The Inclusive Internet Index 2018 Methodology Report

A report by The Economist Intelligence Unit



Contents

e Inclusive Internet Index 2018: Methodology 2		
Acknowledgements	2	
Scoring criteria and categories	2	
Country selection	3	
Updates to the 2018 Index	4	
Sources and definitions	6	
Data modeling	8	
Estimating missing data points	9	
Aggregation and weights	9	
Appendix 1: Detailed indicator list	12	
Appendix 2: Background indicator list	17	
Appendix 3: List of indicators and weights	19	

The Inclusive Internet Index 2018: Methodology

C ommissioned by Facebook, the second iteration of the Inclusive Internet Index assesses and compares countries according to their enabling environment for adoption and productive use of the Internet. The Index outlines the current state of Internet inclusion across 86 countries, and aims to help policymakers and influencers gain a clearer understanding of the factors that contribute to wide and sustainable inclusion.

This document contains the EIU's methodology for the index. The research results are available at this website¹.

Based on feedback that the research team received from the 2017 study, several changes were made to the methodology this year. First, the research team added 16 new countries to the study, while dropping 5 countries from last year's study. Second, a survey component was added to the study. The survey targeted measures that were difficult to capture from desktop research. Third, several changes were made to the Index framework. The main change was the addition of two new policy indicators to the framework. Fourth, the EIU reached out to government ministries to confirm selected data points. These changes are discussed in the sections below.

Acknowledgements

The Economist Intelligence Unit (EIU) drew on the expertise of highly respected experts in the field of connectivity and inclusion to provide input on the methodology, data sources and modelling options for the Index.

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Scoring criteria and categories

Categories, indicators and weights used in the Index were selected on the basis of EIU analysis, a literature review and consultation with experts from industry, academia and NGOs. The EIU gathered data and conducted the research and analysis for all quantitative and quantitative indicators.

The Index contains 54 indicators organised across four categories:

- Availability: This category captures the quality and breadth of available infrastructure required for access. At a basic level, connectivity is limited if the infrastructure to connect is insufficient or unavailable. The category looks at use of the Internet, the quality of the Internet connection, and the type and quality of infrastructure available for Internet access and electricity access in both urban and rural areas of the country.
- 2) **Affordability:** The category looks at the cost of access to the Internet and considers initiatives, whether private or public, to decrease costs or promote access in other ways. Cost of access relative to income is a critical factor in Internet adoption. The category includes factors that look at price, such as the cost of a handset or fixed-line broadband, and the competitive environment for wireless and broadband operators.
- 3) Relevance: This category describes the value of being connected, in terms of useful services and content and the availability of local content. If people do not find value in being connected, then Internet adoption is less likely. The category measures the availability of local content, such as whether basic information or government services are available online in the local language. It also measures whether content and services that stimulate economic activity, such as those relating to health, finance, commerce or entertainment, are available online. The category includes measures of the value of the Internet to consumers.
- 4) Readiness: This is a measure of the capacity among Internet users to take advantage of being online. The category looks at measures such as the level of literacy and educational attainment, the level of web accessibility, privacy regulations, the level of trust in different sources of information found online, national female e-inclusion policies and spectrum policy.

Each category receives a score, calculated from a weighted average of the underlying indicator scores (see "Weights"), and scores are scaled from 0 to 100, where 100 indicates the strongest environment for the adoption and productive use of the Internet. The overall country score (adjusted) is a weighted average of the category scores.

Country selection

The Inclusive Internet Index 2018 evaluates the state of Internet inclusion in 86 countries. The country choice reflects a mix of high-income, middle-income and low-income countries, with a wide range of geographic and demographic representation. The 86 economies selected for the Index represent approximately 91% of the world population and 91% of global GDP.

The 86 countries are:

Americas	Asia	Europe	Middle East and Africa
Argentina, Brazil, Canada,	Australia, Bangladesh,	Austria, Belgium, Bulgaria,	Algeria, Botswana, Burkina
Chile, Colombia, El Salvador,	Cambodia, China, India,	Denmark, Estonia, France,	Faso, Cameroon, Congo
Guatemala, Jamaica,	Indonesia, Japan, Kazakhstan,	Germany, Greece, Hungary,	(DRC), Côte D'Ivoire, Egypt,
Mexico, Peru, United States,	South Korea, Malaysia,	Ireland, Italy, Netherlands,	Ethiopia, Ghana, Iran,
Venezuela	Maldives, Mongolia, Myanmar,	Poland, Portugal, Romania,	Kenya, Kuwait, Liberia,
	Nepal, Pakistan, Philippines,	Russia, Spain, Sweden,	Madagascar, Malawi,
	Singapore, Sri Lanka, Taiwan,	Switzerland, Turkey, Ukraine,	Morocco, Mozambique,
	Thailand, Uzbekistan,	United Kingdom	Namibia, Nigeria, Oman,
	Vietnam		Qatar, Rwanda, Saudi Arabia,
			Senegal, South Africa, Sudan,
			Tanzania, Uganda, United
			Arab Emirates, Zambia

Updates to the 2018 Index

The EIU team collected feedback after the launch of the 2017 Index and made several improvements based on this feedback. These updates are discussed below.

Changes to the country selection

16 new countries were added to the study: Austria, Belgium, Botswana, Bulgaria, Denmark, Estonia, Greece, Hungary, Ireland, Jamaica, Kuwait, Namibia, Portugal, Qatar, Switzerland and United Arab Emirates. The following countries, which were included in the 2017 Index, were not included in the 2018 Index: Angola, Mali, Niger, Seychelles and Yemen.

Introduction of survey data

The 2018 Index introduces a novel survey evaluating the value of the Internet to people in all Index countries. The "Value of the Internet" survey explores the ways in which the Internet brings value to people's lives, from work and shopping to entertainment and self-expression. The survey was conducted among 4,267 people across 85 countries using local languages.² Both CATI (computer-assisted telephone interviewing) and online methodologies were employed depending on the market. Quotas were set at the country level using standard census criteria to ensure consistent sampling and representation, as well as allow for reliable cross-country comparisons.

