Digital Mapping & Analysis

BANGLADESH

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Purpose of this Document

To support the UNICEF Regional Office for South Asia's integration of digital tools, technologies, and best practices into Social and Behaviour Change (SBC) programming, this Digital Mapping outlines the existing digital interests, needs and challenges across Bangladesh. This document outlines the country's context, media, digital habits and preferences, emerging trends and recommendations on leveraging the existing opportunities gathered through secondary research.

This document can inform digital SBC programme design, development, and implementation at the country level based on the available insights and data from recent years.
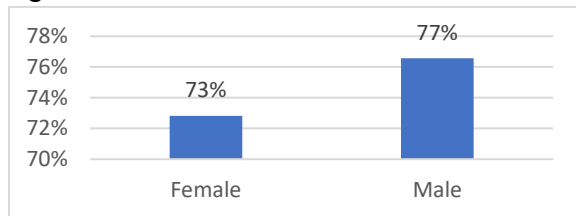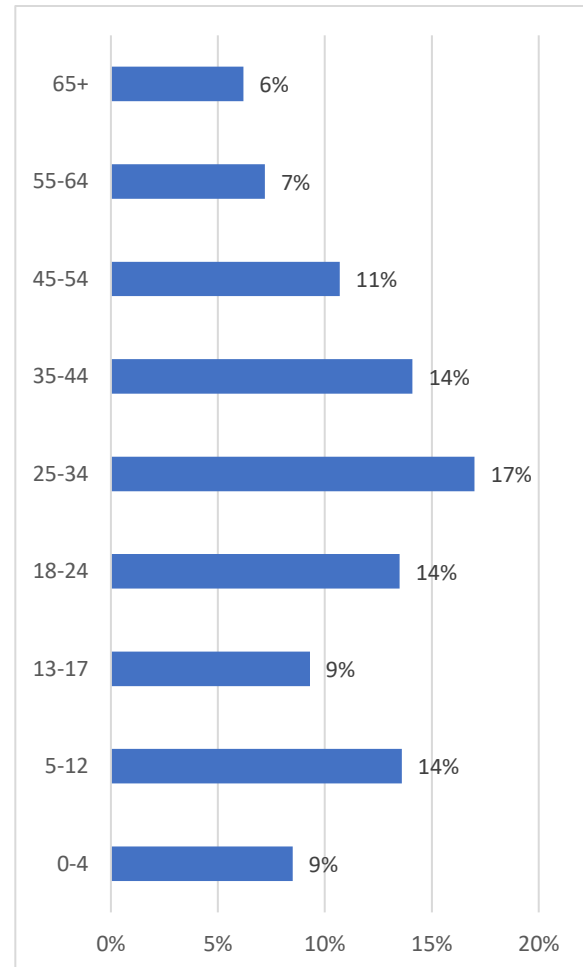
Demographic Overview

Total Population: 171M[i]

[iii]

Female	Male	Urban	Rural
50.4%	49.6%	40%	60%
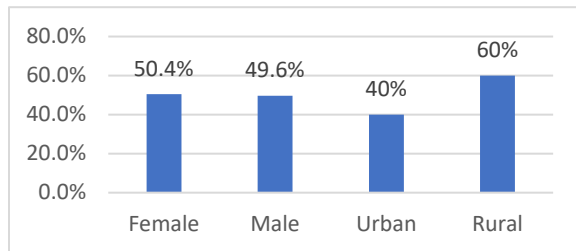
National Language: **Bangla[iv]**

Literacy Rate: 74.66% in the population aged 15 and above[v]

Female	Male
73%	77%

Age Demographics[ii]

Age group	Percentage
65+	6%
55-64	7%
45-54	11%
35-44	14%
25-34	17%
18-24	14%
13-17	9%
5-12	14%
0-4	9%

Digital Connectivity

190.36M[vi] people in Bangladesh had cellular mobile connections in Nov 2023 (*the number is greater than the actual population, likely due to people having more than one device*)[vii] and there were 118.96M mobile internet subscribers in 2023[viii], with the average mobile internet and fixed internet connection speed at 13.95 Mbps and 34.85 Mbps, respectively.[ix] This is fast enough for video streaming. The devices used to access the internet are mobiles (69.36%), laptop/desktops (29.97%), and tablets (0.68%). About 58.9% of cellular mobiles have 3G, 4G, or 5G broadband. [x] Despite the growing population connectivity, the Digital Quality of Life Index (DQL) report 2023 ranked Bangladesh at 82nd out of 121 countries. It stands at 115th in mobile speed (same as 2022).[xi]

To note: Bangladesh hosts the world's largest refugee camp – Cox's Bazar – which is home to 931,000 people, most of whom are Rohingya refugees from Myanmar.[xii] Connectivity and access inside the camp is unpredictable and frequently restricted.[xiii]
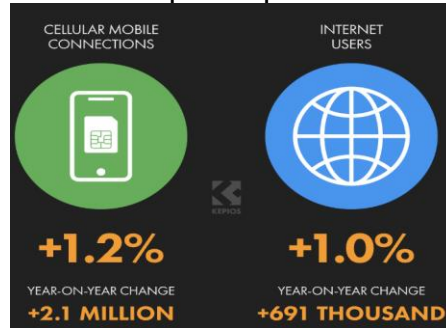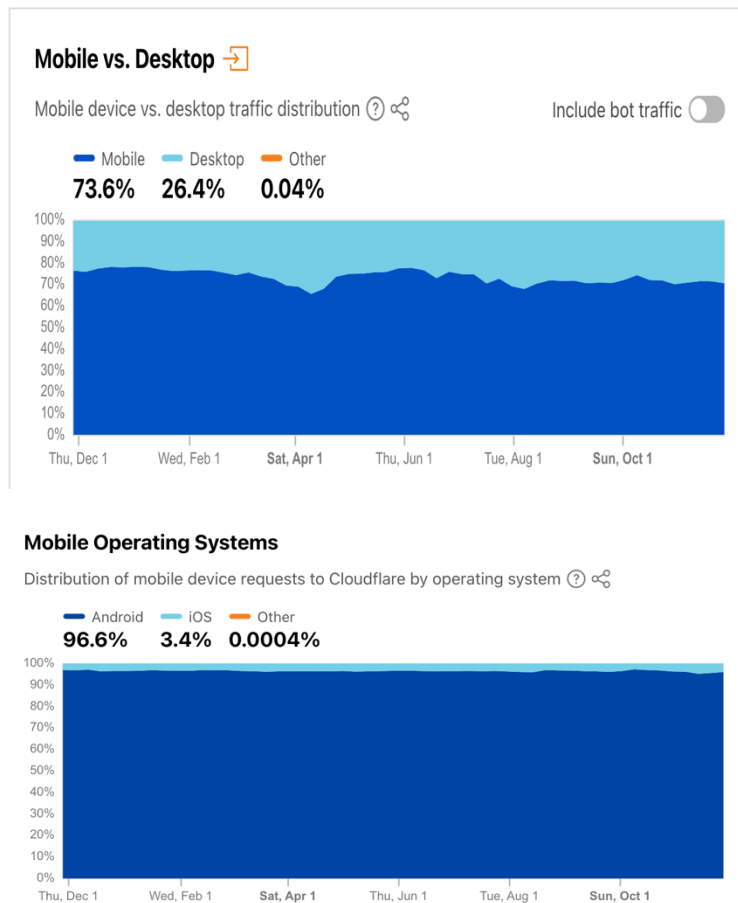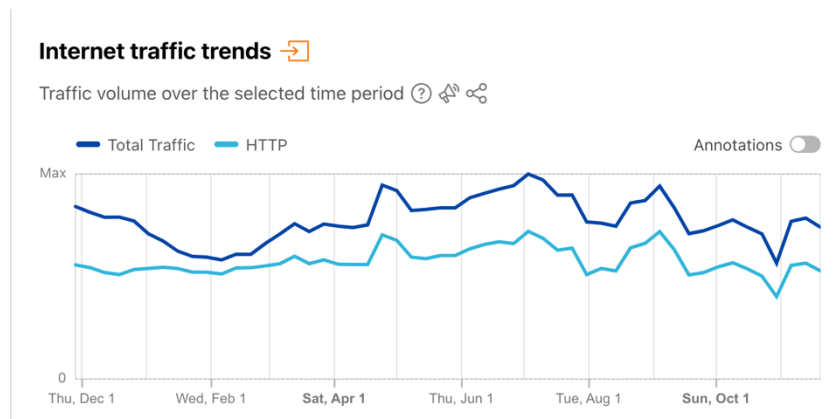

