Digital Mapping & Analysis

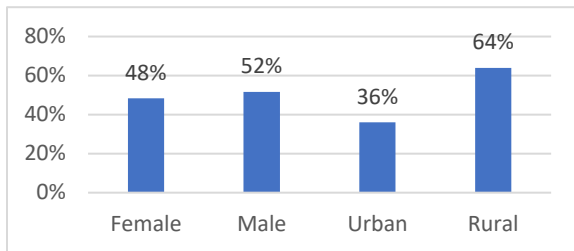# INDIA

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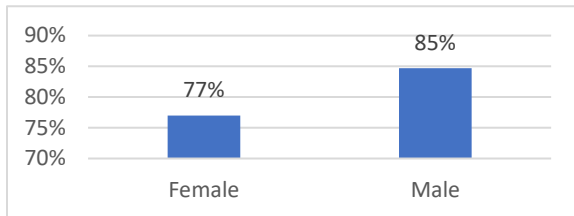
This document can inform digital SBC programme design, development, and implementation at the country level based on the available insights and data from recent years.

Demographic Overview

Total Population: 1.4B[iii]

Age Demographics[iii]

Literacy Rate in rural India is at 66.77% and in urban 84.11%[iv]

Languages Spoken[v]

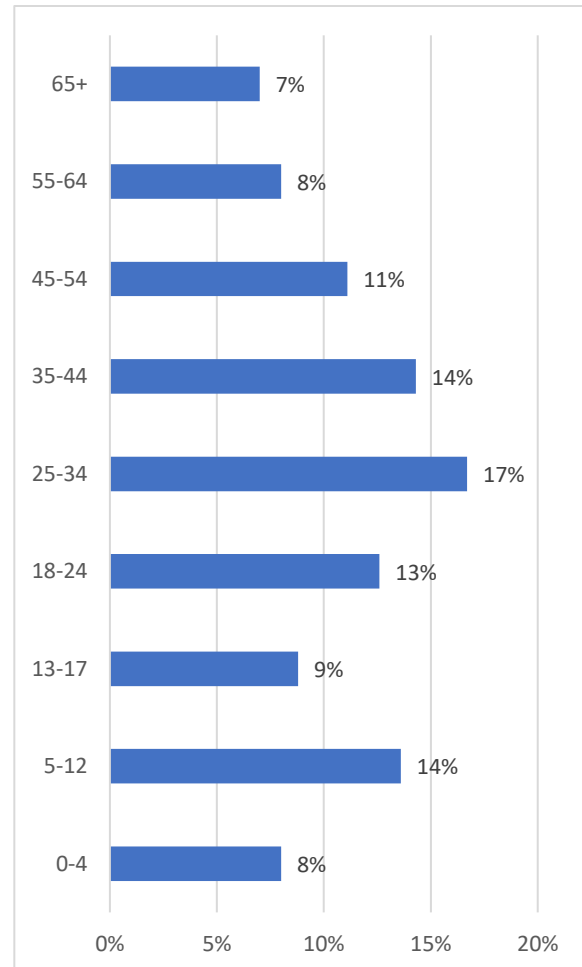Some of the spoken languages in India are listed below *(up-to-date data on the languages is not available)*:

1. Hindi
2. Bengali
3. Telugu
4. Marathi
5. Tamil
6. Gujarati
7. Urdu
8. Kannada
9. Odia
10. Punjabi

Digital Connectivity

An estimated 84% (1.18bn) of the population have cellular mobile connections.[vi] 47% (692M) of the population use the internet through mobile (any: 90.6%, smartphone:

89.3%, feature phone: 8.3%), laptop/desktop computers (57.6%), connected TVs (31.7%), tablets (20.7%), and game consoles (12.6%).[vii]

74% of cellular mobiles in India have 3G, 4G, or 5G broadband, with an average connection speed of 18.26 Mbps.[viii] Average fixed internet connection speed is 49.09 Mbps; this is fast enough for video streaming.[ix]
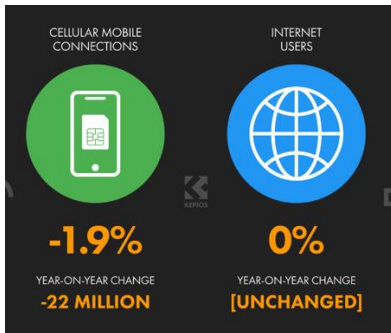
Digital Growth[x] (compared to 2022)

Trends to Note (Nov 2022 to Nov 2023)[xi]
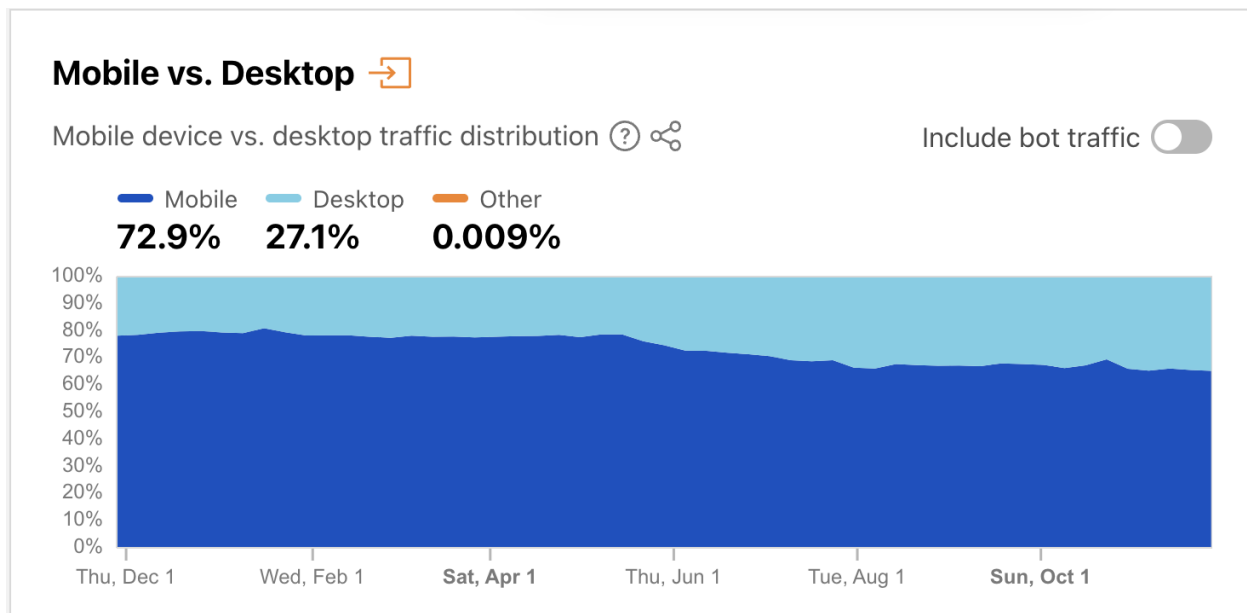
Mobile Operating Systems

