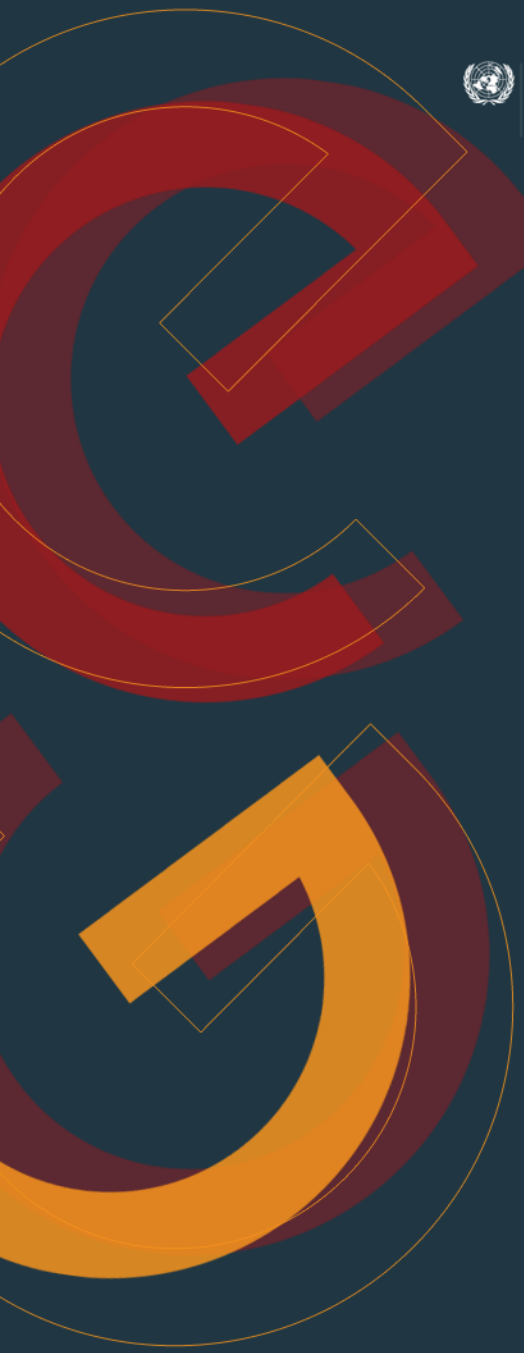

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Policy-Driven EGOV

A Context for EGOV at W3C?

Tomasz Janowski

UNU-IIST Center for Electronic Governance

PUBLIC SECTOR ICT

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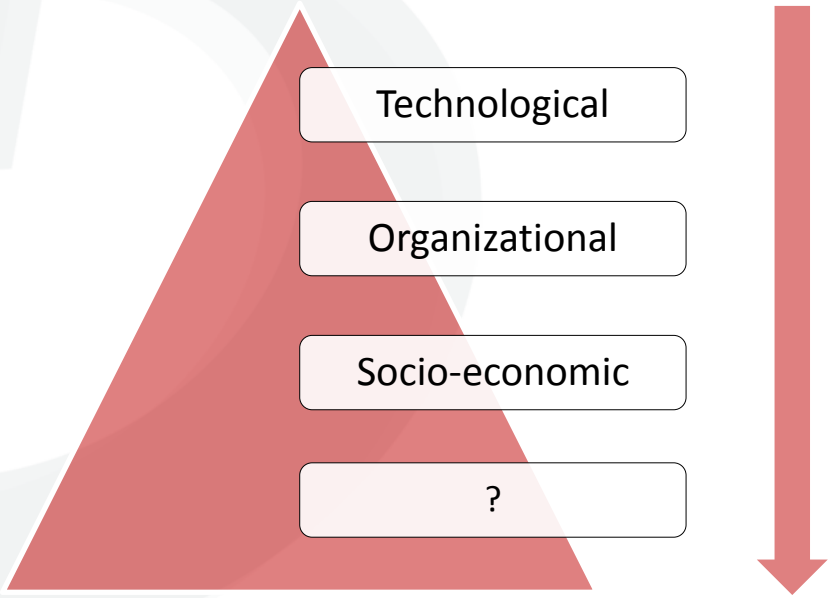
Two decades of development, innovation and research – well established area

Evolving Goals	Expanding Context	Time
Increasing the quality and efficiency of internal government operations		
Delivering better public services across traditional and electronic channels		
Facilitating administrative and institutional reform in government		
Engaging citizens and other non-state actors in policy- and decision-making processes		
Supporting policy and development goals in health, education, security and other sectors		



Uncertain future and impact on government, society and economy

TECHNOLOGICAL RESPONSE

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TECHNOLOGY IN GOVERNMENT	
GOALS	Establishing government portals
	Automating administrative processes
	Providing online access to public services
CHALLENGES	Connecting agencies, citizens and businesses to the Internet
	Ensuring interoperability of systems run by different agencies
	Connecting legacy systems to other systems and the Internet
LIMITATIONS	Technology can only deliver if accompanied by organizational change
	Developing more mature services raises organizational issues
	Technological development alone does not produce public value

ORGANIZATIONAL RESPONSE

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ELECTORNIC GOVERNMENT	GOALS	Reengineering administrative processes
		Enabling collaboration between government agencies
		Offering services across agencies according to the needs of citizens
	CHALLENGES	Hierarchical organization, inward looking culture and lack of collaboration
		Orientation on maintenance, not outcomes
		Resistance to change
	LIMITATIONS	Higher service maturity may not lead to higher usage
		Lack of public consultation and capacity building are sources of failure
		Internal government transformation alone does not create public value

SOCIO-ECONOMIC RESPONSE

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ELECTRONIC GOVERNANCE	GOALS	Utilizing social media to engage citizens in government decision-making
		Making government data available for businesses to build public services
		Integrating public, private and non-profit services into one service space
	CHALLENGES	Digital divide – gender, age, socio-economic, geographic, etc.
		Lack of trust – citizens not trusting government, government not trusting citizens
		Engaging non-state actors in public service delivery
	LIMITATIONS	What local policy objectives are being pursued?
		How are such objectives pursued given the local conditions?
		What is the impact of meeting such objectives on the local environment?

TURNING POINT

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Turning point

Economic pressures, social tensions, global competition, tremendous development needs all question “generic” approaches to public sector ICT investment.

Local development context

Directly supporting policy and development goals in health, education, economy, environment, governance, security and other sectors while taking into account specific local conditions and priorities.

Public investment in ICT is expected to produce public value

EGOV contributing to a larger policy objective e.g. Sustainable Development (EGOV4SD)

AIM AND OVERVIEW

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AIM

Present and illustrate the concept of a policy-driven EGOV as a possible context for EGOV at W3C.

