
Information Society and Public Administration: The Theoretical Bonding

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Abstract: *These days information has not only emerged as a new world power but also resulted in the creation of an ‘information society’ benefiting every aspect of our lives. All spheres of human life including social, educational, administrative both in public and private sectors are highly dependent on information, where Information and Communication Technology (ICT) plays a momentous role in rendering it. The implications of information society reflect and relate to the different theories and issues of public administration. This article analyzes the implications of information society from a theoretical perspective. The article relates information system with different theories like open systems, decision making, managerialism and illustrates their implications. Information society also generates politics, conflicts and divisions. It concludes with the notion that the information society has an ambiguous impact on public administration.*

Keywords: Information Society; Information Communication Technology (ICT); Public Administration; Open Systems Theory; Decision Making; Managerialism.

1. Introduction

People now-a-days are constantly being driven by a massive flow of information in every sphere of their lives and consequently led towards the emergence of an ‘information society’ - “a society characterized by a high level of information intensity in the everyday life of most citizens, in most organizations and workplaces; by the use of common or compatible technology for a wide range of personal, social, educational and business activities; and by the ability to transmit and receive digital data rapidly between places irrespective of distance” (IBM Community Development

Foundation 1997, www.epress.anu.edu.au). The concept of information society started to gain popularity from the 1980s. During the 1990s there were a lot of discussions along with academic and official publications. Herbert Simon noted long ago, organizations were created, in part, to process information and overcome limits to cognition, but even this form is taxed beyond its limits by the complexities of modern life (Rethemeyer, 2007: 201). The emergence of ICT has immensely contributed in easing that situation. Information has also become a powerful means of managing public administration. It has various types of implications on different fields of the discipline. Government is becoming more and more knowledge-based; 'Knowledge-based government in the knowledge-based economy and society' (Brown, 2005: 242). The implications of information society reflect and relate to different theories and issues of public administration. At times information is a major source of power and development. And sometimes it creates complexities, conflicts and divisions. The abundance of information and communication channels has challenged the traditional relationship between the government and the citizen. To better understand this relationship some important theories and issues where information society plays a significant role have been discussed here, with reference to their applicability.

2. An Open System

Information society can be analyzed from the open-systems perspective. Open systems theory was primarily developed by Ludwig von Bertalanffy (1968), a biologist, but is applicable in all disciplines. It defines the concept of a system, where "all systems are characterized by an assemblage or combination of parts whose relations make them interdependent" (Scott, 200: 77). Open systems like organizations are "multi-cephalous: many heads are present to receive information, make decisions, direct action" (Scott, 2002: 92). The interdependence between organizations at all levels of the organization is increasing day by day.

Organizations function and continuously interact with its ever changing environment. Information society is a part of that environment and provides new inputs to the organization. Organizations manage the dependency on the environment by exchanging and managing resources and information with other organizations. Like all other organizations public organizations gather information and process them to achieve the goals. Input comes in the form of information regarding citizens' needs, election manifestos, personal information and the like. These are processed through the administrative apparatus and results in output in the form of policies and legislation. These again constitute the environment which provides new inputs. The push towards e-government has digitalized the governmental activities to a large extent. Citizens provide personal information while filling up various forms including electronic ones. The websites and blogs about policy issues are also major sources of information input. All information gathered are integrated and preserved in the databases of various organizations. Different organizations again exchange information among themselves through intranet which is then processed for formulating policies or making governmental decisions. Citizens can learn about policies and governmental activities from governmental and non governmental websites, media and information centers.

Organizations need to process information in order to make decisions. Information system is a subsystem of the decision making system. Thus it is also interrelated with the policy network. Policy networks are at the centre of the administrative decision making process. Policy networks are sets of public agencies, legislative offices, and private sector organizations (including interest groups, corporations, and non-profits) that have an interest in public policy within a particular domain (e.g, health, education) because (1) public decisions affect the ability of members to continue their operations and meet the goals of internal and external stakeholders, and (2) members are interdependent (Rethemeyer, 2007: 201). Information is shared, exchanged and integrated among all the stakeholders.