The following quotas were required within each country:

- Minimum sample size: 50 completes
- Age: Minimum 20% each Millennials (born 1981-1999), Gen X (born 1965-1980), Baby Boomers (born 1946-1964) [based on Pew generation definitions]
- Gender: Minimum 30% each males and females
- Household income: Representative for each country; 50/50 split above and below the country median

² Iran was excluded from the survey sample due to lack of feasibility. At the time of fieldwork, no reliable source of online sample was available that could be confidently verified. Given the target audience, phone access is also extremely limited. The main findings of the survey are captured in the Executive Summary paper, available here: https://theinclusiveinternet.eiu.com/summary

Survey data in the Index

The research team used survey data to build several indicators related to Relevance and Readiness, focusing on user perceptions of factors such as trust and privacy. Such data were not easily available through desk research and an existing survey with comparable data could not be found for all the countries in the Index. Below is a list of indicators that used survey data:

Category	Indicator number	Indicator name	Survey question
Relevance	3.2.2	Value of e-finance	Which of the following forms of useful information have you accessed via the Internet at least once in the last year? The indicator is ranked by responses indicating 'Information about personal finance'.
Relevance	3.2.4	Value of e-health	Which of the following forms of useful information have you accessed via the Internet at least once in the last year? The indicator is ranked by responses indicating 'Information about health and fitness'.
Relevance	3.2.5	e-Entertainment usage	How often do you use the Internet for entertainment purposes? The indicator is ranked by responses indicating 'Several times a day', 'Every day' and 'Several times a week'.
Relevance	3.2.7	Value of the Internet for e-commerce	How often do you purchase goods via the Internet? The indicator is ranked by responses indicating 'About once a month'.
Readiness	4.2.2	Trust in online privacy	How confident are you that your activity online is private? The indicator is ranked by responses indicating 'Somewhat confident' and 'Very confident'.
Readiness	4.2.3	Trust in government websites and apps	To what extent do you trust the information you receive from the following sources online? - 'Government websites/ apps.' The indicator is ranked by responses indicating 'Mostly' and 'Completely'.
Readiness	4.2.4	Trust in non- government website and apps	To what extent do you trust the information you receive from the following sources online?—'Non-government websites/apps that are based in my country! The indicator is ranked by responses indicating 'Mostly' and 'Completely'.
Readiness	4.2.5	Trust in information from social media	To what extent do you trust the information you receive from the following sources online?—'Other people using social media.' The indicator is ranked by responses indicating 'Mostly' and 'Completely'.

Changes to the Index framework

Several changes were made to the Index framework. The table below summarizes the new indicators that were added to the framework.

Category	Indicator number	Indicator name	Rationale for change
Availability	1.1.4	Gender gap in Internet access	This indicator captures the gap between female and male access to the Internet. The 2017 Index included an indicator on "Female access to the Internet". Presenting the data as a gap gives readers a clear idea of the relationship between female and male access.
Availability	1.1.5	Gender gap in mobile phone access	This indicator captures the gap between female and male access to mobile phones. The 2017 Index included an indicator on "Female access to a mobile phone". Presenting the data as a gap gives readers a clear idea of the relationship between female and male access.
Readiness	4.3.1	National female e-inclusion policies	This indicator assesses whether strategies addressing e-inclusion of females exist that help address gender digital divides. The indicator examines whether e-inclusion strategies exist that address 1) female Internet access and adoption, 2) digital skills, and 3) encouragement of STEM education.
Readiness	4.3.5	Spectrum policy approach	This indicator assesses the country's ability to expand broadband connectivity by way of 1) gauging operator flexibility within a country's spectrum policy to migrate to the next generation of network technology and 2) assessing the country's openness to provisioning unlicensed spectrum for greater Wi-Fi access. Higher prices, poorer service, lost productivity, loss of competitive advantage and untapped innovation can all be outcomes of preventing flexibility.

Sources and definitions

All of the quantitative and qualitative data in the Inclusive Internet Index 2018 were collected and analyzed by the EIU project team. Data were gathered from reputable international, national and industry sources, including the EIU's internal databases. The data collection process lasted from August 2017 to December 2017. Any changes to the data after December 2017 are not accounted for in this version of the Index.

The main sources used in the Inclusive Internet Index are the EIU, Alexa Internet, Cisco, Gallup, Google, GSMA, International Energy Association (IEA), International Telecommunication Union (ITU), OpenSignal, Telegeography, United Nations Conference on Trade and Development (UNCTAD), United Nations Development Program (UNDP), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Bank, country ministries, national statistical offices, city administrative offices, national telecommunications authorities, domestic news websites and industry associations.

In creating the Inclusive Internet Index, the EIU relied heavily on publicly available sources. This research approach has the benefit of creating a fully transparent and repeatable methodology. However, not all publicly available data are up to date, which is especially relevant in such a fast-changing field. Additionally, several international sources rely on data reported by countries. Governments may use different methodologies to gather or count the data, or have less capacity to report the most current data, which causes variations in data quality and timeliness.

To lessen this effect, the EIU validated 10 selected indicators through a data confirmation process with the telecommunications ministry (or its equivalent) and the education ministry in each of the 86 countries. The following indicators were vetted with ministries:

Indicator name	Unit	Main source(s)
Internet users	% of households	ITU
Fixed-line broadband subscribers	Per 100 inhabitants	ITU
Mobile subscribers	Per 100 inhabitants	ITU
Network coverage (min. 2G)	% of population	ITU
Network coverage (min. 3G)	% of population	ITU
Network coverage (min. 4G)	% of population	ITU
Mobile phone cost (prepaid tariff)	% of monthly GNI per capita	ITU; World Bank
Mobile phone cost (postpaid tariff)	% of monthly GNI per capita	ITU; World Bank
Level of literacy	% of population	UNESCO
Schools with Internet access	% of schools	UNESCO

In cases where the ministries provided data that were comparable (in terms of definitions and methodologies used in calculation) to the other data in the series, they were included in the study.

The research team hopes to improve the accuracy and type of data from both public agencies and private companies to aid the understanding of Internet inclusion and welcomes comments and suggestions to this end.

As discussed above, the Index also uses data from a survey conducted by the EIU called "Value of the Internet". In total, 8 indicators were based on survey results.

The Index uses the latest year of available data as the reference year for all data series. When data existed for 2017, that value was used. If not, we used the following sequence:

- 1. We used the closest previous year, when available.
- 2. If the closest previous year data was older than five years, we used other reliable data sources as long as the definitions and technical notes in the series that were used to fill the data gaps aligned with those of the same series.
- 3. If neither historical same-source data nor alternative source data were available, we used a data imputation approach (see "Estimating missing data points").

Data modeling

Indicator scores are transformed and then aggregated across categories to enable a comparison of broader concepts across countries. The process of transforming involves rebasing the raw indicator data to a common unit so that it can be aggregated. All indicators in this model are transformed to a o to 100 scale, where 100 indicates the strongest enabling environment for Internet inclusion and o indicates the weakest environment for Internet inclusion.