Distribution of mobile device requests to Cloudflare by operating system

Android **93.7%**   iOS **6.3%**   Other **0.001%**

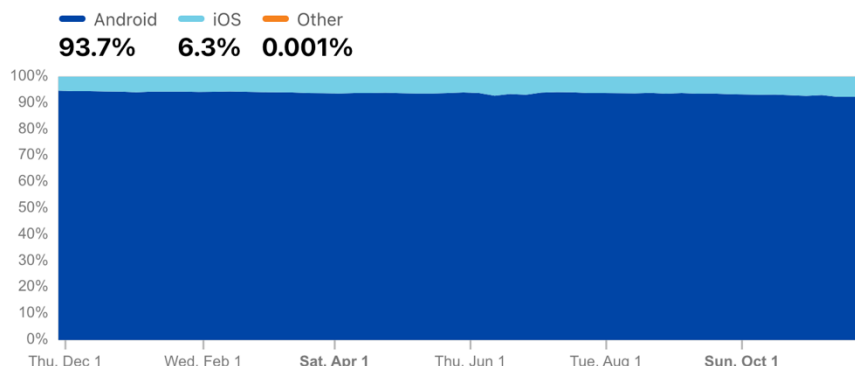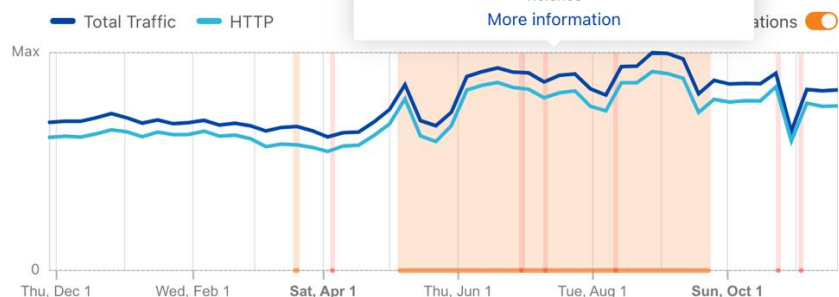**Internet traffic trends**

Traffic volume over the selected time p...

May 4 2023, 14:00 UTC – Sep 23 2023, 12:00 UTC
Outage event
overnment-ordered shutdown in Manipur amid violence
More information

Digital Divide

The gender digital divide

Women's use of mobile internet in India saw an increase from 21% to 30% between 2020 and 2021, while men's usage increased from 42% to 45% in India.[xii] NFHS 5 (Fifth National Family and Health Survey 2020) data also showed that only 42% of women had ever used the internet compared to 62% of men.[xiii] Covid-19 pandemic lockdown (and the rise of online activities) and somewhat affordable internet can be seen as drivers behind the increased use of internet in 2021. However, in 2022, women's mobile internet use *remained* at 30% while men's increased to 51%.[xiv] According to GSMA's The Mobile Gender Gap Report 2023, the gender gap in mobile ownership in India is at 11% (28% of women owned basic phones (23% for men), 3% (4% for men) feature phones, and 29% own a smartphone (48% for men)), while mobile internet adoption is low (40% gender gap and awareness levels are below 60%).[xv] It is also noted that 19% of 'female mobile internet users' are '*accessing it on someone else's device compared to 8% of men'*.[xvi]

The top barriers to mobile ownership in the recent GSMA report amongst women were affordability, literacy[xvii] (digital skills) and safety.[xviii] Furthermore, financial autonomy[xix], autonomy as a whole (and in choosing the devices), unequal access to connectivity,

prevalent social norms[xx], and low awareness of mobile internet[xxi] and its possible benefits, are some other barriers to digital adoption for many women and girls in India. [xxii] The divide is also visible in the number of women in ICT careers, and women-owned businesses in the technology sector (in 2019, only about 13% of enterprises in India were owned by women), girls in STEM fields or education programmes, participation (limited to non-digital sectors), and uptake of digital governance services etc.[xxiii]

Moreover, the rising threat of online violence (gender-based) is also an area of concern and can hinder female digital adoption. As per the National Crime Records Bureau (NCRB), cybercrimes against women in 2020 amounted to 10,40573 (a large increase from 8,379 reported in 2019).[xxiv]

However, important to note some progress to bridge this divide, such as around 78% of women are now 'financially included via a digitally enabled account' (though in 2018, only 27% used digital payments or transfers compared to 35% of men.)[xxv] There are also some gender-friendly initiatives such as Mahila e-haat[xxvi], Mobile Academy[xxvii], She-Box[xxviii] to provide improved service delivery. Furthermore, according to the World Economic Forum's Global Gender Gap Report 2023, India has closed 64.3% of its gender gap, has 40% women representation in local governance and has a score of 1.000 for Education Attainment (on a 0-1 scale). However, it attained less than 40% parity, it is 6th in the region, 127th globally (out of 146 countries) and has a score of 0.643 (on a 0-1 scale), a +0.014 change from 2022.[xxix]

