

Digital Empowerment: An Introduction

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ABSTRACT

Digital empowerment enables digital participants to make maximum use of the potentials of information technologies. Digital empowerment largely involves creating a culture that supports and thrives on rapid innovation. It is critical in a knowledge society and economy. It requires openness, freedom, and democracy for furthering the progress towards a knowledge society. It is a necessity for any country that wants its citizens to participate in the global economy. This paper introduces digital empowerment as well as its applications and challenges.

KEYWORDS: digital technologies, digital empowerment, digital economy, digital literacy, information and communication technology (ICT)

How to cite this paper: Matthew N. O. Sadiku | Uwakwe C. Chukwu | Abayomi Ajayi-Majebi | Sarhan M. Musa "Digital Empowerment: An Introduction" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-6 | Issue-4, June 2022, pp.554-559, URL: www.ijtsrd.com/papers/ijtsrd50141.pdf



IJTSRD50141

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INTRODUCTION

Technology connects and brings us together to share ideas across borders and cultures.

It enables opportunity, dismantles gender-based barriers, democratizes access to information, and disrupts racial and economic-privilege hierarchies. Technology has leveled everything and with digital skills, you can reach the whole world with your values and participate in the global economy. Just having basic access to technology is not a silver bullet. We need to ensure that access directly correlates to equitable opportunities.

Digital technologies have dramatically transformed every aspect of our lives. Technologies and digitization have led to a significant higher participation of women in employment, financial markets, and entrepreneurship. The Internet is everywhere, enabling people to be strongly tied to digital media such as tablets, laptops, and smartphones. It also allows them to chat with friends, exchange emails, play games, read the news, or buy and sell.

This is the age of empowerment. Digital empowerment refers to the ability of an individual to use digital technologies effectively the information society. It is critical in a knowledge society and economy. A knowledge society and economy is one in which organizations are built to further the limitless development of people through creating. It recognizes all people as potential owners and creators of knowledge. Modernization efforts are increasingly tied to a nation's ability to make strategic use of ICTs to develop competitive advantages.

WHAT IS DIGITAL EMPOWERMENT?

Empowerment refers to the development of the information, skills, and abilities that are necessary for individuals to control their own learning activities. Empowerment of individuals and societies means increased control over life and coping skills. Digital empowerment is more than giving people access to digital technologies. It is a multi-stage process that gives individuals new skills and opportunities to better participate and express themselves in a networked society.

The idea of empowerment originated as a reaction to the power imbalance in society. Empowerment also relates to how people think and consider themselves, their capacities, abilities, and mastery over what they have. Figure 1 illustrates the digital empowerment framework [1]. Digital empowerment has many components including culture and people engagement [2]:

- **Culture:** This is essentially the environment in which work is done and people operate. A company's culture is experienced in the way we do everything in our organizations; how we hire, how we motivate, how we reward, how we interact, how we communicate our ideas, how we dress, how we organize our teams, and what we value. The culture evolves over time as particular ways of doing things become normal and accepted. A good culture is one that creates successful, profitable organizations with highly engaged staff and customers, that are innovative, and provide great places to work in and to do business. A bad culture is one that stifles creativity, disempowers people, and makes them inflexible to do business with. We need good culture to support and sustain strategic goals.
- **People Engagement:** Strategy is the bridge between cultural alignment and people engagement. Engagement means giving people the opportunity to do what they are good at and rewarding them for it. This implies meeting their individual hierarchy of needs. Creating a culture of employee engagement requires that they fully understand their role. It means that their own personal values are aligned with those of the organization. Creating a culture of engagement with customers means giving our customers something that they want.

APPLICATIONS OF EMPOWERMENT

Digital empowerment is usually applied to several areas such as agriculture, healthcare, business, government, and individuals. The following applications are only typical.

- **Digital Empowerment of Employees:** This is organizational empowerment. In order to have a successful digital transformation journey, all employees in company must be empowered as your operating systems are becoming. Digital empowerment is releasing the power of the workers in an organization in a controlled and focused way. It refers to measures which have been designed to increase the degree of autonomy and self-determination in an organization's people. Empowerment is an intentional ongoing process that leads to the organization taking

control and developing mastery in their particular environment or marketplace. It is developing and achieving digital mastery in a company [3].

- **Digital Business:** In 2011, Microsoft and other industry leaders came together to discuss and envision a future where technology would play a crucial role in driving innovation and business success. Since then, Microsoft has invested in industry-specific knowledge and expertise. Although technology plays an increasingly strategic role in fostering their innovation, they do not focus on technologies but look at the impact that their technologies are making on customers [4]. Most businesses today have an infusion of technology in their service, making customer experience more satisfying.
- **Digital India:** This is a campaign launched by the Government of India on July 1, 2015 under the leadership of Prime Minister Narendra Modi. The program is an attempt by the national government of India to transform India into a digitally empowered society and a knowledge economy. The aim is to digitally empower the country and its people, improve infrastructure, introduce a better quality of life, and raise India's stature in the digital world. The plan includes connecting rural areas with high-speed Internet networks and improving digital literacy. The vision of Digital India has three parts to its vision [5]:
 - digital infrastructure as a core utility service to citizens
 - governance and services on demand
 - digital empowerment of citizens.