Most indicators are transformed on the basis of a min/max normalization, where the minimum and maximum raw data values across the 86 countries are used to bookend the indicator scores. The indicators for which a higher value indicates a more favorable environment for Internet inclusion, such as access to mobile phones, have been transformed on the basis of:

x = (x - Min(x)) / (Max(x) - Min(x))

where Min(x) and Max(x) are, respectively, the lowest and highest values in the 86 countries for any given indicator. The value is then changed from a 0–1 value to a 0–100 score to make it directly comparable with other indicators. This in effect means that the country with the highest raw data value will score 100, while the lowest will score 0 for all indicators in the Index.

It must be noted that the focus of the study is on comparing data across countries and between the 2018 and 2017 versions of the study. To that end, year-on-year comparisons of data took into account the 70 countries that were included in both years of the study.

There were several adjustments made to quantitative indicators to deal with the way the data were structured, or to account for outliers. These are summarized in the table below:

Indicator	Adjustment
Mobile subscribers	Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service that provide access to the PSTN using cellular technology. This includes (and is split into) the number of postpaid subscriptions, and the number of active prepaid accounts (i.e. that have been used during the past three months) and applies to all mobile cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging and telemetry services. There is a cap on mobile subscriptions at 130. All countries that exceed this value will receive 130 as the maximum possible value. This cap accounts for differences in SIM user behavior, including influxes in tourism, migrant workers, and other factors that can play into the over-estimation of the number of subscribers.
Wireless operators' market share	The wireless operators' market share was calculated using a commonly accepted method called the "Hirschman-Herfindahl Index". However, market concentration does not follow a strictly linear pattern. To account for that, the EIU used three scoring bands as follows: HHI < 3,000 "unconcentrated"; HHI 3,000–4,000 "moderately concentrated"; and HHI > 4,000 "highly concentrated". This reflects the nature of the telecom industry, which tends to have fewer players than most other industries. It is important to note these thresholds when using the "Simulator" function in the Excel workbook. Changes to scores and ranks in the "Simulator" function will be recorded only if a value is changed so that it moves to a different scoring band.
Broadband operators' market share	The broadband operators' market share was calculated using a commonly accepted method called the "Hirschman-Herfindahl Index". However, market concentration does not follow a strictly linear pattern. To account for that, the EIU used three scoring bands as follows: HHI < 3,000 "unconcentrated"; HHI 3,000–4,000 "moderately concentrated"; and HHI > 4,000 "highly concentrated". This reflects the nature of the telecom industry, which tends to have fewer players than most other industries. It is important to note these thresholds when using the "Simulator" function in the Excel workbook. Changes to scores and ranks in the "Simulator" function will be recorded only if a value is changed so that it moves to a different scoring band.

³ 2017 estimations were used as the base.

⁴ Regressions tested were not deemed to be good fits for estimations for this indicator. Data gaps were filled via imputed regional averages relevant to specific country gap.

⁵ For i) ad-hoc weighting schemes, the analyst simply chooses the contribution of each variable to the final composite indicator. While it is possible to make an attempt to base the weights on a theoretical framework that assigns different priorities to different sub-dimensions, the final weight is-to some extent-always ad hoc. A variant of the ad hoc approach is to use a structured methodology to determine the weights, although not one that is based upon statistical optimization. For example, it may be possible to use survey data to weight indicators by importance, or a "traffic-light" system where indicators can be put into one of a number of categories of high, medium or low weight.

For ii) statistical (optimization) methods, the most common approach is to use principal component analysis (PCA). Intuitively, the idea of PCA is to reduce high-dimensional data (several variables and sub-components of an index) into lower-dimensional data by grouping highly correlated sub-components and variables into a linear combination. In most cases, the factor loadings for the first component are used as the weights for the final index. The advantage of this approach is that the weights are statistically determined and in that regard free from value judgements. The disadvantage lies in the lack of transparency: multivariate statistical methods are relatively complex, and the methodology of such indices is difficult to convey to the wider public.

Estimating missing data points

In cases where data were incomplete or missing, EIU analysts developed custom estimation models to estimate data points, where appropriate. The concern at this stage of the data treatment process was imputing missing data using statistical methods. This was done for 11 indicators, which had between 1 and 8 missing values that were not obtainable through comparable series or historical data. Missing data were populated using a modeling approach for the following indicators:

Indicator	Number of missing data points
e-Commerce content	3
Average fixed broadband download speed	5
Average fixed broadband latency	5
Average fixed broadband upload speed	5
Average mobile download speed	7
Average mobile latency ³	8
Average mobile upload speed	7
Broadband operators' market share ⁴	5
Mobile phone cost (postpaid tariff)	3
Network coverage (min. 4G)	1
Smartphone cost (handset)	2

For these indicators where data availability presented incomplete datasets, missing data were imputed using a regression-based approach. In order to calculate Index values for countries with missing data, we imputed missing values by predicting using the Ordinary Least Squares (OLS) method.

Aggregation and weights

Methods to aggregate the transformed variables into a final composite indicator can broadly be separated into two types: i) ad-hoc weighting schemes; and ii) statistical (optimisation) methods⁵.

Given the difficulties in assigning weights, most of the composite indices resort to an equal weighting scheme, allowing all variables to enter uniformly. The advantage of this approach is the transparency, while the clear disadvantage is that there is no underlying theoretical reason for why all variables and sub-dimensions should be treated equally. Another approach is to allow users to alter the weights or present a number of scenarios, but this can remove clarity from the index outcome.

Due to the degrees of freedom in defining the weights of an index, a useful method for gauging the soundness of a weighting scheme is to think of the weights as implicit trade-offs among the subdimensions of an indicator. As such, a short survey and consultation with individual experts was used to reflect on-the-ground priorities and the practical shortcomings of existing data around Internet inclusion. The Index weights follow a "lifecycle" approach to the four categories used in the Index. Using this approach, the most important category is Availability, followed by Affordability, then Relevance, and finally Readiness. One implication is that the chronological order of these categories is important. For example, if access to the Internet were not available due to limited infrastructure in a country, then affordability would matter less. Once access was available and affordable, then relevant content would be a major driver of adoption. Finally, once there was relevant adoption, the ability to take advantage of

Category	Weight
Availability	40%
Affordability	30%
Relevance	20%
Readiness	10%
Total	100%

Internet access, as measured by readiness, would become a factor. While this may not always be the case, the research team found that it applied to the vast majority of countries. As the nature of connectivity and inclusion changes, it will be necessary to revisit the weight system that has been applied to this Index to see whether the logic still holds. The weights assigned to each category are as follows:

