United Arab Emirates

هيئة الإمارات للهوية
EMIRATES IDENTITY AUTHORITY

23 May 2011 | **National Vision for better Future**

e-Government Transformation

GCC eServices Delivery Standards and Recent Developments

Conference: '17th GCC eGovernment and eServices Conferences'

May 21-25, 2011 | Burj Al Arab Hotel | Dubai, United Arab Emirates

Agenda

- Introduction: e-Government and Information Technology
- Recent Developments in GCC countries
- UAE Electronic Identity Working Model
- Supporting National Economy
- Reflections

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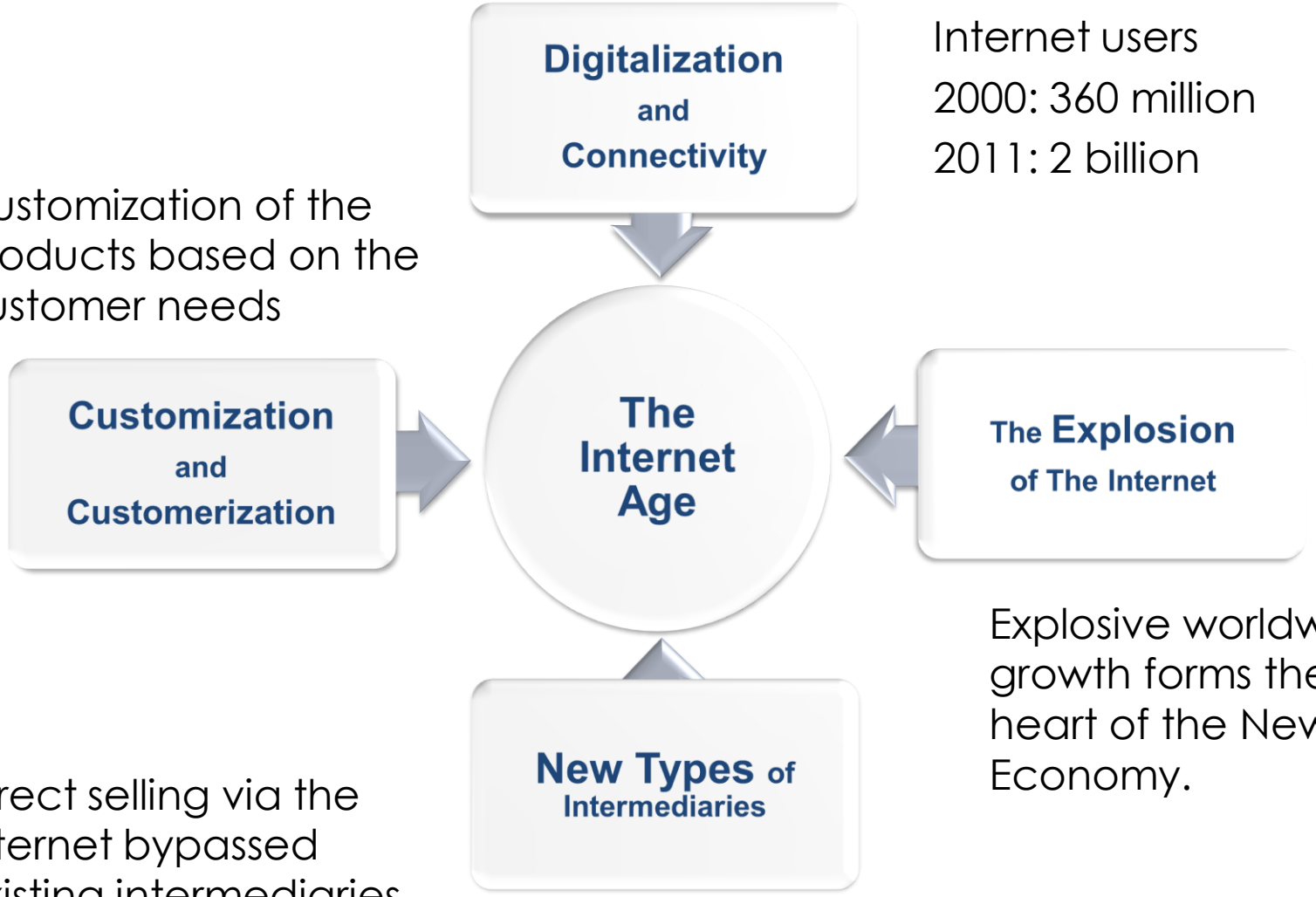
Forces Shaping the Digital Age …



Internet users
2000: 360 million
2011: 2 billion

Customization of the products based on the customer needs

Explosive worldwide growth forms the heart of the New Economy.

Direct selling via the Internet bypassed existing intermediaries (disintermediation)

eGovernment

- **e-Government** is a process that attempts to **align IT and business needs** to develop an infrastructure of systems and information flow that will support *business goals, objectives*, and processes for **governance in the digital age**.

Information Technology

"Information technology, and the **ability to use** it and **adapt** it, is the critical factor in **generating and accessing wealth, power, and knowledge** in our time...."