Digital platforms improve efficiency of service delivery, and reduce response time and corruption. Figure 2 shows the various components of Digital India [6]. As a developing nation, India is implementing a series of initiatives to grow in digital technologies. The initiatives have benefited several nations such as US, UK, Japan, Canada, South Korea, Australia, Malaysia, Singapore, and Vietnam. Smart phones and other digital devices are available to a large number of citizens. This access to the digital world leads digital empowerment. Making one person in every family digitally literate is one of the integral components of the prime minister's vision of "digital India." The digital divide between urban and rural areas must be bridged to ensure sustainable development.

- **Digital Empowerment of Girls:** Empowering girls and women globally through the use of digital technology can yield incredible returns in

social and economic development. There is global awareness on empowering and encouraging young women and girls to consider studies and careers in Science, Technology, Engineering and Mathematics (STEM). Women and girls continue to face gender-based barriers that prevent them from accessing and utilizing digital tools at the same level as boys and men. Equality of education can redress the digital gender gap. We must change the perception that prevents girls from seeing digital roles as accessible career paths. We must remove the barriers that prevent them from utilizing digital tools at the same level as boys and men. This way we can achieve gender equality and promote the rights of girls and women worldwide [7]. Even as a teenager, you can begin to make money handsomely by marketing your digital skills. Women should also help girls to progress by freely sharing their knowledge. Knowledge is power, and is amplified when shared with like-minded individuals. For example, HP focuses on diversity, equity, and inclusion while advancing human rights, social justice, and racial and gender equality across its ecosystem. Figure 3 shows how girls are being digitally empowered [8].

- **Digital Empowerment of Senior Citizen:** Technology is often marketed for the young. The youths have been targeted for the dazzling array of digital devices, apps, and tools. But the huge consumer base comprising the senior citizens has not been fully tapped. The elderly need to be empowered in to ensure that they are made digitally savvy. Lifelong learning is essential in the digital age. Technology can be a great tool for enabling our senior citizens to fully participate in technology and independently navigate the challenges of modern life. Digital empowerment for seniors is necessary in order to avoid our the older generation facing the risks of digital isolation and be deprived of a happier life. The elderly can benefit from online services such as emailing, banking, shopping, paying bill, booking a cab, ordering food, hiring housekeeping help, entertainment on demand, etc. Figure 4 shows how seniors citizens can be empowered [9].
- **Digital Empowerment of Patients:** Today, patients use technology to research information online, identify treatment options, care providers, and share the information with their care-giver. Using various services, such as telecare, telehealth, telemedicine, mHealth, digital health, and eHealth, patients services can be empowered by giving them more control over their health and

social care needs. It can also help individuals to obtain more information regarding their health and provide more personalized service. Technology-enabled care (TEC) can [14]:

- Improve self-management through remote monitoring, education, and treatment adherence
- Tackle areas of unmet needs that traditional treatment struggles to address, such as mental health
- Supports the development of online patient portals and patient communities
- Transforms the relationship between patients, carers and healthcare providers to focus on co-creation
- Healthcare providers need to realize that emerging technologies offer a tremendous opportunity to transform the way patients engage with their health

BENEFITS

Digital empowerment ensures that citizens have a say and participate in governance. Other benefits include [10]:

- **Digital Inclusion:** The data revolution brings the challenge of ensuring that no one is left behind. It can support inclusive development and sustainable growth.

Empowerment and participation in society are often put forward as the main goals of digital inclusion. Inclusive growth necessitates people's empowerment in more than one way. It is estimated that the chances of women benefitting from opportunities accrued by the information society will be one third less than for men. While the focus on bridging the gender gap is important, it cannot make an effective dent on women's inclusion prospects without the removal of implicit and explicit discriminatory barriers.

- **Digital Satisfaction:** Investing in people is the only way for a business to thrive and remain strong. By equipping workers with the digital skills they need, companies can ensure that its workers are satisfied.

- **Brighter Futures for All:** A major economic impact can be made by empowering people with the skills they need for future work, seeing that they are included in moving forward and enjoy equality of opportunities.

CHALLENGES

Although there are tremendous benefits of digital empowerment, there is are limitations.

The digital age sees to only marginalize the marginalized and exacerbate existing hierarchies between genders. There remains a clear digital empowerment gap in access and use between various demographic groups. The rise of the Internet in particular has outpaced legal and governance frameworks, presenting significant problems for attempts to regulate it.