Figure 1: Digital Growth[xiv] (compared to 2022)

Trends to note (Nov 2022 to Nov 2023)[xv]

Internet traffic trends

Traffic volume over the selected time period

Total Traffic — HTTP   Annotations

Max

0

Thu, Dec 1   Wed, Feb 1   Sat, Apr 1   Thu, Jun 1   Tue, Aug 1   Sun, Oct 1

Digital Divide

Persistent gender divide

The gender divide in the country is stark due in part to the lack of gender-friendly public access points, infrastructures, geography, socioeconomic status, digital skills and literacy, etc, but also due to the existence of pervasive cultural barriers.[xvi] World Economic Forum's Global Gender Gap Report 2023 noted above 50% parity score for Bangladesh (55.2%). Bangladesh is one of the best performing countries in South Asia and it was noted that it is one of the two countries where 'women have held the highest political position in a country for a higher number of years than men.' Bangladesh is close to achieving parity in secondary education enrolment. It is 1st in the region on the Global Gender Gap Index ranking by region, 59th globally (out of 146 countries) and has a score of 0.722 (on a 0-1 scale), a +0.008 change from 2022.[xvii]

The Mobile Gender Gap Report 2023 found that mobile ownership and mobile internet adoption were at 84% amongst men and 67% amongst women, where 67% of women own a mobile phone. 40% of men owned a smartphone compared to just 21% for female. The awareness of mobile internet was high amongst both (75% for men and 64% for women) but 'only 37% and 21% were using it'. Family disapproval is noted a a crucial 'barrier to women's mobile ownership', 2nd most reported along with lack of digital skills and literacy and relevance.[xviii] An increase in female internet users was also noted by the Bangladesh Sample Vital Statistics, a project run by the Bangladesh Bureau of Statistics (by 1.2% in 2022). But comparing this to the 2.5% increase for males, the gender gap is visible.[xix]

Global System for Mobile Communications (GSMA) 2020 data showed that Bangladesh had a 29% gender gap in the use of mobile phones and 52% in the use of mobile internet.[xx] Rural women are noted to be more deprived of ICT than urban women in terms of education, cultural norms and beliefs, and ICT infrastructure.[xxi] It is also noted that the women entrepreneurs in Bangladesh are currently 'underserved by the country's financial services sector'. However, strides have been made for women inclusion, such as digital strategies developed by the Ministry of Women and Children's Affairs to advance women's issues and welfare, focus on women in the a2i program, particularly in the areas

of commerce, livelihoods, education and health. It has also launched initiatives to provide ICT access to rural areas (Union Digital Centers) and increase public awareness about women's empowerment (through television commercials) and using digital technologies to empower women through better access to government and financial services.[xxii]

Low levels of digital literacy

Digital literacy was identified as the main barrier to digital adoption in Bangladesh as people lack basic education and skills to even access the internet and technology[xxiii] and this makes it difficult to adopt or integrate technology into their daily and social lives. The Mobile Gender Gap report 2023 found that in Bangladesh, 22% of women and 18% of men who do not own a mobile phone reported difficulties with reading and writing as the main reason.[xxiv]

BRAC Institute of Governance and Development study (2019) found that in rural households, only about a third of the households (out of 6500) could read and send SMS, 10% could check and send emails, 41% could use social media and 28% could comment on sites but only 15% could video call. While for obtaining information, only 13% could retrieve at least one of the 3 pieces of information (passport application forms, hotline number for passport office and fees), from the homepage of Bangladesh Department of Immigration and Passport.[xxv]

Although many people may use the internet for simple entertainment purposes, they are often not digitally literate enough to get services or conduct processes online.[xxvi] GSMA's The State of Mobile Internet Connectivity 2023 report found that in Bangladesh, playing free games and listening to music was noted as an exception to how the mobile is used.[xxvii] A significant dip was also noted in the use of mobile to access to education support weekly (from 41% to 16%). was also noted in Bangladesh. [xxviii]

A UNICEF report also stated that 'less than a third of youth in South Asia have the digital skills to carry out basic computer related activities.'[xxix]

Inconsistent connectivity and digital infrastructure in rural communities

Although ICT infrastructure is well established in urban communities, it is still lagging in rural and remote cities.[xxx] A 'broadband divide' exists between urban and rural communities in Bangladesh, which has led to underserved populations that may struggle to get online.[xxxi] According to the Bangladesh Sample vital Statistics, while the internet users increased (as shown above in figure 1), only 37% are from villages/rural areas.[xxxii]

BRAC Institute of Governance and Development (BIGD)'s study 'Digital Literacy in Rural Bangladesh (2019)' also found that 92% of rural households owned a mobile phone (feature or smart) but 41% had access to smartphone. Very few households owned a computer but could access it at a shop/internet café and only 9% had any skills to use the device. The survey also found that rural households are still lagging as far as the understanding of 'internet', connectivity (only 37%), adoption and use of e-services.[xxxiii]

According to the GSMA report on the state of mobile internet connectivity 2023, smartphone ownership in 2022 was 27% for rural and 37% for urban population.[xxxiv]

Lack of Affordability: High Cost of Data and Devices

In Bangladesh, for the bottom 40%, the cheapest 30-day data package (at least 660MB) costs about 2.6% of GNI per capita, and the cheapest 30-day data package (at least 6GB) costs about 5.6% of GNI per capita (the average price of 1 GB mobile data was at $0.23 in 2023[xxxv]). Both these rates are higher than the 2% benchmark by the A4AI.[xxxvi] Several factors such as the pandemic, energy prices, taxes etc. have contributed to the high cost of internet and devices in Bangladesh.[xxxvii] To note, the government launched the 'One Country One Rate' 'tariff service' in 2021 to address the connectivity and accessibility inequality, but the 'hike in transmission costs' was seen as a setback to achieving this.[xxxviii] As per the Digital Quality of Life Index (DQL) report 2023, Internet affordability in Bangladesh dropped to 77th (from 29th in 2022).[xxxix]