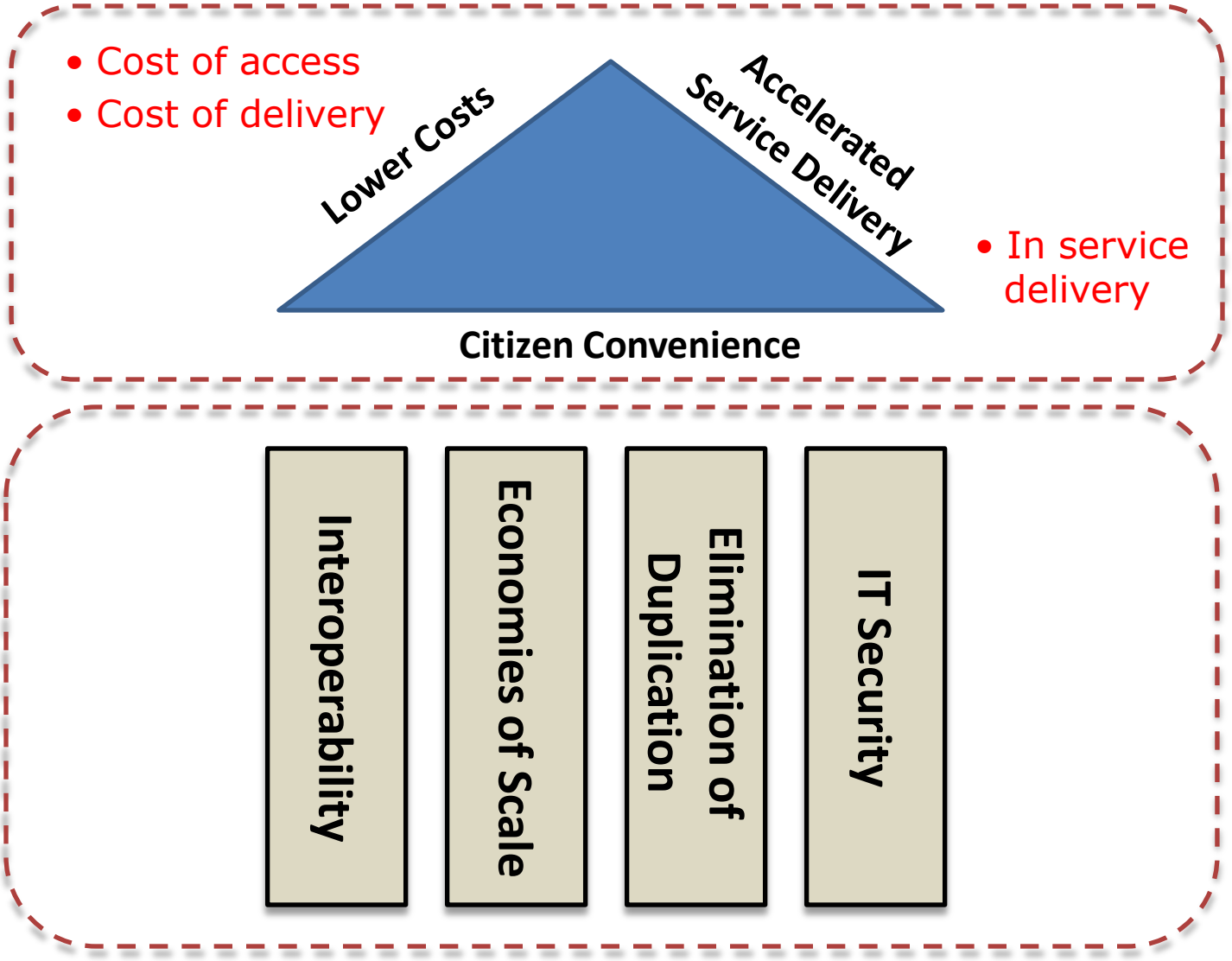
Professor: Manuel Castells

IT House of Values

Primary elements of e-Government Value

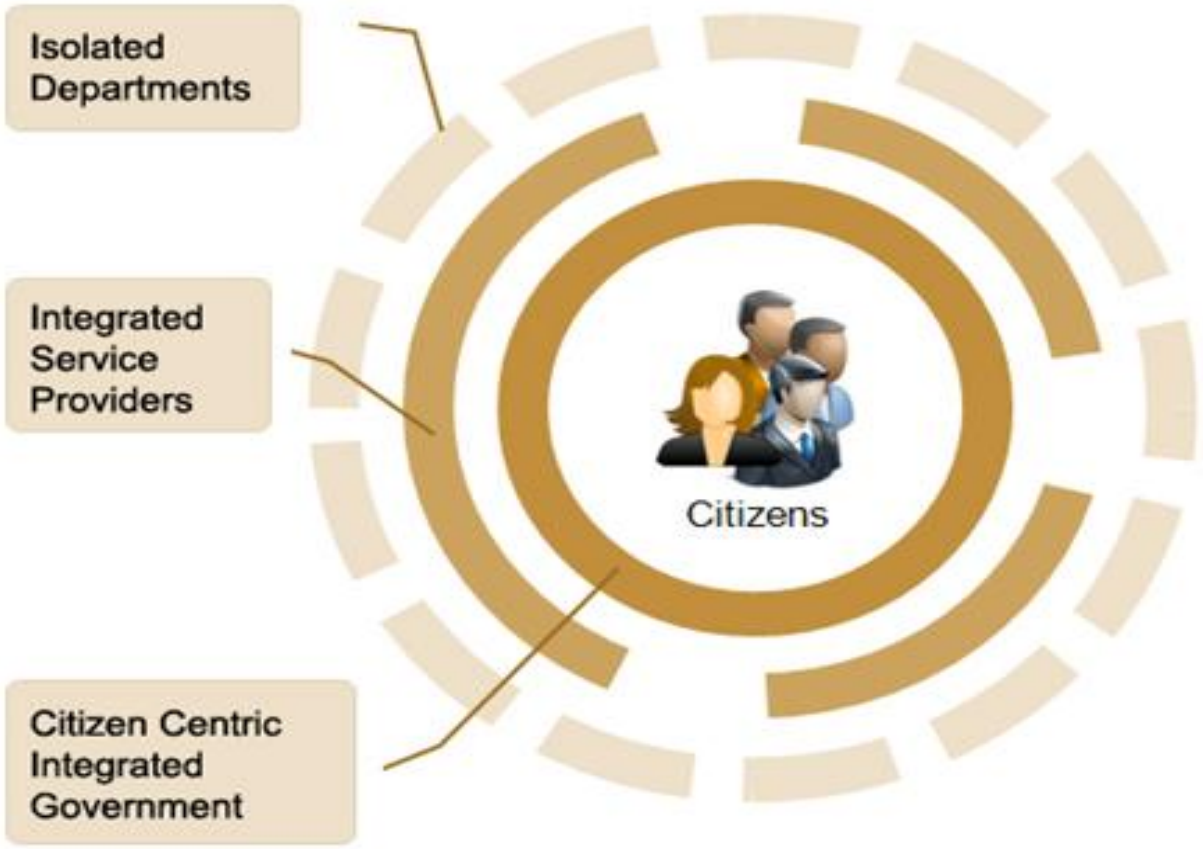
are enabled by ...

