

Category 1

**E-GOVERNMENT:
A STRATEGY FOR MODERNIZING GOVERNMENTS**

Dr. Sami Zahran,
B.Sc., M.Sc. Ph.D. PMP
Senior Project Manager
and Registered Evaluator for ICT European Community Projects

Abstract

Information and communication technology (ICT) is a fundamental vehicle of how modern societies to function. Effective exploitation of ICT opportunities should help the countries in the ESCWA/Arab region achieve economic growth, competitiveness and prosperity, and transforming developing societies into information and knowledge based societies. These goals can only be achieved national governments adopt a modernization programme to bring the public services into the 21st century through the effective use of ICT technologies by all the government departments.

E-government is an enabler to achieve such modernization programme. This paper advocates that an e-government programme is a long-term programme of change to capitalize modern ICT technologies to:

- Transform the way government makes policy,
- Transform the way services should be delivered,
- Transform the way government uses technology,
- Change in the way the public service is valued.

The goal should be to convert current governments into e-governments. It should involve everyone working in the public services, and everyone who uses public services. . In order to achieve an e-government, governments should set milestones to chart their action plan and success criteria so that the users of public services can judge whether the modernization programme is working. Government departments should report periodically to a central coordinator on the progress towards implementing e-government, and should encourage feedback and comments through discussions with many people in the public service and outside. This paper defines what is meant by e-government, suggests focus areas for e-government systems and presents an example of an architecture for e-government systems. The paper relates the concepts discussed to the main features of the UK Government modernization strategy and the associated e-government programme. The areas addressed in the UK e-government and modernization strategy aims at improving the quality and efficiency of public services through a better use of information and knowledge towards the creation of:

- Citizen-focused services
- Accessible services
- Responsive public services

Modernization of these areas will have benefits for the citizens, the private business, and the public sector. Examples of these benefits are discussed in the paper.

The information age should increase the choice of how citizens and businesses receive services, not restrict it. The Internet, interactive TV and touchscreen delivery should take their place alongside more innovative use of the telephone, the call centre and the paper document, not replace them; nor should face to face contact be replaced where that is what is needed. National Governments should develop targeted strategies to ensure that all groups have proper access to information age government. Implementation of modernization and e-government systems is both risky and challenging. The paper lists and discusses a number of critical success factors task and f the paper describes the challenges and risks facing e-government programmes. The concepts discussed and the examples quoted from the UK government modernization programme could be serve as guidelines for ESCWA and the Arab region countries while developing their own modernization and e-government strategies.

Contents

Abstract	iii
Contents	v
I. E-GOVERNMENT OPPORTUNITIES AND CHALLENGES	1
A. MISSION FOR MODERNIZING NATIONAL GOVERNMENTS	1
B. FOCUS AREAS FOR GOVERNMENT MODERNIZATION	2
C. ICT-ENABLED OPPORTUNITIES FOR GOVERNMENT MODERNIZATION.....	3
D. ICT ENABLERS FOR E-GOVERNMENT	4
II. DEVELOPING AN E-GOVERNMENT STRATEGY	6
A. FOUNDATIONS FOR AN E-GOVERNMENT STRATEGY	6
B. GUIDING PRINCIPLES FOR E-GOVERNMENT PROGRAMMES	7
1. <i>Citizen-focused government</i>	7
2. <i>Accessible and responsive services</i>	7
3. <i>Social Inclusion</i>	8
4. <i>Using information better</i>	8
III. CHALLENGES FACING E-GOVERNMENT PROGRAMMES	9
A. RISKS ASSOCIATED WITH IMPLEMENTING E-GOVERNMENT	9
B. THE CHALLENGE OF MANAGING INFORMATION	9
C. THE CHALLENGE OF MANAGING CHANGE.....	9
D. ORGANIZATIONAL AND LEGISLATIVE CHALLENGES.....	10
1. <i>Legislative challenges</i>	10
2. <i>Organizational challenges</i>	10
IV. BENEFITS OF E-GOVERNMENT	11
A. BENEFITS TO THE CITIZENS.....	11
B. BENEFITS TO THE BUSINESSES.....	11
C. BENEFITS TO THE PUBLIC SECTOR	12
V. A CASE STUDY: STRATEGIC BUILDING BLOCKS OF THE UK	13
E-GOVERNMENT PROGRAMME	13
A. AN ARCHITECTURAL MODEL.....	13
B. UK ROLES AND RESPONSIBILITIES FOR MAKING E-GOVERNMENT HAPPEN	14
1. <i>The e-Envoy</i>	14
2. <i>Information Age Government Champions (IAGC)</i>	14
3. <i>Central IT Unit (CITU)</i>	14
4. <i>The Office of Government Commerce (OGC)</i>	15
5. <i>Central government departments, and agencies</i>	15
6. <i>Local government</i>	15
7. <i>Industry</i>	15
REFERENCES	16
About the Author	17

I. E-GOVERNMENT OPPORTUNITIES AND CHALLENGES

A. MISSION FOR MODERNIZING NATIONAL GOVERNMENTS

Modern governments have a mission to modernize – renewing their country for the new millennium. National Governments should be modernizing their schools, their hospitals, their economy and their criminal justice system. National Governments should be modernizing their democratic framework. But modernization must go further. It must engage with how government itself works. Modernizing government is a vital part of their programme of renewal for The ESCWA/Arab countries. The old arguments about government should be now outdated – big government against small government, interventionism against laissez-faire. The new issues should be the right issues modernizing government, better government, getting government right.