Further modifications were made to the weights of individual indicators as part of the lifecycle approach. These are intended to lessen any biases in factors relating to income and geography, or to balance the influence of indicators across a sub-category or category. Below is a summary of these modifications:

Indicator	Sub-category weight	Rationale
INFRASTRUCTURE		
Network coverage (min. 2G)	10%	2G coverage is considered to allow for only basic functionality when connected to the Internet, so the indicator weight was reduced.
Network coverage (min. 4G)	10%	4G coverage is considered a forward-looking indicator. While some countries have made good progress, it would be unfair to hold all countries to this standard currently, so the indicator weight was reduced.
COMPETITIVE ENVIRONMENT	33.3%	The competitive environment sub-category is part of the affordability category, and focuses on industry- or company-level metrics such as market concentration or average revenue per user. The other sub-category is price, which includes consumer-level metrics of affordability such as the cost of a handset and the cost of a prepaid tariff for a mobile phone. The price sub-category was considered more important than the competitive environment one, so the weight on the latter was reduced.
Average revenue per user (ARPU)	20%	The average revenue per user data typically bundle both voice and data. Some operators also count multiple users instead of factoring accounts linked to individuals. No easily obtainable disaggregated data were available, yet ARPU is an important element of the competitive environment. Due to the lack of disaggregated data, the weight on this indicator was reduced.
LOCAL CONTENT		
Concentration of websites using country-level domains	14.3%	Country-level domains are a decent proxy for the popularity of websites that produce local content for a local audience. However, some governments recommend or require that country-level domains be used. The introduction of new domains also skews this indicator. As such, the weight on this indicator was reduced.

Indicator	Sub-category weight	Rationale
RELEVANT CONTENT		
Value of e-finance, value of e-health, e-entertainment usage, value of the Internet for e-commerce	Each indicator is weighted at 10%	These indicators were based on data from the "Value of the Internet" survey, conducted by the EIU and commissioned by Facebook. Each country had approximately 50 responses per question and these indicators were designed to capture the value of the Internet to users. Each of these indicators is paired with a corresponding metric on whether the type of relevant content was available in country. As a result, the weight on this indicator was reduced.
TRUST & SAFETY		
Trust in online privacy, trust in government websites and apps, trust in non-government websites and apps, trust in information from social media, e-commerce safety	Each indicator is weighted at 14.3%	These indicators were based on data from the "Value of the Internet" survey, conducted by the EIU and commissioned by Facebook. Each country had approximately 50 responses per question and these indicators were designed to capture users' perception of trust in the information they receive from a variety of sources online. These indicators were in the same category as a qualitative indicator that evaluated privacy regulations in each country. As a result, the weight on these indicators was reduced.
POLICY		
Existence of a digital identification system	9.1%	Digital identification systems are relevant mostly in how they are applied to e-government services, and not more broadly to the entire Internet. Since their use is more narrowly defined, the weight on this indicator was reduced.

Examining the weighting scheme by comparing the relative importance of different dimensions is an important tool for conducting robustness checks. To this end, the EIU has provided a way to compare the effects of different weighting schemes on country ranks in the dashboard tool.

Despite the care that has been taken in selecting the indicators, categories and weights, no index of this kind can ever be perfect. The EIU recognises there are many different methods for weighting an index. The weighting assigned to each category and indicator can be changed by users on the 'Custom Weights' tab of the dashboard tool to reflect different assumptions about their relative levels of importance. This functionality enables users to create customized weightings that allow them to test their own assumptions about the relative importance of each category and indicator. Users can also set a weighting to zero to completely remove the influence of any category, indicator or sub-indicator on the index results and country rankings. In addition to the pre-set weighting offered in the dashboard tool, users can save one other bespoke weight setting and compare the effect of different settings on country ranks and scores.

Appendix 1: Detailed indicator list

The categories, sub-categories and indicators are:

No.	Indicator	Unit	Description	Source
	OVERALL	0-100	The overall score is the weighted sum of the following category scores: 1 to 4	
1	AVAILABILITY	0-100	This category captures the quality and breadth of available infrastructure required for access. Connectivity is limited if the infrastructure to connect is insufficient or unavailable. The score for the availability category is the weighted sum of the following indicator scores: 1.1 to 1.4.	
1.1	USAGE	0-100	More usage usually indicates greater connectivity, even if this may be concentrated in certain groups. The usage score is the weighted sum of the following indicators: 1.1.1 to 1.1.5.	
1.1.1	Internet users	% of households	This measures the number of people using the Internet in the past 12 months. A higher number of people using the Internet indicates greater connectivity.	ITU
1.1.2	Fixed-line broadband subscribers	Per 100 inhabitants	This measures the fixed-line broadband subscriptions per 100 inhabitants. The higher the number of subscriptions, the greater the level of Internet connectivity.	ITU
1.1.3	Mobile subscribers	Per 100 inhabitants	This measures mobile-cellular telephone subscriptions per 100 inhabitants. A higher number of smartphones increases the propensity to use the Internet and related services, especially advanced mobile services, though this may be concentrated in certain groups.	ITU
1.1.4	Gender gap in Internet access	% difference, male to female access	This measures the gap between male and female access to the Internet. Positive values indicate that male access exceeds that of female access. A smaller or negative gap indicates greater female connectivity.	EIU, Gallup
1.1.5	Gender gap in mobile phone access	% difference, male to female access	This measures the gap between male and female access to mobile phones. Positive values indicate that male access exceeds that of female access. A smaller or negative gap indicates greater female connectivity.	EIU, Gallup
1.2	QUALITY	0-100	The higher the quality of the available infrastructure for access, the easier it is to use a broader range Internet sites and related services. The quality score is the weighted sum of the following indicators: 1.2.1 to 1.2.7.	
1.2.1	Average fixed broadband upload speed	kbps	This measures average fixed-line broadband upload speed. A faster speed indicates better quality.	Cisco
1.2.2	Average fixed broadband download speed	kbps	This measures average fixed-line broadband download speed. A faster speed indicates better quality.	Cisco
1.2.3	Average fixed broadband latency	ms	This measures how long it takes data to travel between its source and destination. A lower latency indicates better quality.	Cisco
1.2.4	Average mobile upload speed	kbps	This measures average mobile upload speed. A faster speed indicates better quality.	Cisco, OpenSignal
1.2.5	Average mobile download speed	kbps	This measures average mobile download speed. A faster speed indicates better quality.	Cisco, OpenSignal
1.2.6	Average mobile latency	ms	This measures how long it takes data to travel between its source and destination. A lower latency indicates better quality.	Cisco, OpenSignal
1.2.7	Bandwidth capacity	Bit/s per Internet user	This measures the total used capacity of international Internet bandwidth, in bits per second per Internet user. Used international Internet bandwidth refers to the average traffic load (expressed in bits per second) of international fiber optic cables and radio links for carrying Internet traffic. More bits/s indicates better quality.	ITU