OVERVIEW

ELECTRONIC GOVERNANCE

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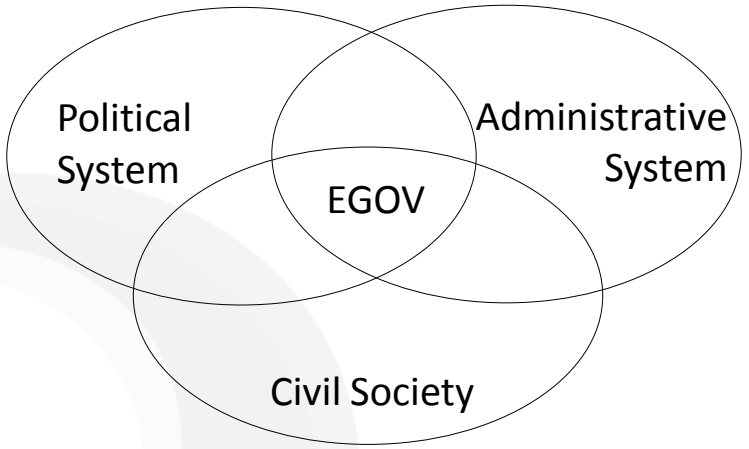
DEFINITION

Transforming the working of government and its interactions with citizens, businesses, civil society and other arms of government through technology



DIMENSIONS

GOVERNMENT	TECHNOLOGY	INTERACTION	CUSTOMERS	SOCIETY
Mission	Equipment	Channels	Information needs	Demography
Role	Infrastructure	Channel Strategy	Service needs	Digital inclusion
Values	Data	Interoperability	Producer roles	Institutional change
Operations	Social Media	Partnerships	Consumer roles	Social tension
Services	Services	Goals	Accessibility	Globalization
Institutions	Applications	Governance	Trust	Migration

SUSTAINABLE DEVELOPMENT

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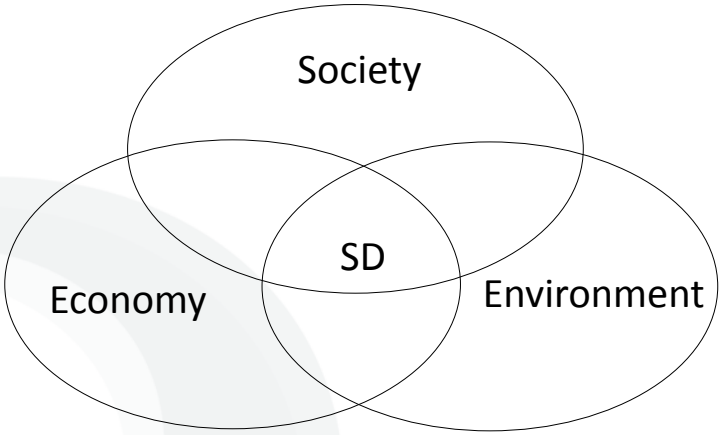
DEFINITION

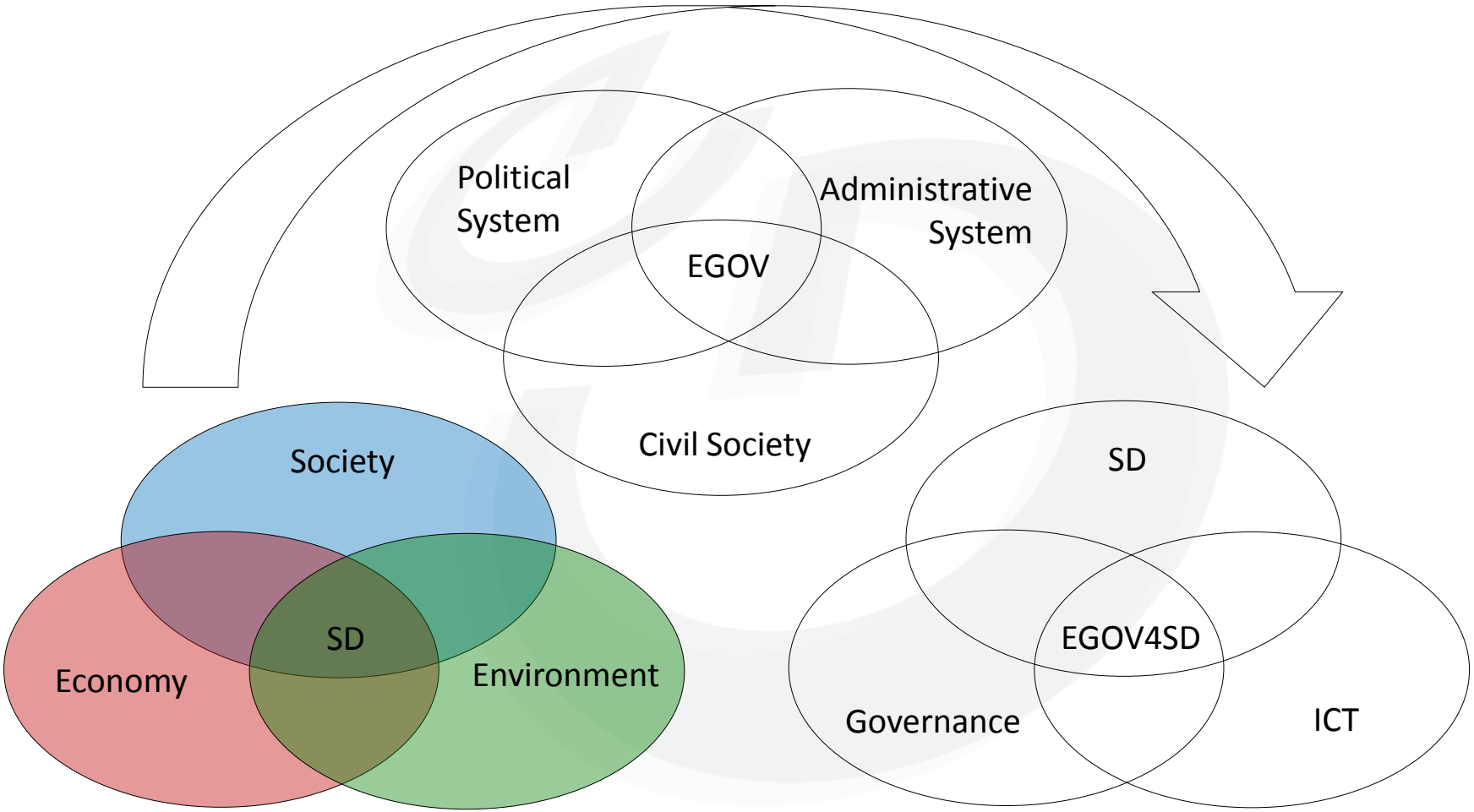
Development that meets the needs of the present generation without compromising the ability of the future generations to meet their own needs.



