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Bridging The Digital Gender Divide For Attaining Gender Equality And Women Empowerment In India

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Abstract:- Digitalization is a broad term used for the digital transformation of the economy. It refers to the digital transformation process that uses an integrated approach of using digital technologies in all areas of a business, impacting the business operations and distributes value to its customers. The Indian government has launched several digital projects to encourage women's digital empowerment to promoting gender equality and sustainable development. In order to mitigates gender gaps, the Indian Government's digital literacy efforts are crucial as it enables women to have a sustainable future, encourages socio-economic inclusion, and encourages digital technology access. Among the challenges faced by girls and young women are limited access to education, professional training and economic opportunities as well as gender- and age-based discrimination along with digital gender-based violence and harassment. The greater usage of digital services has multi-fold gains to women has it gives them greater access to markets, information and along with more flexible working arrangements. This can bring in more technical education and the economic empowerment of women can bring dramatic gains in human development and well-being for individuals, families and society. This paper studies the role of digitalization in attaining gender equality and women empowerment in India, and aims to understand the issues and obstacles as well as the approaches and remedies to overcome these impediments towards bridging the digital gender gap in India.

Keywords:- *Digitalization, Digital Inclusion, Women Empowerment, Socio-Economic Inclusion.*

I. INTRODUCTION

"Today, much of India's development agenda is mirrored in the Sustainable Development Goals."

~ Hon'ble Prime Minister of India, Shri Narendra Modi at the UN Sustainable Development Summit, 25 Sept 16

Sustainable development has been thrust into the limelight since the passing into the United Nations Sustainable Development Declaration in 2015, and was signed by all the 193 member nations. It emphasizes three core objectives for human development: the economy growth, social integration, and the policy on sustainable development. The SDGs are well-coordinated development goals aiming at capturing all sectors of development and surrounded by five major principles, which include people, planet, prosperity, peace, and partnership. There are seventeen goals set up, that encompasses alleviation of poverty, hunger and malnutrition, health and well-being, education, gender equality, clean water and provision of sanitation, energy and productive and sustainable economic growth, infrastructure, reduced vulnerability, sustainable management of resources and consumption. These goals have highlighted the need for making cities and communities sustainable, taking actions towards climate change, life on land, life below water, promoting peaceful society and justice, and finally, refining partnerships. These areas need more immediate and more significant investments because they are essential for addressing the contemporary wants and needs as well as the requirements of future generations.

As a partner country to the United Nations' Sustainable Development Goals (SDGs) Declaration, the Digital India programme has been launched proactively with strategic focus on digital infrastructure as basic amenity and digital services on demand and digital inclusion of all citizens. India, the world's fastest growing major economy and the leading IT powerhouse, has launched path-breaking and experimental holistic and collaborative development initiatives. The world is on the verge of experiencing a digital revolution and through the concept of Digital India, the country has a unique, golden opportunity to become one of the pioneers of this shift. Digital India initiatives like Aadhaar – provision of unique digital identity, Jan Dhan Yojana – financial inclusion to every household, targeted public distribution system food security to all the families particularly the BPL families, Direct Benefit Transfer (DBT) to all the genuine beneficiaries, DISHA – digital literacy in every household, Government eMarketplace (GeM) – an initiative where the sellers of products and service providers directly dealing with the government procurement agencies etc. are making India a digitally empowered society and knowledge economy.

II. DIGITAL INDIA

A. India and Digitilizaton

The Sustainable Development Goals (SDGs) were launched in 2015 seeking to focus on priority global issues like economic injustice, information imbalance, scarcity of services, digital divide and climate change. These goals also consider the fact that today living environment is increasingly interdependent and attainment of many of these goals depends

on achievement of many other goal areas, especially in the area of technology. Digital India launched in year 2014 also shares a strong synergy with SDGs since it plans to take India into a digitally aggregated society as well as knowledge society by embracing ICT. With goals such as increasing Internet connectivity; increasing the usage of technology; and strengthening e-governance, Digital India works toward narrowing the digital gap so that all can embrace the opportunities offered by the knowledge economy. Digital empowerment as one of the key drivers necessary to ensure achievement of the SDGs as it fosters innovation via access to technology, creating solutions to challenges and creating opportunities for citizens, governments and businesses in the sector. Specifically, technology can enhance openness, responsibility, and productivity in solving problems such as education, health, financial, and climate change.