Focussing on these strategic focus areas



Citizen Centricity

A Global Trend …

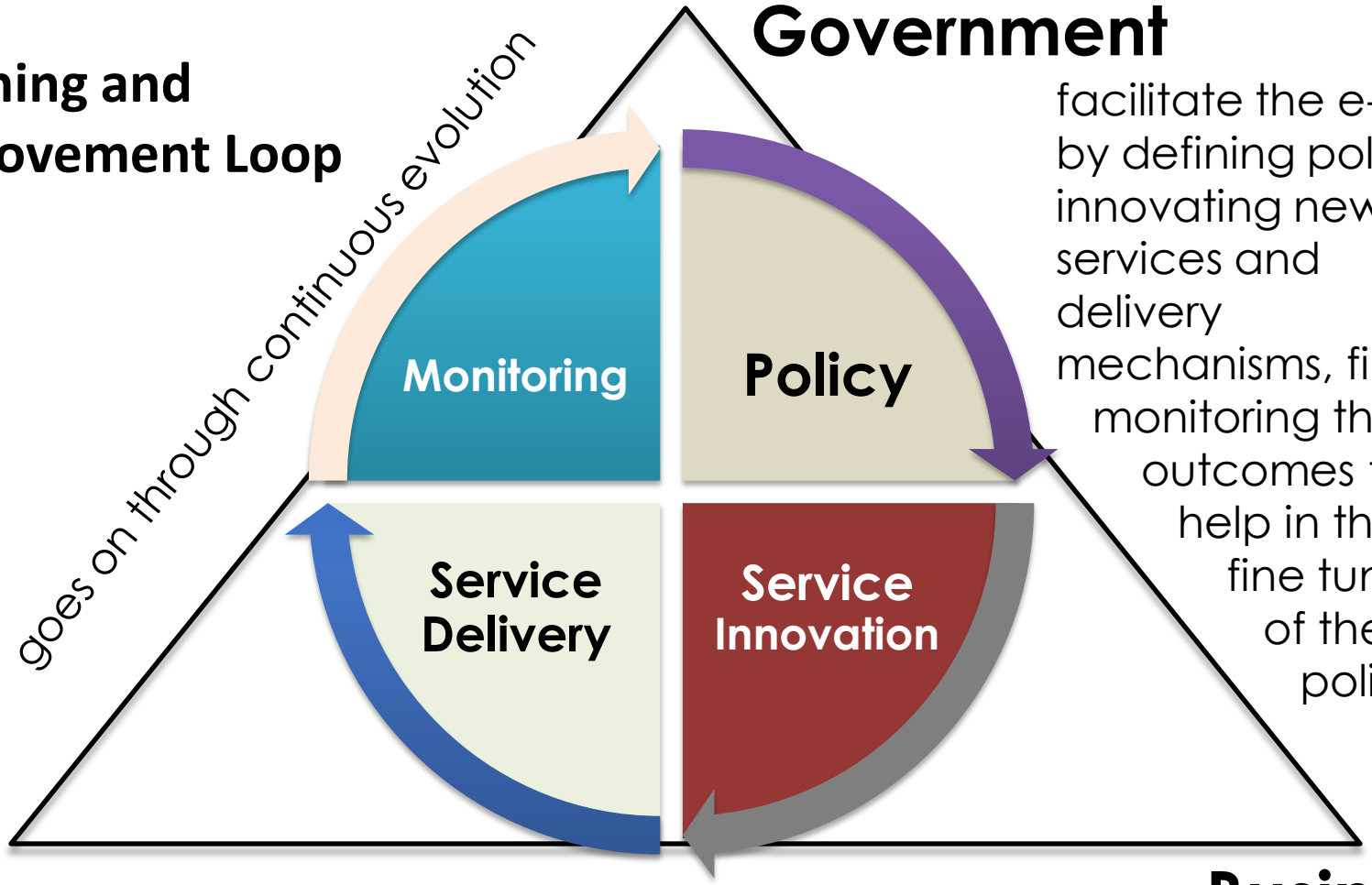


- **Customer focused business model** / Service Delivery
- Integrated systems
- **transparency** and **convenience**
- **One Stop Shop**
- Re-oriented structures, IT, policies, etc.

Transform the "experience" of government services for all

e-Government Stakeholders Pyramid

- **Learning and Improvement Loop**



Government

facilitate the e-Gov by defining policies, innovating new services and delivery mechanisms, finally monitoring the outcomes to help in the fine tuning of the policies.

Business

leverage the e-Gov services and in turn provide services to citizens

Citizen

European Union Information Society

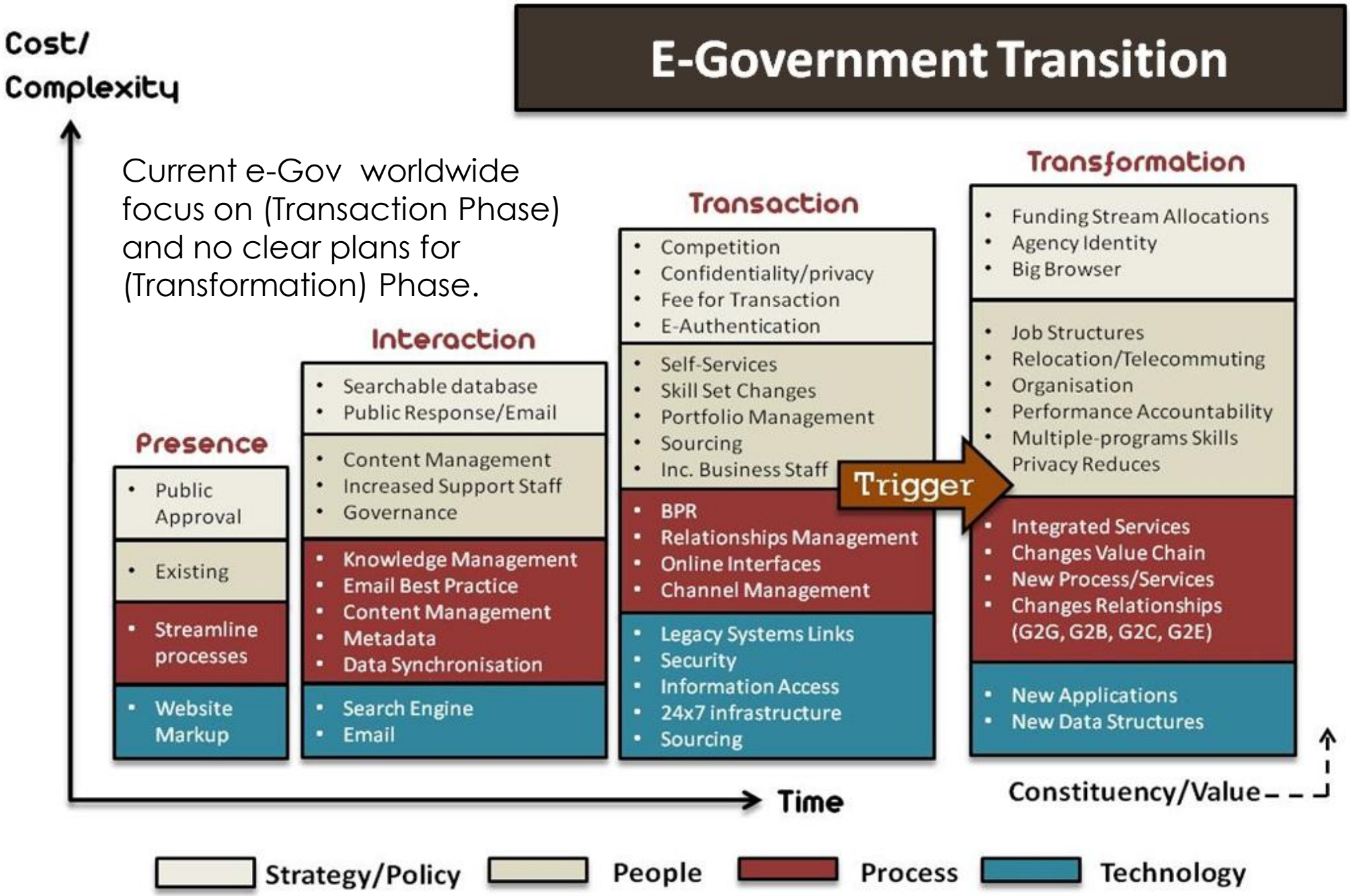
Action Plan 2011-2015

5 Key Priorities & Objectives

Inclusive e-Government	Efficiency & Effectiveness	High Impact Services	Key Enablers	e-Participation
Empower citizens and business **Transparency, Access**	• reduction of **administrative burdens** • Horizontal and vertical **integration** • greening government, to reduce the **carbon footprint**	**One-stop-shop:** delivering cross-border eServices for citizens and businesses	**Electronic Identity** • **Interoperability** of ICT Infrastructures • Good Practice Sharing and **Knowledge Exchange**	