📖 Low levels of digital literacy

The literacy Rate of India in 2023 was 77% for women and 84.7% for men (was at 77.7% overall in 2022[xxx]).[xxxi] And in 2021, India ranked 73 out of 120 countries for internet literacy (assessed the level of education and preparedness to use the internet).[xxxii] Indian National Statistical Office's data also showed that while 'more than 55% of Indians had broadband access, only 20% had the ability to use the Internet'.[xxxiii] This was also seen in the GSMA State of the Mobile Internet Connectivity 2023 report, where 16% of the surveyed population had difficulty reading/writing, 15% did not know how to access mobile internet, and 3% did not know how to use the mobile.[xxxiv] While the literacy gap slowly closes, digital literacy is 'almost non-existent among more than 90% of India's population.'[xxxv] The large internet usage gap between rural and urban was also attributed to the low levels of digital literacy.[xxxvi] Furthermore, access to devices and connectivity also contributed to the low digital literacy; in 2019-20, around 38% of Indian schools had computers (and from that, around 22% had internet access).[xxxvii]

However, India ranked 17th for 'Digital/Technological Skills' out of the 63 countries in IMD World Digital Competitiveness Ranking, 2022[xxxviii] (compared to the 2021 ranking of 59).[xxxix] World bank estimates that India's 'future demand for skills will likely grow from 1.2-1.3 million in 2020 to 3.5-3.7 million in 2024' but it also pointed out that there is a need to 'revamp' of the 'present' digital skills to meet the future demand and noted that there is a gap in education and employment (along with geographic and gender divide).[xl]

Government run digital literacy programmes are available, such as the National Digital Literacy Mission (NDLM)[xli] (also known as Digital Saksharta Abhiyan) and the Pradhan

Mantri Gramin Digital Saksharta Abhiyan[xlii] but it was noted that only around 20M individuals were 'covered through the NDLM programme'.[xliii] World Bank report noted that while the government is trying to provide digital skills programmes and training, it is not 'reaching or engaging a significant number of the working-age population', nor considering the 'reality on-ground or the usage patterns'.[xliv] Emergence of start-ups providing digital literacy and tech-based learning to bridge the digital divide has been noted in India[xlv] such as Lokal,[xlvi] Lakshya Jeevan Jagriti,[xlvii] Dost Education[xlviii] and Digi Gnan[xlix].

(Un)affordability: Data and Devices

OXFAM India's 2022 Inequality report on the Digital Divide noted that socioeconomic factors determined who owned and had access to devices.[l] It noted that households earning less than US$2 a day spent 3% of their monthly income on each gigabyte it consumed, while those earning $10-$20 per day spent just 0.2% per gigabyte.[li] The cost of data for mobile broadband (1GB, 2GB, 5GB Packages) was below the UN Broadband Commission benchmark of 2% of GNI per capita in India ($0.17 for 1GB, one of the cheapest in Asia[lii]), but the cost of 5GB fixed broadband was above the benchmark. Moreover, according to the study conducted by Surfshark, a cybersecurity services and VPN provider, India had an internet value index of 0.0542, 26% lower than the global average (*a score above the global average score of 0.0729 is noted as having 'fair internet prices', and below mean people are 'overpaying' for the internet)*.[liii] Furthermore, as per the Digital Quality of Life Index (DQL) report 2023, Internet affordability in India dropped to 28th (from 21st in 2022). [liv]

The World Bank Report on South Asia's Digital Opportunity also stated that a nationally representative survey in India found that the share of smartphone and feature phone users is 'especially low in India where the cost of smartphones is higher.'[lv] India had Smartphone Price at 40% of GNI per Capita as per the A4AI Smartphone Affordability Database 2021.[lvi] While another source noted that the price of the cheapest smartphone in India in 2023 was at $66 (35.91% of average income).[lvii] The cost of a handset is also one of the most frequently cited barriers to mobile internet use in India, with data cost also cited as a frequent barrier.[lviii]

Disparity: urban and rural areas

There are three times as many internet subscribers in urban areas than there are in rural areas (according to Oxfam India, only 31% of the rural population uses internet compared to the 67% usage by the urban population.[lix]) and the ownership of devices (such as owning a phone or computer) also showed significant gaps (urban population 12-14% more likely to have a phone and 7-8% more likely to have a computer than rural population.)[lx] Smartphone ownership for 2022 also showed these gaps (49% for urban and 35% for rural)[lxi]. World Bank attributed the significant usage gaps to low levels of digital adoption by the population.[lxii]

Quality of Connectivity

Despite the growing population connectivity, the Digital Quality of Life Index (DQL) report 2023 ranked India at 52nd (up from 59 in 2022) out of 121 countries. It stands at 47th in mobile speed (a huge up from 108th in 2022) and 67th in broadband speed (dropped

from 61st in 2022).[lxiii] Furthermore, a local survey with 8,210 consumers found that 9 out of 10 mobile phone users complained of poor wireless connectivity,[lxiv] 48% mentioned frequent disruptions to service and 44% were unhappy with the speed.[lxv] Digital Empowerment Foundation, an NGO that works with rural communities, also stated that there are 'issues with reliable and consistent internet connection in remote and rural areas'.[lxvi]
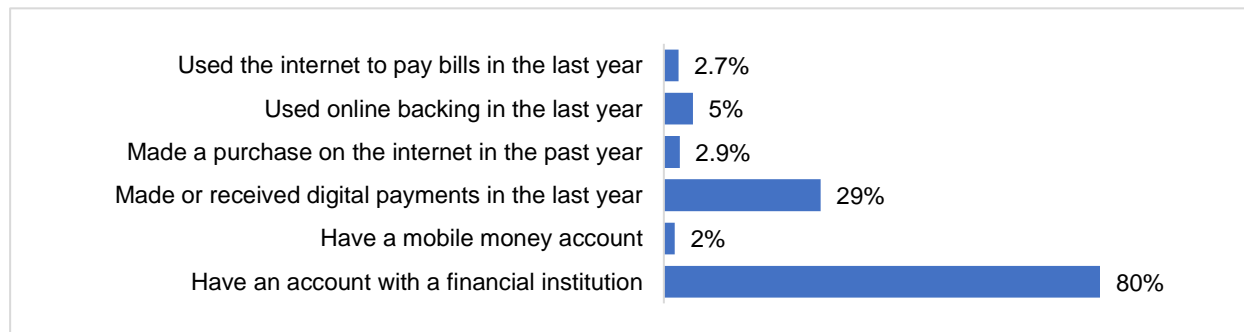
Public Trust with Technology

