

SMART GOVERNMENT

C I R C L E

OF ATTENTION

Professor Ali M. Al-Khouri

Technology and humans today are working in somewhat a virtual world. Who owns the world of imagination owns the real world, and will consequently control it.



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NOTE FROM THE AUTHOR

The Internet and subsequent technological developments have pushed citizens' expectations to new levels. This in turn is making governments worldwide struggle to comprehend the rapid developments that are impacting all practice fields around them. In fact, the last two decades have seen governments taking up larger roles due to having to widen their scope of responsibilities, which have been impacted by technological developments.

In a rather reactive manner, governments, over the same time period, have been pursuing initiatives such as e-government in order to revolutionize the public sector service delivery by taking advantage of technology. In recent years, there has been a move toward concepts such as transformation or smart government initiatives to address the needs of both development and expectation.

In this book, we identify some foundational concepts and practices that need to be considered in national government transformation strategies. These elements are argued to have serious implications for policymakers and government agencies concerned with the design and development of a smart user-centric government. We use the concept "circle of attention" to narrow the focus areas of e-government strategies to look more at the actions that would yield higher value sets.

Professor Ali M. Al-Khoury

CHAPTER



INTRODUCTION

INTRODUCTION

As a communication platform, the Internet has brought about a paradigm shift in how individuals and businesses interact and access resources. However, despite tremendous efforts by governments to utilize this platform to enhance their efficiency and the effectiveness of their communication and service delivery in the public sector; their practices are still widely viewed as not yet sufficiently taking full advantage of the Internet and the other contemporary technologies that could help them achieve notable progress in e-government development.¹⁻¹⁰

Figure 1 depicts one of the commonly used e-government development models proposed by Layne and Lee ¹¹. The model is defined as follows:

- The 1st stage is “catalogue”: At this stage, the government information is brought online.
- The 2nd stage is “transaction”: E-government at this stage entails a transaction capability so that citizens can transact with the government electronically.
- The 3rd stage is “vertical integration”: This stage, involves the integration between different levels of systems within similar functionalities or jurisdictions.
- The 4th stage is “horizontal integration”: This is an enhanced integration of e-government services across various jurisdictions, with the ultimate aim of providing citizens with a ‘one stop shop’ experience.

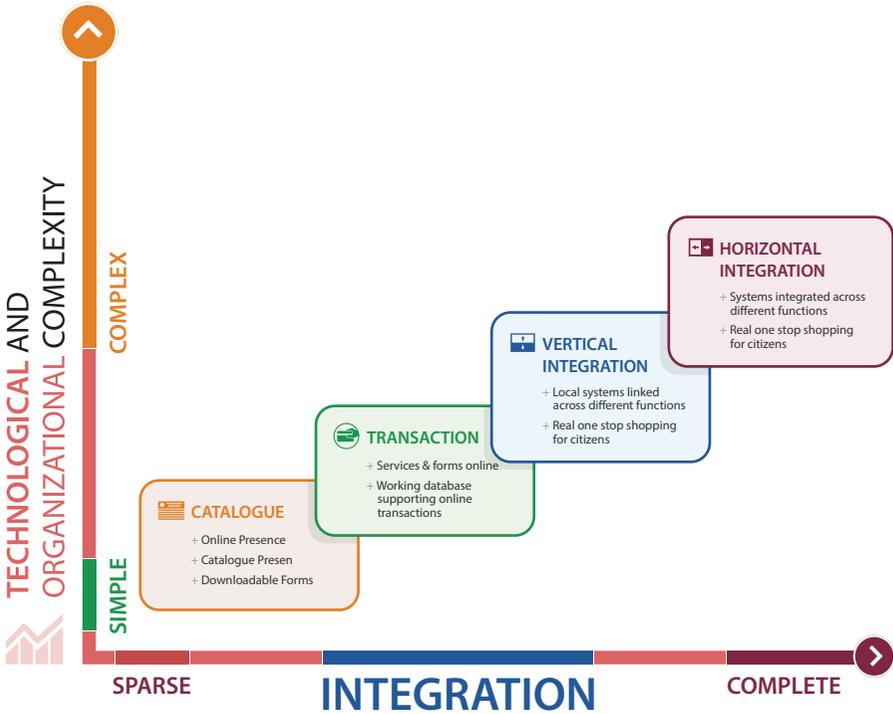


FIGURE 1

E-government Maturity

Source: Layne & Lee 11

Numerous practical studies have shown that e-government practices are widely viewed to be of a limited transactional nature – that is, phase two of Layne and Lee’s model. 12-14 This argument can be supported by noting that there is limited evidence in the existing literature that can back up the notion that there is real progress in horizontal and vertical integration between government agencies.

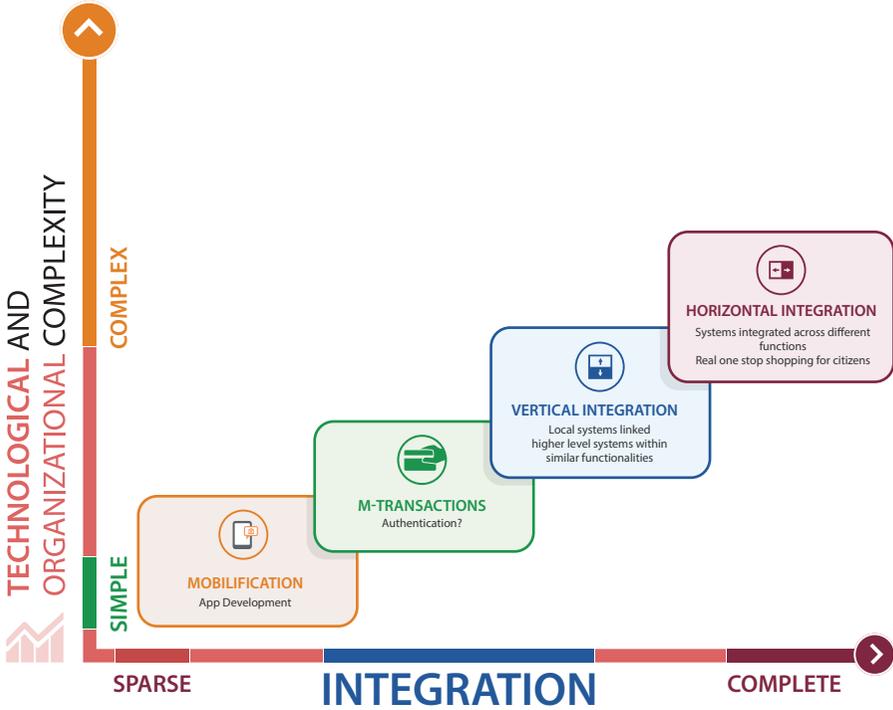


FIGURE 2

M-government Maturity

Source: Based on the work of Layne & Lee 11

On the whole, the demand for more access to government information and services has reached new levels. This has been due to the rise in the use of mobile devices, coupled with the phenomenal penetration rates of smart phones. Therefore, citizens today expect their governments to deliver services on mobile devices.

As illustrated by the e-government Maturity Model above, this has basically pushed governments back to square one of “cataloguing.” In short, governments are now at the stage of having to develop mobile-fit versions of web portals and/or creating mobile apps. This is actually quite similar to the early days of the website development stages in the 1990s.

See also Figure 2.

Failings such as this have resulted in the recent trends of government practices that are calling for a shift from e-government toward a much more transformational approach.¹⁵ Some countries, among them the UK, Canada, and Australia, have all recently published strategies that shift decisively away from e-government toward a much more radical focus that transforms the whole relationship between the public sector and users of public services even further.¹⁶

OASIS¹⁶ defines ‘transformation government’ “as a managed process of ICT-enabled change in the public sector, which puts the needs of citizens and businesses at the heart of that process and which achieves significant and transformational impacts on the efficiency and effectiveness of government” (p. 2).

