

## Future of E-Government: An Integrated Conceptual Framework

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### Abstract

In fact, e-governance can be seen as a broader concept that identifies and evaluates the impacts that ICT and artificial intelligence technologies on the practice and administration of government, on relations between civil servants and society in general, and on interactions with elected representatives or external stakeholders including non-governmental organizations or private institutions. Several studies have examined how e-governance is radically transforming public sector organizations and processes (Abuljadail et al., 2017; Bovaird, 2003; Jho, 2005; Marsou & Oudri, 2017; Misuraca, 2012; Mutasa & Iyamu, 2017; Wynne, 2009). This paper seeks to investigate the ways and degree to which administrative structures and management practices have been altered by ICTs to bring about e-governance, in order to determine its challenges and implications.

**Keywords: e-Governance, Concept, Strategy and Implication**

**Introduction:** Nowadays, information and communication technologies are revolutionizing all aspects of our daily lives. Public governance has grown up to take advantage of them. The integration of ICTs has generated the e-Governance concept, which has significantly improved the delivery of public services to all citizens, and consequently the overall objective of improving the performance of governance systems at all levels, as well as strengthening the public governance framework of the whole society. By exploring the origin and evolution of e-governance over time and space, this research highlights theoretical and empirical findings about the potential implications of ICT integration in public governance systems. Additionally, opportunities for effective integration of ICT into local governance systems were identified and discussed, based on concrete examples of effective implementation. Afterwards, this paper provides several challenges currently facing e-governance, including Internet access, security and privacy, ethical regulation, professional skills and environmental issues. Finally, it discusses the perspectives raised by artificial intelligence (AI) as it evolves to improve data-driven decisionmaking, automate repetitive tasks and enable personalized services

E-governance raises the transparency, accountability, efficiency, and effectiveness and inclusiveness in the governing process in terms of reliable access to the information within government, between government, national, state, municipal, and local level governments, citizens, and businesses and empowers business through access and use of information (Dwivedi and Bharti: 2005).

The main focus of the E-Governance or electronic governance is to provide transparent, equitable, and accountable service delivery to the citizens. The aim of the e-governance facilitates and improves the quality of governance and ensures people's participation in the governing process through electronic means like e-mail, websites, SMS connectivity, and others.

E-governance is not just about government websites or e-mail or financial transactions. "It will change how citizens relate to government as much as it changes how citizens relate to each other" (Katyal: 2002). It also refers to the utilization of IT in the country's democratic processes itself such as the election.

E-governance is about the use of ICT for steering the citizens and promoting the public service. It includes a pragmatic application and usage of ICT for delivering efficient and cost effective services and information and knowledge to the citizens being governed, thereby realizing the vast potential of the government to serve the citizens (Prabhu: 2015). It made correlations between state and society, government and people, people to people, governance and society.

Reinventing government has been a dominant theme since 1990s, wherein governments world over are attempting to improve the systems of public service delivery. Rapid strides made in the field of Information and Communication Technology (ICT) have facilitated the reinvention of governments and prepared them to serve the needs of a diverse society. In

other words, the information age has redefined the fundamentals and transformed the institutions and mechanisms of service delivery forever. The vision is the articulation of a desire to transform the way government functions and the way it relates to its constituents. The concept of electronic governance, popularly called e-governance, is derived from this concern. Democracies in the world share a vision of the day when e-governance will become a way of life.

### **CONCEPT OF E-GOVERNANCE**

The concept of e-governance emerged with the rapid advancement of ICTs in the late 20th century. The governments recognized the potential of digital technologies to streamline their actions and operations to improve public services. Admittedly, e-governance implies the use of ICT to conduct government business. But historically, and according to some authors (Schwester, 2009), the concept of e-governance started out as a way of disseminating information, then progressed to online operations in a second phase, before culminating in a participatory framework for involving citizens online. Therefore, the concept of e-governance was first conceived as a component of public administration reform, before emerging as a major social challenge and a mechanism capable not only of improving administrative services and user satisfaction, but also of promoting deeper forms of democracy (Misuraca, 2012). In the literature on the origins of the e-governance concept, we have noted a certain confusion in previous studies between e-governance and e-government. E-government and e-governance have become key issues on the agendas of governments around the world (Jafari & Ali, 2011). Heeks (2005) for example, has proposed this definition of e-governance: "E-Governance means the use of information technology by public sector organizations or administrations". Kim (2005) had claimed that "E-Government is about the deployment of technology by government to conduct administration and to enhance the delivery of existing services, such as government/citizen platforms" (Kim, 2005a). These two definitions are very similar, but conceptually, e-governance is different from e-government (Bannister & Connolly, 2012). However, since the 1990s, the systematic adoption of ICTs in government activities was the driving force behind the concept of e-government (Bovaird, 2003; Paquet, 2000) before theoretically exploring the concept of e-governance.

