Digital Dividends: Using Digital Government to Promote Integrity and Development

Submitted by: World Bank Group

Workshop on Digital Government, Integrity Policies and Corruption Prevention Mechanisms in APEC Economies
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DIGITAL DIVIDENDS:
USING DIGITAL GOVERNMENT TO PROMOTE INTEGRITY AND DEVELOPMENT

WORLD BANK GROUP
Governance

Public Sector and Institutions Department

Governance Global Practice

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Outline

1. The problem

2. Global trends

3. Digital government and integrity: theory and practice

4. Country and global examples

5. Looking forward - GovTech Partnership

1. The problem: impacts of corruption

- Corruption undermines World Bank twin goals of ending extreme poverty and boosting share prosperity.
  - Reduces private investment – impact on growth and jobs
  - Falls most heavily on the poor
  - Discourages access to basic services
  - Weakens the quality of public investment
  - Erodes trust in government

1. The problem: in numbers

Money at risk annually in procurement
$10 trillion

63%
Of firms say bribes create unspoken mechanisms to get things done quickly

Percentage of global population living under governments where corruption is endemic
85%

Number of firms that pay bribes for contracts in Bank client countries
20 %

Volume of foreign transactions per hour
$220 billion

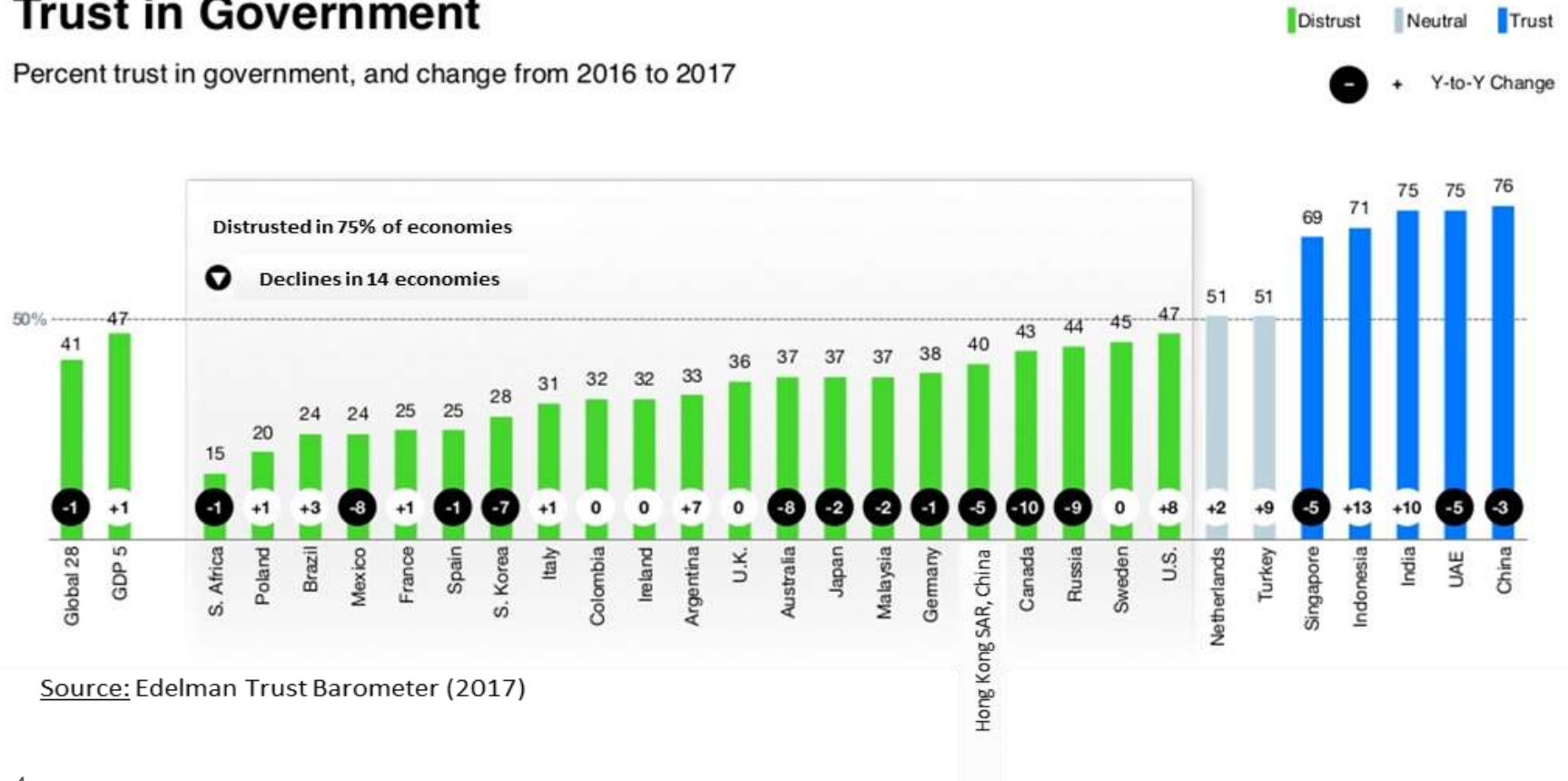Share of people globally who paid a bribe in 2018
25%

