Korea’s experience in cross-border paperless trade facilitation

Sung Heun HA (Rama)
I. National Paperless Trade Platform of Korea
Korea, Used-to-be One of the Poorest Countries

1950’s

ODA Beneficiary Country
## Rapid Growth in Trade Volume

### Trade Facilitation for Sustainable Economic Growth in Korea

< Unit : U.S. Dollars >

<table>
<thead>
<tr>
<th>Year</th>
<th>Import (Billion)</th>
<th>Export (Billion)</th>
<th>Total (Trillion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>100 Million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1974</td>
<td>10 Billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>100 Billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td>500 Billion</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>1.09 Trillion</td>
<td>572 Billion</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>0.90 Trillion</td>
<td>495 Billion</td>
<td></td>
</tr>
</tbody>
</table>

- Source: Korea International Trade Association

GDP World No. 11 (2016) Source: IMF
1. Background in 1980s

**Excessive trade documents**

- More than 620 boxes per company

**Bottleneck in trade process**

- 19-28 days for customs clearance

**Rapid growth of trade volume**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value (Billion US$)</td>
<td>3</td>
<td>39</td>
<td>134</td>
<td>332</td>
<td>1,079</td>
</tr>
</tbody>
</table>

**Manage all trade tasks electronically**
1. National Paperless Trade Platform of Korea

- KTNET, Founded by KITA in June 1, 1991 to strengthen industrial competitiveness of Trade community through Process Renovation

Korea World Trace Center Seoul

Korea Paperless Trade Center Pangyo

Exclusive investment by KITA (Initial Capital USD78Million)
KTNET is a Paperless Trade Platform Operator and a Customs Network Service Provider designated by Korean Government

KTNET services covers the whole cycle of trade process with 620 different kinds of e-documents with over 300 Million transactions per year

1. National Paperless Trade Platform of Korea

- Global e-SCM
- PAA
- Global e-C/O Service
- Advance Manifest Service

- S/R, e-B/L
- Master/House Manifest Consolidation
- General Declaration
- Cargo Visibility
- Advanced Passenger Information

- P/O, Invoice, P/L
- Certificates/License
- C/O, Insurance, Tax Invoice
- Purchase Certificate of raw material

- e-L/C, e-Local L/C
- e-Negotiation
- Settlement

- Export Clearance
- Import Clearance
- Duty Draw-back (Tariff refund)
1. National Paperless Trade Platform of Korea

**National Paperless Trade Platform**

- **Trading Company**: <80,000
- **Customs & Logistics**: <7,000
  - Airlines
  - Ocean Carrier
  - Customs Brokers
  - Forwarders
  - Bonded Transportation
  - Bonded Warehouse
- **Financial Institution**: <96
  - Banks
  - Insurances
- **OGAs & License/Certification**: <470
- **MOTIE, KCS, KIS, Quarantines (CIQ), NTS, POA etc.**

** National Paperless Trade Platform**

- **uLogisView**
- **PAA**
  - China
  - Macau
  - Japan
  - North America
  - Asia
  - Malaysia
  - Singapore
  - Indonesia
  - Thailand
  - Taiwan
  - Hong Kong
  - Philippines
  - Global Van
  - Overseas Partners (ARINC, GXS, TRAXON...)

**Overseas Partners**

ARINC, GXS, TRAXON...
1. National Paperless Trade Platform of Korea

- National e-Trade Committee
  - National e-Trade Committee was established in 2003
  - Private e-Trade Committee was established in 2005
  - Korea e-Trade Facilitation Center to implement 33 tasks from ‘e-Trade Korea 2007 Plan’
1. National Paperless Trade Platform of Korea

**uTradeHub Project**

<table>
<thead>
<tr>
<th>Goal</th>
<th>To cope with Korea’s growing trade volume by upgrading the Electronic trading system into a single window system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Period</td>
<td>2005 ~ 2008</td>
</tr>
<tr>
<td>Project Cost</td>
<td>About 30 million (USD)</td>
</tr>
</tbody>
</table>
| Leading Agencies | Ministry of Knowledge Economy (MKE)  
| | Korea International Trade Association (KITA)  
| | Korea Trade Network (KTNET) |

Year 1
- Building Core Infrastructure (2005)

Year 2
- Introducing e-Trade portal (2006)

Year 3
1. National Paperless Trade Platform of Korea

- Enacted Trade Automation Act (1991) and revised Customs Act (1994)
- Revised the ‘e-Trade Facilitation Act (2005)
  - Established legal basis for circulation of e-Trade documents
  - Defined role of ‘e-Trade Infrastructure Operator
- Revised ‘Electronic Transaction Act (2006)
- Revised Commercial Law (2007)
  - Introduced electronic bill of lading and specified the operating rules including title registry
1. National Paperless Trade Platform of Korea

Increase of users by year and by interface type

- **Number of PT Platform users**
- **User Interface types**
1. National Paperless Trade Platform of Korea

- **Nationally**, the economic impact of paperless trade reached to 5.57 billion US dollars, but the cost of operating system is 0.15 billion US dollars (2010, KITA).
- **Samsung Electronics** has reduced 67% of lead time, 80% of processing time, 84% of labor and 95% of papers in overseas purchase utilizing paperless trade.

