Road toward E-Government - Footprints

E-Government Best Practice

Informatization of Government Services

Computerization of Passport Issuance

Computerization of Registry Services

One-stop Service System for Export & Import Cargo (PORT-MIS)

School LAN and Internet Access - ICT Use in the Education

KIPOnet

Computerization of Customs Administration

Road toward E-Government - Footprints
To develop an information system that allows online issuance of passports and to establish a telecom network for relevant government agencies to share necessary information.

**Background**
- As overseas travel was deregulated in January 1989, the number of tourists showed an annual increase of 20% from 1.5 million in 1990. Accordingly, the number of applications for new passports increased explosively from 0.8 million in 1990 to 1.3 million in 1994. (As of 2001, about 2.4 million passports were issued per year.)
- The issuance of passports used to involve two processes - police clearance and application. This caused delays in processing and was inconvenient for citizens.

**Project Description**
- The Passport Management System was developed in 1994 to allow an online check on the status of passport application, renewal, and police clearance from relevant agencies.
- By interconnecting all relevant DBs from different agencies and to unify the passport issuance process, the required information can now be retrieved online. Applicants do not have to physically be at different agencies.
- Daejon City was selected for the pilot project and started the online issuance of passport service in March 1994. By December of 1995, the project has been implemented nationwide.
- Telecommunication lines and shared databases were established interconnecting information on passport issuance through the Ministry of Foreign Affairs and Trade (MOFAT), residents registration of the Ministry of Government Administration and Home Affairs (MOGAHA) and police clearance of Korean National Police Agency (KNPA).
  - Information on residents registration, military service and police clearance is now retrievable from the DB's of residents registration, the Office of Military Manpower Administration and the Korean National Police Agency.

**Achievements**
- The number of required documents was reduced to one from the previous four, thus delivering fast, convenient services to citizens.
- The wait time after submitting the application for a passport issuance was cut down to about a minimum of 20 minutes from two to three working days in the past.
To construct a paperless patent administration system to handle all IP-related administrative procedures including filing, examination, registration and payment of fees, and to improve the quality of service and operational efficiency.

Background

- With the establishment of the WTO in 1995, the international economy entered into the era of globalization. Accordingly, applications for patents and disputes on patent infringements are increasing to a great extent. Therefore, more investments are made in technology development.
- In the 1990’s, the number of intellectual property applications received at KIPO including patents, new utility designs, design rights and trademarks exceeded 100,000 per annum. It was 180,000 in 1999.
- KIPO realized that it could not handle the workload by the traditional method as response time lagged, efficiency dropped and publication costs increased.

Project Description

- In 1992, Korea Intellectual Property Office mapped out the Patent Administration Informatization Plan and began to implement the KIPOnet system in order to streamline patent-related administration procedures.
- A total of 38 billion won invested during the 3-year period from 1995 to 1998. The implementation of the KIPOnet system comprised of 22 subsystems including the application administration system, examination administration system, registration administration system and electronic signature & transmission system. These were completed and its service went live in January, 1999.
- In the year 2000, the online fee-payment system was established and online services such as newsletter publication service and remote video consulting service were added to provide a wider range of online services.

Project Status

- Applicants are now able to file their IP applications such as patents, new utility designs, design rights and trademarks online through KIPOnet in their living rooms or workplaces.
- KIPOnet set up an automated electric distribution and management system of documents ranging from online applications, internal documents and publications of official reports.

Achievements

- Anyone can tap into and search through more than 20 million entries of both foreign and local IP information via the Internet free of charge.
- The international electronic exchange of patent related documents such as priority certificates was made possible through the networks interconnecting the World Top 3 Intellectual Property Offices.
- The utilization rate of KIPOnet shows continuous growth due to thorough preparation in terms of laws and regulations, user-friendly applications, and a stable system from the outset.
- 240,000 applications (91.4%) out of 250,000 were filed online in 2001. After patent-related information services were provided on the Internet in 1999 and became free of charge in 2000, the number of people using patent information increased by an average of 430% annually to 3.3 million users.
- All in-house IP administration procedure was computerized and a total of 1,650,000 applications out of 1,660,000 are being electronically approved (99.1% as of 2001) and the operational efficiency has greatly improved - the entire process of examination has been reduced by more than 6 months (from 28.1 months to 21.3 months).
- KIPOnet cut costs by 29.8 billion won per annum, including a saving of 20.3 billion won in publication costs by publishing official gazettes on the Internet.
To establish information systems that streamline customs administration and establish effective smuggling interdiction, to reduce logistics costs in the import and export industry and improve the quality of services offered.

**Background**

- Importers/exporters needed to appear in customs houses and financial institutions to clear their goods, pay customs duty and apply for tax refunds.
- Clearance, surveillance and control over airports and ports were not systematic and were efficient enough to cater to ‘travellers’ needs but caused inconvenience.

**Project Description**

- In 1998, the entire clearance procedure including customs declaration for import or export, port entry, unloading, transportation, storage and refunding activities were computerized.
- In 1999, the EDI clearance system was interconnected to the networks of 64 import/export related agencies and 17 major banks to establish paperless clearance procedures that electronically processed cargo inspection and customs duty payments.
- To provide effective surveillance of illegal trading that takes advantage of simplified clearance procedures, accumulated information on clearance, refund and foreign exchange were automatically analyzed by computers since the year 2000.

**Project Status**

- A total of 1,631 entities including 11,894 trading companies and 808 customs offices utilize the EDI clearance system to perform import/export clearance tasks.
- A network was established to interconnect 81 institutions including Korea Food and Drug Administration and quarantine offices for customs, Korea Apparel Industry Association for various kinds of tax and quota, and local banks.