Volume of financial flows that are illicit
?

1. The problem: trust in government is low

Trust in Government

Percent trust in government, and change from 2016 to 2017

Distrust | Neutral | Trust

－ ＋ Y-to-Y Change

Distrusted in 75% of economies

Declines in 14 economies

	Global 28	GDP 5	S. Africa	Poland	Brazil	Mexico	France	Spain	S. Korea	Italy	Colombia	Ireland	Argentina	U.K.	Australia	Japan	Malaysia	Germany	Hong Kong SAR, China	Canada	Russia	Sweden	U.S.	Netherlands	Turkey	Singapore	Indonesia	India	UAE	China
Percent	41	47	15	20	24	24	25	25	28	31	32	32	33	36	37	37	37	38	40	43	44	45	47	51	51	69	71	75	75	76
Change	-1	+1	-1	+1	+3	-8	+1	-1	-7	+1	0	0	+7	0	-8	-2	-2	-1	-5	-10	-9	0	+8	+2	+9	-5	+13	+10	-5	-3

50%

Source: Edelman Trust Barometer (2017)

4

1. The problem: corruption versus development

Figure S6.2 Checks on corruption and accountability institutions improve more in countries that escape upper-middle-income status to achieve high-income status than in countries that are "non-escapees"

**Source: WDR 2017.**
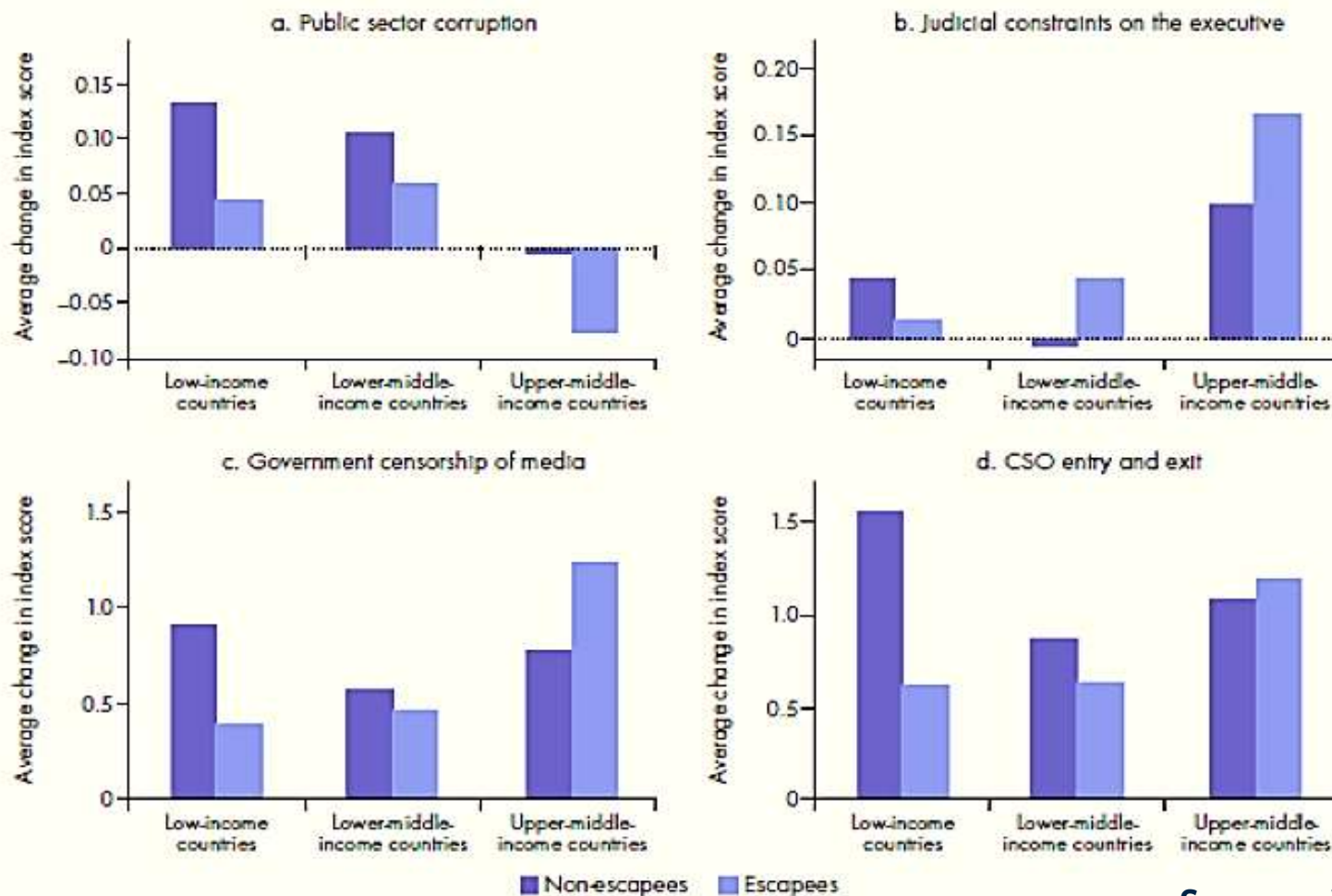
2. Global trends

Technological

- New technologies rapidly (*exponential growth*) emerging – e.g. artificial intelligence, machine learning, and myriad others...

- Mobile phone access expanding

- Explosion of data (... but data literacy?)

