InterPARES 3 Project

International Research on Permanent Authentic Records in Electronic Systems

Trusted 3rd Party Digital Repositories

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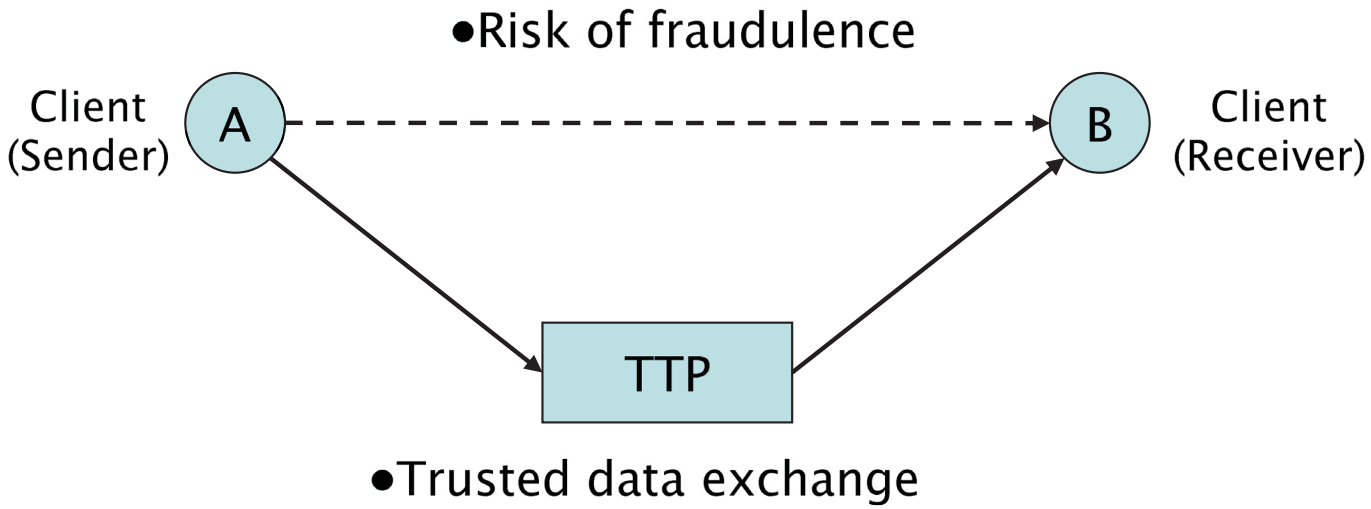
Overview

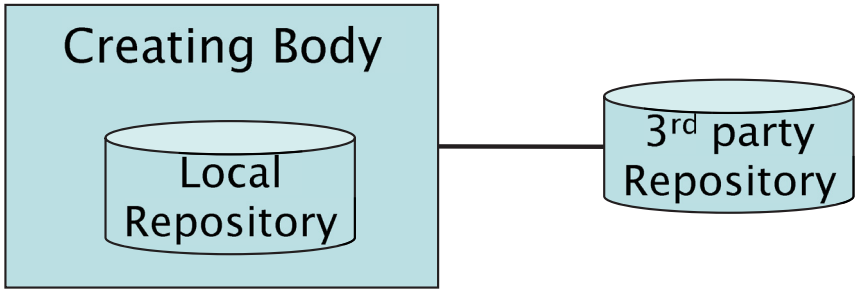
- **What is 'Trusted Third Party Digital Repository' ?**

- **Trusted Third Party (TTP)**
  - An authority that acts as an intermediary between participating parties for trustworthy interactions between the parties
  - A trusted third party authority that is trusted by both parties (A, B)