3. Decision Making in the Information Society

Information is the most important element in the decision making process. This process usually follows the following steps (Laswell, 1963):

- i) The intelligence phase, involving an influx of information;
- ii) The promoting or recommending phase, involving activities designed to influence the outcome;
- iii) The prescribing phase, involving the articulation of norms;
- iv) The invoking phase, involving establishing correspondence between prescriptions and concrete circumstances;
- v) The application phase, in which the prescription is executed;
- vi) The appraisal phase, assessing intent in relation to effect; and
- vii) The terminating phase, treating expectations (rights) established while the prescription was in force.

The first step of decision making begins with collecting information. Not only the primary phase but each and every phase involves information processing. Information about the decision, the alternatives, and the possible consequences of the alternatives and so on is a major requirement.

Governments all around the world are more and more relying on ICT for managing information. Agile government processes focus on achieving speed with flexibility and responsiveness, in the process making government decision making competitive with best practice in the business sector (Dunleavy, Yared, and Bastow, 2003; Dunleavy et al, 2005: 285). Organizations that exhibit an elaborate information system and conspicuous consumption of information will ... be more effective decision makers than those who do not (Feldman & March, 1980: 25). The accessibility to a huge amount of information, with the support of ICT, has enabled policy makers to formulate policies more promptly and efficiently.

Public policy making is the totality of the processes by which a government decides to deal or not to deal with a particular problem or concern (Shafritz & Russell, 2000: 52). Gathering support or consensus building for any one alternative is a major step in the policy making process. It is necessary to mobilize a large number of people towards that alternative. Mass mobilization affects policy decisions to a great extent. Letter writing campaigns, marches, protests are undertaken to draw the attention of the public and the mass media. The internet plays a significant role in this matter. The internet does make mobilization cheaper, easier and faster, as election and social movement scholars have claimed (Rethemeyer, 2007: 201). It helps in mobilizing a large amount of geographically dispersed people. Websites are created especially during political campaigns to promote policies. Global non-political organizations and Non Governmental Organizations (NGOs) also spread their own views through publishing papers on policy issues online.

The availability and easy access to a vast array of information has also enabled the citizens to choose from a wide range of alternatives. It has increased citizens participation in the policy making process to some extent. The internet optimists think that the key to enhance representative democracy “is the use of information technologies (ITs) such as the Internet to build a more informed citizenry and to create open, deliberative forums in which politicians and public servants must confront their constituents” (Rethemeyer, 2007: 199). Creation of forums on the internet allows citizens express ideological views, grievances, needs and demands. Informed citizens become aware of their rights and know what services to expect from the government. This enables citizens to constructively take part in the formulation process of different social accountability tools like the citizens’ charter.

As the internet supplies a seemingly endless flow of information a general view might be that it has enabled to avert Simon’s (1947; 1996) ‘bounded rationality’ of decision making, which asserts that among other factors rationality is bounded or limited by complexities of receiving, storing, retrieving and transmitting information. But in reality it has not; bounded rationality prevails. One reason is that, even

though we have a wide supply of information, it is still not possible to process the feasibility of all the alternatives. Apart from that, the major reason is that, most important information is controlled and filtered. Policy making is dominated by organizational interest. Information is used to promote organizational interests. Therefore not all information is available or easily accessible. Only information that will guide the people towards vested interests is put on the internet or largely available. Also, studies have revealed that the internet is mostly used by those who can use the information most effectively to achieve personal goals. Therefore people still have to select the alternative that 'satisfices' them.

4. Managerial Perspective

The development of information society has promoted the views of New Public Management (NPM). The main features of NPM according to Christopher Politt (1993) are:

- i) A much bolder and larger-scale use of market-like mechanisms for those parts of the public sector that could not be transferred directly into private ownership (quasi-markets)
- ii) Intensified organizational and spatial decentralization of the management and production of services
- iii) A constant rhetorical emphasis on the need to improve service "quality"
- iv) An equally relentless insistence that greater attention be given to the wishes of the individual service user/ "consumer"

The major ideas of NPM (Osborne and Gaebler, 1993; Drucker, 1968) like empowerment of managers, emphasis on results, and use of competitive techniques (for example benchmarking and best methods in management innovation) have been enhanced through the use of ICT. This also led to the perception of the private and non-profit sectors as partners to the government and as alternative vehicles for

delivering public services (Brown, 2005: 245). The increasing demand for knowledge and expertise and new developments and complexities has led government to work hand in hand with management consultants, through contracting out and outsourcing. USA, Canada and Australia give emphasis on private sectors to play the major role in establishing the infrastructure of the information superhighway. On the other hand the Nordic countries give importance on the role of the government.

