Women and Tech
Bringing Gender Equality in the Digital Ecosystem

Introduction

Digital technology is already playing a critical role within various sectors, and its influence is likely to increase in the coming times with rapid digitalisation. With various services, such as education and healthcare now being accessible over digital platforms, it becomes important to make this transition gender-neutral. For this, the targets of Sustainable Development Goal (SDG) 5, to achieve gender equality and empowerment of all women and girls and Goal 5B to enhance the use of information and communications technology, to promote their empowerment [1] should strive to be achieved.

In this regard, a report by Internet Telecommunications Union (ITU), observed that while the overall usage of the internet has gone up in recent years, the internet usage by women globally is still at 48 percent compared to 58 percent amongst men. This gap has increased in the developing and least developed countries in Africa, the Middle East, and the Asia- Pacific.[2]

The technology presents an opportunity to give more accessibility to groups which have been at the margins of development and have faced discrimination. Hence, it is important to identify and address the challenges, such as the digital gender divide, the emergence of 'datafied' society[3], and the

resultant privacy and cyber-crime concerns for women, and roadblocks to women's economic participation.

Some of the key assessments about these challenges are mentioned below.

Key Assessments

1. **Digital Gender Divide:** Information and Communication Technologies (ICTs) are revolutionising how services such as healthcare, finance, and education are being delivered. However, there still exists a gender divide in their adoption due to inaccessibility to the internet. Specifically, concerning India, a recent report has observed that the female internet population in India is half of the male population. This gap is more evident in rural areas where there is just 28 percent of female internet users, compared to 72 percent male internet users.[4]

This gap emanates from lack of access to internet-enabled devices, such as smartphones wherein there is a gap of 26 percent between male and female ownership of mobile phones as of 2019.[5] Most of the females use shared mobile phones amongst family members which limit their usage for various purposes.[6] Moreover, these barriers are not just limited to economic constraints but
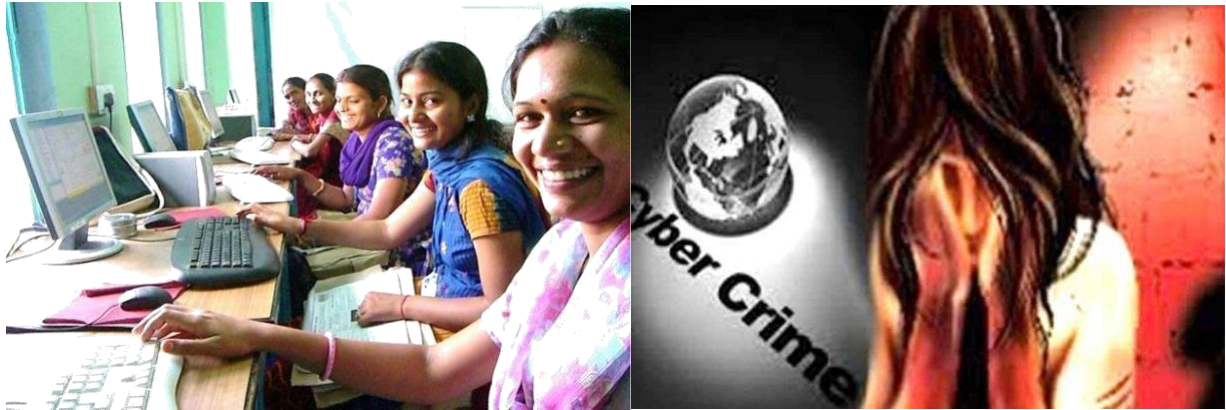
extend to normative issues, such as low level of acceptability of women being exposed to digital technology as it is presumed that such exposure will impact their moral standing.[7]

This is also reflected in some of the incidents wherein rural governing bodies banned phone usage for girls in their villages with the view that it will affect their morality and values.[8]

This gap has further deepened during COVID-19 crisis, [9] as majority of women lack in ICT skills resulting in their deprivation of education[10] and livelihood opportunities available online as they are not able to leverage on digital transition during this period.

2. **Privacy Perceptions:** The government in India and around the world are becoming increasingly conscious about privacy as societies become more 'datafied', however, little focus has been given to women's perception of privacy. In this regard, a privacy perception survey conducted by Consumer Unity & Trust Society (CUTS), revealed that women hold a different perception of privacy, as they are more cautious of sharing their email-

Ids and personal photos, with impact on reputation as a prime consideration. Along with this, their confidence in techniques, such as anonymisation was also found to be comparatively low.[11]

Additionally, instances such as the reports of linking 'Aadhar Card' to track pregnancies and abortion in women, pose a risk on their right to informational autonomy and affect their reputation.[12] Such instances may result in dilution of the concept of 'privacy boundary management' (managing privacy based on personal beliefs and situational assessment),[13] which particularly adversely affect women, as they might lose control of what they can or cannot disclose about themselves.

In this regard, contextual elements for disclosure of information such as to whom, for what and why and its effect on their reputation and societal standing become important for women. It remains to be seen how the current framework of data protection and conditions of consent built therein will accommodate unequal power dynamics in the society,[14]which at times may put women at disadvantage.

