WAYS TO BRIDGE THE GENDER DIGITAL DIVIDE FROM A HUMAN RIGHTS PERSPECTIVE

Submission by the Human Rights, Big Data and Technology Project at the Human Rights Centre of the University of Essex, Funded by the Economic and Social Research Council

Introduction

1. This submission is made by the [Human Rights, Big Data and Technology Project](#) (HRBDT), funded by the Economic and Social Research Council and based at the University of Essex's Human Rights Centre. HRBDT analyses the challenges and opportunities presented by the use of big data and associated technologies from a human rights perspective. Drawing on the wide range of expertise of its interdisciplinary researchers and partner organisations, the Project considers whether fundamental human rights concepts and approaches need to be adapted to meet the rapidly evolving technological landscape. The work also brings together practitioners, State, industry and United Nations officials, and academics in the fields of human rights, big data and associated technologies to assess existing regulatory responses and whether reforms are needed in order to maximise effective human rights protection.

2. HRBDT welcomes the call for input published by the Office of the High Commissioner for Human Rights (OHCHR), pursuant to Human Rights Council Resolution 32/13 on the promotion, protection and enjoyment of human rights on the Internet and the opportunity to contribute to the High Commissioner's report on ways to bridge the gender digital divide from a human rights perspective.[1]

3. This submission addresses: 1) the conditions that favour the development of a gender digital divide; 2) the impact of such divide on women's human rights; and 3) the human rights framework relevant to addressing the gender digital divide. The main focus of the present submission is on the impact of the digital divide on women, with additional consideration given to implications for LGBTI persons.

The development of a gender digital divide

4. Technology has the potential to produce an impact on various aspects of society. Free access to and use of Internet Communication Technologies (ICTs) has become essential to the conduct of government operations, to business, and to individuals' day-to-day lives. While these technologies offer unprecedented opportunities for advancement in areas ranging from education to political participation and employment, they have also been pinpointed as a key factor in social and economic disparities. Existing inequalities are reflected in discrepancies in the access to and use of ICTs, thereby transposing offline divides into the digital space. Due to the negative impact of lack of free access to use of and benefit from ICTs, the digital revolution risks significantly amplifying the gender divide across different social and economic groups. This constitutes a barrier to the emergence of an equitable information society by perpetuating, and even exacerbating, gender inequality, gender inequality being both the cause of and aggravated by the gender digital divide.

5. Throughout the world, economic, social and cultural obstacles prevent or limit women's access to, use of, and benefits from ICTs, a phenomenon referred to as the gender digital divide.[2]

<u>Impediments to access to ICTs</u>

6. Distinct socio-economic disadvantages faced by women, including the gender wage gap that persists globally, make the relatively high price of Internet access in many low- and middle-income countries one of the most significant barriers to increasing adoption of ICTs among women and female-headed households.[3]

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[1] A/HRC/RES/32/13, OP 13.

[2] Relevant sources distinguish two main aspects of the gender digital divide: a gap in access and a gap in use of ICTs. See, for example, World Wide Web Foundation, 'Women's Rights Online. Translating Access into Empowerment' (2015), available at webfoundation.org/docs/2015/10/womens-rights-online21102015.pdf.

[3] Broadband Commission Working Group on Broadband and Gender, 'Doubling Digital Opportunities: Enhancing the Inclusion of Women & Girls in the Information Society' (2013), available at www.broadbandcommission.org/documents/working-groups/bb-

7. In many countries, women continue to be economically dependent on their spouses and other male relatives.[4] They often have less control over finances than do men[5] and, as a result of the unequal division of paid and unpaid work, fewer women have independent income from their labour.[6] Together, these socio-economic impediments significantly impact the affordability of ICTs for women.

8. Lack of equality in access to ICTs is a key human rights concern[7] in many countries around the world.[8] Accessibility may be limited by both physical and social/cultural impediments. These are closely linked to affordability and access to information.

9. Factors such as geographical isolation and poor technological infrastructure can prevent women from accessing ICTs in public or at home.[9] While these circumstances affect both women and men, for women, physical inaccessibility is exacerbated by the power inequalities and socio-cultural norms that shape their day-to-day lives. In countries with marked gender disparities in education, income, and political power, cultural norms frequently limit women's online access.[10] Women's access to digital resources, such as Internet cafes, is restricted in societies where they have limited visibility in public.[11] Equally, in some countries, men largely control women's access to ICTs in the private domain.[12]