In commensurate with the views of NPM, commercialization of the product is very important. If new technologies are just discovered but do not gain any commercial value then it is not bring any major development or economic achievement. The new technology gradually tends to loose importance. The question of who produces and who pays is also important. For instance the USA does not produce most of the technology, it pays for it. Therefore it achieves the economics control and power. While Russians produce new technologies but do not emphasize on its marketing strategies. As a result their products are not dominant in the world market.

The Delta Model (Hax and Wilde, 2001; 2003) is a major development in this area as it focuses on ICT. It mainly discusses how the internet bonds customers, complementors and suppliers and creates a triangle of relationship that opens the mindset to a new set of strategic options. The exchange of valuable information initiates the engagement process with the clients.

The idea of information society and managerialism has led governments to see citizens as customers. In order to deliver services government collects a great deal of data. Sometimes these data are collected or given for a specific purpose through online service delivery mechanisms. These data give governments ideas about public needs and are later utilized to increase efficiency of service delivery. In addition information communicated through the internet can be stored and communicated for management purpose. But sometimes this may result in close surveillance and give rise to complicated privacy issues.

The features of managerialism and its relation with information society are summarized as follows (Chadwick & May, 2003: 2):

A concern with the 'efficient' delivery of government/state information to citizens and other groups of 'users'; the use of ICTs to improve flows of information within and around the organs of government; a recognition of the importance of 'service delivery' to 'customers'; the view that speeding up of information provision is by itself 'opening up' government; a general absence of user resource issues such as ability to receive and interpret information; and 'control' as the defining logic.

5. Communication Enhancement

Communication is crucial and a prerequisite for not only formulating and implementing organizational objectives but also to accomplish day to day activities. Communication refers to exchange of meaningful information between people. Bertalanffy (1968) asserts that communication is related with the flow of information within the system. Communication can be formal or informal and may take place at the micro, meso or macro levels. Again, one form of communication is internal or organizational communication which consists of report presentations, meetings, official circulars, work directions etc. The other form is external communication which occurs with the media, public and between organizations.

As part of the overall system information technology is thought to reduce the cost of expected failures and enhance efficiency. Technological progress now enables us to process, store, retrieve and communicate information in whatever form it may take - oral, written or visual - unconstrained by distance, time and volume (EC, 1994). Various developments in Information and Communication Technology (ICT) from the beginning of mainframe computers, use of single micro-

processor to present day use of optical fiber has reduced the cost of the communication system to a great extent. Contemporary developments in this sector also contribute significantly. Like the use of internet, intranet and browsers reduce costs, save time and enhance efficiency. Multi-media applications enable citizens to pay bills, pay taxes, and apply for jobs. Various financial transactions can be made through the use of swipe cards and smart cards. Communication between the government and the citizens has become more easy and prompt.

6. Politics of Information

Information society has important impacts on democracy and politics. Manuel Castells (1996) in his book “The rise of the network society” presents three major impacts of information network on informational politics. First the development of new technologies will enhance the participation of local government. Secondly, online information access and communications through computers will increase political participation and horizontal communication among citizens. Thirdly, the non-political organizations can play a role in democracy through expressing their own views.

But experiences have showed that the Internet has superficially increased participation, but has excluded existing network members. The internet, it seems, is being used primarily by those who are highly influential, highly endowed with resources, and well positioned as brokers or public authorities to automate and enrich their communications with one another (Rethemeyer, 2007: 205).

The evolution of information society has made communication with political leaders easier. For example, an ordinary citizen can easily communicate with the president through e-mail. This new tool of communication provides an opportunity to all interested citizens to express their opinions and thus participate in the decision making process. But this ICT-enabled communication decreases the level of bonding and interactive communication between

citizens and the politicians. Previously the politicians used to meet the citizens in public gatherings more often. But as it has become easier and cheaper to get information and communicate from home, face to face communication may tend to reduce. The internet may also undermine the advantages of political parties or lobby groups who relied on costly advertisements. As information distribution and availability becomes cheaper the not so wealthy parties or groups can equally compete with the wealthy ones. Thus the internet has affects on the political system also.