No.	Indicator	Unit	Description	Source
	OVERALL	0-100	The overall score is the weighted sum of the following category scores: 1 to 4	
1.3	INFRASTRUCTURE	0-100	The wider the coverage of infrastructure for Internet access, the easier it is for people to be connected. The infrastructure score is the weighted sum of the following indicators: 1.3.1 to 1.3.6.	
1.3.1	Network coverage (min. 2G)	% of population	This measures the percentage of people covered by 2G networks (number of people as a percentage of total population). The higher the percentage, the greater the number of people connected.	ITU
1.3.2	Network coverage (min. 3G)	% of population	This measures the percentage of people covered by 3G networks (number of people as a percentage of total population). The higher the percentage, the greater the number of people connected.	ITU
1.3.3	Network coverage (min. 4G)	% of population	This measures the percentage of people covered by 4G networks (number of people as a percentage of total population). The higher the percentage, the greater the number of people connected.	ITU
1.3.4	Government initiatives to make Wi-Fi available	Qualitative rating 0-2, 2 = best	This indicator looks at whether the government provides public Wi-Fi access in the largest city in the country and whether it is free to connect to. An initiative that comes at no cost to the consumer is likely to promote usage.	EIU country research
1.3.5	Private-sector initiatives to make Wi- Fi available	Qualitative rating 0-2, 2 = best	This indicator looks at whether the largest privately owned ISP provides public Wi-Fi access to its customers in the largest city in the country and whether it is free to connect to. An initiative that comes at no cost to the consumer is likely to promote usage.	EIU country research
1.3.6	Internet exchange points	Number of IXPs per 10 million inhabitants	This indicator measures the number of Internet exchange points (IXPs) in each country. The higher the number of IXPs, the wider the infrastructure coverage.	EIU, Telegeography, PeeringDB
1.4	ELECTRICITY	0-100	Electricity is needed to power the infrastructure and hardware required for Internet access. More extensive electricity access increases the number of people who are connected. The electricity score is the weighted sum of the following indicators: 1.4.1 to 1.4.2.	
1.4.1	Urban electricity access	% of population	This indicator measures the urban electrification rate (%). The higher the percentage of population with access to electricity, the easier it is for people to gain access to the Internet.	IEA, World Bank
1.4.2	Rural electricity access	% of population	This indicator measures the rural electrification rate (%). The higher the percentage of population with access to electricity, the easier it is for people to gain access to the Internet.	IEA, World Bank
2	AFFORDABILITY	0-100	The category looks at the cost of access to the Internet. Cost of access relative to income is a critical factor in Internet adoption. The score for the affordability category is the weighted sum of the following indicator scores: 2.1 to 2.2.	
2.1	PRICE	0-100	The cost of access relative to income is an important factor for Internet adoption. Generally, the lower the cost of access, the higher the adoption rates. The price score is the weighted sum of the following indicators: 2.1.1 to 2.1.4.	
2.1.1	Smartphone cost (handset)	Score of 0-100, 100 = most affordable	This measures the indexed scores of the price of an entry-level handset to the consumer, as a percentage of GNI per capita. Generally, the lower the cost of a smartphone handset, the higher the adoption rates.	GSMA
2.1.2	Mobile phone cost (prepaid tariff)	% of monthly GNI per capita	This measures the price of a prepaid 500 MB mobile data plan, as a percentage of monthly income. Generally, the lower the mobile phone data cost, the higher the adoption rates.	ITU, World Bank
2.1.3	Mobile phone cost (postpaid tariff)	% of monthly GNI per capita	This measures the price of a postpaid 500 MB mobile data plan, as a percentage of monthly income. Generally, the lower the mobile phone data cost, the higher the adoption rates.	ITU, World Bank
2.1.4	Fixed-line monthly broadband cost	% of monthly GNI per capita	This measures the price of fixed-line monthly broadband to the consumer as a percentage of monthly income. Generally, the lower the broadband cost, the higher the adoption rates.	ITU, World Bank