In the past two decades, a number of frameworks and technical solutions have been proposed to enable a so-called citizen-centric || government.¹⁷⁻²² It must be noted here that many implementations that have been carried out by different countries were promoted by flashy, colored marketing by consultants and technology suppliers – one reason among many others that are typically being used to explain why e-government objectives to date are not being realized.

SERVICES REFLECTS THE CHARACTERISTICS

Designed to achieve clear policy outcomes
Consider users to be more than consumers
Provide users with obvious added value & encourage re-use

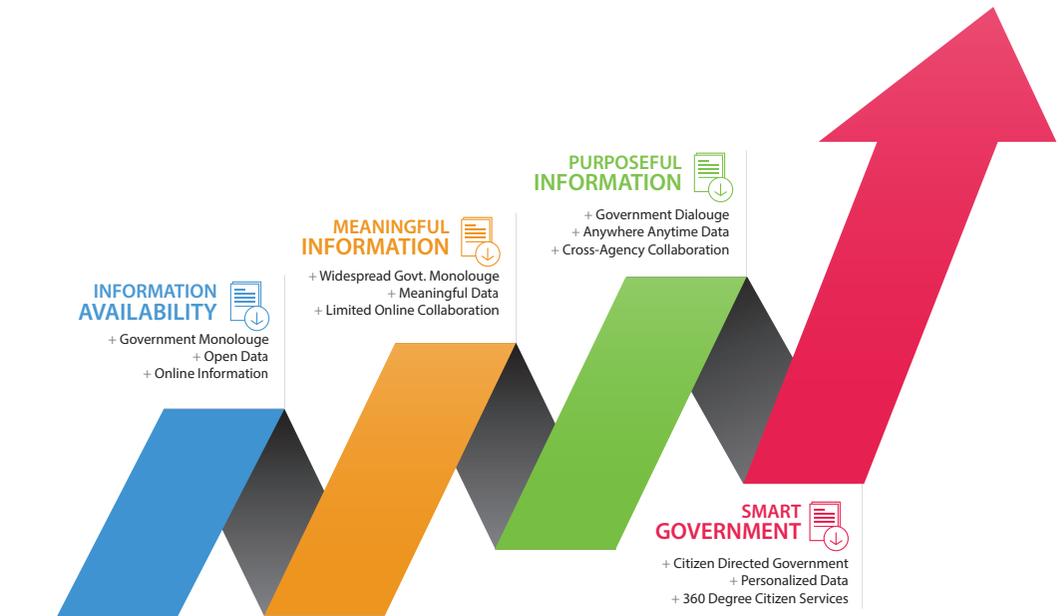


FIGURE 3

Smart Government Evolution

Source: IDC₂₃

The argument is that, in order to realize a true revolution, the government has to embrace it from within itself, not from the sales pitch of the work done by consultants. Governments also need to move away from the technical mind-set, which tends to focus on information and communication technologies (ICT).

In other words, governments need more than a technology focus. Government organizations must nurture an ongoing effort at internal transformation until they can effectively expand beyond their four walls to have a 360-degree view of their constituents.²³⁻²⁴ Only then will they be able to shift into a smart government concept that puts citizens' needs at the heart of their design.

See also Figure 3.

It is in this context that we need to examine the transformation to a smarter government that is driven by its citizens' needs. A true smart government is one that not only seeks to, but it actually does transform the manner of its functioning and achieves efficiency in delivering its ubiquitous services. There are several views and aspects concerning the implementation of a smart government. We use the notion of "circle of attention" to focus on the core elements that national smart government strategies should be addressing in the short to medium term.

The term circle of attention was first used by Constantin S. Stanislavski, a famous Russian theater actor and director.²⁵ In simpler terms, the idea of a circle of attention is akin to what an actor may draw virtually in their mind and focus upon so as not to be distracted by the audience. This circle of attention thus becomes a metaphor for focusing on objects that need to be delivered and performance. In real life, too, there are many distractions. The idea is to apply a circle of attention that virtually filters out all the distractions and then deliver.

This same concept can be applied to examine the delivery of a smart government. In our circle, we draw on the six components of cloud computing, ubiquitous digital-identity, integration, open data, big data, and knowledge management as the key elements that can speed up progress that can lead to delivering a smart, citizen-centric government. The following chapters define the elements of the circle of attention.

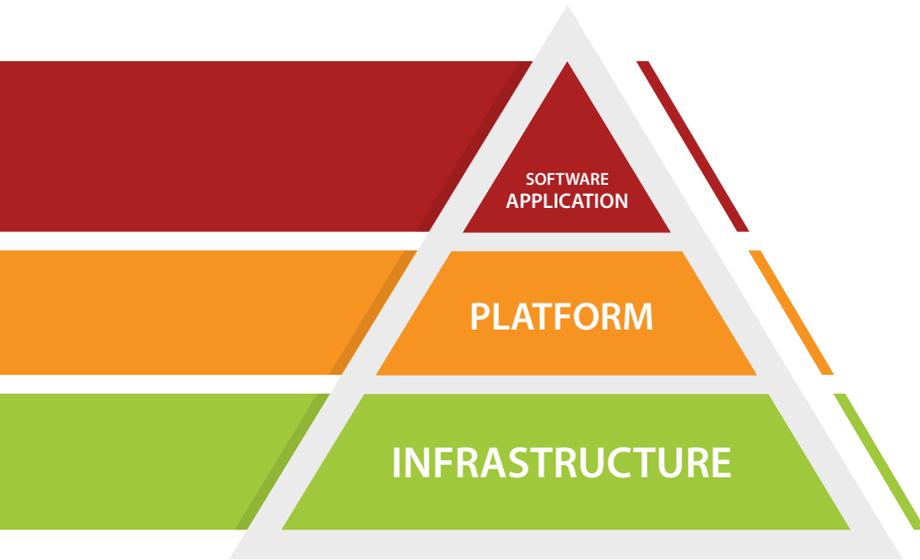
CHAPTER

2

CLOUD COMPUTING

A NEW REVOLUTION WILL RESHAPE
THE PRACTICE OF INFORMATION
TECHNOLOGY

SOFTWARE SERVICES



SOFTWARE as a SERVICE (SaaS)

Operating environment largely irrelevant, fully functional application provided, e.g., CRM, ERP, email.

PLATFORM as a SERVICE (PaaS)

Operating environment includes, e.g., Windows/.NET, Linux/J2EE, application of choice deployed.

INFRASTRUCTURE as a SERVICE (IaaS)

Virtual platform on which the required operating environment and application are deployed, also includes storage as a service offering.

FIGURE 4

Cloud computing service models

CLOUD COMPUTING

A NEW REVOLUTION WILL RESHAPE THE PRACTICE OF INFORMATION TECHNOLOGY

Cloud computing is currently one of the hottest topics in the technology world. Despite its great significance, government organizations have paid little attention to it. By definition, Cloud computing refers to the delivery of hosted services over the Internet. Cloud solutions come in three types, as depicted in Figure 4.

