

Future Directions and the Current State of Korea's *e* -Government

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1. Back ground to the promotion of Korea's *e*-Government

As we enter the twenty-first century, it has been widely recognized that in the competitive world we live in, the production of information and the ability to use it practically are core resources. To this end, information technology (IT) has been utilized as an important tool to assist national development. Furthermore, the Korean government has plans to increase the efficiency of its administration and the level of service provided to its citizens through the practical application of information transmission technology to both governance and government policy. The realization of an *e*-government has overcome the time-related and location constraints that plagued existing government services and is considered a new paradigm for national administration in the twenty-first century, as well as emerging as a central issue in securing competitive power in the international arena. Reflecting these demands, considerable time and effort has been put into the establishment of *e*-governments in the West. The efforts to reinvent as an *e*-government, coming through the functional level of computerization of administrative services by IT and together with the reform in management methods, has promoted a positive change in understanding. Korea's *e*-government is developing into a concept of *e*-democracy that guarantees to its citizens a service which is a transparent, efficient two-way flow of information, focusing on the information infrastructure, personnel resources and internal government organization. Having been through the transitional stages of computerization for each of its ministry's operations and the construction of the national backbone network, Korea's *e*-government has laid the foundations for a system of communication which makes effective use of information. Thus, the construction of an ultra high-speed data transmission network supports the communal use of information, utilizing the government organization and its human resources as well as its information infrastructure. This has led to a reform of the government's services which will eventually enable citizens to participate in an *e*-democracy. Through these developments, the principles and the identification of issues in the construction of *e*-government as a summary means to improve the nation's competitiveness and achieve the government's new role, became necessary in a very short space of time.

2. The vision of Korea's *e*-government.

The establishment of Korea's *e*-government, is guided by the following visions:

- a government that satisfies the people in respect to the provision of government services.
- a government that provides the most suitable environment through a "knowledge-based" government.
- a government that enhances its democratization, improves transparency and productivity.

2.1 The promotion of *e*-government

Each government department should be able to improve efficiency: by simplifying the administration tasks and management methods; speeding up government functions; by actively encouraging electronic documentation in intra-institution dealings; through the implementation of electronic settlements across all areas; and by implementing paperless administration procedures. Through these changes should be able to supply the kind of service demanded by the community conveniently and easily, without any time or location constraints, and at the lowest possible cost.

By using the information for administration communally, rather than have one institution collect and process data that is already held by another, it is possible to realize a government that is highly productive accomplishing all its tasks with minimal personnel.

2.2 The activation of electronic transactions

The active use of electronic commerce increases the transparency of transactions and procurement and the electronic processing of the various types of company tax returns, authorizations and licenses, is both convenient for business and enhances competitiveness.

2.3 The unification of central and regional government

Using an ultra high-speed communication network, valuable data to both regional and central governing bodies can be stored in a central database and used in both administrative environments, greatly enhancing administrative productivity.

2.4 The expansion of informationization in welfare, health and education

Open education is now possible, with those who demanded education reform at its center. There has also been an improvement in the quality of life of the people through the informationization of health and welfare.

2.5 Assisting the foundations of *e*-democracy

By encouraging citizens to participate actively in policymaking by using IT, and reflect on the results, can seek to realize *e*-democracy.

3. The current state of Korea's *e*-government

As Korea entered the 1980s, through the development of communication and information industries and the favorable turn in the domestic communications marketplace, the government clarified its policy for early realization of an informationized society. In the first (1978-1982) and the second (1983-1986) periods, through the computerization of government administration, the government promoted the construction of an administration system based on a single, nationwide information network. This was put into effect with the focus on the computerization of important government institutions including economic development, national defense and security and public order as well as improving administrative efficiency and the level of service to the people.

To assist in the construction of the national backbone network, the "**Bill for the diffusion and expansion of the (national) computer network and the promotion of**

its use,” a bill that actively promoted informationization, was introduced in 1986. In the first (1987–1991) and second (1992–1996) stages, it promoted the national backbone network project, providing the opportunity for the whole Korean society to become aware of informationization and its basic fundamental elements.

