
IDEA 2006

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Integrated e-learning environments

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Victoria University Flinders Street Campus,

Melbourne Australia

Transport Integrated Learning and Information Service: Overview and drivers

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TILIS Vision

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TILIS is shared infrastructure focussed on providing a transport and logistics industry related electronic exchange and market able to improve the discovery, sharing, trading, and access to learning content and information services

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TRANSPORT AND LOGISTICS CENTRE

Building capability in transport and logistics

What is the TILIS project?

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- TILIS is a project that involves over \$1.5 million to establish a national transport and logistics (T&L) industry web gateway
- TILIS is being built by Tradegate Australia Ltd (www.tradegate.org.au)
- TILIS is part of the responsibilities of The Transport and Logistics Centre (TALC) (<http://www.talc.com.au>)
- TALC is a 'solutions oriented' \$8 million initiative sponsored by the Commonwealth and NSW State Governments, housed as a project in the Ministry of Transport (NSW), and chartered to work with industry and government agencies to build capability across the national T&L industry

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TRANSPORT AND LOGISTICS CENTRE

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What is TILIS?

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TILIS will:

- Built a service oriented, open, standards-based Internet gateway or national exchange for commercial and non-commercial digital objects
- Support single, perpetual sign on and central authentication (identity management)
- Provide access rules and permissions for reuse and rendering of objects (based on the owners' permissions and rights management)
- Implement a range of categorisation structures
- Make objects/content discoverable and accessible where suitable permissions have been allocated with sign on
- Working with DEST and ADL TALC will ensure TILIS advances a **CORDRA** Digital Repository (Content Object Repository Discovery Registration Architecture). This will manage meta data to permit content and data to be published and searched across many digital repositories, whilst maintaining user rights and privileges

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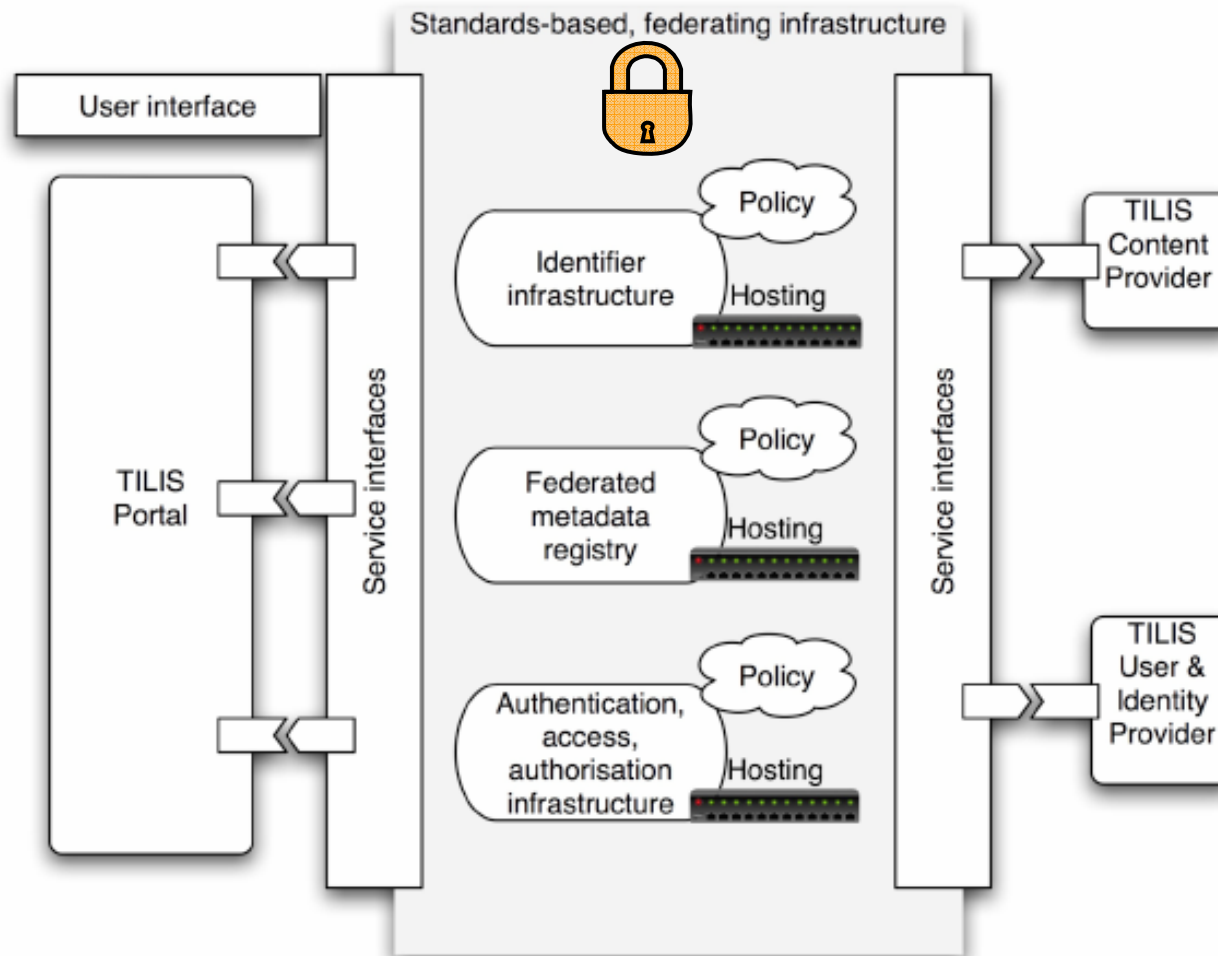


