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Comparative Information Management in Australia and Vietnam: The Case of Gov 2.0

Chinh Nguyen[1], Helana Scheepers[2], Jason Sargent[2] and Rosemary Stockdale[2]
[1]Science and Technology Center, State Records and Archives Department of Vietnam, Hanoi, Vietnam
[2]Swinburne Business School, Swinburne University of Technology, Melbourne, VIC, Australia

Introduction

Information is an important national resource which provides the public with knowledge of government, society, and the economy (McDermott 2010). Information Governance (IG) refers to establishing an environment and opportunities, rules, and decision-making rights for the valuation, creation, collection, analysis, distribution, storage, use, and control of information; it answers the question *"what information do we need, how do we make use of it and who is responsible for it?"* (Kooper et al. 2011, p. 196). On the other hand, Information Management (IM) concerns the control over how information is created, acquired, organized, stored, distributed, and used as a means of promoting efficient and effective information access, processing, and use by people and organizations (Lin 2011, p. 284).

This entry compares IG and IM between Australia and Vietnam through the reflection of a theoretical unified IGIM framework proposed by Nguyen et al. (2014) in government information policies of these two countries. Australia is at a high level of development of electronic government (e-Gov), and Gov 2.0 is central to the delivery of government reforms and improvement of quality of public services (Gruen 2009). On the other hand, Vietnam is ranked low in e-Gov development (United Nations 2014) where services are delivered by face-to-face and web-based Internet applications.

Unified IGIM Framework in the Context of Gov 2.0

Electronic government (e-Gov) is the use of information technology in government contexts (Beynon-Davies 2013). Gov 2.0 refers to government using Web 2.0 technologies to create online communities, social networking, and user-generated content (Chun et al. 2010). Literature indicates that Gov 2.0 brings a number of benefits to both government and citizens such as emergence of citizen-created content (Veljković et al. 2012) and improvement of public sector transparency, policy making, and public services (Bonsón et al. 2012). However, it has caused a range of issues in IG and IM including difficulty in determination of authentic information (Jaeger et al. 2010), inadequately meeting information needs

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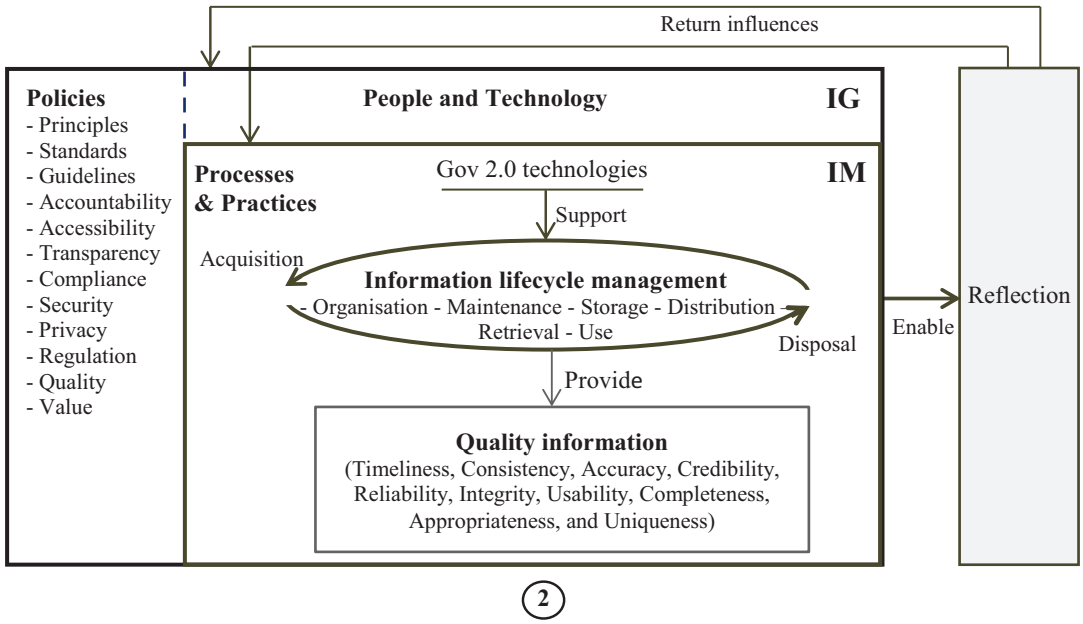
(Bertot et al. 2012), and high risk in security and privacy (Dwivedi et al. 2011). Based on a review of a significant number of academic references on IG and IM, Nguyen et al. (2014) developed a unified framework for IG and IM in the context of Gov 2.0 (See Fig. 1 below).