The Digital India programme has seen the execution of several transformative initiatives that endeavors, for transforming socio-digital landscape for the densely populated one billion plus citizens. The Aadhaar platform, provides every resident with a digital identity so that they can obtain a number of key government services and benefits quickly and safely. Digital India also includes yet another creative solution called MyGov through which common citizens are engaged and come forward as active participants in the governmental systems starting at the grass root level. Similarly, the Direct Benefit Transfer (DBT) to ensure subsidies and welfare payments directly to the intended recipients while eliminating wastage and corruption. In the rural and diverse regions, Common Services Centers (CSCs), approved by the Government in September, 2006, acts as the one stop solution for all basic services from government to e-commerce, from digital literacy to digital literacy and e-commerce. The Digital Locker is designed as an online place which contains important documents of the citizens and accessed in a secure and convenient way. At the same time, the increased adoption of Information and Communication Technology (ICT) in sectors such as agriculture, health, education, and urban planning can hold promise in radically enhancing service provision and efficiency, as well as contribute to increase inclusiveness. These projects have been development with reference to the best practices, modern technological solutions and in compliance with the requirements of a diverse population, including low literate individuals and those living in remote areas. In the way that Digital India has embraced technology in these ways it's not just a question of inclusion and extending technologies but a question of optimizing the quality of governance, service delivery, and socio-economic opportunities for every citizen towards the outcomes envisaged by sustainable development. The principle of "SabkaSaath, SabkaVikas (Participation of All, Growth for All)" can be achieved globally by Digital India. The above goals are in consonance with the Digital India vision which is based on three pillars namely, Digital Infrastructure, Digital Governance, and Digital Services.

B. Objectives of the Study

The primary objective of the present paper is to focus on the existence of digital divide and address the gender challenges and potentials in bridging the digital gap. This research paper identifies factors, which are influenced by digital revolution and the impact of digital revolution on women empowerment. The following objectives are covered in this study, empowering women through digital technology:

- To study how digital inclusion can bridge the gender inequality gap
- To understand the challenges to women's digital inclusion
- To study how digital inclusion can impact women's empowerment in India

The theme for International Women's Day 2023, "DigitALL: '' Innovation and technology for gender equality,'' highlights the need for including women and other marginalized individuals in the ever-evolving technological world. The inclusion of women into the fields of technology, innovation and digital education can help to designing unique, imaginative and effective solutions that are custom-made for their needs, and ultimately pave the way for gender equality

The significance of the theme for 2023 draws attention to the fact that technological advancement and digital learning can facilitate in empowering woman by education, and help to access opportunities, eradicate hindrances and to become economically productive citizens. Various ICT tools can empower women empower women; connect them to education, health facilities, sources of finance, employment opportunities, connect social networks and advocate for their rights even in rural areas, that may be hardest to reach. Simple effective initiatives like digital literacy interventions, mHealth solutions and applications, and e-commerce incubation hubs of enterprise development have enabled and uplifted women's enhanced change agents that disturbed traditional limitations in their societies. Finally, the theme focuses on understanding that the digital transformation should not only be in the sphere of technologies but also in such areas as gender equality and women and girls' rights alongside engaging them in the opportunities and building the world's future

