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DigitALL: INNOVATION AND TECHNOLOGY FOR GENDER EQUALITY

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Abstract:

Science, technology and innovation can play a very important role in meeting internationally agreed developmental goals. However, they cannot effectively facilitate equitable and sustainable development unless the aims, concerns, situations and abilities of women as well as men are considered in formulating science, technology and innovation policies. Technology and innovation present us new opportunities that never existed before. Not only do they help progress the economy and people's livelihood they also serve as a powerful tool to increase awareness creating space for social movements and making everyone's voice heard. It is undeniable that technology and innovation have contributed to the democratization of access to information and opportunity. But it is true only to a certain extent. If we look closer women and girls across continents have inadequate and limited access to technology. The exclusion of women from science has been historically witnessed by the world for a long time and their participation is still not in parity of expectation. The negative attitude that is held against women pertaining to science and technology remains active due to the influence of socio-psychological parameters. The barriers to women's access to technology and innovation lies in the structural issues, poverty, gender discrimination and digital illiteracy. The lack of such access translates to a lack of information, updates, opportunities and the skills necessary to adapt to the changing circumstances. Proper monitoring, proper informing and creating necessary work conditions in the field of science and technology can help reduce gender inequality. As the pandemic led to a surge in the use of digital technologies in education, it also revealed staggering gender gaps in access to and use of digital technology all around the world. Indeed, gender-based exclusion is present throughout the technological world. However, the pandemic showed that learning can occur anywhere and anytime. Innovative solutions are at finger tips and we have an opportunity now to leverage and grasp global experiences to deliver quality learning for gift.

Keywords: Equitable Future, Digital Platforms, STEM.

INTRODUCTION:

Science and digital technology has become a critical and inseparable part of human life. Online experiences and opportunities are also important for children's and young people's development across a wide range of areas, including: online education, access to formal and informal learning; access to information and support relating to health and well-being; being able to engage with their own creative and cultural practices; to express their ideas and opinions; to help them connect with peers; to help them find employment, career information and

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entrepreneurship opportunities. However, there exists a gender divide that is gender based. Women make up only around 35% of the stem workforce. Consequently, women and girls tend to be excluded from technological advancement. They are disadvantaged when it comes to digital adoption. They have considerably lower levels of access to use of digital technology than the counterpart, and often they are not benefitting from digital technology in the same way as men. There are a number of root causes of the digital gender divide, including hurdles to access, affordability, education thus resulting in lack of technological literacy as well as inherent biases lead to gender based digital exclusion. Affordability is a challenge for all but affects women and girls more disproportionally and thus remains one of the key hurdles in accessing ICTs. In order to meet the realities digital products and services need to be designed with and for girls. Digital technologies and products and content tend to be designed for a default user and fail to consider the girls have to on the digital platform they are on, their digital literacy levels, or content girls find relevant and want to see. Despite best intentions, teams often design for a user base that is predominantly male. Girls are left out of co-creation, design and product testing. As a result, female users often put girls at a further disadvantage. This is not only a loss for women, but for the society as a whole. In order to respond to the needs of women, women need to be involved in the development process. Diversity can bring about development that meets everyone's needs.

WOMEN AND GIRLS INTO THE FIELD OF SCIENCE:

Women and girls have made revolutionary discoveries, reinvented our future through the power of innovation, imagination and technology and paved the way for a better future. Despite their achievements, women and girls still are under-represented in Science, Technology, Engineering and Mathematics (STEM) fields. Women remain a minority in STEM education at only 35 per cent, with just 3 per cent studying information and Communication Technology. The statistics is a clear indication of the discrimination faced by women and girls around the world. This stands even more true for marginalized women and girls, such as indigenous women, women with disabilities, women in rural areas, elderly women etc. Gender stereotypes and norms are reinforced through early ages and are found embedded in curricula, textbooks, and teaching-learning practices. Careers in men have a strong male-dominated culture and thus have a limited women representation.

Existing initiatives have proven inadequate. Change for girls in science requires a commitment to long-term, sustainable programmes and initiatives that acknowledge structural barriers and thus work to remove them.

DIGITALL: BRIDGING GENDER GAPS THROUGH INNOVATION AND TECHNOLOGY.