Source: Preparing eGovernment post i2010 - http://ec.europa.eu/egovernment

E-Government Transition



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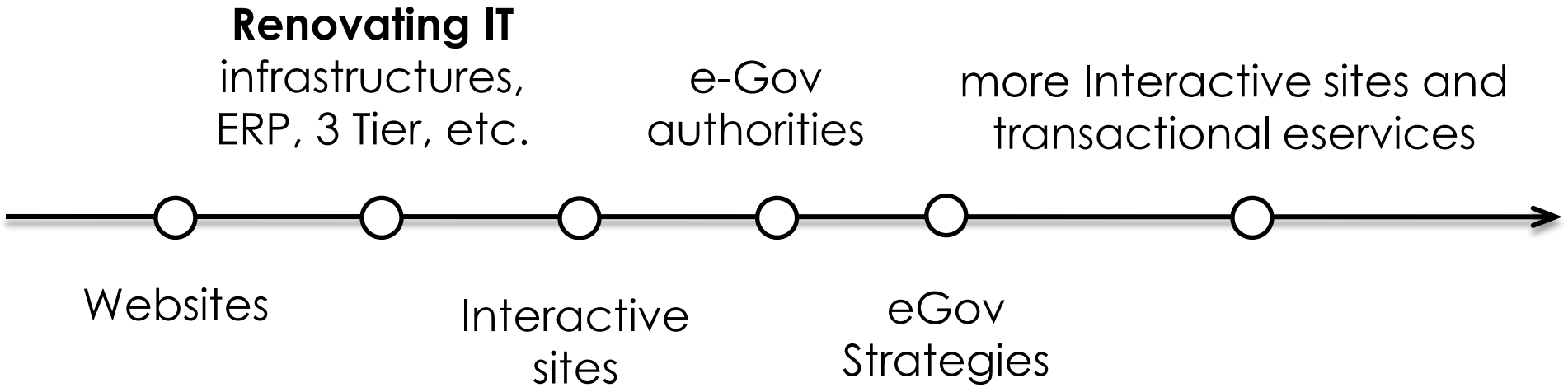
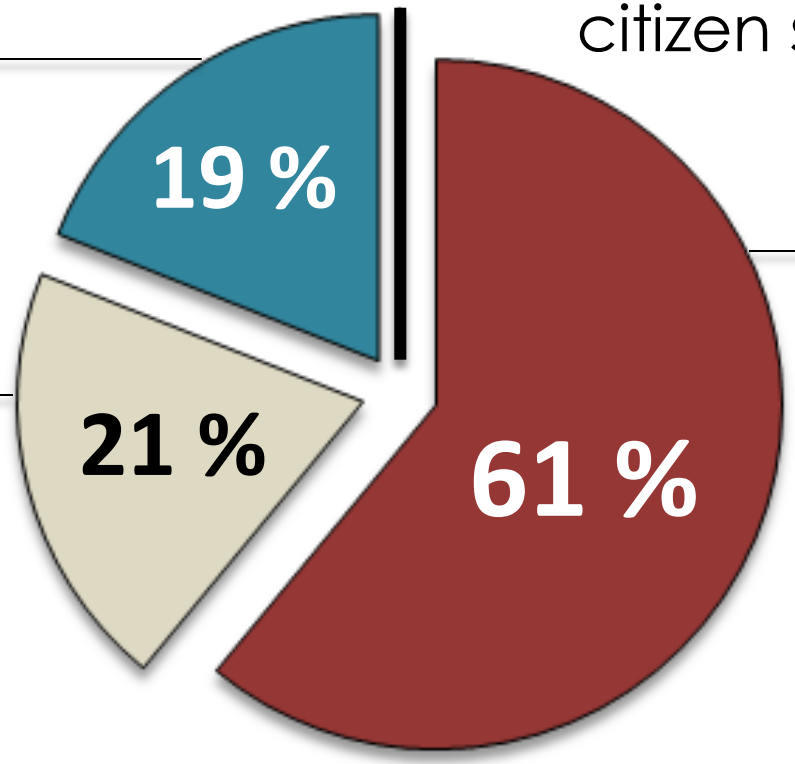
eGov evolvement in GCC



Billions of Expenditure but unjustified investments!!

GCC Websites Survey (95 websites visited)



Transformation

Inter-agency integration and unified citizen services

Transaction

Online citizen transaction

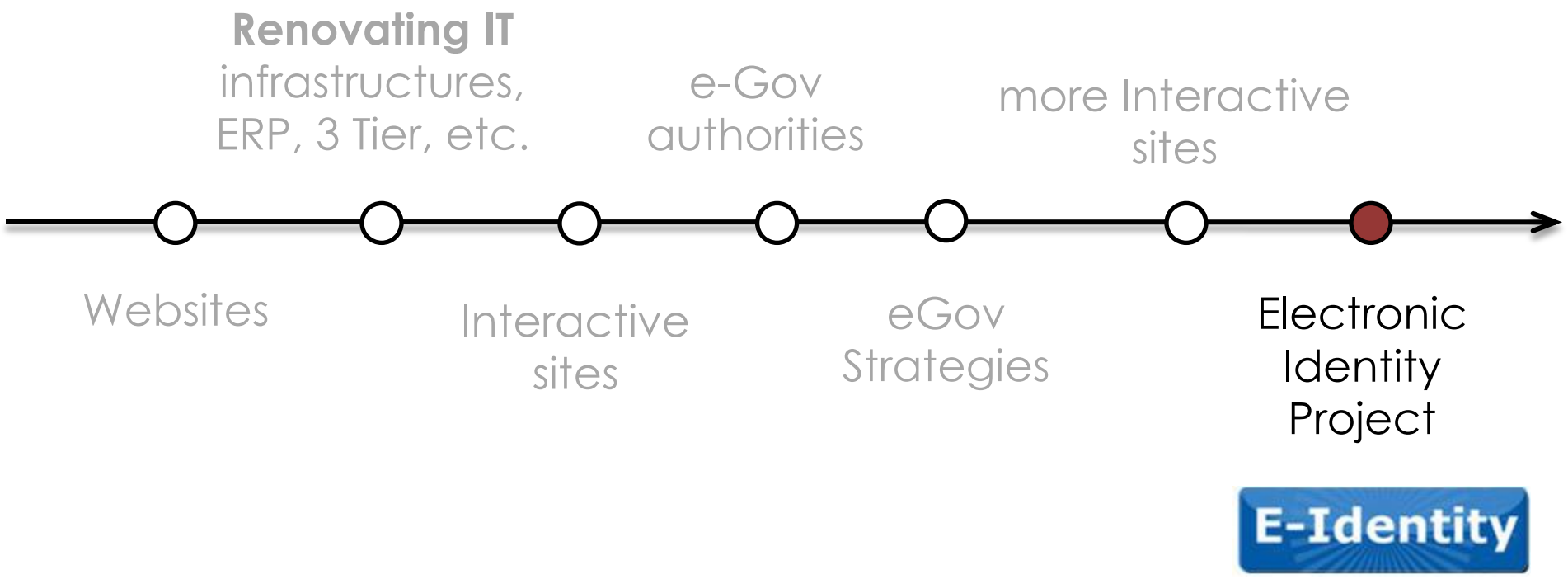
Interaction

Intake process of citizen interaction

Information

Web Presence for Publishing Information

Developments in GCC countries



ID Card vs. Electronic Identity

- All GCC countries have initiated *modern* **Identity management systems** to develop a **new personal identification card** that would be generally acceptable identification document and contain both **visually and electronically accessible information**.