Impediments to the effective use of ICTs

10. Equal access to ICTs is not sufficient in itself to close the gender digital divide. Beyond having access to the Internet and related technologies, women need to have the knowledge and resources to translate access into effective use. Women however face a series of obstacles when it comes to free use of ICTs. Some of these obstacles are related to the education gap affecting women. Lower levels of literacy and numeracy align with lower levels of technological skills. The resulting digital literacy gap is manifest in the lack of basic technological skills, which poses an obvious impediment to both access to and use of ICTs.[13]

11. Even when women have affordable access to the Internet and the skills to make use of it, they are often confronted with: a) a lack of online content relevant to their experience, context and language[14] and b) a hostile and unsafe online environment, likely to discourage them from using certain websites, services or features.[15]

12. The lack of relevant content may be a crucial obstacle to continued use of available Internet access.[16] Due to the lack of apparent value for them in accessing the Internet, women may be unwilling to

doubling-digital-2013.pdf, at 22; Alliance for Affordable Internet, 'Affordability Report 2015/16' (2016), available at a4ai.org/wp-content/uploads/2016/04/A4AI-2015-16-Affordability-Report.pdf, at 5 and 32.

[4] Alliance for Affordable Internet, *supra* note 3, at 32.

[5] United Nations Department of Economic and Social Affairs, Statistics Division, 'The World's Women 2015: Trends and Statistics', (2015), available at unstats.un.org/unsd/gender/downloads/WorldsWomen2015_report.pdf, at xiv.

[6] Broadband Commission Working Group on Broadband and Gender, *supra* note 3, at 22.

[7] *Ibid*, at 10.

[8] European Parliament, 'Information and Communication Technologies and Human Rights' (2010), available at www.europarl.europa.eu/RegData/etudes/etudes/join/2010/410207/EXPO-DROI_ET%282010%29410207_EN.pdf, at 71. In the developing world, nearly 25% fewer women than men have access to the Internet, with this figure soaring to 45% in Sub-Saharan Africa. See Intel, 'Women and the Web' (2013), available at www.intel.com/shewill/, at 10.

[9] Research by the World Wide Web Foundation suggests that women are nearly 50% less likely to access the Internet in poor, urban communities in low and middle-income countries. See the World Wide Web Foundation, 'Women's Rights Online: Translating Access Into Empowerment' (2015), available at webfoundation.org/about/research/womens-rights-online-2015/. Moreover, as rural areas are often remote, sparsely populated, and marginalized, the spread of Internet access infrastructure, such as broadband cables and cell phone towers, is less economically effective as compared to urban areas. See Intel, *supra* note 8, at 23. See also the World Wide Web Foundation, 'Digging Into Data on the Gender Digital Divide' (2016), available at webfoundation.org/2016/10/digging-into-data-on-the-gender-digital-divide/.

[10] Intel, *supra* note 8, at 23.

[11] M. Zarrehparvar, 'Women's human rights in the information society', in R. F. Jorgensen (ed.), *Human Rights in the Global Information Society* (MIT Press, Cambridge, 2006), at 231.

[12] European Parliament, *supra* note 8, at 71.

[13] United Nations Department of Economic and Social Affairs, Statistics Division, *supra* note 5, at xiv.

[14] European Parliament, *supra* note 8, at 71.

[15] N. Primo and A. W. Khan, 'Gender Issues in the Information Society' (2003), available at portal.unesco.org/ci/en/file_download.php/250561f24133814c18284feedc30bb5egender_issues.pdf, at 42-44.

[16] European Parliament, *supra* note 8, at 71.

invest money or time in this regard.[17] Apart from the absence of relevant content, Internet filters may also contribute to the problem. For example, filtering policies, which are in place in some countries, may block access to health and sexuality information, affecting women's health and reproductive rights. This raises further concerns when it comes to information relevant to LGBTI communities as such online material may constitute their only source of information.[18]

13. Hostile online environments marked by negative stereotypes, attitudinal biases linked to conservative gender roles, harassment, and hate speech constitute additional factors impeding use. Given the existence of a digital gender gap, they may remain unchallenged and become self-perpetuating.[19] Hostile online environments, as well as conservative gender roles, may also be associated with a gender divide regarding participation in online political discourse.[20]

Impact of the gender digital divide on women's human rights

14. ICTs and human rights have become inextricably intertwined. With the transformative potential of ICTs and big data, the impact on human rights, both positive and negative, have become increasingly apparent.