Lack of Relevance

In Bangladesh, a 'perceived lack of relevance' is noted as a barrier to mobile internet adoption.[xl] Furthermore, digital platforms and systems developed in Bangladesh have been shown to lack in useability, accessibility and user experience, which creates less incentive for people to try and access them.[xli]

Low public trust in technology

As people started to enter the online space, in 2018, the government released a "Digital Security Act" that regulates the use of digital tools and technology in the country, including the protection of personal data and the prevention of cybercrime.[xlii] However, safety and security issues surrounding technology remain a major concern in Bangladesh (23% noted it as an 'important barrier', 18% cited harmful content as a concern, 15% strangers contacting and 12% information security).[xliii]

The government has also adopted an open licensing regime that allows for the public sharing of data. Despite the Government of Bangladesh drafting data protection and privacy bills and the existing 'sector-specific data protection laws', there are still concerns about data privacy and protection. It is also noted that there is a need to strengthen cybersecurity around the financial systems.[xliv]

Lack of Awareness and Motivation

According to the GSMA The State of Mobile Internet Connectivity 2023 report, lack of awareness is another barrier to digital adoption and use in Bangladesh (23% of smartphone owners were 'not using mobile internet, and from these, almost half were unaware of mobile internet'. 69% of rural and 71% of urban adult population (aged 18 and above) were aware of mobile internet in Bangladesh).[xlv]

Low-income populations are often not as interested in internet use, and there is often a lack of trust in the internet, especially among illiterate and rural populations. This lack of

trust results in a lack of motivation to invest in and learn to use digital platforms and services.[xlvi]

Slow uptake: Digital financial services (DFS), e-commerce and start-up culture

Compared to some other South Asian countries with developed digital businesses, Bangladesh has the lowest DFS rates, with the digital gender gap contributing heavily. The government noted that 'while financial inclusion amongst the entire Bangladeshi population jumped from 31% to 50%, the gender gap has widened'. To counter this, an a2i (Bangladesh's digital transformation program) mission is focused on 'digitising Government to Person (G2P) payments including social safety net programs, as well as Person to Government (P2G) payments'.[xlvii] DFS are primarily allocated to banks, specifically for paying or transferring money.[xlviii]

According to the Digital Entrepreneurship Index (2019), scores (0–100), Bangladesh stood at 11.2.[xlix] The country does have business-friendly regulations and the government is also making efforts to support the ecosystem, investing around $742 million into the country's start-up ecosystem over the last decade.[l] They have primarily supported the country's start-up sector by providing them with funding and investment opportunities.[li] For example, through the iDEA Project, the government gave pre-seed grants to start-ups and key stakeholders helped them emerge from a range of sectors (e.g., FinTech, e-commerce, etc.). Additionally, Bangladesh's Securities and Exchange Commission (BSEC) also implemented regulatory initiatives (e.g., Alternative Investment Funding Rule) to help start-ups as well.[lii]

Additionally, there has been an increase in e-commerce and FinTech over the years.[liii] An example of the support by government for this would be the introduction and development of the 'ekshop' by a2i which is assisting rural youth entrepreneurs, artisans, farmers etc to sell their products, get fair prices, make and receive payments digitally etc.[liv]
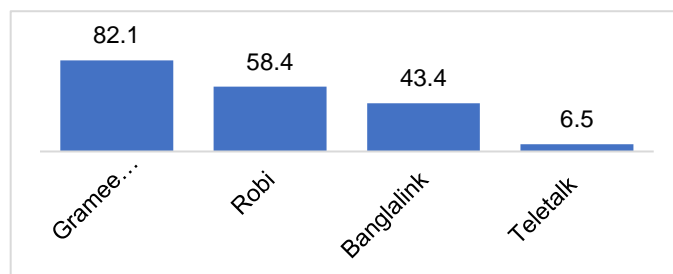
Digital Communications

Telecommunications

The Bangladesh Telecommunication Regulatory Commission (BTRC) is Bangladesh's telecom market regulating state agency. The current telecommunication operators are Grameenphone, Robi, Banglalink, and Teletalk.[lv]
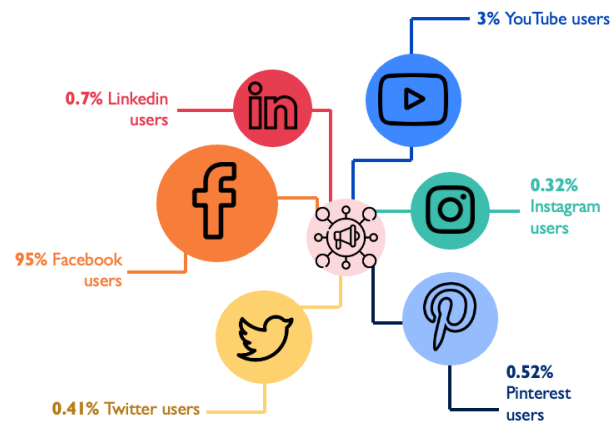

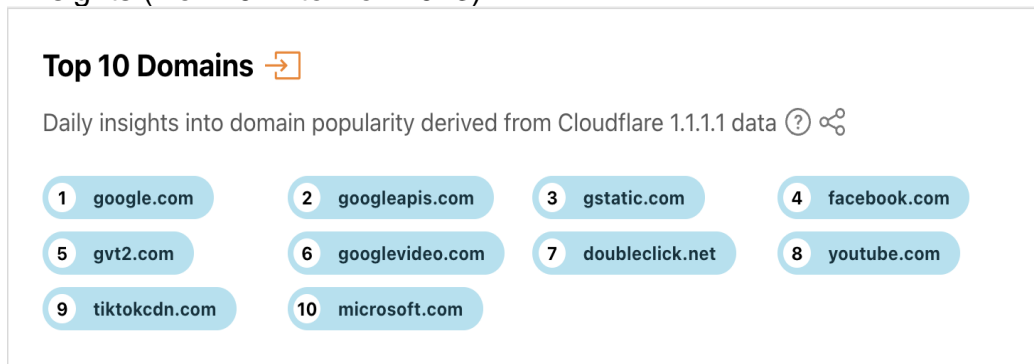|	
Gramee…	82.1
Robi	58.4
Banglalink	43.4
Teletalk	6.5

Active subscribers (in millions)

Social Media

There were 44.70M social media users in early 2023, with 40.7% of users over the age of 18. 32.6% of users were female and 67.1% were male.[lvi]

Reference for the figure[lvii]

% of social media users that access third-party websites/information via clicks or taps on links published on social media platform

3% YouTube users

0.7% Linkedin users

0.32% Instagram users

95% Facebook users

0.52% Pinterest users

0.41% Twitter users

Domain Insights (Nov 2022 to Nov 2023)[lviii]

Top 10 Domains →

Daily insights into domain popularity derived from Cloudflare 1.1.1.1 data ⑦ ⌘

1 google.com	2 googleapis.com	3 gstatic.com	4 facebook.com
5 gvt2.com	6 googlevideo.com	7 doubleclick.net	8 youtube.com
9 tiktokcdn.com	10 microsoft.com		