THE INCLUSIVE INTERNET INDEX 2018 METHODOLOGY REPORT

No.	Indicator	Unit	Description	Source
2.2	COMPETITIVE ENVIRONMENT	0-100	A healthy, competitive environment usually leads to lower prices for consumers. The competitive environment score is the weighted sum of the following indicators: 2.2.1 to 2.2.3.	
2.2.1	Average revenue per user (ARPU, annualized)	USD	This measures the average revenue per user (ARPU) for wireless operators. Generally, the higher the ARPU, the higher the adoption rates.	Telegeography
2.2.2	Wireless operators' market share	HHI score (0- 10,000)	This measures the market concentration among all wireless operators. The Hirschman-Herfindahl Index measures the concentration of markets as follows: $HHI < 3,000$ "unconcentrated"; $3,000 \le HHI < 4,000$ "moderately concentrated"; and $HHI \ge 4,000$ "highly concentrated". A lower HHI score indicates a more competitive environment.	EIU, Telegeography
2.2.3	Broadband operators' market share	HHI score (0- 10,000)	This measures the market concentration among all broadband operators. The Hirschman-Herfindahl Index measures the concentration of markets as follows: HHI < 3,000 "unconcentrated"; 3,000 \leq HHI < 4,000 "moderately concentrated"; and HHI \geq 4,000 "highly concentrated". A lower HHI score indicates a more competitive environment	EIU, Telegeography
3	RELEVANCE	0-100	This category describes the value of being connected, in terms of useful services and content and the availability of local content. If people do not find value in being connected, then Internet adoption is less likely. The score for the relevance category is the weighted sum of the following indicator scores: 3.1 to 3.2.	
3.1	LOCAL CONTENT	0-100	A key barrier for adoption is when local content does not meet local needs. The higher the amount of local content, the higher likelihood of Internet adoption. The local content score is the weighted sum of the following indicators: 3.1.1 to 3.1.4.	
3.1.1	Availability of basic information in the local language	Qualitative rating 0-2, 2 = best	This indicator measures whether the country has domestic news websites that provide information online in the official language(s). If domestic news websites are available in local languages, adoption becomes more likely.	EIU country research
3.1.2	Concentration of websites using country-level domains	Qualitative rating 0-3, 3 = best	This measures the proportion of websites in the top 25 most-visited websites that use a country code top-level domain (ccTLD). The higher the proportion, the more likely there are popular websites catering to local content needs.	Alexa Internet
3.1.3	Availability of local language keyboard on devices	Qualitative rating 0-1, 1 = best	This assesses the availability of a keyboard on an Android phone in the most commonly spoken official language of a given country. For countries that do not have an official language, we use the most commonly spoken language of the population. Languages that are not supported by Android at the time of the research that use an English-based alphabet receive a score of zero, as programming for the language's respective commands and dictionaries is still required to be used effectively. A local language keyboard allows for the development and accessibility of local language content.	Google, EIU country research
3.1.4	Availability of e-government services in the local language	Qualitative rating 0-2, 2 = best	This measures whether the government of the largest city in the country has a website that offers transactional services, including applying for a business license or permit. The availability of government services online is likely to increase adoption.	EIU country research
3.2	RELEVANT CONTENT	0-100	This measures whether there are content and services online that stimulate economic or social activity. The relevant content score is the weighted sum of the following indicators: 3.2.1 to 3.2.7.	
3.2.1	e-Finance content	Qualitative rating 0-2, 2 = best	This measures whether the largest retail banking institution offers online banking services. Online banking services are likely to stimulate economic activity.	EIU country research
3.2.2	Value of e-finance	%	This is an indicator taken from the EIU "Value of the Internet" survey. The indicator looks at country-level responses to questions about personal finance. A higher proportion of respondents that value e-finance in their country suggests that more relevant content is available.	EIU survey
3.2.3	e-Health content	Qualitative rating 0-3, 3 = best	This measures whether the Ministry of Health in the country has a website that provides information or links to information on disease prevention and wellness. Easily available health information is likely to inform both social and economic activity, and increase adoption.	EIU country research
3.2.4	Value of e-health	%	This is an indicator taken from the EIU "Value of the Internet" survey. The indicator looks at country-level responses to questions about health and fitness. A higher proportion of respondents that value e-health in their country suggests that more relevant content is available.	EIU survey
3.2.5	e-Entertainment usage	%	This is an indicator taken from the EIU "Value of the Internet" survey. The indicator looks at country-level responses to questions about how often respondents use the Internet for entertainment purposes. A higher proportion of respondents that use the Internet for entertainment in their country suggests that more relevant content is available.	EIU survey

No.	Indicator	Unit	Description	Source
3.2.6	e-Commerce content	Score of 0-100, 100 = best	This indicator seeks to measure the availability—and extent—of electronic commerce (e-commerce) in the country, which can serve both as a way to buy products and to sell them. E-content means electronic (online) or mobile. Greater availability of online services/e-commerce is generally thought to increase Internet adoption.	UNCTAD
3.2.7	Value of e-Commerce	%	This is an indicator taken from the EIU "Value of the Internet" survey. The indicator looks at country-level responses to questions about how often respondents purchase goods via the Internet. A higher proportion of respondents that use the Internet for purchasing goods in their country suggests that more relevant content is available.	EIU survey
4	READINESS	0-100	Readiness is a measure of the capacity among Internet users to take advantage of being online. The score for the readiness category is the weighted sum of the following indicator scores: 4.1 to 4.3.	
4.1	LITERACY	0-100	In order to find and use Internet content, users must have basic and digital literacy. The literacy score is the weighted sum of the following indicators: 4.1.1 to 4.1.4.	
4.1.1	Level of literacy	% of population	This indicator assesses the extent of literacy within countries. In order to use the Internet for useful purposes, such as to read news and access health or educational information, people must be able to read. The higher the level of literacy, the higher the capacity to take advantage of being online.	UNESCO
4.1.2	Educational attainment	Years of schooling	This indicator measures educational attainment through average years of schooling (ISCED 1 or higher). Internet adoption tends to be higher among highly educated groups. The greater the number of years of schooling, the higher the capacity to take advantage of being online.	UNDP
4.1.3	Support for digital literacy	Qualitative rating 0-3, 3 = best	This measures whether the government has a plan or strategy that addresses digital literacy for students and training for teachers. Higher digital literacy increases the capacity of users to take advantage of being online.	EIU country research
4.1.4	Level of web accessibility	Qualitative rating 0-4, 4 = best	This measures whether the national government website passes W3C guidelines on web accessibility. If websites are not accessible to people with disabilities, there is less opportunity to use them.	EIU country research
4.2	TRUST & SAFETY	0-100	A secure and safe connection and higher cultural acceptance generally increase the capacity to take advantage of being online. The trust and safety score is the weighted sum of the following indicators: 4.2.1 to 4.2.6.	
4.2.1	Privacy regulations	Qualitative rating 0-2, 2 = best	This measures whether the country has data protection law(s) and whether there are legal or financial penalties in place for firms that do not follow the law. Clear and transparent laws and financial penalties mean users can tell what is legally acceptable within the country, which increases their capacity to take advantage of being online.	EIU country research
4.2.2	Trust in online privacy	%	This is an indicator taken from the EIU "Value of the Internet" survey. The indicator looks at country-level responses to questions about how confident respondents are that their activity online is private. A higher proportion of respondents that are confident their online activity is private increases the capacity to take advantage of being online.	EIU survey
4.2.3	Trust in government websites and apps	%	This is an indicator taken from the EIU "Value of the Internet" survey. The indicator looks at country-level responses to questions about the extent to which respondents trust information they receive from government websites and apps. A higher proportion of respondents that trust these sources increases the capacity to take advantage of being online.	EIU survey
4.2.4	Trust in non- government websites and apps	%	This is an indicator taken from the EIU "Value of the Internet" survey. The indicator looks at country-level responses to questions about the extent to which respondents trust information they receive from non-government websites and apps. A higher proportion of respondents that trust these sources increases the capacity to take advantage of being online.	EIU survey
4.2.5	Trust in information from social media	%	This is an indicator taken from the EIU "Value of the Internet" survey. The indicator looks at country-level responses to questions about the extent to which respondents trust information they receive from social media. A higher proportion of respondents that trust these sources increases the capacity to take advantage of being online.	EIU survey
4.2.6	e-Commerce safety	%	This is an indicator taken from the EIU "Value of the Internet" survey. The indicator looks at country-level responses to questions about the extent to which respondents agree with the statement "Making purchases online is safe and secure". A higher proportion of respondents that agree with this statement increases the capacity to take advantage of being online.	EIU survey