DIMENSIONS

ENVIRONMENTAL	ECONOMIC	SOCIAL	TRANSITIONAL
Climate change	Transportation	Poverty and inequality	Green accounting
Water Scarcity	Logistics	Hunger and malnutrition	Renewable energy
Land degradation	Energy Consumption	Gender imbalance	Voice and empowerment
Fish stock depletion	Economic Growth	Illiteracy	Environmental practice
Biodiversity loss		Maternal/infant mortality	Policy integration
Deforestation		Access to communication	

EGOV + SD = EGOV4SD



EGOV4SD DEPENDENCY MATRIX 1

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SD		EGOV DIMENSIONS				
DIMENSIONS	GOALS	GOVERNMENT	TECHNOLOGY	INTERACTION	CUSTOMERS	SOCIETY
Social	Access for all					
	Reducing poverty and inequality					
	Reducing gender inequality					
	Reducing infant and maternal mortality					
Economic	Transportation and logistic					
	Economic growth					
	Improved energy consumption					

EGOV4SD DEPENDENCY MATRIX 2

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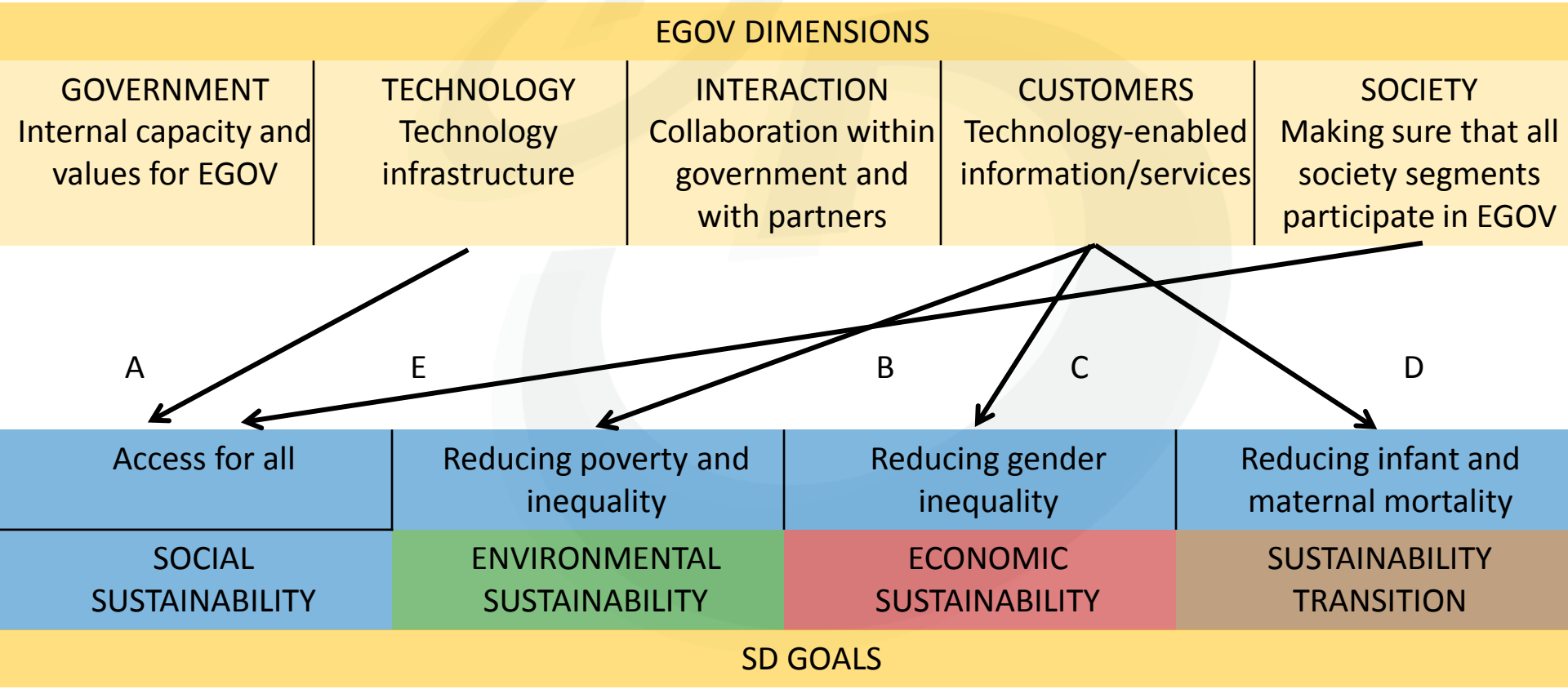
SD		EGOV DIMENSIONS				
DIMENSIONS	GOALS	GOVERNMENT	TECHNOLOGY	INTERACTION	CUSTOMERS	SOCIETY
Environmental	Climate change					
	Improved water management					
	Reduced land degradation					
	Restoration of biodiversity					
Transitional	Green accounting					
	Access of under-privileged groups					
	Adoption of environmentally friendly practices					
	Energy from renewable sources					

SOCIAL SUSTAINABILITY – MAPPING

How can EGOV initiatives explicitly address the Social Sustainability goals?



SOCIAL SUSTAINABILITY – MEASURES

A	EGOV technology initiatives should consider accessibility (cost, ability to use, etc.) of all segments of society in their technology choices, e.g. support for mobile channels for service delivery.
B	EGOV services should enable citizens and particularly the disadvantaged to meet their critical livelihood needs like access to jobs, primary health services, educational services, sanitation, etc.
C	EGOV services in rural areas and at lower levels of government should be specifically targeted at women as critical actors in the social and economic development of families.
D	EGOV services should support government public health efforts in reducing infant and maternal mortality by providing necessary information to mothers, particularly in the less developed areas.
E	EGOV initiatives should involve participation of different members of the society and should not exacerbate existing digital divide.

