



وزارة التخطيط التنوي والإحصاء
Ministry of Development Planning and Statistics

ورشة عمل بشأن تحديث الإحصاءات الرسمية في دولة قطر Workshop on Modernization of Official Statistics in Qatar

الاثنين ١١ ديسمبر ٢٠١٧ - فندق روتانا، سيتي سنتر
Monday 11 December, 2017 - Rotana City Center Hotel - Doha



وزارة المواصلات والاتصالات Ministry of Transport & Communications

Modernizing Development of Transport and ICT Indicators

إدارة التخطيط والجودة

Planning & Quality Dept.



Modernizing Development of Transport and ICT Indicators to Monitor the Sustainable Development Goals and National Development Strategy 2017-2022

وزارة المواصلات والاتصالات
Ministry of Transport & Communications

December 11, 2017



Agenda

- ▶ 2030 Agenda for SDGs
- ▶ Indicators Framework
- ▶ Key enablers and Pilot projects
- ▶ Qatar's efforts on Modernization
- ▶ Transport and ICT Indicators related to SDGs
- ▶ Framework for modernizing Transport and ICT indicators
- ▶ Benefits and Key Challenges
- ▶ Recommendations



Transforming Our World: The 2030 Agenda for Sustainable Development



THE GLOBAL GOALS For Sustainable Development

Preamble

“This Agenda is a plan of action for **people, planet** and **prosperity**. It also seeks to strengthen universal **peace** in larger freedom. All countries and all stakeholders, acting in collaborative **partnership**, will implement this plan.”

Indicators Framework and Data Disaggregation

Snapshot of SDGs



General scope/ focus	Economic growth, Social inclusion & Environmental protection
Target	Entire world (rich and poor)
Formulation <i>(Result of consultation process among...)</i>	193 UN Member States
	Civil society
	Other stakeholders

Indicators framework

- ▶ Member States have pledged to leave **no one behind**
- ▶ **Global Indicators** will be the core of all other sets of indicators
- ▶ Member States will develop indicators at regional, national and sub-national levels to **complement the global indicators, taking into account national circumstances**
- ▶ Thematic indicators are also being developed in a number of areas

Data disaggregation

- ▶ SDGs is committed to include an overarching principle of data disaggregation in order to ensure:
 - Indicators cover specific population groups
 - Other disaggregation elements specified in the targets
- ▶ Indicators should be disaggregated where relevant by
 - 1) Income
 - 2) Gender
 - 3) Age
 - 4) Race
 - 5) Ethnicity
 - 6) Migratory status

Introduce elements that enable data analysis at Overall and mainstream population levels for localization purposes

 - 7) Disability and
 - 8) Geographic location



Technology as enabler and global pilot projects in modernizing official statistics

Technology as key enabler

- ▶ Cheaper handling of data produced by high-tech devices (e.g. satellites, medical devices, electronic instruments in planes and ships, etc.)
- ▶ Improved storage to access and handling of traditional and non-traditional data (e.g. public administration, banks, insurance, utilities, etc.)
- ▶ New applications to data collection, management, and processing
- ▶ Introduction of connected mobile devices (e. g phones, cameras and watches etc.)
- ▶ Digital connection from appliances to cars and all sorts of industrial machineries
- ▶ Interoperability of data sets/ develop tools for interoperability
- ▶ Advanced dissemination tools: Power BI, SAS VA, etc.

Global pilot projects

- ▶ Transport
 - GPS data from trucks, rail, ship and air transport are used to supplement **Transport statistics**
 - Improving transport planning through real time data analytics, Jakarta Smart City
 - Google Street view images using the machine learning can help in counting pedestrian
- ▶ Information and Communications technology(ICT)
 - Mobile cellular data is being used for estimating Tourism, Transportation, natural disaster and Urban statistics (World Bank in Nigeria, ITU)
 - Automatic price data collection (Web scrapped) for price indices, labor market indicators, and enterprise profiling (Eurostat)
- ▶ Others
 - Smart meters for Energy and Environmental statistics (Eurostat)
 - Credit card, cash register, and scanner data for price and other economic statistics



Background and Qatar's efforts on Transformative Agenda for Official Statistics

- ▶ 2030 Agenda goals incorporated in Qatar's National Development Strategy - 2 (2017-2022)
- ▶ Ministry of Development Planning and Statistics (MDPS), UN Statistical Division (UNSD) and Arab organizations joined global project on "Transformative Agenda for Official Statistics" to monitor SDGs indicators at country level
- ▶ Aim of the project is to significantly transform and modernize Qatar's Statistical System and enable it to collect, process, analyze and disseminate **traditional and non-traditional** data
- ▶ Objectives of the project
 - Coordination and partnership among different components of the national statistical system
 - Communication and advocacy
 - **Building an integrated data collection, processing and publication system**
 - **Innovation in using technology and new data sources**
 - **Capacity building and resource mobilization**

