INFORMATION POLICY IN NATIONAL DEVELOPMENT

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ABSTRACT

National and community development commonly rest on the management of information considering the importance of the role of information, the policies are required to regulate the infrastructures and sources of information. Historically, the basic concepts and practices of information policies have changed since 1950 suited with the social needs. In the recent years, the policies and practices have been integrated with the sophisticated Information and Technology (IT). This design aims to provide the information more informative easily consumed by the society. The use of IT based-information is expected to promote the growth of the modernization of the government and a good e-commerce environment.

INTRODUCTION

Information plays an important role in national and community development. Hence, information institutions, information infrastructure and information resources need to be systematically managed based on policies. Recognizing that importance, the framework of basic concepts and practices has been formulated and implemented since the 1950s and further developed in the 1970s to date. Issues highlighted at the outset of the development of the information base are related to reducing the burden of providing paperwork, ensuring the accuracy of information and information security (Dae, 1996) to provide scientific and technical information and the establishment of public libraries by the government (Bustamante, 2007; Soler, 2007). Information policy concepts and practices continue to receive new perspectives with the introduction and enhancement of information and communication technology integration as processors, tools and information delivery tools regardless of time and boundaries. Finally, the integration of information and communication technologies is central to the development of new information policy issues such as knowledge democracy to help shape a post-industrial productive society and organization called information society (Soler, 2007). This makes the field of information more informative and scientifically as well as dynamically growing.

Most countries, regardless of size, ideology and development stage, are aware of the importance of developing information policies. Information policy is built in response to opportunities and threats from digital technology and the effects of a competitive global economy (Moore, 2005). In addition, the development of information policy also aims to assist the modernization of the government, develop information-based economies, provide a good e-commerce environment, improve education effectiveness, avoid community excellence and empower the nation's cultural identity (UNESCO, t.th). Information policy also improves government information management (Room, 2006).

INFORMATION POLICY

The previous study outlines the basic definitions and concepts of information so there is no collective acceptable definition (Duff, 2004). Some studies claim that there is a policy that can be considered an information policy but is disputed and placed under an alternative title. In the meantime, there are researchers who tend to narrow the boundaries of information base narrowly and refer to them (self-referential) while others see the information field of information from a broad perspective. The diversity of disciplines and issues associated with information policy is a source of difficulty for researchers to define information policy as well as define the theoretical framework (Case, 2010). The diversity of information policy definitions also stems from the nature of the information itself that is dynamic, innovative, and has social and economic implications. In order to understand the information policy, Braman (2009) presents several approaches to defining information policy which relates to legislation, industry, stage in information production chains and the impact of information on society.

a) Micro Definition

Some basic information definitions are based on a specific scope with a particular theoretical perspective. For example, according to Jaeger (2007), the information policy is "a combination of legislation, rules, and guidelines governing the production, management, and use of information - which imposes the role of information in society". Other researchers define the legal and regulatory framework as presented by Chambers (2006) other than policies to promote and stimulate information exchange (Cornella, 1998). Information policy is specifically defined as a set of activities related to information and communication processing (Trauth, 1986). Case (2010) and Wilkinson &Nilsen (2010) define the information base by associating it with the

library. Case claims that information policy is a guide to infrastructure development (telecommunications network, computer and library building) and content (all related to copyright agreements to actual documentation).

b) Macro definition

Some scholars see policy information on a macro basis as these policies need to cover broad and diverse issues. Masters who tend to macro definitions consider the information policy to be referred to as an umbrella for a group of public policy that directly or indirectly integrates with the term information (Trauth, 1986; Burger, 1993) as well as being associated with other fields such as education, science and technology (Bustamante, 2007; Soler, 2007), culture, transparency of public administration and anti-corruption policies, information technology (Bustamante, 2007) and health (Soler, 2007). In addition, the information policy should not only serve as a provider of scientific and technical information solely but exclusively covering all types of information and knowledge (Soler, 2007).

Porat (1977) was one of the earliest researchers who made macro definitions. While linking information policies with information-based economies, Porat does not address non-informational sectors such as society and government. In fact, technologists need to take note of the impact of information technology on other sectors so that the basic perspective built is not narrow. The Encyclopedia of Library and Information Science (Hill, 1994) also presents a broad definition of information policy as a field of information science and public policy. Information is regarded as a commodity tied to economic theory in relation to property rights and considers information as a resource that is collected, protected, shared, manipulated and managed. Pajaro & Betancourt (2007a) argues that the information policy is a guideline and direction of planned action to ensure universal access to information to carry out all activities (social, economic and political), to help achieve national development goals. Whereas Maxwell (2003b) formulated the definition of information policy as social, political, legal, economic and technological decisions related to the role of information in society.

