InterPARES 3 Project
International Research on Permanent Authentic Records in Electronic Systems

A New Business Model through Certified e-Document Authority

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Agenda

- InterPARES 3 Project Team Korea Case Study
- Concept of trusted 3rd party digital repositories
- Data collection and analysis
- Roles of CeDA
- A new business model of trusted 3rd party digital repositories
- Contributions

Concept of TTPR

◆ 'Trusted Third Party Digital Repository' (TTPR)?
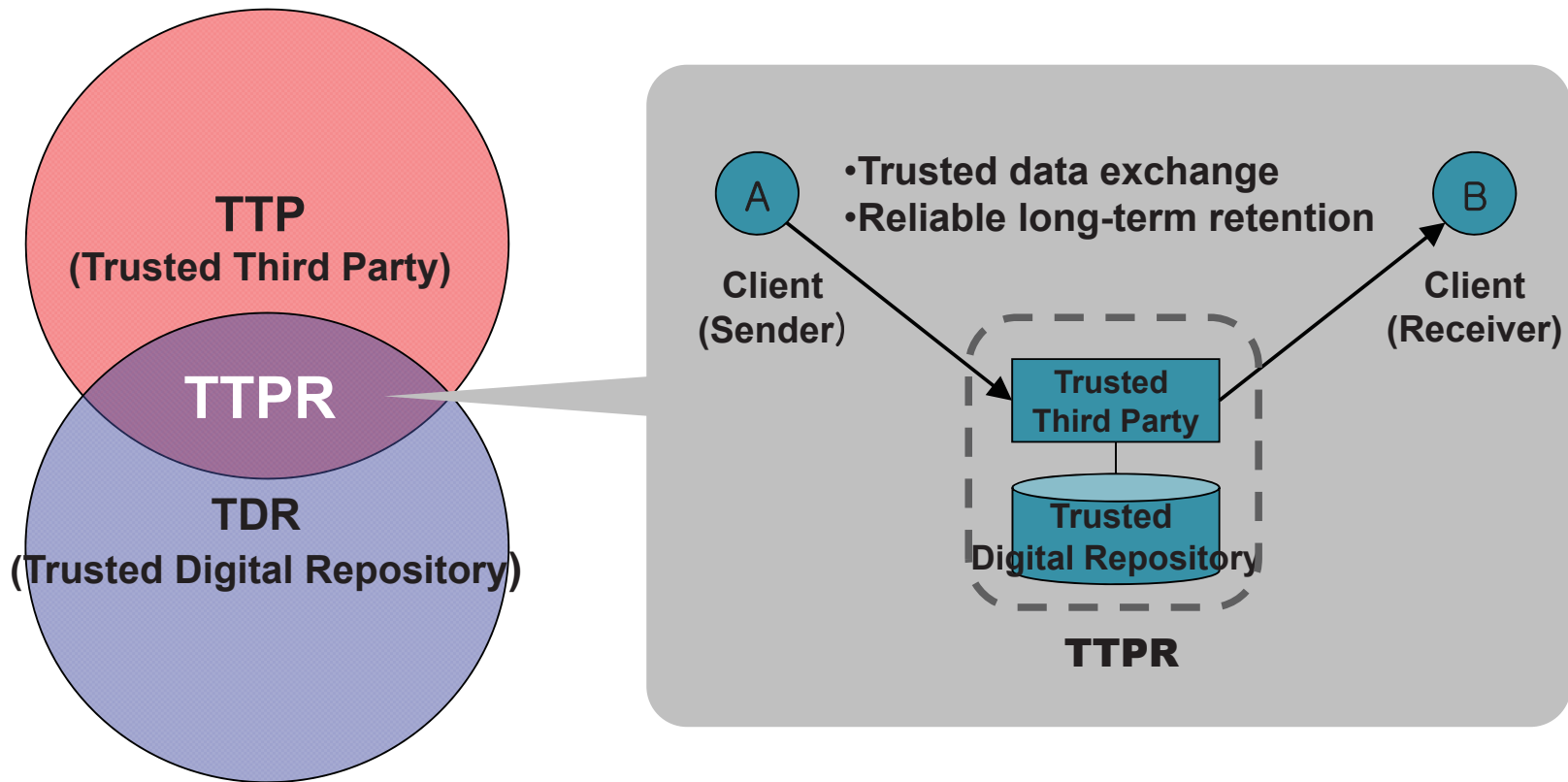
Why TTPR?

