SOA emergence

Palveluorientoituneisuus yritysjärjestelmiin

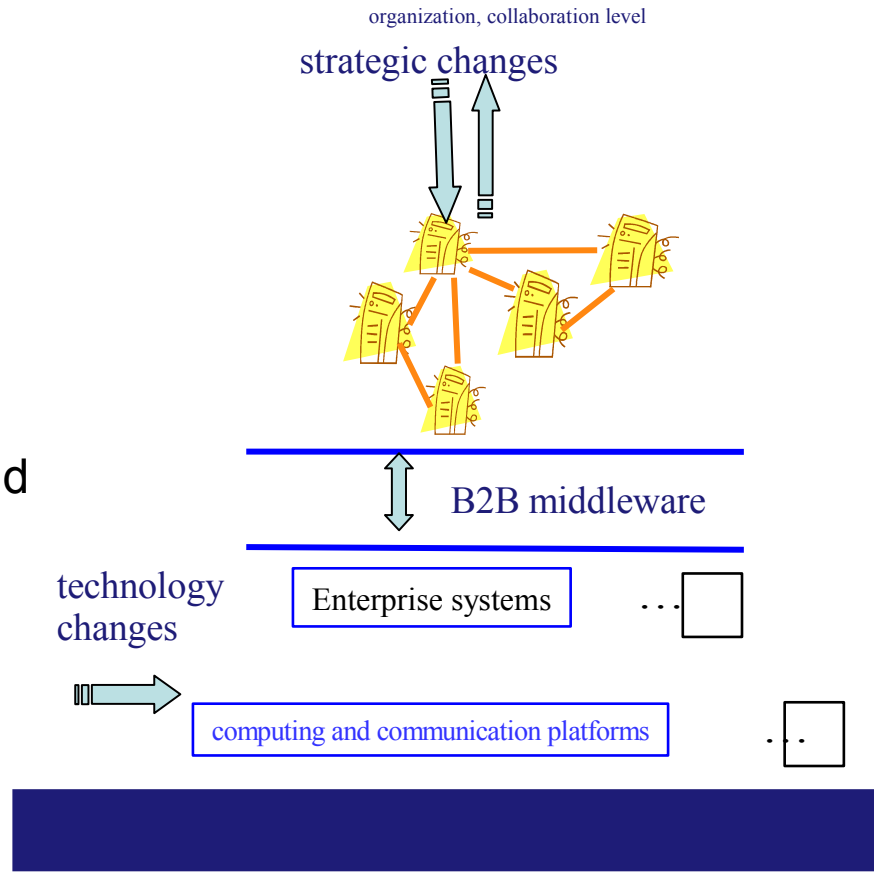
Avoin seminaari
5.12.2006
SOAMeS

SOA emergence
Palveluorientoituneisuus yritysjärjestelmiin

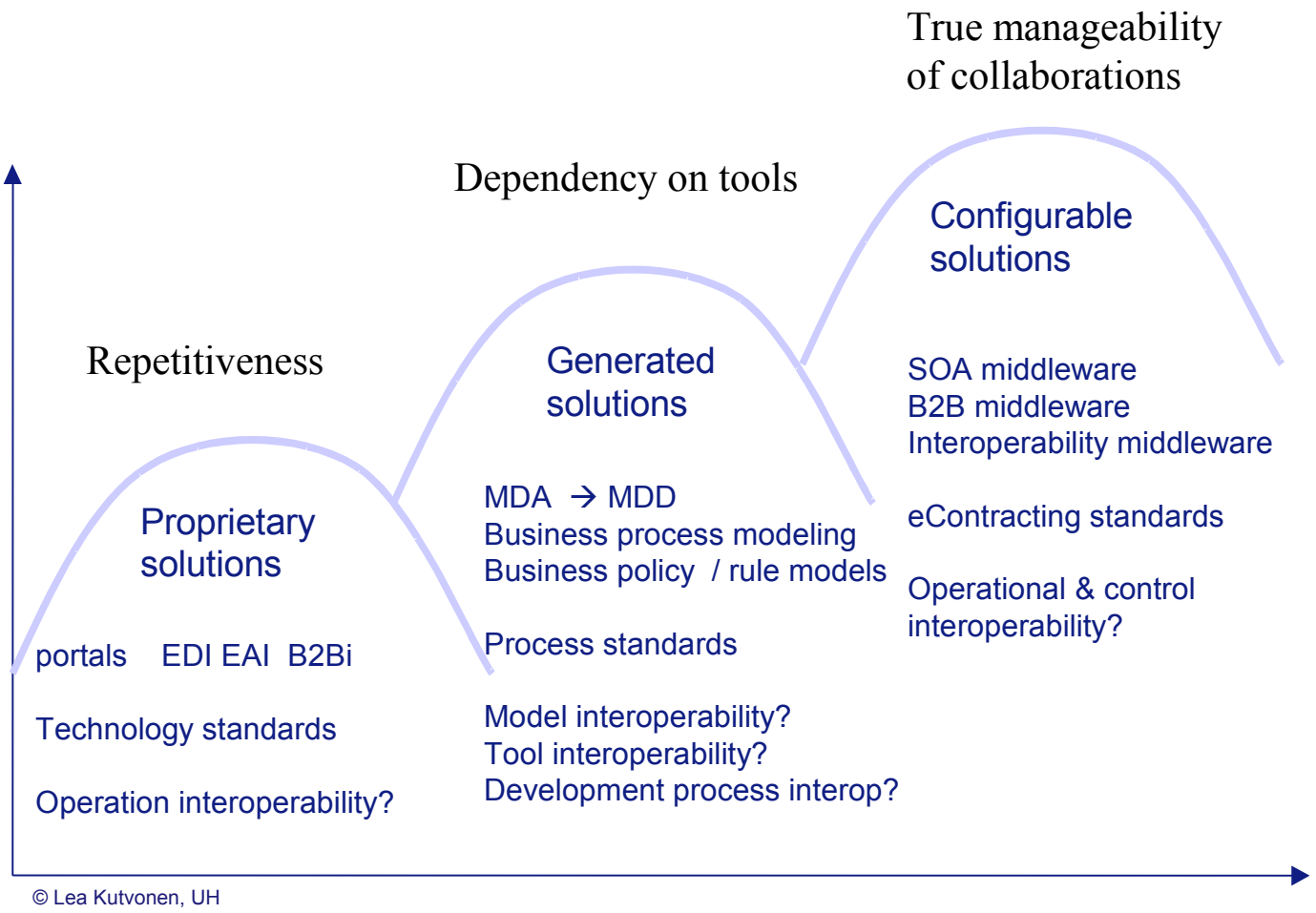
Seminaarin avaus
9.20 – 10.05 Mirja Pulkkinen, Jyväskylän yliopisto:
Organisaation johtamisen ja ICT:n johtamisen prosessit ja niiden vuorovaikutus;
Enterprise Architecture -foorumin esittely
Kahvi
10.25 – 10.55 Neuvotteleva virkamies Aki Siponen, VM:
Voiko valtionhallinnon tietojärjestemien nykytilaa kuvata?
11.00 – 11.30 Järjestelmäpäällikkö Jarmo Kaipomäki, TM:
CASE-kuvaus SOA:n käyttöönotosta Työministeriössä
Lounas
12.30 – 13.15 Kari Lehtinen, Business Manager, SAP Business Consulting:
Business development through SOA
13.15 – 14.00 Konsultointipäällikkö Heikki Mattsson, Oracle:
SOA, ERP & Oracle Fusion Applications
Kahvi
14.30 – 15.15 Kari Lehtinen, Elisa/DIMES:
eBUS
15.15 – 16.00 Keskustelua ja seminaarin päätös

