DIGITAL GOVERNMENT PRINCIPLES, PRACTICE AND RESEARCH

MODULE 3: DIGITAL GOVERNMENT MEASUREMENT

TOMASZ JANOWSKI GDAŃSK UNIVERSITY OF TECHNOLOGY, POLAND DANUBE UNIVERSITY KREMS, AUSTRIA

ELSA ESTEVEZ AND PABLO FILLOTRANI UNIVERSIDAD NACIONAL DEL SUR, ARGENTINA

1	To motivate Digital Government measurement efforts
2	To explain basic terminology underpinning Digital Government measurement
3	To provide examples of frameworks and current trends in Digital Government measurement
4	To present one in-depth case of Digital Government measurement

OVERVIEW

1	MOTIVATION	Why is it important to measure Digital Government?
2	CONCEPT	What are the basic concepts underpinning Digital Government measurement?
3	EXAMPLES	What kind of Digital Government measurement framework are currently used?
4	TRENDS	What are the future trends in Digital Government measurement?
5	CASES	What are the cases of Digital Government measurement?
6	SUMMARY	What was covered by this module?

WHY IS IT IMPORTANT TO MEASURE DIGITAL GOVERNMENT?

MEASURING DG	EXAMPLE DG MATURITY MODEL
DG practice is replete with	Stage 1 – Emerging
stage-of-growth and maturity models	Government's online presence is comprised of a web page, much of the information is static, there is little interaction with citizens.
	Stage 2 – Enhanced
They prescribe possible DG	Governments provide more information on public policy and governance.
development paths	Stage 3 – Interactive
	Governments deliver online services and interactive portal/website with services to enhance the convenience of citizens are evident.
They also serve as basis for	Stage 4 – Transactional
determining progress made in the domain	Governments begin to transform themselves by introducing two-way interactions between 'citizen and government'.
	Stage 5 – Connected
	Governments transform themselves into a connected entity to respond to the citizens' needs by developing an integrated back office infrastructure.

MOTIVATION – WHY MEASURE ICT AND DG?

Growing pressure from citizens and other stakeholders for government to more visibly justify their investments on ICT related programs which are often delivers indirect benefits and public value.
 Many governments see measurable improvements in their DG programs as good investment, which could make these governments perceived as modern and transparent.
 Evidence of this is the practice of governments in publishing results of favorable DG rankings on their official portal.



WHY TO MEASURE DIGITAL GOVERNMENT PERFORMANCE OF YOUR UNIVERSITY? WHAT BENEFITS CAN BE EXPECTED?

PROVIDE AN EXAMPLE.

OVERVIEW

1	ΜΟΤΙVΑΤΙΟΝ	Why is it important to measure Digital Government?
2	CONCEPT	What are the basic concepts underpinning Digital Government measurement?
3	EXAMPLES	What kind of Digital Government measurement framework are currently used?
4	TRENDS	What are the future trends in Digital Government measurement?
5	CASES	What are the cases of Digital Government measurement?
6	SUMMARY	What was covered by this module?

WHAT ARE THE BASIC CONCEPTS UNDERPINNING DIGITAL GOVERNMENT MEASUREMENT?

Measurement refines conceptual definitions into concrete measures or variables. These variables which capture varying aspects of the concept are further refined into directly observable indicators.

TERM	DEFINITION	EXAMPLE
Construct	Conceptual underpinnings of a domain	DG Readiness
Concept	Systematic and formal definition of a construct	DG readiness could be defines as the capacity of a government to plan and implement DG

CONCEPT – TERMINOLOGY 2

TERM	DEFINITION	EXAMPLE	
Variable	Captures varying aspects of a concept	Aspects of DG Readiness	
		 infrastructure readiness human readiness availability of online services citizen participation in govern 	ment decision making, etc.
Indicator	Specific measures for a variable	infrastructure readinesshuman readiness	Internet usage Broadband penetration adult literacy ICT literacy

CONCEPT – STAGES

STAGE	DESCRIPTION
Readiness	Government addresses issues such as:
	 Awareness of leadership and citizens on benefits of DG
	 Development of required infrastructure
	 Provisioning of the necessary organizational structures to support collaboration among government entities and with non-state actors
	 Enabling equitable access to ICT-enabled services are addressed
Availability	The main focus is on ensuring that the critical mass of information and services required by citizens are provided on electronic platforms for citizens and businesses at reasonable level of service maturity.
Uptake	The main focus is how to ensure that provided services and information are actually used by their targeted users
Impact	Government addresses how concrete outcomes such as efficiency, effectiveness, enablement, and enhancement will be produced to ultimately generate the concrete public values

EGOV measurement could be conducted at different levels of governance by national and local governments, as well as international and inter-governmental organizations.