This year's International women's Day under the theme DigitALL: Innovation and technology for Gender Equality provides an important reminder of the immense potential that digital transformation possesses for accelerating gender equality and women empowerment. It also reminds us of the risk it bears for repeating and amplifying existing patterns of gender inequality.

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It is essential to make greater and more sustained investments increasing women and girls digital literacy and familiarity with technology. This in turn empowers them to participate effectively in the digital economy and gain access to digital services which include various sectors such as education, healthcare and online banking. In today's world with the advancement in technology E-commerce and technology-based business offer women more flexibility thus providing them more inclusion which is essential for economic empowerment.

Apart from basic skills it is also essential to promote women and girls in ICT sector by developing their skills in areas such as coding, where there is still critical underrepresentation. By enhancing their digital skills and presenting them with female role models, there is potential to increase their opportunities to pursue careers in science, technology, engineering and mathematics (STEM)- a field that has immense growth possibilities and will account to 75% of jobs by 2050. This will require concerned efforts by the government, academia, civil society and a very crucial pillar i.e. the private sector.

Women also need to be involved in the creation of and decision making around digital technology. It is very important to ensure that today's emerging data-driven solutions are not biased of harmful gender stereotypes and patterns of discrimination. There is a need to develop online content and technology with and for women and girls in a way that responds to their specific needs and priorities within a regulatory framework that prioritizes, emphasizes, protects and promotes human rights of women and girls.

Digital platforms and online spaces should be made safe for women and girls. As per a recent survey India has seen significant jump in cyber crimes reported in 2021 from the previous years. Karnataka and Uttar Pradesh accounted for the highest share during the measured time period.

(Survey period-2012-2021).

Number of cyber crimes reported across India from 2012 to 2021.

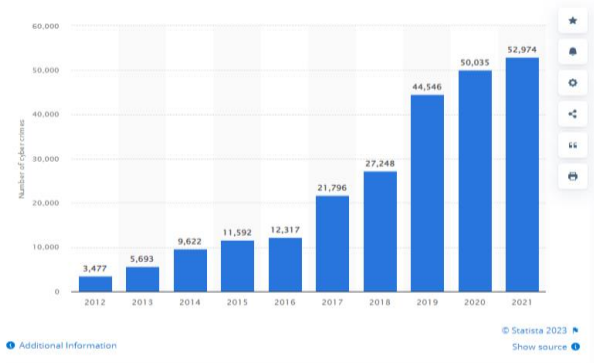

Fig.1**Number of cyber crimes reported in India 2012-2021**

Unfortunately cyber harassment and violence against women and girls are often not taken seriously which deters them from using the internet and thus threatening their online freedom of expression. It is crucial to tackle the harmful social norms at the root cause of these acts of violence and set up legal and policy frameworks that educate and protect girls and women from cybercrimes. One of the major key factor that will help eradicate cyber violence apart from helping women and girls to recognize, report and recover from online abuse is civic education for perpetrators, often boys and men, to uproot harmful social norms an power dynamics that underline their action. Women need to be made aware of the potential benefits that the internet may bring. It is found that women who do not engage online are not interested in using the internet, and believe that

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accessing the internet would not bring them any benefit. Lack of trust in digital devices or internet is also one main factor. Illiteracy further hinders women's and girls ability to access online services. To try and tackle with this hurdle, some search engines, such as Google, have installed voice navigation systems in local languages to make Internet search queries more accessible and inclusive. The digital gender divide is also fuelled by digital illiteracy, which often translates in lack of comfort in using technology and accessing the Internet. Such "technophobia" is often a result of concurrent factors including education, employment status and income level.

HOW CAN WE BRING ABOUT A CHANGE FOR EQUITABLE FUTURE-

- **Bridging the gaps in digital access and skills:**

Initiative needs to be taken by governments to invest in evidence-based programmes and initiatives. Allowance of subsidized smartphones and laptops for women and girls and making the provision for incentives and low-cost data plans can benefit in a large way in overcoming gendered access barriers. This is also applicable to digital literacy programmes, which can help give women and girls the skills they need to lead, connect and successfully shape the digital space.