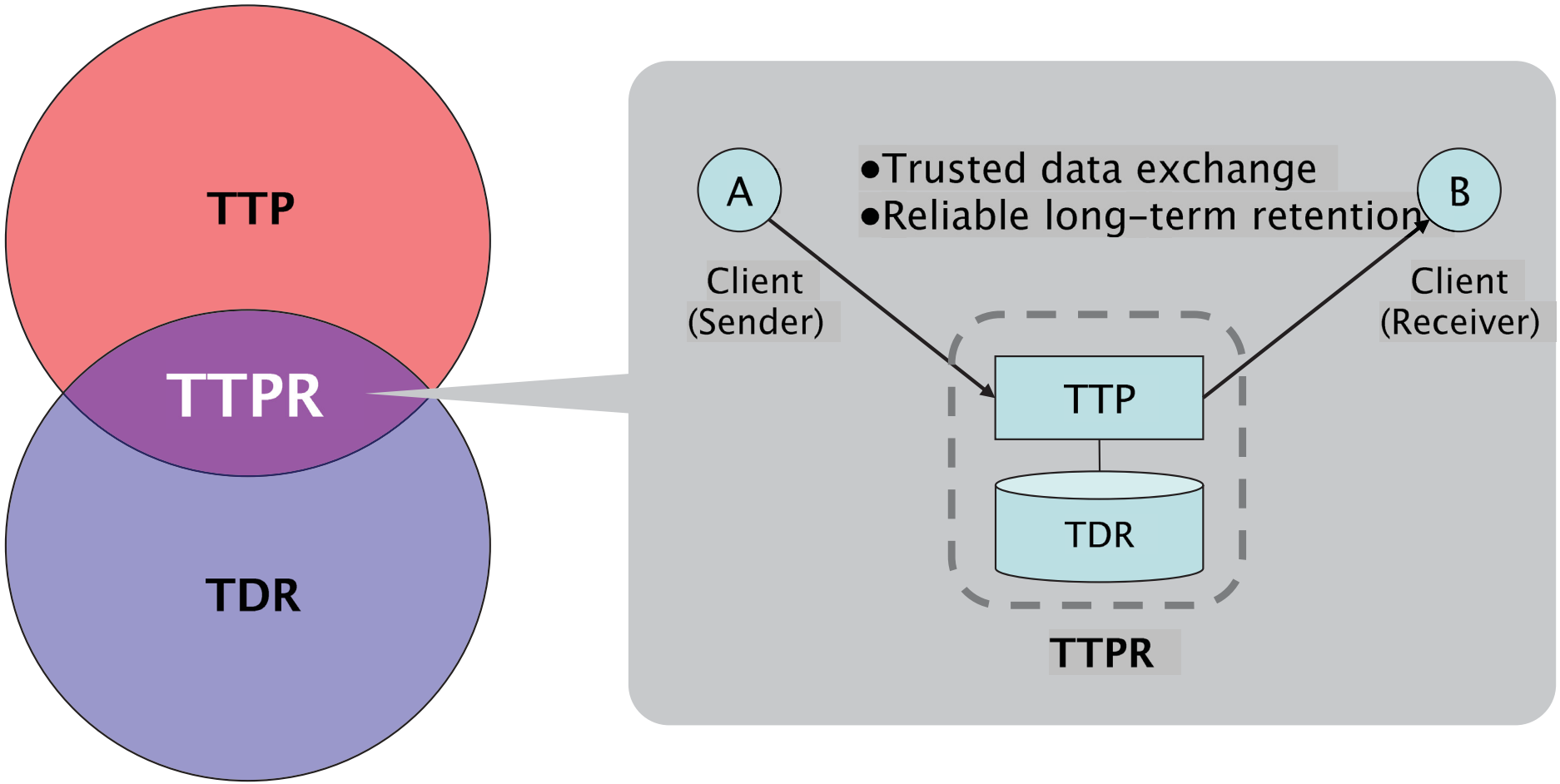
Overview

- **What is 'Trusted Third Party Digital Repository' ?**
- **Trusted Digital Repository (TDR)**
  - "A trusted digital repository provides reliable, long-term access to managed digital resources to its designated community, now and in the future." (OCLC/RLG, 2002, p. 5)
    - Accept responsibility for the long-term maintenance of digital documents
    - Demonstrate fiscal responsibility and sustainability
    - Design its system in accordance with standards
    - Establish methodologies for system evaluation
    - Have policies, practices, performances that can be audited and measured
    - Can be either local repository or third-party repository



Overview

- What is 'Trusted Third Party Digital Repository' ? (TTPR)



Background of trusted 3rd party digital repositories

Industrial

- Ensuring e-document's reliability and authenticity
- Building trust between e-document exchange parties
- Promoting e-business and improving business efficiency and speed