SOCIAL SUSTAINABILITY – STRATEGIES

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SINGAPORE 2015	KOREA 2012	ESTONIA 2013
Next generation infocomm infrastructure	Public-private collaborative governance	One service space - public, private and third sectors
Innovation centers and entrepreneurship	Seamless and converged informatization	Paperless document management
Infocomm competency framework	Active response to adverse effects of informatization	Traceability of the use of one's own data
Electronic health records	Utilization-focused services	Internet in rural areas
EUROPEAN UNION 2015	**UNITED NATIONS 2010**	**WASEDA 2011**
Improve (seamless) services to cater for different needs	Government data sharing based on open standards	Increase of social media applications for participation
Invite third parties in EGOV development	From readiness to development	Cloud computing and data center virtualization
Involve stakeholders in public policy processes	Agility to respond to more demands as revenues drop	Disaster management and business continuity
Reduce carbon footprint	Citizen-centric practice	Smart grid and green technology

SOCIAL SUSTAINABILITY – EXAMPLE

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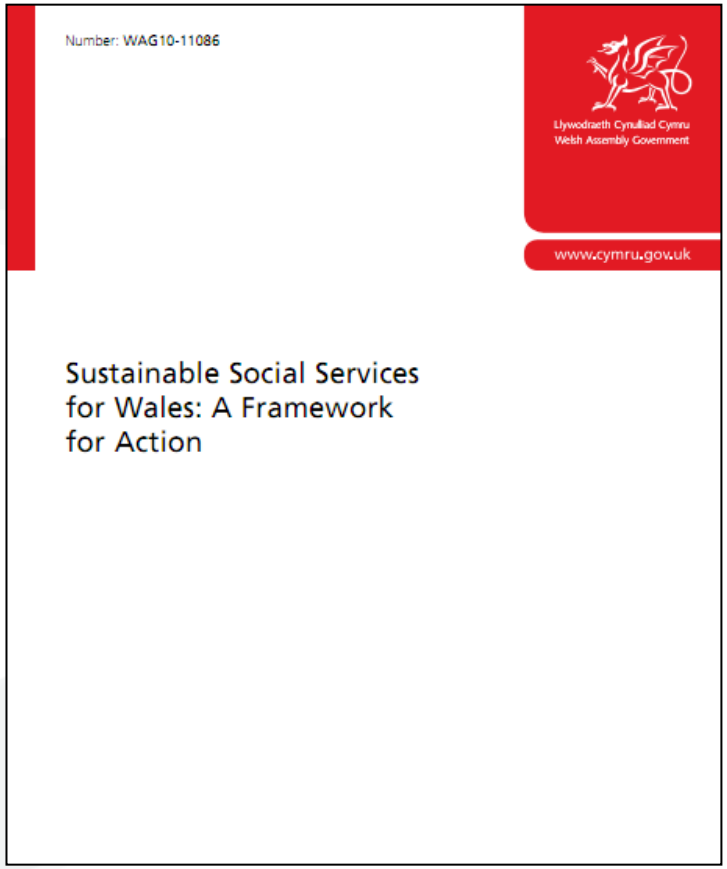
Sustainable Social Services for Wales, UK

Priority actions:

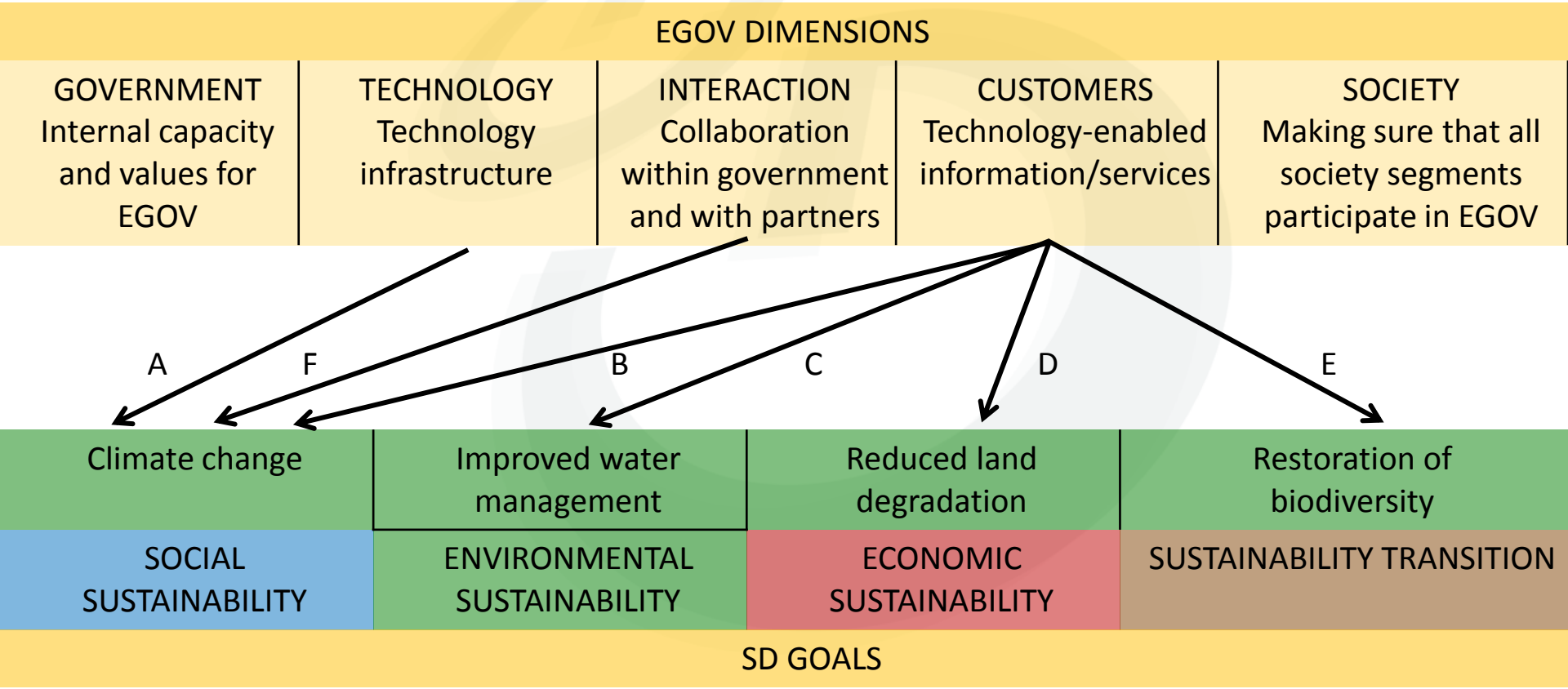
1. A strong national purpose and expectation and clear accountability for delivery
2. A national outcomes framework
3. Citizen centered services
4. Integrated services
5. Reducing complexity
6. A confident and competent workforce
7. Safeguarding and promoting the wellbeing of citizens
8. A new improvement framework for Wales



http://wales.gov.uk/docs/dhss/publications/110216frameworken.pdf

ENVIRONMENTAL SUSTAINABILITY – MAPPING

How can EGOV initiatives explicitly address the Environmental Sustainability goals?



