

INVESTING IN GIRLS: MARKET OPPORTUNITIES BY SECTOR

Information and Communication Technology (ICT)

Scale of ICT-related issues facing girls

Information and communication technology (ICT) offers a wide range of opportunities for girls, including career development, education, saving time, accessing financial resources and facilitating connections. However, it can also expose girls to new risks, such as online harassment and grooming. Girls also face unique barriers to accessing ICT. Often referred to as ‘the gender digital divide’, women and girls may experience stigma surrounding mobile phone and internet access, earning a disposable income and making financial decisions through digital means. Beyond gender issues, ICT access is profoundly shaped by structural challenges which also have gender dimensions, including literacy, access to electricity, poverty, and infrastructure supporting rural and remote areas.

In East Africa and South Asia, populations are becoming increasingly digitally connected, primarily through mobile phones. Mobile phone use in sub-Saharan Africa has exploded in recent years, from 23 subscriptions per 100 people in 2007 to over 74 in 2017.¹ However, access to mobile technology and the internet is unequally distributed: women in South Asia are 26% less likely than men to own a phone, and in sub-Saharan Africa, they are 34% less likely to be online.² The gender digital divide persists regardless of income, age and geographical location.³

Key statistics

Country	Mobile cellular subscriptions (per 100 people), 2017 ⁴	Individuals using the Internet (% of population), 2016 ⁵	Access to electricity (% of population), 2016 ⁶	
			Rural	Urban
Ethiopia	69	15	27	85
Kenya	86	17	39	78
Rwanda	72	20	18	80
Tanzania	70	13	17	65
Uganda	58	22	18	58
Sub-Saharan Africa average	75	20	25	76
Bangladesh	92	18	93	65
Myanmar	90	31	92	42
Nepal	73	16	99	89
South Asia average	87	30	98	80

Market opportunities in the ICT sector

Infrastructure development, increased supply, regulatory reform, new financing models and technological innovation are likely to contribute to the improved ability of girls and women to access ICT. As a result of the trend of growing cellular access, the majority of ICT-based interventions revolve around mobile phones (mLearning, mBanking, mHealth, etc.). Some efforts to increase computer literacy through classrooms and community groups also exist. Low-cost technologies coupled with business process innovations have helped telecom operators to reduce costs by as much as 50% in some markets. Pre-paid packages allow for small and irregular payments, eliminate transaction costs for companies and simplify ownership for new users.⁷

Impact of ICT investments on adolescent girls

Education, savings and networking solutions that rely on ICT are more likely, in the short term, to impact affluent and urban girls who have the best ICT access. As ICT access increases in poorer and rural communities, the potential depth for impact will likely increase for less affluent girls. The potential scale, scope and depth of all solutions will depend on local gender norms that exist around technology use, which may need to be tackled directly to enable greater benefits. Increasing ICT access for girls is likely to have a wide range of benefits, helping them to:



EARN: Access to ICT prepares girls to engage in the job market, access vocational and financial resources, and compete in the global economy.⁸ ICT can help girls circumvent mobility or other restrictions that limit their economic opportunities, by allowing them to connect to markets from home.



EARN: ICT can provide entrepreneurship opportunities for women and girls. For example, the Grameenphone Village Phone programme in Bangladesh provides female entrepreneurs in rural areas with credit to buy a phone, which is then used to provide mobile-pay phone services, allowing them to charge a markup agreed with Grameenphone.⁹



LEARN: Mobile technology can help girls learn remotely. In situations where attending school is difficult, mobile phones have been used to improve access to education for girls. In rural Bangladesh, mobile-based learning has been shown to be at least as effective as face-to-face learning.¹⁰



SAVE: Improving digital literacy and access can increase girls' ability to leverage mobile banking technology, increasing their control over savings and their financial security.¹¹ Mobile phone ownership can enable adolescent girls to take advantage of financial services and increase their financial autonomy.¹²



STAY SAFE: ICT access offers girls and women a way to connect to protective networks, and even to call for help in emergency situations.^{13,14}



BE HEALTHY: ICT can provide access to medical, health and other private information that girls may not be able to access elsewhere, especially about culturally taboo subjects such as sexual health. In Nepal, the Mobile Health for Adolescent Sexual & Reproductive Health Initiative uses digital technology to give adolescents access to information they want but are often too embarrassed to ask for.¹⁵

Examples from SPRING ICT businesses

Sehat Kahani provides affordable, high-quality healthcare to marginalised communities via nurse-assisted video consultations by connecting patients with home-based female physicians. The key innovation for Sehat Kahani is bringing non-practising yet qualified female physicians back into practising medicine.

