Abstract: This research paper analyses the relevance of e-Government in today’s contemporary business world where governments are keener to apply and adopt this new platform. The researcher firstly defines the concept of e-government, reviews the types and applications of e-governments, probes into existing models of e-government and highlights the benefits and challenges of the concept. The aim of the paper is to develop a roadmap for e-government in society by taking two short case examples of Europe and Mauritius. It explains that despite impending challenges, e-Government should be effective in most societies and that it is an imperative for the public sector to consider its relevance.

Keywords: e-Government, models, e-readiness, benefits, challenges, case examples.

I. INTRODUCTION

A. Defining e-Government

There are several definitions on e-Government meaning almost the same but having a slight different view on it. This chapter analyses the various definitions of e-Government and how close these might be related. The main approach on e-Government can be described as follows: With the Internet, e-Government can be used to work on and to solve political and social issues increasingly local: close to the point of origin. Therefore e-Government creates a more effective and a more citizen orientated government with less costs for the administration.

Electronic Government refers to the simplification and the transaction of business processes by the use of information and communication technology (ICT) in the context of governance and public administration.

e-Government is the use of information and communication technologies in public administrations—combined with organisational change and new skills—to improve public services and democratic processes and to strengthen support to public policies.

e-Government is understood as the execution of administrative tasks and processes with the help of technical tools and media [1].

The World Bank, (2012) defines e-Government as the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions [2].

II. LITERATURE REVIEW

A. The popularity of e-government

E-government has become a popular focus of government efforts in many countries around the world. More and more governments around the world have implemented and introduced e-government systems as a means of reducing costs, improving services, saving time and increasing effectiveness and efficiency in the public sector. E-government and Internet has made an essential change in the whole society structure, values, culture and the ways of conducting business by utilizing the potential of ICT as a tool in the daily work.

According to Alsheri and Drew (2007), the purpose of e-government is not only the conversion of traditional information into bits and bytes and making it reachable via the Internet websites or giving government officials computers or automating old practices to an electronic platform. But it also calls for rethinking ways the government functions are carried out today in order to improve processes and integration [3].

Governments have different strategies to build e-government. Some have created comprehensive long-term plans. Others have opted to identify just a few key areas as the focus of early projects. In all cases, however, the countries identified as most successful have begun with smaller projects in phases on which to build a structure. E-government researchers divide the process of e-government implementation into phases or stages.

B. The business case for e-government

E-government is now widely regarded as being fundamental to reform, modernisation and improvement of government. The OECD defines e-government as "the use of information and communication technologies (ICTs), and particularly the Internet, as a tool to achieve better government". However, the real costs of and benefits of e-government have rarely been soundly and systematically evaluated. During the ‘dot.com’ boom, e-government enjoyed a healthy level of political and financial support. ICTs and e-government were seen as key tools for modernising public administrations and providing better government [4].

C. Governments need to adopt access for opportunity as a policy goal

Governments must specifically identify and address issues of real access—utilising the Access Model put forth herein—rather than issues of technology. The end goal should be access for opportunity, rather than solely access to ICT. In this context the governments need to develop and formally adopt E-government Plans and/or similar national ICT Plans that include access goals, economic development objectives, and long-term goals to achieve a knowledge economy/society.

D. Governments need to focus on knowledge societies

Governments need to re-think and re-engineer their development strategies towards building knowledge societies.
A renewed commitment is needed to put ICTs within an integrated development framework to leap-frog the traditional long gestation phases of development and yield rapid economic and social progress for all. Governments need to include ICTs in all planning initiatives: To improve access-for-opportunity, countries must recognise the centrality of ICTs to development. The governments need to include ICT planning across all government sectors, particularly public education, public health, economic development, commerce and industry, law enforcement and security, and others—this integrated planning will lead to real e-government and ICT for development. E-government and ICT goals should be clearly articulated in terms of economic development and quality of life enhancements for all members of society.

E. The concept of e-readiness

According to the Economist Intelligence Unit report (2009), digital development marches on. Connectivity continues to improve, and remains the major enabling factor for any country’s ability to improve its e-readiness [5]. While usage levels are still in their infancy, encouraging signs are seen, ranging from e-participation efforts to actual use of online public services. In rich and poor countries alike, however, thorny policy issues arising from the very success of digital development remain largely unresolved. Widespread Internet usage, for example, naturally motivates telecoms carriers and content providers to explore ways to obtain more information—and thus sales—from their customers.