E-governance is the application of ICT to the processes of government functioning for good governance. In other words, e-governance is the public sector's use of ICTs with the aim to improve information and service delivery, encourage citizen participation in decision-making and make government more accountable, transparent and efficient. The Ministry of Information and Technology states that e-governance goes far beyond mere computerisation of stand alone back office operations. It implies fundamental changes in government operations; and new set of responsibilities for the legislature, executive, judiciary and citizens. According to the Comptroller and Auditor General, UK, e-governance means providing public access to information via the internet by government departments and their agencies. So in essence, e-governance is the application of ICT in government functioning to bring in SMART governance implying: simple, moral, accountable, responsive and transparent governance.

SMART governance, thus, helps in:

- improving the internal organisational processes of governments;
- providing better information and service delivery;
- increasing government transparency in order to reduce corruption;
- reinforcing political credibility and accountability; and
- promoting democratic practices through public participation and consultation.

E-governance and E-government E-governance and e-government are often used interchangeably, so distinguishing between them at this stage is imperative. According to Thomas B. Riley government and governance are both about getting the consent and cooperation of the governed. But whereas government is the formal apparatus for this objective, governance is the outcome as experienced by those on the receiving end.... E-government can be more productive version of government in general, if it is well implemented and managed. E-governance can evolve into participatory governance, if it is

well supported with appropriate principles, objectives, programmes and architectures. E-government is, thus, the modernisation of processes and functions of government using the tools of ICT as to transform the way it serves its constituents. As per the World Bank, e-government refers to the use by government agencies of information technologies (such as wide area networks, internet and mobile computing) that have the ability to transform relations with citizens, businesses and other arms of government. It is the use of technology to enhance the access to and delivery of government services to benefit citizens, business partners and employees. E-governance, on the other hand, goes beyond the service delivery aspects and is seen as a decisional process. It is about the use of ICTs in the systems of governance, that is, using ICT to involve multi stake holders in decision-making and in making governments open and accountable.

### **Differences between government and governance**

In his book “E-governance in Africa: From theory to action”, Misuraca (2007) argues forcefully for the advantages of e-governance, particularly for local authorities in Africa. He claims that this process can enable local governments to “reinvent” themselves, and maintains that much public governance can be more easily achieved through the incorporation of networked electronic equipment and ICTs into local government administration (Misuraca, 2007). In West Africa, for example, administrations are now implementing governance mechanisms that take into account the possibilities offered by ICTs, in order to better meet the expectations of their populations. The major issue surrounding e-governance in West Africa is to improve administration through the effective circulation of administrative information, a better relationship between the administration and citizens, and above all, the availability of online services that help to involve the population more fully in the decision-making process that affects them (Mbengue, 2009). Over the years, e-governance has increasingly gained popularity in emerging and developing countries, mainly in South-East Asia and India. An illustration of this can be seen in Basu's (2004) examination of the legal and infrastructure challenges associated with e-governance, particularly focusing on developing nations, with special emphasis on these countries' success in developing regulatory-related legal frameworks (Basu, 2004). Additionally, in the case of India and Southeast Asia in general, there is an active movement towards e-governance and ICT development. Nevertheless, instead of being anchored in a well-defined theoretical and practical background, e-governance is frequently perceived as a derivative of e-government. This means moving towards greater political participation and more fruitful links between non governmental stakeholders. In Morocco, e-governance is taking its first steps through the “Digital Morocco Plan” in 2013 and the “Digital Morocco Strategy” in 2016. Based on the recent study by Marsou & Oudri (2017), it is clear that the improvement of digital or traditional administration in Morocco is being achieved in a complementary way, by diversifying the portfolio of services to satisfy the Moroccan citizen and investing in territorial proximity as a common strategic factor that concretizes the decentralization of decision-making authority to ensure successful e-governance (Marsou & Oudri, 2017). Constantly analyzing the evolution of the concept worldwide, Ojo et al., (2009) studied e governance in Asia, explaining that the factors of regional competitiveness and intra-regional performance are crucial in the realization of e-governance, and their impact on the quality of governance based on the active involvement and empowerment of individuals, as well as the efficiency and effectiveness of administrative processes. In their results, a top-down regional approach is applied at scale to ensure knowledge sharing and collaborative actions enabled by communities of interest (Ojo et al., 2009).