While India has laws and regulations in place to help safeguard data and privacy, the country's 'safeguard score was still below the global average'. Additionally, although many businesses and public activities have digitalised, there is still a struggle to be a cashless society, perhaps because of the increase of cyberattacks on businesses.[lxvii] This was also noted in the GSMA 2023 report that stated that concerns around identity theft and misuse of (personal) data were 'top overall barriers for smartphone owners'.[lxviii] Safety and Security is also a noted barrier to mobile internet use but not cited as frequently as others such as affordability and literacy.[lxix]

Furthermore, cybercrimes are on the rise, especially online scams, which has also led to mistrust with the technology[lxx] and cybercrimes against children have also increased in 2023 (an increase of 32%).[lxxi] Worries about websites tracking internet usage are also evident in India, with 38.6% of people using a tool to block advertisements and 42% using a VPN at least some of the time.[lxxii]

Digital financial services (DFS), e-commerce and start-ups

India has seen significant development in digital financial services in recent years, with supportive policies such as the Jan Dhan Yojana, aiming to increase financial inclusion by providing bank accounts to underserved populations.[lxxiii] The development of digital infrastructures such as the Aadhaar identification system, the Unified Payments Interface (UPI), and the Bharat Interface for Money (BHIM) has made it easier for people to uptake digital services. The increasing adoption of mobile phones (and connectivity) has also made it easier for people to access digital financial services through mobile applications.[lxxiv] The Reserve Bank of India (RBI) also reported that the 'share of digital transactions in the total volume of non-cash retail payments increased to 99.6% during 2022-23' (99.3% in previous year).[lxxv]

Category	Percentage
Used the internet to pay bills in the last year	2.7%
Used online backing in the last year	5%
Made a purchase on the internet in the past year	2.9%
Made or received digital payments in the last year	29%
Have a mobile money account	2%
Have an account with a financial institution	80%

Percentage of population aged 15+ that uses or owns each product or service. All data was collected from Digital 2022 India Overview Report.
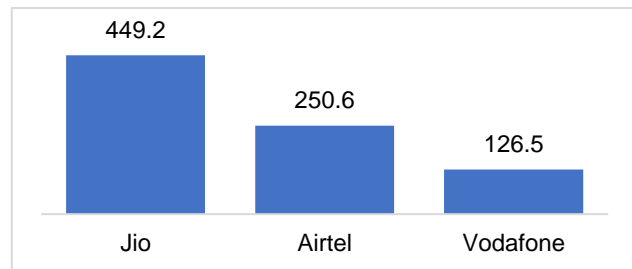
Digital start-ups are also growing due to the increasing entrepreneurship ecosystem and venture capital financing, but despite this, regulations and the global market has made it difficult for start-ups to register or access markets outside of India and South Asia. Additionally, India's FinTech markets have also been on a rapid acceleration.[lxxvi]

Digital Communications

Telecommunications

India hosts the second-largest mobile market in the world.[lxxvii] The Telecom Regulatory Authority of India (TRAI)[lxxviii] is India's state agency for the oversight of telecoms.

Reference for the figure (wireless broadband)[lxxix]

Active Subscribers Sept 2023 (in millions)

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

Top 10 Domains

Daily insights into domain popularity derived from Cloudflare 1.1.1.1 data

1. google.com
2. googleapis.com
3. gstatic.com
4. facebook.com
5. microsoft.com
6. gvt2.com
7. doubleclick.net
8. youtube.com
9. whatsapp.net
10. instagram.com
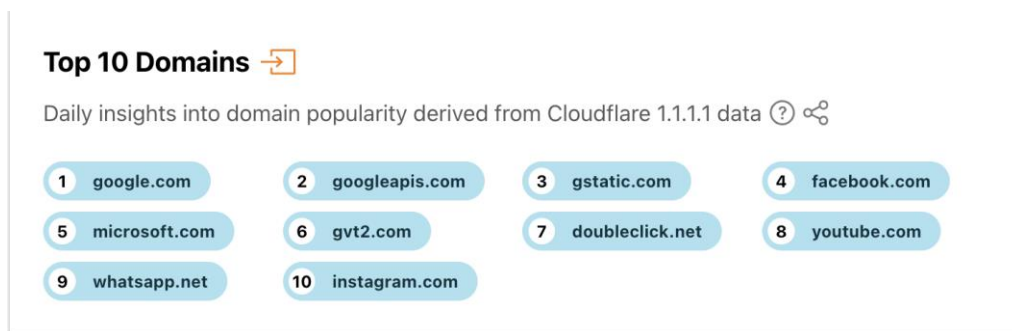
Social Media

467M of Indians were social media users in 2023, with 398M 18 and above. 26.5% were female while 73.5% are male. The top five reasons people ages 16-64 use social media are[lxxxi]:

- Keeping in touch with friends and family (38.9%)
- Reading news stories (32.6%)
- Finding content (29.4%)
- Filling spare time (28%)
- Seeing what's being talked about (28.2%)

Reference for the figure[lxxxii]
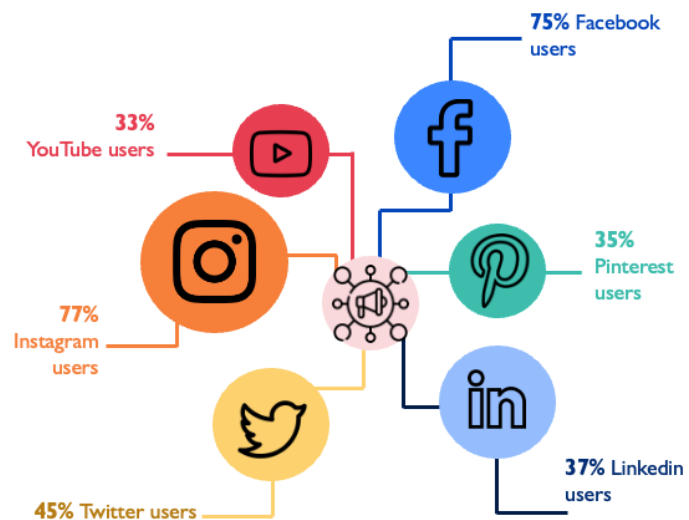
% of social media users that access third-party websites/information via clicks or taps on links published in