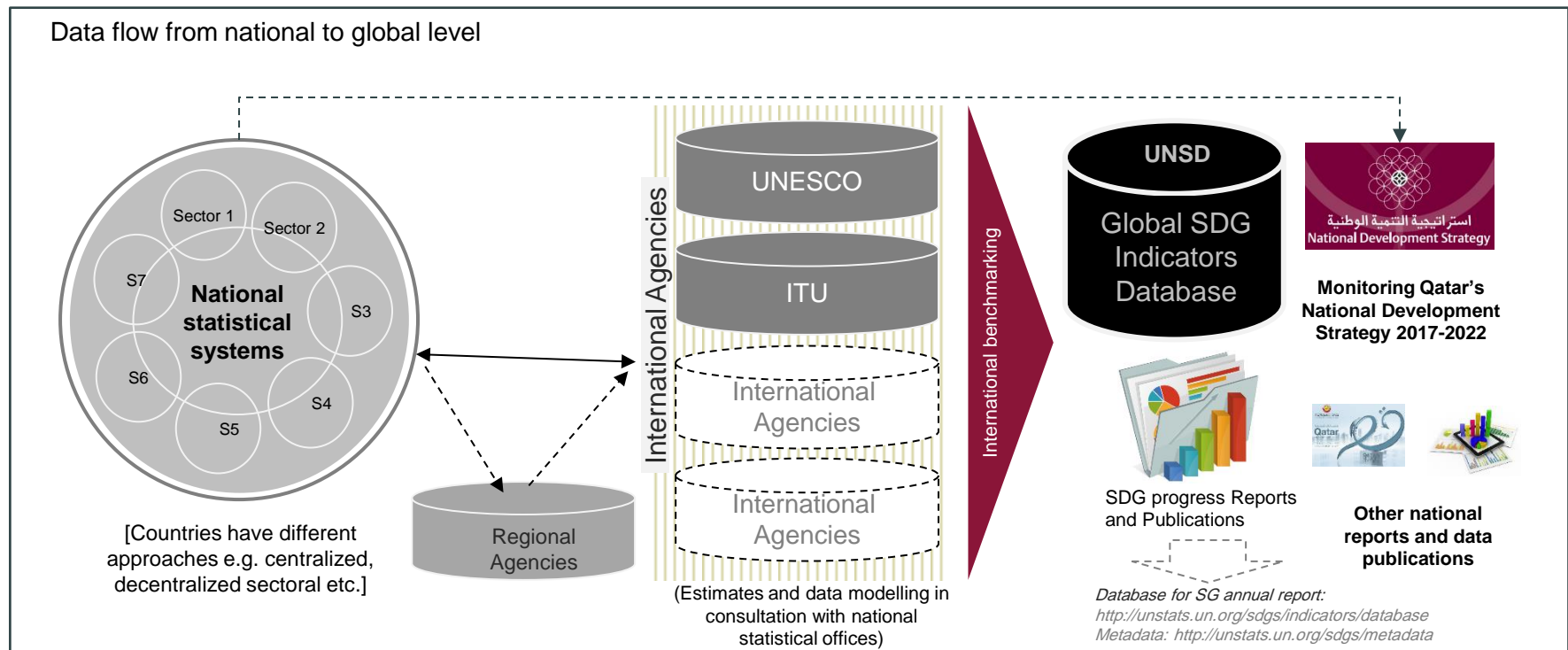
"Qatar is committed to achieving the 2030 Agenda goals and targets, modernizing its statistical system to provide the required indicators as adopted by the United Nations Statistical Commission.

A monitoring and evaluation system will be in place to track on regular basis. We here highlight the fact that Qatar is a major partner in the international community that can be relied on to build global security and peace, provide development and relief assistance to poorer countries and refugees and act as a hub for religious and cultural dialogue and for scientific research and innovation"

– Ministry of Development Planning and Statistics

Indicators framework and Data flow

- ▶ SDG specific indicator's data will be produced by various National Statistical Systems (coordinated by MDPS in Qatar)
- ▶ Information will be aggregated at sub-regional, regional and global level
- ▶ UN Secretary-General's mandate to produce annual SDG progress report to support follow-up and review at the High-level Political Forum





Proposed Transport indicators related to SDGs

(Based on World Bank)