ENVIRONMENTAL SUSTAINABILITY – MEASURES

A	Use of low or zero carbon-emission ICT equipment for government operations (front and back office)
B	Providing information and services to citizens on how they can contribute to addressing the climate change (e.g. carbon footprint calculators) to support decisions about the choice of delivery channels.
C	Providing information and services for citizens and businesses on better domestic water management practices and smart metering systems.
D	Providing information to citizens on better land use practices and information systems at government offices for better management of land use, with relevant services for citizens.
E	Providing information to citizens on the practices that can improve or restore biodiversity and develop relevant information systems to monitor ecological areas of interests.
F	Develop partnerships with relevant environmental agencies to deliver A – E, including improved water management, reduction of land degradation and restoration of biodiversity.

ENVIRONMENTAL SUSTAINABILITY – STRATEGIES

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ENVIRONMENTAL SUSTAINABILITY – EXAMPLE

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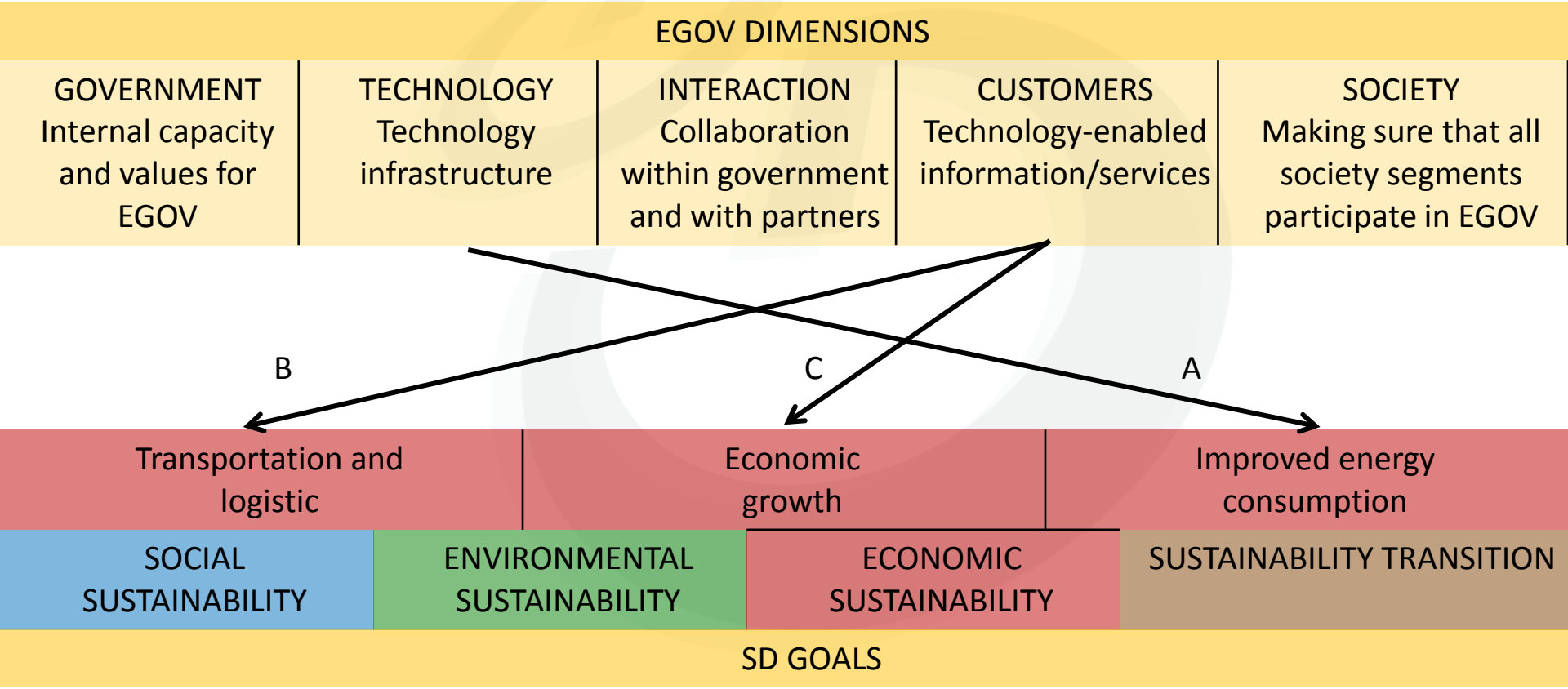
Crowd-sourcing renewable energy strategy on the Internet, Maldives:

AIM	Experts around the world are invited to provide technical advice on low-carbon energy generation, storage and financing through http://maldives.co2.org
GOALS	Making the country carbon-neutral by 2020 Addressing lack of local technical expertise
SCOPE	8 themes and 65 theme-related questions, e.g.

1. How should Maldives pursue carbon neutrality vis-à-vis short-term economic wellbeing?
2. How should Maldives account for tourist air travel in its quest for carbon neutrality?
3. Should air travelers contribute financially to de-carbonization of the Maldives economy?
4. What level of oil price should the Maldives use for planning its energy future?

ECONOMIC SUSTAINABILITY – MAPPING

How can EGOV initiatives explicitly address the Economic Sustainability goals?



ECONOMIC SUSTAINABILITY – MEASURES

A	Use of energy efficient technology equipment in government operations and incorporation of such equipment in the government procurement practice.
B	Providing information and services to citizens to help reduce transport congestion e.g. real time service to check traffic situations in different parts of cities.
C	Providing information and services to enterprises and businesses to support their operations, interaction with governments, and growth.

ECONOMIC SUSTAINABILITY – STRATEGIES

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ECONOMIC SUSTAINABILITY – EXAMPLE

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Green occupational guidelines for 23 occupations by California Government

Informational services:

1. Work to be carried out as a …
2. Required skills
3. Possible tasks and required skills
4. Working conditions
5. Job expectations
6. Wages and benefits
7. Job outlook
8. Qualifications
9. Training opportunities
10. Job opportunities

California Occupational Guides

Summary Guide (Printer Friendly)
Detailed Guide (Printer Friendly)
Detailed Report-Jump to:
Top of Page
What Would I Do?
Wages and Benefits
Job Outlook
How Do I Qualify?
Job Search Tips

I want to:
Search by Topic
Search by Keyword

LaborMarketInfo

EDD Employment Development Department State of California

Estimated Employment and Projected Growth
Carpenters

Geographic Area (Estimated Year-Projected Year)	Estimated Employment	Projected Employment	Numeric Change	Percent Change	Additional Openings Due to Net Replacement
California (2008-2018)	138,700	148,900	10,200	7.4	17,300

Source: EDD/LMID Projections of Employment by Occupation

View Projected Growth for All Area

Annual Job Openings

In California, an average of 1,020 new job openings per year is expected for Carpenters, plus ar additional 1,730 job openings due to net replacement needs, resulting in a total of 2,750 job openings.

