

"GTWN Call to Action for Digital Inclusion for All" 27 February 2023 at the Mobile World Congress, Barcelona, Spain

Background

In June 2022, the GTWN received an alarming email from Claire Sibthorpe, Head of Digital Inclusion and Connected Women and Connected Society at the GSMA: "After years of progress towards women's equal digital inclusion across LMICs, we are - for the first time - now seeing a slowdown and, in some countries, a reversal. The mobile Internet gender gap has narrowed every year from 2017 to 2020, from 25% to 15%. However, our latest data suggests that this momentum has been lost. Women are now 16% less likely than men to use mobile Internet across LMICs, which equates to 264 million fewer women than men using mobile Internet. Significant and coordinated efforts are urgently needed to reduce the gender gap and ensure that women can participate fully in a more digitised society."

Immediately, the GTWN International Board Members rallied together to discuss with the GSMA possible steps to positively reverse the downward trend and to work together to develop a set of practical initiatives based around the current activities and interests of the GTWN International Board members.

Two months later, members of the GTWN were present at the GSMA Mobile 360 Congress in Singapore where we met with representatives of the ITU. We were particularly pleased to hear about the Office of the United Nations Secretary-General's Envoy on Technology and the International Telecommunication Union (ITU) new set of UN targets for universal and meaningful digital connectivity¹. The ITU's mission is to guarantee that all the world's people can use and benefit from digital information, products and services, equally and equitably. ITU members' Connect 2030 Agenda focuses on how technological advances can accelerate the achievement of the United Nations Sustainable Development Goals (SDGs) by 2030.²

Our partners at the ICC (International Chamber of Commerce) note that "Despite enormous progress in expanding connectivity (94% of the world's population lives in areas covered by a broadband network), only 63% of the global population were using the Internet in 2021, with 2.9 Billion people still remaining offline."

¹ https://www.itu.int/en/mediacentre/backgrounders/Pages/bridging-the-gender-divide.aspx

² https://www.itu.int/en/mediacentre/backgrounders/Pages/digital-inclusion-of-all.aspx

Further, we recall UN Deputy Secretary General Anita Bhati and her call at our GTWN 30th Anniversary in February of 2022 when she made a poignant plea to not let anyone behind in the Digitization of our Citizens, particularly those who had suffered so greatly during the Covid 19 Pandemic.

The GTWN has been successful in the past in supporting global action to address inequality and discrimination. Ten years ago we heeded the call by European Commission Vice President Viviane Reding, (a champion of democratizing mobile roaming charges and ensuring data protection), to join her in campaigning for gender quotas on Boards -- a battle it took a decade to win, but we did it.

It is in the same spirit of determination to ensure that technology is used for the benefit of all that the GTWN is now announcing:

A Call to Action to ensure Digital Inclusion for All

Firstly, we need to **define the problem** and focus our actions on achievable goals.

Considering the United Nations estimation that more than one-third of the world's population — a staggering 2.9 billion people — remain offline, this can make the task seem overwhelming. If we are to make meaningful progress in addressing this global problem, significant and coordinated efforts from key actors are urgently needed to ensure that these billions of people do not continue to be disproportionately impacted and left behind in an ever more digitized society. Closing the mobile connectivity gap has never been more critical. The majority of men and especially women in LMICs connect to the Internet via a mobile phone and the majority of those who 'remain offline' live in LMICs.

Ending the digital exclusion is not just an altruistic goal. It is an incredible market opportunity for all economies. GSMA research found that over a five-year period, closing the gender gap in mobile Internet use across LMICs could deliver an additional \$700 billion in GDP and closing the gender gap in mobile access and use could deliver \$140 billion in additional revenues for the mobile industry. Closing the gender gap in mobile ownership and use in the African and Asian countries GSMA surveyed could generate up to 44% additional revenue for the mobile industry". Furthermore, as an ESG generating revenue opportunity, closing the gap is aligned with Board, investor and regulatory priorities globally. [See https://www.gsma.com/mobilefordevelopment/.]