At present knowledge-power or information-power dominates all aspects of life. According to Pfeffer (1993) power is defined as the ability to get things done the way one wants them done; it is the latent ability to influence people. Power can be observed from two perspectives: political and organizational or administrative. In both cases the information holder is powerful than others. Forming allies through communicating information helps to increase influence. The person having access to important information has power. Generally people in high positions have exclusive sources of information which is not available to everyone.

An optimist view is that the wide access to information brings equality in the society and tends to break down the power structure. It is seen as, 'authority of knowledge' rather than 'authority of hierarchy'. But in reality it can be observed that information is used as a means of control. People at the lower level and those without access to ICT are becoming more dependent. Information is being concentrated within the top levels. Important information is exchanged only among the trusted partners. It has become a one-way flow of information.

ICT also dominates in other social and economic issues. People engaged in ICT related jobs dominate the organization and are also highly paid. In the case of economy, the uneven development of telecommunications increases the uneven development of local economies. This is because 'powerful organizations including governments disperse their activities geographically around electronic network' (Christine and Taylor, 1998: 25). The multifarious use of ICTs has created an unclear impact. ICT has been

characterized as being inherently, 'ambiguous technologies' (Frissen1992b, Christine and Taylor, 1998, p. 31).

7. Conflicts and Divisions

There are both positive and negative impacts of the information society. Though the general view is that the use of new technologies will bring about equality and harmony in social, political and economic life, there is also a growing concern about the downsides of the information society.

Sometimes chaos and conflicts arise between organizations for gaining control over information. Legislative, institutional and social factors contour and limit the use of technology. Legislation regarding secrecy or national security creates barriers in the equal and free access to information. Though, at times the reference of these legislation may not have any viable ground.

The increase in the use of internet as a means of participation also depends upon the attitude and culture of the people. For instance, spontaneous participation in e-voting will increase only if the citizens assume the use of technology as a better method than the traditional one. Often technologies fail due to its clash with local culture.

The over abundance of information sometimes creates chaos and confusion. Much information is collected without any reason and is left neglected. Feldman and March (1980: 27) have eloquently explained the situation:

Organizations seem to invest in information and information systems, but their investments often do not seem to make sense. They gather information and do not use it. They ask for reports and do not read them. They act first and receive requested information later, and do not seem to be concerned about the order.

Too much information also makes it difficult to identify information that is relevant, valid and important.

The unequal distribution of information is leading to the creation of two classes: the information poor and the information rich. The information poor are also known as the excluded, the disorganized or unorganized. Thus the 'digital divide' - which refers to "a term used to describe the discrepancy between people who have access to and the resources to use new information and communication tools, such as the Internet, and people who do not have the resources and access to the technology" (isp.webopedia.com)- is created. The concept of the digital divide is based on the hypothesis that there are both "information-haves" and "information-have-nots" in the Internet Age, and that the basis for that division may include any or all of such demographic characteristics as age, gender, income, education, ethnicity, region, and locality (Riley, 2004: 6). The main factor is not the number of technologies being used or applied rather the benefits and information generated from such. The digital divide can exist between different economic classes, between the educated and the uneducated, and between people living in rural areas and those living in urban areas. It also exists in a global scale, that is, the gap exists between more and less developed countries.

8. Conclusion

The process of information dissemination and its implications reflect a range of administrative and managerial theories. ICT has given it an added strength and zest. Information system is a sub-system of the greater administrative system and is processed through an open system. Without it the decision making process is not only incomplete but impossible too. Governments worldwide are increasingly viewing citizens as customers. With the increased use of ICT in the citizen-oriented service delivery activities of the public sector, the values of NPM and Delta model are being reflected. On one hand it is the source of power; on the other a source of conflict that arises from the

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power struggle. Profuse flow of genuine information is a crucial element for improving the quality of public administration but again the unequal distribution creates digital divide. Information society has an ambiguous impact on public administration. It has both the good sides and the bad sides. The impacts are taking place simultaneously. None of these can be overlooked or overemphasized. ICT has to be harnessed efficiently in order to derive the benefits of information society.

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