Political

- Citizens' expectations of governments have been and continue to rise

- Stricter laws against overseas bribery

- Renewed commitment of the international community to fight corruption

E-government services and corruption
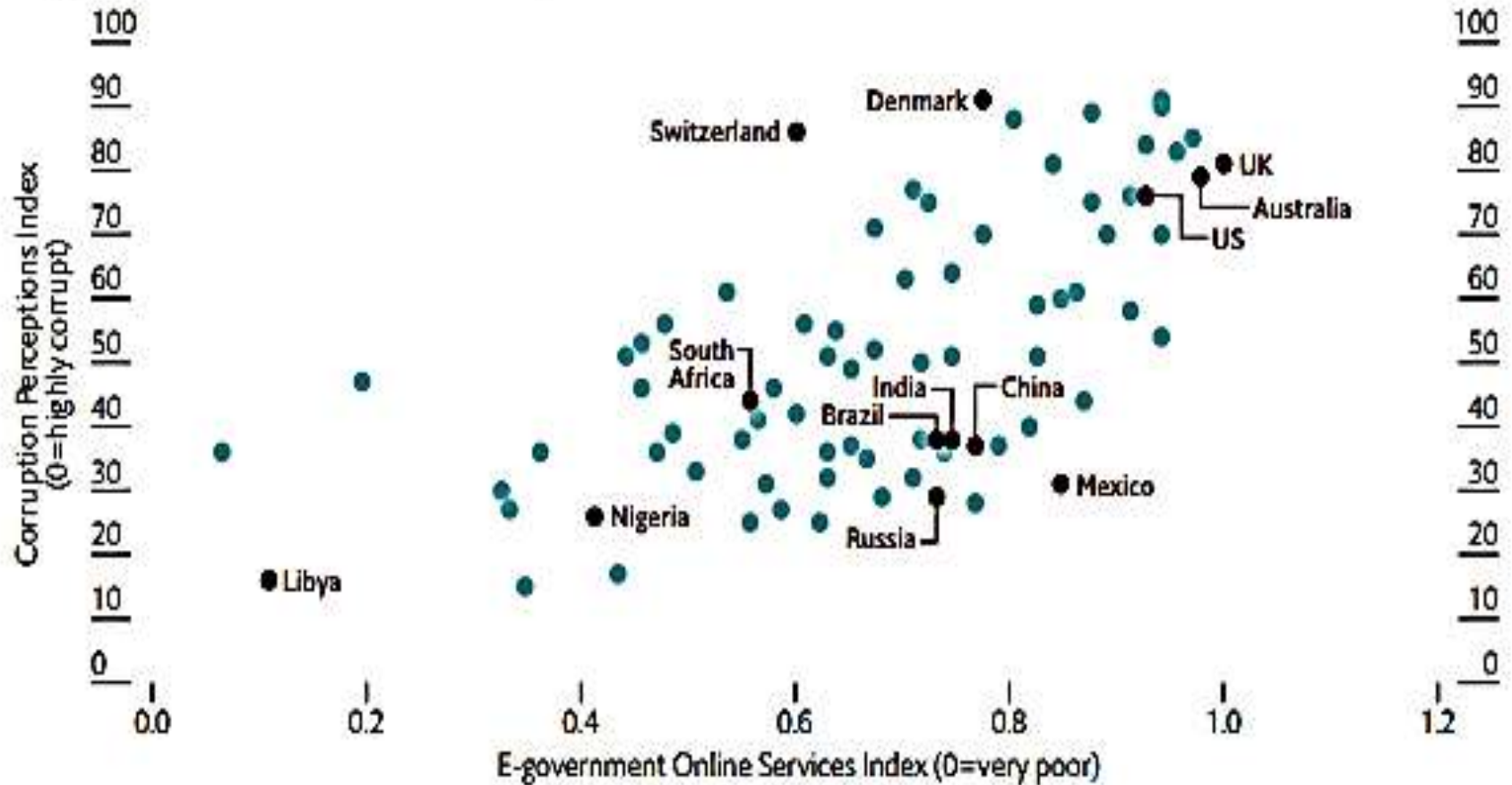
Note: 2016 data for egovernment; 2015 data for corruption perceptions.
Sources: UN E-Government Development Index; Transparency International Corruption Perceptions Index.

