



Middle East Technical University
e-Government Research and Development
Center
(METU EDMER)

*Dr. Ali ARİFOĞLU,
Director, METU EDMER*



EDMER :

e-Government Research and Development Centre

- A PUPP
- Middle East Technical University
- June 2006
- To accelerate “e-Transformation Turkey” Project



PARTNERS & SPONSORS

Public Organizations and Institutions : Private Sector Organizations :

- Middle East Technical University
- State Planning Organization
- Ministry of Trade and Industry

□ Main Sponsors:

- Intel Corporation
- Microsoft
- Cisco
- Havelsan (Local System Integrator)
- Turk Telekom

□ Sponsors:

- Oracle Corporation
- Meteksan (Local System Integrator)
- Milsoft (Local software vendor)
- Logo Yazilim (Local Software vendor)
- Turkcell (Mobile GSM Operator)

EDMER PROJECTS

COMPLETED PROJECTS :

- ✓ Study for a Model for Public Internet Access Points (PIAPS) – 2009
- ✓ Transformation in Education with One-to-one e-Learning – 2009
- ✓ Research for an e-Governance Model for the countries: A Proposal for Turkey – 2010
- ✓ A New e-Transformation Metric System for Countries – 2010

CURRENT PROJECTS :

- E-Performance Measurement and Evaluation
- Measuring e-Service Performance



Project - 1:

Study for a Model for Public Internet Access Points (PIAPS)

Partners: METU EDMER, Intel, Cisco, DPT, Microsoft, MONE

Research Questions:

- The current situation of PIAPs in the world and in Turkey?(7 int., 4 national)
- The services are being provided by PIAPs?
- How is the sustainability of PIAPs achieved?
- How are they being operated?
- What is the management structure?
- How to model PIAPs on country level?



Output: A model for Turkey

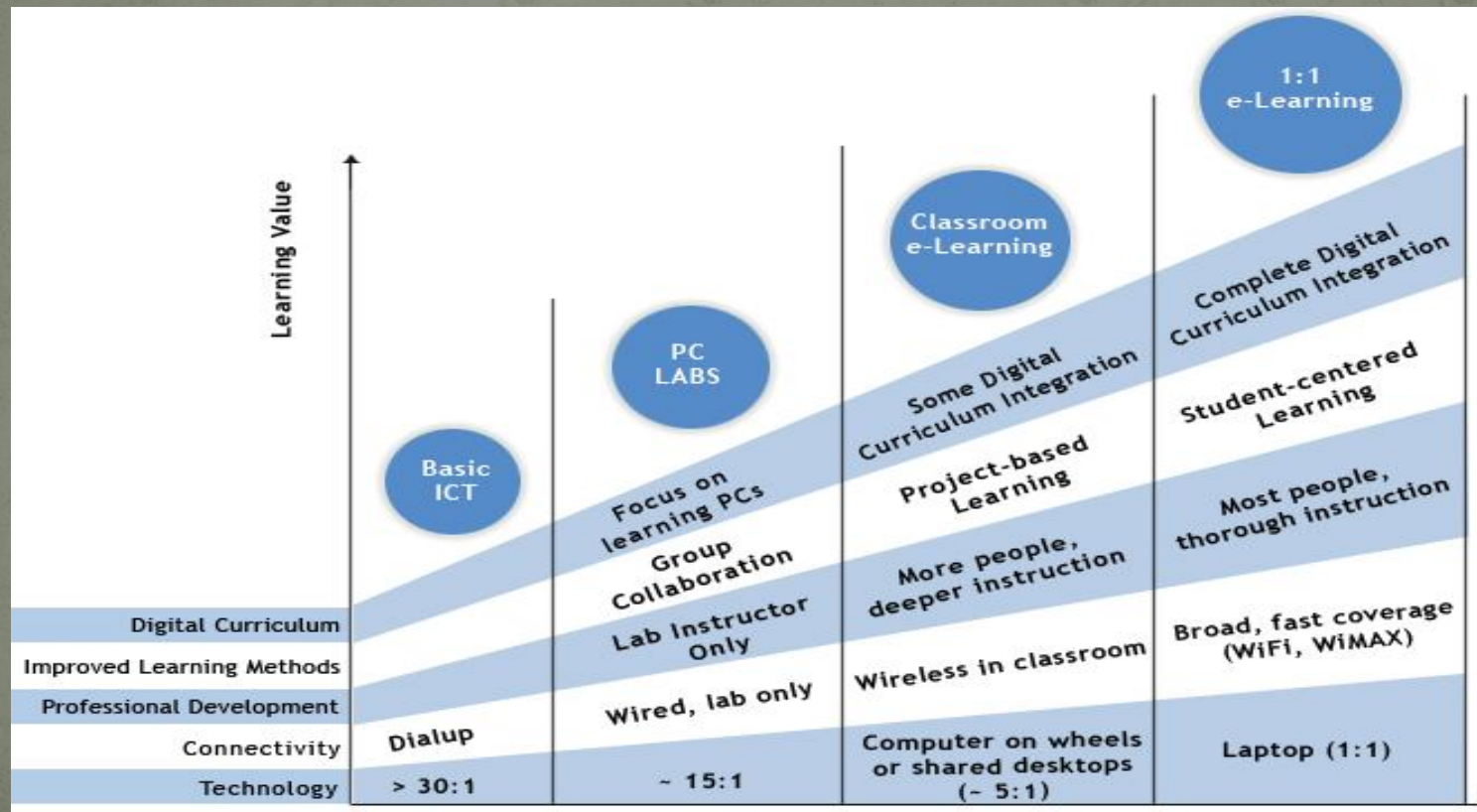
- General Structure of Model
- PIAP Coordination Unit (PIAP-CU)
- Services
- PIAP Portal
- Turkey PIAP Budget
- Creating User Demand for PIAPs
- Roadmap
- Monitoring and Evaluation
- Critical Success Factors