As well, Fixed Line, Satellite, Tower and Wireless operators and their service provider partners can reap enormous benefits in terms of people, planet, profit, and purpose.

Closing the gap will not be easy. Whereas vast improvements have been made with infrastructure coverage, issues that still need to be addressed include affordability - particularly of handsets, digital literacy, safety and security concerns, and the social norms that prevent women from accessing and using mobile phones and services to reap the full benefits they can provide. How each country closes the gap has to be agnostic as it should be customized to each nation's unique challenges. GSMA has pilot programs in several countries to accelerate digital and financial inclusion for budding entrepreneurs as well. Everything from government grants to micro loans to subsidized handsets, end-user equipment such as satellite terminals, modems, and edge devices to advertising should be considered and implemented where relevant to reach new users.

How can we solve these issues together?

The various studies have shown that the quest for "Digital Inclusion for All" must focus on the women in society if we are to achieve our goal. Investigations by The World Bank, the United Nations, Global Entrepreneurship Monitor, Deloitte and Ernst & Young show that women are the real drivers of the economy as business leaders, employees, consumers and entrepreneurs. "Digital divides reflect and amplify existing social, cultural and economic inequalities, "said UN Secretary General Antonio Gutierrez on announcing the Universal Meaningful Connectivity for All initiative. "The gender gap in global Internet use is a stark example – in two out of every three countries, more men use the Internet than women. Similar challenges affect migrants, refugees, internally displaced persons, older persons, young people, children, persons with disabilities, rural populations, and indigenous peoples. We must close these gaps through better metrics, data collection, and coordination of initiatives."

As responsible citizens and businesses who care about Diversity, Equity and Inclusion within our own workforces, we need to be aware of these trends globally and we need to act. Significant and coordinated efforts are urgently needed to ensure that women can participate fully in a more digital economy and society.

Before we can act, we need to fully understand the **key drivers for this trend**, which are complex. In the mobile sector there are indications that fewer women can afford phones and when this is possible, they can't afford minutes and data. A number of solutions have been suggested to this affordability challenge; one is for a sponsorship program, whereby benefactors can pay for a phone service to be provided free to individual women.

While we can distribute hardware, this is just one solution but it's not enough on its own. The pandemic briefly gave women a reason and justification to educate their children online, for example but this declined in priority as life returned to normal. One intervention would be to look at education, including improving women's digital skills and confidence and finding reasons for

women to participate online, e.g. mobile banking is far less costly than traditional banking. In addition, there are many apps now available for female farmers and entrepreneurs such as Alipay, the My Bixie Solution from our GTWN Board Member Rosalia Gitau and the work that our GTWN President Europe Victoria Hernandez is doing as a Board Member of CAIXA Bank to work to bring innovation and digitization to financial services and to make digital finance more accessible and inclusive.

To prevent the widening of the digital gender gap, we need to be very attentive to how the economy is currently developing. The idea of involving women decision-makers is an important first step. It also seems particularly important to motivate younger women to address this issue. As technology providers, we also need to **look at lower cost technological solutions** e.g., developing apps that use small amounts of data and Internet frequency for some markets. Also as providers we may need to absorb some costs for users, be they men or women. We need to be allies of all those who are suffering from the Digital Divide globally and put our collective heads together.

Overwhelming as it may seem to tackle this issue, there are silver linings; where women are online they tend to be loyal customers and constitute 50% of the potential customer base for providers, thus providing the new market opportunities described above. In addition, women will often prioritise communication as an essential expense and it is highly valued in this case. But what more can we do?

Suggested areas to focus on: The GSMA Connected Women has four areas of focus that they suggest to stakeholders and we agree with all of them:

- Ensure there is a focus on gender equality and reaching women at an organisational and policy level through senior leaders championing the issue and setting specific gender equity targets.
- Understand the mobile gender gap by improving the quality and availability of gender-disaggregated data, and understanding women's needs and the barriers they face to mobile ownership and use.
- Explicitly address women's needs, circumstances and challenges in the design and implementation of digital-related products, services, interventions and policies. This includes addressing the barriers women face related to access, affordability, safety and security, knowledge and skills, and the availability of relevant content, products and services.