EGOV measurement could be organized according to four stages in the EGOV value chain: Readiness, Availability, Uptake and Impact.

			Value Cł	nain Stages	
		Readiness	Availability	Uptake	Impact
nce	International				
Governance Level	Regional				
	National				
0	Local				



HOW TO MEASURE DIGITAL GOVERNMENT PERFORMANCE OF YOUR UNIVERSITY? WHAT INDICATORS COULD BE APPLIED?

PROVIDE EXAMPLES.

OVERVIEW

1	MOTIVATION	Why is it important to measure Digital Government?
2	CONCEPT	What are the basic concepts underpinning Digital Government measurement?
3	EXAMPLES	What kind of Digital Government measurement framework are currently used?
4	TRENDS	What are the future trends in Digital Government measurement?
5	CASES	What are the cases of Digital Government measurement?
6	SUMMARY	What was covered by this module?

WHAT KIND OF DIGITAL GOVERNMENT MEASUREMENT FRAMEWORK ARE CURRENTLY USED?

EXAMPLE 1 – ITU

INSTRUMENT ORGANIZATION	Measuring the Information Society International Telecommunication Union (ITU)
TOOLS	 ICT Development Index - progress in ICT development in 155 countries through a composite index of 11 indicators ICT Price Basket - cost and affordability of ICTs in over 160 countries through a composite index of fixed line, mobile and broadband tariffs over time
EDITIONS	 2011 - broadband issues such as capacity, speed and quality, as well as the role of education, income, gender, age and location in Internet usage 2012 - revenue and investment in telecommunications and usage from a global capacity view in terms of measuring communication and capacity
RECOMMENDATIONS	 rapid rise in broadband uptake over the past five years but that governments can do more to maximize its impact the success of mobile phones can be replicated with mobile Internet access through smart phones strong policy measures to support ICT development as well as its contribution to broader economic goals

EXAMPLE 1 – ITU CONTINUED

11 ICT indicators grouped in three clusters:

- Access ICT readiness: fixed-telephony, mobile telephony, international Internet bandwidth, households with computers, and households with Internet
- Use ICT intensity: Internet users, fixed (wired)-broadband, and mobile broadband
- Skills ICT capability: adult literacy, secondary enrolment and tertiary enrolment

ICT DEVELOPMENT INDEX FOR ARGENTINA



DIGITAL GOVERNMENT AND DEVELOPMENT - DIGITAL GOVERNMENT MEASUREMENT

UNS, BAHIA BLANCA | 14-25 AUGUST 2017 | 19

EXAMPLE 2 – UNCTAD

INSTRUMENT

ORGANIZATION

FOCUS

RECOMMENDATIONS

Information Economy Report

United Nations Conference on Trade and Development (UNCTAD)

Private sector ICT

- Enhance quality of ICT infrastructure, including opportunities of mobility, where governments are called upon to meet the needs of enterprises
- Enhance business use of ICT where government can help make services available and affordable
- Stimulate the ICT sector by creating competition, offering training, and increasing trust
- Use ICT to create a provision for effectiveness and reform in order to reduce cost of services and expand their reach.