15. Inequalities in access to and use of the Internet and associated technologies have the potential to undermine the opportunities for realising human rights and attaining the Sustainable Development Goals (SDGs) as ICTs may function as a gateway to the realisation of human rights. For example, the Internet enables access to education by allowing online learning resources to be shared. It similarly furthers the right to take part in cultural life and to enjoy the benefits of scientific progress and its application. Facilitating access to health information and services also positively affects the right to the highest attainable standard of physical and mental health.[21]

16. Limitations of access and use have been shown to interfere with the rights to access to information and freedoms of expression, religion and association, also impacting on the right to take part in the conduct of public affairs.[22] They also impinge upon the rights to work and to an adequate standard of living by limiting access to goods and services, to employment and business opportunities.[23]

17. At the same time, ICTs and big data can and should be utilised to further women's human rights. For example, big data analytics can assist in the identification of otherwise invisible forms of marginalisation

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[17] World Wide Web Foundation, *supra* note 9, at 20.

[18] D. B. Holt, 'LGBTIQ Teens-Plugged in and Unfiltered: How Internet Filtering Impairs Construction of Online Communities, Identity Formation, and Access to Health Information', in: Greenblatt (ed.), *Serving LGBTIQ library and archives users: essays on outreach, service, collections and access*, (McFarland Publishers, 2010).

[19] European Parliament, *supra* note 8, at 72. Broadband Commission Working Group on Broadband and Gender, *supra* note 3, at 7; N. Shephard, 'Big Data and Sexual Surveillance', Association for Progressive Communications (2016), available at www.apc.org/en/system/files/BigDataSexualSurveillance_0.pdf, at 12. See also A/HRC/17/27.

[20] T. J. Gray, J. Gainous and K. M. Wagner, 'Gender and the Digital Divide in Latin America', *Social Science Quarterly* (2016); Association for Progressive Communications and Humanist Institute for Cooperation with Developing Countries, 'Global Information Society Watch 2013. Women's Rights, Gender and ICTs', available at www.giswatch.org/2013-womens-rights-gender-and-icts, at 25ff; E. Hunt, 'Julia Gillard Says Online Abuse Deters Women from Political Careers', The Guardian (12 October 2016), available at www.theguardian.com/world/2016/oct/12/julia-gillard-says-online-abuse-deters-women-from-political-careers.

[21] For example, the adoption of e-health and m-health (where health services are delivered electronically or via mobile devices) can lead to cost-effective access to health care. See World Health Organization and International Telecommunication Union, 'eHealth and innovation in women's and children's health: A baseline review' (2014), available at apps.who.int/iris/bitstream/10665/111922/1/9789241564724_eng.pdf?ua=1&ua=1. Equally, the analysis of data drawn from a significant number of electronic health records (big data-based analytics) can be used to identify appropriate treatments and facilitate early intervention, reducing future health care costs. See A. Diana, 'Healthcare Dives Into Big Data', InformationWeek (14 May 2014), available at www.informationweek.com/healthcare/analytics/healthcare-dives-into-big-data/d/d-id/1251138.

[22] See Association for Progressive Communications and Humanist Institute for Cooperation with Developing Countries, 'Global Information Society Watch 2011. Internet Rights and Democratization', available at www.giswatch.org/en/2011.

[23] 'When women in the developing world get online, 30 percent report earning additional income, 45 percent report searching for jobs, and 80 percent report improving their education.' See 'Women and the Web: Bridging the Internet Gap and Creating New Global Opportunities in Low and Middle-Income Countries' (Santa Clara, CA: Intel, Dalberg, 2012), available at www.intel.com/content/dam/www/public/us/en/documents/pdf/women-and-the-web.pdf.

and discrimination, thereby facilitating the development of efficient policies.[24] This in turn may lead to reduced inequalities, and can assist in tackling the gender divide online and offline.

A human rights approach to addressing the gender digital divide

18. Internet governance should be grounded in human rights. A systematic approach to embed human rights in Internet governance programmes,[25] including efforts to tackle the gender digital divide, means addressing the full range of human rights engaged by ICTs by applying human rights norms and standards to all relevant policies and programs. In this vein, the General Assembly has recognised the interdependent and mutually reinforcing nature of democracy, sustainable development and respect for human rights.[26]

19. Discrimination based on sex is prohibited under core human rights treaties, including common article 3 of the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), providing for the equal right of men and women to the enjoyment of all rights.[27] States Parties to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) undertake to adopt appropriate legislative and other measures to eliminate such discrimination and to protect the rights of women on an equal basis with men, with the aim of achieving *de facto* equality between the sexes. The Convention, among others, affirms women's right to non-discrimination in education, employment and economic and social activities. Women belonging to marginalised groups, such as members of racial, ethnic, religious and other minorities, women with disabilities or women migrant workers benefit from additional protection.[28]