Project-2:

Transformation in Education with One-to-One e-Learning

Partners: METU EDMER, Intel, Cisco, Microsoft, MEB

Research Question: How to model 1-1 e-Learning : A POC study



➤ Phase-1:

- One School, (K12)
- a learning environment
 - Vitamin (Education content –by CEBIT)
 - Skool (by Intel)
 - Think.com (Oracle)
 - High speed internet access (ADSL)
 - An intelligent classroom with smart board, PC's etc...

➤ Phase-2:

- Three schools more
- Collaboration

Output:

- ✓ Tested POC
- ✓ The model
- ✓ The effectiveness study



Project -3:

Research for an e-Governance Model for the countries: A Proposal for Turkey

Research Question:

- How do the countries manage their own e-Transformation Projects?
- A proposal for Turkey

Project Partners: METU EDMER, Cisco, TUSIAD

Scope:

- 25 best e-Gov practices over world were investigated

Output:

- The orgs having roles in Strategy, Coordination, Implementation and Audit were identified
- A model was proposed

Project- 4:

A New e-Transformation Metric System for Countries

Research Question:

- A new metric for e-performance of the countries

Project Partners: METU EDMER, Thesis Study

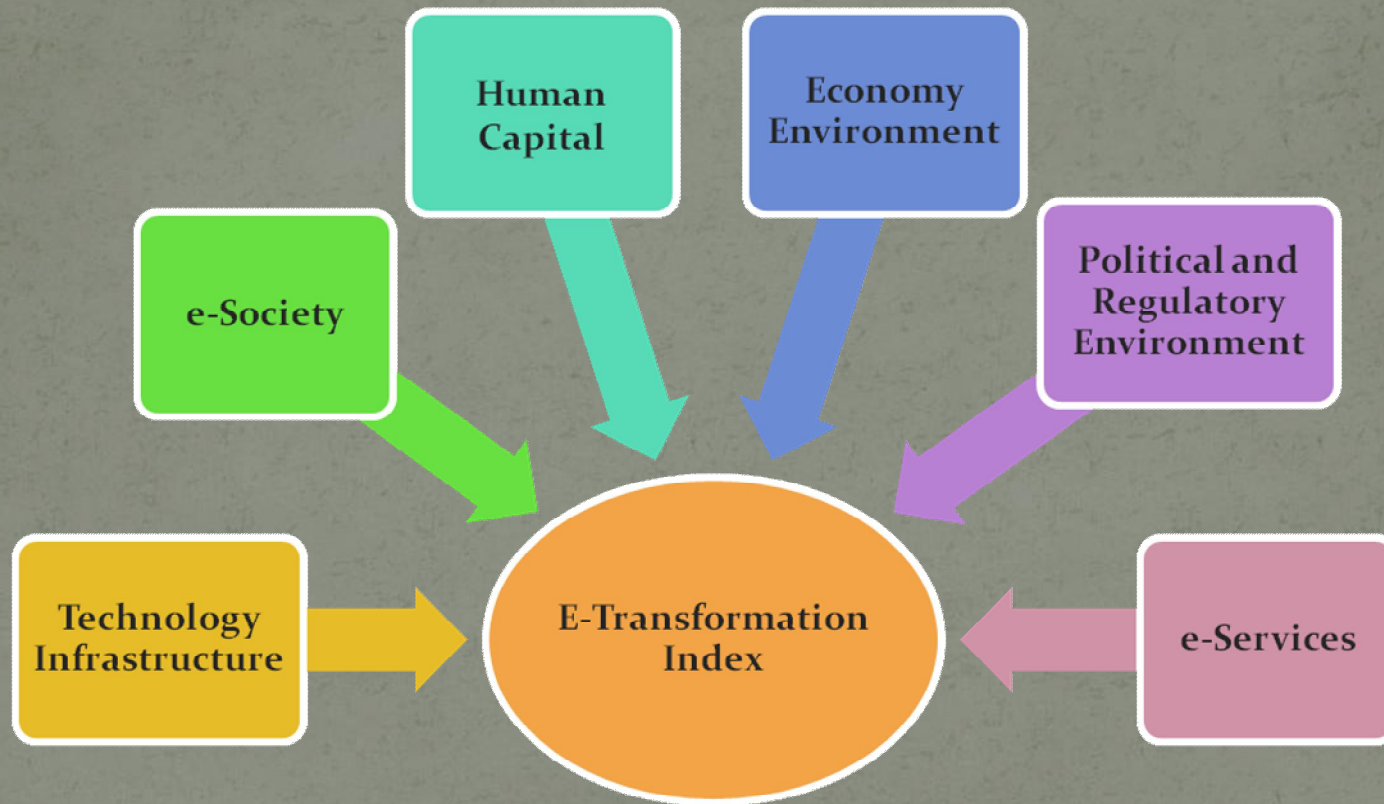
Scope:

- Analysis of more than 200 metrics in 20 groups

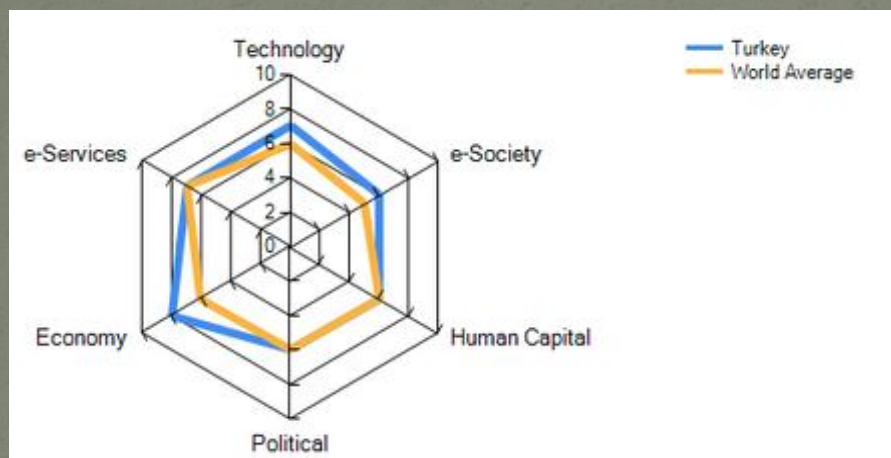
Output:

- A new metric giving the similar results
- Country scorecards,
- Country comparisons
- Detailed measurement about Turkey

New Metric : Classification



New Metric : Country Scorecard – Turkey (56/158)

