The Korean government's electronic record management reform: The promise and perils of digital democratization

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ARTICLE INFO

ABSTRACT

Recently, the Korean government instituted a reform in its archives with the goal of increasing transparency in government and meeting the challenges of the new digital environment in records management. President Roh's administration focused on a "process and system" reform through a shift from paper-based records management to electronic records management. The *E-jiwon* task management system of the Office of the President, invented by President Roh himself, served as the archetype for the reform. This study explores and critiques the administration's choice of a "process and system" reform over institutional reform, examines the legal framework used to enact the reform and its shortcomings, and analyzes the benefits and deficiencies of the *E-jiwon* as a tool for democracy in the archives. It concludes that while the new digital environment can assist in promoting government transparency, technological change by itself is inadequate; ultimately, institutional change is necessary for true reform.

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1. Introduction

Digital technology has presented significant opportunities for archives and records management. In addition to the obvious opportunities offered by this technology, such as global access and paperwork reduction, it opens new possibilities for E-democracy in public archives. Despite its positive potential as a tool for innovation and openness, however, digital technology's effect in a given society is limited without the civic energy for promoting a democratic agenda. This energy is a prerequisite in order to establish and manage a democratic system in public archives, just as it is in other areas of a society.

Throughout Korea's recent history, academic and civil rights groups have taken the lead in the development of public records management. Civic engagement from outside the sphere of government has contributed significantly to reforming the national archival system. Due to the citizens' passion for and active participation in archival development, which has historically been intertwined with the broader development of Korean political democracy, the archives in modern Korea have evolved from an era characterized by the absence of public records under authoritarian regimes (1948–1993) to an era of legislation for the basic principles for managing public records under the first two civilian administrations (1993–2003) (Lee, 2006). Nevertheless, chronic malpractice in recording, managing, and disclosing information still existed even under the recent administration of Moo-Hyun Roh (2003–2008). Driven by the state

slogan of "participatory government", however, Roh's administration set forth a plan for the democratic reform of the archival system.

The Roh administration set forth three goals — thorough recording, systemization of classified records, and expansion of information disclosure — and argued that accomplishing these goals would lead to an increase in democracy and "participatory government". The present study looks at President Roh's method of reform and discusses why his administration's "Roadmap" for reform took the shape that it did. It then examines in detail both the legal and the technical means through which the reform was accomplished, and asks to what extent these means were adequate for accomplishing the stated goals of the reform. The deficiencies of the measures adopted, both legal and technical, in terms of promoting transparency and democratic practices in government record keeping, are discussed, and specific recommendations for improving the Korean electronic records management system are offered.

2. Research method

The purpose of this research is to describe and analyze the contextual factors that conditioned the Korean government's electronic records management reform implemented by the Roh administration between 2003 and 2008. The primary focus of this study was on evaluating the results of the electronic records management reform as they related to the administration's stated democratic agenda for government archives. The present study used both quantitative and qualitative data analysis to examine the research question, an examination that revealed a complex structure of both benefits and deficiencies in the reform. A quantitative data analysis was used to analyze detailed technical data, such as the software manual used in

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the operation of the *E-jiwon*, the electronic Records Management System (RMS) of the Office of the President (OP) of Korea. As a "regulating code" (Lessig, 1999) of the electronic records management system, the technical requirements had to be analyzed in order to understand fully the political implications of the digital medium for the Korean government's records management system.

A qualitative data analysis was used to analyze provisions of Korean legislation and to explore the research theme in a comprehensive manner, by means of archival data. Through analyzing the Enforcement Ordinance (EO) of the Public Records Management Act (PRMA) and the new Presidential Records Act (PRA) since their passage in 2007, the present study shows how the laws function as a "literacy warrant" (University of Pittsburgh, 1996) guiding the Korean government's electronic records management reform; the study also offers policy suggestions about how to realize the Korean government's reform in electronic records management.

2.1. Documentation and archival records

This study describes longitudinally the history of electronic records management in Korea and surveys the state of Korean public records management from 1948 to the Roh administration's recent attempt at promoting democratic reform in the government archives. Documents are significant sources for data collection in performing such a case study (Yin, 2003, p. 87). The present study collected documentary information — such as agendas, announcements, and other written reports of events — closely related to the Special Committee's activities dealing with the records management reform under the Roh administration.

