

Reflections on the Global Most Recent E-government Development Indicators Results.

Presentation for the 2020 Unitec Research Symposium
Friday October 9th.

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Agenda

- Overview of e-government
- E-government readiness and its indicators
- Study aim and objectives
- Research methods, results & conclusion
- Q and A

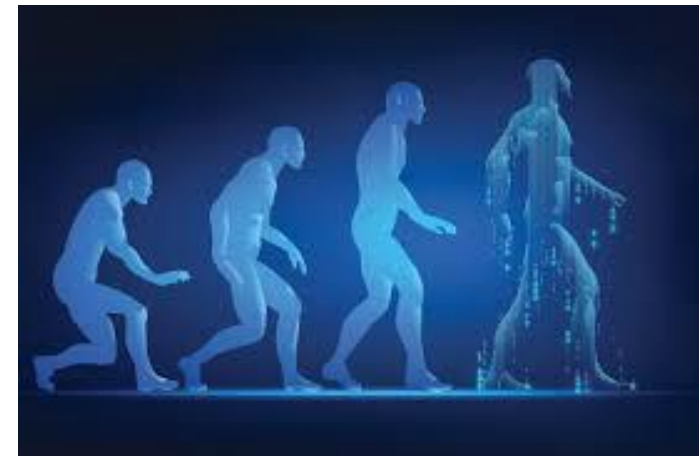
What is e-government?

- The UN e-government knowledgebase states that e-government has been employed to mean everything from ‘**online government services**’ to ‘**exchange of information** and services electronically with citizens, businesses, and other arms of government’.”



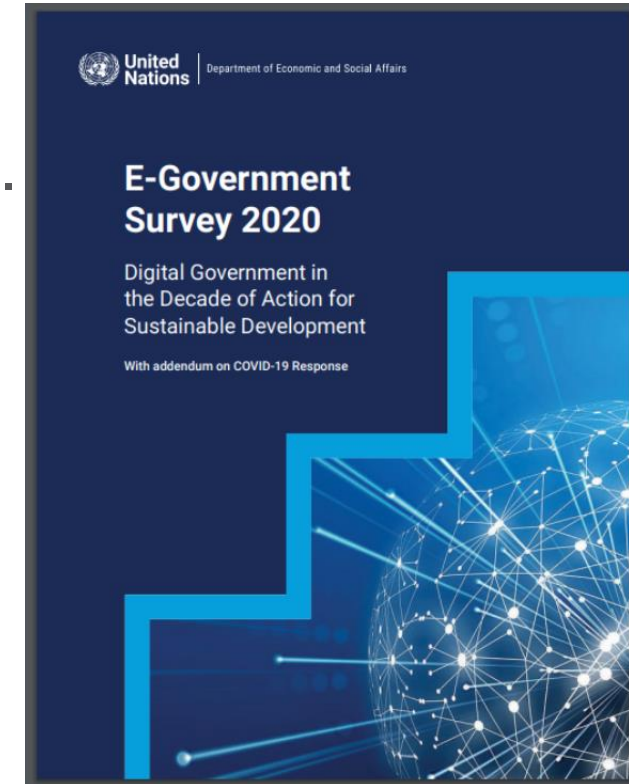
Overview of e-government

- The **World Bank** has defined **e-government** as “government-owned or operated systems of information. and communications technologies (ICTs) that **transform** relations with citizens, the private sector and/or. other government agencies so as to promote citizen **empowerment**, **improve** service delivery. (World Bank, 2006)
- **Benefits** of e-government services are well documented and include:
 - Improved and more accessible services by citizens,
 - Greater public access to information, and
 - More efficient and cost-effective government.
 - ...etc.



Overview of e-government








- The United Nations **E-Government Survey** is one of the key reports that **monitors** the state of e-government status.
- The Survey is the **only global report** that assesses the e-government development status of all United Nations Member States
- The survey produces a regular series of **rankings** of countries' e-government development, based on a metric known as the UN E-Government Development Index (**EGDI**).














EGDI Components

- The EGDI is a **composite index** based on the weighted average of **three** normalized indices. The three components are:
 - **Online Service Index (OSI)** measures the maturity of a country's e-government websites, such as their national website and related portals.
 - **Telecommunication Infrastructure Index (TII)** derives a score for a country's telecommunications infrastructure based on five indicators: the proportion of Internet users, fixed telephone lines, mobile subscribers, fixed Internet subscriptions, and fixed broadband facilities.
 - **Human Capital Index (HCI)** is calculated based on measures of a country's adult literacy and education enrolments.
- The e-participation index (EPI) is derived as a **supplementary** index to the UN E-Government Survey.

