

THE NEED FOR PUBLIC ADMINISTRATION EDUCATION TO IMPROVE SERVICE DELIVERY IN THE INFORMATION SOCIETY

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ABSTRACT

In the information society the use of technology is becoming increasingly important. This is especially relevant to government institutions in South Africa. In South Africa the public service is the sole supplier or provider of particular products or services that citizens in the country have to utilise. It therefore goes without saying that in order to be able to provide these services the South African public service is in need of educated, trained and professional public servants. Initiatives like for example e-government requires an educated and proficient public work force that can meet the needs and challenges of citizens in a growing information society.

INTRODUCTION

Webster (2004:1) states that “there is within current social science a view, that information is now more central to our way of life, so much so that many scholars conceive of the emergence of a new entity, the Information Society”. In an information society the creation, distribution and use of technology is becoming more important. New technology, for example the Internet, is becoming increasingly useful in the information society. The Internet can provide universities with a new way of teaching, communicating and interacting with students in various subjects and fields of study including Public Administration. The use of technology to teach, for example, Public Administration to government officials is of great importance since South Africa is in need of skilled and educated government officials to provide public services. The information society therefore has an influence not only on how society, governments and universities function but also on every aspect of people’s lives including education and the study of Public Administration.

The information society is also synonymous with other concepts that will be used in this article, for example the knowledge society, network society, information age and post industrial society. Technology and the need for Public Administration education in an information society will therefore be an important part of this article. The purpose of this article is *firstly* to determine what the emerging information society is, and then *secondly* to look at the need for Public Administration education in an information society. This article will also address the reasons why South Africa is in need of Information and Communication Technology (ICT) trained public service work force that can provide public services in the information age.

This article is based on a literature study that was done to obtain a clear understanding of the development and growth of the information society and to get an overview of the need for Public Administration education in an information society. Information about higher education was collected from official documents, for example, policy papers, acts and bills; in addition, the Internet was used to obtain information about ICT. Accordingly, the reading and analysis of text can be seen as the main method of research for this article.

THE INFORMATION SOCIETY

The United Nations Educational, Scientific and Cultural Organization (UNESCO 2003: online) stated that “a fundamental transformation of human society, perhaps comparable only to those engendered by the invention of the alphabet and the printing press, is the emergence of the Information Society. In this dynamic environment, a new culture is emerging with prospects of having an impact on all aspects of human life”. The concept of the information society was first used by the economist Fritz Machlup during the 1950s and 1960s. Machlup’s breakthrough study, *the production of knowledge in the United States*, was published in 1962 and introduced the concept of the knowledge industry (*Concise Encyclopedia of Economics* 2008: online). After Machlup, various authors wrote about the information society as it grew and developed globally.

The development of the information society

According to Webster (2004:1) the information society developed as a new society different from the industrial society and the agricultural society which preceded it (see Table 1). From these developments a new civilisation emerges that brings with it new ways of thinking and working (Minnaar and Bekker 2005: 39). These new ways of thinking and working can be seen as revolutions or paradigm shifts that led to the development of the information society.

According to Van Audenhove (2003: online) the information society as a concept of the post industrial society has become part of the public and political life of many countries and since the 1990s the concept has been widely used by academics, citizens and government. As the information society develops, it has become increasingly important to get a clear understanding of what is meant by the concept *information society*.

Article

Concept: information society

The United Nations Educational, Scientific and Cultural Organization (UNESCO 2003: online) explains the concept: information society as “a society that makes extensive use of information networks and information technology, produces large quantities of

Table 1: The development of the information society

Society	Explanation
The agricultural society	This society began about 10 000 years ago when a seed was planted and nurtured. The agricultural society was important because people moved from nomadic wandering and hunting and settled into villages. This society can be symbolised by the cow.
The industrial society	This society was an expression of machine muscle. This society began in the 1700s after the American Civil War, and is sometimes referred to as the Industrial Revolution. People started leaving the farms to work in city factories. The symbol of this society is the assembly line.
The information society	This society is based not in the muscle but in the mind. This society is driven by knowledge and information technology. In the information society, wealth is measured not by money but by the amount of information that an individual knows or possesses. In this society, livelihoods are increasingly made by the use of information. This society is symbolised by the computer.