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TILIS gateway and repository

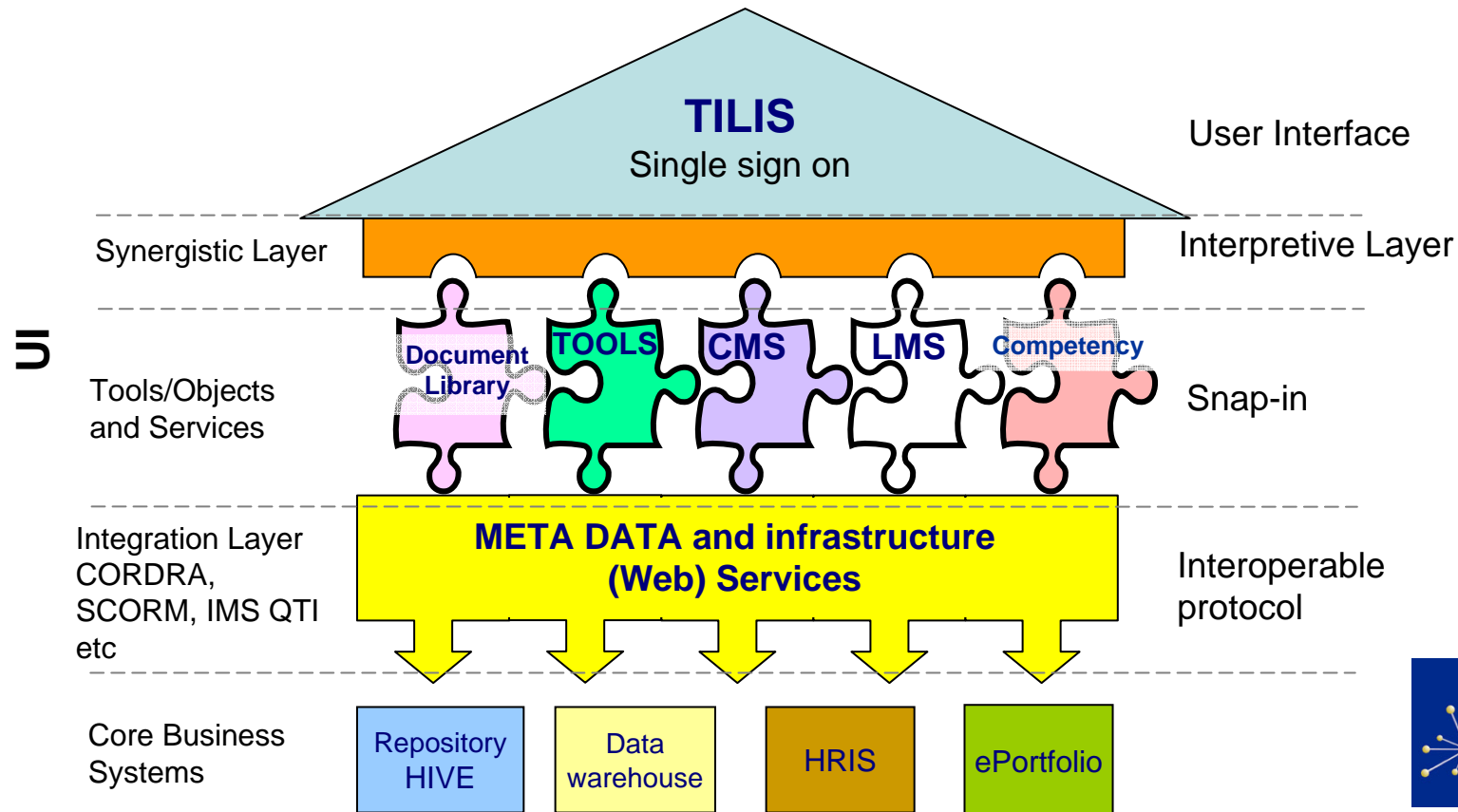
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TILIS: Shared infrastructure