Impacts

- Business changes
  - → New business network models, opportunities
  - → IT investment style changes
  - → More open service markets
  - → Regulatory involvement
- Software development cycle and tools
  - → Continuous process of composition and management
  - → configurability by business rules and policies
- Architectural changes for IT
  - → Enterprise system architectures
  - → Middleware stacks



Trends



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LISÄTIETOJA

http://cinco.cs.helsinki.fi

YHTEYSTIEDOT

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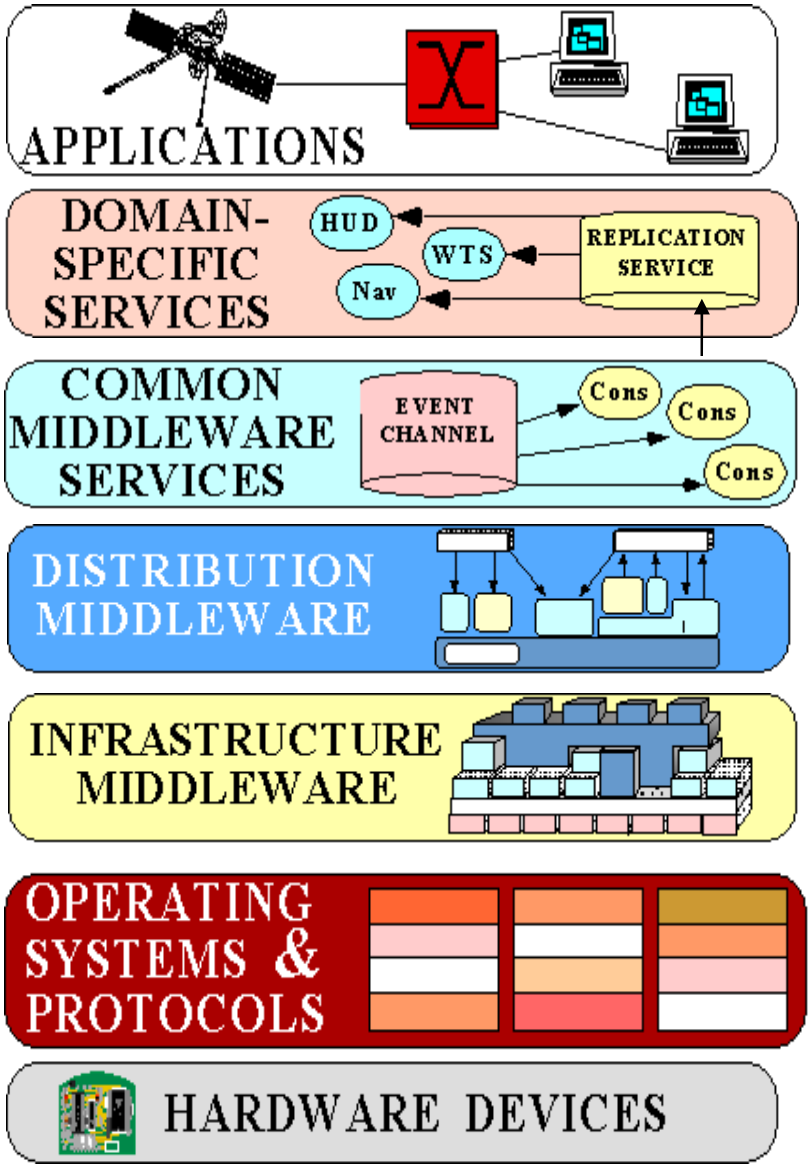
Väliohjelmistotasot