Overall SDGs



TRANSPORT
(Related SDGs)



I. Code	Indicator	Data type	Data producer	Intl. Repository	2013	2015
TI → 3.6.1	Death rate due to road traffic injuries (Per 100,000 population)	Admin. data	MOI	WHO	15.2	-
TIII → 9.1.1	Proportion of the rural population who live within 2 km of an all-season road	Admin. data		UN	-	-
TI → 9.1.2	Passenger and freight volumes, by mode of transport	Admin. Data	MOTC	ICAO, ITF-OECD	-	-
	Freight volume by road transport (Thousands Tonne kilometers)				-	22,007
	Passenger volume by road transport (Thousands kilometers)				-	62,264
	Freight volume by rail transport (Thousands Tonne kilometers)				-	1,633
	Freight volume, by air transport (Metric tons)				-	1,449,735
	Freight volume by air transport (Thousands Tonne kilometers)				-	7,563,307,390
	Mail volume air transport (Thousands Tonne kilometers)				-	48,553,980
	Passenger volume, by air transport				-	25,263,224
	Passenger volume by air transport (Thousands kilometers)				-	108,311,227,930
TII → 11.2.1	Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Admin. data		UN	-	-
TIII → 12.c.1	Amount of fossil-fuel subsidies per unit of GDP and as a proportion of total national expenditure on fossil fuels	Admin. data		UN	-	-

To be developed

TI → Tier 1: Conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50% of countries and of the population in every region where the indicator is relevant

TII → Tier 2: Conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries

TIII → Tier 3: No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested

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Direct indicators

12
Indirect indicators



Proposed ICT indicators related to SDGs

(Based on ITU)

Overall SDGs



ICT
(Related SDGs)



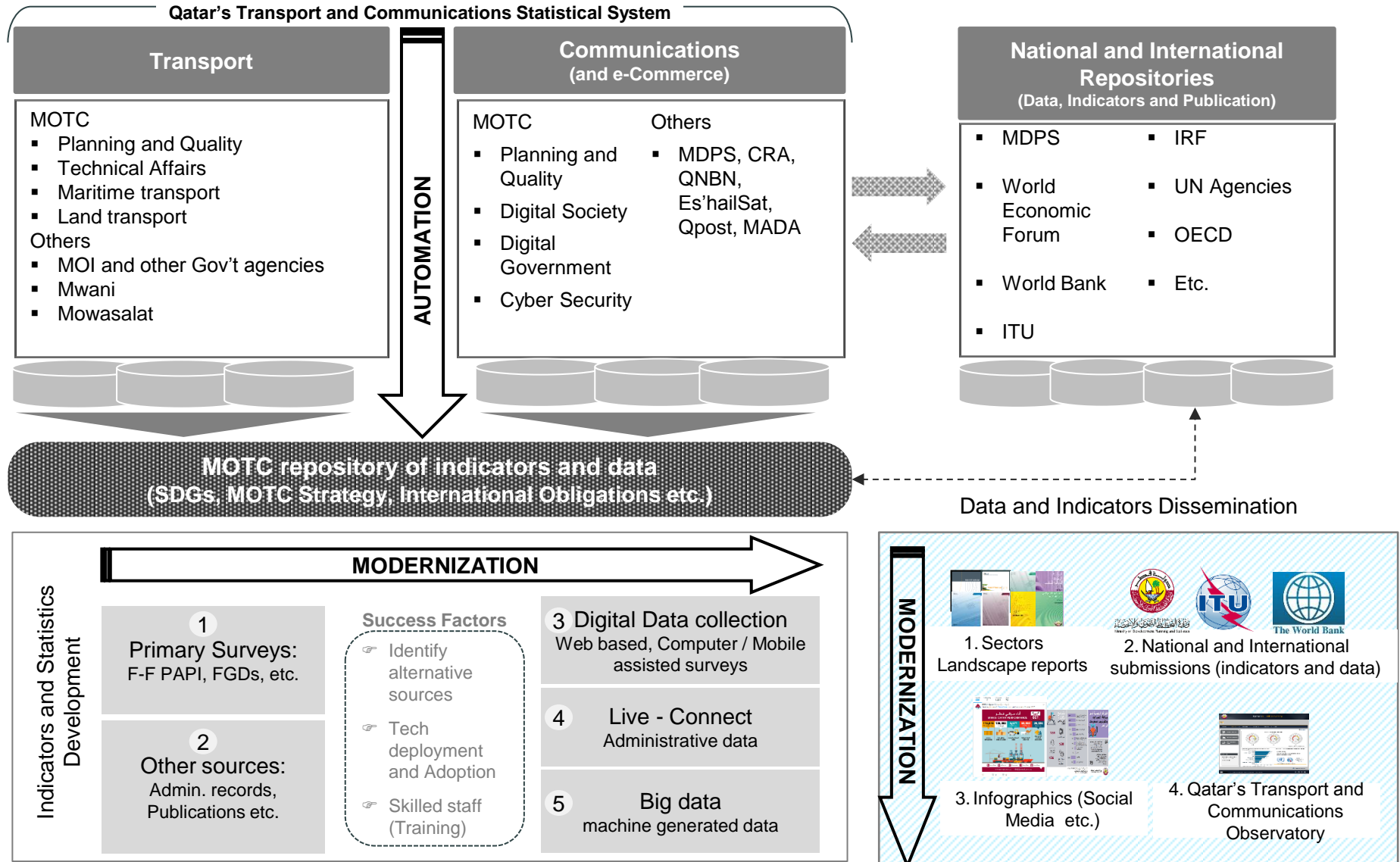
I. Code	Indicator	Data type	Data producer	Intl. Repository	2015	2016
TII → 4.4.1	Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	Survey		UNESCO-UIS ITU	-	-
TII → 4.a.1	Proportion of schools with access to the Internet for pedagogical purposes	Admin. Data	MOHE	ITU	-	-
	Proportion of schools with access to the computer for pedagogical purposes	Admin. Data	MOHE	ITU	-	-
TI → 5.b.1	Percentage of individuals who used a mobile cellular telephone	Survey	MOTC	ITU	99.97	-
TI → 9.c.1	Percentage of the population covered by mobile - cellular network	Admin. Data	CRA	ITU	100	100
	Percentage of the population covered by at least a 3G mobile network	Admin. Data	CRA	ITU	98	99.64
	Percentage of the population covered by at least an LTE/WiMAX mobile network.	Admin. Data	CRA	ITU	95	99.04
TI → 17.6.2	Fixed broadband subscriptions per 100 inhabitants	Admin. Data	CRA/ Ooredoo	ITU	10.12	10.77
TI → 17.8.1	Internet users (%)	Survey	MOTC	ITU	92.88	94.29