The difference between government and governance is often raised. Governance, according to the New Oxford English dictionary (1991), is defined as “the action or manner of governing”. It is the process by which we collectively solve our problems and meet our society's needs. Government is the instrument we use.” e-Government and e-governance can be defined as two very distinct terms. e-Governance is a broader topic that deals with the whole spectrum of the relationship and networks within government regarding the usage and application of ICTs. It is a group of norms, processes and behaviours that have an influence

on the exercise of power, especially from the point of view of openness, participation, responsibility, effectiveness and consistency. e-Government is actually a narrower discipline dealing with the development of online services to the citizen, more the e on any particular government service - such as e-tax, e-transportation or e-health (Riley, 2012) e-Governance is a wider concept that defines and assesses the impacts technologies are having on the practice and administration of governments and the relationships between public servants and the wider society, such as dealings with the elected bodies or outside groups such as not for profits organizations, ngos or private sector corporate entities. It encompasses a series of necessary steps for government agencies to develop and administer to ensure successful implementation of e-government services to the public at large. . E-democracy refers to the processes and structures that encompass all forms of electronic interaction between the Government (elected) and the citizen (electorate).

E-government is a form of e-business in governance and refers to the processes and structures needed to deliver electronic services to the public (citizens and businesses), collaborate with business partners and to conduct electronic transactions within an organisational entity.

### **Objectives of E Governance**

The objectives of e governance are as follows-

1. One of the basic **objectives of e-governance** is to make every information of the government available to all in the public interest.
2. One of its goals is to create a cooperative structure between the government and the people and to seek help and advice from the people, to make the government aware of the problems of the people.
3. To increase and encourage people's participation in the governance process.
4. e-Governance improves the country's information and communication technology and electronic media, with the aim of strengthening the country's economy by keeping governments, people and businesses in tune with the modern world.
5. One of its main objectives is to establish transparency and accountability in the governance process.
6. To reduce government spending on information and services.

### **Features of E Governance**

It has been proven from the concept of e-governance that it is a powerful means of public service in the present era. Some of its features can be found by observing the functioning of e-governance.

1. **De bureaucratization:** Due to e-governance, the gap between the people and the government in all the services of the government is narrowing and the dependence of the people on the bureaucracy is also greatly reduced.
2. **E-Services:** Its main feature is the provision of services through the Internet. As a result, we get G2C, G2B, G2E, etc. services. This is already discussed in the section of 'types of governance'.
3. **International Services:** through e-governance, all the essential services can be delivered to the citizens who are living outside of their country for job purposes or any other reasons.
4. It enhances the **right to express** to the citizens. Using the means of e-governance anyone can share their views with the government on any bill or act or decision taken by the government.
5. **Economic Development:** With the introduction of e-governance, various information like import-export, registration of companies, investment situations, etc. are available through the internet. As a result, time is saved, procrastination decreases, and economic dynamism increases.
6. **Reduce inequality:** using e-governance tools everyone can gather information and empower themselves. In this globalized world, knowledge is power, and means of e-governance empower us by providing relevant information at minimal cost, effort, and time.

## Types of E Governance

E-Governance can be considered as the social inclusive policy for development of transparency and accountability of both people in society and administration. This policy involves providing the services to the people with collection of information through the institutional and communicational development.