Following this, in an effort to enter the ranks of the top ten IT countries, the “ultra high-speed communications network foundation advancement plan” was instituted and the government’s informationization project became top priority. In the first stage (1995–1997) a high speed, broad-bandwidth backbone was put in place linking 80 of the Korea’s provinces. In the second stage (1992–1996), a further 37 provinces were added completing the project. The third stage (2001–2005) is the “Cyber Korea 21,” a plan which involves the “consolidated application of *e-government*” and proposes the “informationization vision” of the creation of a creative knowledge-based nation. In January 2001, President Kim Dae-Jung’s “Special Committee on *e-Government*” was set-up with the specialists involved in the promotion of the *e-government* project and the vice-ministers of the relevant ministries as members. In May 2001, the *e-Government* Realization Strategy Reporting Committee—under the slogan “providing the highest level of service to the people, providing the most suitable environment for business and a highly productive and transparent government”—proposed 11 important elements to be addressed by 2002.

4. The strategy for future *e-government* in Korea

4.1 The construction of a Korean-style *e-government*

The slogan and goal of a Korean-style *e-government* is the realization of an “online, open government that you get through to the first time.” There are three important elements in the strategy to realize this goal.

1. To set up a government service which is open 24 hours and operational as long as electronic services are available. A one-stop service location where, just by applying—without any need for documentation—you will be served regardless of location, status or time.
2. To build a first class government that is more productive than the private sector, where documentation is produced and managed electronically and data-flow is smooth and efficient.
3. The people and the government, through effective information resource management that realizes both data-openness and data protection over the network system, build a transparent government.

4.2 Promotion strategy

The Ministry of Government Administration and Home Affairs (MOGAHA), proposed six policy initiatives, and within each of these three directions for development, for the actual realization of *e-government*—making 18 elements in all raised.

4.2.1 The establishment of customer-centered administration services

Casting off custom and drawing instead from recent developments in e-commerce an EDI system that fulfills the requirements of citizens-first administration should have the following elements: that is a one-stop service center; automatic processing at reception;

offers non-stop 24 hours a day service; and that information in regard to government is actively disclosed to the people via the internet.

4.2.2 The efficient redesign of government services

If applications are made through a single window, and by processing administrative services linked to all administrative institutions sharing the same information system, a transparent and efficient government services system processed just at reception will be possible. By the year 2002, other departments will have finished redesigning related government services. This is intended to simplify the flow of policy intention by reducing the processing time through the computerization of reporting and settlement processes, by providing a general environment for the provision of government and improving government functions

4.2.3 The communal use of government data

In order to promote the notion of information-sharing in government, legislation or regulation must stipulate the manner in which data is to be provided across institutions and between the central and autonomous regional governments. In addition, a safety management strategy that prevents misuse of government data, such as the leaking of personal information, must be implemented. For this purpose, there are plans to establish a center for all ministries and local authorities to enable them to share information.

4.2.4 Preparing the foundations of IT

An important step is the establishment of a “government intranet” across the ultra-high speed communications network. Decisions also need to be made to ensure the mutual applicability between networks and data systems prepared for the sharing of government data. A further integral part is the provision of education programs informing the community about informationization.

4.2.5 Improve the productivity of individual public service employees

A number of strategies have been proposed to raise the productivity levels including: the introduction of telecommuting for public service employees using either residential area-based communication centers or working from home; the introduction of electronic identity cards for public service employees; and the expansion of informationization education to enable government services to be conducted in an original manner utilizing data application abilities and the special nature of services.

4.2.6 Reform of laws and system

This would be possible by introducing a system with one person in charge of informationization—the chief information officer (CIO)—to take responsibility for the introduction and application of administrative technologies that reform the law and system in order to eradicate systematic irrationalities or administrative customs that interfere with *e*-government, set actual articles for evaluation, conduct preemptive evaluations and examinations afterwards, report the findings to the pertinent people enabling the general community to be up-to-date on the progress made.

5. 2002: Target date of *e*-government

By 2002, the following key projects need to be fully implemented in order to realize a perfect *e*-government. This will maximize benefits for both private and business transactions with the primary goal being to prepare a basic framework.

1) Government to Citizen (G2C): internet processing of service to citizens through the single window of *e*-government.

- the establishment of an electronic reception system which will enable a one-stop procedure for all services
- the development of a one-stop procedure when changing address.
- the construction of a combined internet system that makes tax-related submissions and an advisory service possible.
- the construction of an education management data system that is linked to each level of schooling
- the development and diffusion of an electronic prescription transmission service.
- the establishment of a general system for employment related information.
- the unification of the four large national social insurance data systems.