Estimated Average Annual Job Openings
Carpenters

Geographic Area (Estimated Year-Projected Year)	Jobs From Growth	Jobs Due to Net Replacements	Total Annual Job Openings
California (2008-2018)	1,020	1,730	2,750

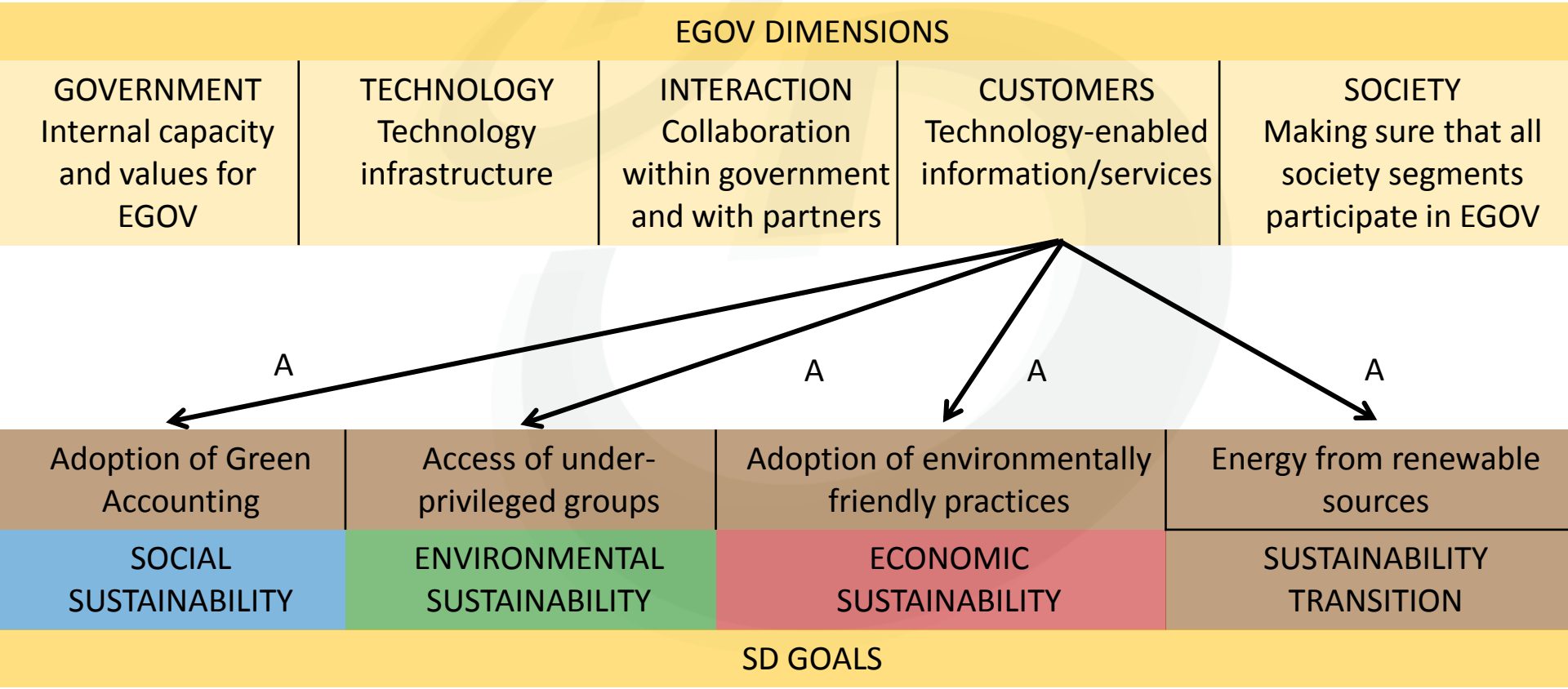
Source: EDD/LMID Projections of Employment by Occupation

View Data for All Areas

http://www.labormarketinfo.edd.ca.gov/OccGuides/GreenIndexOfGuides.aspx?Geography=0601000000

SUSTAINABILITY TRANSITION – MAPPING

How can EGOV initiatives explicitly address the Sustainability Transition goals?



SUSTAINABILITY TRANSITION – MEASURES

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A Provide information and electronic services that show key SD indicators and their interpretation for citizens and agency management [9]:

SOCIAL INDICATORS		ECONOMIC INDICATORS	
1.	Population, density, growth rate	1.	Air travel
2.	Life expectancy, infant mortality	2.	Energy consumption
3.	Urban/rural population distribution	3.	Growth of economic activity
4.	Percentage of voting population	4.	Agricultural production density
ENVIRONMENTAL INDICATORS		**TRANSITIONAL INDICATORS**	
1.	Plant biodiversity	1.	Changes in food and nutrition style
2.	Animal population	2.	Environmental and general education
3.	Depletion of fossil fuels	3.	Percent of energy from renewable sources
4.	Topsoil and farmland loss	4.	Access of the poor to public decision-making

SUSTAINABILILITY TRANSITION – STRATEGIES

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Reduce carbon footprint	Citizen-centric practice	Smart grid and green technology

SUSTAINABILITY TRANSITION – EXAMPLE

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Directgov, UK

Offering informational services on environment and greener living:

1. Recycling and reducing waste
2. Climate change and environment protection
3. Energy saving and generation
4. Greener home and garden
5. Greener travel and leisure
6. Keeping farm animals and bees
7. Greener community and work
8. Greener life events and celebrations

http://www.direct.gov.uk/en/Environmentandgreenerliving/index.htm

AIM AND OVERVIEW

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AIM

Present and illustrate the concept of a policy-driven EGOV as a possible context for EGOV at W3C.