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LMS= Learning Management System
CMS = Content Management System

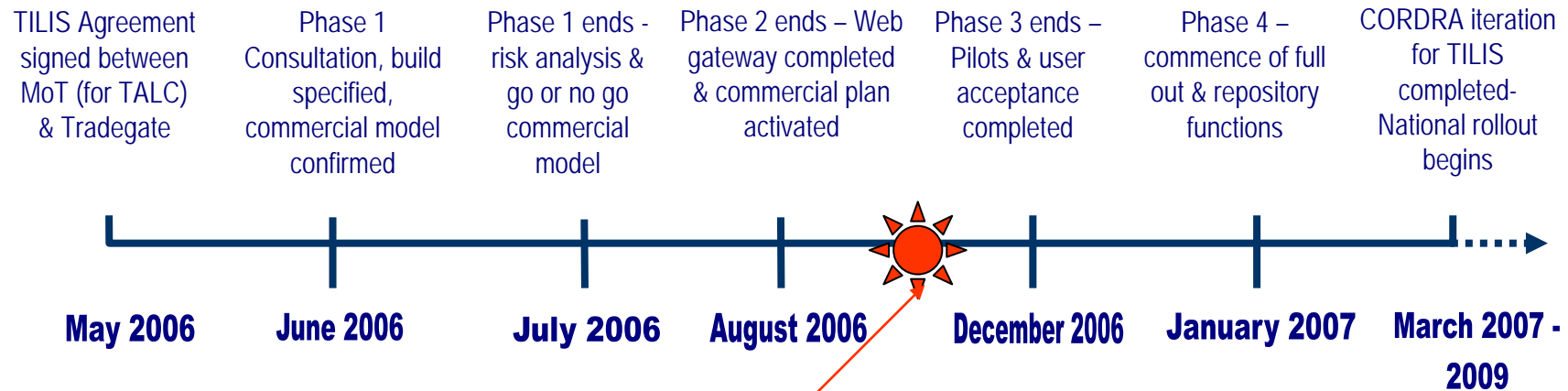


Building capability in transport and logistics

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TILIS Timelines

Activities



We are here,
on time and on budget

Collateral funding
i.e. Commercial partners;
national input from projects
sponsored by Department of Education
Science, & Training.