Legal

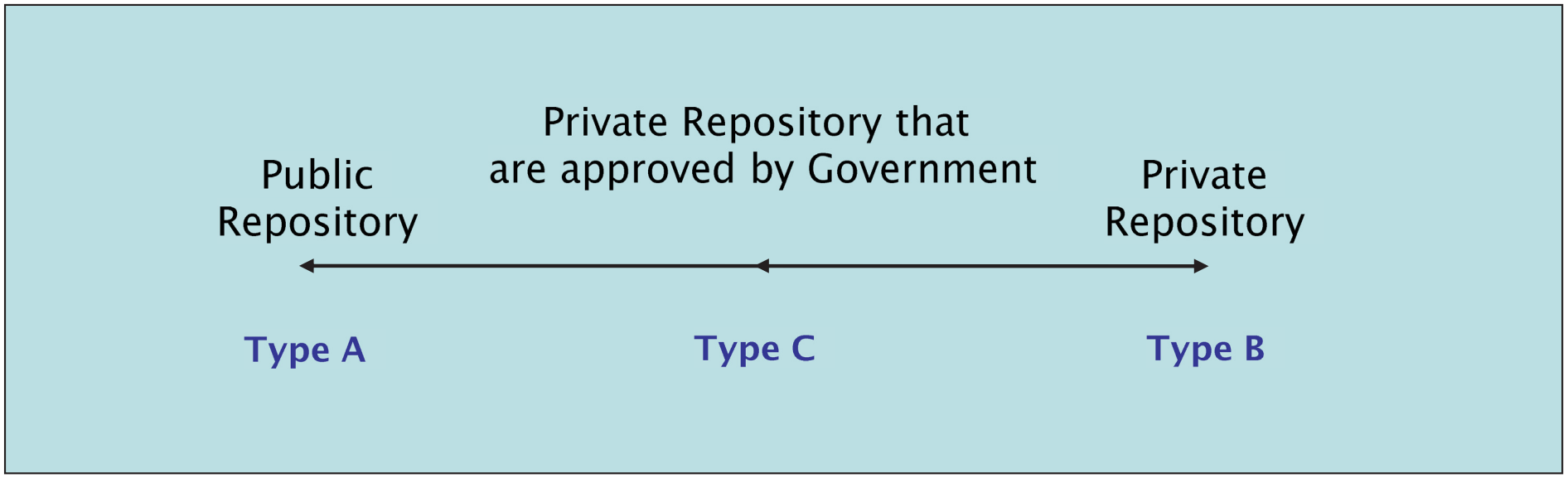
- Resolving relevant laws and regulations into unified requirements in dealing with e-documents
- Offering legal, procedural and technical standards in establishing digital repository
- Endowing scanned documents with legal authority

Technical

- Based on development of security technology and storage technology
- Supporting electronic document exchange and sharing