Social Media Platform Overview

Platform	User Demographics	Usage
Facebook	• 43.25M users[lix] • 34.6% Female, 65.4% Male[lx] • Largest user group is 18-24	Widely used by people of all ages and backgrounds. Used mostly to stay in touch with friends and family, sharing news and information, and connecting with others. Businesses use Facebook to promote their products or services.[lxi]
Instagram	• 4.4M users[lxii] • 31.4% Female, 68.6% Male[lxiii] • Largest user group is 18-24	Used to connect with friends and family, share photos and videos, promote businesses or personal brands, and follow celebrities and influencers.[lxiv]
LinkedIn	• 5.90M members[lxv]	Used for networking, job searching, and career development. Businesses use LinkedIn to search for talent,

		create brand awareness and link with others in the industry.[lxvi]
YouTube	• 34.40M users[lxvii] *User group data not available*	Particularly popular in Bangladesh for its wide range of content: music videos, short films, educational content and live streaming etc. The platform is also used by businesses, educators and creators to upload and share their content.[lxviii]
Twitter	• 1.05M users[lxix] *User group data not available*	Used to stay informed about current events, for sharing news and information, expressing opinions and thoughts on various topics, and connecting with others who have similar interests. Many politicians, journalists, and other public figures use Twitter to share updates and engage with their followers.[lxx]

Social Messaging Applications

One of the social messaging applications is Bip, a Turkish messaging app, which is thought to be safer than other apps in Bangladesh and rose to number one on the Google Play Store in Bangladesh in 2021.[lxxi] Other messaging applications in use in Bangladesh include WhatsApp (user data not available), Facebook Messenger (20.35M users[lxxii]), and IMO (*user data not available*).[lxxiii] IMO is popular, especially among migrant workers and their family members working in different countries.[lxxiv] IMO messages are compressed in the app, meaning that the file size is smaller, so it uses less internet data, which makes it more affordable compared to other apps.[lxxv] Other apps such as Telegram, Messenger Kids and Discord are also used, but no specific user data is available.

Key Social Media Influencers[1]

The top key influencers, as identified by the criteria indicated in Annex 1, have been identified below. Local macro influencers, who are celebrities or key opinion leaders will be the priority criteria used for this digital mapping. As they have the most potential for meaningful partnerships with UNICEF, reaching target communities seems most likely with this cohort. However, depending on the Country Office priorities, as well as the evolving nature of social media influencers, key influencers will need to be re-identified.

Influencer	Social Media Platform	Number of Followers	Category	Type of Content
Mustafizur Rahman	Facebook Instagram Twitter	Facebook - 1.6M Instagram – 1M Twitter – 1.2M	Sports Celebrity	Social Posts

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[1] Social influencer statistics may have changed since they were last checked in January 2023.

Name	Social Media Platform	Number of Followers	Category	Type of Content
Nusrat Jahan Ontora	Facebook, Instagram, Twitter, YouTube	Facebook – 5.3M Instagram.- 975K Twitter – 47.1K YouTube – 412K	Entertainment Celebrity	Social Posts Videos Blogs
Sallha Khanam Nadia	Facebook, Instagram, Twitter, YouTube	Facebook - 2.9M Instagram – 925.3K Twitter – 298 YouTube - 11	Entertainment Celebrity	Social Posts Videos
Hridoy Khan	Facebook, Instagram, Twitter, YouTube	Facebook - 2.8M Instagram – 735.8K Twitter – 51K YouTube – 762K	Entertainment Celebrity	Social Posts Videos
Sabbir Rahaman Roman	Instagram, Twitter	Instagram – 777K Twitter – 77K	Sports Celebrity	Social Posts
Nawsheen Nahreen Mou	Instagram, Twitter, YouTube	Instagram – 653K Twitter – 73.3K YouTube – 254K	Entertainment Celebrity	Social Posts Videos Blogs
Sonia Media	YouTube	1.4M	Entertainment Celebrity	Videos
SalMoN TheBrownFish	YouTube	1.59M	Entertainment Celebrity	Videos
Salahuddin Sumon	YouTube	1.43M	Culture Key Opinion Leader	Videos Blogs
Rs Fahim Chowdhury	YouTube	1.66M	Culture Key Opinion Leader	Blogs Videos
Nadir On the Go	Instagram Facebook TikTok YouTube Twitter	Instagram – 170K Facebook – 160K TikTok – 1.5K YouTube – 813K Twitter - 704	Travel Vlogger Digital Creator	Social posts Videos Blogs
Jannat – The Lunatic Traveler	Instagram Facebook YouTube	Instagram - 5661 Facebook – 98K YouTube – 99.9K	Travel Vlogger Digital Creator	Social posts Videos Blogs

Online Groups

Group Name	Social Media Platform	Number of Followers	Category	Type of Content

|				
Our Evergreen Bangladesh	Facebook	6.1M	Bangladesh	Social posts
Desperately Seeking - Dhaka (DSD)	Facebook	541.3K	Need Advice/help with anything	Social posts
FoodBank	Facebook	2.1M	Food Restaurants	Social posts
30k BDSS Community	Discord	30.4K	Entertainment	Voice over Internet Protocol Instant messaging
Bangladesh (r/Bangladesh)	Reddit	46.8K	Education Sports Scient & Technology Economy Policy	Discussion
Dhaka, capital of Bangladesh (r/Dhaka)	Reddit	2.6K	Dhaka Advice How to find something	Discussion

Traditional Media Platforms

FM radio has seen a dramatic loss of listenership in urban centres across Bangladesh due to the advancements in technology and the availability of social media.[lxxvi] However, radio is still quite popular in some remote areas of the country, such as the state-run shortwave radio station Bangladesh Betar. It is seen as a reliable platform for up-to-date information on important issues such as natural disasters.[lxxvii] On the other hand, TV consumption continues to grow, with the urban and rural viewership divide noted as decreasing since 2017.[lxxviii] Bangladesh has four state-owned television stations, and some popular radio and television networks:[lxxix]

Television	Radio[lxxx]
• Channel 1 • ATN Bangla • NTV • Independent TV • Somoy TV • Gazi TV • Ekushey Television (ETV) • RTV • Bangla Vision • Maasranga TV	• Bangladesh Betar • BBC • Bangla Radio • Radio Metrowave • Bangla Radio Broadcastings • Eurobangla Audiocast

Streaming Services/VOD

Bangladesh has a variety of OTT (Over The Top) video platforms. Netflix (200k subscribers), lxxix, Prime Video, and Hulu are available in the country, but the local OTT platforms see a lot of traffic and interest from the population.[lxxxi] Some are listed below:

