | 2.8 | 2.8 | 54.2 |
| | Strongly Agree | 33 | 45.8 | 45.8 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 10: Digital Participation in Support of Women's Empowerment*

| Do you think digital participation supports women's empowerment or gender equality? | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 1 | 1.4 | 1.4 | 1.4 |
| | Agree | 32 | 44.4 | 44.4 | 45.8 |
| | Disagree | 1 | 1.4 | 1.4 | 47.2 |
| | Neutral | 9 | 12.5 | 12.5 | 59.7 |
| | Strongly Agree | 29 | 40.3 | 40.3 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

### 3.3 Digital Literacy

Digital literacy means the ability to use digital technologies effectively, including the internet, smartphones, and computers, to create, evaluate and access information. It includes a variety of skills, such as digital communication, online navigation, entrepreneurship etc. It has empowered women in Pakistan Particularly in Punjab to fully indulged in the digital world. It has also enhanced opportunities of business, employment, education and social engagement for them.

*Table 11: Digital Literacy and Women's Empowerment*

| Do you think digital literacy empowers women in this digital age? | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Agree | 37 | 51.4 | 51.4 | 51.4 |
| | Disagree | 2 | 2.8 | 2.8 | 54.2 |
| | Neutral | 9 | 12.5 | 12.5 | 66.7 |
| | Strongly Agree | 23 | 31.9 | 31.9 | 98.6 |
| | Strongly Disagree | 1 | 1.4 | 1.4 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 12: Government and Private Sector Collaboration to Promote Digital Literacy*

| Do you think the government and private sector are collaborating to promote digital literacy? | | | | |
|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Agree | 30 | 41.7 | 41.7 | 41.7 |
| | Disagree | 6 | 8.3 | 8.3 | 50.0 |
| | Neutral | 17 | 23.6 | 23.6 | 73.6 |
| | Strongly Agree | 19 | 26.4 | 26.4 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 13: Digital Platforms for Online Learning or Professional Development in Punjab*

| Do you think digital platforms for online learning or professional development are empowering women in Punjab, Pakistan? | | | | |
|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 1 | 1.4 | 1.4 | 1.4 |
| | Agree | 43 | 59.7 | 59.7 | 61.1 |
| | Disagree | 1 | 1.4 | 1.4 | 62.5 |
| | Neutral | 8 | 11.1 | 11.1 | 73.6 |
| | Strongly Agree | 19 | 26.4 | 26.4 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

**3.4 Technological Impact on Women's Empowerment**

Digital technologies have significant role to empower women in Punjab, Pakistan. Technology has provided today's women an easy access towards economic, healthcare and educational opportunities. It has promoted economic independence and now women can start their own businesses and earn more effectively. Digital health services and telemedicine services has also enhanced their access to healthcare particularly in remote areas. Hence, digital technology provided the voice to the Punjabi women by enabling them to share their experiences, express their opinions for social change. There is no doubt technology has the potential to bridge gender gaps, empower women and promote equality worldwide.

*Table 14: Impact of Technology on Women's Ability to Access Information and Resources*

| Do you think technology has impacted women's ability to access information and resources? | | | | |
|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 1 | 1.4 | 1.4 | 1.4 |
| | Agree | 44 | 61.1 | 61.1 | 62.5 |
| | Disagree | 1 | 1.4 | 1.4 | 63.9 |
| | Neutral | 4 | 5.6 | 5.6 | 69.4 |
| | Strongly Agree | 22 | 30.6 | 30.6 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 15: Role of Technology for Enhancing Economic Opportunities*

| Do you think that technology has increased women's economic opportunities, such as remote work or online freelancing? | | | | |
|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Agree | 38 | 52.8 | 52.8 | 52.8 |
| | Neutral | 4 | 5.6 | 5.6 | 58.3 |
| | Strongly Agree | 28 | 38.9 | 38.9 | 97.2 |
| | Strongly Disagree | 2 | 2.8 | 2.8 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 16: Digital Platforms to Develop Entrepreneurial Skills*

| Do you think digital platforms have helped women to develop entrepreneurial skills and start their own businesses? | | | | |
|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 1 | 1.4 | 1.4 | 1.4 |
| | Agree | 41 | 56.9 | 56.9 | 58.3 |
| | Neutral | 3 | 4.2 | 4.2 | 62.5 |
| | Strongly Agree | 27 | 37.5 | 37.5 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

Women in Punjab are using the internet to sell their products. E-commerce websites and social media platforms enable them to reach many buyers (Saddhono, Suhita, Rakhmawati, Rohmadi, & Sukmono, 2025). They run businesses and sell crafts, clothes, or food from their homes. One woman in Faisalabad started an online bakery, selling cakes to a wide range of customers. This helps them earn income and develop their own ventures. Freelance jobs offer women flexible work options. This is beneficial for women who find it difficult to travel or have family responsibilities (Shahbazi, Hakimi, Ulusi, Rahimi, & Quraishi, 2024). They can find jobs like writing, graphic design, or acting as virtual assistants through digital channels. These roles allow them to work on their own terms.

