The world has entered a new level of sophistication in connectivity, but a world where lines have been blurred between real and online, fact and fiction, truth and lie. The role of the technology has become an essential tool for every organisation, not least for those deploying peace operations. Specific efforts have been made to utilize technological tools and platforms to support conflict resolution in communities and foster democracy and local activism.

Technology is complex and continuously evolving. Early adopters were inspired by the potential of technology as an equalizer, a game changer for the disadvantaged and the marginalised. The intangible and ever-changing nature of cyberspace was for many, an opportunity to level the playing field and usher in structures of equality – but, just like the real world, cyber space is flawed.

Despite its potential, the digital revolution has sadly not transformed our gendered state of affairs. As peace operations venture down a path of digital transformation, they must carefully consider both the potential opportunities and pitfalls that technology presents, especially taking note of what can be a gendered tool of oppression and continued marginalisation. While technology has the power to enable, it can also disempower.

**THE GENDER GAP IN CONNECTIVITY**

It is estimated that 5 billion people around the world use the internet today (63% of the population). However, 3.7 billion people are unconnected, the majority of whom are women and girls.[1] (s. Footnotes at the end of the article). In some regions, such as the Americas, the digital gender gap is almost zero; in Eastern Europe it is shrinking. In many parts of the world – especially the global south and many conflict areas – the gender gap has grown substantially.[2]
The International Telecommunication Union (ITU) regional estimates for Africa put the gender ratio at nearly three-to-two in favour of men over women. Approximately around 234 million fewer women in low- and middle-income countries use the mobile internet than men. This divide is most stark in sub-Saharan Africa and South Asia where the gender gap persists over 55% more men than women. [3]

Approximately 1 billion women are unable to access financial services because of limited access to mobile phones, underdeveloped digital skills, and inappropriate products, among other barriers.[4] These gaps pose a direct threat to economic development as digital exclusion and concerns over safety and security online limit women and marginalized groups’ engagement in the digital economy.

A failure to ensure women have equal access to the internet has cost low-income countries $1tn over the past decade and could mean an additional loss of $500bn by 2025. Last year governments in 32 countries, including India, Egypt and Nigeria, lost an estimated $126bn in gross domestic product because women were unable to contribute to the digital economy. Phumzile Mlambo-Ngcuka, former executive director of UN Women and founder of the Umlambo Foundation, said: “We will not achieve gender equality until we eliminate this digital gap that keeps so many women offline and away from the opportunities the internet provides.”[5]

While COVID-19 technically empowered many around the world, for many women various barriers prevent them from taking advantage of a technological future – from expensive handsets and data tariffs, social norms that discourage women and girls from being online, fears around privacy, safety, and security and a lack of money.

The digital divide is apparent in the development and design of technology as well as online usage. Although women have a long history in the development of online world from Ada Lovelace, Grace Hopper, to Elizabeth ‘Jake’ Feinler and Radia Perlman, women who have created, designed, inspired, defended and coded. And yet, much like any other industry their role and achievements have often been dismissed and obscured.

Over the last few years, several initiatives have been introduced by corporate and governmental bodies, as well as the UN, to address the underrepresentation of women in technology. Getting more women into technology is essential not just for the sake of parity. For peacekeeping more women (as well as other minority groups) mean more diversity – which allows for a different way of thinking about the design and use of technology, especially with regards to protection of women and girls.

Increasing women and addressing gender parity has become a clarion call for the UN and other organisations. The UN has decreed that parity – 50% representation – is the goal, across all sectors and all regions. The 2019 UN Military Gender Strategy sets annual targets for the participation of women in uniformed roles (including 15% in military contingents and 20% in Formed Police Units by 2028). The commonly accepted theory that if any organizational group increases the number of women to 30%, systemic change is not only possible, but sustainable.[6] Anything less than 30% will result in stasis. Therefore, change relies on having a quota of 30% women (or any other
marginalised group) present. This however is reliant on the theory that all women will support the same transformational goals.

Despite the value of gender parity, the real key to advancing gender equality is in the broader application of gender – beyond just numbers. Simply adding more women to any industry does not advance gender equality. Changing the system does! And, to change the system, reduce imbalances and eradicate discrimination – gender analysis is required. Which means putting a gendered lens on technology to allow for an upending of structural obstacles that excludes women and other less represented groups.

