Comparison and Evaluation of International e-Government Benchmarking Studies

- This comparative research analyses **16 international e-government benchmarking (IEGB) studies** completed between 2001 and 2017
- Identifies the common points and the differences with respect to **22 different criteria**
- The research identifies:
  - The mostly covered areas,
  - The common benchmarking criteria and their prioritizations,
  - Scope of application,
  - The most preferred collaboration channels,
  - The preferred methodologies,
  - The differences between benchmarking approaches

  by analyzing benchmarking reports and methodologies.

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RESEARCH QUESTIONS

RQ1: Which focus stages are mostly covered by IEGB studies?

RQ2: What is the common benchmarking criteria in IEGB studies?

RQ3: How wide (scope of) benchmarking is applied?

RQ4: What is the most preferred collaboration channels?

RQ5: Which methodologies are preferred in general?

GOAL of STUDY

1. Improve the benchmarking methodologies for future studies
2. Identify the main areas to help the e-government development in the countries
3. Guide the prospective researchers to prepare a framework for increasing e-government maturity

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METHODOLOGY (M), RESEARCH PLAN and SEARCH STRATEGY (SS)

M1. Identify global actors and their reports on IEGB related to RQ's with the following **search strategies (SS):**

SS1: Publications/reports/documents of intergovernmental/international and supranational organizations and universities that deal with IEGB.

SS2: Desktop research on the internet about the reports, researches and books on IEGB to fill out the gaps in previously mentioned reports.

SS3: Contacting with the central government bodies that are responsible for data about IEGB for details.

SS4: Contacting with the national delegations of IEGB in international decision-making meetings in order to provide information about benchmarking issues.

SS5: Desktop research of academic papers.

M2. Prepare an inventory of all publications (found in SS1) applicable to IEGB studies.

M3. Prepare a criteria list that will be applied to all benchmarking studies.

M4. Fill out the criteria list by using the last published benchmarking study/report.

M5. Prepare comparison table that answer the research questions.

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Global Actors and Their Publications on IEGB (**M1 & M2**)

CATEGORY	ACTIVE ORGANIZATIONS					RELATED ORGANIZATIONS							INACTIVE ORGANIZATIONS			
Report Publication Year	WEF	WU	EU	UN	OECD	WB	Deloitte	Accenture	EIU	RUTGERS&SU	ITU	AAO	BU	SIBIS	AAO	DEEDS
2001	●		●	●				●					●	●		
2002	●		○	○				●					●	●		
2003	●		●	●				●	●	●			●	●		●
2004	●		●	●		●		●	●	○		●	●	○		○
2005	●	●	○	●		●		●	●	●		○	●	○		○
2006	●	●	●	○	●	●		●	●	○		○	●	○		○
2007	●	●	●	○	●	●	●	●	●	●		○	●	○		○
2008	●	●	○	●	○	●	●	○	●	○	●	○	○	○		○
2009	●	●	●	○	●	●	●	●	●	●	○	○	○	○		○
2010	●	●	●	●	○	●	●	○	●	○	●	○	○	○		○
2011	●	●	○	○	●	●	●	○	○	○	●	○	○	○	●	○
2012	●	●	●	●	○	●	●	○	○	●	○	○	○	○	○	○
2013	●	●	○	○	●	●	●	○	○	○	○	○	○	○	○	○
2014	●	●	●	●	○	●	●	●	○	●	○	○	○	○	○	○
2015	●	●	●	○	●	●	●	○	○	○	○	○	○	○	○	○
2016	●	●	●	●	○	●	●	○	○	●	○	○	○	○	○	○
2017	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○	○
TOTAL PUBLICATIONS	16	12	11	9	6	14	10	9	8	7	3	1	7	3	1	1

Legend: ● Publication ○ No Publication ○ Discontinued Study ● Publication only once

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Global Actors and Their Publications on IEGB (**M1 & M2**)