- ID-card registration in GCC countries is a **compulsory process** and is an acceptable travel document to travel between the GCC countries. To date, around **14 million (28%)** people have been enrolled in such systems.

ID Card vs. Electronic Identity

GCC ID-card projects are **integrated with PKI** technology to develop electronic identities:

- **Digital certificate** inserted in the ID-card includes the personal identification code, which enables the identification of the individuals at once.

- **Signature certificate**, which enables to sign electronic documents, which is equivalent to the ordinary signature on paper.

Multi-Factor Authentication

- Basic Personal Information(Signed data)
- 4 Digit Pin Code
- Fingerprint Biometrics
- Digital Certificate
- Digital Signature

Enabling eGovernment: Smart Card and PKI

Security

- **Multi-factor authentication** of citizens through smartcard AND/OR biometric
- **Smartcard** as an ideal tool for **PKI enablement**
- **Protection** for personal data in a chip
- Protection of PKI **private keys** on Smartcard
- **Prevents forgery** and ensures that entitlements and benefits reach the intended beneficiary
- **Digital signatures** to replace manual signature

Efficiency & Accountability

- **Reduced paper** form data entry and associated errors
- **Foolproof digital signature** along with biometric authentication to prove **accountability**
- Facilitate **fast adoption** of e-Government services by reducing the fear of **identity theft**
- Service **innovation** through integrated citizen services enabled by Smartcard and PKI

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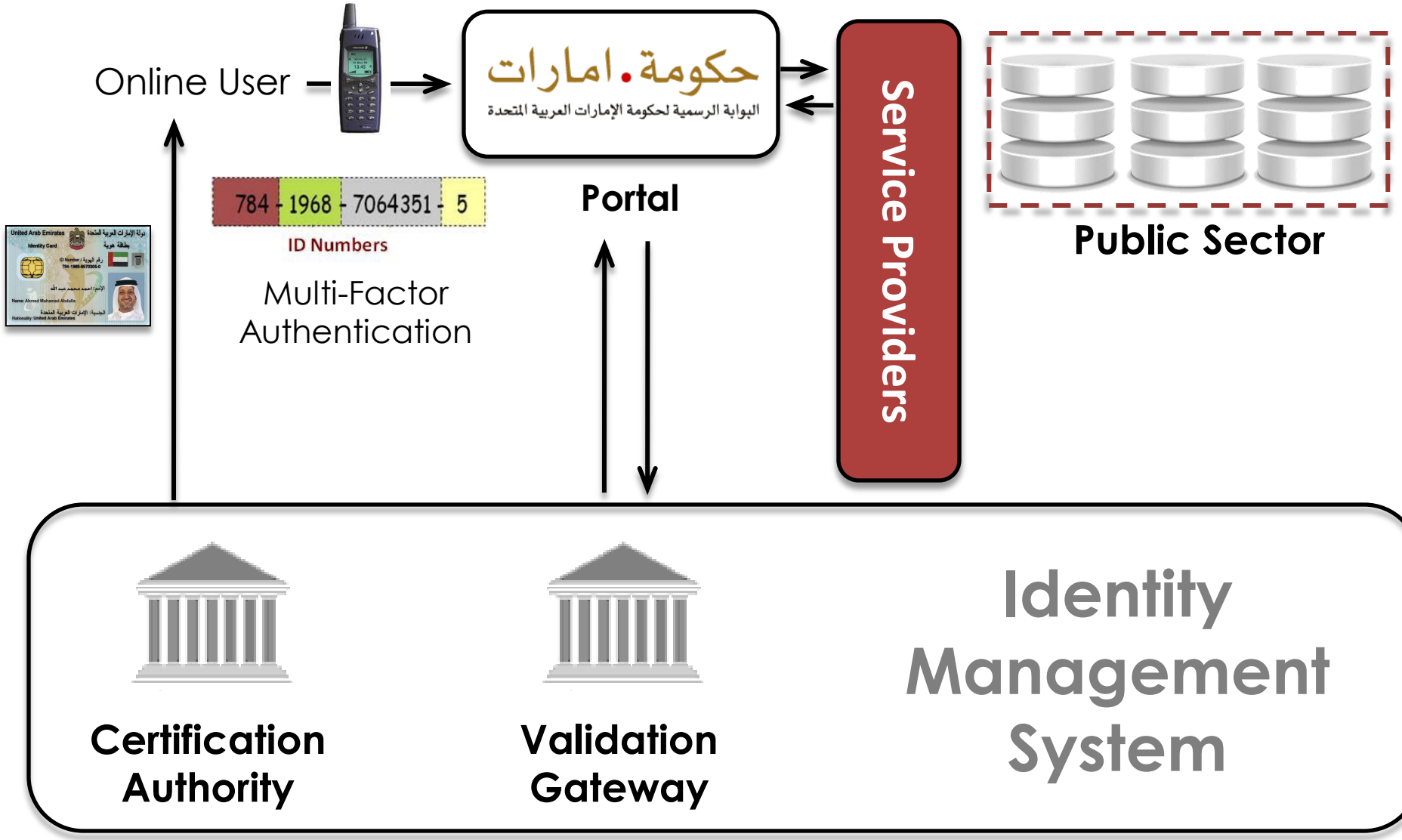
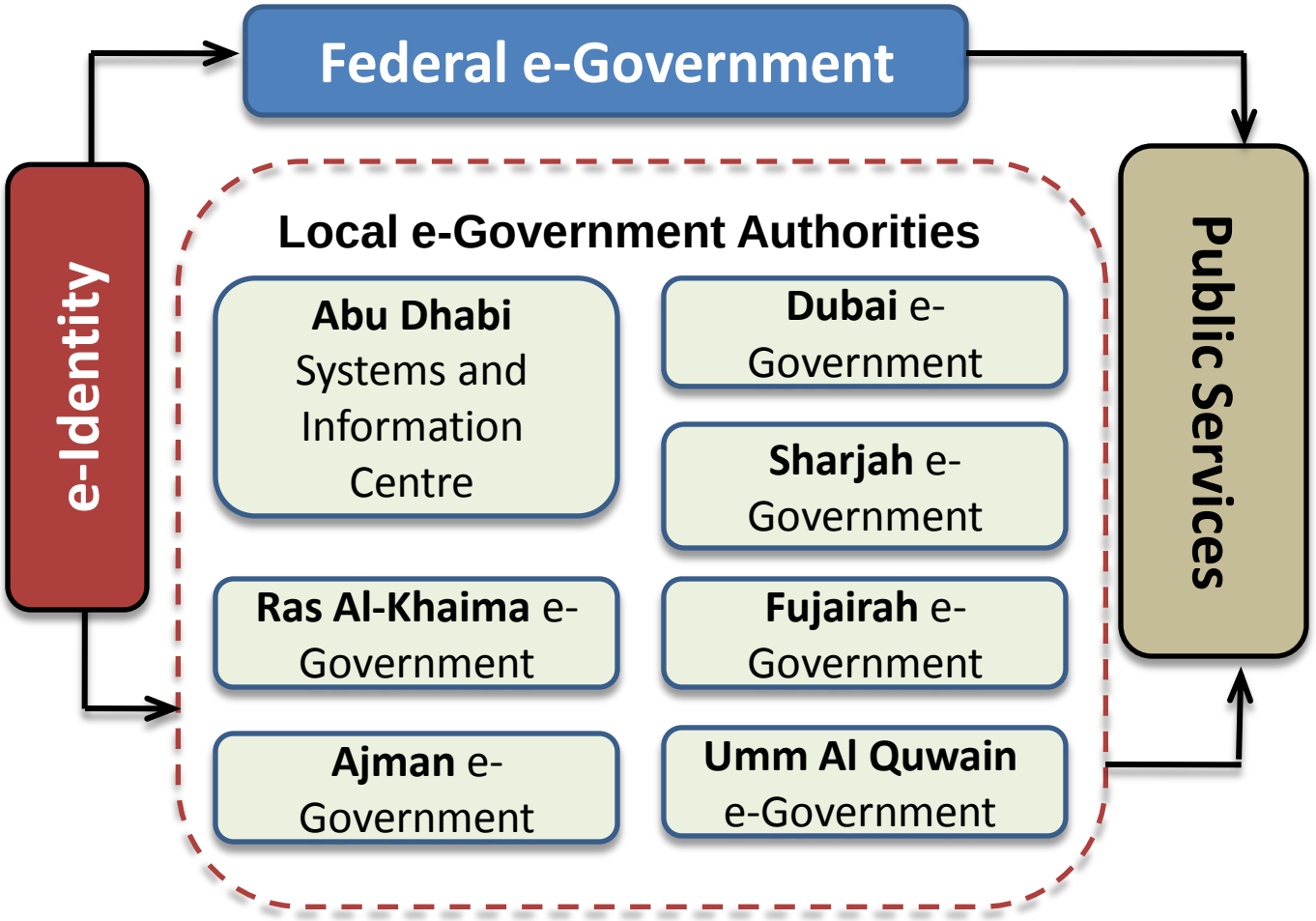
E-Identity Operating Model