2) Government to business (G2B): increase of transparency through the appropriate use of an electronic commerce platform between government and business.

- the construction of a system for guides to investment, establishing companies, contracts and overseas investment.
- the establishment of a general patent information service for technological development and supporting industry.
- the extension of the existing electronic tendering system for the Government Procurement Office and expansion of IT in the public sector in general.
- the establishment of a one-stop procedure for tax returns, public declarations and payments using electronic invoicing and payments.
- the construction of an electronic supply system dealing with tenders in defense, construction and public works and contracts.

3) Within government (G2G): increase in productivity and transparency in government business.

- the introduction of a system where government institutions are duty-bound to settle electronically.
- fixed electronic documentation in inter-departmental and intra-departmental dealings.
- the establishment of a pan-governmental knowledge management system and government knowledge-based digital products.
- the development and implementation of a general information system for city, district and ward administrations.
- mutual connection of the city, district and ward general information system and the central system.

4) Construction of the foundation for electronic government: securing reliability and safety of the flow and management of data.

- final targets of the ultra-high speed communication network.
 1. home-based participants to be connected at above 10Mbps.
 2. individual mobile telephone users to be connected at above 2Mbps.
- the construction of a combined government computerized environments which are unified on the basis of ministries, agencies and regions.
- the establishment of a inter-connecting system between government departments, public agencies and the general public and a move towards standardization.
- the establishment of a publicly disclosed key based (PKI) private information system for electronic commerce, electronic reception and the transmission of electronic documentation.
- implementation of a certification system for IT qualification and inspection system (to examine) IT capabilities.

6. Words of advice in regard to *e*-government

For a successful *e*-government, the government and its citizens need to act as one body. Thus, the voluntary participation of the general public is necessary in addition to government projects. How close Korea is to implementing an *e*-government can be divided into the following elements.

6.1 Information infrastructure

The information infrastructure is in the application of information transmission technology. Increasing the speed and bandwidth of the data transmission network and introducing interactive elements make the provision of multimedia services across the network possible. The next generation network will make it possible to activate administration services and electronic commerce. It will also enable the formation of electronic cooperatives and the provision of educational assistance meaning *e*-democracy will become a real possibility. Furthermore, through the standardization of the basic technology (linked to this), application technology and data protection technology after having ensured their compatibility, a policy that ensures the safety of each kind of information system will become necessary.

6.2 Infrastructure of the organization

The information society needs to be organized appropriately. Accordingly, to adapt to changes in the *e*-government age structural changes will be required from time to time and, in order to accomplish this, an organization similar to the Korean government's *e*-Government Special Committee must be put into action. Such an organization must be able to fulfill the role of controller of change, to diagnose the current situation and steer a course accurately and adjust the pace of change when required. Organizations already operating in cyber space, such as the "cyber consultation room" or a "Virtual Agency" could also be considered. Such an organization would be responsible for the systematic appraisal of each of the laws related to informationization, preparation of the systems and laws promoted for the *e*-government in the real world.

6.3 Human infrastructure

In order to improve the attitudes of public sector employees who are at the front line of basic government administration services, the introduction of certain standards of service which are compulsory will be necessary. In order to increase the level of knowledge that Koreans have, the management and expansion of the IT educational system will be required. The government should take the lead in directing both public and private programs to raise the current level of IT skills and should endeavor to make the general public aware of the overall benefits of electronic government, including the advantages of taking part in IT policymaking, so that their participation is voluntary.

7. Conclusion

The electronic government of the twenty-first century is a new paradigm. A concept of this kind—that of *e-government*—begins ultimately by emphasizing service to the people. In other words, in the process of policy determination based on IT, it is possible to bring about the positive participation of the people in order to improve efficiency and transparency. Through the base of electronic government, which embodies electronic democracy, people can put forward their views on government policy without fear of reprisals, using IT as a communication base, the government can focus on the public's opinions on each of its policies by using online discussion forums, which has the added benefit of increasing opportunities for contact between the government and its citizens. This will provide an opportunity for the direct participation by the people and to improve their understanding of *e-government*.

Reference

For further information on *e-governments* in general see the National Computerization Agency website on <<http://www.nca.or.kr>>.