Types of trusted 3rd party digital repositories

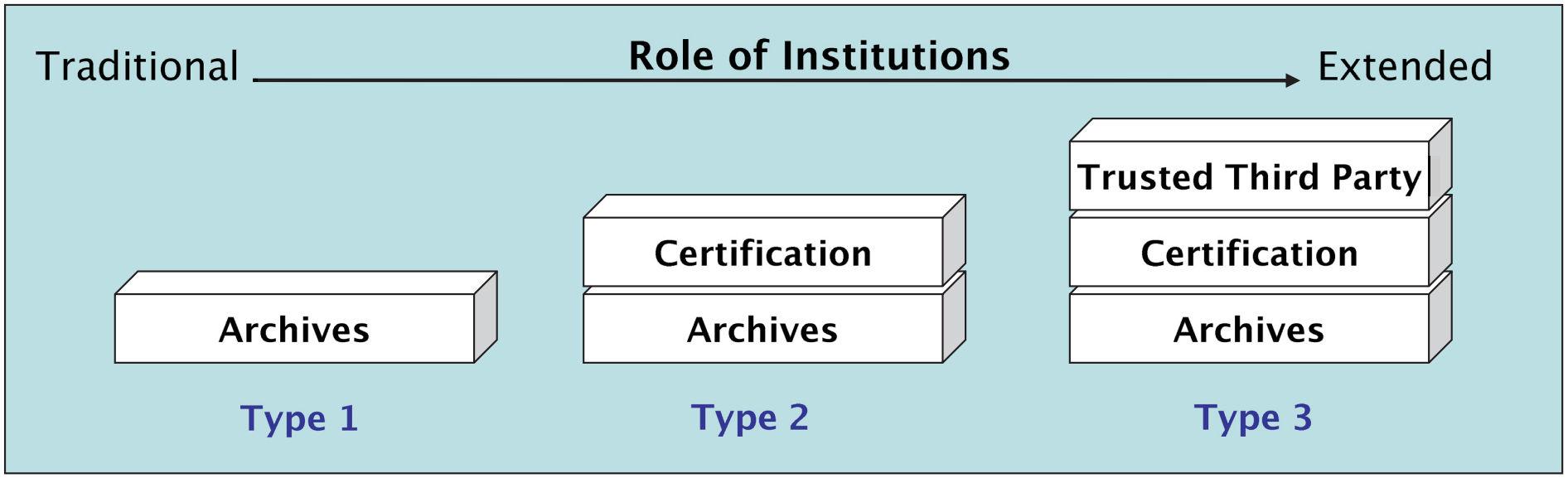
◆ By Types of Institutions



- Type A: Official repositories that are governed and operated by Government (e.g. US, Spain)
- Type B: Commercial repositories (e.g. US, Iron Mt.)
- Type C: Commercial repositories that are approved by Government (e.g. Korea, Japan)

Types of trusted 3rd party digital repositories

◆ By Major Role



- Type 1: Archives retaining and preserving e-documents (e.g. US Iron Mt., Spain)
- Type 2: Archives + Certification or Notarization of e-documents (e.g. US, Japan)
- Type 3: Archives + Certification + Trusted Third Party (e.g. Korea)

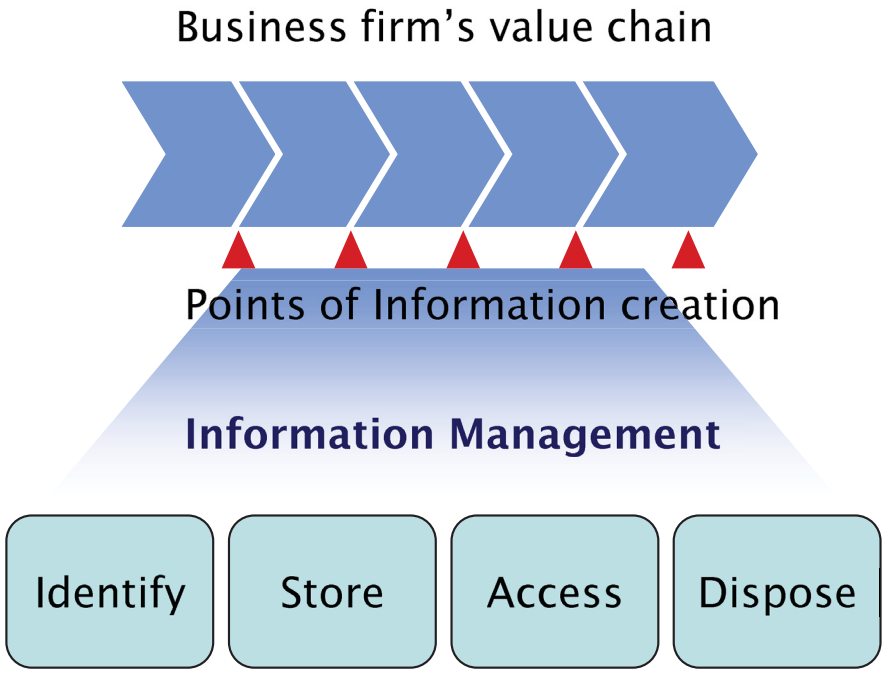
Types of trusted 3rd party digital repositories

- **Matrix of Roles and Institution Type**

Roles		Types of Institutions	
TTP + Certification + Archives		Certified e-Document Authority (Korea)	
Certification + Archives		e-Notary by notary assc. (Japan)	e-Notary by lawyers (US)
Archives	Gov agencies (Spain, US?)		corporations (US)
	Public		Private