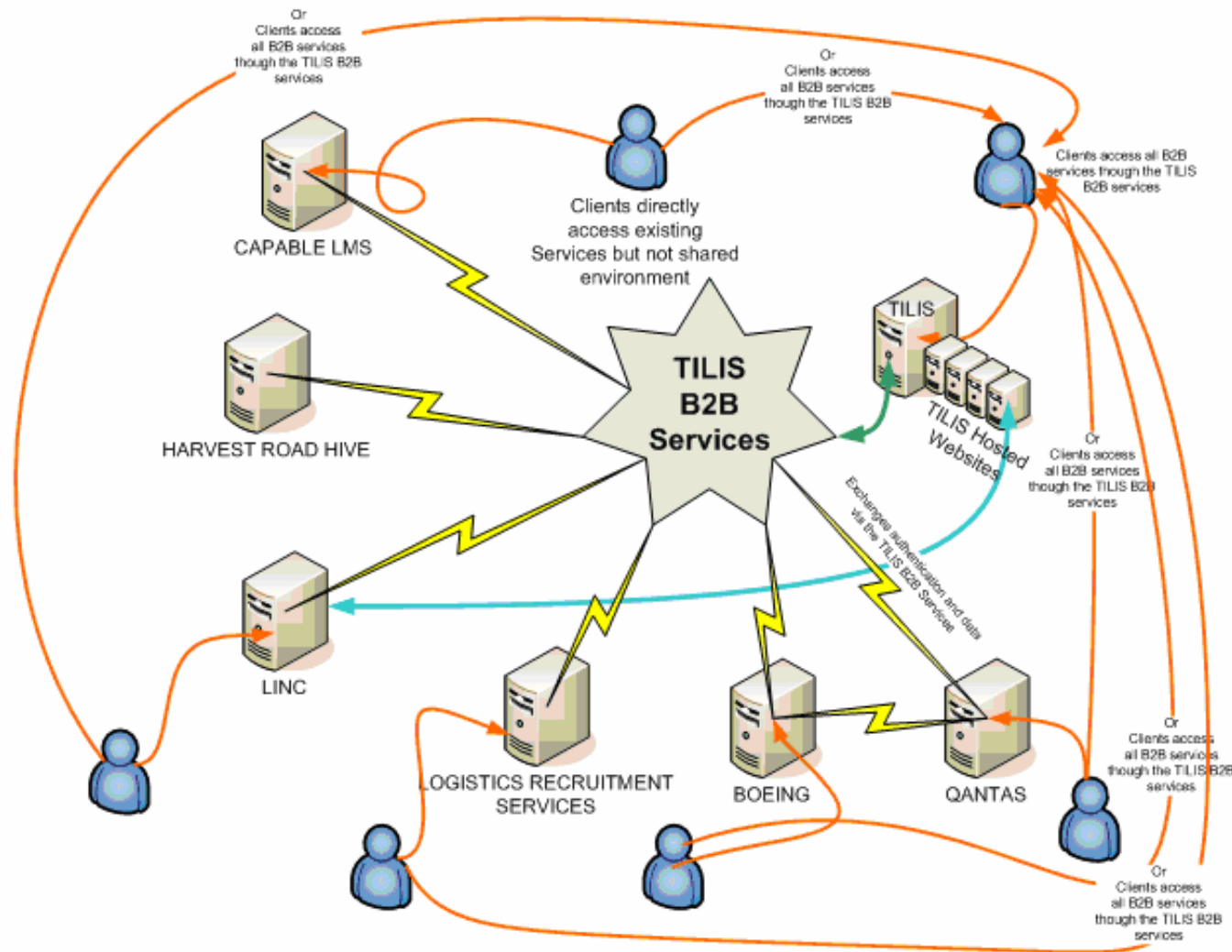


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TILIS pilot model

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Building capability in transport and logistics

TILIS is an investment in **!dea** cap'*abilities*'

- *Discoverability* of knowledge and content
- *Sustainability* of service
- *Searchability*/ *Browseability* across systems and different types of content
- *Interoperability* with existing technology and systems
- *Accessibility* -Infrastructure supports access by many, to their preferences
- *Re-useability* of content across organisations, locations and sectors
- *Flexability* to create multiple strategies for metadata and content packaging
- *Reliability* of access and identity
- *Affordability* - making learning objects and information sharing more cost effective
- *Scalability* of solution and service
- *Accountability* of maintenance and government structure

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Based on Marcia Harrison (2005) *Cranfield University EMS*, Presentation at the International Hive™ User's Group, Perth.



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Drivers

(for later reference)

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Foundation principles

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In 2003 key principles were set as the foundations for TILIS

- open architecture, user oriented
- no reliance on a single vendor
- reduce capital costs to industry seeking to engage in learning and content activities
- many to many, supply chain view
- about commercial sustainability (demand-side), not the technology or the providers (supply-side)
- on demand, pay on use

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TILIS shares !dea value along the supply chain

- TILIS is a web gateway to access and present services
- TILIS has a repository that federates content across a supply chain
- TILIS adds value but is not a 'market player'
- A content **supply chain** is about creating and managing a **value chain** where all activities operate in a coordinated, integrated and seamless manner among all members of the chain thus producing lower inventories, responsiveness to market needs and optimal customer satisfaction.