Social Media Platform Overview

	User Demographics[lxxxiii]	Usage
Facebook	• 314.6M users • 23.7% Female, 76.3% Male	To connect with family, friends, community members etc. and to exchange news and information. News and entertainment videos were some of the most watched content on the app.[lxxxiv]
Instagram	• 229.6M users • 26.7% Female, 73.3% Male	Used to share life updates, follow celebrity and trends, discover information, food and travel, and to connect.[lxxxv] It is also used for online shopping.[lxxxvi] In addition to individuals, Instagram is also a popular tool for businesses.[lxxxvii]
Linked In	• 99M members • 29.8% Female, 70.2% Male	Popular with professionals, particularly from legal, education, design, healthcare and other industries.[lxxxviii]
YouTube	• 467M users • 31.2% Female, 68.8% Male	Educational videos, comedy, travel, and product reviews videos and content creators attract a large viewership in India.[lxxxix]
Twitter	• 27.25M users • 14.7% Female, 85.3% Male	Used by citizen journalists and bloggers, particularly for interacting with the international community. NGOs in India use Twitter to make connections.[xc]
TikTok (currently banned)[xci]	• No current data available	Before being banned, it could be accessed and was available in 15 local languages. While many used the app for entertainment, it had also become a mobilisation platform for protests and other forms of social education and organization.[xcii]

Social Messaging Applications
The most popular messaging app in India is WhatsApp, with 487.5M users monthly[xciii] (and projected to reach 795.6M users by 2025[xciv]). Other popular apps include Snapchat (172.5M users[xcv]), Facebook Messenger (117.6 million users[xcvi]) and Telegram (it had 220M downloads by 2022).[xcvii]

Social Media Key Influencers[1]
The top ten 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 are 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

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

with this cohort. However, depending on the Country Office priorities, as well as the evolving nature of social media influencers, key influencers may need to be re-identified.

Influencer	Social Media Platform	Number of Followers	Category	Type of Content
Virat Kohli	Instagram Facebook Twitter	Instagram – 236M Facebook – 50M Twitter– 53.8M	Athlete	Social posts
Bhuvan Bam	Instagram Twitter YouTube TikTok	Instagram – 15.6M Twitter – 3.9M YouTube – 25.8M TikTok – 3.3K	Entertainment Celebrity	Social Posts Videos Blogs
Vijay Devarakonda	Instagram Facebook YouTube Twitter	Instagram – 17.8M Facebook – 10M YouTube – 1.14M Twitter – 3.4M	Celebrity	Social posts Videos
Sadhguru	Instagram Twitter	Instagram – 9.5M Twitter – 5M	Spiritual Influencer Author Humanitarian Entrepreneur	Social posts
Kusha Kapila	Instagram Twitter YouTube TikTok	Instagram – 3.1M Twitter – 36.2K YouTube – 821K TikTok – 56.4K	Lifestyle Celebrity	Social Posts Videos Blogs
Diipa Buller-Khosla	Instagram TikTok	Instagram – 1.8M TikTok – 1.8M	Entrepreneur Key Opinion Leader	Social Posts Videos
Nikhil Sharma	Instagram Twitter YouTube TikTok	Instagram – 1.4M Twitter – 502.8K YouTube – 3.93M TikTok – 263.6K	Lifestyle Celebrity	Social Posts Videos Blogs
Komal Pandey	Instagram TikTok YouTube	Instagram – 1.8M YouTube – 1.27M TikTok - 4.2K	Lifestyle Celebrity	Social Posts Videos Blogs
Dolly Singh	Instagram YouTube Twitter TikTok	Instagram - 1.5M YouTube – 685K Twitter – 2721 TikTok – 26.7K	Lifestyle and Entertainment Celebrity	Social Posts Videos Blogs
Mithila Palker	Instagram YouTube	Instagram - 1.5M YouTube – 172K	Entertainment Celebrity	Social Posts Videos

	Twitter TikTok	Twitter – 59K TikTok – 233		Blogs
Masoon Minawala Mehta	Instagram YouTube Twitter	Instagram - 1.3M YouTube – 55.7K Twitter – 15.3K	Lifestyle and Entertainment Celebrity	Social Posts Videos Blogs
Srishti Dixit	Instagram TikTok	Instagram - 1.3M TikTok – 6K	Entertainment Celebrity	Social Posts Videos Blogs
Rhea Gupte	Instagram Twitter	Instagram – 38.2K Twitter - 2665	Artist/Celebrity	Social Posts

Online Groups

Group Names	Social Media Platform	Number of Followers	Category	Type of Content
Deepika Sharma	Facebook	7.9M	*Private group*	Social posts
Deepika Sharma	Facebook	2.7M	Fan page	Social posts
Non-Veg Food Only	Facebook	1.7M	Food,Cooking,Indian Cuisine, Recipes	Social posts
Positive Vichar	Facebook	3.2M	Positivity Quotes	Social posts
Design Blouse (Only For Ladies)	Facebook	755.5K	Women's fashion Online shopping	Social posts
Game.tv IN	Discord	222.6K	Mobile gamers	Voice over Internet Protocol Instant messaging
BANDITS	Discord	20.6K	For people who want to make friends	Voice over Internet Protocol Instant messaging
Bhaiya Meme Sena	Discord	9.9K	Conversations	Voice over Internet Protocol Instant messaging
India: United We Stand (r/india)	Reddit	1.6M	Crime,Health & Environment,Memes & Satire,Politics,Food,News	Discussion