Modernizing government should be central to any government's programme of renewal and reform. Modernizing government should be for a purpose – to make life better for people and businesses. Modernizing government should involve a long-term programme of improvement. It involves a new package of reforms which involves:

- **A commitment** to ensure that public services should be available hours a day, seven days a week where there is a demand, for example by the end of everyone being able to phone the national health service at any time for health advice.
- **Joined-up government** in action – including a clear commitment for people to be able to notify different parts of government of details such as a change of address simply and electronically in one transaction.
- A new drive to **remove unnecessary regulation**, and a requirement on government departments preparing policies which impose new regulatory burdens to submit high quality Regulatory Impact Assessments.
- A **new service delivery target** of all dealings with government being deliverable electronically within a set time target.
- **New 'Learning Labs'** to encourage new ways of front-line working by suspending rules that stifle innovation.
- Taking a **more creative approach** to financial and other incentives for public service staff, including a commitment to explore the scope for financial reward for staff who identify financial savings or service improvements.
- A **new focus on delivery** - asking every Minister and Under Secretary to ensure that their department has the capacity to drive through achievement of the key government targets and to take a personal responsibility for ensuring that this happens. Bringing more people in from outside and bringing able, younger people up the ladder more quickly.
- To ensure that government is both **inclusive and integrated**, National Governments have three aims in modernizing their governments:
- Ensuring that **policy making is more joined up and strategic**.
- Making sure that the **primary focus is on public service users**, not providers, by matching services more closely to people's lives.
- Delivering **public services** that should be **high quality and efficient**.

Modernizing Government is a significant step forward in what is a long-term programme of reform. It puts in place a number of important initiatives, and sets out an agenda for the future. But in line with the Government's overall modernization programme, in line with their policy of investment for reform, it is modernization for a purpose modernizing government to get better government – for a better The ESCWA/Arab countries.

Modernizing government is a programme of reform for the future, with a series of new measures which governments should implement now. Also modernizing Government is also about providing a clear statement by the Government of what government is for. Not only for those who work in government; but government for people – people as consumers, people as citizens. Governments should also value public servants, and public services. But in doing so, National Governments should make sure that government services should be better – that they reflect real lives and deliver what people really want. Better provision of better services available from government at all levels is central to the approach of modernizing government – in schools, in hospitals, in doctors' surgeries, in police stations, in benefit offices, in Jobcentres, in local councils. To improve the way national governments provide services, they need all parts of government to work together better. National Governments need joined-up government, and integrated government. They also need to make sure that government services should be brought forward using the best and most modern techniques, to match the best of the private sector – including one-stop shops, single contacts which link in to a range of government departments and especially electronic information-age services. These should be key new initiatives.

But modernizing government is a long-term programme. Modernizing government is a key step forward in that programme, and a road-map for its future. It sets out a challenge for all of us in government a challenge to modernize government, to create better government to make life better for people.

B. FOCUS AREAS FOR GOVERNMENT MODERNIZATION

Modernization of government should be a means to achieving better government – better policy making, better responsiveness to what people want, better public services. People want their government to meet their needs, through the provision of services that are available when they need it, and which deliver results for them. People want effective government, both where it responds directly to their needs – such as in healthcare, education and the social services – and where it acts for society as a whole, such as protecting the environment, promoting public health and maintaining their prison and immigration services and defense capability. Governments can improve their performance through a programme of modernization which could focus on the following areas:

1. Review of the policy making process

National governments should be forward looking in developing policies to deliver outcomes that matter, not simply reacting to short-term pressures. Policy making is the process by which governments translate their political vision into programmes and actions to deliver ‘outcomes’ – desired changes in the real world. Government should go further to ensure that policy making delivers creative, robust and flexible policies, focused on outcomes. The convenience of dealing with government will be greatly enhanced by the implementation of common policies on key building blocks for e- government. There should be standards for authentication, security and privacy to which all services should over time be required to subscribe. There should be a common format for smart cards which will be able to carry identifiers to enable online identification. This will lead to the e-government having a sound legal basis.

National Governments should:

- Identify and spread best practice through a new Centre for Management and Policy Studies.
- Bring in joint training of Ministers and civil servants.
- Introduce peer review of government departments.

2. Review of public spending plans

The government should look for further ways where joint working and budgeting should be appropriate.

3. Increasing the accountability and incentives

The government to tackle the barriers to joined up policy making and innovative team-working in service delivery and publishing the further action the Government intends to take in the light of that report.

4. Seeking further opportunities to improve the legislative process

Improvement should span from policy development, through parliamentary consideration of legislation, to ways of keeping legislation up to date in a world of increasingly rapid change.

5. Producing and delivering an integrated system

Modernized government systems should not just cover the delivery of services, but also should include facilities for impact assessment and appraisal tools in support of sustainable development, covering impacts on business, the environment, health and the needs of particular groups in society.