Case 1. Archives model

◆ Iron Mountain, US: secure storage and destruction



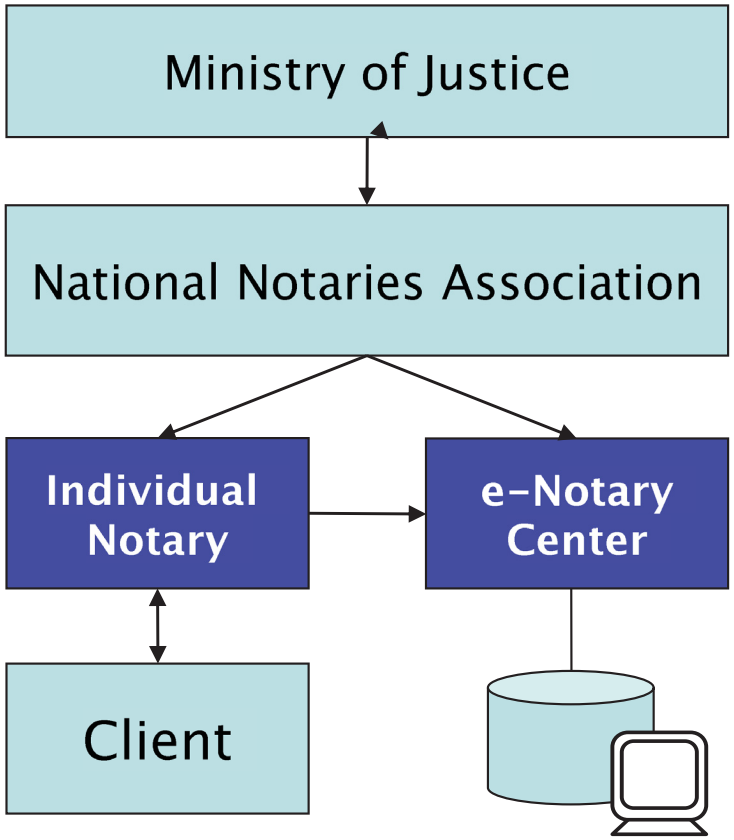
IRON MOUNTAIN®

- **Founded in 1951**
- **Offices in 37 countries**

- **Records Management & Shredding**
  - Records Management (paper, digital)
  - Secure Destruction
- **Data Protection & Recovery**
  - Server Data protection
  - PC Data protection
- **Digital Services & Software**
  - e-Discovery
  - e-mail Management
- **Fulfillment Services**
  - Inventory Management
  - On-time document delivery