SMART GOVERNMENT CIRCLE OF ATTENTION

Public Cloud Rest of IT

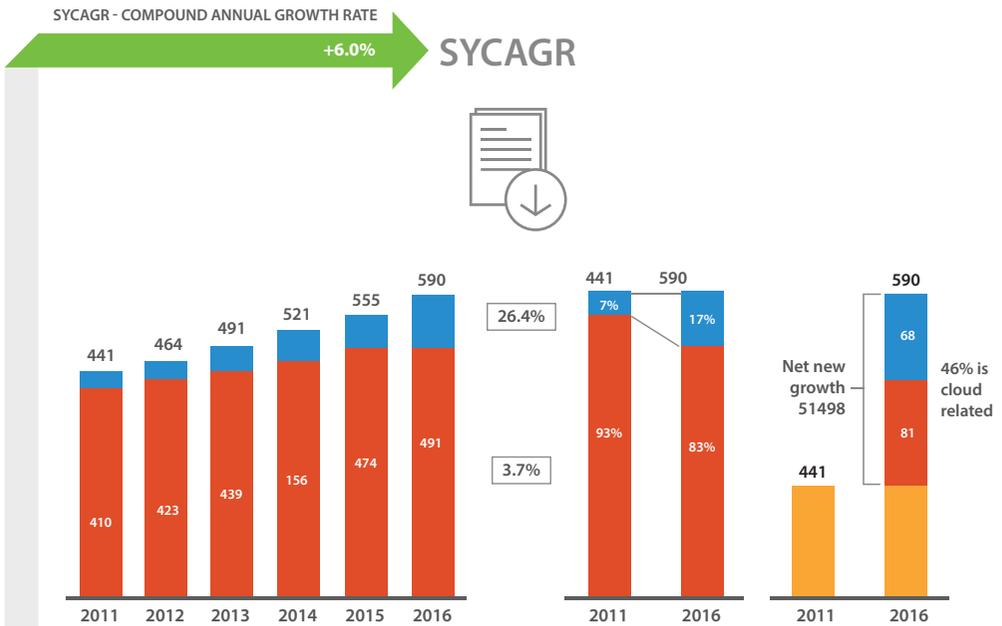


FIGURE 5

Public cloud vs. rest of IT

Source: IDC₂₄

Software (Application) as a Service (SaaS): SaaS is a hosted software/application service that is available remotely on demand as a web-based service. Some examples of SaaS include Google, Twitter, Facebook, and Flickr. Users can access the services via any Internet-enabled device.

This approach allows organizations to access business functionality at a lower cost as there are no setup or maintenance costs. Rather than purchase software, organizations typically can subscribe to it, usually on a monthly basis.

SaaS has become a common delivery model for many business applications, such as for Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), Human Resource Management (HRM), Content Management (CM), Service Desk Management, and collaboration environments.

Platform as a service (PaaS): An outgrowth of SaaS, PaaS offers an operating system environment for developing applications. It provides the architecture as well as the overall infrastructure to support application development. This includes networking, storage, software support, and management services.

PaaS services are hosted on the cloud and accessed by users simply via their web browser. As such, the development of new applications that are intended for the web, as well as mobile devices and PCs, are considered ideal.

Infrastructure as a Service (IaaS): This is a standardized, highly automated offering, whereby computing resources of virtualized hardware and computing infrastructure, complemented by storage and networking capabilities, are owned and hosted by a service provider and are offered on-demand to customers.

IaaS can be utilized by enterprise customers to create cost-effective and easily scalable IT solutions, where the complexities and expenses of managing the underlying hardware are outsourced to the cloud provider. If the scale of a business customer's operations fluctuates, or if it is looking to expand; the business can tap into the cloud resource when it needs it rather than purchase, install, and integrate hardware.

Reports indicate that public Information Technology cloud services are to grow sevenfold over the next few years, with almost 50% of IT spending by 2016 to be spent on cloud-related platforms and applications.²⁶ See also Figure 5.

The cost/benefit ratio of cloud computing is becoming too high to ignore.²⁷⁻²⁸ A Booz Allen Hamilton reports the benefit-to-cost ratio in the range of 5.7 to 15.4, with large data centers potentially reaching as high as 25.²⁹

From our experience with government businesses, agencies tend to be distracted. Often, much of their effort is spent on building support functions. Logically, we are of the view that for any government transformation to happen, agencies need to apply the 80:20 rule and, thus, pay more attention to the development and continuous enhancement of core functions.

Instead of dwelling on an in-house development or implementation approach, the use of cloud application models for support functions (e.g., e-mail, CRM, and collaborative environments) could make a big difference. Organizations would just need to plug in and subscribe to online hosted services on shared infrastructure via the Internet.

A recent survey of 1,000 Information Technology professionals by Forrester Research found that they are turning to hosted SaaS products as a way to offload management of non-mission-critical applications, such as human resources (HR) and CRM.³⁰ This also indicated that the subscription-based SaaS pricing model can keep Information Technology budget costs consistent or lower than packaged or homegrown software.³⁰

Governments could also consider promoting solutions such as cloud platforms and infrastructures. As security concerns will always be at the forefront, national government strategies may include initiatives to develop nation-wide cloud solutions that support transformation programs at institutional levels.

The South Korean model stands out as a case in use, here. The Korean National Computing and Information Agency was set up nearly ten years ago to support government IT consolidation efforts. It has consolidated the data centers of government agencies and provided an integrated management system as a cloud service for IT resources. A recently released report outlines that this has resulted in nearly \$60 million in savings.³¹ The average monthly downtime per equipment was reduced dramatically from 67 minutes before integration to 0.28 minutes, with the system operational rate increasing from 99.845% to 99.9995.³¹

CHAPTER

3

UBIQUITOUS
DIGITAL IDENTITY

THE NEED FOR A TRUSTED TOKEN TO ACCESS
DIGITAL SERVICES



UBIQUITOUS DIGITAL IDENTITY THE NEED FOR A TRUSTED TOKEN TO ACCESS DIGITAL SERVICES

FIGURE 6

Ubiquitous e-Identity

The primary challenge facing transformation initiatives today is related to identity management in the digital world. The question is how to identify whether the user of the device is authenticated (rightful owner) and/or the device itself is identified as authorized.

This is to say that the primary obstacle faced by governments and service providers, as a whole, in order to facilitate mobile transactions on mobile devices is yet again related to the identity management of online users – that is, handling identification and authentication requirements in virtual and, now in, mobile environments.

This is an issue that, right from the early days of the concept, has been challenging the progress of e-governments worldwide.^{32,33} Over the past few years, governments have been spending massive amounts on addressing cyber-security issues through numerous identity-management systems.

However, for transformation initiatives to progress, governments need to develop a ubiquitous digital identity that could act as a proxy for real identity, be it an individual or an organization. Such a digital identity should provide a set of credentials for identity assertion that altogether supports the development of a mutual trust between the service provider and the individual.