EXAMPLE 3 – UN

ORGANIZATION	Partnership on Measuring ICT for Development:
	 ITU UNCTAD UNDESA UNECA UNECLAC, etc.
OBJECTIVE	Identify ICT indicators that can be compared on a global basis and assist developing countries to collect them and track progress over time
COUNTRIES	68
PUBLICATIONS	Framework for a Set of E-government Core Indicators – basic indicators related to e- government

EXAMPLE 4 – EC – DIGITAL AGENDA

ORGANIZATION	European Commission (EC)		
STRATEGY	Digital Agenda 2020		
OBJECTIVES	 a vibrant digital single market, interoperability and standards, trust and security, fast and ultra fast Internet access, research and innovation, enhancing digital literacy, skills and inclusion, and ICT-enabled benefits for EU society 		
ACTION PLAN	European eGovernment Action Plan 2011-2015: Harnessing ICT to promote smart, sustainable & innovative Government		
OBJECTIVES	 Empower citizens and businesses to use e-government services designed around users, and increase access and transparency Reinforce mobility in the single market through e-government Use e-government to improve effectiveness while promoting a sustainable economy Create appropriate legal and technical enablers by setting policy priorities 		

EXAMPLE 5 – EC – COMMON SERVICES

INSTRUMENT	Digitizing Public Services in Europe: Putting ambition into action		
ORGANIZATION	European Commission (EC)		
OBJECTIVES	Measuring maturity across "20 basic public services" using a progressive stage model: information, one-way interaction, two-way interaction, transaction and targetisation/automation		
RESULTS	The average score is 90%, up from 83% in 2009		
SOURCES	 online service analysis across some 10,000 websites surveys with nominated representatives from Member States evaluations carried out by experts 		
NEW INDICATORS	 maturity of "life events" and customer journeys for starting a business and losing and finding a job availability of key enablers, such as in the back-office, such as eID, interoperability guidelines, open standards and single sign-on features. 		
NEW STEPS	More focus on take-up, closing digital divide and demonstrating outcomes:		
	 Stabilize the scope of measurement and offer a broader set of benchmarks Develop a process for indicator innovation and sharing of good practices Increase comparisons to leading international practices 		

EXAMPLE 6 – OECD – GOVERNMENT AT A GLANCE

INSTRUMENT	Government at a Glance
ORGANIZATION	Organisation for Economic Co-operation and Development (OECD)
OBJECTIVES	Assessing government performance for 42 countries across 10 policy domains through 58 indicators of good government, including:
	 e-government strategies, e-procurement, and uptake of e-government services
FINDINGS	 Countries look to e-government as an enabler to public sector reform and a tool to do more with less in the aftermath of the financial crisis Priorities: reducing administrative burdens - 96% cost cutting - 86% spurring innovation - 74% improving effectiveness and responsiveness - 67% low levels of usage is due to the inability of vulnerable segments of society to use digital channels due to lack of awareness or lack of IT skills
	 broadband proliferation and growth in m-government as potential solutions

EXAMPLE 7 – OECD – M-GOVERNMENT

INSTRUMENT ORGANIZATION OBJECTIVES

M-Government: Mobile Technologies for Responsive Governments and Connected Societies OECD with ITU and UNDESA

Measure m-government - "the adoption of mobile technologies to support and enhance government performance and foster a more connected society"

FINDINGS

- Global penetration rate
 - 5% in 1998
 - 55% in 2008
 - 96% in 2018
- Access to mobile networks (2G, 3G, and 4G) is available to 90% of the world population, including 80% of whom live in rural areas
- Critical potential of mobile technologies for improved governance and economic and social progress.

EXAMPLE 8 – WEF – NETWORKED READINESS

INSTRUMENT	Networked Readiness Index (NRI) , part of Global Information Technology Report		
ORGANIZATION	World Economic Forum (WEF)		
OBJECTIVES	Measures the extent to which 142 economies around the world use ICT to improve economically and socially		
FINDINGS	Growth of mobile devices, big data and social media as drivers of hyperconnectivity – Internet and associated content are available all the time and at any time		
METHODOLOGY	 Introduction of an ICT impact sub-index, in addition to the environment, readiness, and usage, to measure the effect of ICT on the economy and society Focusing the readiness sub-index on infrastructure, affordability and skills Inclusion of innovation and entrepreneurship in the ICT environment sub-index, in addition to ICT uptake Separation of usage from impacts in the usage sub-index An update to the selection of variables to take into account technology changes; for example, removing the number of fixed telephone lines and adding mobile broadband subscriptions; the composite index now features 53 variables 		