III. DISCUSSION: CONCEPTUALISING A ROADMAP FOR E-GOVERNANCE

E-government and innovation can provide significant opportunities to transform public administration into an instrument of sustainable development. E-government is ‘the use of ICT and its application by the government for the provision of information and public services to the people’ [6].

More broadly, e-government can be referred to as the use and application of information technologies in public administration to streamline and integrate workflows and processes, to effectively manage data and information, enhance public service delivery, as well as expand communication channels for engagement and empowerment of people. The opportunities offered by the digital development of recent years, whether through online services, big data, social media, mobile apps, or cloud computing, are expanding the way we look at e-government.

The World Bank has embraced e-government in its efforts to modernise public sector and improve public sector delivery. For this reason, e-government initiatives are present in most projects in the Sector. E-government is considered a key facilitator to achieve the proposed reforms supported by the rest of the core areas, from public financial management to anti-corruption, including the improvement of service delivery for citizens. In numerous projects, it has been demonstrated that e-government has had a remarkable impact on improving the efficiency and integration of public sector.

While e-government still includes electronic interactions of three types—i.e. government-to-government (G2G); government-to-business (G2B); and government-to-consumer (G2C)—a more holistic and multi-stakeholder approach is taking shape. Through innovation and e-government, public administrations around the world can be more efficient, provide better services and respond to demands for transparency and accountability. E-government can help governments go green and promote effective natural resource management, as well as stimulate economic growth and promote social inclusion, particularly of disadvantaged and vulnerable groups. ICTs have also proven to be effective platforms to facilitate knowledge sharing, skills development, transfer of innovative e-government solutions and capacity-building for sustainable development among countries. E-government can generate important benefits in the form of new employment, better health and education.

IV. MODELS OF E-GOVERNMENT

Models of e-Government are discussed in this section. Firstly, the Government to Government Model (G2G) relates how e-Government can be successfully implemented within state organisations, Government to business (G2B) deals with public and private sector interaction, and Government to Citizens (G2C) deals with the relationship between government and citizens. As such, one can note the pervasive use and implementation of e-government in all spheres of society.

A. Government to Government Model (G2G)

According to Gregory (2007) G2G refers to the online communications between government organizations, departments and agencies based on a super-government database. Moreover, it refers to the relationship between governments. The efficiency and efficacy of processes are enhanced by the use of online communication and cooperation which allows for the sharing of databases and resources and the fusion of skills and capabilities. The vital aim of G2G development is to enhance and improve inter-government organizational processes by streamlining cooperation and coordination. Governments depend on other levels of government within the state to effectively deliver services and allocate responsibilities [7].

In promoting citizen-centric service, a single access point to government is the ultimate goal, for which cooperation among different governmental departments and agencies is necessary. G2G facilitates the sharing of databases, resources and capabilities, enhancing the efficiency and effectiveness of processes. It represents internal systems and procedures which form the backbone of public organizations. G2G involves sharing data and conducting electronic transactions between governmental actors. This includes both intra and inter-agency interactions between employees, departments, agencies, ministries and even other governments.

B. Government-to-Business (G2B)

Government to business, or G2B, is the second major type of e-government category. G2B can bring significant efficiencies to both governments and businesses. G2B include various services exchanged between government and the business sectors, including distribution of policies, memos, rules and regulations. Business services offered include obtaining current business information, new regulations, downloading application forms, lodging taxes, renewing licenses, registering businesses, obtaining permits, and many others. The opportunity to conduct online transactions with government reduces red tape and simplifies regulatory processes, therefore helping businesses to become more competitive [8].

C. Government-to-Citizens (G2C)

G2C deals with the relationship between government and citizens. It allows citizens to access government information
and services instantly, conveniently, from everywhere, by use of multiple channels. Government-to-Citizens (G2C) model have been designed to facilitate citizen interaction with the government. The focus of G2C is customer centric and integrated electronic services where public services can be provided based on a “one-stop shop” concept. This implies that citizens can carry out a variety of tasks, especially those that involve multiple agencies, without needing to initiate contacts with each individual agency. While e-Administration initiatives improve internal government processes, e-Citizens and e-Services deal with improving communication and quality of service between government and citizens. Finally, e-Society initiatives concern interactions of government with businesses and civil communities. As each domain develops and progresses, e-Government initiatives may increasingly fall into overlaps.