### Comparison between “Before and After” of Adoption of paperless Trade in SE

<table>
<thead>
<tr>
<th>Category</th>
<th>Before</th>
<th>After</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inventory date</strong></td>
<td>25</td>
<td>5</td>
<td>80%</td>
</tr>
<tr>
<td><strong>Lead time in Purchase</strong></td>
<td>12</td>
<td>4</td>
<td>67%</td>
</tr>
<tr>
<td><strong>H/R for Clearance</strong></td>
<td>6,894</td>
<td>1,072</td>
<td>84%</td>
</tr>
<tr>
<td><strong>Paper Documents</strong></td>
<td>620</td>
<td>30</td>
<td>95%</td>
</tr>
<tr>
<td><strong>Document Handling Capacity</strong></td>
<td>10 k</td>
<td>22 k</td>
<td>220%</td>
</tr>
</tbody>
</table>

**Note:** The data for Samsung Electronics is an example of the impact of paperless trade.
Paperless Trade Infrastructures of Korea

1. 620 types of e-Documents
2. Trading Co. Declarant
4. Private-Centric Integrated National Single Window
5. Customs Declaration
6. Customs-Centric Single Window
7. Successful PPP Korean Single Window Model

* ASPLine: Electronic licensing & Certification System developed and operated by KTNET
II. Cross-border paperless trade and challenges
What is a ‘Cross-border’ paperless trade?

- Three flows of International Supply Chain, goods, documents/data and money, cross the border(s)

- “Cross-border paperless trade” means trade taking place on the basis of electronic communications, exchanging trade-related data and documents across the borders in electronic form;
## National, Bilateral and Subregional Paperless Trade Initiatives

<table>
<thead>
<tr>
<th>Type</th>
<th>Countries/Economies/Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National</strong></td>
<td></td>
</tr>
<tr>
<td>Single Window (in operation)</td>
<td>Azerbaijan, Japan, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore, Thailand</td>
</tr>
<tr>
<td>Single Window (under development)</td>
<td>China, all other ASEAN countries, Kazakhstan, Mongolia, Turkey, Tajikistan, Uzbekistan, Russian Federation, India</td>
</tr>
</tbody>
</table>
| Other Paperless Trade Systems | - India’s Indian Customs EDI System (ICES)  
- China’s e-Ports  
- Pakistan’s Web-Based One Customs (WeBOC)  
- Online e-C/O systems of Chamber of Commerce |
| **Cross-border** |  |
| One directional Initiative | - Advance Filing Rule (Japan), Advance Manifest Service (Korea, China) |
| Bilateral Initiatives | - Electronic Certificate of Origin between Republic of Korea and Taiwan Province of China  
- Electronic Certificate of Origin data exchange between China and Hong Kong and Macau  
- Electronic Sanitary and Phyto-Sanitary (e-SPS) exchange between Australia and New Zealand |
| Sub-regional Initiatives | - ASEAN Single Window (Electronic Exchange of Preferential Certificate of Origin among ASEAN members)  
- Pan Asian e-Commerce Alliance (PAA) |
## 2. Cross-border paperless trade

### Trade Agreement with Paperless Trade Provision

<table>
<thead>
<tr>
<th>FTA</th>
<th>Nature of Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN-Australia-New Zealand FTA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>Australia-Chile FTA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>Australia-Thailand FTA</td>
<td>Best Endeavour + Some Binding</td>
</tr>
<tr>
<td>Australia – US FTA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>China – Peru FTA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>India – Singapore CECA</td>
<td>Some Binding</td>
</tr>
<tr>
<td>Japan – Philippines EPA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>Japan – Singapore New Age Economic Partnership</td>
<td>Some Binding</td>
</tr>
<tr>
<td>Japan – Switzerland FTA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>Japan – Thailand EPA</td>
<td>Some Binding + Best Endeavour</td>
</tr>
<tr>
<td>Republic of Korea – Peru FTA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>Republic of Korea – Singapore FTA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>New Zealand – China FTA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>New Zealand – Hong Kong Closer EPA</td>
<td>Best Endeavour</td>
</tr>
<tr>
<td>New Zealand – Singapore Closer EPA</td>
<td>Binding</td>
</tr>
<tr>
<td>New Zealand – Thailand Closer EPA</td>
<td>Best Endeavour + Binding</td>
</tr>
<tr>
<td>Trans-Pacific SEP (Brunei, New Zealand, Chile Singapore)</td>
<td>Best Endeavour</td>
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</table>
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2. Cross-border paperless trade - Services

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- B2B Commerce, License & Certification
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- Cross Border Transaction
  - e-L/C, e-Local L/C
  - e-Negotiation
  - Settlement

- Trade Finance
  - Export Clearance
  - Import Clearance
  - Duty Draw-back (Tariff refund)

- Logistics

- Customs

Korean Single Window
2. Cross-border paperless trade - Services

- **Global e-SCM service:** around 160 customers with 150,000 ~ 200,000 transactions per year
  
  - To connect Korean suppliers and buyers with their overseas partners to exchange trade documents and data for the management of supply chain (P/O, Invoice, Dispatch Advice, Delivery Forecasting and etc)
  - Customers are from various industries; automotive, semi-conductor, distribution, logistics, and electricity

- **Cross-border e-C/O service:** over 60 Korean sellers and 140 Taiwan, China buyers

- **Advance Manifest Service:** Korea, Japan, USA and etc.
Before the implementation of paperless trade
2. Cross-border paperless trade – Case of global e-SCM

After the full implementation of paperless trade
2. Cross-border paperless trade – Challenges

- 1st Challenge:
  - Increasing International Trade Volume → Introduction of Value Added Network Service for Government Service

- 2nd Challenge:
  - WWW → Internet based Paperless Trade Platform (uTradeHub)

- Latest Challenge:
  - Increasing Cross-Border e-Commerce with creative new commerce practices → ?
2. Cross-border paperless trade – Challenges

- Open Innovation Approach

<table>
<thead>
<tr>
<th>Closed Innovation</th>
<th>Open Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Innovation with ideas, resources and technologies within organization</td>
<td>○ Innovation with ideas, resources and technologies outside of organization</td>
</tr>
</tbody>
</table>

Thank you

For further information please contact

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