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Building capability in transport and logistics

TILIS is part of a wider evolution

Idea

Data → **Information** → **Knowledge**

Capture individual records, improve manual processes

Share data, and integrate technology and systems

Purpose driven, supply chain view

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© Bowles 2002 in *E-learning testbed report*,

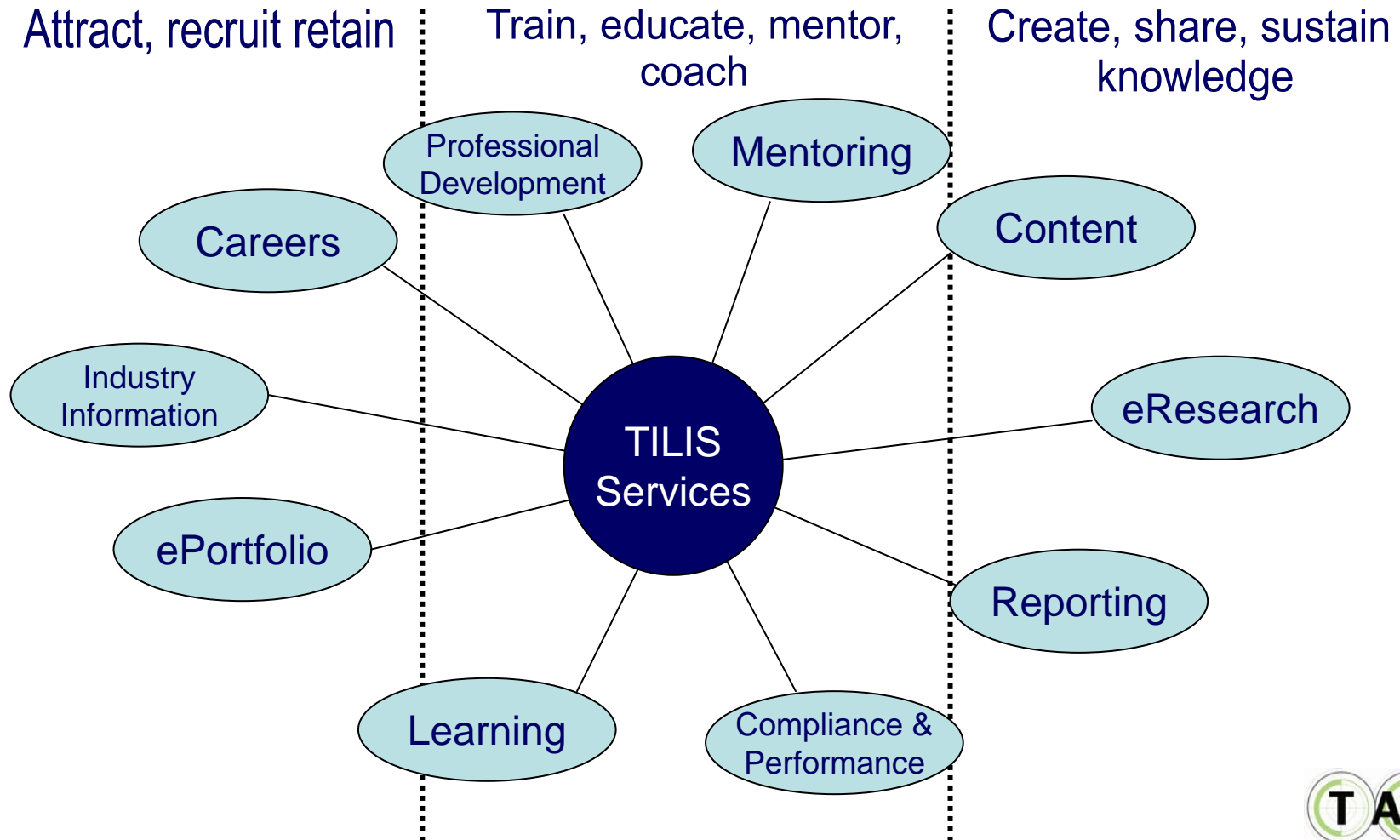
<http://marcbowles.com/projects.htm>



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TILIS T&L supply chain **!idea**