In rural Pakistan, women and girls often encounter barriers to accessing healthcare, primarily due to lack of mobility. In research, the company found that low female mobility stems from social norms (e.g. women not being able to travel unaccompanied), existing commitments (e.g. they are the sole caregiver in their household and often unable to leave the home) and low incomes (meaning they are unable to meet travel costs).

Through SPRING, Sehat Kahani responded to these challenges by designing a technology-enabled hub-and-spoke model that allowed women and girls to access health services at home through a network of on-the-ground community health workers. This allowed the company to reach girls and young women with health information and care. To date, the business has opened 15 clinics and reached over 4,400 girl patients with its new model.

Case study from [SPRING's Impact Report: Building Businesses for Girl Impact](#)

Koe Koe Tech is a Myanmar-based tech company. With over 80,000 users, its 'MayMay' app, focused on maternal and child health, is the most popular mHealth app in the country. Though the app had some general content on sexual and reproductive health aimed at adolescent girls, Koe Koe Tech's own ethnographic research showed that girls were put off by the title and positioning of MayMay (which means 'mother' in Myanmar). Given this, the company came into SPRING with the aim of developing a new sexual and reproductive health app for adolescent girls. Human-centred design research conducted through SPRING helped Koe Koe Tech decide what content and features to include in the app, particularly that which would be acceptable to parents (whose phones would likely be needed for girls to access the content). The new app, 'Phyo Phyo May', or 'single women', was launched in January 2019 and already has over 10,000 users. Though the app is not yet generating revenues, the business hopes to build a large enough user base to attract advertising revenues in order to finance it on an ongoing basis.

Case study from [SPRING's Impact Report: Building Businesses for Girl Impact](#)

For more information about SPRING's insights in leveraging ICT to impact girls, see [Scaling Social Business through Design Thinking](#).

This brief is a combined summary of the SPRING East Africa and South Asia region-specific ICT briefs, which will be published in September 2019.

Notes

- 1 World Bank (N.D.). 'Mobile Cellular Subscriptions (per 100 People).' Available: <https://data.worldbank.org/indicator/IT.CEL.SETS.P2>. Accessed 30 July 2019.
- 2 Rowntree O. (2018). 'The Mobile Gender Gap Report 2018.' GSMA.
- 3 Ibid.
- 4 International Telecommunications Union data retrieved from data.worldbank.org/.
- 5 Ibid.
- 6 World Bank SE4ALL data retrieved from data.worldbank.org/.
- 7 Gunawardene N. (2014). 'South Asia Analysis: Cell Phones Empower South Asia's Poor.' SciDevNet. Available: <http://www.scidev.net/index.cfm?originalUrl=/south-asia/communication/columns/sa-analysis-cell-phonesempower-south-asia-s-poor.html&>. Accessed 30 July 2019.
- 8 Intel and Dalberg, 'Women and the Web'; Scharwatt and Minischetti, 'Reaching Half of the Market'; Vodafone and Girl Effect, 'Real Girls, Real Lives, Connected'.
- 9 GSMA (2014). 'Country Overview: Bangladesh.'
- 10 Valk J.H. et al. (2010). 'Using Mobile Phones to Improve Educational Outcomes: An Analysis of Evidence from Asia.' The International Review of Research in Open and Distributed Learning 11(1): 117. Available: <https://doi.org/10.19173/irrodl.v11i1.794>.
- 11 WWB (2015). 'Digital Savings: The Key to Women's Financial Inclusion?' Women's World Banking.
- 12 Buvinić, M. et al. (2013). 'A Roadmap for Promoting Women's Economic Empowerment.' United Nations Foundation and ExxonMobil Foundation.
- 13 Intel and Dalberg (2012). 'Women and the Web: Bridging the Internet Gap and Creating New Global Opportunities in Low and Middle-Income Countries'. Intel and Dalberg Global Development Advisors.
- 14 Scharwatt C. and Minischetti E. (2014) 'Reaching Half of the Market: Women and Mobile Money'. Deeper Insights. GSMA Mobile Money for the Unbanked and Connected Women.
- 15 UNFPA (2014). 'Harnessing Mobile Technology to Improve ASRH Knowledge in Nepal.' UNFPA Nepal (blog), September 22. Available: <https://nepal.unfpa.org/en/news/harnessing-mobile-technology-improve-asrh-knowledge-nepal>.

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