UN E-GOVERNMENT SURVE	Y		
WORLD'S RANK	2016	41	
	2014	46	
	2012	56	
	2010	48	
	2008	39	
	2005	34	

UN E-GOVERNMENT SURVEY	2016		
		STAGE	
		Digitization	Х
ONLINE SERVICE INDEX	0.7101 > 0.5	Transformation	Х
E-PARTICIPATION INDEX	0.6271 < 0.63	Engagement	
		Contextualization	

Source: United Nations e-Government Survey 2016,

https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2016

NRI FOR ARGENTINA



NETWORK READINESS INDEX 2017

	Rank (out of 139)	Value (1–7)
Networked Readiness Index		.3.8
Networked Readiness Index 2015 (out of 143)		3.7
Networked Readiness Index 2014 (out of 148)		3.5
Networked Readiness Index 2013 (out of 144)		3.5
A. Environment subindex		3.3
1st pillar: Political and regulatory environment		3.0
2nd pillar: Business and innovation environment		3.6
B. Readiness subindex		4.7
3rd pillar: Infrastructure		4.3
4th pillar: Affordability	n/a	n/a
5th pillar: Skills	71	5.0
C. Usage subindex	73.	3.8
6th pillar: Individual usage		4.9
7th pillar: Business usage		3.4
8th pillar: Government usage		3.3
D. Impact subindex		3.4
9th pillar: Economic impacts		
10th pillar: Social impacts		3.7



Source: http://reports.weforum.org/global-information-technologyreport-2016/economies/#economy=BRA



Features:

- Continues on its upward trajectory, ranking 89th this year.
- Weak (though improving) regulatory and innovation environments seem to be the two biggest bottlenecks preventing larger gains from digital technologies.
- With mobile phone use one of the highest in the world (13th) and an overall solid adoption rate among individuals, businesses are making use of digital technologies to transact with consumers (76th), yet B2B ICT use remains low (120th).
- There is also much room for greater public-sector adoption of digital technologies: although the Argentinian government seems to be making good use of ICTs to provide services to the population (55th), the business community perceived the government as lacking in vision and effort when it comes to ICT promotion.
- Consistent with previous years, Argentina does not have data in the affordability pillar because of the lack of reliable PPP estimates.

Source: http://reports.weforum.org/global-information-technologyreport-2016/economies/#economy=BRA

EXAMPLE 9 – WEF – FUTURE OF GOVERNMENT

INSTRUMENT	The Future of Government: Lessons Learned from around the World		
ORGANIZATION	World Economic Forum (WEF)		
OBJECTIVES	FAST (Flatter, Agile, Streamlined, Tech-enabled) framework for governments to be effective in today's interdependent and rapidly evolving environment		
COVERAGE	 open government and open data, the civil service in the 21st century, metrics of government transformation, benchmarking public value from the perspective of citizens cybersecurity for open government, examples of how governments around the world are using ICTs, including social media, to transform themselves and engage constituents a holistic framework to measure the various aspects of FAST (readiness) and its "public value" (outcome) 		

EXAMPLE 10 – WASEDA UNIVERSITY

1	
INSTRUMENT	Waseda University International e-Government Ranking
ORGANIZATION	Waseda University
OBJECTIVES	Survey the development of government websites worldwide
COVERAGE	55 countries
INDICATORS	30 sub-indicators across seven categories:
	 network preparedness, required interface functioning applications, management optimization, national portal, CIO in government, e-government promotion, and e-participation
TRENDS	Cloud computing, social media, big data, business continuity plan / disaster recovery plan, digital inclusion, cyber security, mobile government and ICT applications for ageing society



WHAT IS THE POSITION OF ARGENTINA IN VARIOUS INTERNATIONAL RANKINGS?

OVERVIEW

1	ΜΟΤΙVΑΤΙΟΝ	Why is it important to measure Digital Government?
2	CONCEPT	What are the basic concepts underpinning Digital Government measurement?
3	EXAMPLES	What kind of Digital Government measurement framework are currently used?
4	TRENDS	What are the future trends in Digital Government measurement?
5	CASES	What are the cases of Digital Government measurement?
6	SUMMARY	What was covered by this module?

WHAT ARE THE FUTURE TRENDS IN DIGITAL GOVERNMENT MEASUREMENT?