In accordance with the scope of national research and complex information environment, comprehensive information policy should cover all sectors that can be linked to information in a country. Information policy needs to be linked to the provision of diverse information for use by all sectors within the country. This book is in line with the broad definition of basic information as used by Maxwell (2003b) and Pajaro & Betancourt (2007a).

INFORMATION BASIC GOALS

Confusion about the goal of information policy development continues to occur (Duff, 2004). Although the approach used to study the national information policy is different from one country to another (Arnold, 2004; Pajaro& Betancourt, 2007) but the goal of establishing information policy is the same for most countries (Orna, 2008; Case, 2010) of similarity issues dealt with. For example almost every country tries to address issues related to universal access, personal rights, intellectual property protection and promotion of e-commerce activities (Moore, 2004b) in the formulation of their respective policy information policies. Hence, determining and setting goals for information policy development is important as it should be the basis for analyzing the current information policy of a country. In this book the author sees the development of an information policy with the following objectives:

a) Providing Information Services

National information policy is necessary to provide information services to the public. Countries need informational policies to ensure the implementation and operation of harmonious systems, services and resources (Priftis& Oppenheim, 1999). Effective national information policies are essential to information professionals and professionals involved with the access, management, distribution and identification of information usage by various user groups besides ensuring effective coordination and collaboration of information and service systems (Henrici, 2004).

b) Improve ICT Infrastructure and Applications

If information and communication technology (ICT) is important for improving lives, empowering socio-politics and economic development (Hosman& Howard, 2010), information policy is crucial for determining the support infrastructure and optimally optimizing the use of technology (Pajaro& Betancourt, 2007b). In addition to being a supervisor for effective and inexpensive telecommunications infrastructure (Moore, 2004b; Pajaro& Betancourt, 2007b) and innovative ICT applications (Soler, 2007). Information policy also serves to provide and implement national development information system development and operating action plans based on existing infrastructure, identifying and improving deficiencies, bridging gaps and productive interactions with international information systems and systems (Montviloff, 1990). Furthermore, information policy needs to be formulated for the integration of the media,

technology and information services as well as setting standards in line with new ethical challenges resulting from ICT (Soler, 2007).

c) Maintaining Culture, Social and Community

Communities are complex and depend on information as a necessity in all sectors. Hence, information policy needs to be built in a coordinated, coordinated and optimal way. The importance of information policy to culture, social and society is not only acknowledged by individual researchers such as Henrici (2004), Soler (2007) and Case (2010) but also focused on organizations globally, especially UNESCO. UNESCO recognizes the importance of information in the social system since 1971 through the organization of UNISIST (United Nations International Scientific Information System) program. Next in 1974 through NATIS (National Information System) program. Whereas in 1977 through the General Information Program (GIP) to replace UNISIST and NATIS explain the goal of information policy not only related to the preparation of scientific and technological information, but all kinds of information for human daily activities include information exchange for cultural retention of a nation (Soler, 2007).

In addition to information on social importance, governments need to have policies for protecting traditional information as it is also important for maintaining cultural heritage, traditional information also has the potential of economic value. Cultural information and knowledge including folklore, traditional costumes, language, music, dance, rituals, festivals, traditional medicine and healing, cuisine and all special cultural attributes. According to Busamante (2007), traditional knowledge is not related to past, but is a continuing process in society.

d) Assist Government Provide Information Access

Information is the essence of democracy and transparent administration. Information policy is often associated with the government because the rules are necessary to fulfill the people's rights such as freedom of rights, freedom of expression (Uhegbu, 2004; Henrici, 2004; Soler, 2007) and government information access rights (Pajaro& Betancourt, 2007a). The government through the national information policy should provide adequate and appropriate information to its eligible citizens at the right time and in the appropriate format (Uhegbu, 2004). The Government shall provide the necessary information at reasonable cost to all those contributing to the achievement of national development goals ie researchers, engineers and

technicians, development planners, makers and administrators, professionals, farmers and entrepreneurs. Provision of government information is not only for the benefit of the individual but at the same time reducing costs and value-added data to the private sector and other sectors (Saxby, 2011). Even the government's commitment to providing government information can make it transparent and ultimately overcome the inefficiency of the administration. Through information access, people can participate in the process of developing policy and government agenda and not only depend on lobbying, parliamentary process and consultation only.