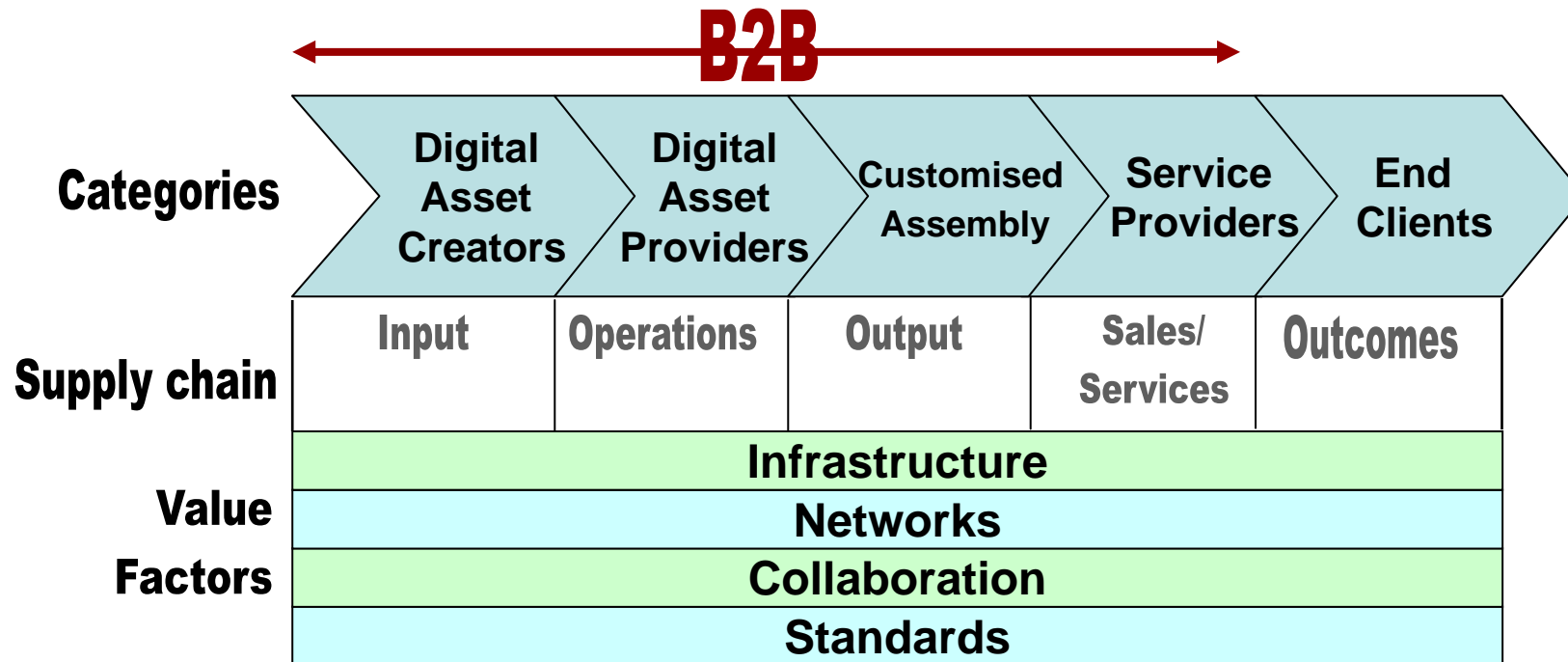


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TILIS

knowledge value chain

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New value paradigm **!idea**

As shared infrastructure TILIS creates value because it:

- **lowers capital costs** by providing infrastructure
- creates a **channel** to market where effective use/reuse increases the intellectual property value of content
- forms a **market** that moves content and related technology from a cost (input) to an investment (outcome)

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TILIS content eMarketplace **!idea**