Bollywood news, reviews, photos, videos and more (r/Bollywood)	Reddit	394K	Bollywood	Discussion
Indian Food (r/IndianFood)	Reddit	251K	Food Cooking Advice	Discussion
Indian Gaming Community {I.G.C.}	Facebook	4.6K	Online gaming	Social posts
House of Gaming	Discord	41K	Online gaming	Voice over Internet Protocol Instant messaging
SoStronk	Discord	3.2K	Online gaming	Voice over Internet Protocol Instant messaging
Nexus Gaming	Facebook	21K	Online gaming	Social posts
BATTLEGROUNDS MOBILE INDIA	Discord	181.4K	Online gaming	Voice over Internet Protocol Instant messaging
India Social – Gaming, PC building, IITJEE prep, Crypto	Discord	2.4K	Online gaming	Voice over Internet Protocol Instant messaging
Indian LAN Gaming – ILG Cup	Facebook	25K	Online gaming	Social posts
Speedrun.com	Discord	17K	Online gaming	Voice over Internet Protocol Instant messaging
Speedrun.com	Twitter	18.5K	Online gaming	Tweets Social posts

Gaming Platforms and Communities

Community Name	Type of Content

Gamer Connect	• Hosts offline and online events, esports, and tournaments and provides a platform for gamers to connect, discuss, and share their gaming experiences • Hosts e-commerce as well
IGL Indian Gaming League	• Hosts regular tournaments and competitions for various games • Provides gamers with an opportunity to build their gaming profession
SoStronk HQ / Archetype Entertainment Pvt Ltd	• Hosts esports tournaments, gaming leagues, and other gaming events
Gamers Nexus	• Focuses on mobile gaming • Provides a platform for mobile gamers to connect, share their experiences, and participate in tournaments and events
Indian LAN Gaming	• Focuses on LAN gaming • Organizes LAN parties and events, where gamers can play games together in person.
Indian Speedrunners – Forum	• Players discuss and share their experiences and strategies for various speedrunning games
TekkenIndia	• India's #1 online community for all Tekken related news, events, and interviews

Dating (social) Apps and their use:

Dating apps are embedded with social features, such as sharing profiles, contacting each other, getting likes, views, etc., influencing how people (especially the younger population) interact and where they spend their time. Regarding year-over-year growth, India emerged as the 5th fastest-growing market in-app spending (more than $31 million spent in 2022). As per Statista data 2021, around 51% of Tinder users in India were aged between 25-34 years and around 25% of users were aged between 35-44 years.

- Tinder is the most popular dating app in India. Though to be noted: the male-to-female disparity is significant on Tinder:

Tinder gender demographics 2021 (%)

Age	Percentage of users
Female	24
Male	75

- Bumble: third most preferred dating app in India with average daily downloads of 13.5K. Though certain divides exist here as well: gender, income, education, access etc
- Other popular apps

Traditional Media Platforms

India has around 900 provate satellite TV stations and around 17,000 Newspaper titles.[xcviii] Most of India's 100,000 registered print publications have websites and social media accounts.[xcix] Doordarshan, India's public TV network, monopolises terrestrial broadcasting and operates national, regional, and local services.[c] In 2020, 130 million people paid for access to channels offered by private TV stations[ci].

Other than Doordarshan, popular TV stations in India include[cii]/[ciii]:

- **Star India**: one of the most popular Hindi-language entertainment channels in India.
- **Zee Entertainment Enterprises**: owns several popular channels, including Zee TV, which is another popular Hindi-language entertainment channel in India.
- **Sony Entertainment Television**
- **Sun TV**: popular Tamil-language channels and also owns several other popular channels in Tamil and other South Indian languages.
- **Colours**

Online Entertainment and Media Platforms (OTT)

There are many online entertainment and media platforms in India.These include[civ]:

- Netflix
- Amazon Prime Video
- Hotstar: a popular subscription-based streaming platform that offers live sports streaming, TV shows, movies, news, and original programming. Hotstar has exclusive broadcasting rights to both international and domestic cricket games in India.
- ALTBalaji
- Aha
- Sun NXT

Digital Tools

Education

There are many digital platforms available in India to support learning. These include massive open online courses (MOOCs), digital learning management systems (LMS),

digital textbooks and libraries, educational apps etc. Some examples of digital platforms found in India include:

- Vedantu: an online tutoring platform with 35 million users and a heavy YouTube presence.[cv]

- Toppr: online tutoring platform.[cvi]

- National Digital Library of India: to provide access to books, journals, and other documents in Indian languages. The library has a collection of over 2M books, including in Hindi, Bengali, Marathi, Tamil etc.[cvii]

- Digital Nagrik Pledge – Digital Citizenship: 1M1B and META initiative in partnership with Central Board of Secondary Education (CBSE) to provide digital citizenship courses to 10 million students and 1 million teachers.

- Yuvai[cviii]: an inclusive and collaborative AI Skilling program was initiated in 2020. National e-Governance Division, Ministry of Electronics & IT, Government of India, launched **'YUVAi- Youth for Unnati and Vikas with AI'** program to foster a deeper understanding of AI, and it aims to equip students (classes 8th to 12th) with 'AI skills, and empower them to become human-centric designers and users of AI.'

Health

Many digital health technology platforms and initiatives in India support healthcare delivery and management. These include:

- Practo: allows patients to book appointments with doctors and healthcare providers and access their medical records and test results.[cix]

- 1mg: allows patients to book appointments with doctors and healthcare providers, and has an online medicine delivery service.[cx]

- ArogyaSetu: a digital health app that was developed by the Government of India for COVID-19 response. The app uses Bluetooth and GPS technology to track the movement of users and alerts them if they have encountered someone who has tested positive for COVID-19.[cxi]

- DocsApp: allows patients to consult with doctors online via chat or video call and get a prescription as well.[cxii]

Child Protection

There are several digital child protection initiatives in India that aim to protect children from online abuse and exploitation. Some examples include:

- The Child Online Protection (COP) initiative by the Ministry of Home Affairs, Government of India, focuses on creating awareness and building capacities of various stakeholders to prevent and combat online child sexual abuse and exploitation.[cxiii]

- The Cyber Crime Prevention Against Women and Children (CCPWC) initiative by the National Crime Records Bureau (NCRB), Government of India, aims to prevent and combat cybercrime against women and children.[cxiv]