Figure 1 depicts the combination of IG and IM in information lifecycle control to enhance effective and efficient operation of organizations. Stage 1 emphasizes the IG level focusing on the prerequisite of development and comprehension of policies for information control. In Stage 2, IM is situated in IG and the information lifecycle is enacted. This stage focuses on the application of these regulations to develop and practice the information lifecycle management (ILM) processes in a Gov 2.0 context, the role of technologies in supporting the ILM occurs here. Accordingly, information lifecycle (from acquisition, creation, organization, maintenance, storage, distribution, retrieval, use, and disposal) is performed complying with the policies to ensure quality information. In Stage 3, reflective practice is used to consider areas for improvement, emerging issues, and lessons learned. This stage loops back to Stage 1 as a key feature of the iterative unified framework.

In order to assess this framework in the information policies of Australia and Vietnam, the relevant constructs of *people* and *technology* components need to be outlined. *People* and *technology* components are associated with both IG and IM. For IG, *people* refers to staff responsible for decision-making on information control mechanisms and IG and IM environment (Faria et al. 2013), which is supportive of the development of organizational *context*, *culture,* and ethical behavior of employees *(ethics)*. For IM, *people* refers to actors who play an important role in developing *context* and *culture* of IM and have appropriate *skills* for implementation of IM processes (McKeen and Smith 2007). Likewise, *technology* component at IG level refers to technological constructs supporting policymaking as well as ILM at the IM level.

To reflect the theoretical unified IGIM framework in Australia and Vietnam, a significant number of national information policies including laws, acts, rules, principles, guidelines, standards, and white papers by these two governments were



Comparative Information Management in Australia and Vietnam: The Case of Gov 2.0, Fig. 1 The theoretical unified IGIM framework in the context of Gov 2.0 (Adapted from Nguyen et al. 2014)

reviewed and analyzed to determine the regulations related to the IG and IM constructs. A construct is reflected if it is regulated and explained in any policies reviewed. The content and scope of regulations related to each construct indicates its appropriate context (physical, Gov 1.0, or Gov 2.0).

Comparative IG and IM in Australia and Vietnam

The extensive review of the literature and current national information policies and guidelines for IG and IM by Australian and Vietnamese governments has highlighted key similarities and differences between the reflection of the theoretical unified IGIM framework (see Table 1).

Table 1 illustrates each component and construct of IG and IM reflected in Australian and Vietnamese policies in comparison with those identified in the theoretical IGIM framework. The significant constructs, which are evident in the theoretical IGIM framework, are also evident in Australia's IG and IM, signifying that the key requirements of IG and IM in a Gov 2.0 context in Australia are addressed, and go towards reflecting the theoretical framework. Meanwhile, numerous constructs, which are covered by Vietnam's IG and IM, partially address IG and IM in a physical and/or Gov 1.0 context(s). However, several constructs (e.g., *culture, accountability,* and *compliance*) which refer to general requirements of IG and IM are applicable in both contexts (See Table 1). Furthermore, the imbalance of constructs which are evident in the Australia's IG and IM as compared to Vietnam's IG and IM also reflects different levels of the theoretical IGIM framework adoption in the different contexts. This becomes more obvious in the consideration of each component in both levels of IG and IM as discussed below.

Consideration of Policies Constructs

Regarding IG, most constructs of information policies in Australia have met requirements of electronic and digital records created by Gov 2.0. For example, Australia has also applied several international and national standards supporting electronic records and metadata management such as ISO 16175: 2011 and AS 5044–2010. Furthermore, the National Archives of Australia (NAA) has issued guidelines for the implementation of an EDRMS (NAA 2011) and requirements of records management in the cloud (NAA 2015c). On the contrary, most of the policy constructs reflected in Vietnam refer to physical records control (SRADV 2015) or are at the first step towards an increased use of electronic records in the operation of governmental agencies (Prime Minister 2012). Although electronic records management is covered by the Archives Act 2011, there is a distinct lack of standards and detailed guidelines for an EDRMS as well as the use of the cloud for records management.