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Direct indicators

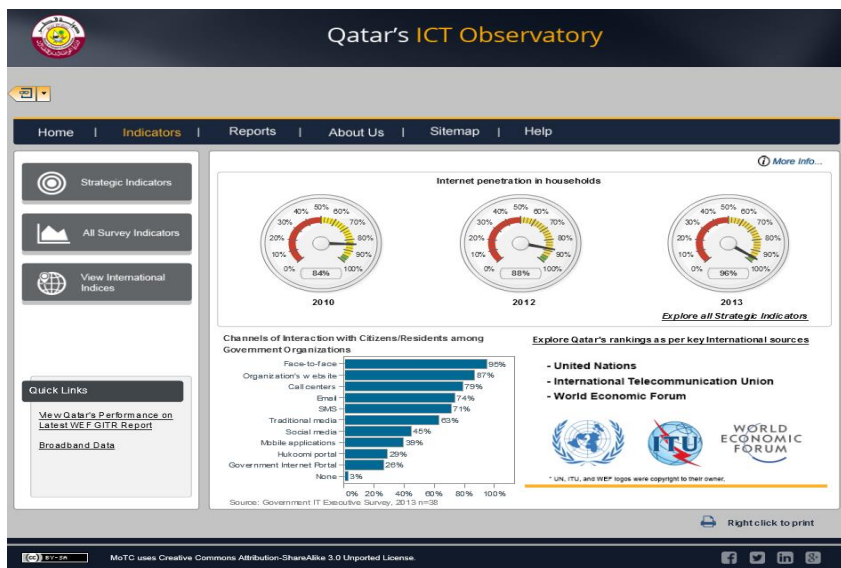
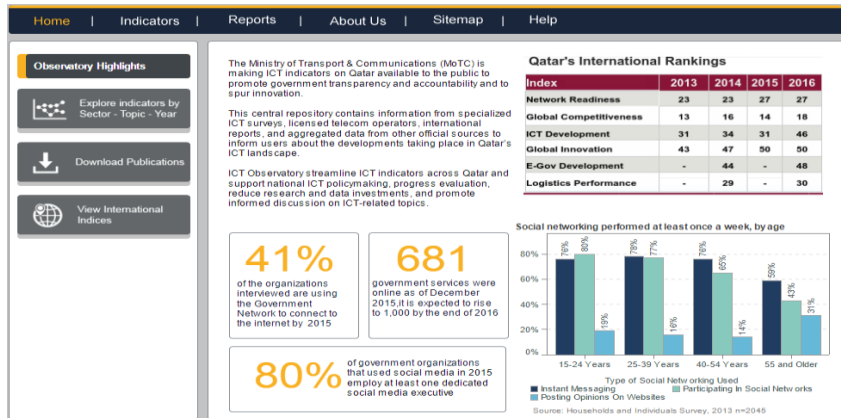
Conceptual framework for modernizing Transport and ICT indicators