- [Hoichoi](#)
- [Binge](#)
- [Chorki](#)
- [Teleflix](#)
- [Bongo](#)
- [Toffee](#)
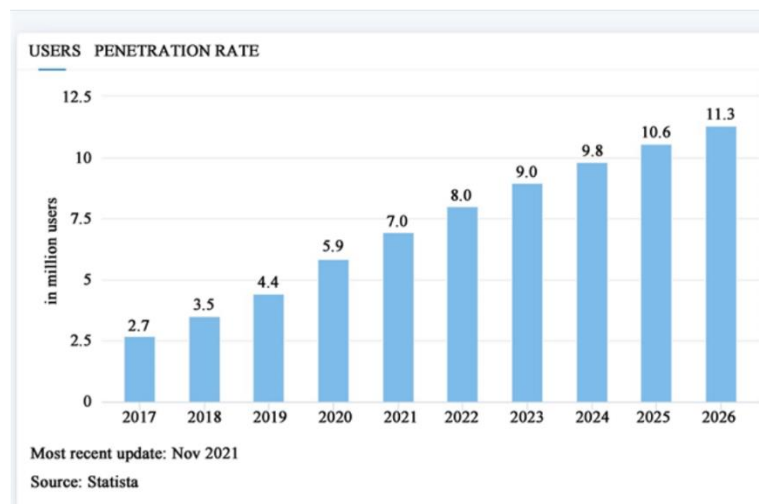
OTT users in Bangladesh (data from Statista, 2021)

Gaming Community and Platforms

The gaming sector's potential in Bangladesh still remains untapped and requires a trained workforce, government buy-in and policies and investments.[lxxxii] Mobile Games had a market volume of US$477.90m in Bangladesh in 2023, and the number of users is expected to reach 58.01M by 2027.[lxxxiii]

- [egamers Teams](#)
- Some online groups and pages[2]:
    - [Gamers Of Bangladesh : গেমার্স অব বাংলাদেশ](#) - 353.3k members
    - [Gamers of Bangladesh](#) - 176k followers
    - [Bangladesh Gaming Community](#) - 110.3k members
    - [Gaming Community Bangladesh](#) - 4.9k members
    - [GAMING COMMUNITY BANGLADESH](#) - 3.8k members
    - [Bangladesh Gaming Community [BDGC]](#) - 2.9k members

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[2] Member numbers may have changed since June 2023

The inaugural SPiCE (Strategic Platform for iGaming Conference & Exhibition) event is taking place in Bangladesh and will explore and take advantage of the "incredibly exciting opportunities that have yet to be fully utilised in this market".[lxxxiv]

Digital Tools

Education

During the pandemic, the Bangladesh government started distance learning initiatives through Sangsad TV, to ensure continued learning.[lxxxv] Bangladesh has a public 'EdTech ecosystem', which is a 'multimodal approach' combining high and low-technology and non-technology modalities for education technologies.[lxxxvi]

Some of the e-learning applications and educational websites in Bangladesh include[lxxxvii]:

- Digital Literacy Center: an initiative by Bangladesh Computer Council (BCC), supervised by the Information and Communication Technology department, to decrease digital literacy inequality, to increase awareness and skills around technology, online safety and for knowledge sharing etc.

- Meena Game by UNICEF Bangladesh

- 10 Minute School: provides pre-recorded lectures, quizzes and live classes on Facebook for free. It is sponsored by Robi, the Mobile Network Operator, and is endorsed by numerous public figures.

- Shikho: provides animated video lessons, interactive live classrooms, and graphical learning journeys, with ongoing evaluation and performance analytics.

- Shikkhok Batayon: a free website run by the Ministry of Education that mainly provides PowerPoint presentation slides explaining different topics that correlate to the national curriculum.

- Mojaru: provides e-learning through gameshows, art, and entertainment.

- MBS Academy: offers courses on topics such as digital marketing, web design, programming, office tools etc.

Health

As a part of the Government of Bangladesh's digital transformation vision, the Ministry of Health and Welfare (MOHFW) has developed Health Information System (HIS) tools.[lxxxviii] There are over 114 digital tools including 17 applications, 90 web-based, and 3 software tools.[lxxxix] A full list of health tools currently being utilised can be found in the Annex of the MOHFW HIS Mapping, 2021.[xc] Some additional examples of health digital tools include:

- Covid-19 Vaccine Tracker: a mobile app for tracking vaccination schedules.[xci]

- E-Treatment Card: a digital platform for managing health records and scheduling appointments with healthcare providers.[xcii]

- A good example of an integrated health dashboard: Real-Time Health Information Dashboard by the Directorate General of Health Services, Dhaka.[xciii]

Child Protection

Bangladesh is continuously working to improve and integrate technology into it's child protection systems. Some examples of existing child protection tools and platforms include:

- Child Helpline 1098: a toll-free helpline for children that provides children with a safe and confidential space to report abuse and seek help.[xciv]

- Child Protection App by Save the Children: created to provide information to parents/caregivers to make them understand what child protection is, what their role as caregivers is, and how to provide psychosocial support to their children.[xcv]

- Adolescent Health Website and Mobile Application by the Ministry of Health and Family Welfare with support from UNICEF and the Embassy of Sweden developed to increase awareness and ensure easy access to physical and mental health information and services for adolescents.[xcvi]
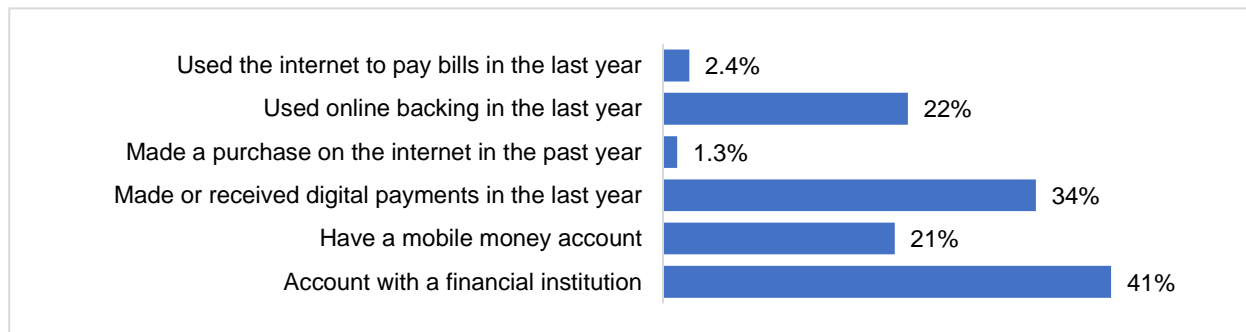
Digital Ecosystem and Infrastructure

In 2008, Bangladesh adopted "The Digital Bangladesh Vision" with the aim of promoting a growing IT industry, a digital government, human resource development, and connecting citizens. Furthermore, Bangladesh's 'Post-COVID-19 National ICT Roadmap FY 2021-2025', the 8th of its kind, highlighted the role of the digital economy in accelerating economic growth and widespread digitalisation. Furthermore, building on from 'Digital Bangladesh' the 'Smart Bangladesh Vision 2041' was introduced with the aim to bridge the digital divide by focusing on inclusion, innovation and scaling to ensure that all citizens of Bangladesh can benefit from digital technologies and advances. It is focused on 4 pillars: Smart Citizens, Smart Government, Smart Economy and Smart Society.[xcvii]

As per the Digital Intelligence Index by the World Bank (a worldwide index that measures countries' digital adoption across three dimensions of the economy: people, government, and business)[xcviii] in 2016, Bangladesh had a Digital Adoption Score of 0.37 (no recent data is available to note if this score has changed).[xcix] In 2022, the National ICT Policy was being revised[c] focusing on 'universal access to education, digital security, digital government, skills development, employment generation, and research and innovation'. The aim of this policy is to 'strengthen the domestic capacity to cope with the changes brought about by emerging technologies'.[ci]

Investment in the national digital infrastructure has been a priority for Bangladesh ever since the launch of Digital Bangladesh.[cii]

Used the internet to pay bills in the last year	2.4%
Used online backing in the last year	22%
Made a purchase on the internet in the past year	1.3%
Made or received digital payments in the last year	34%
Have a mobile money account	21%
Account with a financial institution	41%

Percentage of population aged 15+ that uses or owns each product or service. All data was collected from Digital 2022 Bangladesh Overview Report.