CATEGORY	ACTIVE ORGANIZATIONS					RELATED ORGANIZATIONS							INACTIVE ORGANIZATIONS			
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2001	●		●	●				●					●	●		
2002	●		○	○				●					●	●		
2003	●		●	●				●	●	●			●	●		●
2004	●		●	●		●		●	●	○		●	●	○		○
2005	●	●	○	●		●		●	●	●		○	●	○		○
2006	●	●	●	○	●	●		●	●	○		○	●	○		○
2007	●	●	●	○	●	●	●	●	●	●		○	●	○		○
2008	●	●	○	●	○	●	●	○	●	○	●	○	○	○		○
2009	●	●	●	○	●	●	●	●	●	●	○	○	○	○		○
2010	●	●	●	●	○	●	●	○	●	○	●	○	○	○		○
2011	●	●	○	○	●	●	●	○	○	○	●	○	○	○	●	○
2012	●	●	●	●	○	●	●	○	○	●	○	○	○	○	○	○
2013	●	●	○	○	●	●	●	○	○	○	○	○	○	○	○	○
2014	●	●	●	●	○	●	●	●	○	●	○	○	○	○	○	○
2015	●	●	●	○	●	●	●	○	○	○	○	○	○	○	○	○
2016	●	●	●	●	○	●	●	○	○	●	○	○	○	○	○	○
2017	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○	○
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CRITERIA LIST (**M3 & M4**)

1. Benchmarking Target
2. Country Coverage
3. First Benchmarking Year
4. Number of Published Reports
5. Benchmarking Period
6. Last Benchmarking Year
7. Report Language(s)
8. Category of Benchmarking Organization
9. Focus Stage(s)
10. Number of Pillars / Sub Indexes
11. Number of Indicators
12. Measured Values (Main and Sub index/categories/axis)
13. Open Criteria List
14. Open Benchmarking Data to Public
15. Has Transparent Methodology ?
16. Has Uninterrupted Report Period ?
17. Has Stable Country Attendance ?
18. Has Regional Evaluation ?
19. Has GDP Considered Comparisons ?

Cooperation Ecosystem Level

20. Has Coop. With Countries?
21. Has Coop. With Private Sector?
22. Has Coop. With Academy?
23. Has Coop. With Universities?
24. Has Coop. With International Organizations?
25. Has other Cooperations?

LEGEND

Indirect / Derived Criteria

Extra Criterion for RQ2

★ *Common Benchmarking Criteria (RQ2)*

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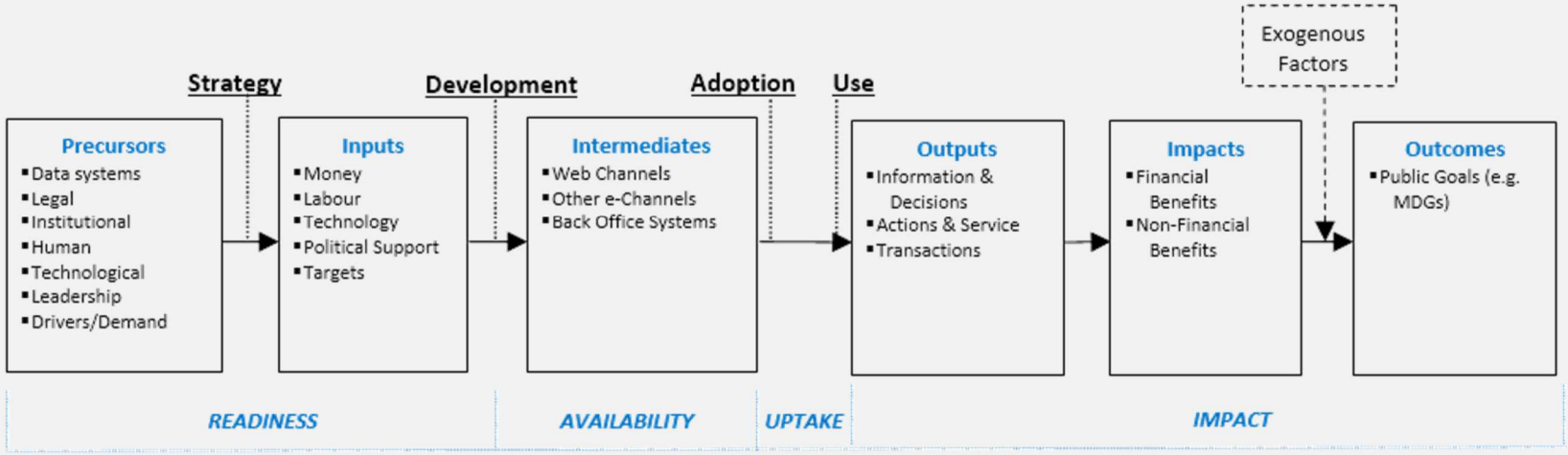
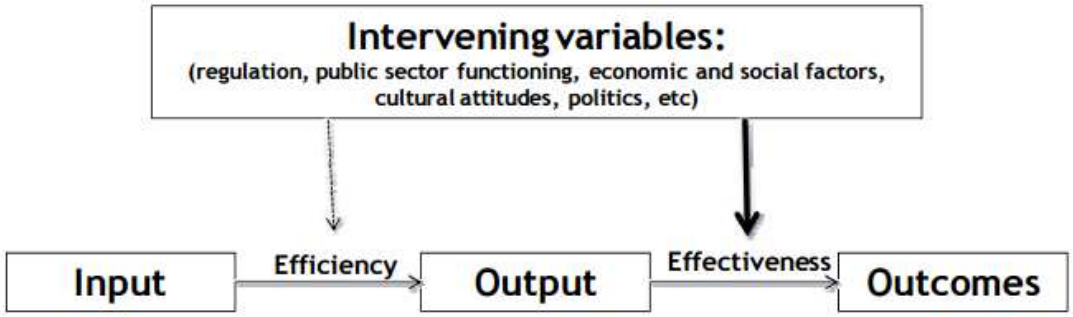