6. Developing a more corporate approach

Modernized government systems should aspire to achieve cross-cutting goals and to provide the leadership needed to drive cultural change in the civil service delivering services to the citizens. One of its tasks should be to ensure that the principles of better policy making should be translated into staff selection, appraisal, promotion, posting and pay systems.

7. Offering joint training to Ministers and officials

Training government Ministers and officials will allow them to discuss the way policy is made and to address particular areas of policy as and when appropriate. It should also promulgate good practice in policy making, and develop a more government-wide, outcome-focused culture.

8. Organizing a programme of peer reviews

Peer reviews should ensure the different government departments implement the principles of government modernization. National governments should also consider how best to assess whether the government departments are operating the management systems necessary to deliver the principles identified in this chapter.

9. Learning the lessons of successes and failures

Learning the lessons can be achieved by carrying out frequent evaluation of policies and programmes. Any government modernization programme should also modernize evaluation standards and tools.

C. ICT-ENABLED OPPORTUNITIES FOR GOVERNMENT MODERNIZATION

Exploiting the capabilities of modern ICT technologies, ESCWA/Arab region national governments have the opportunity to bring about a significant transformation over the coming years. Following are examples of the areas that ICT technologies could lead to real benefits:

Health – *ICT technologies could be used to ensure that everyone in the country should be able to phone/contact national health services directly, 24 hours a day, for healthcare advice and information from experienced, qualified nurses.*

Jobs – *ICT technologies could be used to ensure that jobseekers should be able to look for and apply for jobs through the Employment Service anywhere in England, Scotland and Wales using the telephone or Internet, including evenings and weekends.*

Learning – *ICT technologies could be used to ensure that students of all ages will be able to access National Grids for Learning, through all schools, colleges, universities, public libraries and as many community centres as possible. This will enable them to share high quality learning materials and have access to the wider Internet.*

Older people – *ICT technologies could be used to ensure that older people will benefit from joined-up social services and could help in integrated planning at the local level.*

Single interface to public services – *ICT technologies could be used to ensure that people have a single interface to public services. For example they should be able to notify different parts of government of details such as a change of address simply and electronically in one transaction.*

Social benefit claimants – *ICT technologies could be used to ensure that new benefit claimants are able to deal with their employment needs and benefit claims in one place through a Single Work-Focused Gateway, eliminating the current duplication and confusion.*

All of the above come under e-government initiative. An e-government strategy is a fundamental element in any modernizing government programme. It should identify a common framework and direction for change across the public sector. It should establish a leading role for an e-Envoy as the owner of the programme and a structure for collaboration between the many organizations on which its success should depend. An ESCWA e-government regional programme could identify how national governments should develop the skills which public servants need to realize in full these new opportunities as a part of an overall programme for modernizing national governments.

D. ICT ENABLERS FOR E-GOVERNMENT

ICT technologies can be used to develop information and communication systems that could translate into a number of e-government enablers. Additionally Information Technology is a powerful enabler but the starting point should always be to identify what the customer wants and then look to how IT is used to achieve this. The public sector must embrace new ways of thinking, new ways of doing business, new alliances and new technology. Following are a number of possible ways in which ICT and IT can enable e-government:

- *making it easier for businesses and individuals to deal with government.*
- *enabling government to offer services and information through new media like the Internet or interactive TV.*
- *improving communications between different parts of government so that people do not have to be asked repeatedly for the same information by different service providers.*
- *providing the government staff at the public call centres and other offices better access to information so that they can deal with members of the public more efficiently and more helpfully.*
- *making it much easier for different parts of government to work in partnership central government with local authorities or the voluntary sector; or government with third-party delivery channels such as the post offices or private sector companies.*
- *helping the government to become a learning organisation by improving the citizen's access to, and organisation of, information.*

- *Supporting local communities, voluntary groups and small businesses in the local communities will be helped to get on to the Internet on a community based not-for-profit basis. It provides low cost Internet training in conjunction with local Internet access points. It is developing a local learning network and helping small businesses use e-commerce technologies.*

II. DEVELOPING AN E-GOVERNMENT STRATEGY

A. FOUNDATIONS FOR AN E-GOVERNMENT STRATEGY

The starting point of any serious e-government strategy should be to make a commitment to develop and publish a strategy for e-government which would focus on the needs of citizens and business.

1. Strategic direction

An **e-government** strategy is not a conventional IT strategy which proposes technical solutions to a set of business needs. The business of government is too varied and complex, and the range of its dealings and contacts too great for that to be a sensible approach. Instead, **e-government** should set a strategic direction for the way the public sector will transform itself by implementing business models which exploit the possibilities of new technology. It is informed by changes in the wider economy and in leading developments in the public sector. It identifies the respective roles of public sector bodies and the centre in achieving this.

2. Framework for planning and action

A strategy for **e-government** should provide a framework for planning and action across the public sector. Such framework should cover access policies, security and authentication as well as delivery service channels. The framework should be reflected in the form of a policy and procedures layer, surrounding a communication and technology layer. Security and authentication should run through all the layers of the overall architecture. For example, the establishment of identity and authentication, the provision of secure network connections, safeguarding personal data, facilitation of data exchange and the creation of portals to integrate service delivery.