UAE Project eID Working Model



Emirates Identity Authority coordinates with the Federal and Local e-Government authorities to utilise the e-Identity infrastructure. E-Government authorities will take the responsibility of availing e-Services to citizens through their portals.

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Enabling new Business Value with Internet

$1: The cost to government of renewing a driver's license **online**.

$8: The cost to renew it **in person**.

Business Cost	Traditional System	Internet
Airline Tickets	$8	$1
Bill Payment	$2.22	$0.65

E-Business Development Path

Development of e-business and e-commerce is very much dependent on Trust between the parties. If a secure layer was established that allows identity authentication, then further services can be developed and a revolution in this field is expected.

Supporting Economy

- **e-Commerce Infrastructure**

vs.

- **Trust** in electronic transactions.

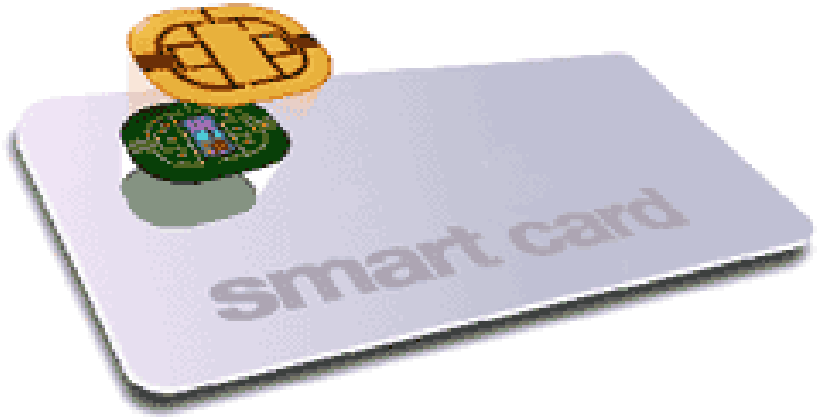
The new ID Card and with its advanced capabilities add a new dimension of TRUST to electronic transactions.

Online Payments: through Smart Cards

Cash

vs.

Electronic Money



Multiple online payment models could be developed with the new smart ID card, which could also be very much independent from the card itself.

ELECTRONIC COMMERCE PAYMENT SYSTEMS

- **micro payments:** a financial transaction involving a very small sum of money and usually one that occurs online.
- **electronic cash:** digital currency used for micropayments
- **digital wallets:** software stores credit card information.
- **eWallet:** Microchip stores electronic cash

Opportunities

Trillions of savings

with e-Government Transformation

Is it as easy?

What are the Challenges ?

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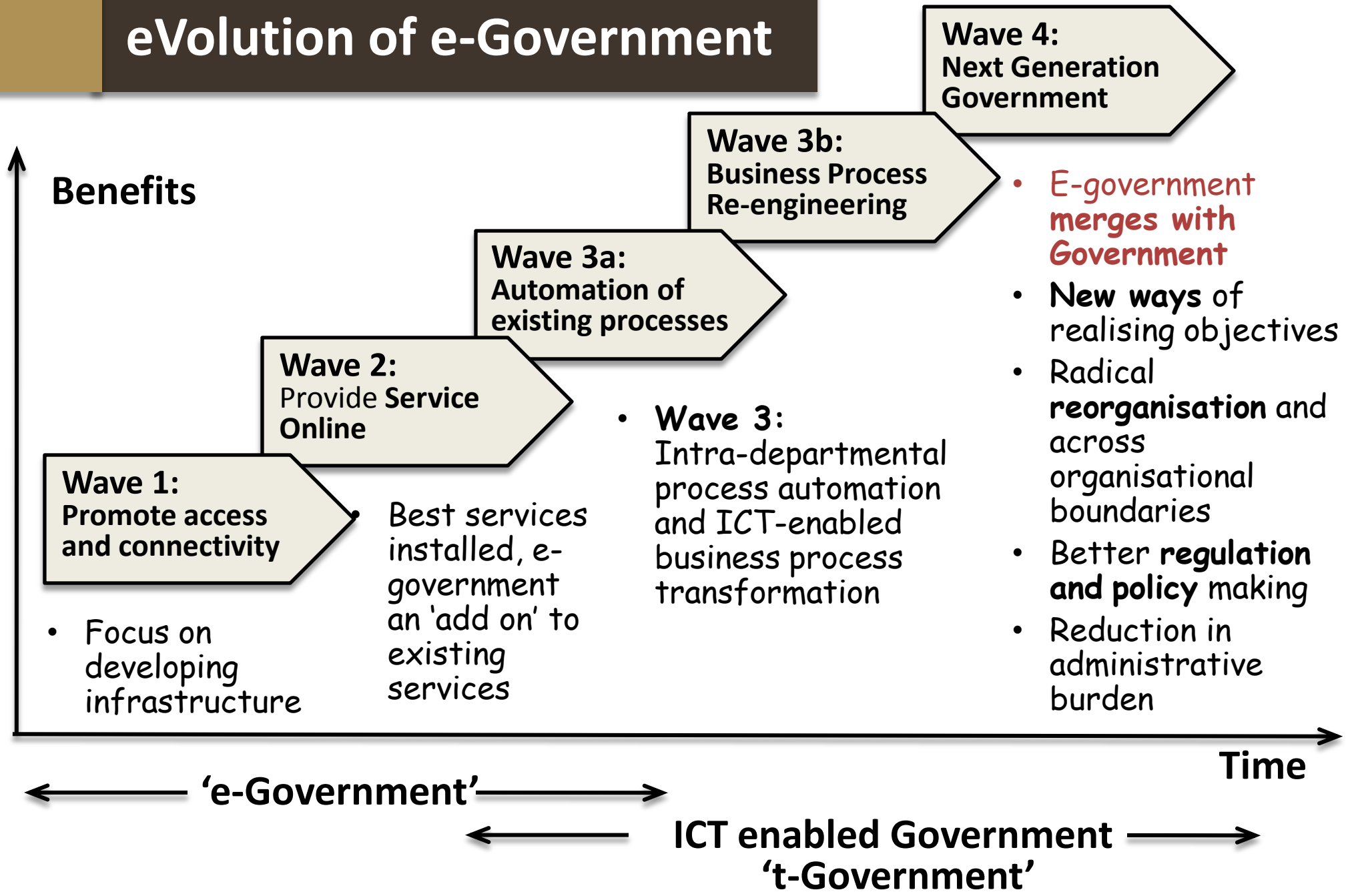
eVolution of e-Government