Case 2. e-Notary model

◆ National e-Notary System, Japan

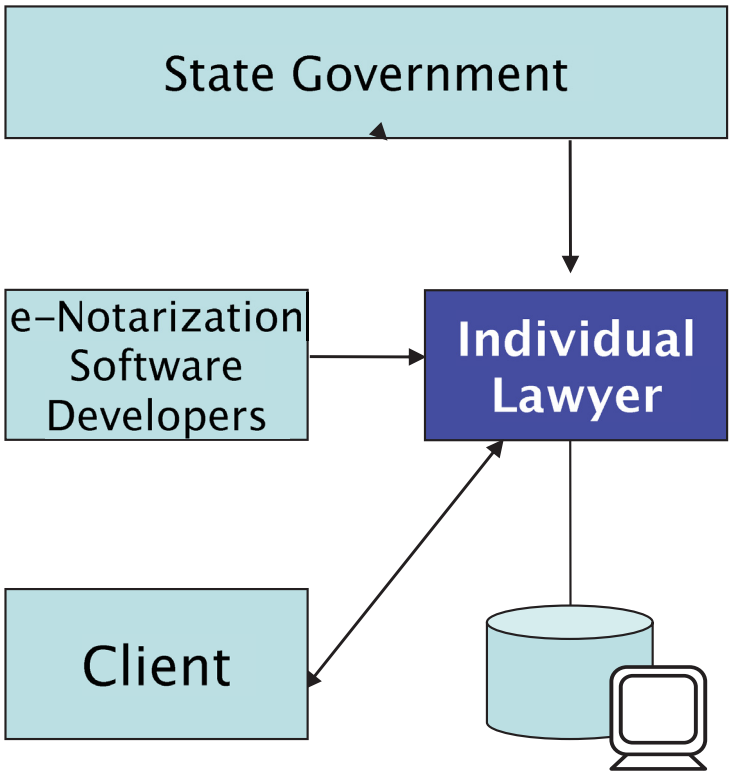


- **Amendment of Notary law in 2000**
- **Started in 2002**

- **Ministry of Justice**
  - Established rules and regulations on electronic notary
  - Issues electronic certificates
  - Authorize and supervise notaries
- **National Notaries Association**
  - Runs 'e-Notary Center'
- **Individual Notary**
  - Create electronic notaries
  - Notarize electronic private document
- **e-Notary Center**
  - Retain e-notarized documents for 20 years
  - Outsourced by Hitachi Co.

Case 2. e-Notary model

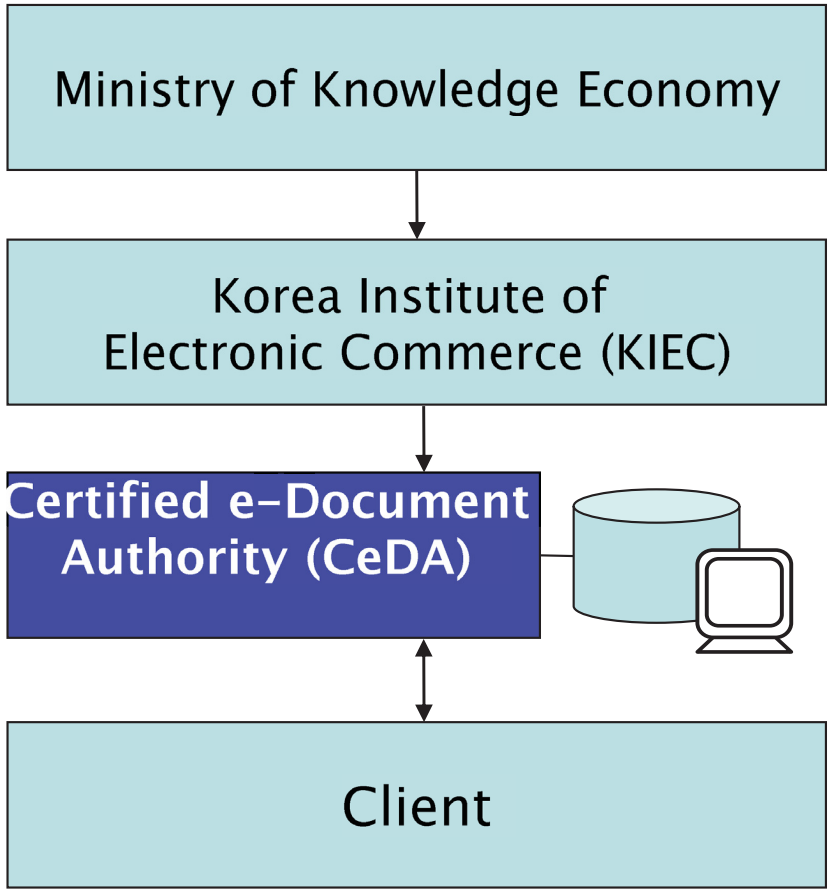
◆ e-Notary, US



- **State Governments**
  - Amend rules and regulations on notarization for electronic documents
  - Specify procedural, technical standard regarding e-notary
  - Many states are in operation or in progress of e-notary planning
- **e-Notarization software developers**
  - Develop e-notarization software in accordance with standards
  - Provide the software to each lawyer
- **Individual Lawyer**
  - Create electronic notaries for private document
  - Store e-notarized documents in their computer systems

Case 3. Combination model

◆ Governance of CeDA



- Establishing relevant acts and regulations
- Supervising KIEC's activities
- Authorizing each repository as the Certified electronic document authority (CeDA)