3. e-Business methods

Exploiting ICT opportunities should create an environment for the transformation of government activities by the application of e-business methods throughout the public sector. A central element of an **e-government** strategy is the use of e-business methods (using Internet and communications technologies (ICT) to exploit information for better management of relationships with customers, suppliers and partners) as a means of meeting the Government's targets for electronic service delivery, electronic procurement and e-commerce. Although the benefits of e-business has already been realized in the commercial sector, e-business methods are also relevant to a much wider range of government activity encompassing transactions with citizens, businesses, suppliers and with other public sector bodies. The relevance of these processes will vary greatly from one part of the public sector to another, but many of the business and technology issues which underpin them will be common. e-business will be able to offer choice of access and employ techniques of market segmentation and customer relationship management. With citizens' consent, they will be able to use data to inform the development of their services and build mechanisms for continuous improvement and better quality services.

4. e-government is the foundation for "Information Age Government"

e-government is a vehicle for realizing the objective of *Modernising Government* to take advantage of the Information Age and ICT technologies. The Information Age revolution has already brought huge changes to both manufacturing and service industries all over the world. It has driven down costs, brought suppliers closer to customers, and made them more responsive to their needs. The Government has launched initiatives to make the United Kingdom a world leader in e-commerce and to make access available to all. This **e-government** initiative, should ensure that government itself will play a full part in this radical transformation of the society. It should provide the opportunity to focus on better services for citizens and businesses and more effective use of the Government's information resources. Such strategy challenges all

public sector organisations to innovate, and it challenges the centre of government to provide the common infrastructure which is needed to achieve these goals.

B. GUIDING PRINCIPLES FOR E-GOVERNMENT PROGRAMMES

An **e-government** programme should be based on a number of guiding principles including:

- building services around citizens' choices (Citizen-focused government)
- making government and its services more accessible (Accessible services)
- social inclusion (to achieve cohesion across all classes in the society)
- using information better (to ensure accessibility for all citizens)

1. Citizen-focused government

Modernizing Government means making sure that citizens and businesses come first. It means a genuine partnership between those providing services and those using them. People have grown impatient of barriers to effective and convenient service that stem simply from the way government is organized. They should not have to worry about what part of government they should be dealing with. National Governments must deliver services and programmes that should be not only efficient and effective but also joined up and responsive. When people interact with government they want to do so on their own terms. They want high quality services which are accessible, convenient and secure. People should not need to understand how government is organized, or to know which department or agency does what, or whether a function is exercised by central or local government. We need a strategy that will provide this – by helping departments and agencies, central and local government, co-operate in new partnerships that will offer their services in ways that make sense to the customer. We need to form partnerships with innovators in the private sector who can find new ways of meeting changing patterns of demand.

2. Accessible and responsive services

There are many barriers to providing services in the way people want them. Some of the most common problems and barriers are:

- People had to give the same information more than once to different – or even the same – organizations. A mother of a boy with physical disabilities said "I have lost count of the times I have had to recount my son's case history to professionals involved in his care."
- There is often no obvious person to help those most in need to find their way around the system.
- There is a lack of integrated information to enable service providers to give a full picture of what help might be available.
- There is minimal use of new technology. Most government Departments have a Website, but few allow people to fill in forms on line. And government are not well- linked to other relevant sites. National Governments should deliver public services to meet the needs of citizens, not the convenience of service providers. National Governments should:
 - deliver a big push to overcome obstacles to joined-up working across government departments,
 - involve and meet the needs of all different groups in society.

To improve the responsiveness to the citizens requests, government should aim to make services which can be electronically delivered will be. The strategy could propose that they should be accessible over the Internet and through mobile phones, digital TV, and call centres as well as through personal computers. The mix for any service will be determined in relation to demand. Electronic service delivery does not do away with the need for personal contact and this must be better supported. Services should be tailored to

individuals' needs. Additionally, the government could develop a business portal, initially for small- and medium- sized enterprises, and a personalized 'home page' for individuals. It should do so in a non-exclusive way and should create the conditions for others, including commercial enterprises, to create innovative service offerings.

3. Social Inclusion

New services must be developed so that they are available to all and easy to use. Digital TV and mobile phones will become increasingly important as a means of accessing the Internet. The Government is committed to making it easier for all people to get access, whether individually or through community facilities. The telephone will remain a preferred means of contact for many. Call centres must be improved by giving their staff access to information networks that will enable them to provide better service. Better information systems will support the work of those who have face to face contact with the public. Transformation of the way government and citizens interact must be an occasion for increasing social inclusion. It will be an opportunity to address disadvantage which arises from geographical location, to improve communications and employment opportunities. The ESCWA/Arab region governments should be committed to reducing the digital divide. This can be achieved through policies that could be developed by a Social Exclusion Unit; through IT learning centres; and ICT initiatives aiming at improving IT skills and access to a National Grid for Learning and a National Library Network. Additional to these central governments initiatives there should be other local programmes in support of these aims. But spanning the digital divide means more than skills and access, and it has to be accepted that some citizens will not want or will not be able to be direct users of new technologies. That does not mean that this strategy has nothing to offer them. New technology can support better face to face and telephone transactions as well as direct interaction online. A challenge for the public sector will be how to free up staff from internal processes in order to offer more effective interactions, and how to provide front line staff with the skills, information and equipment they need to act as intermediaries in this new environment.