2. Global trends: digital government associated with more government effectiveness

E-Government and Government Effectiveness

UN E-Government Index (2018)
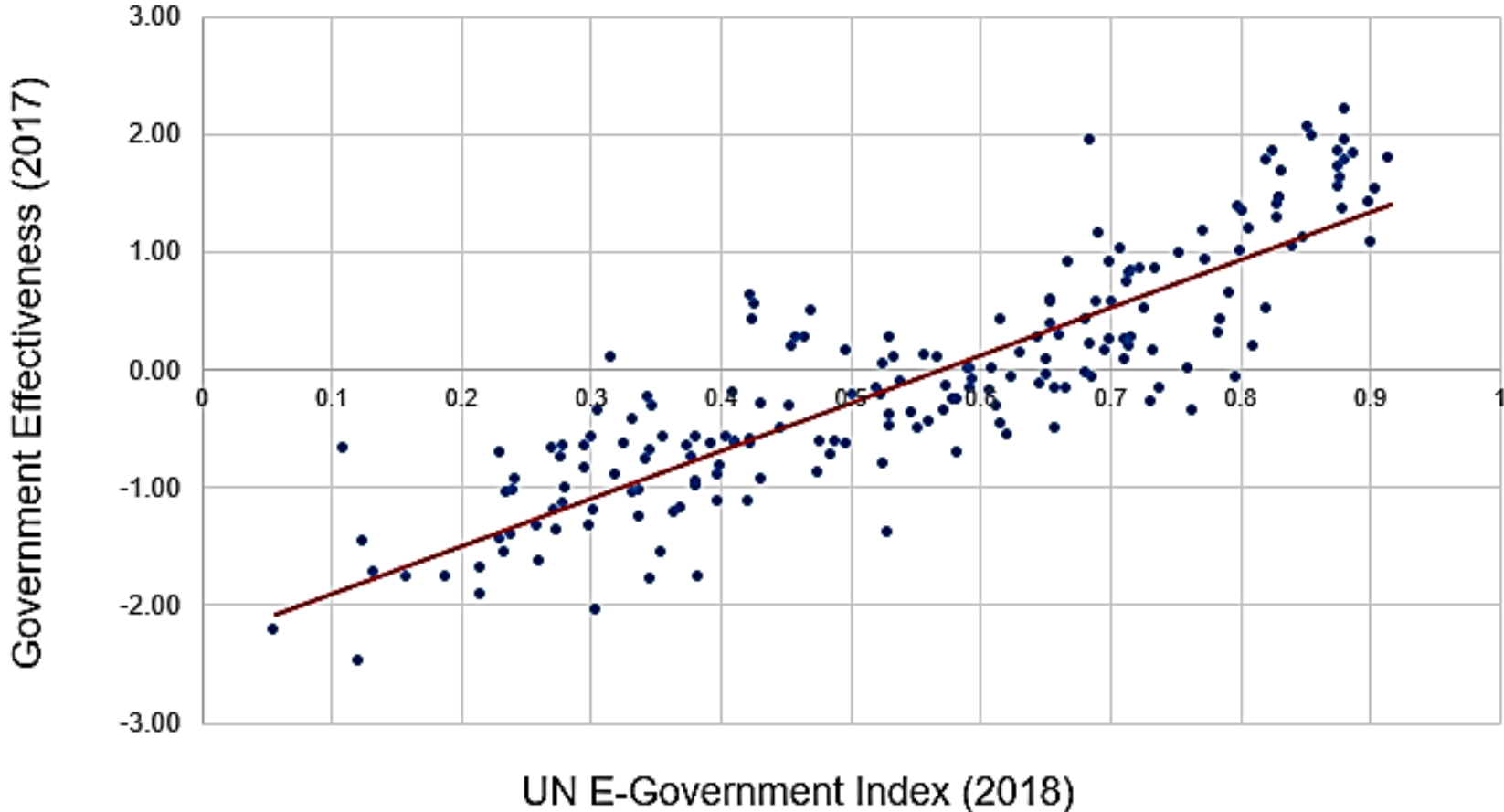
Source: World Governance Indicators (2017), UN E-Government Index (2018), World Bank Staff Calculations

3. Digital government and integrity: theory

Pathways through which digital government can promote integrity:

1. Reducing information asymmetry between governments and citizens

2. Limiting discretion of officials through automation and streamlining

3. Increasing transparency and "auditability" of transactions

4. Soliciting feedback from citizens to track problems and improve service quality

5. Enhancing collective action of citizens to demand better government performance

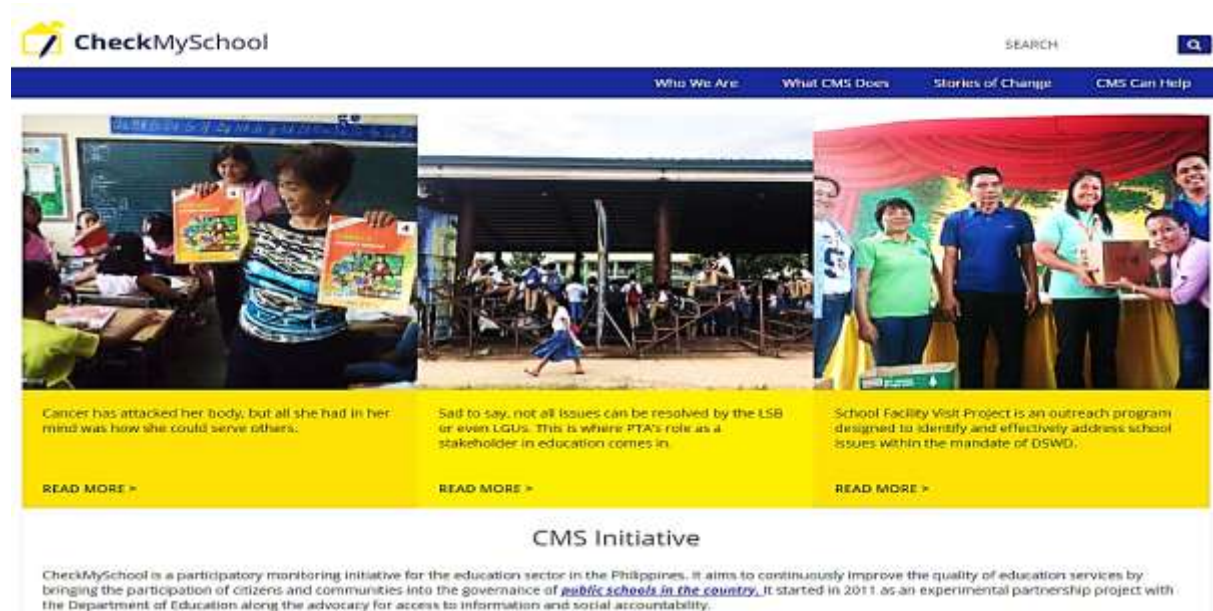# 3. Digital government and integrity: practice

Some core areas of implementation:

1. Front line: Citizen services

2. Back end:

    - Tax collection

    - Procurement

    - Asset and income disclosure
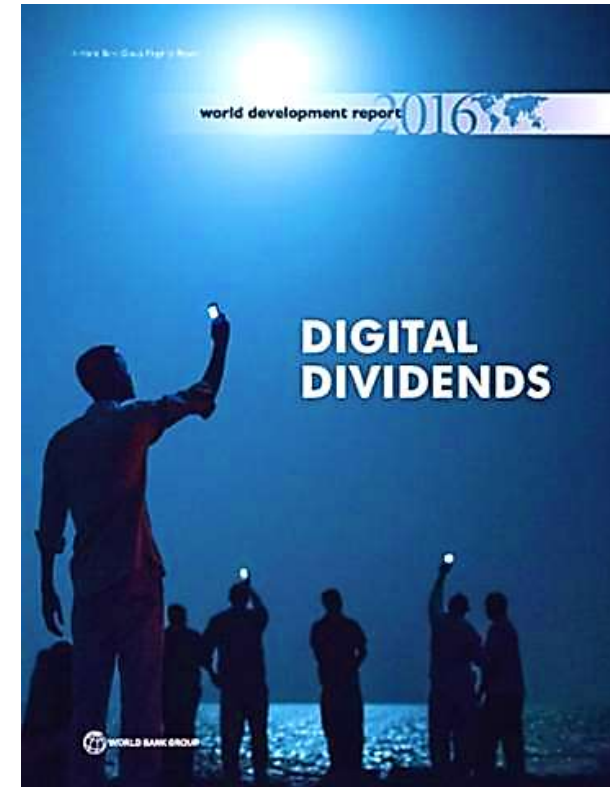
4. Country examples: Philippines - service delivery and tax compliance

- Feedback by parents and students from 46,000 schools to Ministry of Education through checkmyschools.org

- Results feed into local and national decision making to address infrastructure, service and supply constraints

- Sin tax (tobacco excises) monitoring and tracking through crowd-sourcing (inexpensive nation-wide coverage)

CMS Initiative

CheckMySchool is a participatory monitoring initiative for the education sector in the Philippines. It aims to continuously improve the quality of education services by bringing the participation of citizens and communities into the governance of *public schools in the country*. It started in 2011 as an experimental partnership project with the Department of Education along the advocacy for access to information and social accountability.