There are several several different e-governance ecosystems in place:
- **The National Portal:** which contains more than 45,000 websites and services of different government offices.[ciii]

- **The Union Digital Centres (UDCs):** a' one-stop information and service delivery' platform for people who do not have access to vital information and services. Union Council Representatives run the centres, and they provide free and fee-based public and private services.[civ]

- **The National Data Centre**

- **The Computer Incident Response Team (CIRT):** is responsible for protecting the country's cyberspace..[cv]

- **The National Enterprise Architecture (NEA):** is the '*foundation for successful ICT implementation of e-services in government'* and was developed through the 2014-2016 Establishment of Bangladesh National Enterprise Architecture Project.[cvi]

The COVID-19 pandemic also shifted consumer behaviours and according to the e-Commerce Association of Bangladesh, 'e-commerce sales increased by 70% from 2019-2020'.[cvii] In 2022, Bangladesh also improved its ranking on the United Nations eGovernment Development Index (EGDI), from 134th in 2010 to 111th (out of 193 countries).[cviii]

Furthermore, by the end of 2017, over 323 million digital public and private services were provided in Bangladesh[cix], such as 75 million birth registrations, 2.1 million passport issued, access given to land records,[cx] 145,200 bank accounts were opened, and over 100,000 youth vocational and computer-based training were conducted.[cxi]

Artificial Intelligence

The Government of Bangladesh sees artificial intelligence (AI) as an important technology for the country to invest in and promote.[cxii] With a rapidly growing IT sector, it is currently working on improving the country's artificial intelligence (AI) infrastructure and as of 2022,

the country has set in place a developmental approach such as focusing on 'skilling and reskilling of AI workforce, funding and accelerating AI start-ups, and industrialisation for AI technologies'. The government has also introduced information and communication technology (ICT) subjects at universities, colleges, and vocational institutions.[cxiii]

There are currently no laws specifically for artificial intelligence. However, in 2020, the government developed the National Strategy for Artificial Intelligence.[cxiv] Also, the country's National IT Policy 2018 included digital strategic objectives to strengthen the country's preparedness for emerging technologies.[cxv]

Regulations Promoting Digital Transformation and Inclusion

Bangladesh also has the a2i programme that aims to 'improve quality, widen access, and decentralise the delivery of public services in a way that they believe will address the digital divide in the country'.[cxvi] The programme aims to ensure that underprivileged persons, particularly those in rural communities, can access information and services reliably and can afford and access the tools and technology regardless of their socio-economic background.[cxvii]

Challenges, Opportunities, and Recommendations

Challenge/ Opportunity	Narrative	Recommendations
Challenges		
Lack of trust in digital platforms and technology		- Promote online safety in all digital interventions and activities that target everyone in the community. - Partner with: - Trusted authorities/local organizations to promote and raise awareness about the safe and responsible use of technology. - Local communities and religious leaders to build trust in digital platforms and technology. - Trusted influencers and digital leaders to endorse the use of digital platforms and technology. - Advocate for policies and regulations that protect users' privacy and data. This should be tackled at the policy level first. - Partner with cybersecurity experts and firms to provide cybersecurity solutions and services and incorporate them in SBC programming and work. - Partner with local trusted agencies, networks, platforms, and influencers to advocate for better cybersecurity laws and policies. - Promote online safety in all digital interventions and activities: educate communities about the benefits and safe use of digital platforms and technology (develop secure digital platforms (or secure the already operational ones). - Support or partner with ongoing initiatives by the government or other organizations to deliver public awareness key messaging on responsible use of digital platforms (avoid duplication of messages).

		• Ensure that mental health is a core component of every digital intervention/activity.
		• Utilise social listening mechanisms for the 'refine and testing' process for every digital intervention.
Digital Gender Divide	As noted from the findings above, while some progress in narrowing the gender divide has been noted, in areas such as education, labour force participation and income, the Gender Divide (digital as well) still prevails. The divide also widens in the rural areas.	• Assess the situation of girls and women in Bangladesh: carry out formative research (identify KABP, barriers, challenges hindering the move to digital and opportunities and best practices that can be emulated to bring girls/women online) etc. • Collaborate with the gender focal points/section and develop a digital SBC strategy (based on the learnings from the research) as a foundation to bring girls and women online; address the negative gender norms (and the hindering social and cultural norms), educate the men/fathers/mothers/community and religious leaders/other decision makers on the positive outcomes of ensuring girls/women have access and devices, create STEM programs/tools/platforms for girls, advocate for/create women/girls only safe online spaces, ensure online safety (ensure mental health is a core component as well) is a core part of the interventions/discussions etc . • Embed the discourse about girls' access to digital into the ongoing SBC programmes (or as part of any new intervention). • Utilise digital tools and social listening on a continuous basis to gather insights (behaviour as well) for impactful community engagement and for M&E as well. • Develop specific programs, in partnership with the relevant ministries, private sector organisations etc, to encourage and promote digital entrepreneurship culture among women (support with financing, establishing businesses and connecting to digital services to support the inception and promotion). • Partner with women entrepreneurs to reach and engage with girls/women in urban and rural areas and encourage the use of digital technology as a source of livelihood. Embed online safety as part of this intervention/interaction along with providing up-to-date digital skills training. • Establish (in consultation with the women/girls) digital centres/hubs/labs/platforms, and partner with local private sector organizations to develop gender-sensitive digital platforms. • Mobilise influencers, religious leaders and activists to advocate for online, and device, access for girls/women. • Partner with tech companies to promote their safety measures/safeguarding tools to parents as a stepping stone to bringing girls online and to provide safeguarded devices to girls to ensure ongoing and sustained access. • Gaming is an entry point to building digital literacy and skills. • Partner with telecoms to: o Provide connectivity to girls/women: such as special data packages or zero-rated apps/content. Especially for women/girls in rural or remote areas. o Expand the reach of existing digital (annex 3) and e-learning platforms, specifically targeting girls/women in rural areas to develop their digital literacy and skills.
High internet package costs		• Advocate for policies that promote affordable internet access for all. • Partner with telcos/mobile network operators/internet service providers to offer low-cost/free internet packages for low-income (rural) communities, as part of the SBC interventions and programmes.