4. Using information better

New ways of doing business will change the relationship between individuals and government. Access to information will be firmly established under the Freedom of Information legislation and government organizations will be more responsive to citizens' views. At the same time, it will be vital to make sure that people can trust the systems we use, by ensuring that their personal data is protected and that systems are secure. Online public services must be well designed and accessible to all. This includes providing services for minority language groups and those with disability or limited mobility. **e-government** is an opportunity to enhance the services which are provided to the citizens and overseas business men who wish to do business with or visit the country. This is likely to be a stimulus to provide further multilingual services.

III. CHALLENGES FACING E-GOVERNMENT PROGRAMMES

There are a number of risks and challenges facing any e-government programme. Following are examples of these risks and challenges:

A. RISKS ASSOCIATED WITH IMPLEMENTING E-GOVERNMENT

Making e-government happen successfully involves a major task. There are likely to be serious issues of business process change, skills shortages and the existing information infrastructure to confront. Establishing an e-government is an ambitious agenda and it will not be achieved without considerable effort, investment and cultural change. It will be approached in steps, testing the technology, business models and consumer responses along the way. A number of government services and a large amount of government information may already be available online. A government portal should be established as a means of accessing those online services and resources, including an electronic change of address service. An increasing number of local authorities will also offer a wide range of services on-line. Online information will be easier to retrieve with the adoption of a common policy on metadata (data about data) and searching. The framework policies on web sites, smart cards, authentication, security and call centres will have been widely adopted. Government Secure Intranet (GSI) connectivity will have been extended via extranet connections to local authorities and others and common services and applications on the GSI will support more effective working in and between public sector bodies.

Taking an e-government strategy forward will need commitment and investment across the public sector and openness to innovative ideas. Another risk facing achieving these goals is that it will require significant investment (although there is scope overall for both savings and quality improvements). The funding of an e-government programme across the public sector is usually a key issue. To achieve adequate level of funding, the public sector will need to work closely with private sector partners. The added value of the private sector is in developing business models, establishing infrastructure and in delivering services to end users. Crucially, public servants must have the opportunity to develop the skills and culture which will be necessary to work in new, often challenging, ways. There must be a clear lead from the top level of organisations. Partnership with staff and their trade unions is vital in taking this work forward. This is true not just for those with specific roles in relation to the development and technical implementation of e-businesses, but for all public servants.

B. THE CHALLENGE OF MANAGING INFORMATION

The Government's knowledge and information are valuable resources. At the heart of an e-government programme is the need for the public sector to make the best use of the government data and information. Implementing an e-government strategy requires organizations to adopt coherent and compatible information policies in support of better policy making, better service delivery and more efficient working. Skills and knowledge in the use and management of information will be required across the public sector, including understanding the role of new technology in policy making and service delivery and end user IT skills to handle information and deliver electronic services. Bringing together information from disparate sources to create new joined up services will require the adoption of common protocols for data exchange. In some cases, work to achieve back office integration will be a major commitment.

C. THE CHALLENGE OF MANAGING CHANGE

An e-government strategy should encourage innovators in government to identify new ways of working in partnership with the private sector. More new ideas, more willingness to question inherited ways of doing things, better use of evidence and research in policy making and better focus on policies that should deliver long-term goals. The strategy should identify the need for a strong lead and effective support from the centre. This will involve a big programme of change. These changes are not just a matter for new technical infrastructure. They will need the creation of e-businesses throughout the public sector, creating,

managing and marketing their services, possibly in competition with established business units. In suitable cases the same service might be available via a range of channel providers, many in the private sector, operating within a regulatory framework.

D. ORGANIZATIONAL AND LEGISLATIVE CHALLENGES

1. Legislative challenges

Need for new legislation:

To achieve success with e-government, a new legislation should be decreed in order to establish the acceptability of electronic signatures as evidence in court and provide the means to modify legislation that restricts government business to pen and paper. Government departments should be identifying areas where they can remove legal barriers to electronic service. In such new environment, public sector organizations will be able to make information available online in order to meet their responsibilities under a “Freedom of Information” legislation.

2. Organizational challenges

Establishing a position for a national e-Envoy:

Such an e-Envoy:

- own the e-government strategy
- articulate a detailed change programme for realizing the e-government programme
- lead the e-government implementation
- support the government in a cost-cutting review and a review of the budget on the knowledge economy, which will consider the funding of e-government
- identify new opportunities for cost-cutting initiatives
- report regularly on progress to Ministers.

Establishing a Central IT Unit in the government,

Such a unit should:

- support citizen-focused service integration
- lead implementation of framework policies, standards and guidelines
- promote shared infrastructure and applications
- establish a government portal
- promote common policies on the management of information.