Efforts in modernizing Transport and ICT indicators

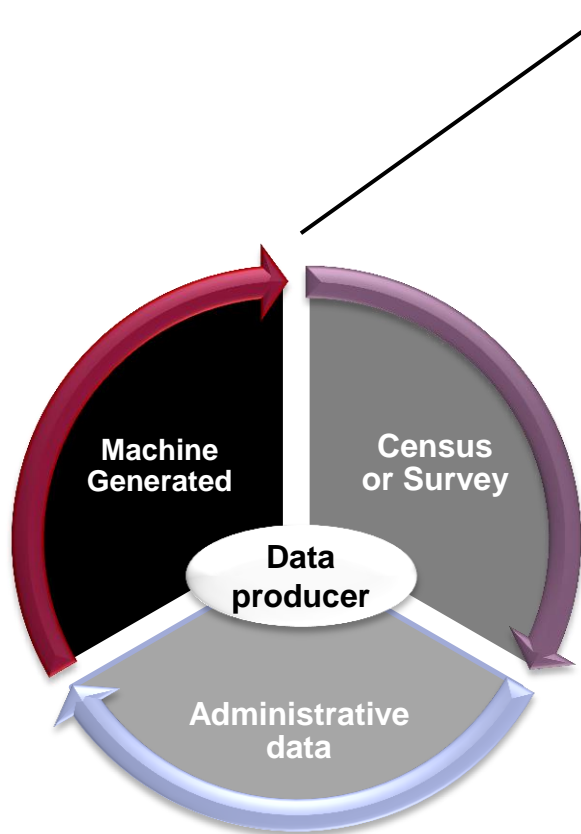
Qatar's Transport and ICT Observatory (ICT is in live and inclusion of Transport sector is planned in 2018)



- ▶ Trusted source of information on Qatar's ICT landscape and indicators
- ▶ Users can view online and analyze ICT market research data from several sources
 - Telecom operators
 - Other official sources
 - Specialized ICT surveys
- ▶ Allows easy-to-use yet sophisticated analytics and the ability to employ ad-hoc data exploration and visualization with quick outcomes
- ▶ Advanced analytics and data visualization capabilities will help users to better understand Qatar's ICT landscape
- ▶ In-memory technology enables quick dissection of the data and creation of interactive reports

All this and more can be found at <https://ictobservatory.qa>

Benefits and Challenges in modernizing production of Official Statistics



Benefits

- **Digital data collection** reduces the production costs, respondents' burden and supports redirection of resources to activities such as analysis of data
- Reduces **duplication** of investments in design, development and maintenance
- Facilitates a sharing **environment**: Reuse business processes, Statistical methods and tools
- Production of **accurate, reliable, disaggregated and timely** indicators
- Data will be aligned with international industry standards Generic Statistical Information Model (GSIM), Statistical Data and Metadata eXchange(SDMX)
- Integration of new data sources with **innovation** to meet demands for new indicators in a sustainable manner

Key challenges

- Availability of **multidisciplinary skilled resources** to implement modernization
- Revision of the existing **research process**
- Availability and adoption of **latest technologies**. E.g. Web Survey tools



Recommendations and way ahead

- ▶ Conduct rolling-reviews of Transport and Communications indicators in Qatar and establish a process for continuously monitoring international and national indicators and modern development methodologies
- ▶ Analyze streamlining of classification / definitions among statistics producers for quick deployment of modern concepts and technologies
- ▶ Strategize indicators development (short-medium-long terms) and collaborate with National Statistical System in relevant areas e.g. indicators from national (sectoral) accounts etc.
- ▶ Develop and establish Transport and Communications Observatory as the trusted source for sectoral indicators in Qatar
- ▶ Establish committees and focal points within data producers for driving development of high quality SDG and sectoral indicators; and modernizing their development
- ▶ Assess the option of hosting working groups and conferences in future engaging both – local and international stakeholders. This will help in establishing relationships, identifying emerging indicators and modern methods for tracking sector progress
- ▶ Work on capacity building and upgrading skills for deploying modern approaches for data production e.g. Big data in developing official statistics



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Thank you

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