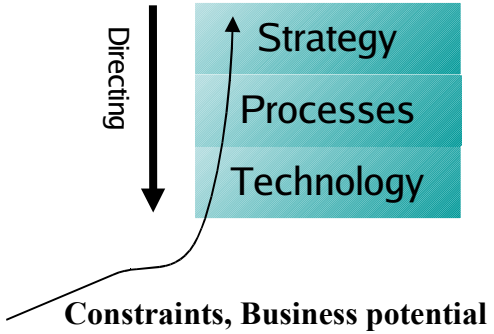
- **sovellusalueen palveluja**: lennon navigointialgoritmeja, potilastietokantamalleja
- **yleispalveluja**: ilmoitukset, turvallisuus, transaktiot, kuormantasaus, tietovirrat, vikasietoisuus
- objektien ja komponenttien välinen **kommunikointi** (RMI, CORBA)
- **yhtenäinen** näkemys käyttöjärjestemä- ja kommunikointipalveluihin

CACM 45, 6 pp 45

Goals

Provide B2B middleware, infrastructure services, and tools

- Inter-enterprise eCollaboration
  - Econtracting: partner selection, negotiation, and monitoring
  - Breach management
  - Trust management
- Metainformation services
  - Service type and ecommunity model management



Architecture approach

collaboration

application services

internal process logic, capsuled information,
internal computational, engineering and technical solutions