34 See Figure 6.

DIGITAL IDENTITY

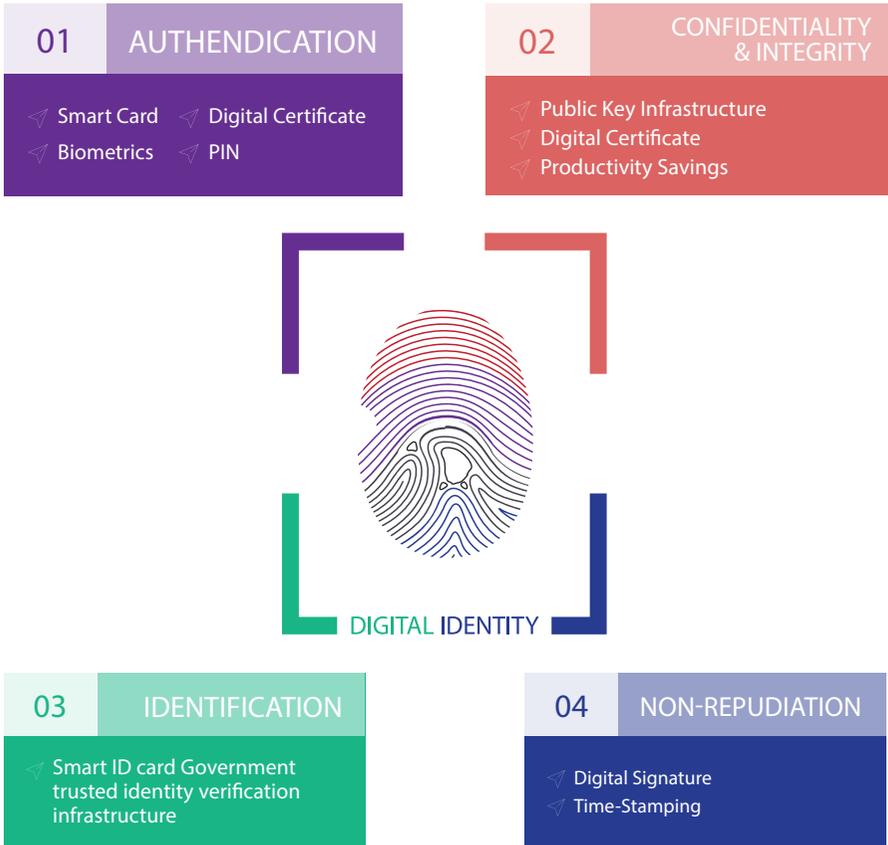


FIGURE 7

Capabilities of modern government identity systems

Modern governments' digital identity systems are envisaged to play a critical role in supporting such objectives. Numerous examples can demonstrate the capabilities of government-issued smart identity cards that support digital identification and authentication.³³⁻³⁶

See also Figure 7.

Many governments are working on extending the use of their contemporary identity systems to address the electronic authentication needs of the mobile ecosystem. Despite many other approaches, the following two are what we perceive to be effective solutions for ubiquitous digital identity systems for use in both a traditional PC environment as well as smart mobile phones and devices:

ID PROXY APP

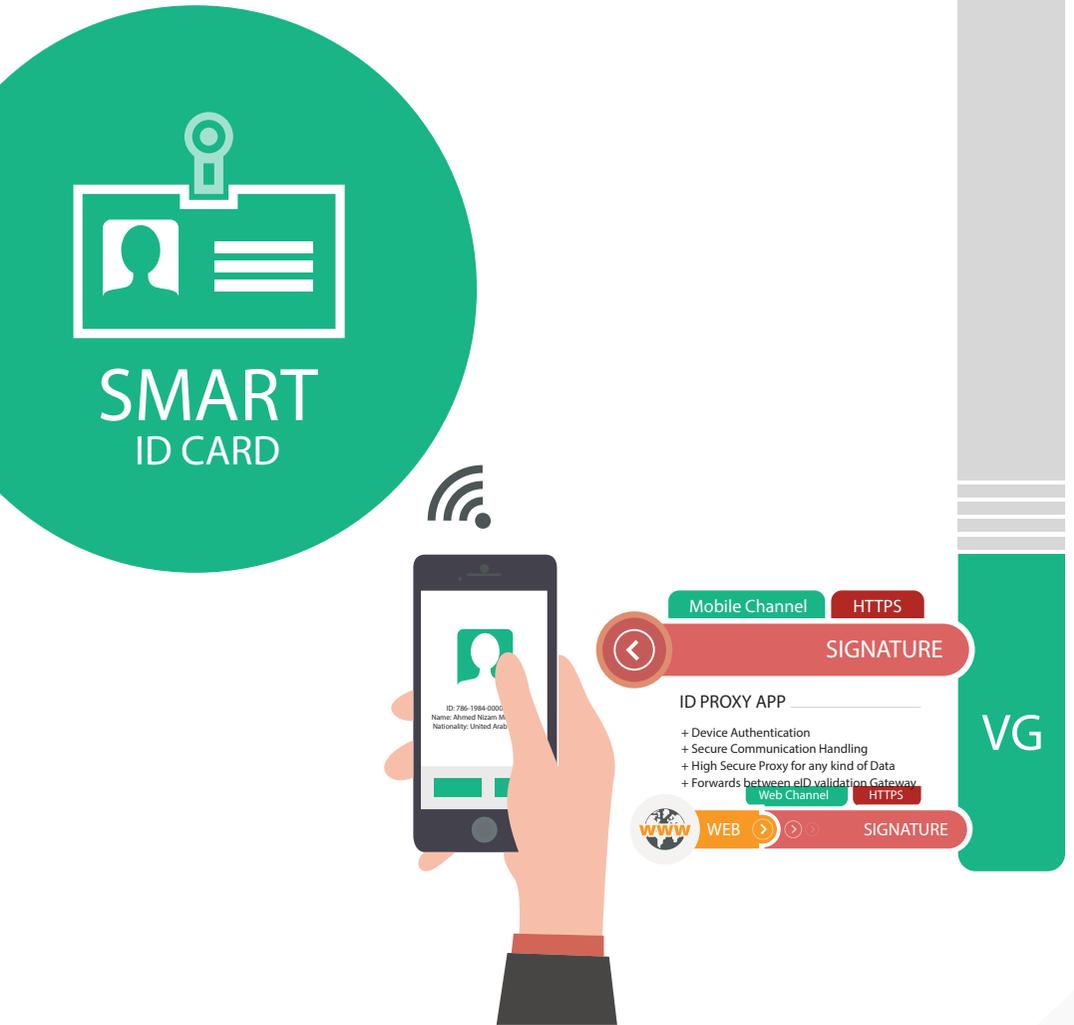


FIGURE 8

Approach 1 - ID Card

RELYING ON A SMART ID CARD WITH NFC CAPABILITIES

This approach relies on existing digital security features and the multifactor authentication capabilities of the ID card itself. In this scenario, the phone acts as a card reader, and as a gateway to connect with the service providers.

The user will only have to tap his/her card to the NFC-enabled mobile device, and the identity would be verified through sophisticated government online systems. In PC environments, a card reader or NFC connectivity would be required.

See also Figure 8.

NATIONAL TSM

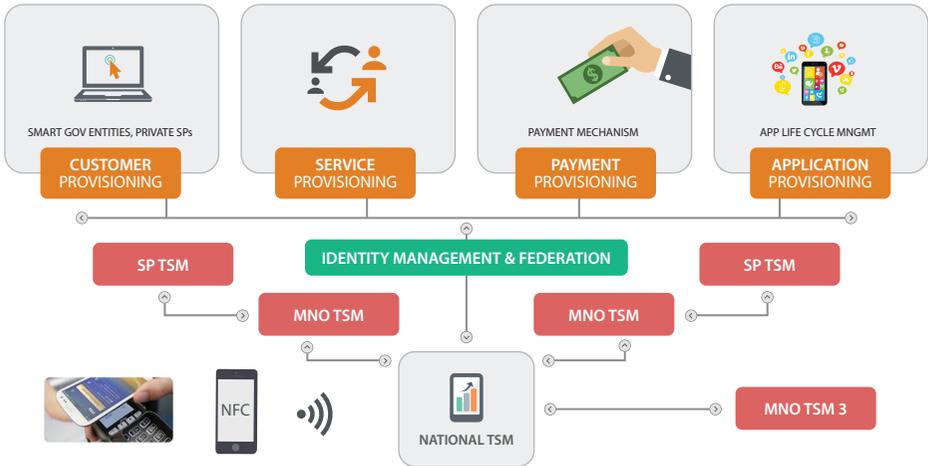


FIGURE 9

Approach 2 - National TSM

DEVELOPING A NATIONAL TRUSTED SERVICE MANAGER (TSM)

The main role envisaged for the Trusted Service Manager (TSM) is to help service providers securely distribute and manage contactless services for their customers using the networks of mobile operators. The TSM enables Service Providers (SPs) to distribute and manage contactless applications remotely by allowing controlled access to the secure element in NFC-enabled handsets.