III. WOMEN'S EMPOWERMENT

Women's empowerment plays a central role in the inclusive development of any society, and also positively touching the daily lives of women. It has a pivotal role in achieving sustainable development in developed and developing Nations. Women empowerment may be defined as the ability of women to make decisions and have control over their lives, income and gender activities. It is the process of empowering women with capabilities to enable them make choice regarding their health, education, career and wellbeing. Empowerment facilitates breaking the social barriers and changing the existing stereotype perception of women, and providing them with role model opportunities to skillfully work for their own and society's better future, addressing issues of gender, equality and sustainable development. Economic independence for women means being able to control their lives, make decisions on our own, and act fully in

the economic and political realms, as well as be responsible for our own health. It also results in a better and more equal distribution of power between women and men, producing more resilient economy, healthier societies and better decision making. In both the developed and the developing world alike women's rights, emancipation is key to building a sustainable future.

IV. DIGITAL INCLUSION

Digital inclusion is defined as "equitable, meaningful, and safe access to use, lead, and design of digital technologies, services, and associated opportunities for everyone, everywhere". Digital inclusion entails provision for Information and Communication Technologies (ICTs) like the internet as well as availing the services to each person disregarding their sex, age, gender, ethnical background, physical or mental challenges, economic status and many more factors. It seeks to bring changes in these aspects in the lives of the minority and the underprivileged or marginalized so that they may also access and use of digital technologies and enjoy the benefits that come with the new shift to digital mode. Cyberspace is socially constructed according to the availability and accessibility of modern technology tends to favor one group over the other, favoring male over female, the urban population over the rural population and the richer population over the population that is relatively poor. As a result, women and girls have lower digital literacy and digital financial capability than men and boys. Digital revolution has unlocked up innovative avenues for economic empowerment. Internet, mobile phones, digital platforms, e-commerce, digital financial services, IT-BPO sector, offer phenomenal employment and income opportunities.

V. DIGITAL GENDER DIVIDE

In March 2017, the Broadband Commission for Sustainable Development's Working Group on the Digital Gender Divide, co-chaired by the GSMA and UNESCO launched the new report, "Recommendations for action: bridging the gender gap in Internet and broadband access and use", which accentuated critical areas of action, as part of the group's continuing work to guarantee that all women and girls can fully join in the digital world. The main obstacles that perpetuate this digital gender divide are: issues of affordability (mainly related to data but also handsets), lack of digital literacy and skills, concerns related to online safety and security, and connectivity experience. Despite worldwide efforts, as of 2023, the share of the male population in the world that used the internet was 70 percent, compared to 65 percent of the female population, which means that globally, currently around 244 million more males than females use the Internet. Globally, 81 per cent of urban dwellers use the Internet in 2023, compared with only 50 per cent of the population in rural areas.

VI. INDIA AND DIGITAL GENDER DIVIDE

India targets a $1 trillion digital economy by 2025, 40% of digital transactions around the globe happening in India currently. In 2022 alone, more than 49 billion digital transactions took place in India. With the world economy shifting into the digital age, it will be only logical to assume that majority of the workforce will need the crucial skills associated with digital technology in the job market.

India has a significant gender digital divide, with men having greater access to the internet and digital infrastructure than women. The digital gender gap in India refers to the access and effective utilization of technology by men and women in India. This gap can be attributed to various reasons such as the income level of the individuals, rural and urban differences, inadequate digital training, and the societal stereotypes. Such conditions do not favor women who in most cases reside in rural areas where they have limited access to smartphones, the internet and digital education systems; hence their chances of being empowered are little. Bridging this divide is important because it contributes to gender equity and economic development and increases women participation in the digital economy. Initiatives to raise levels of digital literacy and provide affordable connectivity are positive steps in the right direction.

Here are some statistics that illustrate the gender digital divide in India:

- NSSO (National Sample Survey Office) data reveals a staggering disparity: only 24% of rural households have internet access, compared to 66% in cities.
- Internet usage: Only 33% of women in India have used the internet, compared to 57% of men. In rural areas, the gap is even wider, with only 25% of rural women using the internet, compared to 49% of rural men.
- Smartphone ownership: 29% of rural women own a smartphone, compared to 62% of rural men.
- Digital literacy: 68.5% of rural men are digitally literate, compared to 49.6% of rural women. In urban areas, digital literacy is relatively higher at 61% as compared to just 25% in rural areas.