3rd Party Involvement and Emerging Architectures

Private sectors are pushing rigorously through aggressive marketing, products develop in the first place to be (SOLD).

Low government involvement

Silo Gov Low back and front-end integration	**No Gov** Multiple (private) services
One Gov Back to front integration	**Tao Gov** Public-private complementarity

Low 3rd Party involvement

High 3rd Party involvement

High government involvement

Governments need to put in place (carefully) laws and policies to regulate how government agencies acquire and set up their ICT infrastructures to address interoperability issues. This should be co-joined with partnerships with the Private Sector.

Why do we have Silo Systems ?

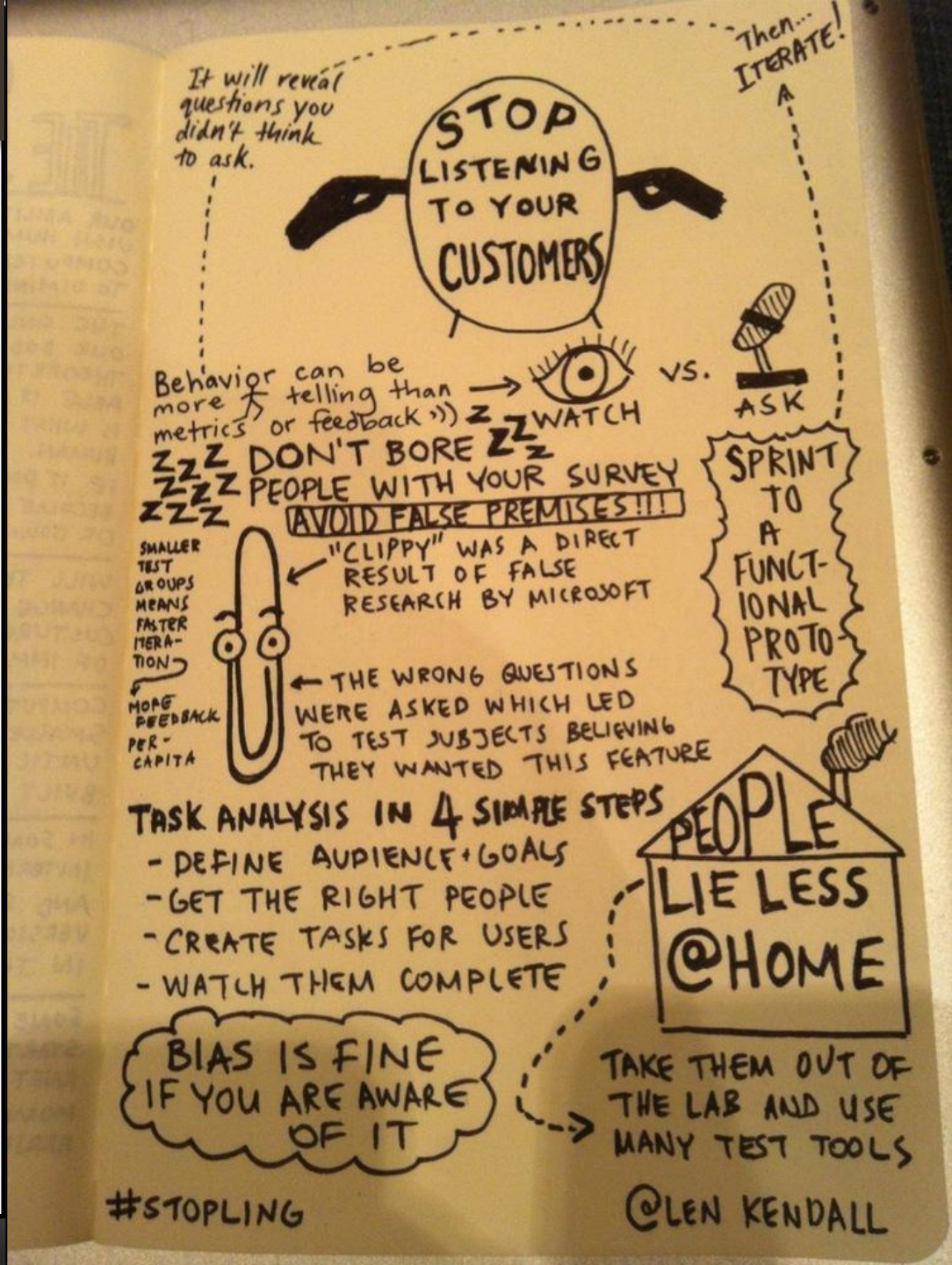
Managers living in the dark!