20. Furthermore, under the Beijing Declaration and Platform for Action,[29] governments undertook: 1) to increase the participation and access of women to expression and decision-making in and through the media and new technologies of communication; and 2) to take actions that aim to promote a balanced and nonstereotyped portrayal of women in the media.[30]

21. The importance of human rights for development was recognised in the 2030 Agenda for Sustainable Development, by grounding the Agenda in, *inter alia*, the Universal Declaration of Human Rights and international human rights treaties, and by emphasising the responsibilities of States to 'respect, protect and promote human rights and fundamental freedoms for all, without distinction of any kind'.[31] The Agenda and the Sustainable Development Goals[32] contain a stand-alone goal on gender equality (Goal 5) outlining

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[24] J. Paraszczak, 'Data analysis holds the answer to cities' efficiency', Financial Times (11 December 2013), available at www.ft.com/content/4de0e638-5c94-11e3-931e-00144feabdc0; Clinton Foundation and Bill & Melinda Gates Foundation, 'No Ceilings. The Full Participation Report' (2015), available at www.noceilings.org/report/report.pdf.
Several initiatives explore ways in which ICTs and big data can help prevent and combat gender-based violence. See for example H. Puravit *et al*, 'Gender-Based Violence in 140 Characters or Fewer: A #BigData Case Study of Twitter', available at arxiv.org/pdf/1503.02086.pdf; L. Sauti, 'ICTs Crucial in Gender Based Violence Fight', News of the South (9 February 2014), available at newsofthesouth.com/icts-crucial-in-gender-based-violence-fight/.
[25] By Internet governance, this submission refers to both the regulation of the evolution of technology and the collection, storage, sharing, use and re-purposing of data, as per the working definition set out in para. 34 of the Tunis Agenda: 'Internet governance is the development and application by governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet.' See World Summit for the Information Society, Tunis Agenda for the Information Society, WSIS-05/TUNIS/DOC/6(Rev.1)-E (18 November. 2005).
[26] Outcome Document of the high-level meeting of the General Assembly on the overall review of the implementation of the World Summit on the Information Society, UN Doc. A/RES/70/125 (1 February 2016), para. 41. See also paras. 42-47.
[27] See also articles 2 and 26, ICCPR and article 2 ICESCR.
[28] For example, the Convention for the Elimination of All Forms of Racial Discrimination, the Convention on the Rights of Persons with Disabilities, the International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families and other instruments, while girls are protected under the Convention on the Rights of the Child and its Optional Protocols.
[29] United Nations, *Beijing Declaration and Platform of Action, adopted at the Fourth World Conference on Women*, 27 October 1995. The Platform of Action has been endorsed by GA Resolution 50/203, of 22 December 1995.
[30] *Beijing Declaration and Platform of Action*, Section J: 'Women and Media'.
[31] A/RES/70/1, paras. 10 and 19.
[32] A/RES/70/1.

targets for every country to make gender equality a reality. In addition to Goal 5, a series of other goals and targets referring to ICTs and technology are of relevance to discussions on closing the digital divide.[33]

22. The 2003 Declaration of Principles on Building the Information Society: a global challenge in the new Millennium,[34] adopted by the World Summit on the Information Society (WSIS) affirms that each person should have the opportunity to acquire the necessary skills and knowledge in order to 'participate in, and benefit fully from, the Information Society and the knowledge economy'[35] and recognises the challenge to harness the potential of ICTs for the promotion of gender equality and empowerment of women. For this purpose, it encourages States to 'mainstream a gender equality perspective and use ICTs as a tool to that end'.[36] The Tunis Commitments and the Tunis Agenda, adopted by WSIS in 2005 and endorsed by the UN General Assembly, reaffirmed commitments to closing the gender digital divide and promoting gender equality.[37] The Outcome Document of the high-level meeting of the General Assembly on the overall review of the implementation of the World Summit on the Information Society emphasises that efforts to end the gender digital divide and to achieve gender equality are mutually reinforcing and calls for 'immediate measures to achieve gender equality in internet users by 2020, especially by significantly enhancing women's and girls' education and participation in ICTs, as users, content creators, employees, entrepreneurs, innovators, and leaders'.[38]

23. The implications for States are clear. Ensuring equal access to the benefits provided by ICTs is an important part of their fulfilling their obligations under international human rights law, including achieving full respect for women's human rights.