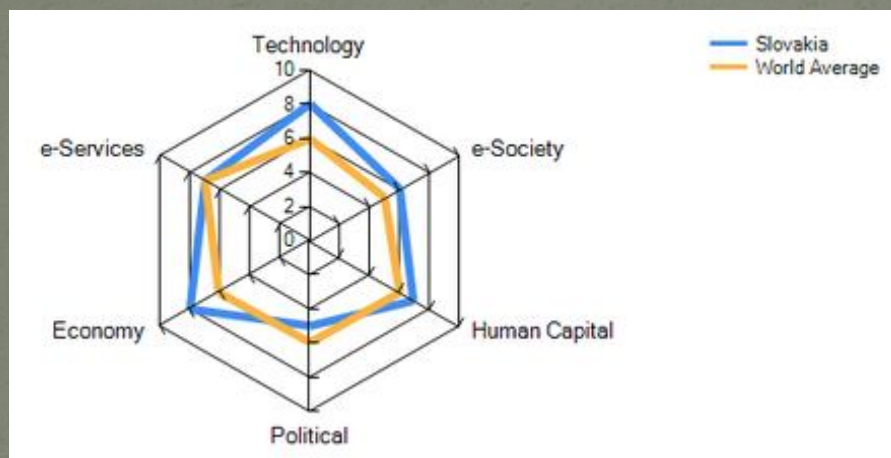


Ranking	56
e-Society (51*)	6,01
PC users per 100 inhabitants	5,95
Internet users per 100 inhabitants	6,98
Mobile Phone per 100 inhabitants	4,83
Fixed Phone per 100 inhabitants	5,75
Broadband per 100 inhabitants	5,09
Firm level technology absorption	6,91
Extent of Business Internet Use	6,99
Government Success in ICT Promotion	4,88
ICT use and government efficiency	7,59
Presence of ICT in Government Offices	6,01

Political and Regulatory Environment (71*)	5,73
Level of priority of ICT for government	4,73
The government implementation plan for utilizing ICT	5,26
Laws relating to the use of ICT	6,91
Level of competition for Internet service	9,92
Effectiveness of law-making bodies	6,99
Independence of judiciary	5,41
Intellectual property protection	3,45
Efficiency of legal framework for disputes	4,96
Property rights protection	3,98
Web Measure	
e-Service (62*)	
Web Measure	7,42

e-Transformation Index	6,50
Technology (52*)	6,57
Proportion of households with Computer	6,83
Proportion of households with Internet	6,77
Mobile cellular subscriptions per 100 inhabitants	5,59
Fixed Phone Lines per 100 inhabitants	6,91
Broadband per 100 inhabitants	7,04
Secure Internet servers per 1 million inhabitants	6
Internet Bandwidth (bits per person)	6,85
Mobile cellular prices (% of GNI per capita)	
Broadband Internet prices (% of GNI per capita)	
Human Capital (73*)	5,67
Professional and Technical Workers as % of the Labor Force	7,35
Extent of Staff Training	5,33
Adult Literacy Rate	6,85
Internet Literacy Rate	4,33
Gross tertiary enrollment ratio	5,86
Gross secondary enrollment ratio	5,22
Proportion of schools having Internet access	6,24
Quality of Educational System	4,96
University Company Research	5,78
Patents granted by USPTO per million people	5,48
Total royalty payments and receipts(US\$/pop.)	4,95
Economy (38*)	7,58
Annual GDP Growth (%)	8,46
GDP (current US\$ bill)	8,87
Level of taxes	2,85
Financial Market Sophistication	7,44
Level of competition in local market	8,27
Number of days required to start a business	9,61

New Metric : Country Scorecard – Slovakia (44/158)