The role of public sector organizations

Public sector organizations should:

- establish new ways of doing business
- implement common standards and framework policies
- develop e-business strategies
- provide services which are accessible via the government and other portals.

IV. BENEFITS OF E-GOVERNMENT

Achievement of the e-government vision will deliver benefits for citizens, businesses, government and suppliers. It should also enable efficiency savings to be realized. It will be important to measure the achievement of these benefits.

A. BENEFITS TO THE CITIZENS

The objective of the government is to give people the services they want, when they want them and with the minimum cost and bureaucracy. Electronic access to government services should become increasingly important to citizens and governments should plan to have all of their services available in this way. Developments in technology and the rapid fall in the price of communications and computing have transformed many people's lives. New services have been established, and existing ones are provided in new ways. At their best, these services deliver the benefits of:

- **better access**, with services available where and when there is a demand
- **delivery through a range of media**, over the counter, via call centre and online
- **segmentation of the market**, with services tailored to suit the needs of groups within the market
- **responsiveness to feedback** about the content and quality of services
- **grouping of services** around life episodes or common events
- **comprehensive analysis** of data about patterns of usage
- **involvement of users** in service redesign and improvement.

People are usually aware of the benefits of effective and responsive public service, and they expect it in all their dealings with business. They are less tolerant of poor service in one sector when they have experienced good service in another. The challenge for the public sector is that the same growing expectations will be applied to government services. The public sector must innovate and invest in new business models to meet this demand. The possibility of more accessible government services should mean that they become more convenient, easier and cheaper to use. Personalization of services should make it possible to be more inclusive in providing services in more languages and in ways which are accessible to those who have a disability or are less mobile. In both the public and private sectors, the increased ability to use data about individuals to improve knowledge of customers and improve services is quite properly accompanied by concerns for the security, privacy and confidentiality of personal information. Establishing and maintaining trust is vital for online businesses. It is at least as important for the public sector. At the same time, new technology offers the possibility of making access to information about government easier and for commitments on freedom of information to be met. The digital age also offers the possibility of a better informed and more participative democracy through electronic consultation and better responses to feedback.

B. BENEFITS TO THE BUSINESSES

New technology has transformed the way businesses can operate. An e-government strategy should reflect the national governments commitment to ensure that the country concerned becomes the best place in the world to do business online. One of the key ways in which businesses have applied e-commerce techniques is in managing their relationships with customers and suppliers. Public sector bodies must do the same if they are to derive the same benefits in terms of reduced costs and better procurement. The effect of the public sector as a whole doing this will itself be a significant contribution to advancing e-commerce and the adoption of e-procurement within government. The public sector does not only interact with businesses as a customer and supplier. It is responsible for a wide range of regulatory and support functions. The Government is committed to reducing the impact of regulation on businesses. Businesses will rightly expect

the public sector to make the processes involved in company startup, business expansion, continuing regulation and compliance and the closing of a business easier and more accessible.