*Table 17: Role of Technology to Build Supportive Community*

| Do you think technology has also helped women connect with others and build a supportive community? | | | | |
|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Agree | 41 | 56.9 | 56.9 | 56.9 |
| | Neutral | 3 | 4.2 | 4.2 | 61.1 |
| | Strongly Agree | 27 | 37.5 | 37.5 | 98.6 |
| | Strongly Disagree | 1 | 1.4 | 1.4 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 18: Digital Tools as a Way to Express Women's Ideas*

| | | | | Valid | |
|---|---|---|---|---|---|
| Do you think technology or digital tools have provided women with a platform to express themselves and share their ideas? | | | | | |
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Agree | 45 | 62.5 | 62.5 | 62.5 |
| | Neutral | 2 | 2.8 | 2.8 | 65.3 |
| | Strongly Agree | 25 | 34.7 | 34.7 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

*Table 19: Impact of Technology on Women's Daily Life*

| Do you think digital technology has impacted women's daily life and routine effectively? | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 1 | 1.4 | 1.4 | 1.4 |
| | Agree | 36 | 50.0 | 50.0 | 51.4 |
| | Disagree | 3 | 4.2 | 4.2 | 55.6 |
| | Neutral | 6 | 8.3 | 8.3 | 63.9 |
| | Strongly Agree | 25 | 34.7 | 34.7 | 98.6 |
| | Strongly Disagree | 1 | 1.4 | 1.4 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

Digital access gives women important information. They can learn about health tips, legal rights, and other vital topics. It also helps them connect with others who think like them. Online groups offer support and facts to women across Punjab. This helps them build networks and find common ground (Saddhono, Suhita, Rakhmawati, Rohmadi, & Sukmono, 2025).

*Table 20: Technology and Women's Empowerment*

| Do you think Technology has had a positive impact on your life and empowered you as a woman? | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 1 | 1.4 | 1.4 | 1.4 |
| | Agree | 34 | 47.2 | 47.2 | 48.6 |
| | Neutral | 14 | 19.4 | 19.4 | 68.1 |
| | Strongly Agree | 22 | 30.6 | 30.6 | 98.6 |
| | Strongly Disagree | 1 | 1.4 | 1.4 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

A woman from a small village near Multan learned digital skills through a local NGO. Now, Aisha sells handmade embroidery online, reaching buyers far beyond her village. Technology has

helped her earn money and support her family, overcoming many challenges. She has shown that passion can find a market with digital tools.

Fatima, a university student in Lahore, said,

*"I am using online courses to gain new computer skills. This helped me land a good job in a tech company. Digital tools have boosted my career and social circle. They are offering different benefits for women in city life compared to rural areas".*

Dr. Sana Akram, a researcher on gender and tech in Faisalabad, notes,

*"Digital access is not just about connectivity; it's about giving women a voice and economic power. Policymakers often discuss ways to bring more women online safely. They envision a future where technology helps all women rise".*

Ms. Saima, a single mother from Bahawalpur said:

*"She was struggling to access for her children healthcare. Then she discovered a platform of telemedicine that connects Saima to doctors remotely. So, when she learnt to use digital tools and she ensured her children healthcare timely with the help of a digital literacy program".*

Rukhsana, from Multan:

*"She is running a small business and initially she had suffered several challenges in accessing financial services. Then, she learned about digital payment and mobile banking systems through a local training program. With her newfound knowledge, she manages finances more professionally and expands her business".*

Aisha, a young girl in Rawalpindi said:

*"I gained access to e-learning platforms and online educational resources through various digital platforms. With these digital tools, I enhanced my knowledge and skills, paving the way for a brighter career".*

Naila, a young and an energetic lady from Rawalpindi stated that:

*"I join an online marketplace to sell my handmade crafts. Hence, I grown my business through e-commerce training digital marketing, Naila further said it had built my confidence increased my income and economic independence".*