- Ensuring the authenticity, reliability and integrity of electronic records and documents is important in the digital age.

- Building trust between electronic record and document exchange parties is necessary across all sectors and industries.

- Installing TTPR is possible with supporting security and preservation technologies.

- Korean TTPR is called as Certified e-Document Authority (CeDA) sites.

Data collection: Interview

1. Interviews with 3 groups of professionals:
   - Records creators
   - Records managers
   - Records users – employees
- Interview questionnaire:
   - Records questions
   - System questions
   - Policy questions

Data collection: Supporting Documents

2. Relevant Documents
- Institution's mission statement and annual reports;
- Publicly available documents related to the system;
  - System manuals;
  - User guides.
- Other written materials generated by the institution;
- Additional comments made by the interviewee

Features of CeDA

- Governed by Korea Government as Official repository.
  - Established relevant regulations;
  - Evaluating potential candidates for the CeDA;
  - Approving CeDA sites; and
  - Setting up technical standards and guidelines.

- Operated by private sectors
  - 8 commercial service provides

Workflow of CeDA
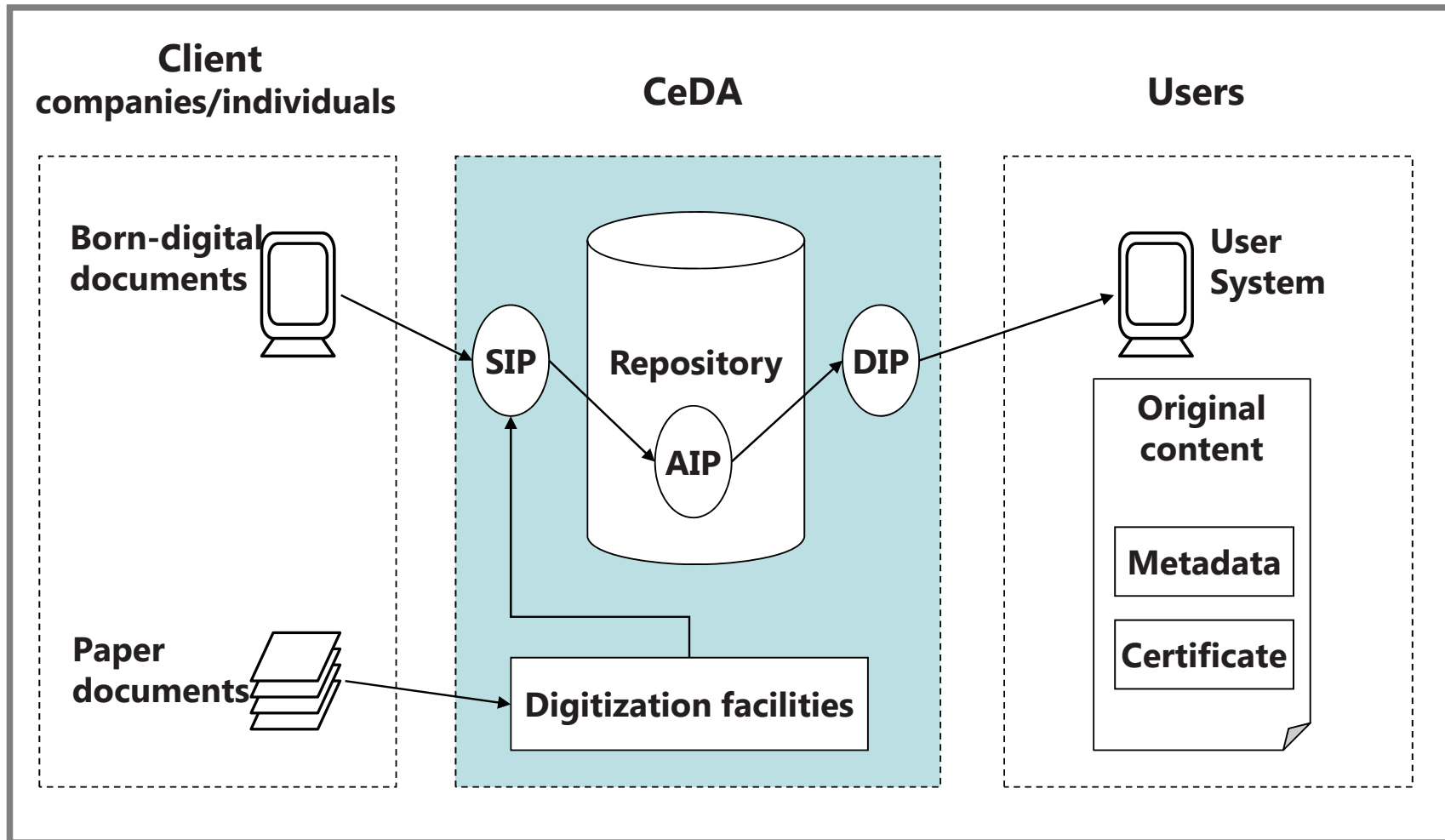
Legal Support

1. Digitized copy: digitizing from paper documents to electronic documents;

2. Endowing digitized documents with legal authority;

3. Electronic documents have the same legal enforceability and effectiveness as paper documents.

Roles of CeDA

1. Archiving born-digital and digitized documents

   – Digitizing paper documents into digitized documents
      – Adding time stamping
      – Adding metadata to original information into a package
   – Ensuring legal authority of all retained documents for electronic transaction and exchange;
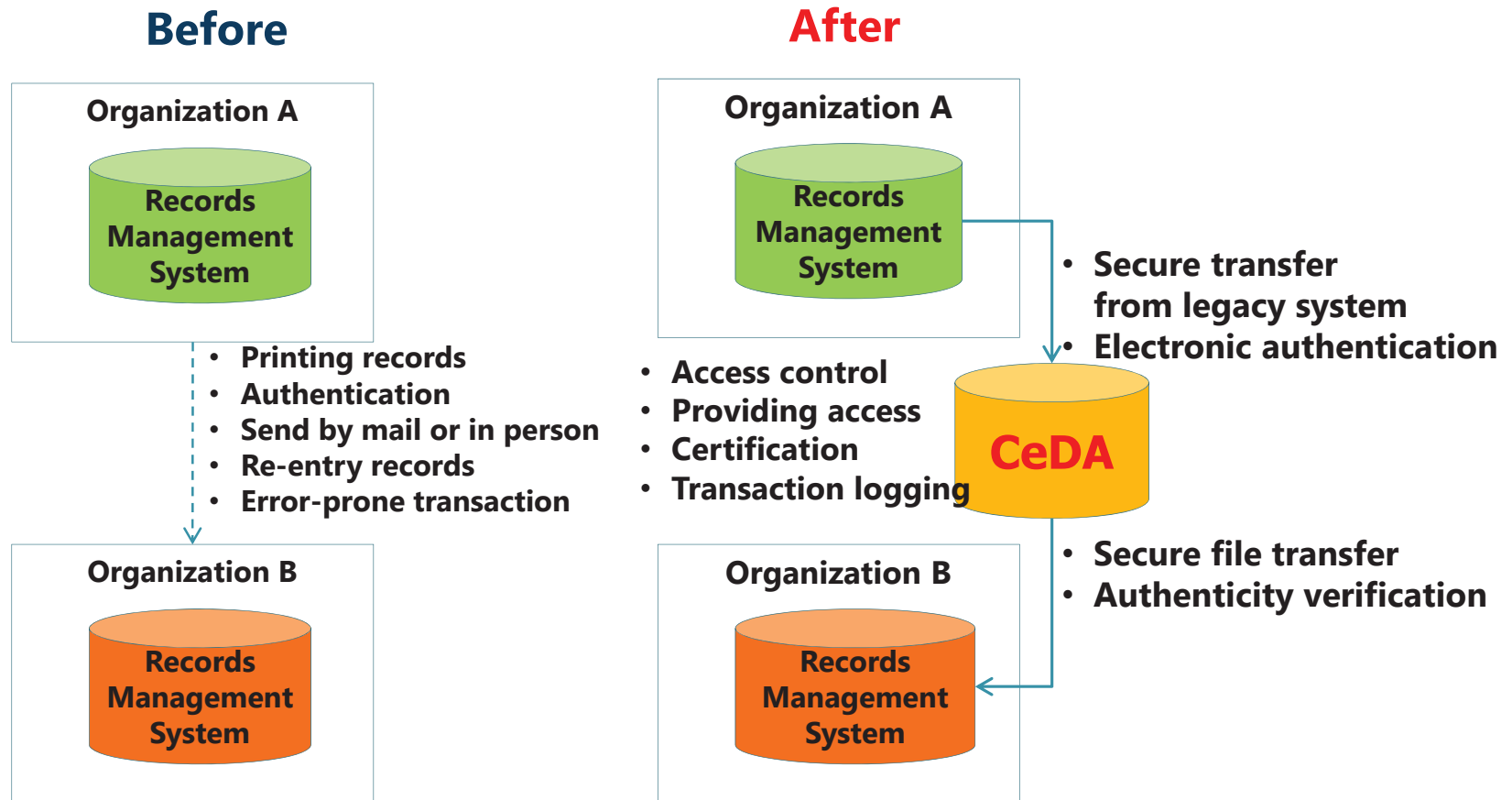
Roles of CeDA