B2B middleware

contract mgmt

static interop tests

eComm moni-toring

communication services with selectable transparency sets

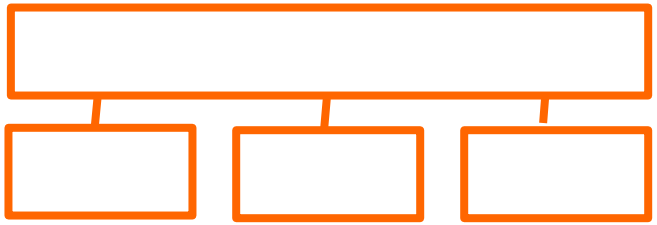
DOC middleware

Integration approaches

Federated

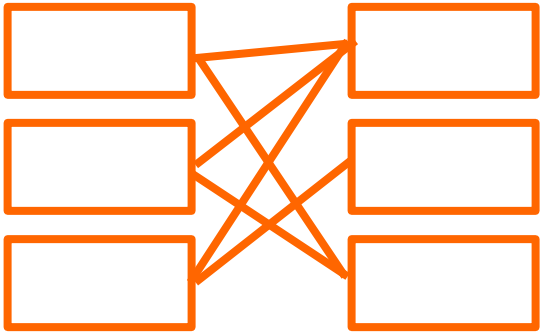
coupled individual models

Unified



mapping to common model

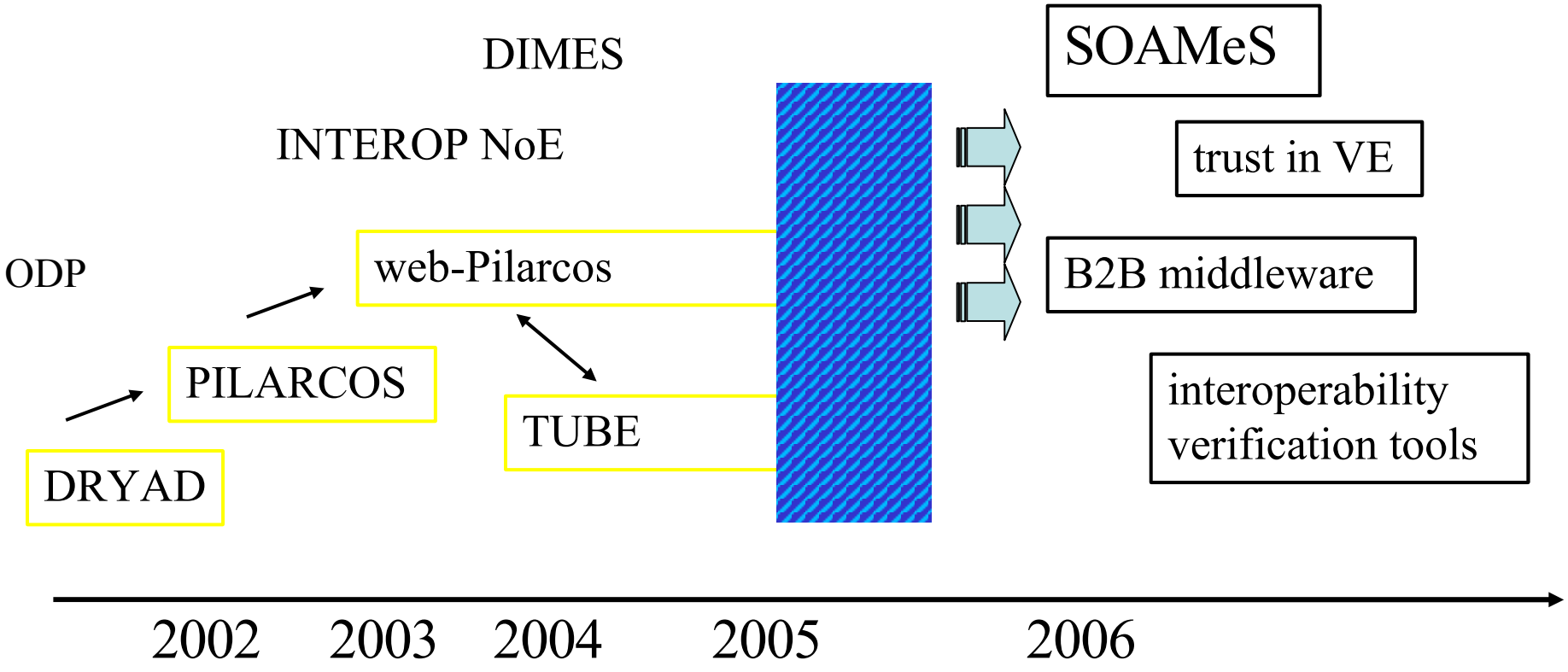
Integrated



common model

CINCO group

- ODCE gets family and new clothes



ODCE history

Process-oriented

Web-Pilarcos II
breeding environment
P2P operational environment

Service-oriented