The world of measurement needs to evolve to meet new expectations:

- Increasing the number of countries.
- Enhancing indicators and developing new methods to capture trends.
- While in the past most reports favored the retention of stability for historical comparison purposes, some have now made greater changes:
 - WEF abandoned a relatively stable framework going back to 2002, in search of a refined model that includes an increasing focus on the challenging measurement of outcomes.
 - The EC benchmarking survey, which also continues to evolve, is placing greater emphasis on piloting and broadening its assessments to the local level.

If people do not have access, they cannot use ICTs:

- Renewed efforts to bridge the digital divide are garnering increased attention around the world
- Usage metrics are now frequent components of various reports and models.

The task of getting people online is only the first step:

- Increasingly, what people do with their time online is gaining attention "useful usage".
- Low e-government usage leaves much room for improvement across the world EU's modest goal of having 50% of the population use e-government although 80% of people there are already online.
TREND 3 – OUTCOMES AND IMPACT

Greater emphasis on outcomes and the impact of initiatives, both of which point to a link between e-government and sustainable socio-economic development.

- Most reports seek to capture this trend implicitly or explicitly.
- The task to measure inputs (such as budgets and inter-linkages on the back-end) to outputs (such as return on investment and socio-economic progress) is complex.
- Turning the focus on micro targeting people, ranging from reaching vulnerable groups in bridging the digital divide and opening up specific data to capturing the results of such policies.

TREND 4 – THE NEXT PHASE

- Efforts to close digital divide and improve usage coupled with open data and an increased reliance on ICTs by both governments and users – is likely to enhance efforts in sustainable development
- It can also put socio-economic progress at risk given that an increase in dependence leads to an increase in vulnerability
- Few reports deal with cyber security, despite an increase in cyber crime and cyber threats
- This topic is likely to receive more attention over the next years as e-government continues to improve



HOW ARE THE CHANGING MEASUREMENT TRENDS LIKELY TO IMPACT THE STANDING OF ARGENTINA IN VARIOUS RANKINGS?

OVERVIEW

1	ΜΟΤΙVΑΤΙΟΝ	Why is it important to measure Digital Government?
2	CONCEPT	What are the basic concepts underpinning Digital Government measurement?
3	EXAMPLES	What kind of Digital Government measurement framework are currently used?
4	TRENDS	What are the future trends in Digital Government measurement?
5	CASES	What are the cases of Digital Government measurement?
6	SUMMARY	What was covered by this module?

WHAT ARE CASES OF DIGITAL GOVERNMENT MEASUREMENT?

CASES – INTERNATIONAL AND REGIONAL

LEVEL	CASES	ID
International	 UN E-Government Survey, 2002 – 2016 	UNDESA
	 Accenture's E-Government Leadership Survey, 2001 – 2009 	Accenture
	\circ Brown University Global E-Government Ranking, 2001 – 2008	Brown
	 Waseda University World e-Government Ranking, 2005 - 2011 	Waseda
Regional	 Measuring EGOV Arab States 	Arab-States
	 Benchmarking Public Services Digitalization in Europe 	Europe
	 Measuring State of EGOV in Latin America 	Latin-America
	 SCAN-IT Indicators of ICT in Africa 	Africa

CASES – NATIONAL AND LOCAL

LEVEL	CASES	ID
National	Australia, Measuring Efficiency and Effectiveness of EGOV, 2004	Australia
	Bahrain, Measuring EGOV for smarter public service delivery, 2007	Bahrain
	Brazil, Measuring EGOV Appropriation, 2010	Brazil
	Canada, Performance measurement for Government Online, 2003	Canada
	Denmark, Measuring EGOV for Smarter Public Service, 2010	Denmark
	Singapore, Annual EGOV Perception Survey, 2010	Singapore
	United States, Report on Benefits of President's EGOV Initiative, 2011	US
Local	Hong Kong SAR, Audit of EGOV Service Provision	Hong Kong
	United States, Identifying Best Practices in State EGOV	US-States
	Norway, Current Status and Emerging Issues in EGOV	Norway-LG
	United Kingdom, Process Evaluation of Local EGOV	UK-LG