3. **Cyber Crimes against Women:** While online spaces are becoming a new medium of exchange of information and ideas, it has also become a festering ground for online crimes. In India, cybercrimes against women have increased by 42 percent from 2017-2018,[15] which includes around 2000 cases of online sexual harassment and exploitation.[16]

More recently, as per the data released by the National Commission for Women (NCW), there were 54 registered complaints of cybercrimes by women in the month of lockdown period, i.e. March-April as compared to just 21 complaints in February, owing to the prevalence of work from home culture and increase in online activities due to COVID-19.[17] Such risks of online abuse further deter women from freely using online tools.[18]

Currently, many of the cybercrimes are covered within the provisions of the Information Technology (IT) Act 2000 (transmitting obscene material and sexually explicit material in electronic form),[19] Indecent Representation of Women's Act, [20] and The Indian Penal Code (cyberstalking, publishing material for blackmailing, intimidation, threat, and harassment through an electronic form).[21]

While these laws recognise cyber-crimes against women they do not provide adequate mechanisms to address them effectively and fails to consider should be treated differently online than offline.[22] For instance, the provisions of the IT Act puts the burden of proof on the victim and fails to acknowledge that in online space consensual circulation to one person does not qualify for public circulation.[23]

Additionally, due to missing jurisprudence around such crimes, there is lack of victim sensitive procedure for filing complaints,[24] also some complaints are reported and many go unacknowledged or the victims are not capacitated to identify the crimes and for filing complaints. This leads in furthering a sense of insecurity that women might face online.[25]

4. **Future of Work:** Digital ecosystem in India has been growing for the past few years and it was presumed that this will provide more opportunities for women to join the workforce. However, the women workforce participation has suffered as there has been a decline in female labour force participation from 35 percent in 2015 to 26 percent in 2018.[26] This is due to barriers such as lack of digital literacy, lack of ICT skills leading to limited access to new employment opportunities.[27] Furthermore, there is a lack of thrust for making platforms economy more gender-inclusive.[28]

Moreover, a study conducted in 2018 on women participation in the platform economy found that around 35 percent of the women surveyed were unwilling to join the platforms and e-commerce, which is due to the trends of the gender pay

gap and structural barriers, such as unequal power relations, which gets further aggravated due to lack of women at higher managerial positions.[29] The lack of participation has also also resulted from an already existing burden from unpaid household work and lack of incentivises by the platforms for women to break away from their traditional household work.[30]

Recommendations

In his 2018 address at the European Commission, UN-Under Secretary-General highlighted the need to understand the risks and opportunity that technology brings for women. He emphasised that to utilise the full potential of the technology, it is important to understand the causes of discrimination and inherent challenges that emanate from a male-dominated society.[31]Considering this, to fulfil the goals as set out in SDG 5 on gender equality and address key challenges as mentioned above, the following recommendations can be considered:

- In recent years, the Indian government has taken initiatives under the 'Digital India' campaign and *Pradhan Mantri Gramin Digital Saksharta Abhiyan*

(PMGDISA)[32] to improve access to mobile devices and the internet. However, to address both structural and societal problems in this regard targeted digital skilling and literacy campaigns through reaching out to schools and rural communities to engage women and girls in the training and imparting education on regarding work environment preparedness is vital. There should be awareness campaigns for communities with women role models, explaining the uses of technology which goes beyond just communication and entertainment and solidifying it as a tool to access services and relevant information for their economic upliftment. Notably, one such initiative has been undertaken by CUTS to increase financial literacy amongst rural women, which includes enhancement of uptake of digital financial tools.[33]

- To make online space more inclusive and safe for women, regulations around data protection and cybercrimes need to be drafted in a way that accounts for contextual elements that might become important for women. For this, the privacy principles need to be interpreted in a way that warrants the inclusion of feminist approaches to consent and ensures

flexibility of boundary management for women through innovative technological design.[34]

Additionally, current provisions of legislations need to be revisited. These should include procedures for registering, investigating complaints through collaboration with private intermediaries, laying protocols to keep records of repeated online offenders, training of authorities who register and investigate the complaint to ensure the privacy of women and prescribing appropriate timelines to address the complaints.

Moreover, capacity building initiatives are necessary for women to identify such crimes, and equipping them with the knowledge of registering complaints, saving evidence, such as suspicious chats or content. Furthermore, there is a need for more sensitisation to maintain a safe online workspace and need to revisit the internal policies of organisations.

- For increased participation of women in the platform economy, more research is needed to ensure that the entrenched gender biases within the existing work environment do not find its way in the platform economy. In this regard, CUTS had also made recommendations to the ITU highlighting the need for increasing women's participation in the digital economy through bridging the digital divide.[35]

There is also a need for a balanced approach through which certain social security benefits, such as safety at the workplace, paid and parental leave, grievance redress mechanism[36] should be adopted by platform economy employers. Additionally, there should be greater push through incentivising the uptake of Science, Technology, Engineering and Mathematics (STEM) research fields and women entrepreneurship which can enhance research and innovation.

Endnotes

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