Source: Adapted from Finley (2002): online; Minnaar and Bekker (2005: 39); and Webster (2004:1)

information and communication goods and services and has diversified content industry". Masuda (2004:15) is of the opinion that the information society is a new type of society; the basis of this society is the production of information that will be the driving force in the society. Duderstadt (2002:4) also states that the transformation and movement into a knowledge driven society is powered by the use of modern technology, computers, telecommunications and new networks like the internet. These technologies have changed the way citizens work, study and communicate. In the information society, technology enables citizens to send and receive information quickly to and from distant, even remote areas. (Duderstadt 2002: 4.) Zurawski (2002: online) also agrees that the information age is changing every aspect of human life. In the information society the foremost commodity will be the exchange of information. Targowski (2002: online) stated in 1991 that the electronic global village is a set of information societies, each society is linked to various cities, countries, economies, the global marketplace, global culture, global travel systems, international trade and the international production systems of multinational corporations in order to produce longer lasting and more knowledge intensive products and services. The global information society generates a new global culture where information plays the biggest role, and where information is freely available at any time or place. (ISOC 2008: online; The Atlantic 2002: online.) The Information Society Commission (2008: online) states that the term *information society* is used to describe a society and an economy that make the best possible use of new information and communication technology. In the information society, people will receive the full benefit of new technology in all aspects of their work, homes and their lives.

It can therefore be deduced that the information society is a society that relies heavily on the use and development of technology in every sphere of human life. Apart from understanding the concept of the information society, it is also important to look at the characteristics that make up the information society.

Characteristics of the information society

The characteristics of the information society include the following aspects (ALIA 2002: online; George Soros 2008: online; and Minnaar & Bekker 2005:40–42):

- Distance which poses no obstacle to development, social intercourse, learning, adequate health care and business success. Therefore full participation in societal activities is possible from anywhere in the world through the use of technology.
- Knowledge which is increasingly available to everyone at any time and any place; knowledge is packaged in a manner to meet individual, social, literacy and cultural needs. In the global information society, knowledge can easily be obtained and used by anyone.
- Learning and working which take place where it is most comfortable or productive.
- Knowledge-based service industries which form a significant proportion of the GDP (gross domestic product) and there is an awareness in government that knowledge technology can foster business competitiveness and economic and employment growth.

- Public sector activities which complement the information society by setting the example in electronic service delivery; this will include the delivery and rapid access to government information by means of the World Wide Web.
- Lifelong learning which is essential to individuals in the information society; individuals will need the capacity to absorb and interpret new and changing information and technology.
- Individuals having open and timely access to information and knowledge; this contributes to the free flow of information and ideas, within a society.

From the above it can be seen that in the information society, information and access to information are considered by various users of information technology to be of great importance. The information society also has implications for South Africa, as the next section will illustrate.

Influence of the information society on South Africa

In South Africa the government has realised the importance of the growing information society. The South African government's commitment to improving information dissemination across the population was illustrated in 1995 when Mr. Thabo Mbeki (then Deputy President of the RSA) stated at the G7 Information Society meeting in Brussels:

"we must strive to ensure that each individual whatsoever his or her station in life plays a meaningful role in decision making and in governance. One of the ways this can be done is to ensure that citizens have access to information" (Mbeki: 1995).

The South African government published a *Green Paper on E-Commerce* in November 2000. This was done to make people aware of the influence that information technology has and could have on South Africa. According to the *Green Paper*: "... the increasing pace of technological innovation such as the rapid integration of the Internet and other telecommunication based activities into nearly every sphere of life has given rise to new ways of communicating, learning and conducting business."

"The Internet has facilitated the establishment of a borderless environment for communications and the electronic delivery of certain services. Convergence of technology is the major driving factor that contributes to the exponential growth of electronic commerce. Convergence goes beyond the use of technology to develop new products and services and is seen as a vehicle to improve the quality of life of society in South Africa and other developing countries" (Green Paper on E-Commerce 2000:9.)

Along with the *Green Paper on E-Commerce* the Department of Public Service and Administration under the leadership of Minister Geraldine Fraser-Moleketi was mandated

to promote the use of information technology to improve public service delivery in South Africa. One of the projects undertaken by the Department of Public Service and Administration is the State Information Technology Agency (SITA) that was established in 1999. SITA focuses on the effective and efficient provision of ICT products and services across the three spheres of government, namely national, provincial and local government. SITA is committed to providing ICT as a strategic resource for government. (SITA: 2007.)

In 2007 the Deputy President of South Africa, Phumzile Mlambo-Ngcuka (2007: online), stated that ICT is crucial for the future economic and social development of South Africa. She also stated that technology should be used to make a better life for all the citizens of the country. For South Africa to participate fully in the information society, information and communication technology literacy and skills at all levels of society and government are becoming increasingly important.