UNITED NATIONS EGOV SURVEY					
Organization	United Nations Department of Economic and Social Affairs through its Division of Public Administration and Development Management (DPAPM)				
Purpose	To establish the global state of EGOV development and provide ideas on possible innovations through cases from other countries				
Measures	Online services, Telecommunication infrastructure and E-Participation				
Approach	Survey of the online presence of all 192 Member States				
Partners	ITU, UNESCO, UNDP and Civic Research Group for data collection and experts from academia and practice				
Result	Reports include ranking of countries, good practice cases and related policy discussions				

EVOLUTION	2001	Revealing EGOV profiles of countries and capacity to sustain EGOV development
	2003	EGOV development in support of socio-economic development
	2004	Addressing the disparity in Access to EGOV information and Services
	2005	Developing socially-inclusive governance through EGOV
	2008	Transition to Connected Governance
	2010	Leveraging EGOV to support recovery efforts from financial and economic crises
	2012	Leveraging EGOV to support Sustainable Development
	2014	EGOV for the future we want
	2016	EGOV in support of Sustainable Development

Measures	Online Services	Emerging Information	Information published on Government websites
		Enhance Information	Enhanced one-way or simple two-way e- communication between government and citizen through Government websites
		Transactional Services	Two-way communication with their citizens through Government websites with e-authentication of the citizen's identity
		Connected Services	E-services and e-solutions cut across the departments and ministries in a seamless manner
	Human Capital	Adult literacy rate	The ratio of adult in the population that is can read and write
	Telecomm	Internet users	No of internet users per 100 persons
	Infrastructure	Main telephone lines	No of telephone lines per 100 persons
		Mobile subscribers	No of mobile phone subscription per 100 persons
		Personal computers	No of personal computers per 100 persons
		Total fixed broadband	No of fixed broadband subscriber per 100 persons

Measures	E-Participation	e-Information	Communication with citizens and businesses that supports policy-making
		e-Consultation	Communication with citizens and businesses at government initiatives
		e-Decision making	Communication with citizens that results in direct citizen input into public policy

ONLINE SERVICE INDEX



Source: United Nations e-Government Survey 2016, https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2016

UNS, BAHIA BLANCA | 14-25 AUGUST 2017 | 48

EVOLUTION – INTERNATIONAL CASES

YEAR	UN EGOV SURVEY	BROWN	WASEDA	ACCENTURE
2000				Rhetoric vs. Reality
2001	Benchmarking EGOV			Rhetoric vs. Reality - Closing the Gap
2002		Delivery of		Realizing the vision
2003	EGOV at the Crossroad	Public sector information		Engaging the Customer
2004	Towards Access for	and services		High Performance, Maximum Value
	Opportunity	online		
2005	From EGOV to e-Inclusion		Infractivity and	New Everetations, New Evertings
			Infrastructure and organizational readiness	New Expectations, New Experience
2006		1	organizationatreadmess	Building trust
2007			Promoting and Establishment of	Delivering the promise
2008	From EGOV to Connected	Improving	Government CIO	Measuring People's impression of
	Governance	technology		Public Value
		utilization		
2009			EGOV as tool for addressing	Creating shared responsibility for
			financial crisis, inclusion and environmental concerns.	better outcome
2010	Leveraging EGOV at a time of		environmental concerns.	
	financial and economic crisis			
2011	500000 00	-		
2012	EGOV for SD			
2014	EGOV for the future we want			
2016	EGOV in support of SD			

ARGENTINA IN UN EGOV SURVEY

YEAR	E-Government Rank	E-Government Index	E-Participation Index	Online Service Index	Human Capital Index	Telecommunication Infrastructure Index
2003	31	0.57704	0.5862	0.62445	0.92	0.18667
2004	32	0.58712	0.2459	0.64285	0.94	0.1785
2005	34	0.59713	0.26984	0.65769	0.96	0.17371
2008	39	0.5844	0.45454	0.55852	0.94698	0.24844
2010	48	0.54668	0.2	0.41269	0.95026	0.28116
2012	56	0.62279	0.2895	0.52941	0.90381	0.43517
2014	46	0.63059	0.54901	0.55118	0.8571	0.48347
2016	41	0.6978	0.62712	0.71014	0.88021	0.50306