24. Relevant inhibitors need to be addressed as part of the State's obligation to respect, protect and fulfil all human rights. In this sense States need to identify and tackle the obstacles to equal access to the benefits of ICTs and to duly consider any correlations between violations and abuses of women's human rights and the gender digital divide. It is crucial for States to adopt a gender-inclusive approach in this regard by taking positive measures furthering gender equality offline and online, in particular having in mind the trend for offline inequalities to be reflected online. This implies integrating gender considerations in the design, implementation, monitoring and evaluation phases of all relevant policies and programs, and setting up clear and specific benchmarks for progress. Such an approach allows for a better understanding of the impact of these initiatives and helps identifying targeted measures to efficiently tackle the identified issues.

25. As part of their human rights obligations, States must take reasonable and adequate legislative and other measures to combat practices that directly or indirectly discriminate against protected characteristics. This also means acting towards establishing and safeguarding an online environment that is safe and conducive for engagement for all, with special focus on the needs of groups facing systemic inequalities, such as women or LGBTI persons. Such measures should include improving the capacity and skills of relevant authorities to deal with online threats of violence, including gender-based violence. Furthermore, States should strive to meaningfully address gender-based harassment and related conduct that does not rise to the threshold of a criminal offence.

26. States also have the obligation to protect persons within their jurisdiction from undue interference with their human rights by third parties, including businesses. Taking adequate measures to address the role of the private sector in bridging a gender digital divide is crucial considering that the pivotal role played by businesses in the ICT sector makes it impossible for States to address the issue without cooperation on part of the private sector.

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[33] Several ICT indicators were identified to help track SDGs 4, 5, 9 and 17. See International Telecommunications Union, 'Measuring the Information Society Report 2016', Chapter 3: The Role of ICTs in Monitoring the SDGs.
[34] See World Summit for the Information Society, Declaration of Principles on Building the Information Society: a global challenge in the new Millennium, WSIS-03/GENEVA/DOC/4-E (12 December 2003).
[35] *Ibid.*, Point 29.
[36] *Ibid.*, Point 12.
[37] *Supra* note 25. See Points 13 and 23 of the Tunis Commitments and Points 90 and 114 of the Agenda.
[38] A/RES/70/125, para. 27.

27. The growing role of corporate actors and their increased impact on the enjoyment of human rights is addressed by the UN Guiding Principles on Business and Human Rights (UNGP),[39] providing an authoritative global standard for preventing and addressing adverse human rights impacts linked to business activity.

28. Under the UNGP the responsibility to respect internationally recognised human rights[40] implies that businesses must '[a]void causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur' and '[s]eek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships' (including users of products and services), even if they have not contributed to those impacts.[41] This responsibility is independent of State obligations and as such 'exists over and above compliance with national laws' and irrespective of States' abilities and/or willingness to fulfil their own duties under human rights law.[42]

29. In line with the UNGP, businesses should adopt an explicit and public policy commitment to meet their responsibility to respect human rights and the commitments should be reflected in operational policies and procedures governing their activities.[43] These commitments and policies should effectively address issues of gender, vulnerability and/or marginalisation. To aid this process, businesses should identify the human rights the enterprise's activities are most likely to have an impact on and effective ways to prevent and/or mitigate such impact.[44]

30. In this respect, companies should take precautions and establish safeguards against any policies or practices that may have an unwarranted discriminatory effect on women, girls or LGBTI persons. They should also take steps towards greater transparency and accountability in algorithm design and implementation to prevent the occurrence of algorithmic discrimination.

31. ICT companies should further aim at creating an online environment conducive to the engagement of all persons. This includes ensuring the safety, security and privacy of users, with particular focus on groups that are at heightened risk of online abuse, such as women, girls and LGBTI persons. Companies should set up, in consultation with their users (including users belonging to marginalised groups) monitoring, complaint and redress mechanisms to duly address abusive use of their platforms and services. As a matter of policy, companies should also strive towards including content that challenges gender stereotypes and provide equitable space for women-curated online content.

Conclusion

32. Human rights should serve as a foundational principle as well as a key goal of Internet governance including with respect to efforts to tackle the gender digital divide. The development and utilisation of ICTs should be guided and regulated by international human rights law in order to avoid negative rights consequences, whether intentional or unintentional. Such an approach should include respect for equality and non-discrimination, and the tripartite obligation to respect, protect and fulfil human rights.

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[39] The Guiding Principles were endorsed by the Human Rights Council in Resolution 17/4 of 16 June 2011.
[40] These are understood to include, at a minimum, the rights expressed in the International Bill of Human Rights and the principles concerning fundamental rights set out in the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. See UNGP, Principle 12.
[41] UNGP, Principle 13.
[42] Office of the High Commissioner for Human Rights, *The Corporate Responsibility to Respect Human Rights. An Interpretative Guide* (2012), at 13.
[43] UNGP, Principle 15.
[44] *Supra* note 42, at 28.