V. BENEFITS OF E-GOVERNMENT

According to the World Bank (2002), e-Governance has the following benefits;

It greatly simplifies the process of information accumulation for citizens and businesses.

It empowers people to gather information regarding any department of government and get involved in the process of decision making.

E-Governance strengthens the very fabric of democracy by ensuring greater citizen participation at all levels of governance.

E-Governance leads to automation of services, ensuring that information regarding every work of public welfare is easily available to all citizens, eliminating corruption. This revolutionises the way governments function, ensuring much more transparency in the functioning, thereby eliminating corruption.

Since the information regarding every activity of government is easily available, it would make every government department responsible as they know that every action of theirs is closely monitored.

Proper implementation of e-Governance practices make it possible for people to get their work done online thereby sparing themselves of unnecessary hassles of traveling to the respective offices.

Successful implementation of e-Governance practices offer better delivery of services to citizens, improved interactions with business and industry, citizen empowerment through access to information, better management, greater convenience, revenue growth, cost reductions etc.

Furthermore, introduction of e-Governance brings governments closer to citizens. So much so that today it becomes extremely convenient to get in touch with a government agency. Indeed, citizen service centers are located closer to the citizens now. Such centers may consist of an unattended kiosk in the government agency, a service kiosk located close to the client, or the use of a personal computer in the home or office.

E-Governance practices help business access information that might be important for them at a click. [11]

VI. CHALLENGES OF E-GOVERNMENT

This section explains the challenges of e-Government. They are namely the digital divide, the need to have effective infrastructure, a suitable and well defined law and policy on the use of e-Government, including accessibility, trust from users and providers of e-services, accessibility and the human resources required to make e-Government a reality [10].

A. Digital divide

Class, race, ethnicity, geography and other factors could lead to groups of people being disenfranchised. In many countries, content must be provided in more than one language or dialect. E-government must also address the needs of those who are illiterate. The digital divide is the gap between people who have access to the Internet and those who do not. Those without access cannot learn essential computer skills, cannot access information that can provide economic opportunities, and cannot share in the benefits of e-government.

Bridging the digital divide means more than just addressing race and class issues. Successful programs will create new opportunities for those who are traditionally isolated from government programs. In particular, technology programs often leave women, immigrants and the elderly behind. An effort must be made to include these and other vulnerable groups.

B. Infrastructure development

All countries implementing e-government have struggled to develop a basic infrastructure to take advantage of new technologies and communications tools. Many developing countries, even if possessing the will, do not have the infrastructure necessary to immediately deploy e-government services throughout their territory.

C. Law and public policy

The application of ICT to government may encounter legal or policy barriers. Legislatures must ensure that laws are updated to recognise electronic documents and transactions. They must take proactive steps to ensure that policies support rather than impede e-government. Policymakers implementing e-government must consider the impact of law and public policy. Otherwise, any initiative will encounter significant problems. The effort must incorporate a holistic view, one that is not just focused on technology. Archaic laws, old regulatory regimes, overlapping and conflicting authorities can all greatly complicate or altogether halt a project. Legal reforms and new policy directives may have to be adopted before the online world can function smoothly.

D. Accessibility

Governments must serve all members of society irrespective of their physical capabilities. Online services will have to be designed with appropriate interfaces – this may have significant cost implications. Some developing countries have sizable disabled populations. These people could especially benefit from e-government services as they may not be able to travel to government offices. However, e-government projects need to accommodate the needs of the disabled – such as those who are blind, or do not have use of their hands.

E. Trust

To be successful, e-government projects must build trust within agencies, between agencies, across governments, and with businesses, NGOs and citizens. When conceptualizing e-government, developers often do not realize the many boundaries, both physical and administrative, that the proposed project will cross. Yet, the success of e-government often comes down to building trust and common understanding with
the variety of players early in the process. The biggest concern for most parties is that change brought about by a new system will negatively impact them.