Web-Pilarcos I
population, interoperablity checking,
P2P negotiation, contracts,

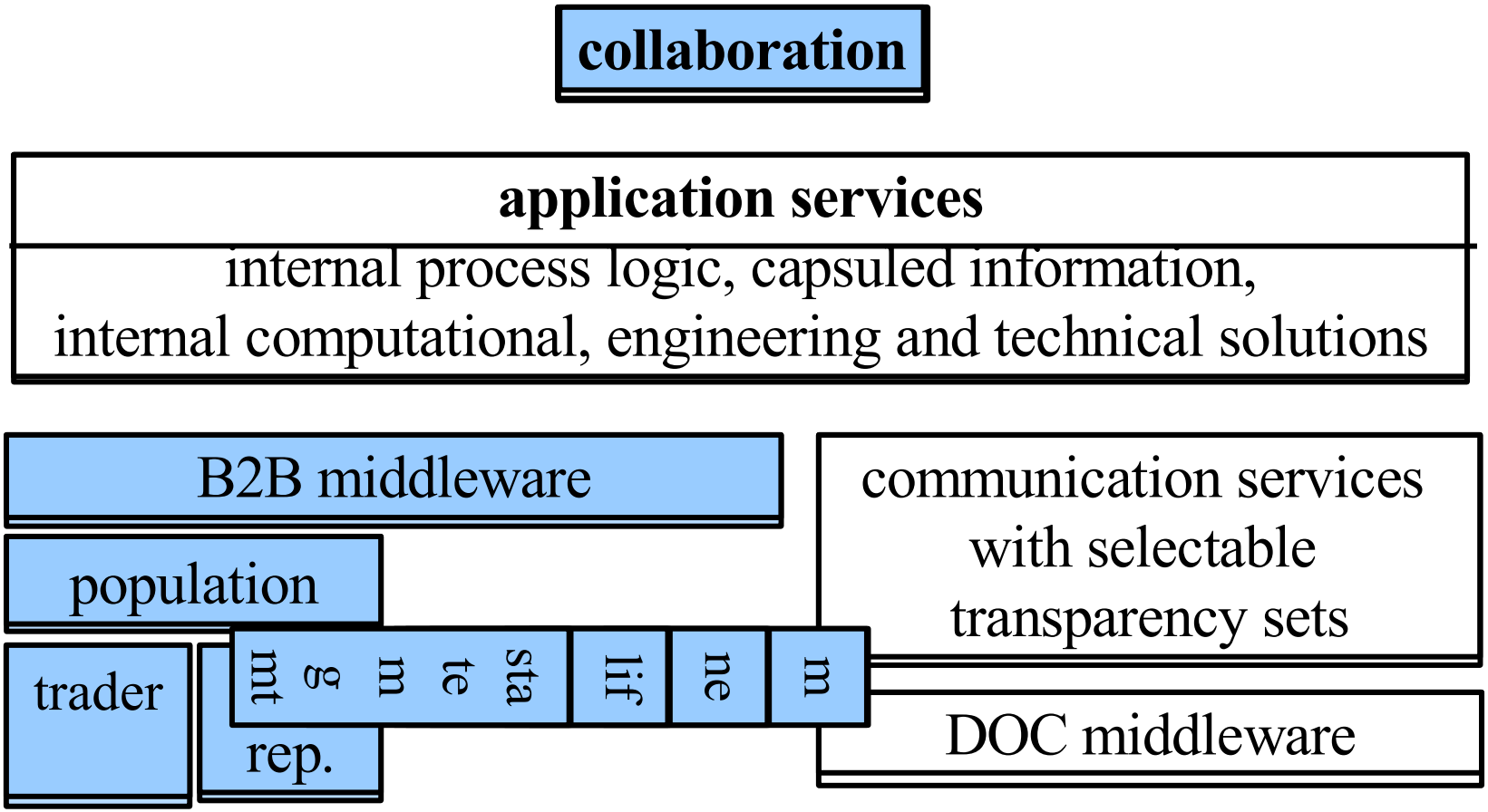
PILARCOS
population of network frame
P2P with matching service offers

Component-oriented

DRYAD object trading service
for matching service offers
C/S and requests
for dynamic biding

Object-oriented

Between ODP and SOA



Business Networking, ...

BPR, BPA, ...

Business Processes

Industry/Business Domain

Management Methodologies

services
- repositories of predefined processes, services ontologies
- model and type verification

