

Implementing E-Government for More Efficient Service Provision: The Electronic Residence Registration System in the Republic of Korea

Introduction

Countries around the world use information technologies to interact with their citizens, provide information, enable service delivery, and perform other government functions—a phenomenon referred to as e-government. The Republic of Korea is widely regarded as a leader in the realm of e-government (Centre for Public Impact, 2016; UNDESA, 2018; Ewha Women’s University, 2016). One area in which e-government systems have been deployed in the Korean government is in the digitization of that country’s national Resident Registration System (RRS). This electronic RRS (E-RRS) is integrated with systems that link information held by government agencies, enabling them to share administrative information more effectively to administer a wide range of government services.

This system drew on the residence registration number (RRN), a unique national identification issued to each Korean citizen, which are in turn linked to resident registration cards (RRCs). The use of RRCs is tied to a wide variety of key activities, among others “elections, tax collection and revenue services, school enrollment and assignment, military conscription and affairs, welfare services, and housing” (Yoon 2015).

Prior to the establishment of the E-RRS, Koreans needed to obtain a variety of paper certificates to access public services. For example, to access social welfare services, data from multiple ministries, insurance systems, and income information needed to be gathered and attached by the applicant. This was less convenient for citizens who needed to gather this information, imposed a significant burden of paperwork on officials, and had costs for government (see for example, Kim Yeong-Mi, et al. 2007, in Yoon 2017). The E-RRS made it possible for Korean citizens to access an extensive range of public services using just their RRN/RRC, often online through a system of government websites, and for government systems to automatically share and check information rather than requiring the submission of additional forms. These services included obtaining a birth certificate, health insurance, paying taxes, accessing pensions, military service registration, and welfare and social programs. This delivery note examines how the government of Korea was able to create the E-RRS and harness it to more efficiently provide services for Korean citizens.

Development Challenge

The development challenge in this case lay in harnessing the existing resident registration system to make the delivery of public services more efficient for government and more convenient for citizens. Systems of national identification



Korea Program FOR
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PROJECT DATA

SECTOR:

Governance; ICT

DEVELOPMENT CHALLENGE:

E-government for more effective service provision

DELIVERY CHALLENGES:

Opposition/Lack of Consensus;
Intra-Governmental
Coordination; Lack of
Regulation/Legislation

COUNTRY:

Republic of Korea

REGION:

East Asia

PROJECT DURATION:

1990–2007

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and civil or resident registration are often used in government service delivery; while these systems enable states to keep track of vital information about their citizens and residents, people rely on those documents to exercise rights and access crucial services: voting, access to formal justice and financial systems, education and social services, ownership of property, and more (Crespan Hidalgo 2018; Yoon 2015; Ewha Women's University 2016). The E-RRS aimed to use civil registration systems and e-government to enable more convenient and efficient service provision.

Intervention

The E-RRS as applied for better citizen services worked by bringing together multiple components: digitized RRS data, and information-sharing among government agencies.

Korea's system of resident registration did not originate with the intention of providing services, but was initially heavily-focused on administrative and territorial control (Yoon 2015). But with shifts in Korean politics, and in tandem with trends of computerization and digitization, this system laid the groundwork for the eventual establishment of the E-RRS.

By 1968, the Korean government had established a system of assigning a unique 12-digit residence registration number (RRN; changed in 1975 to 13 digits) to all citizens as a form of national identification. Meanwhile, successive presidential administrations took an interest in harnessing new digital technologies for the work of government (see Yoon (2017) and Moon (2019)). Between 1988 and 1991, the government undertook the RRS digitization project. This entailed the digitalization of 70 million registration documents and the connection of RRS management systems across the nation. RRS information entered at village and municipal levels was digitized and these offices were connected to the central RRS management system.

By 1994 Koreans were able to update their residence information using the system from anywhere in the country, which enabled (still-manual) information updates for service provision. By 2001 ministries and local governments could access RRS information across a shared online system. This was expected to dramatically streamline provision of administrative services, as the E-RRS was envisioned as linking across ministry databases.

Addressing Delivery Challenges: Opposition, Coordination, and Lack of Legal Framework

Realizing the goals of an integrated E-RRS for more efficient service provision, however, did not come automatically. The creation of the system was not accompanied by overhauls in administrative procedures, and it did not initially achieve widespread use within government.