Indian digital gender gap is the result primarily of three crucial factors, which is geographical disparity causing the rural-urban divide; rural Indian women are less likely to own mobile phones than their urban counterparts; second factor is the economic disparity causing the income-based divide, as accessing data can be costly to a low-income households which will need to spend around as 3% of their monthly income; and the third factor relates to the existing is social norms, in a society where mobile phones are viewed as a hazard to women's repute before marriage and an disruption to her caregiving duties after marriage. If the situation does not change and Indian women do not achieve better education levels and employment rates faster, their opportunities to become entrepreneurs will remain limited to the sphere of low-tech and low-margin food and handicrafts production with little ability to grow.

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VII. CHALLENGES TO WOMEN'S DIGITAL INCLUSION

While existing Government policies for promoting public access to the internet and ICTs are gender neutral, there are significant limitations in a context where women face extensive social control over their access to and use of these technologies. This includes patriarchal social norms, the difficulty of balancing work with family responsibilities, cybercrimes such as sexual harassment, cyber bullying, digital stalking, identity theft and cyber trolling, as well as the high costs of accessing new technologies, low levels of digital literacy and the cost of smart phones and data which are made worse by the low purchasing power of Indian women.

A. Very Low Accessibility:

Accessibility links to a confluence of problems, including low levels of infrastructure, poor coverage, low levels of smartphone penetration, and gender disparities that aggravate what limited chances women and girls have to be involved in the digital arena, through devices and services.

B. Digital Illiteracy:

Participation inequality in functional literacy, another major contributor to the gender digital divide. Girls with lower functional literacy are relatively less able to use smartphones efficiently. According to the National Family Health Survey for the period 2019 to 2021, 59% of women aged 15 to 49 in both urban and rural India never completed 10 years of schooling, the percentage being higher in rural India at 66%.

C. Cyber Safety and Security:

Girls may be socially unable to use digital devices due to a lack of skills and knowledge to handle them well. Internet safety issues are seen were women and persons from other marginalized genders still experience less digital and cyber security in comparison to men, often exposing them to cyberbullying and harassment. These phenomena lead to limited or reduced agency to use digital technologies by women and girls, which widen the digital divide.

D. Cultural Factors:

There are many other factors that stifle the progress of women's integration into the digital world, with the most salient being the influence of social norms which is much more significant in the regions of Africa, Asia, the Middle East, and some areas of Eastern Europe. Cultural norms and societal expectations regarding what is acceptable for a woman to do, where a woman can go unobstructed, and with whom a woman interacts constrain women's access to digital services. In most cultures, women are seen as nurturers or caregivers and are not expected to run businesses or spend time using digital spaces as that would interfere with their prime responsibility taking care of the children and elderly, cook and do other household activities.

VIII. BENEFITS OF DIGITAL INCLUSION FOR WOMEN

Digital inclusion for women drives transformative change in multiple areas, fostering economic empowerment and gender equality. Digital inclusion for women brings numerous benefits, including:

A. Fostering Jobs for Economic Empowerment:

Digital inclusion opens up possibilities for women to work remotely and earn themselves through online job markets and freelancing platforms. Such flexibility promotes an independent economic status among women, furnishing them with chances to balance work and family. Digital platforms further enable women to run businesses, access financial services, and interact with the global market thereby reducing barriers to entrepreneurship.

B. Improved Educational Opportunities and Skill Development:

Digital platforms connect women to online education, courses, and certifications, allowing acceleration in acquiring new skills courses to keep women updated with the trends of the modern world. The courses, tutorials, and courses available online are giving women opportunities to upgrade their skills, attain higher education, and end such barriers to traditional education.