business process modeling tools

B2B middleware

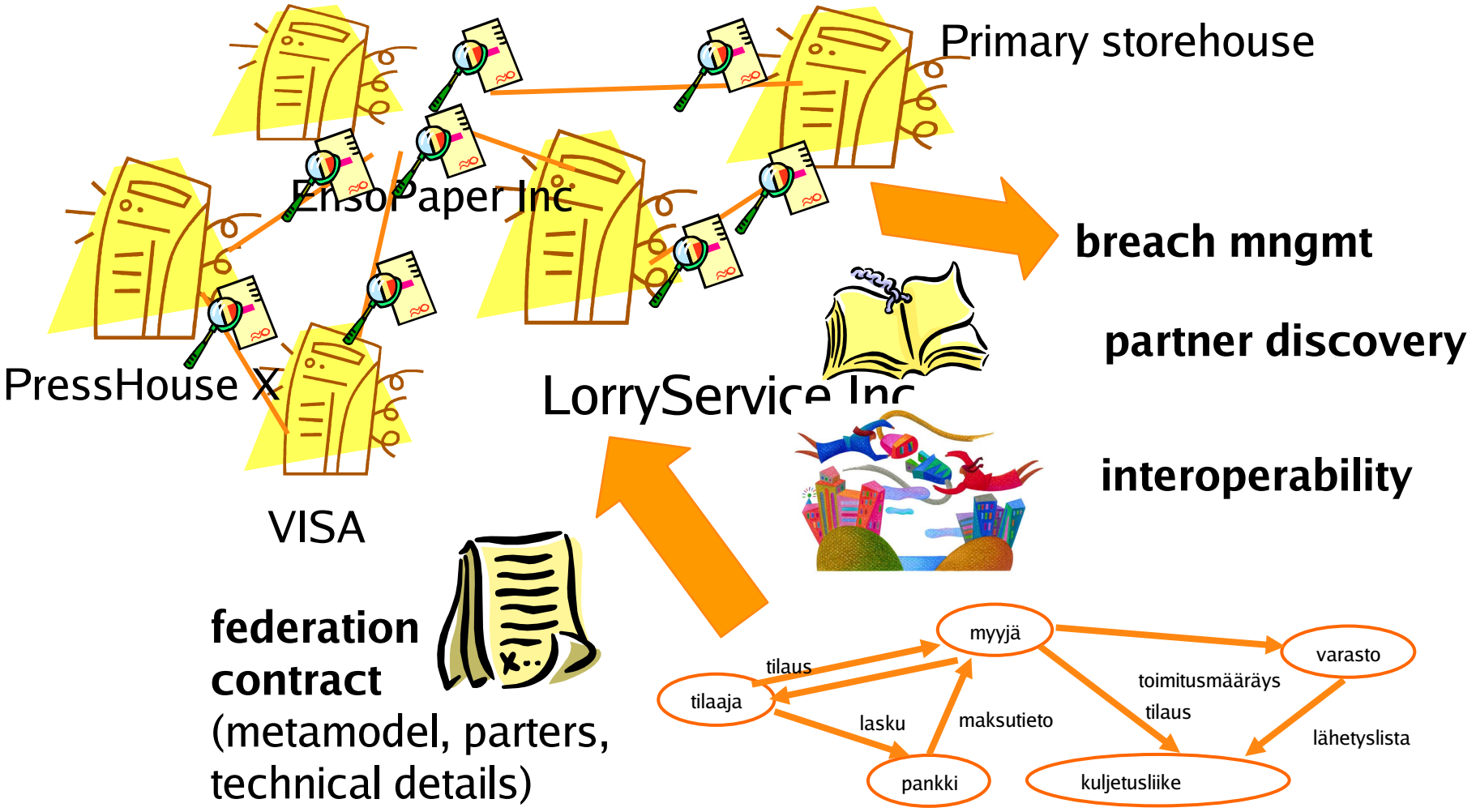
services
-population
-offer and interop. verification
-type matching
-monitoring
-contract management

collaboration requirements
-process-awareness
-semantical interoperability
-technical interoperability
-high level, shared communication and processing concepts

autonomy requirements
-protection
-trust
-business rules: operational policies

collaboration properties
-dynamicity
-changes of processes
-changes of partnership
-contracting and monitoring
- business contracts
-technical behaviour
- NFA in both

B2B middleware: eCommunity management



ODCE in numbers

- Funding: over 800.000 euros (25-30 % of NODES, 5-6 % of CS)
- PhD theses: 1
- MSc theses: 60 (distrib > SE >IS) (1/3 of NODES throughput)
- Batchelor theses: 40
- Seminars: 9, Projects: 6
- New regular courses: 2
- Project consortia workshops: 25 + ???
- Publications: 50
- Senior personel ODCE:NODES = 1:10
- International publications at least at the same level with that

CINCO in numbers

- PhD theses: 2008 onwards
- Licentiate theses: 2-3 in 2006
- MSc theses: 9/year so far
- Batchelor theses: group / year?
- Seminars: 2/year, Projects: under discussion
- Project consortia workshops: 1-2 for project/year
- Publications in 2005: 12 completed
- Personel growth in 2006
- Funding: 150.000-200.000 euros / year

Project family