In addition, the government should also remove all obstacles (social, cultural, cognitive, technological, economic) for access to information and digital data networks (Pajaro& Betancourt, 2007a; Soler, 2007). The government has to protect public domain information from improper access taking into account the difficulties in managing connected networks worldwide. Through information policy, the government needs to provide information access using multiple languages (Soler, 2007).

e) Helping Economic Achievement and Accelerate Development

The development of the national information policy should be based on the awareness of the role of information as a valuable resource to the country (Arnold, 2004). Awareness of the value of information as a country asset should be the core and reference to the formation of information policy which in turn impacts and develops national development (Soler, 2007; Arnold, 2007; Case, 2010). Information wealth can accelerate development if critical activities such as decision making, planning and management use accurate and accurate information (Henrici, 2004). The goal of information policy is to improve industry and commercial competition and productivity by using information as a source of organizational development (Pajaro& Betancourt, 2007a). Productivity is achieved through the use of information for research for innovation purposes; through automation in the management process; or through information-intensive management technique applications. The orientation of the use of information as above can be carried out by knowledgeable workers (Calanag, 2003; Moore, 2004b; Mokmin, 2005a).

In addition to the intensive use of information among employees, informational policies serve to promote the generation of knowledge of community members and public institutions (Pajaro& Betancourt, 2007a). When companies, organizations, and economies are all

competitive, the value added of employees and the average per capita income also increases. This situation leads to a shift from an industrial-based economic system to information-based and knowledge-based systems (Saxby, 2011).

Economic issues related to information policy are issues of intellectual property rights or proprietary information, copyright, information and creative industries, information-based economics, e-commerce, innovation, research and development (R & D) and technology transfer, patent law , consumer information, applications and software, piracy, information technology industry, informational value for economic competition, electronic money transfer, trade mark, industrial property rights, business secret law, information market and telecommunications industry.

f) Compliance with ICT Education Claims

Education is a necessity for the development and development of the nation and is the core of human capital development to increase productivity and creativity in the economy (Henrici, 2004; Soler, 2007). Thus, all levels of society need to have information and technology skills (Moore, 2004b). Efficiency in using and managing information on using technology needs to be enhanced to meet the needs of organizations that are now required to operate on an informed basis. Hence, education and training systems should be modified to meet the demands of lifelong learning and consistent processes for enriching and improving skills (Pajaro & Betancourt, 2007b).

The informational information policy also serves to ensure the support of information research related to theory, practice, education, training to produce, transfer and use information (Pajaro & Betancourt, 2007a). In addition, information policies are also essential to support the provision of collective learning networks for innovation and to generate local knowledge for production purposes (Soler, 2007). The diversity of this information policy implies that information policy is a cross-disciplined field. The diversity of information policy goals also indirectly reflects the need for an information model that can provide an understanding of the information field of information.

BASIC NATIONAL INFORMATION POLICY FORMATION

Before a policy is established, some aspects need to be studied beforehand, including issues related to practice. This problem arises because of its own separate nature and unintegrated implementation (Case, 2010; Koga, 2010).

Separate information policy

Most scholars found similar problems in the study of information policy since the earliest research in 1986 by Trauth until the latest in 2010 as did Case, Koga and Trosow respectively. The problem is: information policy is fragmented, separately to address different issues and not integrated. Separate approaches are used by countries such as Brazil (Chaparro, 2008), US (Trauth, 1986), England (Rowlands, 1996) and Japan (Koga, 2010). UNESCO (t.th) reports that almost all Asia Pacific countries have no comprehensive information policy. Malaysia was reported to have failed to achieve 7 MSC flagship applications due to the lack of integration among agencies involved in implementing the information policy (Salleh, 2008).

There are several factors that contribute to the development of information policy separately. Trauth (1986) claims that this is because of the policy-making that is specific to certain technologies. Researchers following Trauth such as Hill (1994), Browne (1997a) and Norman (1998) have argued that this was due to the 'specific' policy formulation methodology, in response to specific issues and was developed by different agencies or departments within the government. Chaparro (2008) thinks that the phenomenon is based on the information base that is focused solely on technology regardless of the content and context of the source and origin of the information.

Some of the negative effects arise as a result of a separate policy-based approach to information that is not capable of solving important issues relating to information and information technology. For example, the development of information policies based on certain information technologies is a source of trouble managing the legislation built when new technologies and the use of new technologies are being introduced and growing. In addition, a set of policies that are not coordinated at the national level result in wastage not only from the overlapping work but also resulting in a wider gap of information provision at the national level (Revkin, 2006). All of these things lead to the fact that information policies are fragmented, overlapping and conflicting with each other resulting in a policy of separation from the mainstream policy.