OVERVIEW

POLICY-DRIVEN EGOV DEVELOPMENT

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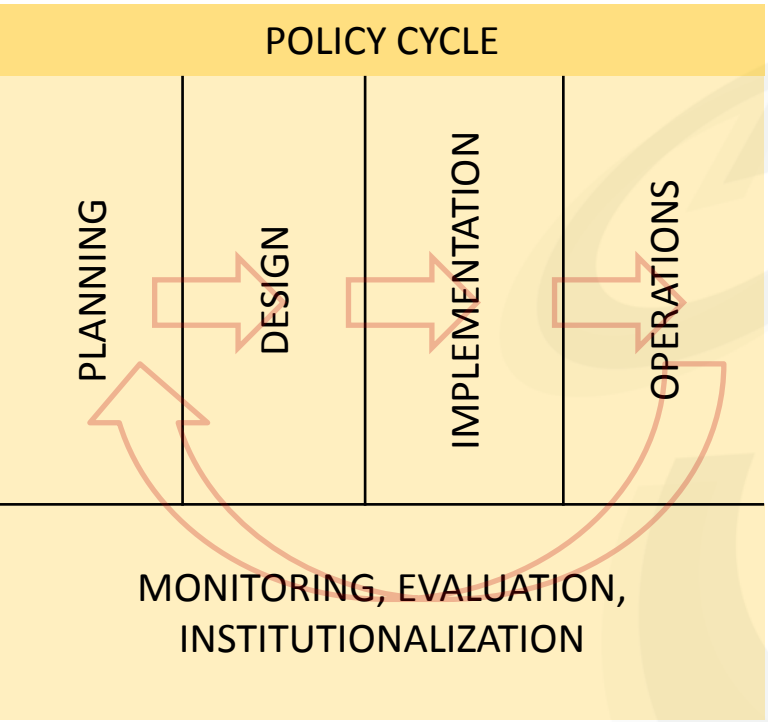

VALUE FRAMEWORK					
	EGOV				
SD	GOVERNMENT	TECHNOLOGY	INTERACTION	CUSTOMERS	SOCIETY
Social					
Economic					
Environmental					
Transitional					

EGOV POLICY CYCLE

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PLANNING	DESIGN	IMPLEMENTATION	OPERATIONS
Law and regulations	Interoperability	Acquisition	Service agreements
Strategy development	Enterprise architecture	Procurement	Monitoring
Strategy alignment	Standards	Technical infrastructure	Software maintenance
Funding arrangements	Best practices	Electronic public services	Adoption and scale-up
Readiness assessment	Agency collaboration	Service middleware	Access and accessibility
Policy development	Information-sharing	Services and applications	Digital content
Action plans	One-stop government	Negotiation and contracts	Digital rights
Partner management	Connected governance	New technology adoption	Digital divide
Stakeholder	Agile government	Project management	Benefit management
Leadership	Multi-channel delivery	Program management	Risk management
Coordination	Innovation system	Organizational change	Performance mgt.

MONITORING, EVALUATION, INSTITUTIONALIZATION			
Measurement	Evaluation	Capacity Building	Knowledge management

EXAMPLE – EGOV.* DEVELOPMENT FRAMEWORK

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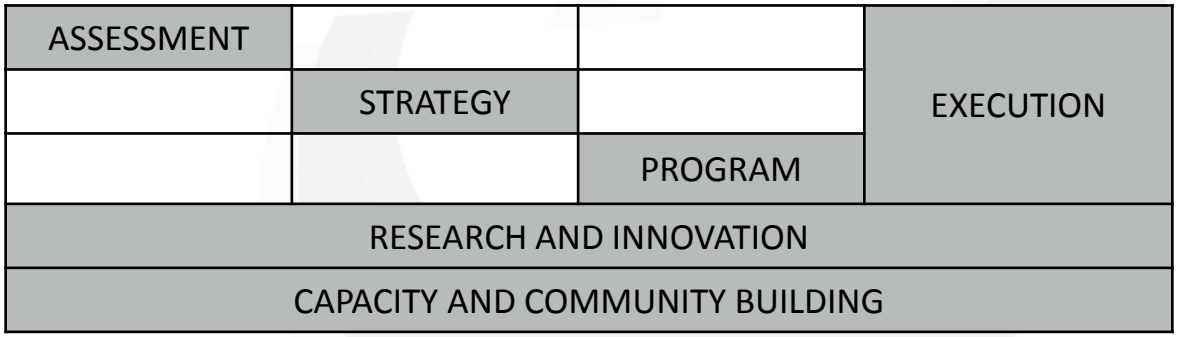
NAME	EGOV4D Development Framework (EGOV.*)
CONTEXT	Public Administration (PA); national, provincial or municipal level
GOALS	○ Establish the state of readiness for EGOV4D in the PA ○ Develop a government-wide strategy towards EGOV4D in the PA ○ Construct a program for PA and its partners to implement the strategy ○ Build capacity of the PA and partners to be able to execute/benefit from the program ○ Establish and sustain research and innovation
ELEMENTS	
APPROACH	Develop various elements of the framework and supporting methods and software tools through research, and evolve them through individual country experiences.

EXAMPLE – EGOV.CM PROJECT EXPERIENCE

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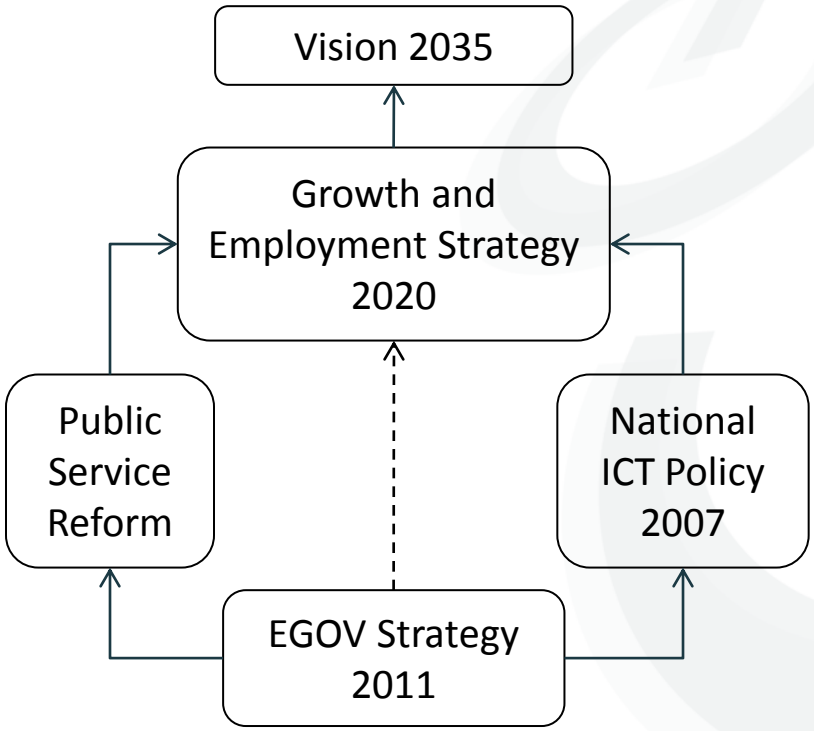
Cameroon policy context



Lessons learnt

Lower levels of governments are low priority

National agencies prefer to invest at the central level for visibility, creating increasing divide within the countries.