The national TSM, for example, that we set up in the United Arab Emirates is a unique implementation that went live in 2014. The UAE NTSM is designed to support the mobile and smart government ecosystem in the country. The mobilification of services is planned to be supported and enhanced by the national TSM.

The UICC (SIM card) is poised to be the secure element on the roadmap that will support various handset models and operating systems, to ensure the availability of secure m-Government services to all UAE users.

The national ID card infrastructure in the UAE will accord the basic foundation of this infrastructure by providing a secure mobile identity. During the first phase (called seeding via the “mobile identity”), UAE users will receive their mobile identity on new NFC-enabled GSM cards, which they can use for secure authentication, for the signing of electronic documents or forms, for login to (governmental) websites, as well as for possibly making secure online payments. The main objective for this NTSM program is to facilitate government services and mobile payment transactions.

With these mobile identity credentials embedded in the UICC as the secure element, the phone would serve as a proxy for the secure credentials provided in the smart ID card. Thus, all service requests can be placed on the phone, in a secure and convenient way, independent of time and location.

See also Figure 9.

CHAPTER

4

INTEGRATION

PIECING THE GOVERNMENT TOGETHER

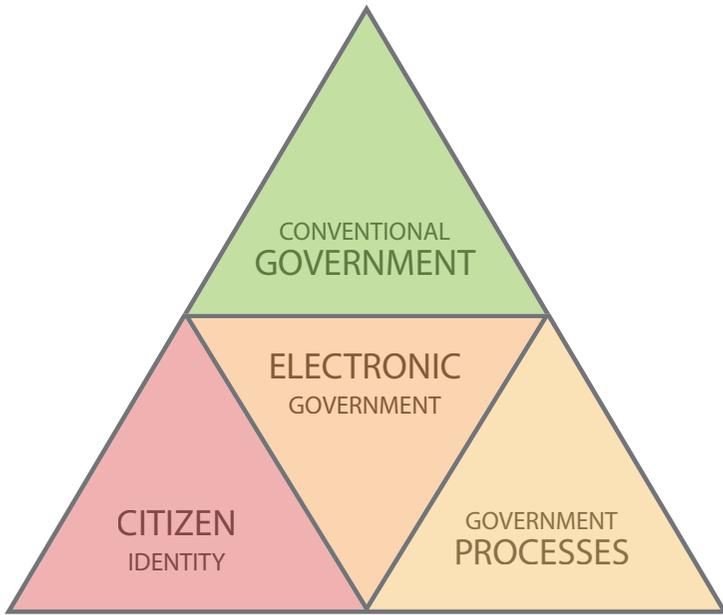


FIGURE 10

E-government Approach

INTEGRATION: PIECING THE GOVERNMENT TOGETHER

Since its initiation, practices in the field of e-government have resulted in the production of a farm of silo systems. Over the past few years, there have been lots of frameworks, approaches, and technical solutions, but none of them has shown evidence that it can promote a seamless integration between different government systems. All current practices of these so-called integrations are, in fact, of an interface nature.

What is needed today is a truly integrated architecture that could deliver a one stop shop experience to citizens.

1. A fully integrated government means that systems act as if they are one system. This only happens when current scattered government systems work closely together to combine different functionalities into a one stop shop experience for seamless service delivery.
 2. Interface involves two or more separate systems communicating under limited capacity. In interface projects, there will always be specific interfacing situations where a standard simply doesn't exist, is too inflexible, or is not supported by a vendor for a given workflow.
-

From experience, we are of the view that for governments to be interconnected, we should first find a mechanism that would enable all those scattered government systems to talk to each other. As you may have experienced, the world of practice has been very much distracted by terms such as interoperability.

It is our argument that governments have to pay attention (the same level of attention offered to process and technology) to identity management systems; if they are to truly transition from conventional to electronic government or to even evolve into a smart government. Government databases, by and large, represent records and transactions involving either citizens or internal employees. In other words, these transactions and records can always be mapped to individuals.

Therefore, we believe that a fundamental pillar that could enable government integration is the availability of a unique identifier that can be located for each transaction. The use of a national identification system, for example, could become the solution. See also Figure 10.

SMART GOVERNMENT CIRCLE OF ATTENTION

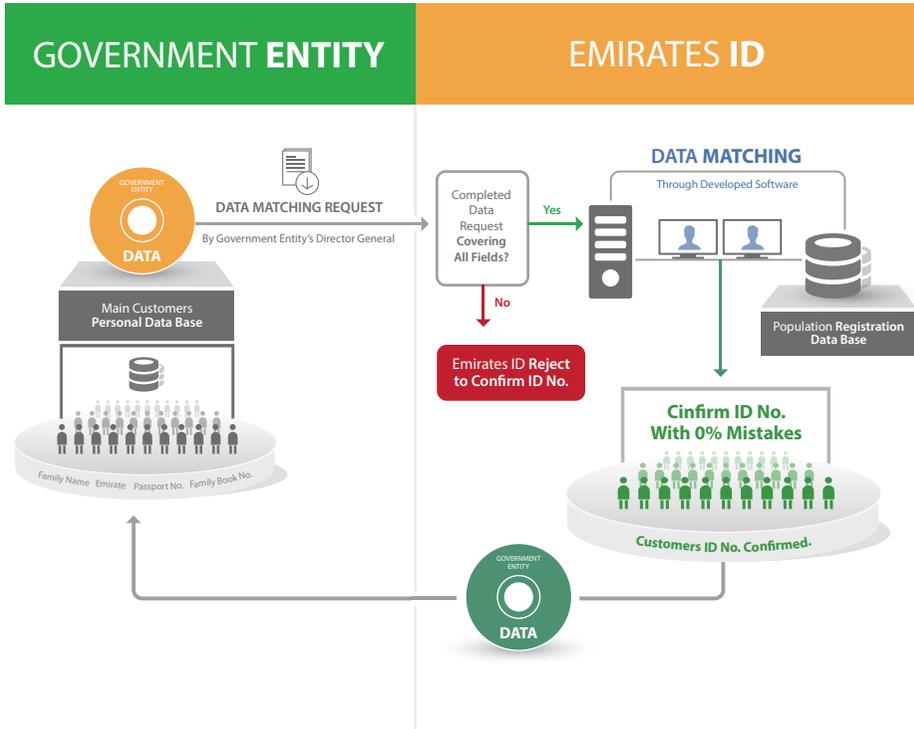


FIGURE 11

Data-mapping process in the UAE

Numerous national identity programs worldwide are trying to adopt a digital identity to reap the benefits of a uniform customer identity.³⁷ Integration and interoperability are not just systems in terms of establishing connectivity or standards of data exchange, but they need to refer to the customer consistently, accurately, and uniquely.

Countries like Estonia and Belgium have pioneered the Electronic Identity (E-ID) system and its usage in Europe. Government services in those countries have been served in their electronic transformation, enabling government e-services. However, many of these identity programs and the related identity cards have failed to provide multifactor authentication mechanisms.

The case we followed in the United Arab Emirates is an interesting example. After enrolling all citizens and residents in the country, the government mandated the use of the new identity cards for all government-related transactions. At the same time, it started injecting the identity number into all of its government databases through a data-mapping process with its identity-management infrastructure.