C. Health and Wellness:

Digital health services provide women with better access to information, telemedicine, and maternal care. Such digital inclusion gives women greater access to key health services, such as reliable information, virtual consultations, and telemedicine. This is particularly valuable for maternal care in providing guidance on pregnancy, childbirth, and postnatal health. Digital platforms also facilitate women's monitoring of chronic diseases, support mental health, and keep them up to date with preventive measures. These resources improve health outcomes, reduce health disparities, and ensure that women obtain the care and support they need, especially in underserved areas.

D. Social Connectivity:

Digital connectivity enables women to create networks, connect with supportive communities, and share resources. They offer women a platform for advocacy, raising awareness, and campaigning for their rights. These platforms, through which women's voices echo, nurture solidarity and solidarity build synergy that empowers women's collective actions to promote the cause of social, political, and economic change.

E. Gender Equality:

Digital access increases empowerment by allowing every woman to enter the digital economy. It is one avenue for narrowing gender gaps in education, employment, and entrepreneurship by equipping women with skills and knowledge for success. Digital platforms allow women to market their products and services easily, gain new skills, and connect with global markets to empower financial independence.

F. Expanded Information Access:

Digital inclusion offers women information they can use regarding health and about their rights and the financial services available to them, hence enabling them to make informed decisions.

G. Increased Security against Digital Crime:

Digital literacy programs enable women to learn how they can protect themselves while online, hence shielding them from online abuse, scams, or exploitation. With the knowledge gained, they are put in a better position to be alert when going online and to keep themselves secure and their privacy intact.

H. More Leisure Options:

Digital platforms offer women fun, well-being resources, and an avenue for creativity for mental health.

IX. BRIDGING THE DIGITAL GAP

Some of the critical strategies that narrow the gaps in the digital divide between genders will ensure that women have equal access to the technology with its benefits are as follows:

A. Investments in Rural Digital Connectivity:

Essential are the expansion and support of internet infrastructure in rural areas for women's access to digital opportunities, such as education, healthcare, and employment.

B. Addressing basic Causal Factors:

Addressing culture, stereotypes, and social norms that dissuade women from using technology has become crucial. Community awareness programs and education can fight these barriers and promote women's engagement in digital platforms.

C. Creating Policies to Prevent Digital Gender-Based Violence:

In the light of an increasing online presence, it becomes imperative to develop policies that protect women against cyberbullying, online harassment, and digital abuse. Legal frameworks should hold the perpetrators accountable by safeguarding women in digital spaces.

D. Affordability of Accessing Digital Technologies:

Among several other barriers that still hinder digital inclusion, affordability remains at the core. Subsidies for digital commodities along with affordable internet plans can allow women, especially in low-income and rural settings, access to technology.

E. Addressing Threats to Access and Utilization:

For digital platforms, trust must be built by ameliorating concerns about safety, such as scams and threats to data privacy. Women have to propound their security in their interactions with technology, especially when they are in setups capable of exposing them to online threats.

F. Digital Literacy and Confidence:

Training women to become digitally literate and design programs that equip them with self-confidence would enhance their skills and self-assuredness in engaging with the digital world.

These will create a multi-faceted approach and ultimately will be the means for attaining gender equality and empowerment in the digital age.

X. CONCLUSION

In conclusion, the bridging of the digital divide in India is paramount for empowering women and promoting gender equality. Availability of technology helps women to transcend the conventional boundaries, achieve financial emancipation and enhance the standards of their lives. Such inclusion is important in the context of women's development as it helps to provide education, health care facilities, access to the economy and promotes social integration. With opportunities for education, healthcare, economic participation, and social empowerment, digital inclusion has become a critical locus for the advancement of women.

As was rightly said by the world-renowned woman-rights advocate, Malala Yousafzai, "We cannot all succeed when half of us, are held back." Digital inclusion for women's empowerment is key not only to promote social equity but also for each woman to strive and foster growth in the nation. By eliminating the digital divide, India can realize the complete potential of its women, harnessing it for sustainable development and progression.

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