**DIGITAL FEMINIST ACTIVISM**

Despite the glaring digital gender gap, there has been some progress and positive shifts especially over the last few years. Technology has provided a platform for mass mobilisation and awareness raising on specific issues, from women’s rights to Occupy Wall Street. Feminist digital activity has surprisingly flourished in this ambiguously open space.

Digital feminist activism allows for feminists to utilize new tools to spread awareness, disseminate information, and mobilize constituents. Women and girls of all ages have taken the digital mantle to create movements and advocate an array of messages promoting, and demanding, their rights. Over the last couple of years, Covid-19 has increased the proliferation of such digital activism.

Globally women have used the internet to highlight acts of violence or harassment – in India women used #whyloiter as part of the movement to reclaim public places and stop public harassment. In Afghanistan #WhereIsMyName, mobilized Afghan women within the online space to push for their name to be used on ID’s. Parents and community members in Nigeria took to social media, with #BringBackOurGirls to highlight the fate of abducted girls taken by Boko Haram. Bring Back Our Girls has become a lasting movement in Nigeria, where it has expanded to include calls for action around many human rights abuses.

The international collective attention on sexual abuse has expanded through online actions like #METOO and #TimesUp. These movement have taken root in over 85 different countries from the global North to the global South and has changed key discourses on sexual harassment and assault. The movements have left a legal and advocacy footprint on harassment and abuse.

International organisations have also expertly utilised online tools for wider advocacy on sexual violence in conflict. While attention has been incrementally increasing since the adoption of the first UN Security Council Resolution (1820) that addresses sexual violence in conflict settings – it has been largely the dissemination of information online highlighting the heinous rape and abuse of women (and men) in conflict using the #stoprapenow, that has galvanized the attention of the world. That and the – sometimes questionable – engagement of celebrities.
However, sadly the positive stories are few and far between – generally, for many women and marginalised or minority groups, online gender dynamics have simply reinforced or even amplified social, economic, cultural, and political structures of the offline world. The online world has a dark side – creating opportunities for global voyeurism and anonymous virtual violence to flourish. Just as digital feminist activism has prospered, on the flip side the technology has given rise to opportunities for cyber-hatred, trolling and bullying, especially for the LGBTQI community around the world.

ONLINE THREATS TO WOMEN

A gendered analysis conducted in 2020 by World Pulse further found that women around the world online face myriad challenges, including privacy concerns, online harassment, and technology-enabled violence, among other problems that have inhibited their full engagement on these platforms[7]. These limitations and the failure of policy frameworks to meaningfully address them, are profound obstacles to women’s engagement. Peace operations and peacebuilding initiatives are increasingly looking to use online platforms to enable broader participation in dialogue processes and community engagement.

In order to realise the promise of greater inclusiveness – especially of women – peace operations need to understand the underlying structural impediments. In conflict areas, they can also advocate for better regulation of online platforms and social media to counter hate speech, particularly where it is directed towards women.

Women are far more likely to be victims of cyber bullying and shaming through online platforms than men and according to a 2015 UN report, are 27 times more likely than men to be harassed online is simply a reflection of a larger societal problem, now enabled by technology.[8] Metadata and the information gathered for geolocation services can enable abusers to track partners or harass individuals through multiple mediums, meaning that technology acts as a less visible enabler for domestic abuse.

A recent Inter-Parliamentary Union (IPU) survey of 55 women legislators worldwide found that 81.8 percent of the respondents had experienced psychological online gender-based violence, including high incidences of humiliating or sexual images having been circulated, where were often fake or doctored.[9]

Women politicians or other leaders are also targeted more often than their male counterparts. This is global, from Europe, to Ukraine, and Brazil, examples highlight targeting of women politicians through fake stories and disinformation campaigns. This pattern tends to be even more pronounced for female political leaders from racial, ethnic, religious, or other minority groups, and for those who speak out on feminist issues. This is especially true in traditional societies where women struggle to be heard. In Libya, hate speech directed towards female activists has led to their withdrawal from dialogue processes or at worse to their leaving the country altogether.[10]
In the 2019 report ‘#ShePersisted: Women, Politics & Power in the New Media World’[11] the pervasiveness of gender-based abuse and disinformation in the digital space was highlighted as a barrier for women who want to engage in politics and a serious disincentive for young women to consider a political career. Gendered disinformation undermines women’s credibility, poses obstacles to political advancement, and is named as one of the main reasons women abandon political careers. When designing activities to engage communities, peace operations can try to alleviate these obstacles through targeted strategic communications and raising awareness.

This is not just a gender issue; this is an impediment to peace and security.