The emphasis on *privacy* and *confidentiality* is also a difference between IG in Australian and Vietnamese governments. In the Australian context, all privacy principles were established based on the balance between personal information protection and freedom of information addressing both the Privacy Act 1988 and Freedom of Information Act 1982 (McMillan 2013; OAIC 2014). While the Privacy Act ensures citizens' rights in personal information protection by the government, the Freedom of Information Act enables the government to promulgate and open information to demonstrate and enhance its transparency and accountability (Mutula and Wamukoy 2009). On the other hand, Vietnamese information policies highlight *confidentiality* of information to comply with the National Confidentiality Act 2000, and little mention is made of open information or personal privacy before the validity of Information Security Law in July 2016. According to Baltzan et al. (2013), confidentiality refers to the assurance that information is available only to people who are authorized to access and it closely relates to privacy and security. The Australian Government has invested in developing software programs for protection of information from hackers and virus attacks, particularly for recordkeeping in the online environment (NAA 2004), whereas Vietnamese information policies have primarily focused on general principles and regulations for information *security* as

Comparative Information Management in Australia and Vietnam: The Case of Gov 2.0, Table 1 Comparison of IGIM frameworks from the literature, Australian, and Vietnamese policies.

Levels	Theoretical framework	Australia	Vietnam
1. IG	**1.1. People constructs**		
	Context/environment	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Culture	Yes (General context)	No
	Ethics	No	Yes (General context)
	1.2. Technology constructs		
	Gov 2.0	Yes (Gov 2.0 context)	No
	Mobility	Yes (Gov 2.0 context)	No
	Interactivity	Yes (Gov 2.0 context)	No
	1.3. Policies constructs		
	Accountability	Yes (General context)	Yes (Physical context)
	Accessibility	Yes (Gov 2.0 context)	Yes (Physical context)
	Transparency	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Compliance	Yes (General context)	Yes (General context)
	Security/Confidentiality (government level)	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Privacy (individual level)	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Principles	Yes (General context)	Yes (General context)
	Standards	Yes (Gov 2.0 context)	Yes (Physical context)
	Guidelines	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Regulations	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Quality	No	No
	Value	No	No
2. IM	**2.1. People constructs**		
	Context/environment	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Culture	Yes (General context)	No
	Skills	Yes (Gov 2.0 context)	Yes (Physical context)
	2.2. Technology constructs		
	Architecture	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Systems	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Tools/equipment	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	2.3. Processes & practices constructs		
	Creation	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Acquisition	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Organisation	Yes (Gov 2.0 context)	Yes (Physical context)
	Maintenance	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Storage	Yes (Gov 2.0 context)	Yes (Physical context)
	Distribution	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Retrieval	Yes (Gov 2.0 context)	Yes (Physical context)
	Use	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Disposal	Yes (Gov 2.0 context)	Yes (Physical context)
	2.4. Information constructs		
	Consistency	Yes (General context)	Yes (General context)
	Accuracy	Yes (General context)	Yes (General context)
	Credibility/True	Yes (General context)	Yes (General context)
	Reliability/Authenticity	Yes (General context)	Yes (General context)
	Integrity	Yes (General context)	Yes (General context)
	Usability	Yes (Gov 2.0 context)	Yes (Physical & Gov 1.0 context)
	Completeness	Yes (General context)	Yes (General context)

(*continued*)

Comparative Information Management in Australia and Vietnam: The Case of Gov 2.0, Table 1 (continued)

Levels	Theoretical framework	Australia	Vietnam
	Timeliness	No	No
	Appropriateness	No	No
	Uniqueness	No	No

well as the responsibility of organizations and individuals in the protection of national information. Regardless, both Australia and Vietnam exhibit a distinct lack of *quality* and *value* constructs for supporting IG policies (See Table 1, Section 1.2).

Consideration of Technology Constructs

Concerning the technology component, the majority of the Australia's technological constructs reflect IG in the context of Gov 2.0 in alignment with the overall literature-based theoretical IGIM framework, especially the appearance of *Gov 2.0 technologies, mobility,* and *interactivity* constructs (see Table 1, Section 1.2). These constructs are a foundation to develop guidelines for social media and cloud use in IM to address Gov 2.0 context (See Table 1, Section 2.2). Both IG and IM technological constructs of the Australian policies confirm the ability of this framework to adequately meet the technological requirements for IG and IM in a Gov 2.0 environment. On the other hand, in the Vietnamese context, the lack of *Gov 2.0, mobility,* and *interactivity* in IG (see Table 1, Section 1.2) is also reflected in IM with limited *infrastructure, systems*, and *tools* that only support operations of the IM processess in physical or/and Gov 1.0 context(s) (see Table 1, Section 2.2). These shortcomings have also led to inadequate standards and guidelines in current Vietnamese policies addressing IG and IM in the process of Gov 2.0 adoption. Furthermore, the lack of *mobility* construct in IG framework by State Records and Archives Department of Vietnam (SRADV) is because mobile technologies, such as smart phones and devices, have only been used in information exchange by citizens in Vietnam (Kemp 2015). Literature also indicates the use of mobile technologies not only helps governments communicate with its citizens anytime and anywhere (Hung et al. 2013), it is also helpful in enhancing the connectivity between the government and citizens (Silic and Back 2013). Therefore, it is suggested that this construct should be present in any IGIM framework in the context of Gov 2.0.