Collaborate and partner with different stakeholders to address the digital gender gap. Targeted intervention is needed from
industry, policymakers, the development community and other stakeholders to ensure that women are no longer left
behind. Regulators and Ministers of Finance, Health, Education, Gender Equality, and Technology are all in the front line
here. CEOs of Banks, Retailers, Telco's, etc. must all join the cause.

What can industry leaders do? Some inspiring examples

GTWN recognizes that the issues contributing to the remaining gaps in digital communications coverage and use around the globe are complex and multi-faceted. In addition to public actions, commercial solutions need to be found that are practical, that encourage innovation and entrepreneurship, and that bring benefit to local communities and societies.

In line with our GTWN motto and ethos, "The Changing Culture of Communications...from Generation to Generation", GTWN International Board Members have been working throughout their careers in the digital tech sector to bridge the digital divide and to enable meaningful digital connectivity for all. The following is a small sample of the work that our leadership has been doing to ensure digital inclusion and promote the use of digital tech for good. We hope it inspires you to action in your own field!

Janice Hughes, CBE is GTWN Co-founder and Founder and CEO of Graphite Strategy Ventures LLP. Janice is also Founder of Spring Fibre - a new green fibre, building group in the UK that's already bringing a green fibre network to the smaller towns and rural businesses in the UK. This Spring Fibre project is rolling out green gigabit fibre to 100,000 homes in the next few months and then scaling up to 1m homes. [See her article on Green Fibre Networks.] Janice is also Chair of Space for Giants, a charity for conservation and biodiversity founded in 2011, which is launching a new group Green 14 as a carbon credits entity on the London Stock Exchange to send funds back to Africa to deploy in tree planting, reversing desertification, training ranger and local communities in safeguarding biodiversity. They already have a dozen projects that qualify and they're targeting some 8m hectares. The Board will be made up of mostly women and we have the former President of Botswana Sir Ian Kharma as the head of the Advisory Board. https://www.spaceforgiants.org

Keri Gilder, CEO of Colt Technologies is leading change across the TMT industry by pioneering the industry's first ever inclusion and diversity score with the tmforum. The score sets the gold standard for measurement of diversity at the CEO -2 management level enabling a true understanding of not only overall diversity within a company but whether those diverse employees are being promoted into senior level positions. It also is the first score to measure inclusion through employee sentiment questions. The insights and enablement of real actions through the IDS scoring tool can help address the "talent problem" that we have as an

industry. She has also partnered with other standards bodies such as the MEF to help drive further understanding of how to build Inclusion and Diversity into the high tech and innovation areas of the industry.

Rebecca Enonchong is Chair Emeritus of Afrilabs, a network of over 400 innovation centers in 52 African countries supporting over 1.5 million digital entrepreneurs. Cofounder and Board Chair of ActivSpaces, a founding member of Afrilabs, that has three tech hubs in Cameroon supporting digital entrepreneurs and promoting technology. One of its hubs in a rural area has run programs to support 40 rural women small business owners by providing them with smartphones, Internet access for a year, assistance and training on helping them digitize their business. Rebecca is also Board member of Imagine Worldwide, providing solar-powered tablets to disadvantaged schools in Africa. The tablets provide research-based pedagogy with a full literacy and numeracy curriculum in the local language that is adaptive and appropriate for the local context. By the end of 2023, over 60,000 children would have benefited from the program. An initiative launched in Malawi will increase this to 2.5 million children. One of the observed outcomes is that boys and girls have similarly successful results, even in math. Rebecca was recently inducted as an International Fellow of the Royal Academy of Engineering. She has been a judge for the Royal Academy's Africa Prize for Engineering for 6 years, a program that awards four African innovators with up to £25,000. 16 innovators a year benefit from a 6-month training program for their startup.