- system and configuration for many-to-many exchange and trading of content (i.e. between authors and content users, between educational providers and students)
- Infrastructure, if required, to link in other educational (i.e. a LMS or an eportfolio) or corporate technology (i.e. compliance, performance reporting)
- critical mass in exchange and trading of content at an aggregated level (courses) or disaggregated level (an object-level)
- adds volume and value to the existing repositories, learning technologies and virtual networks
- supports users (authors, educators, students, etc.) search, discover, and access any available information or content
- supports e-commerce and business systems
- works 'at scale' and will be sustainable

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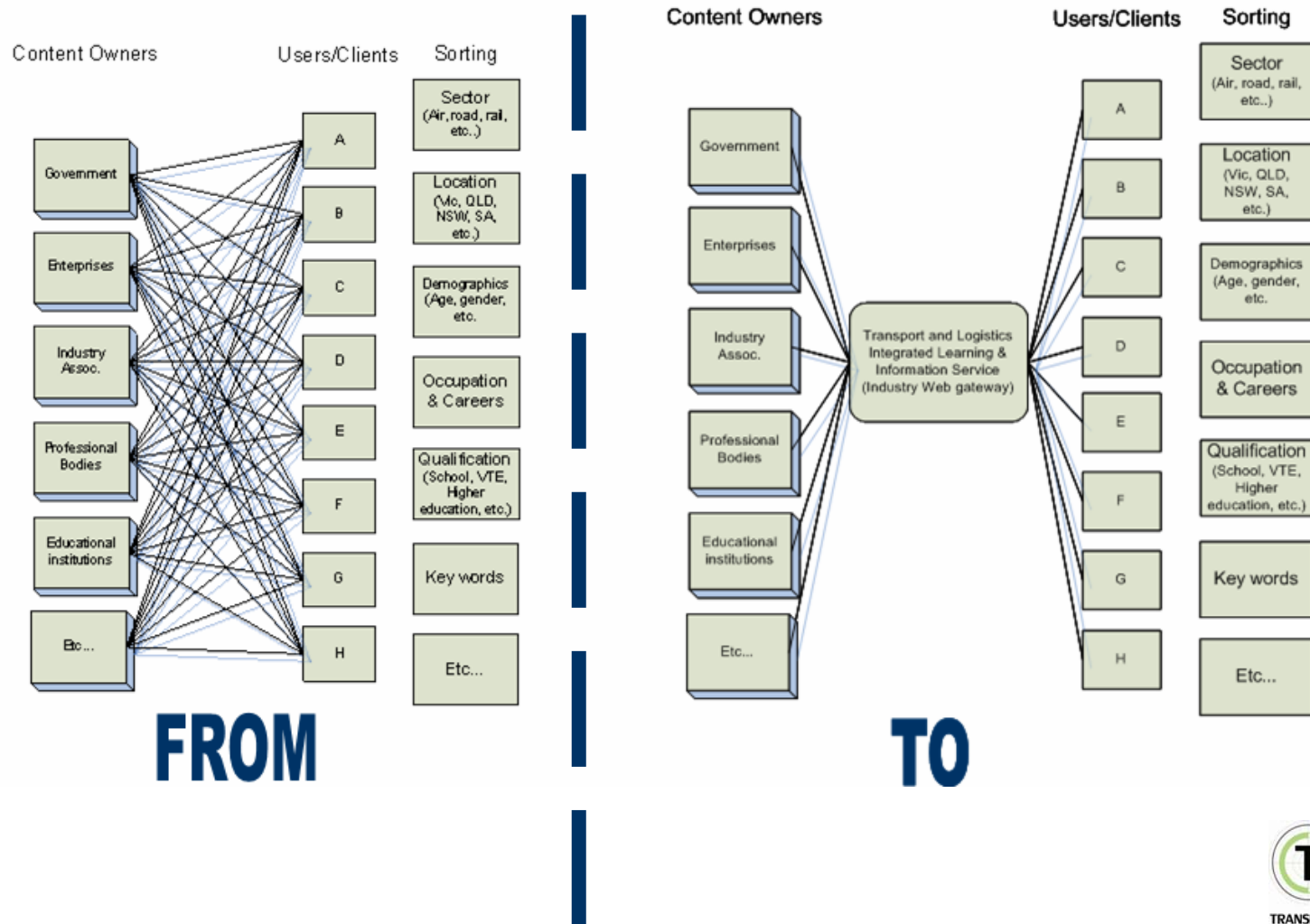