- Childline 1098 is a free 24-hour emergency phone service for children in need of aid or assistance.[cxv]

- META's partnership with the Ministry of Electronics and Information Technology for the G20 Stay Safe Online Campaign:

  o **#DigitalSuraksha** campaign: where helpful resources in multiple Indian languages about how to stay safe online for young people will be created and shared. Planned themes that will be covered are tackling online frauds, how to report harmful content, tips to keep yourself safe when interacting online etc.[cxvi]

    ▪ Digital Nagrik Pledge is also part of this overall campaign, which is encouraging people across India to become responsible digital citizens (Nagriks).[cxvii]

- "Child Rights and You" (CRY) Digital Safety Campaign, which aimed to educate children and young people on digital safety, including cyberbullying and online sexual exploitation, and to empower them to protect themselves online.[cxviii]

Digital Ecosystem and Infrastructure

The government of India has been focusing on building India's digital ecosystem and transformatiom - a concept known as the "India Stack" - to enable 'presence-less, paperless, cashless, and data-driven service delivery by linking these and other platforms through open standards and open interfaces'.[cxix] This has helped India improve their rankings for various global indicators for digital transformation and has positioned itself as a 'leader in digital public platforms in South Asia'.[cxx]

The Indian government has launched several initiatives and policies to promote digital technologies and adoption, such as the Digital India program[cxxi], Aadhaar[cxxii], BharatNet[cxxiii], National e-Governance Plan (NeGP)[cxxiv], Start-up India[cxxv], Make in India[cxxvi], UMANG[cxxvii] and the National Digital Health Mission[cxxviii]. These initiatives aim to increase connectivity, provide government services online, empower citizens digitally, create knowledge societies, and bridge the digital divide. Additionally, in 2018 the government set up a National Digital Communications Policy which aims to 'provide universal and affordable access to the digital ecosystem, and establish India as a global leader in the digital economy'.[cxxix]

Regulations

- The Intermediary Guidelines (Amendment) Rules (2018) require social media platforms to appoint a 'grievance officer', 'implement a complaint redressal mechanism, and remove content deemed illegal or harmful'.[cxxx]

- The Personal Data Protection Bill (2019) aims to regulate organisations' collection, storage, and use of personal data. It includes 'data protection provisions, portability, and the right to be forgotten'.[cxxxi]

- The Digital Media Ethics Code (2021) regulates the content on digital news media and Over-The-Top (OTT) platforms. It provides a 'three-tier grievance redressal mechanism for complaints' on content on digital news media and OTT platforms.[cxxxii]

- The Information Technology (Guidelines for Intermediaries and Digital Media Ethics Code) Rules, 2021: This rule was added to the IT Act 2000, which lays down guidelines for social media intermediaries, digital news media, and OTT platforms.[cxxxiii]

Artificial Intelligence

AI has been identified as a focus area by the Indian government.[cxxxiv] INDIAai, a Ministry of Electronics and Information Technology initiative, is the national AI portal.[cxxxv] India is a partner in the Global Partnership on Artificial Intelligence (GPAI)[cxxxvi] and it hosted the GPAI summit in Dec 2023.[cxxxvii] The NITI Aayog ('apex public policy think tank' of the Government of India) also released the National AI Strategy in 2018 and recently released another document on the underlined responsible use of AI for India. According to the Digital Quality of Life (DQL) Index, India ranked 31st (out of 121 countries) for AI readiness in 2023 (up from 49th in 2022).[cxxxviii] Of all the South Asia countries, India ranked the highest (40th) on the 2020 Government AI Readiness Index.[cxxxix]

Furthermore, India is not planning to regulate AI at the moment, though noting that there are ethical concerns linked to the growth and use of AI, relevant authorities and partners have started to work on 'standardising responsible AI development'.[cxl] The government believes in the power of AI to 'advance the digital economy and to offer personalised and interactive services to citizens through digital public platforms'.'[cxli]

India is also hosting CYPHER 2024, an AI summit in 2024.[cxlii]

Some AI initiatives and AI-powered tools produced in India:
- MyGov (citizen's engagement platform) Corona Helpdesk: chatbot created to counter misinformation, with support from Ministry of Health, Haptik (AI start-up) and WhatsApp.[cxliii]
- India AI[cxliv]: national AI portal
- Yuvai[cxlv]
- Realtime Digital Authentication of Identity system by Telangana State Government[cxlvi]
- E-Paarvai: to identify the presence of cataracts in a person's eye.[cxlvii]

⭐ Challenges, Opportunities and Recommendations

Challenge/ Opportunity	Narrative	Recommendations
Challenges		
Gender (digital) Divide		• Assess the situation of girls and women in India: 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 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 information and livelihood (offline to online movement). • 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. Partner with telecoms to: • Provide connectivity to girls/women: such as special data packages or zero-rated apps/content. Especially for women/girls in rural or remote areas. • Expand the reach of existing digital and e-learning platforms, specifically targeting girls/women in rural areas to develop their digital literacy and skills.
Limited digital infrastructure in rural areas	Despite a September 2022 announcement that the government plans to invest $30B in 4G and 5G connectivity, as well as the development of digital infrastructure in rural areas, large areas of India remain relatively unconnected: rural internet	• Advocate for investments in digital infrastructure, such as broadband networks, improved electricity supply and wider (and affordable) connectivity. • Support the ongoing national programs for digital transformation and inclusion. And partner with the government and private sector to improve access in rural areas (via/through SBC interventions, applying design

	penetration remains around 31%.[cxlviii] [cxlix]	• thinking, utilizing low-data/mobile-based platforms to engage populations and raise awareness etc.). • 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.
Low digital literacy and skills	Indian National Statistical Office's data also showed that while 'more than 55% of Indians had broadband access, only 20% had the ability to use the Internet'.[cl] This was also seen in the GSMA State of the Mobile Internet Connectivity 2023 report, where 16% of the surveyed population had difficulty reading/writing, 15% did not know how to access mobile internet, and 3% did not know how to use the mobile.[cli]	• Advocate for recent and relevant data to ascertain the situation of digital literacy and skills in Maldives (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 and UNICEF sectors) to develop digital literacy and online safety programs for 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 and online safety training to marginalized communities. • Strengthen the capacity of teachers, educators (TOT) and parents on digital skills and online safety. • Partner with CBOs/CSOs, private sector or media to develop and implement educational, edutainment or gaming programmes to improve literacy and awareness of the online platforms/tec/tools etc. • Leverage social media platforms and communities to raise awareness and develop the community's 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. or create edutainment programmes. • Partner with AI and tech companies and organisations, to establish platforms and tools (such as online courses, games, training, hubs, labs, centres etc) that can digitally empower communities, or leverage the existing ones, that can be sustained. Apply design thinking when developing new or existing digital interventions, 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.