Fragmented Stewardship

EGOV rests with IT agencies but implementation suffers from shared stewardship with related powerful ministries

Academia-Government Collaboration is Necessary

Engaging local academia in research, education and training significantly improves program sustainability.

Bureaucracy is Pervasive

With authorizations required for every action, project managers cannot decide on basic activities and progress is only assured with direct engagement of agency heads.

AIM AND OVERVIEW

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AIM

Present and illustrate the concept of a policy-driven EGOV as a possible context for EGOV at W3C.

OVERVIEW

1	EGOV EVOLUTION
2	EGOV POLICY OBJECTIVE
3	EGOV POLICY-DRIVEN DEVELOPMENT
4	EGOV POLICY-DRIVEN DEVELOPMENT AND W3C
5	CONCLUSIONS

EGOV AT W3C – RELEVANT STANDARDS AND GROUPS

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RELEVANT STANDARDS		RELEVANT GROUPS
LegalXML	Electronic exchange of legal data	Education and outreach
StratML	Strategy markup language	Geolocation
EML	Election markup language	Government Linked Data
EDXL	Emergency data exchange language	HTML
SPML	Service provisioning markup language	Internationalization Core
SAML	Security assertion markup language	Points of Interest
NIEM	National information exchange model	RDF
OVAL	Open Vulnerability and Assessment	Research and Development
GML	Geography Markup Language	Web Services Policy
HR-XML	Human Resources XML	Web Accessibility Initiative
[OASIS, etc.]		*[Jeanne Holm, 25 January 2012]*

EGOV AT W3C – DISCUSSIONS AND FOCAL AREAS

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EXISTING DISCUSSIONS	FOCAL AREAS
IT procurement	EGOV policies
Platforms for open data	Government data
Licensing	Open government
Country branding	Accessibility of EGOV services
Gender mainstreaming	Social media
Community directory	Community directory and resources
Twitter use by elected officials	Education and outreach
Social media	Data licensing
Linked data management	Cloud computing
GIS data	Security and privacy
Meta data management for open data	Library of shared EGOV artefacts
[W3C EGOV IG Archives]	*[Jeanne Holm, 25 January 2012]*

POLICY-DRIVEN EGOV DEVELOPMENT AND W3C

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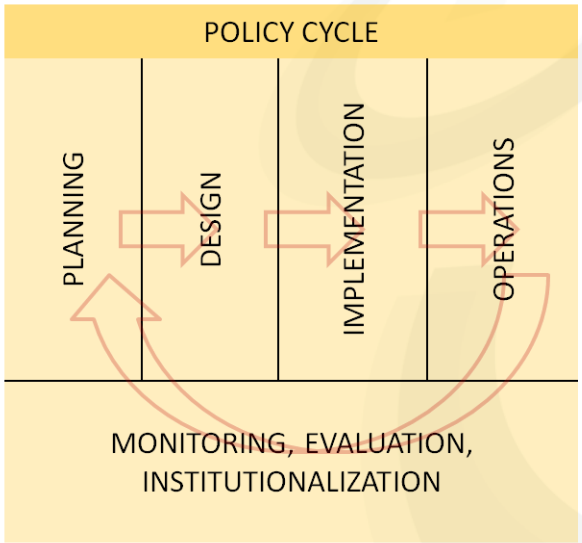
How to organize existing standards, interest groups, discussions and focal areas with respect to each other and the larger policy context? By relating them to the policy-driven EGOV?



VALUE FRAMEWORK					
SD	EGOV				
	GOVERNMENT	TECHNOLOGY	INTERACTION	CUSTOMERS	SOCIETY
Social					
Economic					
Environmental					
Transitional					

POLICY-DRIVEN EGOV DEVELOPMENT AND W3C

UNITED NATIONS UNIVERSITY
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OVERVIEW

CONCLUSIONS

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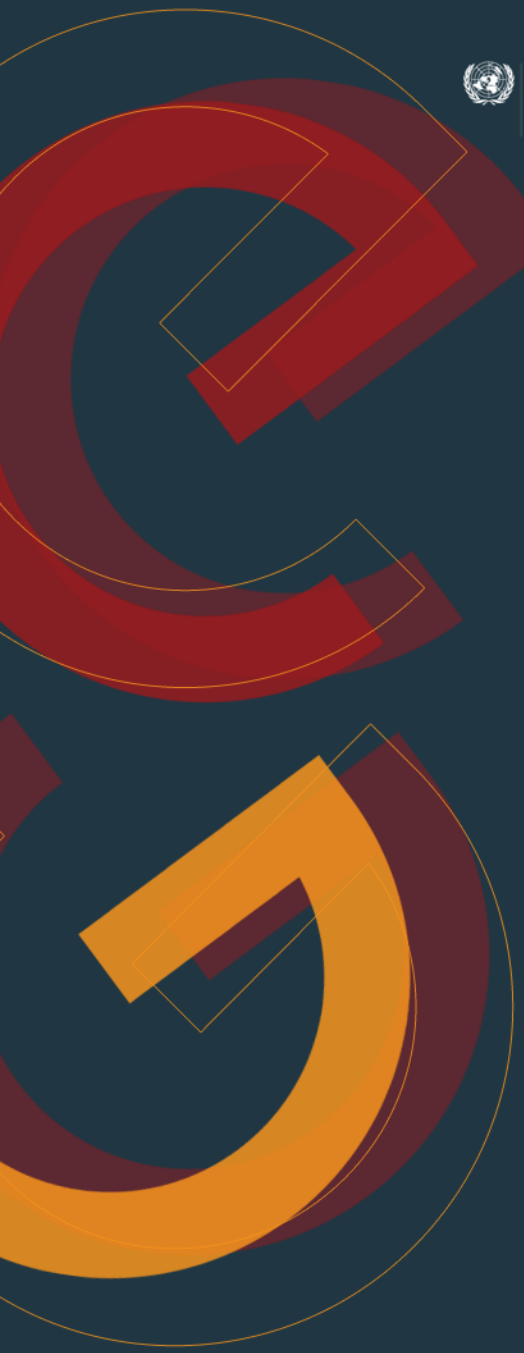
What was presented?	
1.	Evolution of public sector ICT towards policy-driven EGOV
2.	A case in policy-driven EGOV – EGOV for Sustainable Development
3.	Policy-driven EGOV development framework

Discussion:

Can the framework serve as a possible policy-context for EGOV at W3C?



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Questions, comments?

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