Integrated Information Policy Formation

Information policy may not necessarily be in the form of a single document in line with its complex nature (cross discipline) as well as less practical for implementation purposes because of its divergent goals. It is therefore important to develop and implement a coordinated set of policy information (Moore, 2005; Bustamante, 2007; Wilkinson &Nilsen, 2010) by examining clearly the relationships and relationships between each component and the information sector. However, it is not easy to coordinate because the co-ordinated policy model requires commitment and cooperation at the highest level among government agencies involved and all those who impact or derive from the national information policy (The Library Association, 2002; Duff, 2004; Saxby, 2011).

While it is difficult to develop a co-ordinated information policy, it is a critical need for comprehensive and complete policy formulation. For this purpose, governments need to establish bodies that act to coordinate implementation and play a role in managing, monitoring and evaluating the implementation of information policies (Pajaro& Betancourt, 2007a). Information managers in the private sector, public-makers, scholars and researchers and communities generally need to understand the nature and interaction of components or elements in information policy. According to Saxby (2011), the co-ordinating body of the coordinator should play a role in advising ministers on encouraging and creating opportunities in the information industry for the use of all information in the public sector; and advising the relevant parties on changes and opportunities in the information industry, in order to license the copyright and public sector information in line with current developments.

The policy coordination of information was initiated by researchers since the early 1970s. For example, US NCLIS (1996) explains in the 1970s issue of The Rockefeller Report on the need for a national information policy coordinated as many questions arise as a result of the development of computer technology and communications, the economic transition from production to information-based economy and the demands of the people claiming the right to acquire and control information. In fact, the call to holistic information policy approaches and analysis continues to be voiced up now (Wilkinson &Nilsen, 2010). Meanwhile, Trosow (2010) came up with a holistic latest baseline of basic information.

The call for the government to form an integrated national information policy has begun since Porat's (1977) study and was followed by Trauth (1986), Moore (1998c), Arnold (2004),

Xue (2005), Room (2006), Wilkinson &Nilsen (2010), Trosow (2010) and Koga (2010). However, until now there is no model that can be used to integrate policies at conceptual and practice stages. The basic model of existing information is unclear and unanimous. Porat (1977), Trauth (1986), Moore (1993), Dae (1996), Rowlands (1999), The Library Association (2002), Moore (2005), Lei (2007), Bustamante (2007)) and Trosow (2010) each lead a different model. Wilkinson &Nilsen (2010) proposes a comprehensive approach to the development of a basic model of information. In addition, information policy needs to be coordinated (Moore, 2005) because information policy covers all sectors including culture, economy, technology, social, legal, informational and scientific information industries.

CONCLUSIONS

Information policy-related issues have evolved from matters of reducing the burden of providing paperwork, ensuring the accuracy of information and information security, the need to provide scientific and technical information and the establishment of public libraries by the government on issues arising from the integration of information and communications technologies associated with processors, and information transmitter regardless of time and time and in connection with the democratic knowledge of informal society formation. Hence, whether or not the government needs to formulate a policy that oversees information in the country.

While it is difficult to develop a co-ordinated information policy, it is a critical need for comprehensive and complete policy formulation. For this purpose, the government needs to establish a body that coordinates the implementation and plays the role of managing, monitoring and evaluating the implementation of information policy. Information managers in the private sector, public-makers, scholars and researchers and communities generally need to understand the nature and interaction of components or elements in information policy. The established coordinating body should play a role in advising ministers on incentives and creating opportunities in the information industry for the use of all information in the public sector; and advising relevant parties on changes and opportunities in the information industry, in order to license the copyright and public sector information in line with current developments.

BIBLIOGRAPHY

Arnold, A.M. 2004. *Developing a national information policies - considerations for developing countries.*

The International Information & Library Review 36: 169-179.Braman, S. 2009. *Change of state: information, policy, and power*. London: The MIT Press.

Braman, S. 2011.*Defining information policy*. Journal of Information Policy, 1 (1): 1-5.

Burger, R.H. 1993. *Information Policy: A Framework for Evaluation and Policy Research*. Norwood: Ablex.

Bustamante, J. 2007. *Comparing the situation in Latin America and the Caribbean*.In Aballi, I.F. (pnyt.).

Building national information policies: *Experiences in Latin America*, hlm. 35-65. Kingston: UNESCO. http://infolac.ucol.mx/observatorio/ arte_libro.pdf [29 August 2007].