Lack of online safety	The rising popularity of social media in India has resulted in a steep rise in cases of cyberbullying, with the number of female victims doubling in three years, and that of male victims tripling.[clii]	• Promote online safety in all digital interventions and activities that target everyone in the community.
		• Partner with:
		  o Trusted authorities/local organizations to promote and raise awareness about the safe and responsible use of technology.
		  o Local communities and religious leaders to build trust in digital platforms and technology.
		  o Trusted influencers and digital leaders to endorse the use of digital platforms and technology.
		  o with tech firms to promote the responsible use of their platforms and to promote their safety features and regulations.
		• 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. • 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). • Utilise social listening mechanism for the 'refine and testing' process for every digital intervention.
Fake news and online misinformation	56.6% of Indians expressed concern about not being sure when what they're seeing online is real and when it is fake. Further, worries about websites tracking their internet usage is evident, with 38.6% using a tool to block advertisements, and 42% using a VPN at least some of the time.[cliii]	• Develop and deliver SBC programs that help people identify and combat fake news and online misinformation. • Leverage existing mechanisms in place to counter misinformation (by private or public sector) and support technically to protect and advocate for the communities SBC works with. • Partner with tech firms (social media platforms), trusted influencers and media organizations to promote responsible and accurate reporting; build their capacity and engage them for raising awareness to the population: such as providing reliable and fact-checked information to their followers, engage with communities they influence and gather feedback on relevant topics and SBC programmes/interventions. • Advocate for policies and regulations that promote media literacy and responsible reporting.
Opportunities		
AI	The Government of India perceives AI to be an important tool to strengthen and further develop the country's digital economy.[cliv]	• 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 India. • Leverage the existing AI-powered platforms and tools: partnerships, content support etc.
Accessibility of smartphones and relatively affordable mobile data	Across states, in many urban and rural areas, many people have access to smartphones and mobiles.[clv]	• Leverage this to promote digital adoption. This could include leveraging the existing mobile apps/tools or developing other mobile-friendly digital platforms to support SBC work such as providing mobile-based programs and content, engaging community influencers and mobilizing them digitally (and to bridge the offline and online) or for frontline workers training etc. • Partner with universities, tech companies and vocational training centres to provide digital skills training to marginalised communities or increase reach and engagement with SBC work using mobile platforms/apps. • Develop mobile-based services that are optimized for low-bandwidth connections to ensure that they are accessible to all.
Reach of Telecos/Mobile Network Operators (MNOs)	An estimated 84% (1.18B) of the population have cellular mobile connections.[clvi] 47% (692M) of the population use the internet through mobile (any: 90.6%, smartphone: 89.3%, feature phone: 8.3%), laptop/desktop computers (57.6%), connected TVs (31.7%), tablets (20.7%), and game consoles (12.6%).[clvii]	Partner with TRAI and telcos/mobile network operators to: • Expand the reach of SBC digital interventions and programmes, particularly in remote and underserved areas. • Provide subsidised or 'no data cost for users' for specific interventions/programmes/activities/community. • Develop and implement data-driven SBC interventions to bridge the digital divide.

		• Use their micro-segmentation on high-engagement channels to target communities and people for specific SBC digital interventions.
A large youth population	The youth population has social media presence, which can act as a gateway towards onboarding, supporting and promoting digital adoption and inclusion.[clviii]	• Use social media platforms to engage with young people and gather their opinions on different issues and mobilise them to be changemakers; co-create AI-powered applications and platforms where they have agency. • Partner with youth-led organisations to co-create and deliver digital solutions to social challenges (or engage them on/for the existing platforms and tools). • Mobilise the youth to address the gender digital divide. • Partner with local and international fintech organisations and startups to promote and develop learning or social change platforms.
Available and operating national broadcasting networks	Traditional media remains popular across India and can be used to communicate effectively to those still outside of the digital sphere.[clix]	• Explore partnerships with local/diaspora/international broadcasters/MNOs/Private (IT) sector to: o Raise public awareness on responsible use of digital platforms, and personal online safety and get their support in countering misinformation and disinformation. o Promote accurate and responsible reporting on social issues. • Partner with entertainment giants such as international and national streaming platforms (whichever is most used in the country) to create edutainment programmes.
Variety and availability of e-learning platforms	The increase of e-learning platforms has greatly increased the ability to disseminate learning materials, and act as a platform to build the digital capacity of young people and adults.[clx]	• Support the expansion of e-learning platforms, particularly in remote and underserved areas, to improve access to education and information (relevant content): apply design thinking, gamification and AI elements to make platforms more interactive, relevant and engaging. • Partner with universities and vocational training centres to provide accreditation to learning online and create digital skills training and online safety content (ensuring mental health is a core component) for other communities such as parents/caregivers/frontline workers etc. • Develop partnerships with established digital platforms, such as e-commerce, learning and social media platforms, to promote child-friendly policies and practices. • The very high use of chat apps for information distribution and consumption (and the use of text formats on these platforms) is an opportunity to reach large groups of people quickly and inexpensively in Pakistan. Developing AI technology for those applications or integrating components of it within the interactions will also help with engagement.

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.).[clxi]
- **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.[clxii]
- **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.[clxiii]
- **Unbanked**: people with no bank account.[clxiv]
- **Underbanked**: people with insufficient access to banking.[clxv]

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