Top 10

Country	Group	Rank 2020	EGDI 2020
 Denmark	VHEGDI	1	0.9758
 Republic of Korea	VHEGDI	2	0.9560
 Estonia	VHEGDI	3	0.9473
 Finland	VHEGDI	4	0.9452
 Australia	VHEGDI	5	0.9432
 Sweden	VHEGDI	6	0.9365
 United Kingdom of Great Britain and Northern Ireland	VHEGDI	7	0.9358
 New Zealand	VHEGDI	8	0.9339
 United States of America	VHEGDI	9	0.9297
 Netherlands	VHEGDI	10	0.9228

Bottom 10

Country	Group	Rank 2020 ↓	EGDI 2020
 South Sudan	LEGDI	193	0.0875
 Eritrea	LEGDI	192	0.1292
 Somalia	LEGDI	191	0.1293
 Central African Republic	LEGDI	190	0.1404
 Chad	LEGDI	189	0.1557
 Niger	LEGDI	188	0.1661
 Democratic People's Republic of Korea	LEGDI	187	0.2235
 Guinea-Bissau	LEGDI	186	0.2316
 Equatorial Guinea	MEGDI	185	0.2507
 Democratic Republic of the Congo	MEGDI	184	0.2580
 Guinea	MEGDI	183	0.2592

Study Aim

- To **compare and contrast** the EGDI results during the past ten years.
- Measure the **degree** of EGDI indicators **association** during the past ten years.

Research Methods

- Correlation Analysis.
- Cluster Analysis.

Correlations Results – EGDI

		2008	2010	2018	2020
EGDI 2008 N = 192	Pearson Correlation	1	.968**	.867**	.872**
	Sig. (2-tailed)		.000	.000	.000
EGDI 2010 N = 192	Pearson Correlation	.968**	1	.876**	.875**
	Sig. (2-tailed)	.000		.000	.000
EGDI 2018 N = 193	Pearson Correlation	.867**	.876**	1	.980**
	Sig. (2-tailed)	.000	.000		.000
EGDI 2020 N = 193	Pearson Correlation	.872**	.875**	.980**	1
	Sig. (2-tailed)	.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations Results – OSI

		2008	2010	2018	2020
OSI 2008 N = 192	Pearson Correlation	1	.873**	.826**	.833**
	Sig. (2-tailed)		.000	.000	.000
OSI 2010 N = 192	Pearson Correlation	.873**	1	.797**	.790**
	Sig. (2-tailed)	.000		.000	.000
OSI 2018 N = 193	Pearson Correlation	.826**	.797**	1	.924**
	Sig. (2-tailed)	.000	.000		.000
OSI 2020 N = 193	Pearson Correlation	.833**	.790**	.924**	1
	Sig. (2-tailed)	.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations Results – TII

		2008	2010	2018	2020
TII 2008	Pearson Correlation	1	.971**	.882**	.824**
N = 191	Sig. (2-tailed)		.000	.000	.000
TII 2010	Pearson Correlation	.971**	1	.911**	.851**
N = 189	Sig. (2-tailed)	.000		.000	.000
TII 2018	Pearson Correlation	.882**	.911**	1	.958**
N = 193	Sig. (2-tailed)	.000	.000		.000
TII 2020	Pearson Correlation	.824**	.851**	.958**	1
N = 193	Sig. (2-tailed)	.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations Results – HCI

		2008	2010	2018	2020
HCI 2008 N = 182	Pearson Correlation	1	.994**	.947**	.940**
	Sig. (2-tailed)		.000	.000	.000
HCI 2010 N = 183	Pearson Correlation	.994**	1	.946**	.938**
	Sig. (2-tailed)	.000		.000	.000
HCI 2018 N = 193	Pearson Correlation	.947**	.946**	1	.990**
	Sig. (2-tailed)	.000	.000		.000
HCI 2020 N = 193	Pearson Correlation	.940**	.938**	.990**	1
	Sig. (2-tailed)	.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations Results – EPI

		2008	2010	2018	2020
EPI 2008 N = 192	Pearson Correlation	1	.744**	.580**	.578**
	Sig. (2-tailed)		.000	.000	.000
EPI 2010 N = 192	Pearson Correlation	.744**	1	.677**	.683**
	Sig. (2-tailed)	.000		.000	.000
EPI 2018 N = 193	Pearson Correlation	.580**	.677**	1	.906**
	Sig. (2-tailed)	.000	.000		.000
EPI 2020 N = 193	Pearson Correlation	.578**	.683**	.906**	1
	Sig. (2-tailed)	.000	.000	.000	