No.	Indicator	Unit	Description	Source
4.3	POLICY	0-100	This indicator measures the existence of policies that promote the safe and widespread use of the Internet. The policy score is the weighted sum of the following indicators: 4.3.1 to 4.3.6.	
4.3.1	National female e-inclusion policies	Qualitative rating, 0-4, 4 = best	This indicator measures the existence of policies that encourage women and girls to get online, support digital skills training for women and set targets for women to study STEM subjects. The policy score is the weighted sum of the following indicators: 4.3.1.1 to 4.3.1.3	EIU country research
4.3.1.1	Comprehensive female e-inclusion plan	Qualitative rating, 0-2, 2 = best	This indicator assesses whether strategies addressing e-inclusion of females exist that help address gender digital divides. The indicator examines whether e-inclusion strategies exist that address female Internet access and adoption. To help score this indicator, statistical significance testing was conducted indicating that a difference in access between males and females of less than 17.9% gap in internet connectivity is inclusive at the 99% confidence level. Countries that score a 2 on this indicator have gender parity or a gender gap that is not statistically significant, regardless of an e-inclusion policy targeting women. Countries that score a 1 on this indicator have an e-inclusion policy but the gender gap is statistically significant. A current strategy helps women take advantage of being online.	EIU country research
4.3.1.2	Female digital skills training plan	Qualitative rating, 0-1, 1 = best	This indicator assesses whether strategies addressing e-inclusion of females exist that help address gender digital divides. The indicator examines whether e-inclusion strategies exist that address digital skills training for women. A current strategy helps women take advantage of being online.	EIU country research
4.3.1.3	Female STEM education plan	Qualitative rating, 0-1, 1 = best	This indicator assesses whether policies or government initiatives exist that encourage the study of STEM fields for females. A current strategy helps women take advantage of being online.	EIU country research
4.3.2	Existence of government e-inclusion strategy	Qualitative rating 0-2, 2 = best	This measures whether the government has any current initiatives or strategies in place that address e-inclusion—the inclusion and promotion of Internet access for underserved groups. "Current" means that the strategy has been developed within the past five years. Underserved groups include the elderly, youth, low-income groups, ethnic minorities and the disabled. A current and inclusive strategy promotes the safe and widespread use of the Internet.	EIU country research
4.3.3	Existence of national broadband strategy	Qualitative rating 0-2, 2 = best	This measures whether the government has a current national broadband strategy that includes a target penetration rate for fixed broadband coverage. "Current" means that the strategy has been developed within the past five years. A current strategy promotes the safe and widespread use of the Internet.	EIU country research
4.3.4	Funding for broadband buildout	Qualitative rating 0-1, 1 = best	This indicator assesses whether the country has an active government program(s) that helps subsidize or incentivize the buildout of broadband networks. Revised from an indicator looking only at Universal Service Funds (USF) as a method for improving broadband buildout, this indicator expands the scope of the question by addressing other financing options including USFs, in addition to tax credits, low-interest loans, and other government funding sources. This indicator helps address the principle that all citizens should have access to a baseline level of telecommunications services within a country.	EIU country research
4.3.5	Spectrum policy approach	Qualitative rating, 0-2, 2 = best	This indicator looks at two policies related to spectrum policy: whether the country has a policy that addresses technology neutrality for spectrum use, and whether the country has a policy that addresses using unlicensed spectrum for greater Wi-Fi access. The policy score is the weighted sum of the following indicators: 4.3.5.1 to 4.3.5.2.	EIU country research
4.3.5.1	Technology-neutral policy for spectrum use	Qualitative rating 0-1, 1 = best	This indicator assesses the country's ability to expand broadband connectivity by way of gauging operator flexibility within a country's spectrum policy to migrate to the next generation of network technology. Higher prices, poorer service, lost productivity, loss of competitive advantage and untapped innovation can all be outcomes of preventing flexibility. Technology neutrality is a policy approach that allows the use of any technology in any spectrum band. That means, with technology neutrality in place, mobile operators can offer services through any technology (2G/3G/4G/LTE) using any of the frequencies in their possessions ("refarming"). The freedom to deploy network of any technology using the available spectrum brings overall efficiency which culminates in benefits of mobile phone users of this country.	EIU country research
4.3.5.2	Unlicensed spectrum policy	Qualitative rating 0-1, 1 = best	This indicator assesses the country's ability to expand broadband connectivity by way of assessing the country's openness to provisioning unlicensed spectrum for greater Wi-Fi access and other productive uses. Higher prices, poorer service, lost productivity, loss of competitive advantage and untapped innovation can all be outcomes of preventing flexibility.	EIU country research
4.3.6	Existence of national digital identification system	Qualitative rating 0-2, 2 = best	This measures whether the country has a national digital identification (e-ID) system to be used online to access government services. The existence of an e-ID system promotes the safe and widespread use of the Internet.	World Bank

Appendix 2: Background indicator list

There are a total of 21 background indicators in the dashboard tool, which are used to give more context to the Index. There are three different types of background indicators. The first are economic and demographic data series such as population size, urbanisation rate or measures of democracy. The second are indicators that were initially in the Index but were removed due to data availability or quality. If the issues around data quality and availability improve, it is possible that these indicators will be added to the Index in future iterations. The third are ratings or scores from other indices such as the Global Peace Index or EIU Business Environment Rankings. The background indicators are listed below.