See Figure 11.

POPULATION REGISTER SYSTEM

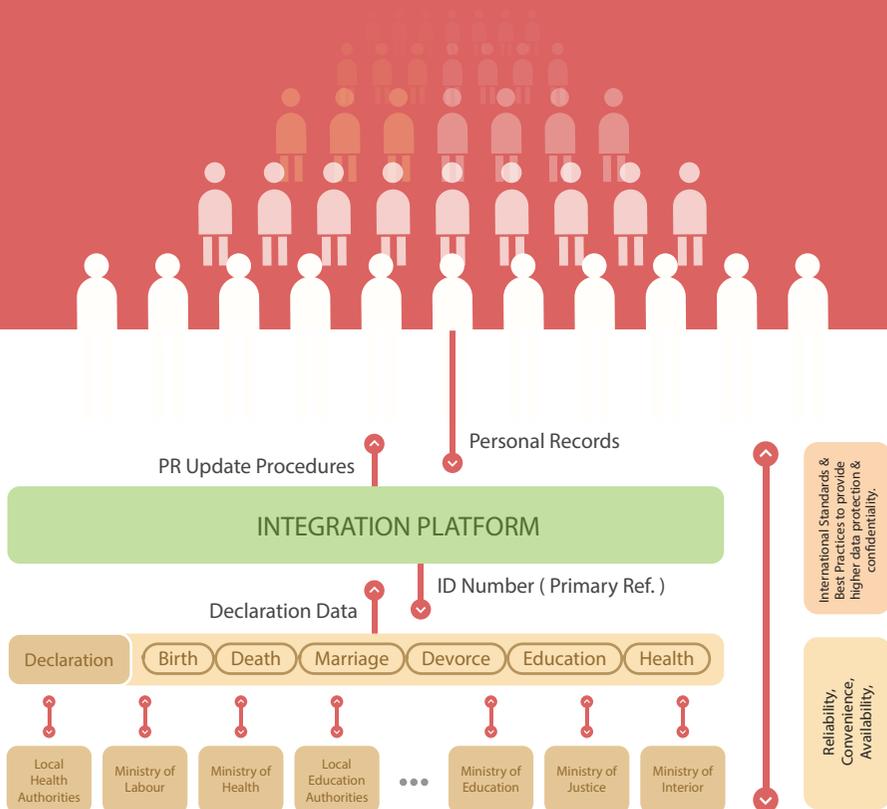


FIGURE 12

UAE Safer Project Architecture

Source: Al-Khourri38

One of the largest national integration platforms being implemented to ensure the updating and the maintenance of the population database in the UAE is the “Safeer” project. This project aims to integrate with 14 government agencies at both the federal and local levels.³⁸ The project is envisaged to support and improve decision-making capabilities in the country by providing up-to-the-second information about population demographics. The use of such an infrastructure in e-government is depicted below in Figure 12.

This integrated unique population register repository serves to provide citizens with an integrated interoperability, and seamless services across government domains. Most importantly, in the ecosystem of e-government, government agencies do not need to worry with such an infrastructure about being up to date with identity management.

CHAPTER

5

OPEN GOVERNMENT DATA

HIGHER TRANSPARENCY AND OPENNESS

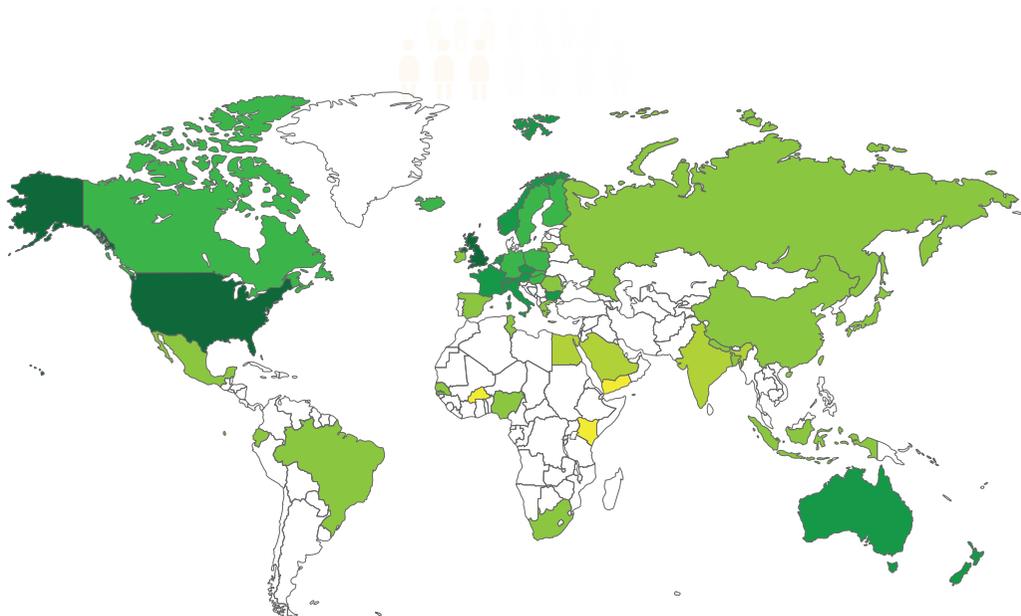


FIGURE 13

Open Data Heat Map

Source: Sedghi 49

● Darker shades of green indicate more openness

OPEN GOVERNMENT DATA: HIGHER TRANSPARENCY AND OPENNESS

Open data denotes that certain data is freely available to everyone to use and republish as they wish, without restrictions from copyright, patents, or other mechanisms of control.³⁹ In basic terms, open data is all about data dissemination.

It is largely argued in the existing literature that for governments to evolve and transform into citizen-centric operational models, data needs to be shared rather proactively.⁴⁰⁻⁴³ In fact, in recent e-government studies, countries are being ranked based on their availability of data, accessibility to data, digital format availability, timeliness, and frequency of updates.⁴⁴⁻⁴⁸ For example, see the Heat map depicted in Figure 13.

VALUE CREATION

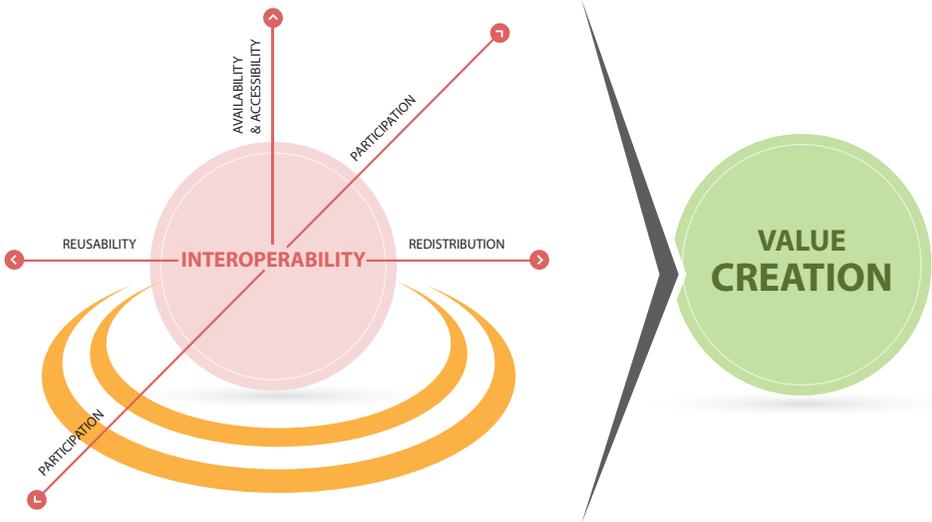


FIGURE 14

Open Data Dimensions

The economic benefits of open data are beginning to be realized across the world. As per McKinsey's open data report, the total economic value from open data is estimated to be over 3 trillion USD per annum, from US estimates alone.⁵⁰ The beneficiary domains studied in the report included education, transportation, consumer finance, consumer products, health care, oil and gas, and electricity.