		• Support the development of community-led solutions (engage the youth), such as shared community Wi-Fi networks/centres.
Poor digital infrastructure	Although Bangladesh has 4G technology for mobiles, it only covers about 30% of the country. Outside of urban areas, users continue to suffer from sudden call drops and other issues related to poor internet service quality.[cxviii]	• Advocate for investments in digital infrastructure, such as broadband networks and improved electricity supply. • Partner with the government and private sector to improve connectivity and digital infrastructure in rural areas. • Partner with relevant authorities to develop alternative solutions such as local access community networks, community-led networks and 'internet cafés' to provide device access and satellite-based internet solutions. • Implement initiatives that bridge the gap between online and offline communities. Do a service mapping to ensure that SBC digital interventions are linked to relevant support, and this also reduces the online and offline gaps (a community being reached online should be able to get support offline and vice-versa). The loop should be completed.
Low digital literacy rates	The lack of computer lab facilities and vocational and practical training programmes hinder the development of digital literacy skills across the country.[cxix]	• Advocate for recent and relevant data to ascertain the situation of digital literacy and skills in Bangladesh (segregated by gender). Support the relevant authorities/partners to carry out the research (nationwide). • Advocate for a balanced curriculum to improve both traditional and digital literacy skills. • Partner with the Ministry of Education (and any other relevant authority) to develop digital literacy programs in schools and communities. Use gamification and interactive learning tools (AI and games) to make digital literacy programs engaging and fun. • Partner with local NGOs to provide digital skills training to marginalized communities. • Strengthen the capacity of teachers, educators and parents on digital skills and them to deliver digital literacy programs. • Leverage social media platforms to develop digital literacy skills: promote the use of social media for educational purposes. For example, Facebook Groups can be used for collaboration, co-creation and discussions etc. • Partner with tech companies and organisations, especially women-run and focused, to establish platforms and tools (such as online courses, games, training, hubs, labs, centres etc) that can improve digital literacy, or leverage the existing platforms that can be sustained. Apply design thinking when creating digital tools and platforms to improve literacy skills. • Partner with telcos to provide connectivity and data to ensure that digital tools and platforms are accessible to the community. This will also encourage digital adoption. • Partner with the gaming community as an entry point to build digital literacy and skills and promote online safety.
Opportunities		
The rapid expansion of the IT sector and demand for the digitally skilled workforce	Post-covid, the IT industry is rapidly expanding and companies are also starting to digitalise as more people work remotely. It's been estimated that digitalisation could generate at least 10,000 new jobs in IT and other related fields.[cxx]	• Leverage the accessibility of smartphones and mobile phones to promote digital adoption and improve digital skills. This could include leveraging the existing mobile apps/tools or developing other mobile-friendly digital platforms, providing mobile-based digital literacy programs, engaging community influencers and mobilizing them digitally (and bridging the offline and online) or for frontline workers training etc. • Partner with private sector/universities and vocational training centres to provide digital skills training (shared-value partnerships).

		• Partner with relevant authorities to develop digital literacy programs in schools and communities.
The reach of Telcos/Mobile Network Operators (MNOs)	190.36M[cxxi] people in Bangladesh had cellular mobile connections in Nov 2023 (*the number is greater than the actual population, likely due to people having more than one device*)[cxxii] and there were 118.96M mobile internet subscribers in 2023[cxxiii].	• Partner with BTRC and telcos/mobile network operators to: o Expand the reach of digital interventions and programmes, particularly in remote and underserved areas. o Provide subsidised or zero-rating (no data cost for user) for specific interventions/programmes/activities/community. o Develop and implement data-driven interventions to bridge the digital divide. o Use their micro-segmentation on high-engagement channels to target communities and people for specific digital interventions.
The attractiveness of online platforms for young people to share their opinions		• Use social media platforms to engage with young people and gather their opinions on different issues; co-create applications and platforms where they have agency. • Develop and implement digital literacy and entrepreneurship programmes targeting youth. • Partner with youth-led organisations to co-create and deliver digital solutions to social challenges. Ensure that mental health is a core component of every digital intervention/activity. • Mobilise the youth to address the gender digital divide. • Engage and mobilise the gaming community for SBC.
Government's commitment towards a "Digital Bangladesh"	The government has committed to developing Bangladesh's digital infrastructure and has invested many resources towards building up the ICT sector in the country. They are also now preparing a new national broadband roadmap to make affordable internet a reality.[cxxiv]	• Collaborate with the government to develop and implement policies and regulations that promote digital development in the country, with a focus on the gender digital divide and the rural population. • Advocate for the inclusion of digital literacy programs in the national education curriculum. • Develop partnerships with government agencies to deliver digital services and solutions to the 'last mile'. • Establish programmes/activities (in collaboration with the relevant ministries and partners etc) that encourage and promote youth-led tech startups (hackathons, investment funds, innovation funds etc). • Develop partnerships with ICT companies to deliver digital services and solutions to communities. AI-focused: • Leverage the interest and focus of the government on AI and support its growth for SBC work: partner with relevant authorities to work together on ethical and protection issues and on leveraging the technology for children and other communities. • Introduce AI into SBC programming and interventions (internal and external capacity building). • Partner with AI start-ups and organisations to develop digital solutions (and elements) to enhance SBC work in Bangladesh. • Leverage the existing AI-powered platforms and tools: partnerships, content support etc.
Universities' Commitment towards a	Universities do not have programmes that support the development of the entrepreneurial skills or the funding to support start-ups.[cxxv] There are approximately 500,000 to 1 million	• Partner with universities to provide digital literacy and skills training to students and communities, and to develop innovative digital solutions to address social challenges.

"Digital Bangladesh"	foreign workers who make up for the shortage of Bangladeshi skilled workers.[cxxvi]	• Use academia's research to inform SBC digital strategy and programmes.

Growing trust around online content providers and creators	Although online media is dominated by entertainment, online content providers are becoming more popular than news sites for information on public issues. Video is the most popular format on social media.[cxxvii]	• Develop partnerships with trusted online content providers, content creators and influencers to:
		
		     • Provide reliable and fact-checked information to their followers.
		     • Disseminate digital literacy programmes and awareness campaigns.
		     • Deliver innovative digital solutions.
		     • Engage with communities and gather feedback on relevant topics and SBC programmes/interventions.
		
		 • Advocate for policies that promote transparency and accountability among online content providers and creators.
		 • Partner with tech companies to reduce misinformation and disinformation: create programs, promote their in-house tools to the general public etc
		 • Ensure that mental health is a core component of every digital intervention/activity.

Favourable laws and public ICT projects	The government has developed favourable laws and projects to encourage investment in the sector both domestically and internationally.[cxxviii]	• Partner with the government and tech companies to develop and implement public ICT projects (solutions) that address social and behaviour change issues.

Annex 1 – Key Influencer Criteria

For the purpose of this document, key influencers have been defined in three ways - by the number of followers, types of content, and level of influence.

Defining influencers by the **number of followers** can be categorised into four types.