Vrinda Kapoor is CEO and Co-Founder 114ai, which has developed a platform that re-defines interoperability of data. While organisations across the world talk about the amount of data they generate - and how that data is going to help them generate insights by leveraging AI - most of that data is virtually unusable because it exists in siloed platforms and in formats that do not talk to each other. The current state of the art is to create standards and then spend endless time and resources converting data to structured standards, only for the real world to push back and constantly force changes to those standards. This new solution utilises knowledge graphs to "infer" the shared semantics and syntax of all of that data, making it usable in a few quick clicks. Once operationalised, this solution will unlock insights in legacy data across organisations, adding enormous value end spurring innovation in digital tech. https://114ai.com/

Leticia Latino van Splunteren, CEO Neptuno, was appointed for the 2022-2024 term to the FCC Equity and Diversity Council's Innovation and Access Working Group. This Working Group is tasked with creating guidelines and promoting existing programs that States can implement and roll out, making the best use of the \$2B of the \$46B BEAD (Broadband Equity, Equity, Access and Deployment) program which has been allocated specifically to help improve digital literacy, address the digital divide, augment programs and outreach. www.fcc.gov / https://www.internetforall.gov/program/broadband-equity-access-and-deployment-bead-program. Her family business Neptuno, over the past 50 years since its founding, has engineered, supplied and installed over 10,000 Telecom Towers over 15 countries, which are at the center of providing connectivity to all. www.neptunousa.com. Leticia is also

Board Member of the South Beach Jazz Festival, which has the mission of supporting musicians with disabilities. One of the objectives is to make sure that accessibility to Digital Content is ADA (American Disability Act) Compliant, so that the digital divide is not further exacerbated in the disability community. She provides USD\$20,000 yearly in scholarships. mentorship and training for South Florida residents. [See her article on the use of VR to diversify training for tower technicians.]

Lucy Lombardi is Director, Head of Technical and Operational Partnership and Contracts at TIM. After leading telco innovation for many years, she is currently using her considerable telco experience to introduce a new approach to governing partnership relationships and contracts. As the telco ecosystem is becoming increasingly interconnected and the, once linear, value chain increasingly blurred, success often relies on the ability to attract and maintain a productive ecosystem of partners, suppliers and peers. Lucy believes that the key to developing and maintaining such an ecosystem is successful governance, which ranges from partner relationships to transparent and effective contract management in line also with the "G" of ESG.

https://www.gruppotim.it/it.html

https://www.gruppotim.it/it/archivio-stampa/mercato/2022/CS-TIM-FS-Copertura-4G-tratta-Bologna-Firenze.html

Isabelle Paradis, President and Founder of HOT TELECOM, is leading the PTC Beyond initiative, which is encouraging young people from all continents and backgrounds to join our industry. The PTC Beyond program attracted over 100 participants in its first year of operation. I have also created the Inclusion hub, which has the main objective of highlighting, connecting and empowering the young generation in our industry. Through the different activities we conducted with the Inclusion Hub we reached over 300 young industry professionals and enabled them to connect with over 50 CEOs. Isabelle is also a member of the Youth and Women Entrepreneurship ESBN taskforce, which is a working group created by the United Nations Economic and Social Commission for the Asia Pacific (ESCAP) to encourage young people and women to become entrepreneurs in developing countries. {See her article on the 'Zellenials' in the 2023 edition of The Mobile Century magazine.]

https://www.ptc.org/ptc-beyond/; https://www.unescap.org/esbn/task-forces/youth-women-entrepreneurship

Candace Johnson is a Serial Space Entrepreneur: SES, Loral Teleport Europe, Europe Online, OWNSAT. She is currently Chair of the Seraphim Space Advisory Board and Partner and Vice Chair of NorthStar, Executive member of the Board of ICC and is a Founding member GTWN. After having created or helped create a number of satellite systems (SES, Iridium, Teleport Europe, etc) to bring digital communications to citizens around the world having founded Europe Online, the world's first Internet-based online service in the 80's, 90's, and first two decades of the 21st century, Candace is continuing the goal of digital inclusion for all with such projects Kacific (OWNSAT) - The Heart of Broadband bringing high throughput broadband Internet to all of the Pacific Islands. Oceania Women's Network Satellite (OWNSAT) is one of the original investors in Kacific and 7 of our GTWN members, (Bridget Cosgrave,