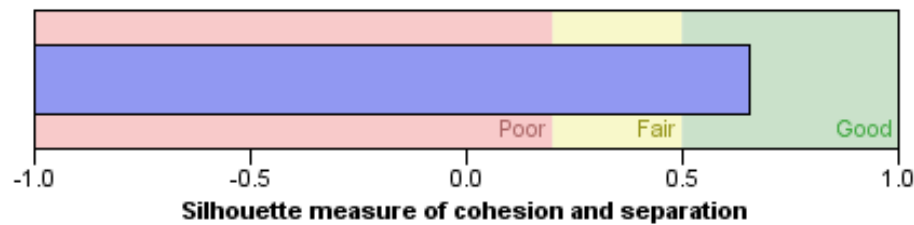
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Cluster Analysis Results - 2008 and 2010

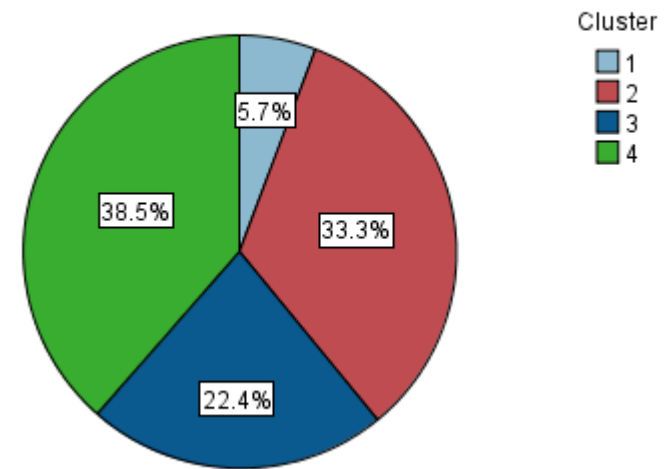
Model Summary

Algorithm	TwoStep
Inputs	2
Clusters	4

Cluster Quality



Cluster Sizes



Size of Smallest Cluster	11 (5.7%)
Size of Largest Cluster	74 (38.5%)
Ratio of Sizes: Largest Cluster to Smallest Cluster	6.73

Cluster Analysis Results - 2018 and 2020

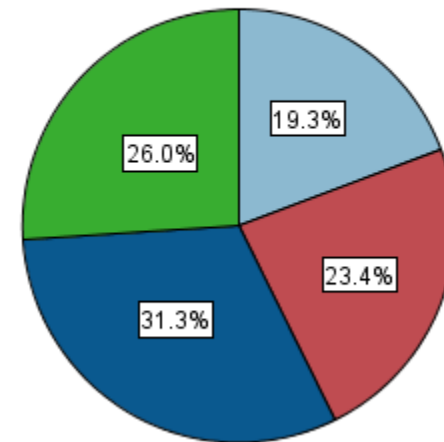
Model Summary

Algorithm	TwoStep
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Clusters	4