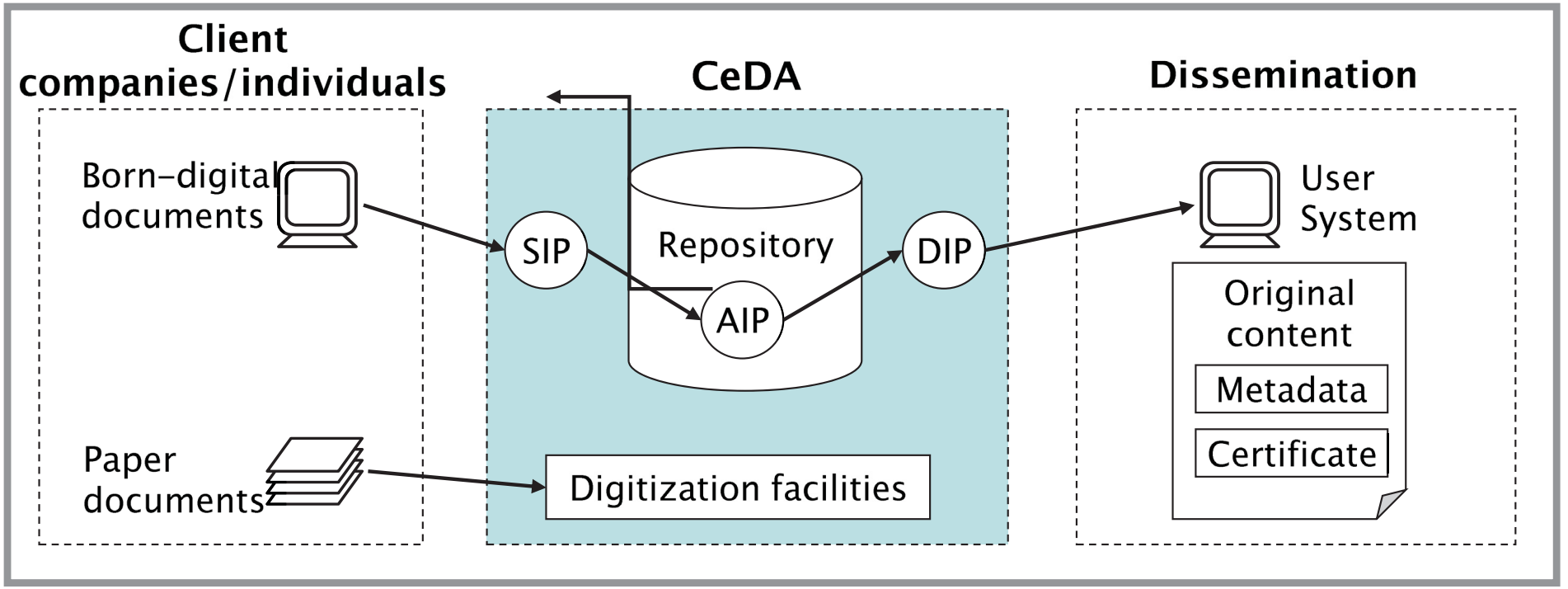
- Evaluating potential candidates for private service provides
- Setting up technical standards and guidelines

- Archiving e-documents
- Exchanging secure e-documents
- Certificating the retained e-documents

- Private businesses
- Individuals

Case 3. Combination model

◆ **Certified e-Documents Authority (CeDA), Korea**



- **Official repository that ensures e-document's reliability**
  - Preserving born-digital and digitized documents
  - Ensuring legal authority of all retained documents
  - Certifying the lifecycle of e-documents
  - Being as an Intermediary for secure e-document exchange between parties

Issues

- Repositories may vary in their major role, organizational structure and governing body by each country's contexts.
- Each repository seems to have some ways to ensure authenticity, reliability and integrity of electronic documents by:
  - legal requirements;
  - technical specifications; and
  - operational procedures.
- However, we have some questions.
  - Do the repositories function appropriately?
  - Do the current methods to ensure authenticity, reliability and integrity of electronic documents appropriate?
  - How do they deal with loss of retained documents?

Further questions

1. **Governance**
   - Are laws and regulations appropriate for establishing repositories?
   - Do government agencies monitor and auditor repositories on a regular basis?
2. **Management**
   - Do the repositories contain sufficient capability in technical expertise, managerial and operational expertise, and human resources?
3. **Budget**
   - Who finances for establishing and operating the repositories?

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Thank you!

For questions, contact:
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