F. Workforce issues

Human resources must be structured and managed with e-government goals in mind. A well-trained and motivated workforce is critical to e-government success. Civil servants need training and leadership in order to integrate themselves into the new information structure. Policymakers need to expect that civil servants will feel threatened by e-government, either because they fear being caught for corruption or simply because they fear a loss of power. Leadership can play an important role and create a positive atmosphere for change by ensuring adequate training and rewarding those who support e-government changes.

G. Cost structures

While planning and budgeting in a changing climate is difficult, governments should seek to invest in sustainable programs that can produce savings. In order to implement a successful e-government program, policymakers need to develop specific and reasonably attainable goals and understand what resources are available to achieve those goals. Only then will they be able to formulate a plan that can be implemented in full, rather than being cut short before any gains are realised due to lack of resources.

VII. COMPARATIVE ANALYSIS OF E-GOVERNMENT IN TWO DISTINCT ENVIRONMENTS

A. Europe and e-government

This section highlights the development of e-Government in Europe. Being a rich continent with high levels of Internet penetration, Europe maintains the lead in e-Government. Certain elements of e-Government namely the conditions in which they apply and their road map for effective e-Government are highlighted below.

The Malmö Declaration sets out 4 political priorities for all European public administrations over the next 5 years [11]:

- Citizens and businesses are empowered by e-Government services designed around users’ needs and developed in collaboration with third parties, as well as by increased access to public information, strengthened transparency and effective means for involvement of stakeholders in the policy process,
- Mobility in the Single Market is reinforced by seamless e-Government services for the setting up and running of a business and for studying, working, residing and retiring anywhere in the European Union,
- Efficiency and effectiveness is enabled by a constant effort to use e-Government to reduce the administrative burden, improve organisational processes and promote a sustainable low-carbon economy,
- The implementation of the policy priorities is made possible by creating the appropriate key enablers and by establishing the necessary legal and technical preconditions.

Governments need to provide better public services with fewer resources. Each of the above political priorities works towards that aim, as well as providing new and better ways to engage with citizens. The emergence of innovative technologies such as ‘service-oriented architectures’ (SOA), or ‘clouds’ of services, together with more open specifications which allow for greater sharing, re-use and interoperability reinforce the ability of ICT to play a key role in this quest for efficiency in the public sector.

B. Small Island Developing State of Mauritius

The government of Mauritius has put effort into developing their online portal and their telecommunication infrastructure. Their website www.gov.mu offers citizens an exhaustive list of e-services segmented by target persons (139 services), by domain (59 services), by ministry (53 services), by department (13 services) and parastatally (14 services). Even though Mauritius is one of the Small Island Developing States with a small land area and population, its economy has developed since independence from a small-scale focus based on agriculture, to a diversified middle-income economy. This increased the government’s potential to invest in infrastructure, communications and education, which raised the Human Capital Index of Mauritius and in turn raised its ranking in the regional EGDI. The government portal also offers citizens a platform for e-participation through chat rooms, a media library, blogs and discussion forums [12].

C. The developing nations’ challenge

One of the main challenges for an e-Government project is the establishment of an appropriate and context tailored strategy. Every project or initiative needs to be rooted in a very careful, analytical and dynamic strategy. This seems to be a very difficult task, requiring a focus on many aspects and processes, a holistic vision, long-term focus and objectives. Many public institutions limit their activities to a simple transfer of their information and services online without taking into consideration the re-engineering process needed to grasp the full benefits. The government must have a clear strategy to overcome the barriers to change. Part of the strategy is to engage in a rigorous assessment of the current situation, the reality on the ground and the inventory of projects, articulate costs, impacts and benefits of programme as well as continuously monitor and evaluate the project upgrading [13].

CONCLUSION

This paper sums up the roadmap to e-government explaining how this is achieved in the public sector in two selected types of society. The issue is that most societies, whether advanced or developing, will need to shift to this concept and many are already embarking on this. It is essential that e-government comes forward with certain useful concepts like e-readiness, the practical implications of such a concept and how it should address the public sector. Broadly, the road map helps both in understanding the key issues around e-government, think of its benefits and challenges but also learn how and why it should be applied without apprehension in public sector administration globally.

References