E-government Value Chain (Heeks et al 2006)



Public Sector Measurement (Codagnone and Arne Undheim et al 2008)

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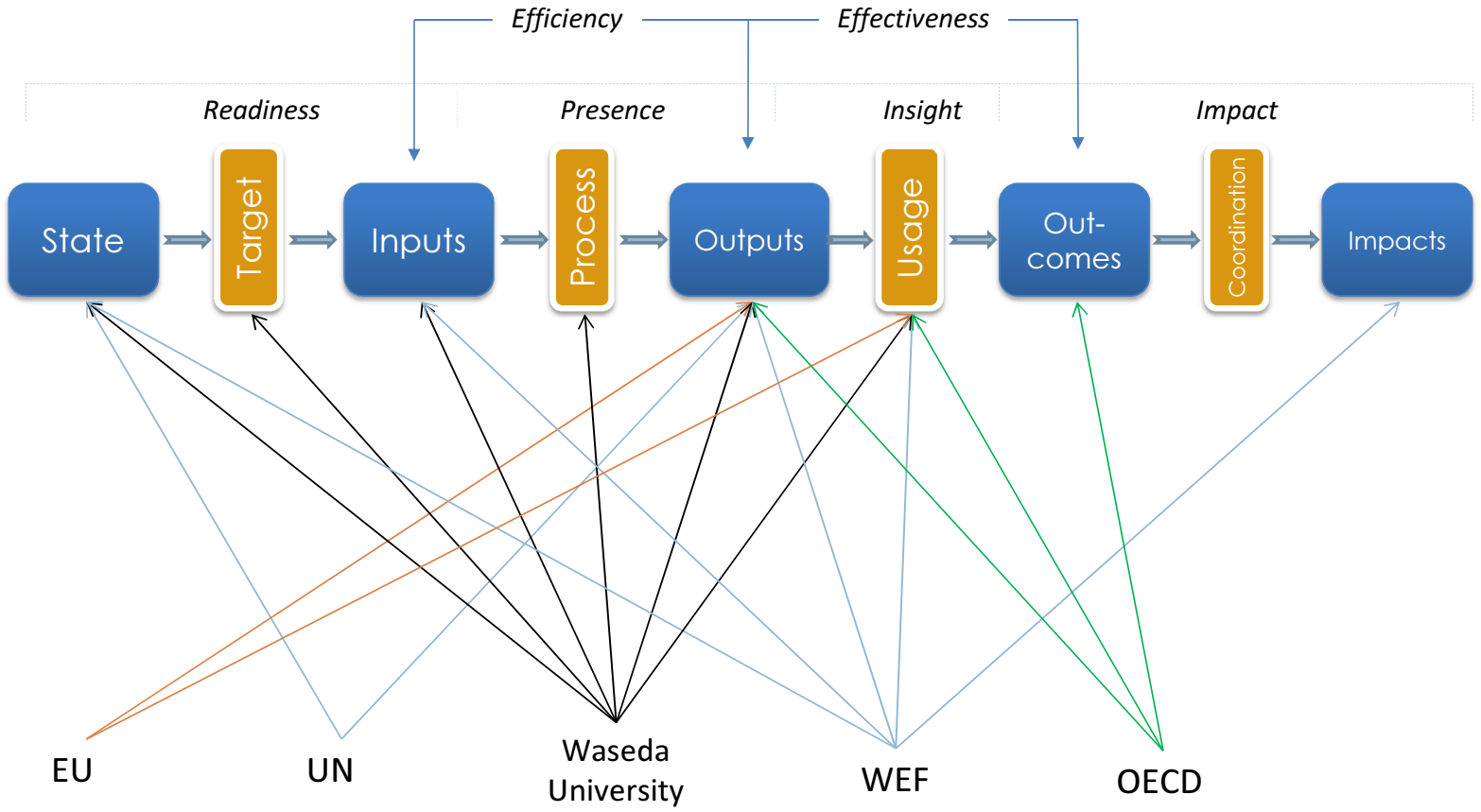