THE NEED FOR ICT SKILLED PUBLIC SERVANTS IN SOUTH AFRICA

As indicated above, the South African government is aware of the importance of technology and the impact that technology could have on education, work performance and the provision of public services. Technology not only has an influence on pupils and students but also on the public service in general. The purpose of the public service is to serve the public. One of the important prerequisites of the *Constitution of the Republic of South Africa, 1996* is the maintenance of a public service that is efficient, effective and career oriented. This requires human resources, and it therefore goes without saying that one of the major tasks in the public service lies in the field of human resource management. The responsibility for the training of 1,2 million public servants extends to each government department, each province and each public servant. In the Budget vote speech, 2002, Geraldine Fraser-Moleketi, the Minister of Public Service and Administration, stated that the reality in the public service with regard to information and communication technology (ICT) literacy is very sad. The Minister stated that government spends an estimated R3bn per annum on ICT goods and services, but that only 20% of public servants are computer users. According to the Minister, ICT can play a substantive role in government. ICT can for example, be used in the fight against poverty and to improve service delivery. According to the Minister the public service is in need of new skills and education to develop its ability to use ICT to its full potential (Minister Fraser-Moleketi, Budget vote speech: 2002).

More recently, in 2004, the need for more ICT skilled public officials was illustrated by a statement by Minister Geraldine Fraser-Moleketi that the government would be recruiting new skilled personnel and that the recruitment would take place primarily from African countries, India and Iran where South Africa has bilateral agreements. During 14 to 17 November 2005 the Minister of Public Service and Administration lead a delegation to India with the specific purpose of reaching agreement between the two countries on assistance by the Indian public service by means of the transfer of Indian public servants, as well as training interventions and mentorship programmes for South African public

servants. This will, according to the Minister Geraldine Fraser-Moleketi assist the South African public service to bridge the skills gap within the public service to provide better service delivery (GCIS speeches 2005: online).

The need for ICT skilled public servants becomes more relevant if one considers at the e-government initiatives of the South African government. Examples of these initiatives to provide information and services to citizens by making use of technology include the following:

South Africa Government Online Web-site

South Africa Government Online is a single electronic gateway that facilitates access to all information about and services provided by the government. The overall vision of the Gateway, as it is known, is to provide access to government services, any time, any place, within a clearly defined and executed e-government strategy. Access to services is the most important aspect of the Gateway. The Gateway is just one example of how technology is being used to provide services to the citizens of South Africa. It also goes without saying that ICT skilled public servants are needed to provide information and service through the Gateway to the public (DPSA 2008: online).

E-filing – tax

Another example of how technology has changed the work of government is the South African Revenue Services (SARS) e-filing of tax returns; this is a co-ordinated effort between SARS and private business. E-filing was launched in 2003 and has grown into a preferred method of completing tax returns for individual taxpayers and businesses. An increasing number of individuals and businesses are using this system every year. Currently an estimated 3,8 million tax returns are submitted via e-filing each year. The e-filing system offers various benefits to users, including almost instantaneous communication with SARS. The e-filing system also has the advantage of being available to users 24 hours a day and 365 days a year. (SARS e-filing, 2007).

Department of Trade and Industry – black economic empowerment database

The Department of Trade and Industry (DTI), in partnership with a number of non profit industry organisations, has used technology to develop a database of black economic empowered (BEE) companies. The first phase ended in March 2003, with a database of 250 companies. The second phase has recently been completed, adding an additional 600 companies to the list and making it one of the most up to date lists of its kind in South Africa. The database is a valuable tool to provide BEE companies with a powerful marketing platform to showcase their companies and initiatives to both local and international businesses, organisations and interested persons (DTI:2007).

2010 FIFA world cup website

The South African government has launched a website, sa2010.gov.za, to provide information on government's preparations for the 2010 FIFA World Cup to the world. This website provides foreigners with quick and easy information about the country and the continent in the context of the first soccer World Cup to be held on the African continent. The website is complementary to the website of FIFA and the local organising committee. An important part of the website is the provision of up to date news on preparations that are being made for the World Cup. Other information on the website include the provision of comprehensive information on South Africa, government programmes, information about the World Cup venues, projects and activities including those related to economic opportunities in the country. (GCIS: 2007; sa2010.gov.za.)

These are only some examples of how technologies have changed the way that government in South Africa communicates, interacts and provides services to citizens. Recent research done by Laschinger and Goldstuck (2006:1) indicate that the number of computer and technology users in South Africa has grown since 1994 and has passed the five million mark. With the increased growth, use and availability of technology in South Africa, the need for the education of government officials to use these new technologies is getting more urgent. Government will also in future be under increasing pressure to provide citizens with even more relevant and necessary public services online.