Consideration of People Constructs

The Australian policies place an emphasis on the IG *culture* construct as a strength of the organization in addressing cultural change when adopting new technologies. The investment in culture also aims to enhance staff's understanding of their obligations and compliance with policies and procedures of information and records management (NAA 2015a) (see Table 1, Section 1.1). This enables the Australian Government and NAA to develop *skills* and knowledge for employees in digital transition. In this context, employees are required to understand their agencies information needs and have professional skills to work collaboratively with information technology specialists to operate IM processes to adapt to Gov 2.0 context (NAA 2015b) (see Table 1, Section 2.1). Particularly, the requirements of skills and knowledge for all staff, ICT specialists, and information and records management specialist working at Australian government agencies in online environment have been regulated in details by the NAA (2014). On the other hand, in the context of Vietnam, the *ethics* construct is clearly articulated (see Table 1, Section 1.1). This is evident in a range of Vietnamese ethical standards such as political bravery, loyalty to the fatherland, dedication, diligent and thrift, honesty, and righteousness for public servants in information and records management areas (Ministry of Home Affairs 2014). Furthermore, literature has indicated that Web 2.0 and social media have changed the way people work in information industries, leading to changed workplace culture (Cook and Pachler 2012). This change requires professional

skills for employees to complete a variety of tasks using Web 2.0 and social media tools in IM. A lack of attention to the *culture* construct at the IG level in Vietnam has led to an absence of IM *culture* and a deficiency of *skill* training programs for staff to perform IM in the process of Gov 2.0 adoption (see Table 1, Section 2.1).

Consideration of IM Processes and Practices Constructs

Most constructs within processes and practices of IM can be found in both the policies of Australia and Vietnam, which is similar to those in the theoretical IGIM framework. However, the distinction here is the operational context of Gov 2.0 in Australia and physical and/or Gov 1.0 in Vietnam (See Table 1, Section 2.3). This can explain the different standards and guidelines in IG between Australia and Vietnam. In the Australian context, current standards and guidelines adequately address IG and IM in the context of Gov 2.0. This ensures the IM processes and practices also address Gov 2.0 requirements. Meanwhile, the standards and guidelines for IM processes and practices in Vietnam are appropriate for physical and/or Gov 1.0 context (s) requirements. In addition, a relationship between several IG constructs and correspondent IM constructs is identified during the process of reflection of the theoretical IGIM framework in the Australian and Vietnamese policies. For example, several studies have indicated that timeliness, appropriateness, and uniqueness partly contribute to quality of information (Lajara and Maçada 2013) and value of information (Moody and Walsh 1999). Hence, the shortage of policies for quality and value constructs in both the NAA and SRDAV's IG might lead to issues in regards to *timeliness, appropriateness,* and *uniqueness* constructs in IM (See Table 1, Sections 1.3 and 2.4).

Consideration of Information Quality Constructs

In the context of IM, three constructs (*timeliness, appropriateness*, and *uniqueness)*, critical for ensuring quality of information, are reflected in the theoretical framework but are not evident in usage by the Australian and Vietnamese governments (See 2.4, Table 1). This possibly explains the lack of the quality and value constructs in both Australian and Vietnamese policies (See 1.3, Table 1).

Conclusion

This entry is one of a few studies distinguishing level and scope of IG and IM reflected in the literature as well as in information policies. The theoretical unified IGIM framework conceptualizes IG and IM as well as identifies relationships between these areas. The identification of the high-level of strategic IG and low-levels of operational IM is fundamental for determining the responsibility of each area.

Another main contribution of this entry for practitioners has been the examination of the theoretical unified IGIM framework in Australian and Vietnamese information policies. This reflects the framework in the different contexts of information policies. This is an important reference for Australian and Vietnamese governments in developing and amending information policies and guidelines in the process of Gov 2.0 adoption.

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