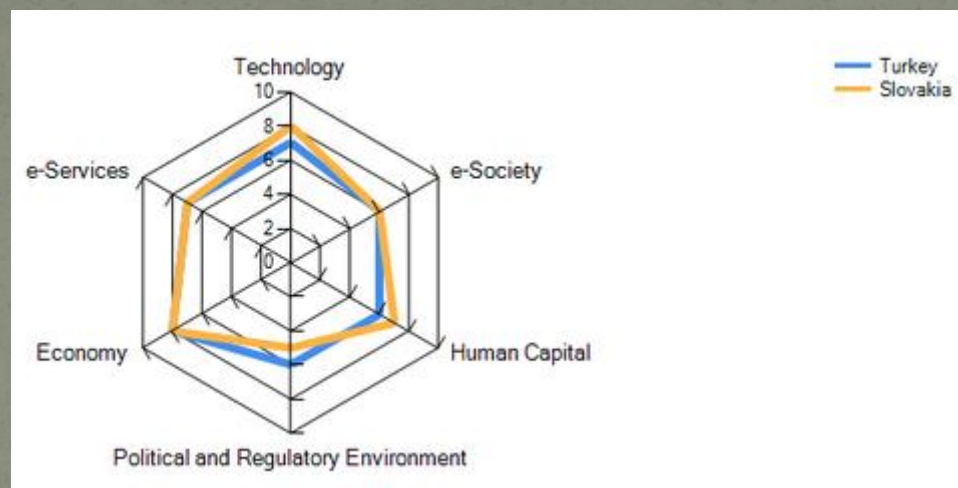


Ranking	44
e-Society (66*)	5,61
PC users per 100 inhabitants	8,88
Internet users per 100 inhabitants	8,80
Mobile Phone per 100 inhabitants	6,60
Fixed Phone per 100 inhabitants	5,17
Broadband per 100 inhabitants	6,54
Firm level technology absorption	7,29
Extent of Business Internet Use	7,06
Government Success in ICT Promotion	2,85
ICT use and government efficiency	4,36
Presence of ICT in Government Offices	5,03

Political and Regulatory Environment (80*)	5,43
Level of priority of ICT for government	3,98
The government implementation plan for utilizing ICT	4,06
Laws relating to the use of ICT	5,78
Level of competition for Internet service	10
Effectiveness of law-making bodies	4,51
Independence of judiciary	4,88
Intellectual property protection	6,24
Efficiency of legal framework for disputes	3,68
Property rights protection	5,78
Web Measure	
e-Service (63*)	
Web Measure	7,42

e-Transformation Index	6,85
Technology (38*)	7,69
Proportion of households with Computer	8,29
Proportion of households with Internet	8,29
Mobile cellular subscriptions per 100 inhabitants	6,85
Fixed Phone Lines per 100 inhabitants	6,28
Broadband per 100 inhabitants	7,54
Secure Internet servers per 1 million inhabitants	
Internet Bandwidth (bits per person)	8,86
Mobile cellular prices (% of GNI per capita)	
Broadband Internet prices (% of GNI per capita)	
Human Capital (47*)	6,89
Professional and Technical Workers as % of the Labor Force	7,35
Extent of Staff Training	7,21
Adult Literacy Rate	9,62
Internet Literacy Rate	
Gross tertiary enrollment ratio	6,99
Gross secondary enrollment ratio	7,48
Proportion of schools having Internet access	7,51
Quality of Educational System	4,36
University Company Research	5,33
Patents granted by USPTO per million people	6,59
Total royalty payments and receipts(US\$/pop.)	6,47
Economy (21*)	8,04
Annual GDP Growth (%)	8,60
GDP (current US\$ bill)	6,05
Level of taxes	8,72
Financial Market Sophistication	7,36
Level of competition in local market	8,64
Number of days required to start a business	8,84

Turkey vs Slovakia Comparison



Region	Technology	e-Society	Human Capital	Political&Regul. Environ.	Economy	e-Services	e-Transformation Index
Turkey	6,57 (52*)	6,01 (51*)	5,67 (73*)	5,73 (71*)	7,58 (38*)	7,42 (62*)	6,50 (56*)
Slovakia	7,69 (38*)	5,61 (66*)	6,89 (47*)	5,43 (80*)	8,04 (21*)	7,42 (63*)	6,85 (44*)

Ongoing Project-1 :

e-Performance Measurement and Evaluation

Research Question:

- Applying e-Gov metrics for 2011.

Project Partners: METU EDMER

Scope:

- 158 countries will be evaluated by e-performance assessment method in 2011.

Output:

- Country scorecards,
- Country comparisons
- Detailed measurement about Turkey

Ongoing Project-2 :