Governments need to clearly articulate the objectives and outcomes of open data and part of their overall e-government strategies. This should guide the development of an open government with services that cater to the needs of citizens. For example.

See Figure 14.

CHAPTER

6

BIG DATA

INSIGHTS THAT COULD CHANGE THE WORLD

EXAMPLE US ECONOMY



SIZE OF **BUBBLE** INDICATES
RELATIVE CONTRIBUTION TO GDP

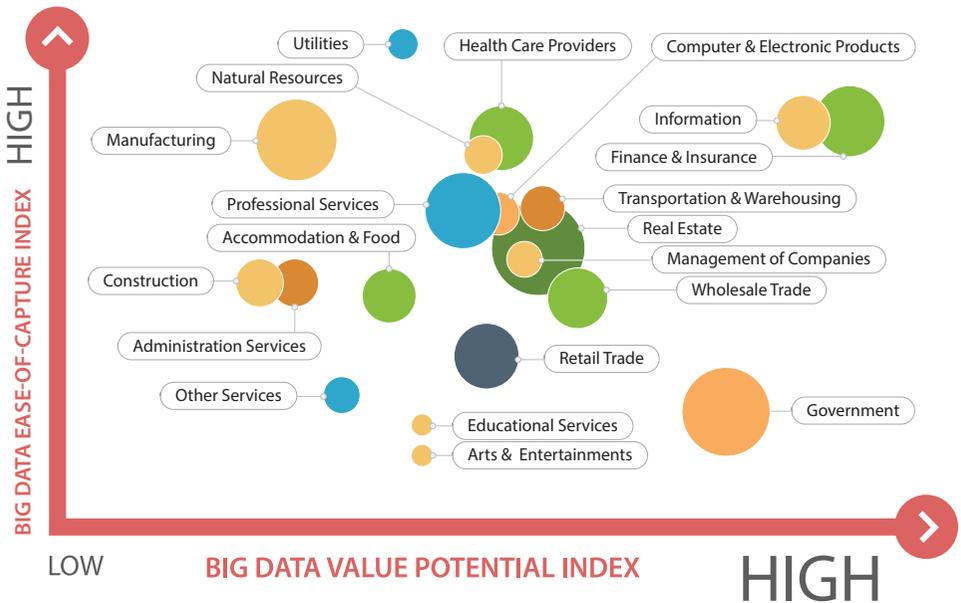


FIGURE 15

Big Data Potential

BIG DATA: INSIGHTS THAT COULD CHANGE THE WORLD

Big data refers to large amounts of both structured and unstructured data that could be used to generate valuable insight. It is widely argued to have the potential to enable government transformation through new capabilities that increase productivity, provide future insight, and increase innovation.⁵¹⁻⁵⁶ McKinsey points to the great potential of big data for a range of industries, but capturing data in the government sector might not be as easy.⁵⁰

See Figure 15.

From a business point of view, big data 2013 revenue is estimated at \$18.8 billion for pure play services for big data.⁵⁷ By 2017, it is expected to grow by 200% to \$50.1 billion. The McKinsey report estimates the total market value of big data to be almost \$5.1 trillion annually.⁵⁰

However, the big data market is still within the confines of the early adopter phase.⁵⁰ For the big data market to reach its full potential, a number of obstacles need to be overcome though. The following ones are worth noting.

#	Challenge	Description
1	Shortage of Skills	A lack of analytic specialists equipped with both technical and business skills who derive insight from large, multi-structured data sets merged from disparate sources. By 2018, the US market is expected to be short nearly 200,000 deep technical data analysts and 1.7 million data managers with the knowhow to create and use big data in the upcoming years. ⁵⁰
2	Lack of Comprehension of the Bigger Picture	A lack of understanding among organizations on how to embark on big data initiatives that best identify business requirements and to effectively communicate the insight gleaned from big data to the business.
3	Organizational Resistance	A resistance to adopting big data, analytics-driven decision-making which would replace “gut instinct” style decision-making.
4	Vendor-driven Implementations	Vendor marketing overly focused on “speeds-and feeds,” product features and “big data washing” rather than on laying out a vision for big data in the enterprise, and articulating a path to achieve this vision to maximize the potential for big data. ^t
5	Proprietary Solutions	Development of big data platforms and tools by vendors that eschew open frameworks in favor of closed, locked-down solutions. This will limit interoperability with competing and complementary products which would reduce customer choice.
6	Lack of Benchmarking	A lack of best practices and the related technologies for managing big data as a corporate asset, which includes data quality, data governance, and security platforms and tools.
7	Limited Tools & Services to Enable Customization	A dearth of big data application development tools and services that allow existing developers to build and customize big data applications using common and popular application development languages and processes.

Source: Kelly⁴⁷

Government strategies need to address big data-related challenges through carefully planned programs. Relying on technology alone will only result in another silo system, which will result in efforts being spent on creating justifications for such projects and expenditures.

CHAPTER

7

KNOWLEDGE
MANAGEMENT

WITHOUT IT, BACK TO
SQUARE ONE...

DOCUMENTATION

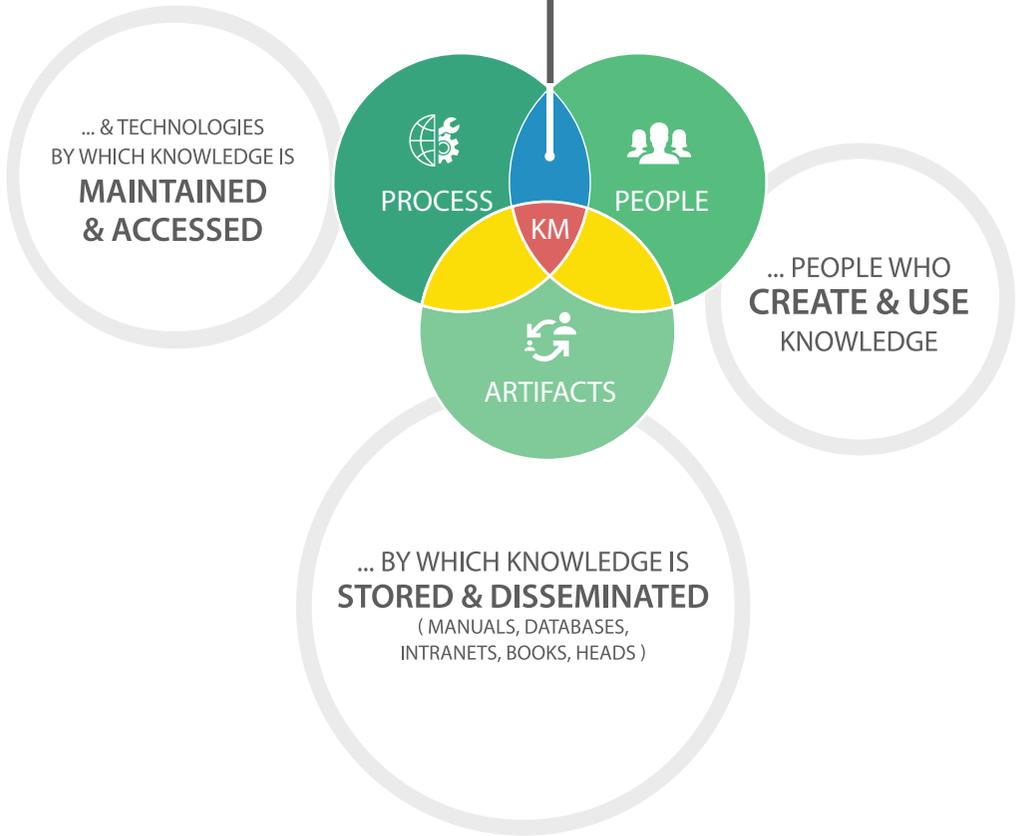


FIGURE 16

M-government Maturity

KNOWLEDGE MANAGEMENT: WITHOUT IT, BACK TO SQUARE ONE

Creating a smart government is strongly associated with the application of knowledge management. However, much of the current practices are focused on processes and technologies, by which knowledge is maintained, accessed, stored, and disseminated.⁵⁸⁻⁵⁹ Less attention is given to the people dimension, which is the dimension of creators and users of knowledge.