Government reports and white papers — such as the *Final Report on Research and Development of Government Agencies' Records Management Reform* (National Archives of Korea, 2005c), the *Report on the Basic Technology Service for Electronic Records' Permanent Preservation* (National Archives of Korea, 2005b), and *Korea's E-Government White Paper: Completion of the E-Government Framework* (Special Committee for E-Government, 2003) — were used to understand the overall vision and effect of the electronic records management reform and the Korean government's push to transform the paper-based records management system into an electronic records management system.

Secondary documents from news agencies — such as newspaper articles and other pieces appearing in the mass media, as well as online administrative resource pages — were used to fill in other aspects of the electronic records management reform in the society at that time. This study also used archival records, such as copies of documents and records from the Library of the National Assembly and of internal government reports on policies from the archives of public institutions.

2.2. Software manuals, reports, and technical supports by the OP's record manager

The present study analyzed the technical manual of the OP's electronic records management system — the *Manual for the OP's E-jiwon* (Office of the President of the Republic of Korea, 2006) — as the regulating technical code for the government's electronic records management reform. The Roh administration's approach to records management reform through the "process and system" made the analysis of technical requirements — represented most fully in the software manual — even more necessary. This study focused on the OP's *E-jiwon* because, as the first and symbolic pioneer in implementing records management innovation in Korea, it is to serve as the archetype for expanding the reform of electronic records management throughout the national government agencies (the *On-nara*, or "pan-national" system), a project which began in 2006 but will not be completed until 2013. In addition,

the editions of the *Manual for Practical Business of the Records Management Reform* issued in 2005, 2006, and 2007 (National Archives of Korea, 2005a, 2006, 2007) play a major role in determining the direction of the records management reform and the agenda pursued by each government agency in actualizing the reform.

In order to analyze the updating of technical requirements of the *E-jiwon* system, this study also examined the *Report on the Plan for Developing the Audit Trail for the Improvement of the Office of the President's E-jiwon* (Office of the President of the Republic of Korea, 2007a) and the *Report on the Plan for Developing the Metadata for the Improvement of the Office of the President's E-jiwon* (Office of the President of the Republic of Korea, 2007b).

The software manuals, such as the *Manual for the OP's E-jiwon* (Office of the President of the Republic of Korea, 2006), and the reports were obtained from the Office of the President's record manager through E-mail in the spring of 2007, while other manuals were drawn largely from online sources. Relevant technical information from the OP's record manager, such as how to interpret the data in the forms of digital codes, was received several times through E-mail during the period from February to May, 2007, including follow-up E-mails dealing with various questions that arose.

The history of electronic records management in KoreaAs a key role in expanding national competitiveness, Korea started an "E-Government" program in the late 1970s. Intended to be an effective citizen-centered system to meet the needs of citizens and private businesses and to provide higher quality and faster government services, the E-Government initiative aimed at making the government more transparent and accountable through an E-Government network. The National Basic Information System (NBIS) project of the late 1980s preserved vital government records — resident registration, real estate, and vehicle records — in a database and created the foundation for the government's electronic records management system. Through the Five National Computer Network project of the late 1980s and the Korea Information Infrastructure (KII) project of the mid-1990s, the Korean government interconnected the public agencies through a fiber-optic electronic network, and eventually increased IT productivity and efficiency in the private sector through this network (Special Committee for E-Government, 2003).

These E-Government projects resulted in the transformation of the government agencies' records management system (RMS) — and naturally so, "given that records management is neither a generic activity nor an end in itself, which can be evaluated apart from the government's business transactions" (Hedstrom & Wallace, 1999, p. 331). To reflect the transformation in the government agencies' daily transactions resulting from expanded use of information technology, the Korean government implemented the Electronic Document System (EDS) in 1996 as a new internet-based records management application. The EDS focused mainly on transfer of approved documents with verification through an E-authentication system across the government agencies.

The Electronic Promotion Act on Administration Processes for the Establishment of an E-Government (or E-Government Act) of 2001 established the legal framework for an E-authentication system. Authentication — "the process of verifying that a thing is what it purports to be" (Society of American Archivists, 2005) — has long been regarded as the main challenge in implementing E-Government, and to confront this challenge, the E-Government Act established requirements for digital authenticity. Most significantly, the E-Government Act stipulates the "administrative digital signature" as the means of authentication for public records and mandates record transfer with an administrative digital signature. To electronically approve and transmit a document through the EDS to various government agencies, the sender creates an "integrated file" for