2. Certifying the retained electronic documents

– Validating that CeDA retains authentic documents

– Certificate of digital documents, including:

  – Creator information
  – Registration information
  – Authenticity information
  – Access history

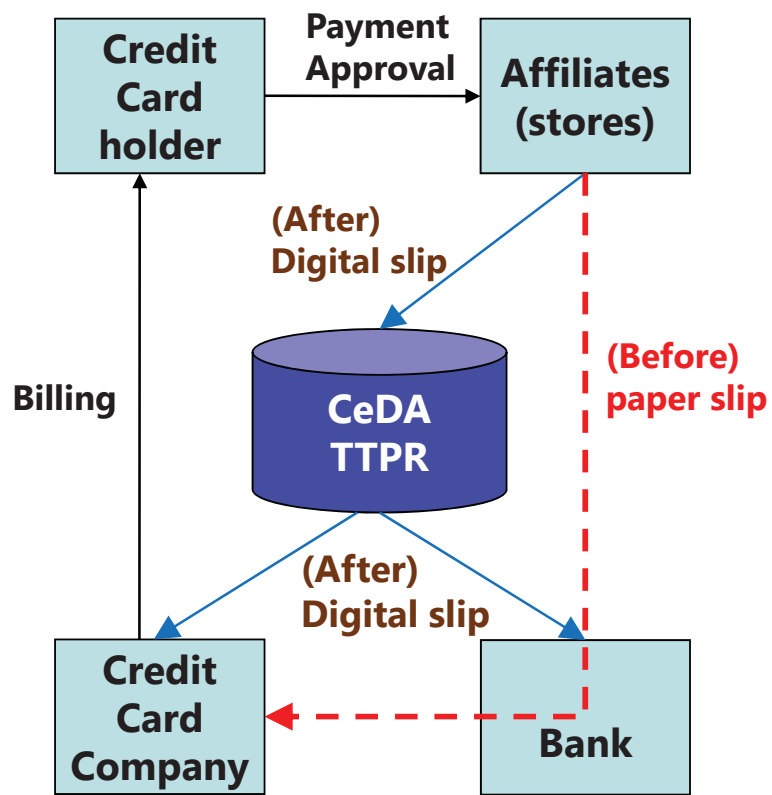– Validating the issued certificates

Roles of CeDA

3. Working as a secure channel of electronic document exchange between clients (senders) and the designated partners (receivers)

- When CeDA can be integrated with records management systems of the organizations for secure transfer,

  ◦ it collects outbound documents from the organizations.

  ◦ Documents are stored and accessed in CeDA.'s repository.

Inter-organizational Documents Exchange

Before

After

Organization A

Records Management System

- Printing records
- Authentication
- Send by mail or in person
- Re-entry records
- Error-prone transaction

Organization B

Records Management System

Organization A

Records Management System

- Access control
- Providing access
- Certification
- Transaction logging

CeDA

- Secure transfer from legacy system
- Electronic authentication

- Secure file transfer
- Authenticity verification

Organization B

Records Management System

Paperless Credit Card records

Credit Card holder

Payment Approval →

Affiliates (stores)

(After) Digital slip

CeDA TTPR

(Before) paper slip

Billing

(After) Digital slip

Credit Card Company

Bank

Example in Credit Card Transaction

Contributions

- In order to ensure the authenticity, reliability and integrity of electronic documents and records by establishing:
  - Legal requirements – acts and regulations
  - Technical specifications – facility and equipment requirements; and
  - Operational procedures – procedural guidelines.

Contributions

- CeDA provides access control to the retained documents, certification on the documents. It logs all the transaction history for auditing.

- CeDA enables to ensure secure transfer and exchange without risks.

- CeDA can provide an opportunity to promote electronic commerce and improving business efficiency and speed.

- CeDA can build national infrastructure for electronic exchange and transaction based on trusted relationship between participants.