No	Indicator	Units	Description	Source
BG1	Nominal GDP	US\$ billions	Measures the total economic value of a country	EIU, World Bank
BG2	Population	Millions	Measures the population of the country	EIU, World Bank
BG3	Urbanization	% of population	Measures the percentage of the population living in urban areas	EIU, World Bank
BG4	GNI per capita	US\$ per person	Measures gross national income per capita (Atlas method)	World Bank
BG5	GINI coefficient	0-100 A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.	GINI index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line.	World Bank
BG6	Population under the poverty line	% of population	Poverty gap at \$1.90 a day (2011 PPP) is the mean shortfall in income or consumption from the poverty-line \$1.90 a day (counting the non-poor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.	World Bank
BG7	Total electricity access	% of population	Access to electricity is the percentage of population with access to electricity.	IEA, World Bank
BG8	Cable landing stations	Number of cable landing stations per 10 million inhabitants	Cable landing stations are the pieces of network infrastructure where submarine cables make landfall. Landlocked countries do not have access to cable landing stations. As such, landlocked countries receive the simple average of all countries in the series.	EIU, Telegeography
BG9	Percentage of schools with Internet access	% of schools	The proportion of secondary educational institutions with any type of Internet connection, where the Internet is defined as: worldwide interconnected networks that enable users to share information in an interactive format— referred to as hypertext—through multiple wired or wireless devices (personal computers, laptops, PDAs, smartphones, etc.) via broadband and narrowband connections. Where data gaps existed, data on primary educational institutions were collected.	UNESCO
BG10	Rating from the Global Peace Index	1-5; 5 = best	The Global Peace Index is a framework for understanding the drivers of sustainable peace.	Institute for Economics and Peace
BG11	Rating from the Democracy Index	0-10; 10 = best	The Democracy Index is a framework for measuring the quality of democracy and the biggest threats to sustaining democracy.	EIU
BG12	Rating from the Corruptions Perceptions Index	0-100; 100 = best	The Corruptions Perceptions Index, compiled by Transparency International, measures the perceived levels of public-sector corruption worldwide.	Transparency International
BG13	Rating from the EIU Business Environment Rankings	1-10, 10 = high	The EIU Business Environment Rankings quantify the attractiveness of the business environment. The business rankings model examines 10 separate criteria or categories, covering the political environment, the macroeconomic environment, market opportunities, policy towards free enterprise and competition, policy towards foreign investment, foreign trade and exchange controls, taxes, financing, the labor market and infrastructure.	EIU
BG14	Rating from the UN E-Government Development Index	0-1; 1 = best	The UN E-government Development Index measures trends in the development of e-government across the world.	UN E-Government Survey 2016

THE INCLUSIVE INTERNET INDEX 2018 METHODOLOGY REPORT

No	Indicator	Units	Description	Source
BG15	Number of Internet users	Millions	This measures the number of Internet users.	Internet Live Stats
BG16	Offline population	Millions	This measures the number of people offline.	Internet Live Stats
BG17	Female access to a mobile phone	% of households	This measures the percentage of females whose home has access to a cellular phone and whether women may be unconnected due to cultural norms.	Gallup
BG18	Female access to the Internet	% of households	This measures the percentage of females whose home has access to the Internet and whether women may be offline due to cultural norms.	Gallup
BG19	Plan addressing female driven innovation and women-owned businesses	Qualitative rating 0-1, 1 = best	This assesses whether policies or plans exist that help address gender digital divides. The indicator will examine whether policies or plans exist that support or encourage women-owned enterprises and female-driven innovation in the ICT sector	EIU country research
BG20	Internet access gender gap	Difference in % points between male and female	An alternative measure to indicator 1.1.4. This measures the percentage-point difference between male and female access to the Internet.	EIU, Gallup, ITU
BG21	Mobile phone access gender gap	Difference in % points between male and female	An alternative measure to indicator 1.1.5. This measures the percentage-point difference between male and female access to mobile phones.	EIU, Gallup, ITU

Appendix 3: List of indicators and weights

Category	Weight
1) AVAILABILITY	40.0%
2) AFFORDABILITY	30.0%
3) RELEVANCE	20.0%
4) READINESS	10.0%
TOTAL	100.0%

Sub-category/indicator	Weight
1.1) USAGE	25.0%
1.1.1) Internet users	20.0%
1.1.2) Fixed-line broadband subscribers	20.0%
1.1.3) Mobile subscribers	20.0%
1.1.4) Gender gap in Internet access	20.0%
1.1.5) Gender gap in mobile phone access	20.0%
1.2) QUALITY	25.0%
1.2.1) Average fixed broadband upload speed	14.3%
1.2.2) Average fixed broadband download speed	14.3%
1.2.3) Average fixed broadband latency	14.3%
1.2.4) Average mobile upload speed	14.3%
1.2.5) Average mobile download speed	14.3%
1.2.6) Average mobile latency	14.3%
1.2.7) Bandwidth capacity	14.3%
1.3) INFRASTRUCTURE	25.0%
1.3.1) Network coverage (min. 2G)	10.0%
1.3.2) Network coverage (min. 3G)	20.0%
1.3.3) Network coverage (min. 4G)	10.0%
1.3.4) Government initiatives to make Wi-Fi available	20.0%
1.3.5) Private-sector initiatives to make Wi-Fi available	20.0%
1.3.6) Internet exchange points	20.0%
1.4) ELECTRICITY	25.0%
1.4.1) Urban electricity access	50.0%
1.4.2) Rural electricity access	50.0%
2.1) PRICE	66.7%
2.1.1) Smartphone cost (handset)	25.0%
2.1.2) Mobile phone cost (prepaid tariff)	25.0%
2.1.3) Mobile phone cost (postpaid tariff)	25.0%
2.1.4) Fixed-line monthly broadband cost	25.0%

Sub-category / indicator	Weight
2.2) COMPETITIVE ENVIRONMENT	33.3%
2.2.1) Average revenue per user (ARPU, annualized)	20.0%
2.2.2) Wireless operators' market share	40.0%
2.2.3) Broadband operators' market share	40.0%
3.1) LOCAL CONTENT	50.0 %
3.1.1) Availability of basic information in the local language	28.6%
3.1.2) Concentration of websites using country-level domains	14.3%
3.1.3) Availability of local language keyboard on devices	28.6%
3.1.4) Availability of e-government services in the local language	28.6%
3.2) RELEVANT CONTENT	50.0 %
3.2.1) e-Finance content	20.0%
3.2.2) Value of e-finance	10.0%
3.2.3) e-Health content	20.0%
3.2.4) Value of e-health	10.0%
3.2.5) e-Entertainment usage	10.0%
3.2.6) e-Commerce content	20.0%
3.2.7) Value of e-commerce	10.0%
4.1) LITERACY	33.3%
4.1.1) Level of literacy	25.0%
4.1.2) Educational attainment	25.0%
4.1.3) Support for digital literacy	25.0%
4.1.4) Level of web accessibility	25.0%
4.2) TRUST & SAFETY	33.3%
4.2.1) Privacy regulations	28.6%
4.2.2) Trust in online privacy	14.3%
4.2.3) Trust in government websites and apps	14.3%
4.2.4) Trust in Non-government websites and apps	14.3%
4.2.5) Trust in information from social media	14.3%
4.2.6) e-Commerce safety	14.3%
4.3) POLICY	33.3%
4.3.1) National female e-inclusion policies	18.2%
4.3.2) Government e-inclusion strategy	18.2%
4.3.3) National broadband strategy	18.2%
4.3.4) Funding for broadband buildout	18.2%
4.3.5) Spectrum policy approach	18.2%
4.3.6) National digital identification system	9.1%

Note

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