- **Provide support to women and girls in STEM:**

Working to eliminate gender biases from schools is a key to ensure that girls have access to women mentors as role models in STEM fields with whom they can identify. And connecting STEM to other disciplines-as well as emphasizing its potential applications to the needs of the society, which research shows is a main driving force of girl's career choices. In order to help women succeed in a changing and growing labour market, targeted reskilling and upskilling programmes should be created. The changing transitions in the labour market should be aimed at improving the position of women and ensure that repeating patterns of inequality are not reproduced.

- **Technology meeting the current needs of women and girls:**

Creating more inclusive, less biased tech starts with designing and regulation processes rooted in human rights. That means centralizing the voices of marginalizes and vulnerable women, as well as social and behavioural scientists and human rights experts, in the design of new digital technology. It also means equal access to exercise different rights online, such as freedom of expression. Ethical frameworks needs to be enforced by rooting them in international human rights standards and norms.

- **Empowering women in Education and employment:**

Technology can contribute to gender equality by improving access to education for girls and women. One example in which digital innovation and technology has made significant advancement in promoting gender equality in India is the use of mobile apps to provide access to educational resources in rural areas. "Pratham" is an innovative learning organization created with the aim to improve the quality of education in India. It aims to provide education to children in the slums of Mumbai. The app "Learn English" developed by this not profit organisation is a game-based learning to teach English language skills making it accessible to students primarily girls in areas with poor connectivity. Digital platforms help women by providing them with access to the same educational

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resources and opportunities as their male counterparts. This proves to be beneficial in fields of (STEM), where women are underrepresented. Startup such as SheThePeople.Tv, Nykaa, Zivame, MamaEarth are leveraging technology to provide women with opportunities to upskill, connect with mentors and find employement. Jobs for her is an online portal that connects women with job opportunities and offer support with career transitions. With the rise in the growth of digital entrepreneurship and E-Commerce women are empowered with new opportunities to start their own businesses and be self-employed. D digital platforms have the potential to empower women, due to a lack of knowledge and skills many are unable to use them. To address this, initiatives such as 'Digital Saksharta Abhiyan' are being implemented. It aims to provide digital literacy training to women and girls in rural areas. The program was launched in 2015 by the Ministry of Electronics and Information Technology as part of the Digital India campaign. It particularly focuses on empowering women in rural areas by providing them with the skills and knowledge they need to participate digitally in the growth of economy and access various government services online. The training is provided through a network of training centers located in rural areas, and the program also provides financial incentives to encourage people to participate in the training. Digital technologies have played a significant role in empowering women's health and creating a more just society by providing them with healthcare information, resources and services. Mobile healthcare apps like HealthifyMe, Strava etc and wearable devices have increasingly gained popularity in India, thus allowing women to seek medical advice remotely and make more informed decision about their healthcare.

CONCLUSION:

"We have a responsibility to elevate learners, especially those who are disproportionally impacted, with the resources necessary to engage in blended learning and gain vital skills to participate in the digital economy. In doing so, we have the potential to drive better learning outcomes and a brighter collective future." - Betty-Hill-Gracia.

Innovation and technology has potential to play a vital role in promoting gender equality and thus a more equitable future. Ranging from the field of education, to healthcare and the workplace, technology and innovation has scope to offer new solutions to long prevailing challenges. In order to realize their potential to the fullest there is a need to ensure that there is no gap in accessibility considering gender or socioeconomic status. While the growth in digitization and modern advancement in developing societies does offer many opportunities, its use requires careful thought of mitigating measures to ensure that the gender gap is not further widened.

REFERENCES:

http://bweducation.businessworld.in/article/Empowering-Women-In-Era-Of-Digital-India/08-03-2468221/#:~:text=To%20address%20this%2C%20initiatives%20such,in%20rural%20areas%2C%20including%20women.

https://www.actionaidbd.org/storage/app/media/Research%20Findings_Online%20Violence%20Against%20Women.pdf

https://www.oecd.org/digital/bridging-the-digital-gender-divide.pdf

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https://www.statista.com/statistics/309435/india-cyber-crime-it-act/

https://www.unicef.org/eap/innovation-and-technology-gender-equality

https://press.un.org/en/2023/wom2224.doc.htm

https://unfoundation.org/blog/post/the-digital-future-we-want-for-girls-and-women-what-needs-to-click-at-csw67/

https://www.unwomen.org/en/news-stories/announcement/2022/12/international-womens-day-2023-digitall-innovation-and-technology-for-gender-equality

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