Opposition to Adopting the System; Lack of Coordination among Government Agencies

Between 1992 and the early 2000s, little information was shared among ministries. Each ministry used the E-RRS to collect information, but did not share the information they collected with other ministries and agencies. Ministries interpreted quite narrowly the kind of data that they could share with other parts of government. Officials experienced a heavier burden of work than before, with overlapping responsibilities related to the "old" procedures and to the E-RRS. And Korean citizens still needed to solicit paper certificates, with over 440 million such certificates being issued as late as 2004.

Lack of Regulation/Legislation

At the root of this opposition to adoption of the E-RRS and to information-sharing across government was the lack of a regulatory or legislative framework to enable, incentivize, and compel use of the system as such. One survey carried out by the Ministry of Government and Home Affairs (MOGAHA) to determine reasons for limited sharing of information found that 28 percent of respondents mentioned noncooperation between departments, 19 percent mentioned legal or institutional constraints, and 11 percent mentioned a lack of procedures and guidelines. To remedy these interconnected delivery challenges, the government needed new legal and administrative frameworks.

To accomplish this, the Public Information Sharing Act was enacted in 2004. This established the Public Information Sharing Center (PISC), which was launched in 2005. This body was mandated to oversee integration of databases and information-sharing across government, and to set standards for the kinds of information to be shared and included in that system. The PISC's work created linked and standardized databases across government offices and established procedures for sharing and accessing government information.

This was further complemented by a series of presidential decrees and adjustments to bureaucratic procedures. In particular, a presidential decree was issued in October 2005, establishing a committee to oversee and implement the “public information sharing policy.” The Public Information Sharing Promotion Committee (PISPC) was set up under the auspices of the Prime Minister's Office. The PISPC met 17 times between November 2005 and November 2007 to discuss and consider policies. Bodies under the PISPC—the Public Information Sharing Promotion Working Group (PISPWG) and Advisory Group (PISPAG)—carried out much of the implementation work of the committee. Additional decrees mandated that ministries and local governments share information with one another.

To give these measures heft, information-sharing was integrated into performance evaluations for individual officials and for government offices. The PISPC and PISPWG were in charge of overseeing compliance with these measures. Members of the PISPWG visited both local- and national-level government offices to personally assess information-sharing performance. They shared these results with MOGAHA so that they could be factored into performance evaluations. At the same time, information-sharing performance in *all* central and local government offices was evaluated by another unit of the Prime Minister's office.

Moreover, local and national government officials received training to enable them to better understand and carry out information-sharing functions. For example, PISPWG delivered nationwide trainings to around 4,000 central government officials in November of 2006. In parallel, local and provincial government officials received training on new procedures for receiving, handling, and cross-checking information, and on information security.

Conclusions: Iterative Processes and Strong Support for a Robust Coordinating Mechanism

As a result of these measures, information-sharing increased, duplications in work declined, and government processes were able to function more efficiently. The number of duplicate paper certificates declined considerably; for example, by 2007 Kim et al. were reporting that 17 million copies were being saved annually—additional documentation that Korean citizens did not have to solicit, print, and submit to access needed services.¹ Korean citizens were increasingly able to use online systems to access needed services with only their RRN, including from smartphones and mobile devices (Yoon 2015).

This experience holds potential lessons for practitioners seeking to harness digital technologies to improve service delivery. Such e-government initiatives are increasingly common around the world. But the link between setting up e-government infrastructure and better citizen services is by no means automatic. In Korea, it was necessary to create additional conditions to ensure use of the system.

Creating Enabling Legal Frameworks and Ensuring Political Support

The legal framework governing ministerial and local government processes needed to be overhauled. This included the issuance of multiple new laws and decrees to mandate that government agencies use the E-RRS. New organizations were also created to ensure implementation. This included the PISC to oversee technical standards and coordinate databases, and bodies such as the PISPC, PISPWG, and PISAG to facilitate the implementation of the public information sharing policy. These organizations' position within the Prime Minister's office also made clear high-level support for the policy and “made salient the political linkage” (Yoon 2017).

1 The figure reached 82 million documents saved for documentation related to the four insurance policies that Korean citizens are required to hold: National Health Insurance, pensions, workers compensation, and unemployment insurance.

“Purposeful Efforts to Overcome Resistance” and Facilitate Use of the E-RRS

Moreover, there is no guarantee that officials will use a new system just because it has been brought into being. In the Korean case, the PISC was needed to play a broker role for information sharing across ministries. Local, provincial, and national officials needed to be trained on new processes and technologies, and in some cases mentor-mentee programs were set up to ensure that all officials were learning good practices for information sharing. Time, iteration, and what Yoon (2017) calls “purposeful efforts to overcome resistance” was needed to ensure that the E-RRS worked as intended.

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