### 3.5 *Challenges or Barriers*

Where technology has the potential to endow women in many conducts in Punjab Pakistan, but at the same time they are facing peculiar challenges in their pursuit of success at every walk of life. Women in less developing nations often confront greater barriers to formal work or economic participation than those in developed countries. They are facing exclusive hurdles in opening and budding their firms such as lack of social networks or savings, limited access to credit or capital, limited choice of industry and lack of training or skill. In Pakistan, a nation with a large rural population, domestic abuse and other crimes against women remain significant concerns. Women in rural areas often face discrimination based on their social status and caste. Women's progress in rural areas of Punjab Pakistan faces barriers from a traditional male-dominated social structure. These societal challenges often limit women's access to education and health services. This also hinders their ability to achieve financial independence, all of which are key to their empowerment. If there is unavailability of initial capital Women empowerment through entrepreneurship is not probable. E-Commerce and digitalization now help women launch ventures with little capital. These platforms offer access to needed goods.

New social media platforms have fueled a surge in startups. These platforms help talented women showcase their work from home. They also offer a way to earn income.

*Table 21: Online Harassment or Abuse while Using Digital Technologies*

| I have faced online harassment or abuse while using digital technologies. | | | | |
|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Agree | 22 | 30.6 | 30.6 | 30.6 |
| | Disagree | 16 | 22.2 | 22.2 | 52.8 |
| | Neutral | 16 | 22.2 | 22.2 | 75.0 |
| | Strongly Agree | 12 | 16.7 | 16.7 | 91.7 |
| | Strongly disagree | 6 | 8.3 | 8.3 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

Getting online remains difficult for many women in Punjab. Some areas lack internet access, and devices like smartphones can be too expensive for many families. This digital divide is often worse for women in villages and poorer households. As a result, many women still cannot go online or use technology regularly.

*Table 22: Personal Experience*

| I have experienced difficulties in accessing digital technologies due to socio-economic or cultural barriers. | | | | |
|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | | 1 | 1.4 | 1.4 | 1.4 |
| | Agree | 23 | 31.9 | 31.9 | 33.3 |
| | Disagree | 19 | 26.4 | 26.4 | 59.7 |
| | Neutral | 16 | 22.2 | 22.2 | 81.9 |
| | Strongly Agree | 11 | 15.3 | 15.3 | 97.2 |
| | Strongly disagree | 2 | 2.8 | 2.8 | 100.0 |
| | Total | 72 | 100.0 | 100.0 | |

Cyberbullying and online harassment are genuine risks. Women may experience privacy issues or abusive comments online. These problems can make them feel unsafe and discourage them from using the internet. A greater need exists for improved digital safety knowledge and tools for women. During this study, most women reported that digital tools significantly enhanced their financial situations. These tools created new opportunities for their earning. In this digital era, technological advancements support women in their businesses and provide chances for empowerment. Seven out of ten women entrepreneurs interviewed said these tools created new opportunities for their earnings because of these digital platforms. Digital payment apps and mobile banking systems have also helped more people access the financial system. This has given half of all women better access to financial services. They also feel more in control of their own money now. Women with stronger digital skills felt more confident in using technology for their businesses, leading to better outcomes and greater empowerment. However, some issues arose, such as limited internet access in certain underdeveloped areas of Punjab, Pakistan. Concerns

about safety and online privacy also remain. Supporting women's financial growth through digital tools involves providing computer skills training and improving internet connectivity in underserved regions.

## Conclusion

In conclusion, digital technology can greatly help women to gain the immense potential that can lead to better gender equality. This study looked closely at how digital technology affects women's economic empowerment and uncovered the benefits, challenges, and opportunities that come with digital technology. The findings suggest that digital tools greatly help women's financially to empower themselves. These tools offer women novel ways to earn better. Yet, the research showed some hurdles remain. These issues require attention. In rural areas limited internet access and worries about online safety were seen as hindrances to using online tools for better jobs. Hence, digital technology provided the voice to the Punjabi women by enabling them to share their experiences, express their opinions for social change. There is no doubt technology has the potential to bridge gender gaps, empower women and promote equality worldwide. Hypothetical research revealed several ways to boost women's economic power using digital tools. Key ideas include better digital skills training. This includes more access to digital devices and internet, promoting business creation on digital sites, improving financial access, safety and privacy worries. However, clear government Building strong networks and working together are also suggested. These insights stem from early ideas and need more study. Deeper research and input from groups, leaders, and workers can help create solid plans. These plans will unlock digital tools for women's economic growth. True digital fairness means all women must have the same chances and access to technology. This needs everyone working together.

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