**Achievements**

- By establishing the world’s first end-to-end import/export declaration, acceptance and release system, transparency of customs administration has enhanced and people can clear their goods at their offices with a simple click of the mouse.
- In the case of complicated import clearances, what used to require two days in the past requires only 2.5 hours now, 4 hours faster than the UNCTAD recommendation. It takes only eight days from port entry to goods delivery at tax withholding areas, a huge drop from the previous 23 days; and the export clearance takes only two minutes compared to the previous 4 hours.
- Annual savings of 2.5 trillion won was achieved by establishing the paperless clearance system and by interconnecting relevant agencies via networks. Thus necessitating personal visits to customs offices and reducing the duration of clearance processes.
To provide a nationwide online registry services such as online disclosure of register books and automated registry services to protect property rights of citizens.

**Background**
- As the society experiences rapid changes, improved quality registration services are needed as people are more akin to protect their property rights.
- Since 1990, the increase in the number of real estate transactions has also led to the increase of the number of applications for registration and issuance of certified copies of registers, therefore, slowing down the whole process.

**Project Description**
- The Supreme Court established the Computerization of Real Estate Registry Services Master plan in 1993 and mapped out the annual action plans to computerize registry services to enhance registry-related administration and the quality of services offered.
- A total of 416 billion won has been invested from 1994 to 2002. All paper-based register books have been digitalized (approximately 45 million parcels and 160 million pages), eliminating the manual processing of registry applications.
- As of September 2002, 213 registry offices nationwide have completed computerization and about 45 million parcels of paper-based register books have been converted to electronic forms.

**Achievements**
- Citizens can easily access to registries and public services from the nationwide information system.
- In particular, registered books can now be viewed on the Internet, marking the commencement of the online administration era.

**Project Status**
- The Supreme Court launched Internet inquiry services on corporate registries in February 2001. The same service on real estate registry was commenced in January 2002.
- Currently, the registry service of 213 registry offices nationwide is available through the Internet.

**Diagram**
- Illustration of the Computerized Registry Services System, showing the process from application for registration to issuance and inspection of certified copies of registers.

**URL**
- http://registry.scourt.go.kr
To provide a one-stop service in port logistics, information systems were introduced to the entire port logistics process. This enables systematic information sharing among related agencies ranging from the arrival to departure of vessels and cargos.

**Background**

- Due to separate, consecutive administration processes of customs, immigration and quarantine (CIQ) agencies, as well as ports suffered from chronic congestion logistics costs also soared drastically.
- The entire workflow of import/export logistics needed to be re-engineered to reduce the logistics costs incurred in the import/export process and to mitigate the investment burden in social overhead capital (SOC).

**Project Description**

- The computerization of port management systems was initiated in 1986 and by 1992, Busan port started to process administration of shipping-in and shipping-out of vessels online.
- From 1993 to 1999, a total of 8.1 billion won was invested in implementing the information sharing system for CIQ agencies including the electronic data interchange (EDI) system.
- All required forms for vessels' entry/departure have been standardized and the clearance process can be completed with a one-stop declaration.
- About 10,000 companies including shipping companies and agencies are using the EDI system for import and export processes including the arrival and departure of vessels (5 million request per annum).
- The PORT-MIS website (http://portmis.momaf.go.kr) integrates diverse information which has been collected during the system operation on the arrival/departure of vessels, cargos and ships. This information is provided to domestic and global users in various languages (English, Japanese, Chinese, Russian, etc.) on the Internet.

**Project Status**

- As revenue collection and port administration documents are now processed electronically, the number of required documents has been reduced to 16 from 75 and the processing time decreased to 2 minutes from 2 hours.
- One-time declaration is enough to complete the import and export process as related agencies now share necessary information through computerized networks, thus reducing the processing time to 2 minutes from the previous 3 hours.
- With the PORT-MIS system in place, the estimated cost saving is about 490 billion won per annum.
To construct school LANs and provide Internet access to 10,000 schools nationwide to promote ICT use in elementary and secondary schools

Project Status
- LAN construction was completed in 346 schools by 1997 (3.3% of total schools), 4,902 schools by 1999 (42.8%), and 10,064 schools by 2000. They are connected to the National Information Superhighway (Pubnet) or Korea Education Network (KREN).

Achievements
- Distribution of PCs to computer labs in elementary and secondary schools have created an environment in which students can develop self-directed, spontaneous learning abilities.
- PCs distributed to 340,000 teachers across the nation have enabled them to utilize PCs and Internet in their classes and have stimulated them to actively participate in the informatization of schools.
- The physical foundation has been laid out to promote ICT use in the education, and to train high-quality human resources, and to develop and distribute educational contents.

LAN construction in elementary, middle and high schools across the nation was completed in the year 2000 - 2 years earlier than the target 2002 and other preparatory actions including provision of Internet access was also completed earlier than scheduled.

In July of 2000, the Ministry of Education and Human Resources Development, the Ministry of Information and Communication and Korea Telecom have provided financial support for Internet connection.

After 2002, the second phase of the Comprehensive Plan for ICT Use in Elementary and Secondary Schools will be set up to improve the ICT infrastructure by increasing the network capacity to at least 2 Mbps. It will also reduce the student-PC ratio and replace and maintain multimedia equipments.

Background
- The construction of an information infrastructure to promote ICT literacy in elementary and secondary schools is essential to foster creative human resources in the knowledge-based information society of the 21st century.
- The Comprehensive Plan for ICT Use in Elementary and Secondary Schools (1997-2002) paved the way for more innovative and interesting teaching-learning methods utilizing multimedia educational information on the Internet to cultivate creative human resources.

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