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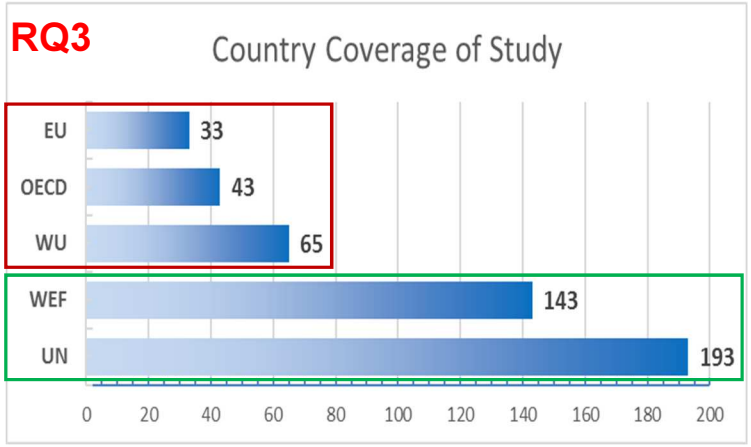
RQ1 Focus Stages

Focus Stages	UN	EU	WEF	OECD	WU	Total out of 5 Studies
Efficiency						0
Coordination						0
Process					●	1
Impact			●			1
Outcomes				●		1
Target					●	1
Input			●		●	2
State	●		●		●	3
Usage		●	●	●	●	4
Output	●	●	●	●	●	5

RQ2

COMMON BENCHMARKING CRITERIA	WEF	EU	UN	WU	OECD
Open Criteria List	✓	✓	✗	✓	✓
Open Benchmarking Data to Public	✗	✗	✗	✗	✓
✓ Transparent Methodology	✓	✓	✓	✓	✓
Cover more than 100 Country	✓	✗	✓	✗	✗
15+ Years of Benchmarking Experience	✓	✓	✓	✗	✗
✓ Coop. With Countries	✓	✓	✓	✓	✓
Coop. With Private sector	✓	✓	✓	✗	✗
Coop. With International Org.	✓	✗	✓	✗	✗
✓ Regional Evaluation	✓	✓	✓	✓	✓
✓ GDP Consideration	✓	✓	✓	✓	✗
Yearly Benchmarking	✓	✓	✗	✓	✗
Report on 2016	✓	✓	✓	✓	✗
COMBINED POINT	11	9	9	7	5

RQ3



RQ4 **Cooperation**: 1. Countries 2. International Organizations

RQ5

Common Indexes	Usage	Organizations					
✓ Infrastructure	6	UN	EU	WU	WU	WEF	WU
✓ e-Service Usage	4	EU	WU	WEF	OECD		
Transparency	3	EU	WU	OECD			
Efficiency-Effectiveness	2	EU	WU				
Online Services	2	UN	WU				
Human Capital	2	UN	WEF				
Impact	1	WEF					
Participation	1	WU					
Performance	1	OECD					
Social Media	1	OECD					
Ecosystem	1	WEF					
Superstructure	1	WU					
Privacy and Security	1	WU					
User Centricity	1	EU					

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CONCLUSION

1. For active 5 out of 16 well-known IEGB studies (UN, EU, OECD, WEF and WU):
   - Focus is mainly on "**output**" and "**usage**" of benchmarking framework for E-government
   - Weakest point is "**openness**" on benchmarking data
   - Common benchmarking criteria: "**cooperation with countries**", "**regional evaluation**", "**transparent methodology**", "**GDP consideration**"
   - Technical categories are the most preferred ("**Infrastructure**" and "**e-Service Usage**")
   - Human-focused categories are very weak ("**human capital**" and "**user centricity**")
   - Most important topics are NOT included (" **privacy** " and " **security** ") in IEGB
   - Following trends are NEVER benchmarked:
     - "**usage** of e-services by citizens", "**governance model** of e-government", "**benefits** of e-services", "**satisfaction**"

NEXT STEPS

1. National framework should include above findings **for priority** and also add red-marked fields **for full integrity**
2. New benchmarking improvements should consider **red-marked fields**

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THANK YOU

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