Sallye Clark, Ellen Strickland, Vicki MacLeod, Walda Roseman, Audrey Mandela and Candace Johnson) are investors. She has also continued the work begun by the GTWN by bringing coding and programing to all of the Lebanon schools with Raspberry Pi under the leadership of Eliane Metni. Her work at the ICC (International Chamber of Commerce has also focused on the Digital Standards Initiative, to enable SME's, corporations, and governments around the world to adopt digital technologies for international trade. [See her articles on the Space Manifesto and on the GBRW initiative.]

https://seraphim.vc; https://northstar-data.com; https://iccwbo.org/about-us/governance/executive-board/; https://kacific.com; https://iea.org.lb/Sections.php?ID=5.

Laureen Cook is an Alumna of the IFC (World Bank), where she was the Principal TMT Adviser, in the Global Telecoms, Media & Technology Private Equity Sector. Currently she is the Founder & CEO of Extelcon, LLC; providing technical and commercial oversight to the Investment Banking Community, Regulators, and TMT & Satellite industry sectors as Lender's Technical Adviser for multibilion USD telecoms & technology companies. Prior to joining the IFC, Laureen was with Alcatel-Lucent (now Nokia), as Vice President 4G Strategy & Innovation, developing revenue generating products & services. She is a founding Director of the GTWN, and is an Investment Committee member of Innovate Cyprus, a European Union funded 6M Euro Venture Capital Fund providing financing for 4G/5G IoT Start-ups. She holds an MSc in Telecommunications Engineering from Rochester Institute of Technology, and an MBA from Long Island University in New York. https://www.extelcon.com. As an IFC (World Bank) Alumna, Laureen continues to provide her technical and commercial expertise to the financial community, regulators, and corporations in order to close the digital divide in developing countries. To date she has worked in over 43 countries worldwide building, managing, & funding, the TMTS industry in both developed and emerging markets.

Rosalia Gitau is CEO at Bixie. Bixie's mission is to empower women to grow their worth. Women are the largest group financially excluded group in the world, yet women account for 80% of all spending decisions. Bixie looks to reverse this trend by empowering women to control their finances and grow them, using financial literacy, expert community, and a marketplace of financial products tailored to our needs and preferences, in an easy-to-access manner. In the Philippines, Rosalia has channeled 500 female owned MSMEs with grants from USAID, SME business insurance from AXA, and SME Loans from Unionbank (PH largest bank)— to increase their worth in under 1 quarter. The program is being scaled up in the Philippines and South East Asia in order to impact more women's lives. Value of contribution is USD1M https://www.mybixie.com/ https://www.mybixie.com/rise

Elisabeth Slapio is the former Director of Innovation and Environment at a German Chamber of Industry and Commerce. She is now working in a private capacity on various measures to overcome digital connectivity gaps. She is currently involved in working to identify appropriate measures to prevent gaps in digital participation. The first project she is involved with is the promotion of public

health through the application of digital technology. The aim is to provide solutions to overcome the lack of digital inclusion of older groups in an ageing society. One part of this project is the role of start-ups in developing innovative digital health solutions. Elisabeth is also working to support voluntary low-threshold measures in social hotspots with the aim of supporting future "help for self-help" through digital fundraising. The aim of this initiative is to overcome any digital divide that could be expected to occur in these areas. Both of these projects are only at the beginning of the first implementation phase. The outcomes of this work will help provide much needed fundamental support in terms of digital connectivity to society, the economy and government.

Sallye Clark is the Strategic regulatory counsel for AST&Science, a satellite system that will provide service to any cell phone for truly global, ubiquitous service; donations of satellite services to humanitarian aid and disaster relief programs in developing countries; Sallye is also one of the founding investors in OWNSAT (Oceania Women's Network Satellite) with Bridget, Vicki, Walda, Audrey, Ellen, and Candace, created to bring high through-put broadband Internet to all of the Pacific Islands with Kacific Sallye also was a member of the founding team of Iridium' to bring ubiquitous communications to the developing world through its NOMAD program and emergency communications capabilities, anywhere/anytime.