Calanag, M. L. 2003. *Public Libraries in the Information Society: What do Information Policies say?*

World Library and Information Congress: *69th IFLA General Conference and Council: 1-9 August 2003*, Berlin.

Case, D. O. 2010.*A Framework for Information Policies with Examples* from the United States. Library

Philosophy and Practice. http://digitalcommons.unl.edu/libphilprac/432. [21 December 2010].

Chaparro, S. 2008. *Digitization of the academic library in Brazil: a proposed advocacy model for successful formulation of information legislation and policy in developing countries*.Thesis Ph.D The State University of New Jersey.

Cornella, A.1998.Information policies in Spain.*Government Information Quarterly 15 (2):197-220.*

Dae, Yun Chon. 1996. *Searching for a comprehensive U.S. national information policy for the 21st*

century. Thesis Ph.D. Arizona State University.

Duff, U.S. 2004. *The past, present, and future of information policy: toward a normative theory of the*

information society. Information, Communication & Society 7 (1): 69-87.

Henrici, I. 2004. *Approach to the formulation of a national information policy* for South Africa. South

    African Journal of Library & Information Science 70 (1): 30-38.

Hosman, L & Howard, P. N. 2010.*Information Policy and Technology Diffusion*: Lessons from Bosnia,

    Croatia, Macedonia, Montenegro, Serbia and Slovenia.*World Information Access Project Working Paper # 2010.1*. Seattle: University of Washington.

Jaeger, P.T. 2007.*Information policy, information access, and democratic participation: The national and*

    international implications of the Bush administration's information politics. Government Information Quarterly 24 (4): 840-859.

Room, N. 2006.*Factors hindering effective management of government information in Kenya. International Seminar on the Strategic management and Democratic Use of Government Information in Africa*. Addis Ababa, Ethiopia, March 27-30.

Koga, T. 2010. *Changing face of access to government information in Japan: Issues concerning policy, the electronic environment, and the role of libraries and archives. 5th*. International Shanghai (Hangzhou) International Library Forum Hangzhou Public Library: 24-27 August 2010, Hangzhou, China.

Lei, Zheng. 2007. *Cross-national information policy conflict regarding access to information: building a conceptual framework*. The Proceedings of the 8th Annual International Digital Government Research Conference, p. 201-211.

Maxwell, EG. 2004. *Mapping information policy frames: the politics of the digital millennium copyrightact*. Journal of the American Society for Information Science & Technology 55 (1): 3-12.

MokminB .. 2005. *Digital Divide and Impact on Lifelong Education Development*. National Seminar on ICT in Education.Organized by the Faculty of Information and Communication Technology, UniversitiIdris Teachers University. Kuala Lumpur, 17-19 November.

Moore, N. 2005.*Information policies in Asia a review of information and communication policies in the   Asian region*. Bangkok: UNESCO.

Orna, E. 2008.*Information policies: yesterday, today, tomorrow*. Journal of Information Science 34 (4): 547-565.

Porat, M.U. 1977. *The information economy: definition and measurement*. Washington: Office of Telecommunication.

Priftis, A. & Oppenheim, C. 1999.*Development of a national information policy in Greece.* Information Development 15 (1): 32-43.

Rowlands, I. 1996. *Understanding information policy: concepts, frameworks and research tools*. Journal of Information Science 22 (1): 13-25.

Salleh M. 2008. *Contribution to the oil and gas industry to the country*. Interview with Isu, RTM TV1, July 17: 9 pm.

Saxby, S. 2011. *Three years in the life of UK national information policy - the politics and process of policy development.*International Journal of Private Law. 4 (1/2): 1-31.

Soler, G. A. 2007.*Evolution and current status of national information policies in Latin America and the Caribbean.In Aballi, I.F. (pnyt.).Building national information policies: Experiences in Latin America, hlm. 12-18.* Kingston: UNESCO. http://infolac.ucol.mx/observatorio/arte_libro.pdf [29 August 2007].

Sveiby, K. E. 1994. *Towards a knowledge perspective on organization.*Thesis Ph.D. University of Stockholm.

Trauth, E.M. 1986. *An integrative approach to information policy research*. Telecom munication Policy 1: 41-50.

Uhegbu, A.N. 2004.*Constraints on the formulation and implementation of national information policy for Nigeria*. Journal of Information Science 31 (1): 41-47.

UNESCO.t.th. *National information policy - differing approaches. UNESCO Regional office for Communication & Information*. Bangkok: United Nations.

Wilkinson, M. A. &Nilsen, K. 2010. *Information Policy and the Canadian Library Association.*Feliciter. 56 (2): 64-67.