Cluster Quality

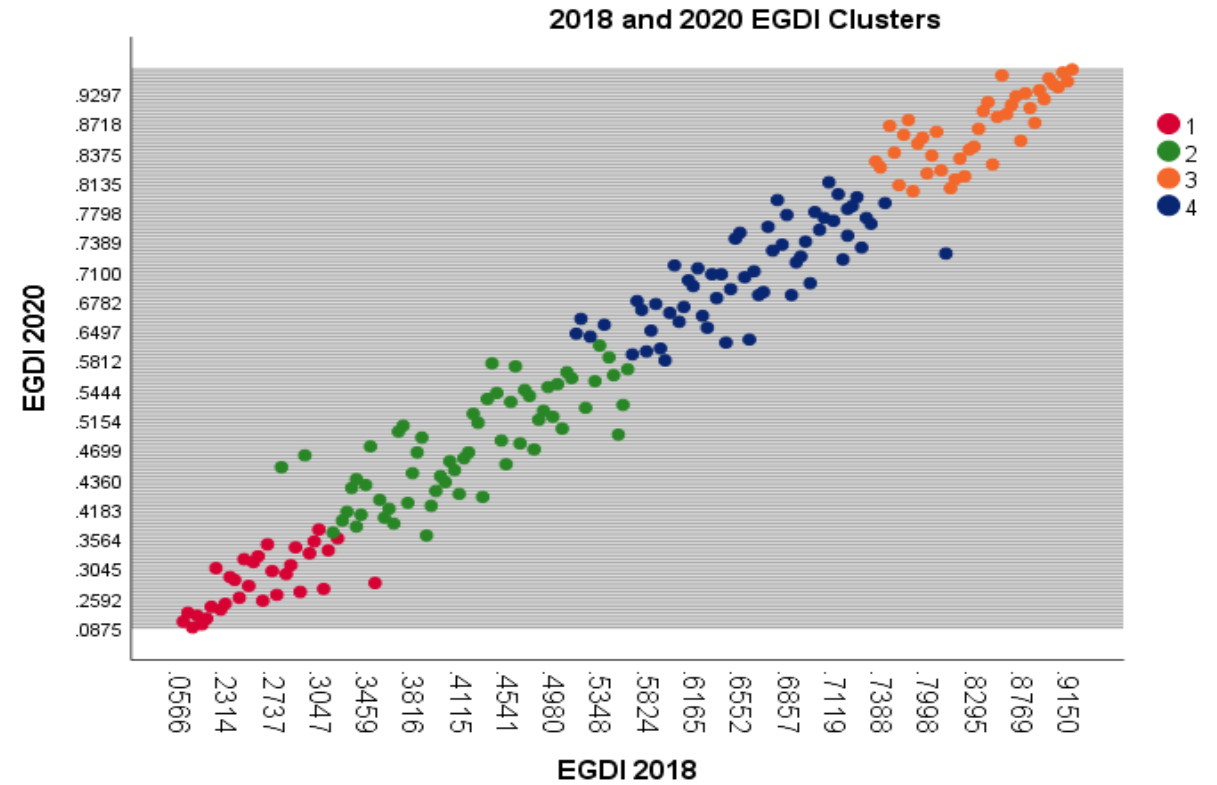
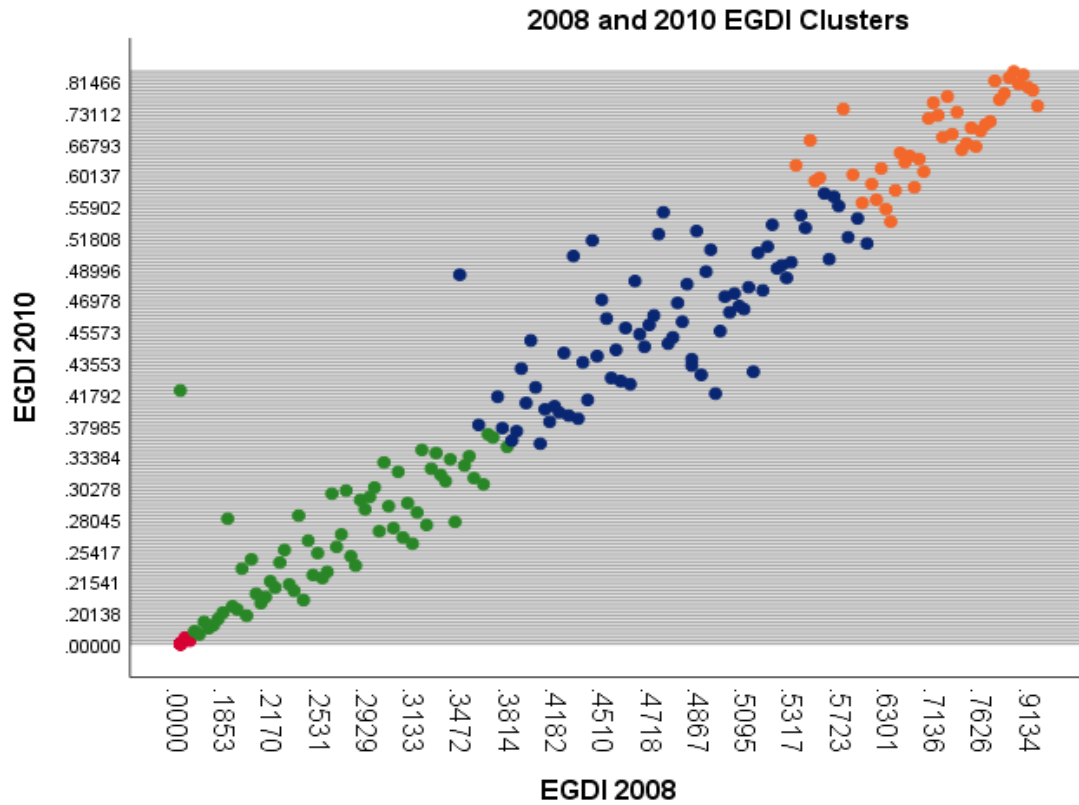


Cluster Sizes



Size of Smallest Cluster	37 (19.3%)
Size of Largest Cluster	60 (31.2%)
Ratio of Sizes: Largest Cluster to Smallest Cluster	1.62

Cluster Analysis Results



Conclusion

- **Strong** EGDI correlation (2008, 2010, 2018 & 2020)
- Despite the **apparent** changes in EGDI scores, the majority of countries retained the same cluster.
- Rankings based on EGDI need to be **used carefully** by both government officials and e-government promoters.

Thank you