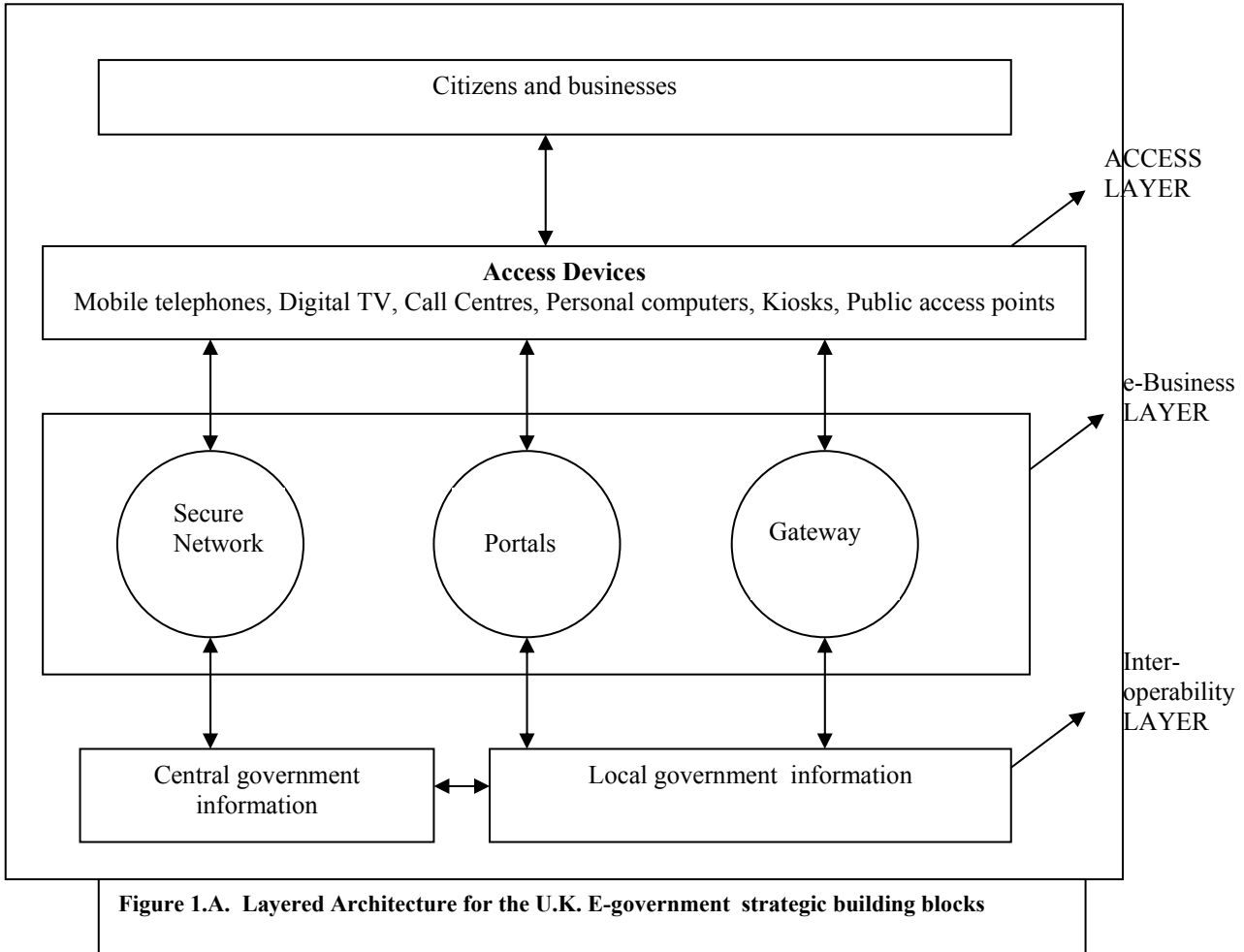
C. BENEFITS TO THE PUBLIC SECTOR

New working methods offer potential benefits for the internal business of government too. These include gains in efficiency and effectiveness from better use and management of information, whether in support of policy making or the administration of programmes. Intranet technologies offer the possibility of establishing knowledge bases and cross-departmental working. Extranet connections between organizations, for example between departments, the Non-Departmental Public Bodies (NDPBs) which they sponsor and deliverers of services to users, will enable business to be carried out more quickly and cheaply. National governments should deliver efficient, high quality public services and should not tolerate mediocrity. National governments should:

- **review** all central and local government department services and activities over the next five years to identify the best supplier in each case.
- **set new targets** for all public bodies, focusing on real improvements in the quality and effectiveness of public services.
- **monitor performance** closely so that National Governments strike the right balance between intervening where services should be failing and giving successful organizations the freedom to manage.
- **should use new technology** to meet the needs of citizens and business, and not trail behind technological developments.
- **should develop an IT strategy** for Government which should establish cross-government co-ordination machinery and frameworks on such issues as use of digital signatures and smart cards, Websites and call centres.
- **benchmark progress** against targets for electronic services.
- **should improve public service**, not denigrate it. This can be achieved through:
 - modernizing the civil service,
 - revising performance management arrangements,
 - tackling under-representation of women, ethnic minorities and people with disabilities and build the capability for innovation.
 - establishing a public sector employment forum to bring together and develop key players across the public sector.

V. A CASE STUDY: STRATEGIC BUILDING BLOCKS OF THE UK E-GOVERNMENT PROGRAMME

A. AN ARCHITECTURAL MODEL



Following are descriptions of the layers shown on the above diagram.

1. Access Layer

Main features:

- Framework policies for access technologies including websites accessible from PCs, kiosks, mobile phones, digital TV, and call centres.
- Guidelines and policies for data access.

2. E-Business Layer

Main features:

- Policies and standards for:
- Third party services delivery channels,
- Security of transaction and information,
- Authentication,
- Smart cards.
- Privacy and data sharing,
- Security and authentication policies.
- Delivery channels.

3. Interoperability Layer

Main features:

- Common infrastructure to enable interoperability across government departments and the wider public.
- Policies and standards to ensure that the government organizations can communicate electronically with citizens and businesses.
- Information management policies and standards for data entities, data management, and metadata (common data standards)

B. UK ROLES AND RESPONSIBILITIES FOR MAKING E-GOVERNMENT HAPPEN

1. The e-Envoy

Main roles and responsibilities:

- owns the e-government strategy on behalf of ministers
- lead the e-business thinking in government
- provide strategic prioritization of e-government infrastructure and policy issues
- accelerate and co-ordinate work to get services on-line
- monitor the strategy implementation and report progress to ministers.

2. Information Age Government Champions (IAGC)

Main roles and responsibilities:

- support the e-Envoy in implementing and developing the strategy
- help in winning and sustaining commitment to the programme across the public sector.
- champion the delivery of departmental and sectoral e-business strategies.
- sustain a network for sharing knowledge and experience in e-government programmes.

3. Central IT Unit (CITU)

Main roles and responsibilities:

- develop and monitor implementations of framework policies, standards and guidelines.
- support departments in their development of e-business strategies.
- develop shared infrastructure and applications in collaboration with lead departments

- coordinate action on new ICT skills for the Information Age Government.