- **Mega influencers** are people with a large number of followers, usually over 1M followers on at least one social media platform. Mega influencers tend to be celebrities who have gained their fame offline, however some will have gained their followers online and through social activities.
- **Macro influencers** usually have 40,000 to 1M followers on social media platforms. This group tends to have high profiles and can be great for raising awareness on issues. It may be easier to connect with macro influencers, as there tends to be more of them than mega-influencers.
- **Micro influencers** have between 1,000 to 4,000 followers and tend to be ordinary everyday people who have become well-known and popular for their knowledge about a specific topic. This means that their followers tend to be interested in that specific topic. These influencers tend to have smaller followings but higher engagement and influence with their followers.
- **Nano influencers** have less than 1,000 followers and tend to be experts in a highly specialized or technical field. Similar to the followers of micro influencers, they tend to have smaller followings but higher engagement and influencer with their followers. However, they will not have as much influence as micro influencers as they have less followers.

Defining influencers by **types of content** which can be categorised into four types.

- **Bloggers** tend to have the most authentic, active, and engaging relationship with their followers.
- **Video makers** are popular types of content, and most tend to create and share videos on YouTube.
- **Podcasters** are the newest form of content to start generating followers and is growing increasingly popular.
- **Social posting only** is rare and tends to happen in parallel with other types of content creation.

Defining influencers by **level of influencer** which can be categorised into two types.

- **Celebrities** can sometimes lack credibility with specific target audiences, or around certain types of topics.
- **Key opinion leaders** are industry experts that can also be considered influencers who gain credibility among followers and people in general due to their technical expertise, qualifications, position, and experience. Key opinion leaders can include journalists, academics, industry experts, and/or professional advisors.

Macro and micro influencers, who are celebrities or key opinion leaders will be the priority criteria used for this digital mapping. As the potential for meaningful partnerships with UNICEF, to reach their target communities seems most likely with this cohort.

Annex 2 – Digital Public Goods (DPGs) case studies

UNICEF Ghana

UNICEF's Ghana office is a Pathfinder and runs the StartUp Lab, which assists sustainable entrepreneurs to develop their products and business models. The lab also serves as an incubator for open source startups and educates those considering it. The objective is to prepare DPGs from the StartUp Lab to apply for UNICEF's Venture Fund investment. The Country Office evaluates the StartUp Lab's solutions through its programmatic sections and collaborates with national institutional partners to incorporate open-source work into broader policy solutions.
UNICEF employs various tools, including the StartUp Lab, Venture Fund, and Innovation Hubs, to support innovation at different stages. In Ghana, the UNICEF Country Office used this system to uncover and advance two DPGs: Bisa App and EduNOSS, as well as DPG nominee Project Konko. For more information visit this site.

UNICEF Philippines

UNICEF Philippines started their DPGs Pathfinding Pilot in early 2021 with two objectives. Firstly, to discover how existing technical country capacity can be advantageous to DPGs and improving Technology for Development (T4D) that are relevant to UNICEF and the government's programmes. And secondly, developing a tool that would allow the sharing of knowledge and capacity among sectors. For more information visit this site.

UNICEF Innovation Funds

UNICEF Innovation funds exclusively invest in open-source technology solutions from new and emerging companies. Through its investments, UNICEF is strengthening communities, increasing the number of DPGs, and having an impact on children. For more information visit this site.

Safe YOU: Virtual Safe Space for Women

Safe YOU was launched in Northern Iraq (Kurdistan) in partnership with UNFPA Iraq and UNFPA Armenia in 2021. With the help of UNICEF Innovation, Safe YOU was recognised as a Digital Public Good (DPG), a digital tool aimed at achieving sustainable development goal number 5 (Gender Equality) as set by the United Nations Secretary General's 2020 Roadmap for Digital Cooperation. Safe YOU aims to be a key resource for evidence-based policy-making through our sophisticated AI data analysis system. This will lead to the prediction & prevention of Violence Against Women & Girls. For more information, visit the site here.

Annex 3 – UNICEF Digital Platforms

U-Report is a messaging tool that enables young people to interact with and raise their voices on issues that are important to them. It is operated by local government, organizations, and young people who record gather information, tips, and opinions from mobile device users on a range of issues. Based on the data and insights gathered by U-`reporters, the results are shared with the relevant communities and stakeholders. For more information on U-Report, visit this site. Access UReport South Asia here: https://southasia.ureport.in/

RapidPro collects data via short message service (SMS) and other communication channels (e.g. voice; social media channels, such as Facebook Messenger, Telegram, WhatsApp) to enable real-time data collection and mass-communication with target end-users, including beneficiaries and frontline workers. The technology allows users to design, pilot, and scale direct mobile outreach services without the help of a software developer in both normal development contexts and humanitarian emergencies.
For more information on RapidPro, visit this site.

Internet of Good Things (IoGT) aims to build people and communities' knowledge by closing the digital divide. For more information on IoGT, visit this site. Access South Asia IoGT here: https://sa.goodinternet.org/en/ or the Pakistan site here: https://nanhayqadam.org/ur/

All Children Learning is a regionally focused platform designed to strengthen assessment capacity and learning. The platform offers four different guidance's (government, emergencies, development, and teaching) to improve the users' assessment capacity and learning. For more information on All Children Learning, visit this site.

OKY app: the world's first menstruation education and period tracker app co-created with girls, for girls. Access here**:** Oky Nepal and Oky India

Bebbo app, developed by the UNICEF Regional Office for Europe and Central Asia, is an application that supports responsive, positive parenting. It aims to provide comprehensive information about early childhood development and parental care in a parent-friendly format. Bebbo also supports the dissemination of messages and information related to COVID-19 prevention and protection for children.
For more information**: https://www.bebbo.app/about-us**

USupportMe: part of the Mental Health and Psychosocial Wellbeing Portfolio at UNICEF. It is an app for on-demand psychosocial support services. After successful pilots in East and Central Asia, we're scaling up this innovative solution to meet its full potential.

UNIlearn: online national learning and knowledge-sharing platform which hosts dynamic education, skills, and other content from different states in India and from other countries.

AGORA is a platform that provides learning opportunities to UNICEF's staff, partners, and supporters. The learning opportunities range from specific thematic areas to strategies to languages to career support. For more information on AGORA, visit this site.

INFORM provides UNICEF and partners with a turnkey solution for field-based data collection, management and visualization. Inform supports UNICEF's strategic outcomes and strengthens our position as the global leader in data for children.
For more information: visit this site.

UNICEF SOCIAL MEDIA PLATFORMS

Endnotes

Definitions to Note:

- **Fixed Broadband Internet:** High-speed connectivity for public use of at least 256 Kbit/s or more in one or both directions (downloading and uploading). It includes cable modem Internet connections, DSL Internet connections of at least 256 Kbit/s or higher, fibre and other fixed broadband technology connections (such as satellite broadband Internet, Ethernet LANs, fixed-wireless access, Wireless Local Area Network, WiMAX, etc.).[cxxix]
- **Mobile Broadband:** Mobile broadband technology allows for a wireless wide area network (WWAN). In simple terms, it provides wireless high-speed Internet access to portable devices by way of radio towers.[cxxx]
- **Gross Domestic Product (GDP) per Capita:** Is the sum of gross value added by all resident producers in the economy plus any product taxes (less subsidies) not included in the valuation of output, divided by mid-year population.[cxxxi]
- **Unbanked:** People with no bank account.[cxxxii]
- **Underbanked:** People with insufficient access to banking.[cxxxiii]

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