Other challenges include the following [11-14]:

- **Data Security:** In an environment where everything is connected to the Internet, it is a great challenge to handle security and privacy concerns.
- **Marginalisation:** Digitally marginalized citizens are usually described as people who are in unequal positions concerning the use of the Internet. In some developing nations today, there is marginalisation in the midst of globalisation. Human poverty is seen in skill shortages, disguised unemployment, gender inequity etc. Marginalisation implies treatment of a person or group as insignificant or peripheral. Social marginalisation refers to the process of pushing a particular group or groups of people to the edge of society by not allowing them an active voice, identity, or place in it. The reasons for the marginalization include lack of awareness of the benefits of affordability, digital illiteracy, lack of access to Internet, and lack of digital literacy. While digitalisation is one of the solutions to marginalisation, it is also feared as a form of digital marginalisation. Technology can play a major role in bringing education to the most marginalized and hardest to reach communities.
- **Digital Divide:** This is closely related to marginalization. It refers to existing discrepancies between rich and poor nations. Low-income families, rural residents, African Americans, Latinos, and people with disabilities are disproportionately impacted by digital opportunity gaps. There is, for example, a close correlation between overall levels of development and Internet access. The poorest nations tend to have the lowest levels of Internet access or penetration. Digital divide addresses important social exclusion issues. The need to address the digital divide is seen both as political correctness and economic wisdom. Most governments have realised digital divide through accountability, efficiency, rule of law and transparency in government processes, and empowerment of citizens, particularly the marginalised. A great deal of effort is needed to turn digital discrepancies into digital opportunities.

➤ **Gender-based Barriers:** This is gender digital divide that prevails across the globe. The world of ICT is dominated by men, with the prevailing notion that women and girls are second-class citizens. Women and girls continue to face gender-based barriers that prevent them from utilizing digital tools at the same level as boys and men. This digital gender gap still exist, in some instances it has even grown wider in recent years. This gap holds back women and girls and negatively impacts their economic contribution. Increasing presence and participation of girls and women in the ICT sector has economic and social benefits.

➤ **Lack of standardization:** This is a major hurdle in digital empowerment. Different manufacturers use different operating systems that lead to interoperability problems.

CONCLUSION

Empowerment is the development of the information, skills, and abilities that are necessary for individuals to control their own learning activities. Digital empowerment of the youths help them become self-motivated, innovative creators. It is a way of engaging youths as shapers of the digital future and developing some as scientists and engineers.

Educational institutions should play a key role in preparing youths for life in today's rapidly developing digital world. Educators should envision a future for students that includes technology as a tool for realizing their dreams. Students should graduate from their program confident in their ability to use technology to be problem solvers and become lifelong learners of technology. More information about digital empowerment can be found in the books in [15-20].

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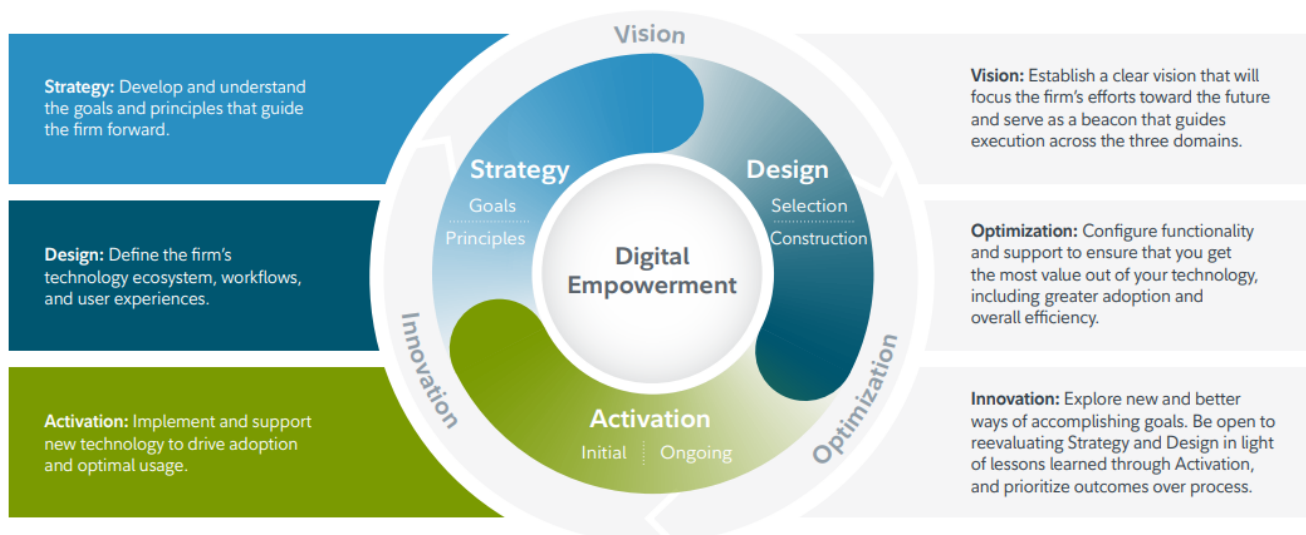


Figure 1 Digital empowerment framework [1].



Figure 2 Digital India [6].



Figure 3 How girls are being digitally empowered [8].



Figure 4 How seniors citizens can be digitally empowered [9].