4. Country example: Argentina – a comprehensive approach to technology-enabled service delivery

- Innovative public sector management reforms to improve service delivery
- Results-based approach incentivizes service delivery for the poor and vulnerable
- *e-Government:* reducing red tape and streamlining services to citizens and businesses:
  - Citizen engagement interfaces with the Government through administrative channels (e.g., electronic civil registry in the Province of Buenos Aires; electronic procurement system)

4. Country example: Brazil – using technology to analyze service delivery

- Data analytics trial in the state of Ceará
- Mobile surveys to uncover patterns of suspicious interactions between public service providers and users
- Feedback provided by patients through mobile phones combined with administrative data from hospital services
- Another experiment investigated how survey and administrative data could be used to find anomalies in environmental licensing
- Administrative data was effectively used to identify corruption red flags

4. Country example: Mexico – using technology to fortify the National Anticorruption System (SNA)

- Federal administration improving the design and effectiveness of government policies related to transparency, citizen participation, and public integrity

- New national financial disclosure forms under preparation; establishing a conflict of interest baseline; designing a data driven model for the prevention, investigation and sanctioning of conflicts of interest; and building government capacity to manage the conflict of interest system

- Design of risk indicators on procurement integrity and implementation plan; implementation of open contracting data standard

4. Global example: Partnering with the private sector – AI and procurement

- WBG-Microsoft pilot on artificial intelligence

- Trend toward digitization of government procurement data

- Extensive body of corporate and public datasets already exists on company structure and ownership, including an expansion of beneficial ownership information

- World Bank is developing an AI Data Analytics platform to link this procurement and ownership big data to proactively identify potential corruption and other integrity risks

- Will provide a heat map for procurement officials to identify the major risks based cross linked with social media from all over the world

5. Looking forward: frontiers

Big Data

The GGP is working with several clients globally on procurement data transparency via the proactive use of Big Data technologies to analyze this data to increase procurement efficiency and reduce corruption.

Satellite Computer Vision

The GGP uses rapidly expanding satellite data and mapping, to promote improved land use governance and infrastructure tracking. For example, demonstration cases are currently focusing on land use and zoning and road networks in a Sub-National DPO Program for Ho Chi Minh City in Vietnam, integrating actions on Smart City governance and zoning disclosure.

Biometrics

The GGP supports the use of biometric verification for salary payments for thousands of civil servants in Somalia.

Crowd-Sourcing Technology

The GGP applies paid crowdsourcing technology to monitor cigarette excise tax stamp compliance in the Philippines. The approach used hundreds of thousands of geo-tagged imaged captures across the Philippines to monitor where tax stamps were being used. The technology is also being shared with other teams.

Civic Tech

Mobile Device Applications

The GGP applies new satellite/smartphone cloud-based geospatial management technologies to improve the agility and cost-effectiveness of public infrastructure asset management. With other GPs, the GGP is demonstrating how essential and open geospatial data standards can be used to improve the way road assets are managed.

The GGP has been piloting ICT platforms designed to amplify citizen voices to improve service delivery. Other work is focused on supporting citizen engagement using administrative data from existing civic tech platforms, such as change.org, FOI system of law requests in Brazil, and I Change My City in India.

Innovative Software for Service Delivery

The GGP used locally appropriate technology in Kenya to help utilities serve customers better and improve revenues through the innovation MajiVoice which registers and categorizes customer complaints for water and sewage delivery in. Initial evaluations showed it increased complaint resolution rates from 46 percent to 90 percent.

Blockchain

Machine Learning

The GGP piloted the application of open source machine learning and prediction tools to analyze and enhance information value in financial management and administrative data. Also, the 'OnTrack' application in Pakistan and the Philippines helps piece together budget execution and procurement data to provide governments tools for proactive and dynamic analytics on public sector performance.

The GGP is exploring possible use of distributed ledger (blockchain) solutions in Brazil for procurement in community-driven development and Madagascar for land-registry in Antananarivo and securing tax-register at national level).

5. Looking forward: GovTech Global Partnership

GovTech Partnership – launching in April - will advance the agenda through:

Research, knowledge and expertise to inform GovTech design and implementation

Global public goods including standards, evaluation tools, open source core systems and modular applications

Financing work at country, regional and global levels; technical assistance for implementation; and brokering with the private sector for solution development

Coordinating and aligning global partners

Thank you!

¡Gracias!