4. The Office of Government Commerce (OGC)

Main roles and responsibilities:

- formulate procurement policies and strategies
- build on the recommendations of the review of major IT projects
- work with the CITU to develop appropriate approaches to sourcing Information Age Government services and systems

5. Central government departments, and agencies

Main roles and responsibilities:

- develop e-business models
- converge with government standards and policies
- providing services to citizens electronically
- develop IT skills and awareness

6. Local government

Main roles and responsibilities:

- encourage the adoption of the e-government strategic framework at the local government level
- encourage local councils to apply the Information Age Government policies to their services.
- contribute to the national e-strategy implementation programme

7. Industry

Main roles and responsibilities:

- deliver public services to the citizens either directly or in partnership with public sector organizations
- provide examples of best practice and support for e-business
- work in partnership with government to provide infrastructure and services to government

REFERENCES

Following are a number of UK government selected Websites links which have details of the UK e-government strategies and plans at both the central government and local government levels.

Comprehensive Spending Review White Paper <http://www.hm-treasury.gov.uk/pub/htm/csr/index.html>
Social Exclusion Unit <http://www.cabinet-office.gov.uk/seu>
Women's Unit <http://www.cabinet-office.gov.uk/womens-unit>
Crime reduction strategy <http://www.homeoffice.gov.uk/crimprev/cpa.htm>
UK Foresight Programme <http://www.foresight.gov.uk>
Policy Appraisal for Equal Treatment <http://www.cabinet-office.gov.uk/womens-unit/equal.htm>
Excellence in Schools <http://www.dfes.gov.uk>
People's Panel findings <http://www.cabinet-office.gov.uk/servicefirst/index/pphome.htm>
Better Government for Older People Programme
<http://www.cabinet-office.gov.uk/servicefirst/index/opmenu.htm>
Race relations/Race Relations Forum <http://www.homeoffice.gov.uk/reu/reu.htm>
New Deal for Disabled People <http://www.disability.gov.uk>
and <http://www.dss.gov.uk/hq/press/press/.htm>
Access Business <http://www.cabinet-office.gov.uk/bru>
Service First <http://www.cabinet-office.gov.uk/servicefirst>
Employment Service Direct <http://www.employmentservice.gov.uk>
New Commitment to Regeneration <http://www.lga.gov.uk>
Education Action Zones (EAZ) <http://www.dfes.gov.uk>
Public Record Office Family Records Centre <http://www.pro.gov.uk>
Community Planning <http://www.lga.gov.uk>
Comprehensive Spending Review White Paper <http://www.hm-treasury.gov.uk/pub/htm/csr/index.html>
Public Service Agreements White Paper <http://www.hm-treasury.gov.uk>
Public Audit Forum <http://www.public-audit-forum.gov.uk>
Consultation on reform of Deregulation and Contracting Out Act
<http://www.cabinet-office.gov.uk/bru/contract.pdf>
Public Sector Benchmarking Project <http://www.cabinet-office.gov.uk/eeg>
Best Value <http://www.local-regions.detr.gov.uk>
Better Quality Services <http://www.cabinet-office.gov.uk/eeg/quality/qualmenu.htm>
Their Information Age White Paper <http://www.number-.gov.uk>
Their Competitive Future White Paper http://www.dti.gov.uk/cii/elec/elec_com.html
Consultation Paper on e-commerce http://www.dti.gov.uk/cii/elec/elec_com.html
Electronic filing of tax returns http://www.inlandrevenue.gov.uk/forms_public/index.htm
NHS Direct <http://www.doh.gov.uk/nhsexec/direct.htm>
National Grid for Learning <http://www.ngfl.gov.uk>
University for Industry <http://www.dfes.gov.uk>
ACCORD <http://www.dss.gov.uk/itsa/index.htm>
Information Age Services for Post Office customers <http://www.royalmail.co.uk>
Public Record Office <http://www.pro.gov.uk>
Modernising Local Government White Paper <http://www.local-regions.detr.gov.uk/lgwp/index.htm>
Central IT Unit <http://www.citu.gov.uk>
NHS National Taskforce on Staff Involvement <http://www.doh.gov.uk/nhsexec/staffinv.htm>
Green Paper Meeting the Challenge of Change <http://www.dfes.gov.uk>
Agenda for Change <http://www.doh.gov.uk/nhsexec/agenda.htm>
Public Appointments/ Commissioner for Public Appointments <http://www.open.gov.uk/ocpa/ocpahome.htm>
Fast Stream Development Programme <http://www.cabinet-office.gov.uk/fsesd>

About the Author

Dr. Sami Zahran has been in the ICT field for nearly 30 years. His career started in the National Computing Centre (NCC) in Cairo Egypt during the mid 1960's and early 1970s. He moved to the UK where he worked with International Computers Limited (ICL) for nearly fifteen years from the early 1970's to mid 1980's. He managed large national computerization projects under the UNDP in the Arab Gulf Areas, then he joined Digital Equipment Corporation (DEC) for 8 years. He is now with IBM Corporation where he manages large e-Business project. Dr. Zahran is a registered independent evaluator with the European Commission since the early 1980's where he evaluates proposals for projects proposals submitted to the European Commission for approval and funding. He is an international author (look him up in Amazon.com), consultant and regular speaker in International conferences on the latest developments in the ICT domain.