Citizens at the Fore !

traditional practices act to increase complexity

Listening
=
Learning

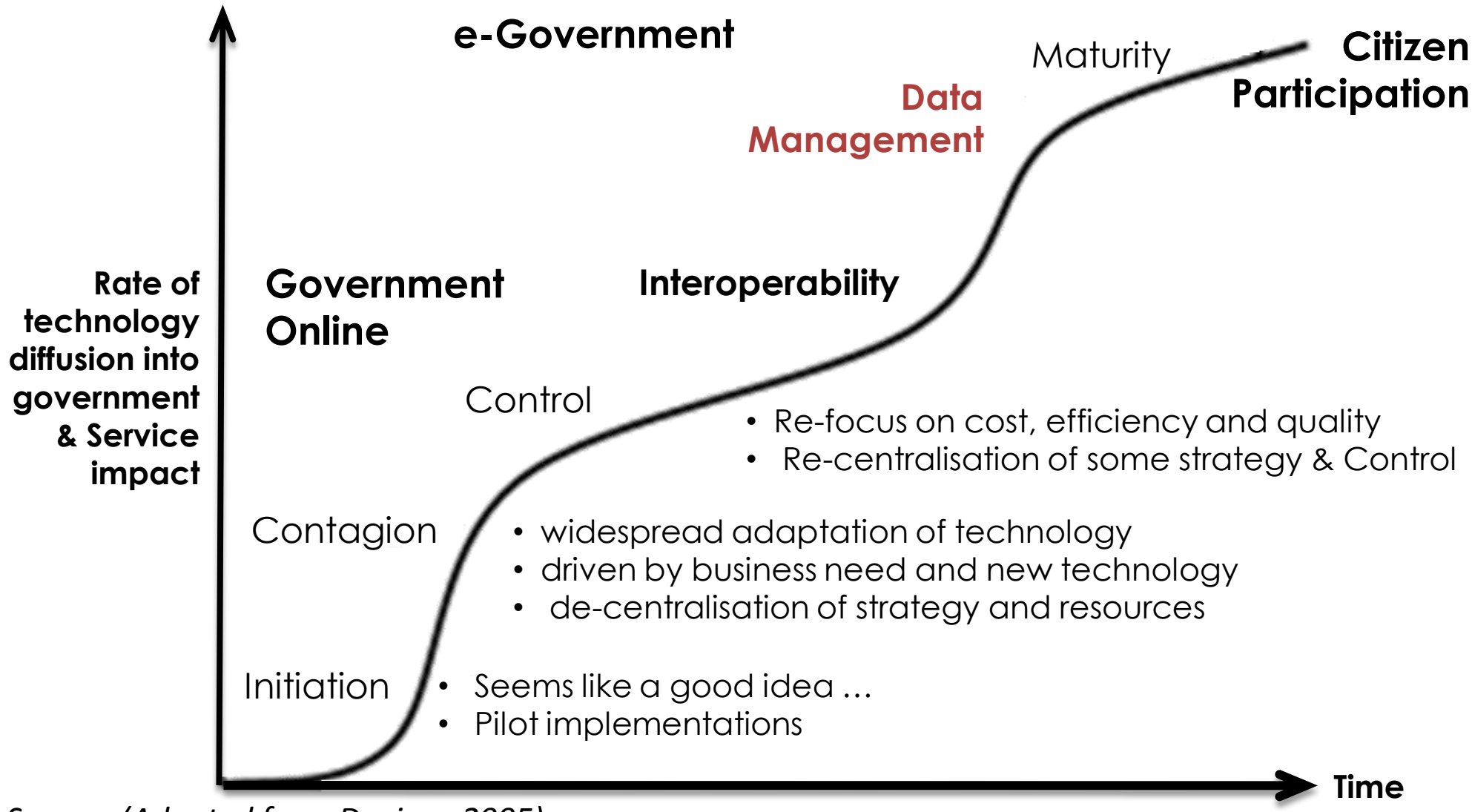
can reveal opportunities ...
and is likely to push for painful change !!



EU: Building blocks of future priorities

User Centricity → Organisational Change → Enabling Services → Key Applications → Benchmarking → Interoperability &Harmonisation → Participation → Inclusion → Innovation → Green Government → User Centricity

IT e-Government Maturity Curve



Source: (Adapted from Davison 2005)

Data revolution !!

- **Exabyte**(EB): 1000,000,000,000,000,000 bytes – 2 EB: Total volume of information generated in 1999.
  5 Exabytes: All words ever spoken by human beings.
- **Petabyte** (PB): 1000,000,000,000,000 bytes – 200 PB: All printed material in the world.
- **Terabyte** (TB): 1000,000,000,000 bytes – 10 TB: the print collection of the U.S. Library of Congress
- **Gigabyte** (GB): 1000,000,000 bytes - 1 GB: a pickup truck filled with books
- **Megabyte** (MB): 1,000,000 bytes 500 MB: CD ROM
- **Kilobyte** (KB): 1,000 bytes 2 KB: a typewritten page

Content Management

A Major challenge in e-Government is in **creating and managing content**.

New technologies are developed to search and dig for data and information. This will become more and more difficult as times go on:

- **Search Engines using Dynamic Information Clustering and Meta Search**
  (Meta search is based on search of other search engines)

- What the customers see (Static vs. **dynamic Content**)
- **Storing and retrieving** documents of various types
- Different **front ends** for different users
- **Tools** available for creating content
- Multimedia **presentation**
- Integration with other media for **data interchange**

Governments need to regulate how content is develop and managed, to make access to information and services convenient and fast.

Citizen Participation

- Citizen participation is like to grow as governments follow the process of

Convergence

of service and efficiency

- Supported by governments plans, Telecommunication companies in GCC countries are playing a key role in closing the digital divide with their state of art infrastructures. Internet penetration rates in GCC are increasing, due to affordable accessibility options.

The world is Changing !

- Whether we like or not, the world is going in one direction… either we are on the path, or we will be left behind.
- Information Societies and knowledge economies are key focus areas and pillars of our future.

Wealth and Power are

CREATED through exploitation of understanding i.e., wealth is generated by what we know.

Need for engineering mindsets to construct eGov..

Thank you

Dr. Ali M. Al-Khouri

Director General | Emirates Identity Authority | ali.alkhouri@emiratesid.ae

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Internet Usage Statistics

WORLD INTERNET USAGE AND POPULATION STATISTICS						
World Regions	Population (2010 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000-2010	Users % of Table
Africa	1,013,779,050	4,514,400	110,931,700	10.9 %	2,357.3 %	5.6 %
Asia	3,834,792,852	114,304,000	825,094,396	21.5 %	621.8 %	42.0 %
Europe	813,319,511	105,096,093	475,069,448	58.4 %	352.0 %	24.2 %
Middle East	212,336,924	3,284,800	63,240,946	29.8 %	1,825.3 %	3.2 %
North America	344,124,450	108,096,800	266,224,500	77.4 %	146.3 %	13.5 %
Latin America/Caribbean	592,556,972	18,068,919	204,689,836	34.5 %	1,032.8 %	10.4 %
Oceania / Australia	34,700,201	7,620,480	21,263,990	61.3 %	179.0 %	1.1 %
WORLD TOTAL	6,845,609,960	360,985,492	1,966,514,816	28.7 %	444.8 %	100.0 %

NOTES: (1) Internet Usage and World Population Statistics are for June 30, 2010. (2) CLICK on each world region name for detailed regional usage information. (3) Demographic (Population) numbers are based on data from the US Census Bureau . (4) Internet usage information comes from data published by Nielsen Online, by the International Telecommunications Union, by GfK, local Regulators and other reliable sources. (5) For definitions, disclaimer, and navigation help, please refer to the Site Surfing Guide. (6) Information in this site may be cited, giving the due credit to www.internetworldstats.com. Copyright © 2000 - 2010, Miniwatts Marketing Group. All rights reserved worldwide.

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