Measuring e-Service Performance

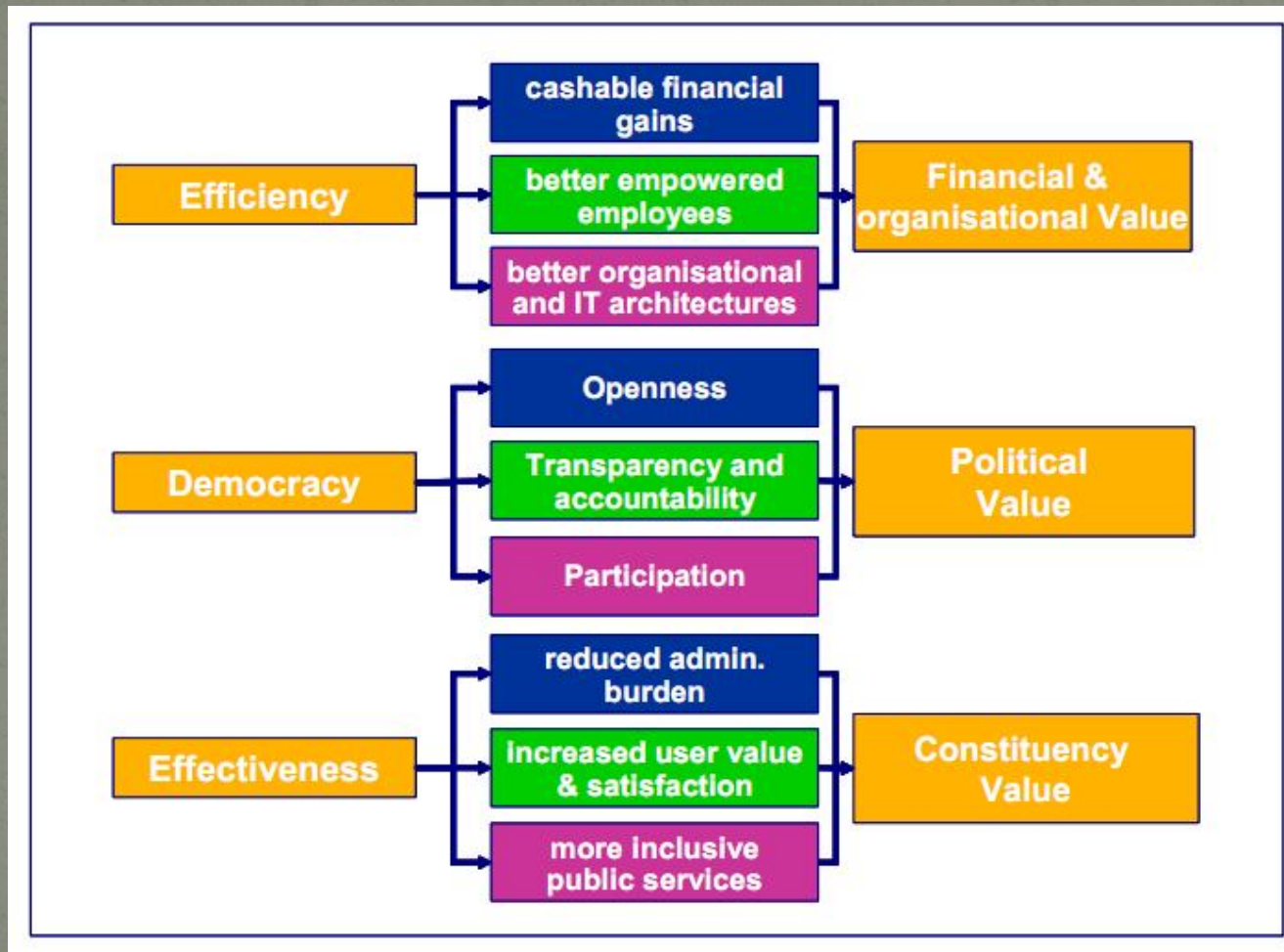
Research Question:

- How to derive your own methodology based on EGEP framework?
- Application of methodology to selected services.

Project Partners: METU EDMER, Thesis Study



eGEP Measurement Framework Analytical Model



Chosen eGEP Indicators Template, Source and Scope

Value Drivers	Impact	Chosen Indicators/All	Measuring Scope	Data Source
Efficiency	Cashable Financial Gains	5/10	E-service	5-ADRE
	Better Empowered Employees	6/8	Employees and organization	2-ADRE 4-ISA
	Better Organizational and IT Architecture	3/22	Organization and top-level employees	1-WMET 1-ADRE 1-ISA
Democracy	Openness	4/6	Organization	2-ADRE 2-TPA
	Transparency and Accountability	5/7	Organization	5-TPA
	Participation	4/6	Organization	2-TPA 2-WMET
Effectiveness	Reduced Admin Burden	3/5	E-service	3-SCMC
	Increased User Value and Satisfaction	7/17	E-service	1-ADRE 1-POPS 2-WMET 3-TPA
	More Inclusive Public Services	6/11	E-service	2-WMET 2-RSS