**DIGITAL DECISIONS – SEIZING OPPORTUNITIES**

The online world is dynamic and ever-changing. Technology can be a powerful tool for women and girls - to engage in democracy, promote equality and illustrate injustice – as well as to achieve political, economic and social empowerment. However, despite the promises of equality and commitment to diversity – the digital gender gap remains and is flourishing.

In 2000 the Security Council adopted the first of a series of 10 resolutions on Women Peace and Security that collectively promote the full inclusion of women and gender perspectives in building peace and stability around the world and protect women from sexual violence. The WPS agenda seeks to achieve the effective and meaningful participation of women across the whole spectrum of international security. Several States and multilateral stakeholders have recognized the importance of achieving this goal in international negotiations and decision-making peace and security. However, the agenda is largely silent on technology. It is imperative for Member States to understand the nexus between peace, gender and security and to promote this in the application of the WPS agenda.

Precedent was set for the integration of a gender perspective in technology. In 2015 the UN Secretary-General’s report on Women, Peace and Security, referenced the potential of new technologies as powerful tools, in both conflict and non-conflict settings and addressed issues relating to the differentiated impact of gender in the online environment especially related to perpetuating sexual exploitation and violence[12]. More recently he launched his ‘Strategy for Digital Transformation of UN Peacekeeping[13] which outlines the path for innovative and digitally progressive peacekeeping operations.

The Strategy proposes to enhance connection between technology users and technology developers to find sustainable technology solutions. It is therefore critical that women are engaged in both identifying problems as users and providing solutions as developers. For technology to be fit-for-purpose and to reflect and respond to all the population, then gender analysis must be applied to make sure that the solutions are holistic and comprehensive. Populations in peacekeeping settings are not just men.
In a 2021 Presidential Statement, the Security Council recognized that technologies had ‘potential as a force multiplier’ and encouraged exploring available and future technologies … that can contribute to the protection of civilians and allow for safer and more effective peacekeeping.[14] This requires strengthening situational awareness for better-informed planning and decision-making, as well as developing an integrated approach to information.

The integration of gender perspectives into situational awareness – making sure that women and men are consulted on risk and threat – is critical.

Today the ability to track risks and anticipate their consequences is possible because of advances made in quantitative and qualitative analytical tools, machine learning (ML), and artificial intelligence (AI). The advancement in technology has provided tools to enhance early warning systems which can accelerate response to risks. This can be invaluable in protection of civilian responses.

Satellite imagery can identify population displacements, which can be an early indicator of the beginning of a conflict and can also be used to plan humanitarian assistance and help affected populations. Although the work with satellite imagery is not new, recently there has been an exponential growth in the availability of images. Google Earth Engine, Copernicus Data Hub, and similar sources are enabling much quicker analysis. Observation platforms, such as Planet, provide daily imagery at a lower resolution, or HawkEye360, provides mapping of radio transmissions at certain frequencies.

All these tools can increase the speed and efficacy of protection in peace operations. Atul Khare, Under Secretary General for UN Operational Support recently said that “technology can make our missions and camps ‘smarter,’ more integrated, efficient, effective, safer and allow for end-to-end service delivery and operational support while minimizing environmental footprint”[15].

But only if gender is taken into account. Only if, there is recognition that women and men recognize the world, security and their roles differently. Only if, there is genuine commitment to create and adopt technology that benefits women and men.

Marshalling diverse, gender-inclusive engagement on technology will enable a more engaged, well-informed, more resilient and economically empowered population. Today diversity is not optional – it is fundamental. It is about embracing difference - positive difference that can effect change. Ultimately creating a more peaceful, diverse and inclusive world should not be a myth – it should be our everyday reality.
FOOTNOTES

1 DataPortal, April 2022.
3 The Costs of Exclusion Economic Consequences of the Digital Gender Gap
5 The Guardian, Digital gender gap: men 50% more likely to be online in some countries, October 11, 2021.
6 The Tipping Point theory: In epidemiology the tipping point is that moment when a small change tips the balance of a system and brings about a large change. Rosabeth Kanter introduced the concept that 30% was the tipping point for women's representation.
7 #SheTransformsTech: Transforming Tech for Gender Equity, World Pulse 2021.
9 Inter-Parliamentary Union (IPU).
10 See SG Report on UNSMIL (S/2022/409).
12 Report of the Secretary-General on women and peace and security (S/2015/716).
15 CIOTECH Asia, UN will use technology and medical capacity to improve peacekeeping, November 30, 2021.

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