1 trillion USD

50 million people
Rapidly Increasing Workload
Limited Personnel & Resources?

Computerization
Development History

Paper | EDI | e-Customs | u-Customs | Smart Customs

1974 | Simple Statistic

1990 | Simple On-line

1992 | EDI Clearance System
- Export Clearance (1994)
- Import Clearance (1996)
- Cargo Management (1997)
- Customs Refund (1997)

1992 | Information Usage System

2002 | Internet Clearance System
- Investigation Intelligence (1999)
- Passenger Intelligence (2000)
- Post Audit (2001)
- CDW (2002)

2005 | Internet Clearance Portal (2004~2005)
- Single Window (2005~2011)

2011 | Smart Clearance

Simple Statistic

EDI Clearance System

Information Usage System

Internet Clearance System

Smart Clearance
System Composition

77 Info Systems inclusive of UNI-PASS to support customs administration

**e-Clearance Portal**

Internet declaration Portal

- User Authentication
- Im/Ex Clearance Service
  - Export declaration
  - Import declaration
  - drawback declaration
  - e-complaint
- Clearance Information Service
  - Pre-notice
  - Owner’s Result
  - statistics

Business Operator System

- Import Clearance
- Collection Duty
- Duty Drawback
- Export Clearance
- Monitoring Airport/Harbor
- Audit Information
- Im/Ex Cargo
- Traveler Information
- Investigation Information

**BSC**

- Strategic Target Mgmt
- Performance Mgmt
- Problem Identification

**i-HRM**

- Capacity Evaluation Mgmt
- Capacity Development
- Learning Program
- Appointment Mgmt
- Promotion Mgmt

**CKM**

- Knowledge Mgmt
- COP
- Wiki, Blog

**CRM**

- Customer Mgmt
- Campaign
- Counseling Mgmt
- VOC Mgmt

**EA**

- IT Architecture
- IT Asset Mgmt
- IT Service Mgmt

**CDW**

- Data Integration
- Data Mining
- Data Analysis
What are their interests?
Need for a New Smart Customs Service

- Cost Reduction
- Increased Need for Information Security
- Optimization of IT Resources
- Diversification of Work Environment
Cloud Service

Public Cloud (Single Window)  Private Cloud (SBC)
Project Background

Launch of 『Single Window』 project for One-Stop processing of information

Effort to Simplify Clearance Process

- Increase of Logistics Cost due to Increased Trade Volume
- Unnecessary Repetition of Work (Import Declaration and Requirements Application)
- Manual Work Processing of Confirmation Agencies

Public Cloud (Single Window)
Work Process

Public Cloud (Single Window)

User

- ① Application form
- ② Application
- ① Import declaration
- ① Import Declaration
- ④ Requirement Confirmation search / print
- ③ Requirement Confirmation
- ④ Requirement Confirmation

Single Window

Requirement Confirmation Agency

Staff

Agent, Customs, Owner

- Customs

KOREA CUSTOMS SERVICE
SaaS (Software as a Service)

- ASP System: provides requirements confirmation SaaS for requirements confirmation agencies.
Application Effects

Public Cloud (Single Window)

- **Standardization**
  - Improvement of Scalability and Flexibility through Platform Unification and Integration of Infrastructure

- **Economic Effects**
  - Reduction of System Development, Management and Operation Cost
    - $13\text{ billion USD} / 1 \text{ year}$
Cloud Service

Public Cloud (Single Window)

Private Cloud (SBC)
Enterprises are using several security solutions for information protection, but circuitous leakage routes targeting PCs are being detected continuously.

Implication

PC is highly vulnerable to information leakage
SBC (Server Based Computing)

- Creation/management of important Data done by PC
- Requires regular update management of illegal S/W

- Data creation/management by server, PC Download is done according to policy
- Work environment standardization and central management possible
Software and Data required for the Server is Provided
the User PC is only used as input/output device.

SBC (Server Based Computing)

Fundamental Prevention of Info Leakage

Ease of Post-Tracking

Protection of Internal Sources from Viruses

Support of Diverse Work Environment
Possibility of internal/external information leakage minimized due to fundamental blocking of data storage in PC

Connection environment for data equipment (Smart Phone, PDA, etc) is provided for easy use by remote officer, traveling officer

Reduction of Equipment Operation Cost through Unification of Data Processing Equipment → 2.6 billion USD/year
Future Development Direction

Cloud Service

Public Cloud

Private Cloud

Single Window

AEO

SBC

Mobile Office

Mobile Office
Thank You!

Q & A