See Figure 16.

SUSTAINED GROWTH

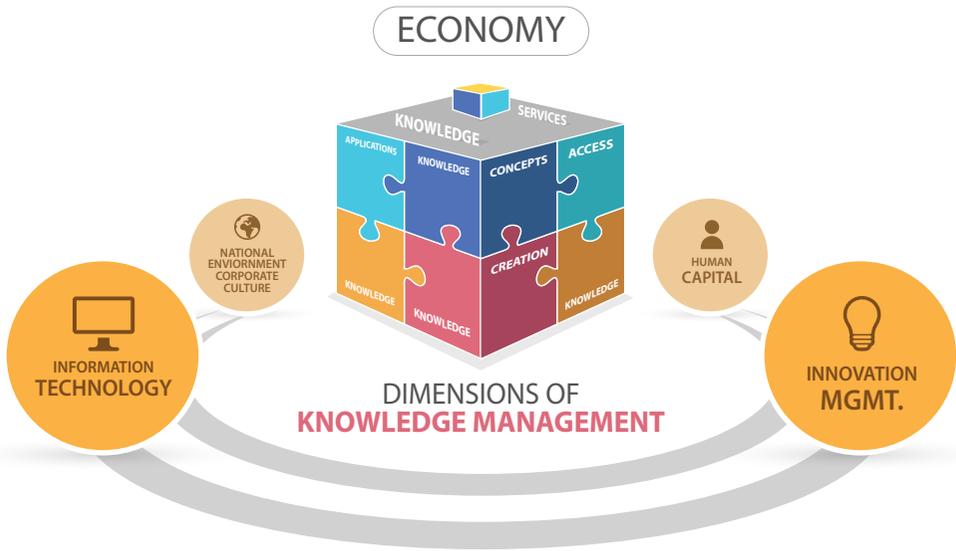


FIGURE 17

National Framework for Knowledge Management

Government strategies need to pay attention to the six dimensions of knowledge management as depicted in Figure 17.60. These dimensions are related to how knowledge is created, conceptualized, accessed, and applied.

Altogether, these should provide an overall reflection of the services and the economy. Government strategies should also pay more attention to the ecosystem components of human capital development, innovation management, contextual use of information technology, and the development of a national and corporate culture of knowledge management orientation.

The use of such frameworks with the big picture in mind should not only support sustainable economy development, but also serve to generate accelerated national growth rates. The fostering of knowledge in the US economy serves as an excellent example.

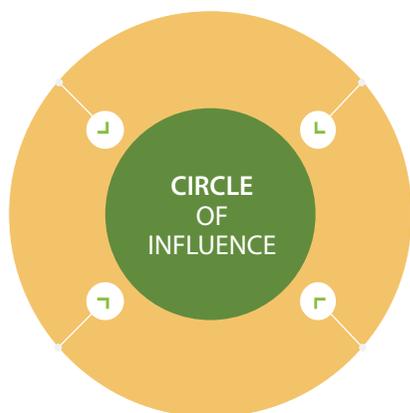
If we were to only use the metrics of the patents registered in the US, we would see that nearly 50% of the 576,763 world wide patents of 2012 are of US origin. The economic growth in the US is closely linked to research and development activities and the collaborative approach adopted by industry and academia in the country.

CHAPTER

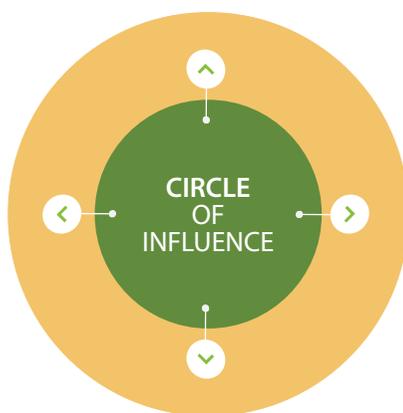
8

CONCLUSION

CIRCLE OF ATTENTION



REACTIVE **FOCUS**



PROACTIVE **FOCUS**

FIGURE 18

Shift in Focus

CONCLUSION

Rapid technological developments are indeed promising some interesting times to come. Such developments will surely put more pressure on governments to be smarter and more innovative in fulfilling their roles and responsibilities.

Governments will have to transition from current bureaucratic structures, characterized by an internal focus approach to more of an open structure with citizen-centric Amazon.com-like structures in terms of more personalized communication and service delivery offerings to unanimous customers.

For this to happen, governments need more adaptive and responsive governance models. Such shifts should support government moves from the current reactive approach to a more proactive mode of operation. This could only happen if governments deploy concepts such as the circle of attention to narrow their focus rather than their doing many things at once.

When Stanislavsky coined the term ‘circle of attention’ in the early twentieth century, it was simply an attempt to describe what an actor can do to maintain control of the performance. He used this concept to theorize how an actor may recapture the attention of the outer fringes of his audience; if he felt that this fringe was beginning to lose interest. He recommended that the actor reduce the circle of attention and then slowly increase the radius of that circle in a controlled manner to regain control of the performance.

See also Figure 18.

Stanislavsky stated that the smaller an actor's circle of attention, the better the performance would be. Thus, in the same way, we believe that governments need to reduce their circle of attention in the field of e-government and examine the extent and range of their concentration. Governments may well use such concepts as a technique to assess their available options and to design and execute purposeful sets of action.

The elements presented in this book are perceived to influence e-government progress and their overall transformation efforts of effectiveness and efficacy. If considered within the existing e-government strategies, these elements are envisaged to support governments becoming influencers rather than being influenced by their external environments – by the disruptive nature of today's technological developments and the subsequent expectation bar of constituents. So what governments need to heed at all times is that the smaller their circle of attention, the easier it would be for them to maintain focus on what really matters within their circle of influence.

Our recommendations indeed call for the reduction of the circle of attention in e-government fields of practice until fundamental aspects have been addressed. However, as they do this and attempt to expand the circle, they would need to question and challenge the existing assumptions about what governments are all about and why they exist. question and challenge existing assumptions about what governments are all about and why they exist.

ALSO REMEMBER

For e-government or smart government to be truly realized, we need a shift in mentality that would reflect how governments must be designed and are expected to function. Without this, governments will continue to loop in a circle – but it wouldn't be called 'a circle of attention'.

The needed course of action that we are referring to here is similar to what Albert Einstein once explained:



The world that we have made as a result of the level of thinking thus far, creates problems that we cannot solve using the same level of thinking that existed when we created them.”

We need to elevate to a different level of thinking in order to be able to visualize what future governments would look like!

KEYWORDS

SMART GOVERNMENT

TRANSFORMATION

E-GOVERNMENT

CITIZEN-CENTRIC

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