It provides quality services in several ways. Those ways are also called as types of e-governance. These are mentioned below-

1. G2C (Government to Citizen)
2. G2G (Government to Government)
3. G2B (Government to Business)
4. G2E (Government to Employee)

### 1. G2C (Government to Citizen)

As people are the key concept of politics and government as well as governance, the government is compelled to connect with citizens through the transparent and accountable order. In this connection the government is responsible for promoting the social opportunities and public services in the field of-

- Transportation (Registration of motor vehicles, Issue of driving licenses, Issue of plying permissions, Tax and fee collection through cash and bank challans and control of pollution etc.),
- hospitals (linking of various hospitals in different parts of the country to ensures better medical services to citizens),
- education ( availability of the e-learning modules to the citizens, right to education),
- online job portal and various customer services.

It also ensures services such as issue of certificates, job cards, passport, ration cards, payments of bills and filing the taxes from the door step through e-governance platform. The main objectives of the G2C services are to ensure equitable distribution of information for all, acceptance of citizen's feedback, and improving welfare services.

### 2. G2G (Government to Government)

G2G has been referring to raising the quality of the government process by cost cutting, managing performance, and making strategic connections within government.

It enables government institutions to be more efficient and more effective by the use of IT tools such as-

- Live fingerprints scanning and verification,
- Electronic entry of reports and paperwork etc.

The major key areas in this type of e-governance are

- E-Secretariat (all the valuable information regarding the function of the government are interlinking throughout the various departments),
- E-Police (police personnel records, criminal records etc), and
- E-Court (creating a database of all the previous cases, pending and ongoing cases) and Statewide Networks (Kumar: 2011).

### 3. G2B (Government to Business)

G2B is mainly concerned with these things-

- E-taxation,
- Getting a license from the government etc.
- Secure Electronics Transactions.

It has included the policy of government with business. According to S.P Kumar, 'the essentials for achievement of G2B services for secure and authentic transactions include: Standards for electronic transactions, a secure payment mechanism and Public key infrastructure' (Kumar: 2011).

### 4. G2E (Government to Employee)

The G2E model refers to providing information and services from government to employee and employee to government as well. It involves training through-

- e-learning methods;
- Consolidating the employee and

- Share of knowledge among the employees.

It has also facilitated the employee to access information regarding pay and benefit policies and manage their profits through online.

What is the Relation Between ICT and Governance?

Through the application of ICT in public administrations, the governing processes are more effective and more efficient and also ensure sustainable development.

### **IMPORTANCE 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 revolutionizes 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.

### **Conclusion**

From the above discussion on **E-Governance: Meaning, Objectives, Features, and Types**, it can be stated that In this era of globalization, the role of E governance is significant. This is a blessing, especially to third world countries. As a result of the implementation of e-governance, all these countries have been able to maintain their development trend on par with the developed countries. Knowledge is power. E-governance empowers ourselves by providing relevant information at minimal time, cost and price.

### **References**

1. Dwivedi and Bharti (2005): 'E-Governance in India- Problems and Acceptability', Journal of Theoretical and Applied Information Technology, New Delhi, Pp. 37-42.
2. Bhattacharya, M. (2013). New Horizons of Public Administration. New Delhi: Jawahar Publishers.
3. Katyal, N. (2002). "The white box revolution". Data Quest, Special Issue Vol. XX, No: 14, July 31, 2002, pp. II-IV.
4. Kumar, P and Kumar, D & et al. (2013). ICT in Local Self Governance: A study of Rural India. International Journal of Computer Applications. Retrieved February 23, 2016, from
5. Kumar, S.P. (2011). E-Governance and Decentralized Planning in Kerala. Retrieved February 25, 2016,
6. Subramanian, C. (2012). E-Governance: A Key to Good Governance in India. International Journal of Recent Scientific Research.

7. Fang, Z. (2002) E-Government in Digital Era: Concept, Practice, and Development, Thailand.
8. Gregory, G. (2007) E-government. Encyclopedia of political Communications. Los Angeles 14
9. Layton, T. (2007) Information Security: Design, Implementation, Measurement, and Compliance. Boca Raton, FL
10. Moon, M. (2002) "The evolution of e-government among municipalities: rhetoric or reality". Public Administration Review; Volume 62, No. 4.
11. Ndou, V. (2004)." E-government for developing countries: opportunities and challenges". The Electronic Journal on Information Systems in Developing Countries; Volume 18, No.1.