NEED FOR PUBLIC ADMINISTRATION EDUCATION

The need to provide some form of professional education and training in Public Administration was recognised as far back as the 18th century. Since then the education of public servants as well as Public Administration as an academic subject has gone through many phases of development (Adedeji & Baker 1974:119). Greenwood, Mohapatra and Robins (1996:4-5) agree, and state that Public Administration has undergone significant changes and development especially in the last two decades. A major reason for these changes is the inputs received from public administration practitioners about the needs of employers. Universities have to look at the needs of future employers of students studying Public Administration as well as the types of knowledge and skills that will be required by graduates to be able to function properly in their future work environment. Therefore Public Administration curricula and education have changed and need to change even more to meet the needs of employers and students.

The South African public service is the sole supplier or provider of particular products or services that citizens in the country might need. It therefore goes without saying that in order to be able to provide these services the South African public service is in need of educated, trained and professional public servants. This need can be seen in the establishment of the Public Service Academy by the South African government. The Minister of Public Service and Administration Geraldine Fraser-Moleketi (2007:online) stated that the goal of the Public Administration and Leadership Management Academy (PALAMA) is to foster, co-ordinate and monitor the quality of training that should be

delivered to public servants as well as the delivery of training in practical management skills. The Public Service Academy should also provide public servants with an ethos and teach them the values that are needed by a professional public service.

Advantages of public service training and education

According to Kroukamp (2003:7), training can assist the government to develop the professional capacity of public servants and to promote institutional change. Training also assists to equip public servants with the knowledge, skills and competencies to carry out their jobs effectively. According to the White Paper on Public Service Training and Education (1998:19), training and education in the public service can:

- help to equip public servants, whether workers or managers, with the necessary knowledge, skills and competences to carry out their jobs effectively in pursuit of the vision and mission for the public service;
- enable public servants to deal effectively and proactively with change and the challenges of a dynamic work and external environment;
- enable public servants to acquire a new development oriented professionalism;
- help to address issues of diversity, while also promoting a common organisational culture to support unity at the workplace and the ethos of a single public service;
- be a powerful instrument for anticipating, as well as facilitating the introduction of institutional changes within the public service and
- assist public servants in developing a better understanding of the needs of the communities which they are serving, as well as a capacity to respond to these needs.

Apart from the needs of the public service and the benefits that training and education can have in the public service, there is also a need for current and future Public Administration students to learn more about computers and the use of technology in the information age.

Public Administration education and technology

If technology is included and used in Public Administration education, students can gain the skills that are required by the public service in the information society. Klay (1982:7) states that the computer holds great promise to convey technical knowledge and skills to the administrator of the future. Snellen and van de Donk (1998: 5) write in their book *Public Administration in an information age* that the acquisition, storage, handling and communication of technology are directly related to all aspects of public administration.

Kramer *et al.*, (1986:595) state that in an information society it is becoming increasingly important for both current and future public managers to learn more about computers and information technology. Knowledge and skills about the use of computers is an important asset for Public Administration graduates to have. Kramer *et al.*, also says that computing needs to be integrated into the Public Administration curriculum and taught to students, since many students do not have computer knowledge or skills. Therefore Public Administration education in the growing information society should

include computer literacy. Computer literacy can be seen as a form of literacy like for example reading, writing and mathematics. Computer literacy means the ability to use a computer and to understand how a computer works. Computer literacy also includes having an appreciation of how a computer can relate to the work situation and the ability to create and complete work with a computer. Bustamante (2008: online) agrees and states that the use of technology in Public Administration education will prepare students with knowledge and skills to function properly in the public service. The public service initiatives referred to earlier (the use of e-government) also require public servants to be able to use technology to provide services to the public.

CONCLUSION

This article has shown that South Africa faces a huge human capital development challenge in building an ICT functioning public workforce in the information society. Therefore South Africa has to become increasingly proactive rather than reactive in the development of information and communication technology skills. South Africa already has a strong base of technology use to build on. However, to participate fully in the global information society, South Africa has to meet world standards. This will include an enhancement of existing educational and training capacity as well as preparing its population to participate in the information society and develop their ICT skills. The expansion of ICT skills through developing and producing a pool of ICT proficient individuals who could become ICT engineers, programmers and software developers could improve the lives of many ordinary South Africans. This could also contribute to improve capacity building, growth and an improved utilisation of technology in government.

If one accept that public servants study Public Administration to gain the knowledge that the government needs to function properly, universities should include the development of ICT skills in their Public Administration curricula giving students the opportunity to gain the ICT skills needed in the Information Society. The South African government seems to be aware of the need to develop and grow an information society in South Africa. To provide effective and efficient services to the public in the Information Society public servants need ICT Skills. It is therefore important to provide the future workforce of the country with these skills to perform their work properly.

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