Ana Tavares Lattibeaudiere is Executive Director of the Global Platform and former GSMA Executive. Her work at the Global Platform has included the recent initiatives to drive more participation of women in standardization activities. While at the GSMA, she created the GSMA's Tech4Girls program to drive more girls to choose technology careers and address the pipeline barrier that is so often talked about. Early work at the GSMA included driving down the cost of IOT devices and IOT connectivity to bring IOT to the mass market; the launch of the emerging market handset programs at GSMA (driving 2G And 3G handset costs down through joint operator tenders) and the launch of GSMA's Development Fund (today M4D) to drive investment in viable businesses that would improve the digital divide but that did not have seed funding.

Audrey Mandela is Chair of Women in Telecoms & Technology, a networking group for women in tech in the UK. For the past 22 years WiTT has hosted events to enable women to network and meet other women who share a common interest in the telecommunications and technology industries; to educate members on current and future trends in the industry; to provide guidance and mentoring through the exploration of real-life career paths (including supporting events for schools to help girls to learn more about the sector); and to elevate the voices of women with expertise in our sector through talks at events. Audrey was co-founder of Multimap, an online mapping company acquired by Microsoft. She now invests in women-led start-ups and mentors their founders. She serves on the Advisory Board of Angel Academe, which invests in female-founded tech start-ups and introduces more women to angel investing. She is also one of the founding investors in OWNSAT (Oceania Women's Network Satellite) which,

with Sallye, Bridget, Vicki, Walda, Audrey, Ellen, and Candace, was created to bring high through-put broadband Internet to the Pacific Islands with Kacific.

All stakeholders – government, civil society and the tech industry - have a role to play in addressing the digital connectivity gap and its challenges. GTWN members have already demonstrated through many different projects how we can all contribute to closing the digital connectivity gap, by applying entrepreneurship and innovation. We hope that the example of the GTWN will encourage others in the industry to heed the Call to Action to ensure digital inclusion for all.

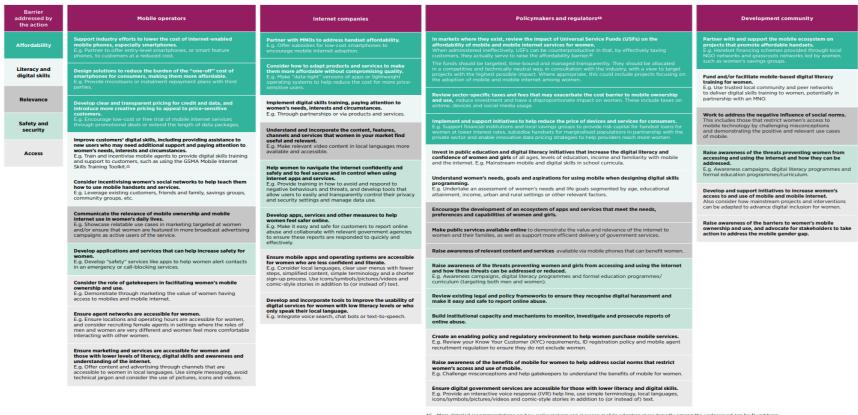
If one is lucky, a solitary fantasy can totally transform one million realities

Maya Angelou, Civil Rights Activist and Poet

Appendix I:

Figure 20

Recommendations for closing the mobile gender gap in low- and middle-income countries, by stakeholder type and barrier addressed



45. GSMA Mobile Internet Skills Training Toolkit (MISTT): https://www.gsma.com/mobilefordevelopment/connected-society/mistt

- 6. More detailed recommendations on how policymakers can increase mobile adoption more broadly among the undeserved can be found here:
- For more details, please see: https://www.gsma.com/publicpolicy/mobilepolicy/andbook/business-environment#universal-service-funds.

Sources:

GSMA "The Mobile Gender Gap Report 2022"

United Nations Office of the Secretary-General's Envoy on Technology, "Achieving Universal and Meaningful Digital Connectivity, Setting a Baseline and Targets for 2030"

Article 70 of the Final Acts of the ITU 2022 Plenipotentiary Conference