Source: United Nations e-Government Surveys 2003-2016

ARGENTINA IN UN EGOV SURVEY

Country	Region	Sub-Region	OSI	HCI	тіі	EGDI	EGDI Level	2016 Rank	
United States of America	Americas	North America	0.9275	0.8815	0.7170	0.8420	Very High	12	
Canada	Americas	North America	0.9565	0.8572	0.6717	0.8285	Very High	14	
Uruguay	Americas	South America	0.7754	0.7820	0.6137	0.7237	High	34	
Argentina	Americas	South America	0.7101	0.8802	0.5031	0.6978	High	41	
Chile	Americas	South America	0.7754	0.8124	0.4970	0.6949	High	42	
Brazil	Americas	South America	0.7319	0.6787	0.5025	0.6377	High	51	
Costa Rica	Americas	Central America	0.6377	0.7436	0.5129	0.6314	High	53	\frown
Barbados	Americas	Caribbean	0.4420	0.8113	0.6397	0.6310	High	54	
Colombia	Americas	South America	0.7899	0.7000	0.3813	0.6237	High	57	~~~~
Mexico	Americas	Central America	0.8478	0.6993	0.3114	0.6195	High	59	

Source: United Nations e-Government Surveys 2003-2016

FROM RANKING TO LEARNING

OBSERVATIONS

- Global DG rankings are powerful instruments for tracking the relative progress of countries in DG 1 development, with real power to mobilize leadership and action.
- Given multiple rankings and changing trends and measurement criteria, how can policy- and decision-2 makers use DG rankings to guide effective DG development?

CHALL	ENGES	RE	COMMENDATION
1	One model applied to all countries, regardless of the level of development and chosen development path.	1.	DG rankings as a data source, local context informs selection of indicators
2	Lack of influence by the countries assessed on the way the rankings are applied to their own contexts.	2.	Policy-makers carry out selection to create a benchmarking instrument to reflect local conditions and priorities
3	The rankings are used to directly drive DG	3.	The role international organizations

The role international organizations 3. is to provide data and enable selection

strategies and programs.



WHICH STAGES OF THE DIGITAL GOVERNMENT EVOLUTION ARE RELEVANT TO DIFFERENT MEASUREMENT FRAMEWORKS/CASES?

OVERVIEW

1	ΜΟΤΙVΑΤΙΟΝ	Why is it important to measure Digital Government?
2	CONCEPT	What are the basic concepts underpinning Digital Government measurement?
3	EXAMPLES	What kind of Digital Government measurement framework are currently used?
4	TRENDS	What are the future trends in Digital Government measurement?
5	CASES	What are the cases of Digital Government measurement?
6	SUMMARY	What was covered by this module?

WHAT WAS COVERED BY THIS MODULE?

SUMMARY

1	MOTIVATION	Maturity models, development paths, determining progress
2	CONCEPT	Terminology, stages, levels of measurement
3	ІМРАСТ	EGOV measurement, SD measurement, EGOV4SD measurement
4	EXAMPLES	ITU, UNCTAD, UN, EC, OECD, WEF
5	TRENDS	Evolving benchmarking; usage and digital divide; outcomes and impact; next phase
6	CASE	UN e-government survey

ASSIGNMENT

- 1 What is the relative standing of your country in various Digital Government measurement efforts?
- 2 How to explain the standing of your country in such measurement efforts?
- 3 Correlate the external measurement with the evolution of Digital Government in your country?



- 1 Adegboyega Ojo, Tomasz Janowski and Zamira Dzhusupova. Measuring Electronic Governance State of Research. E-Macao Project. 2012.
- 2 Adegboyega Ojo, Zamira Dzhusupova and Tomasz Janowski. Measuring Electronic Governance State of Practice. E-Macao Project. 2012.
- 3 Kim Andreasson. 2014 UN e-Government Survey: e-Government as an Enabler for Collaborative Governance. 2012.
- 4 UNDESA/DPADM. United Nations e-Government Surveys: 2003-2016.
- 5 ITU. ICT Development Index. 2016.
- 6 WEF. Network Readiness Index. 2017.

THANK YOU FOR YOUR ATTENTION.

QUESTIONS?

Tomasz Janowski

Elsa Estevez

Pablo Fillottrani