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Many-to-many content exchange

Idea



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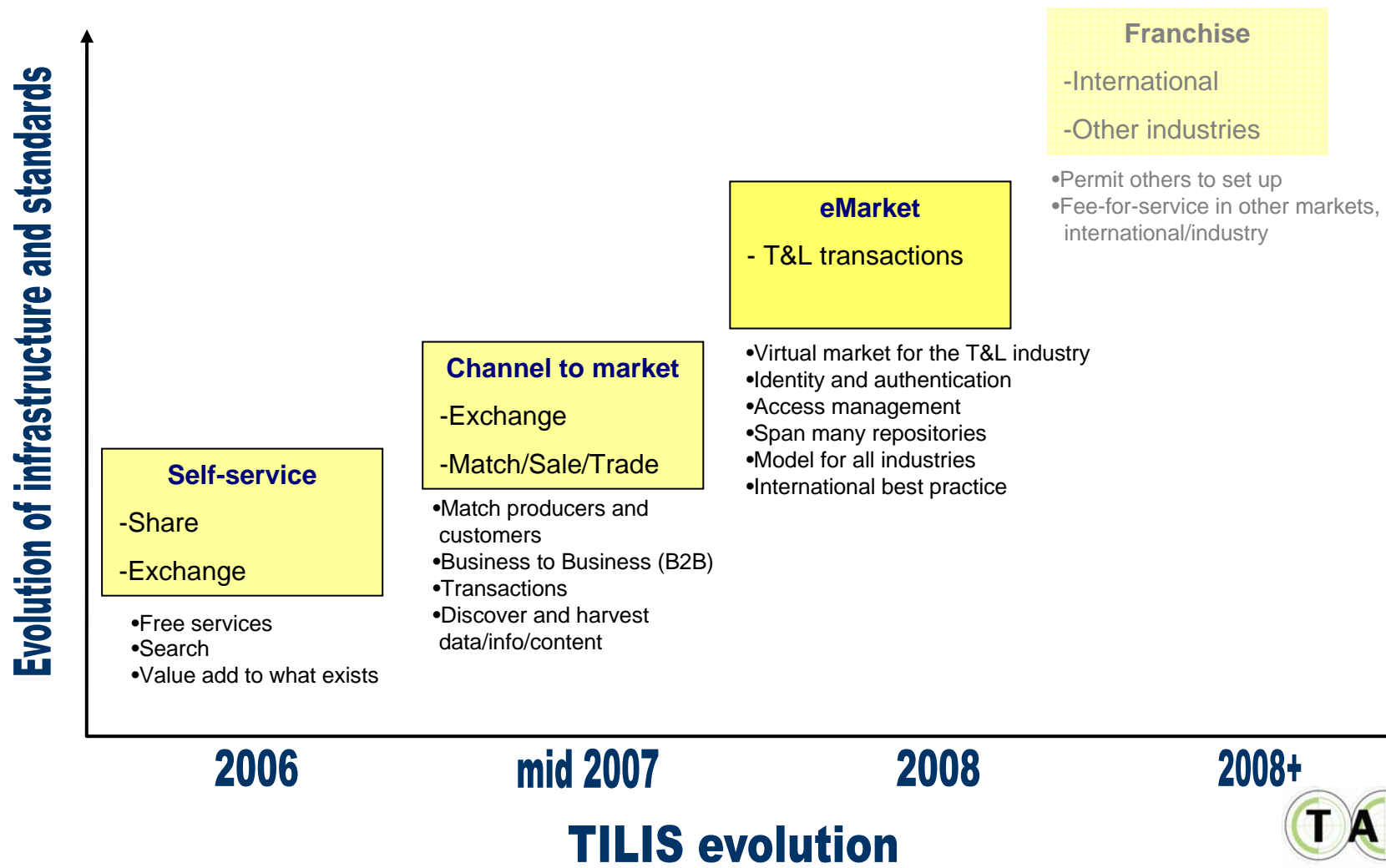


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TILIS can evolve to become a marketplace

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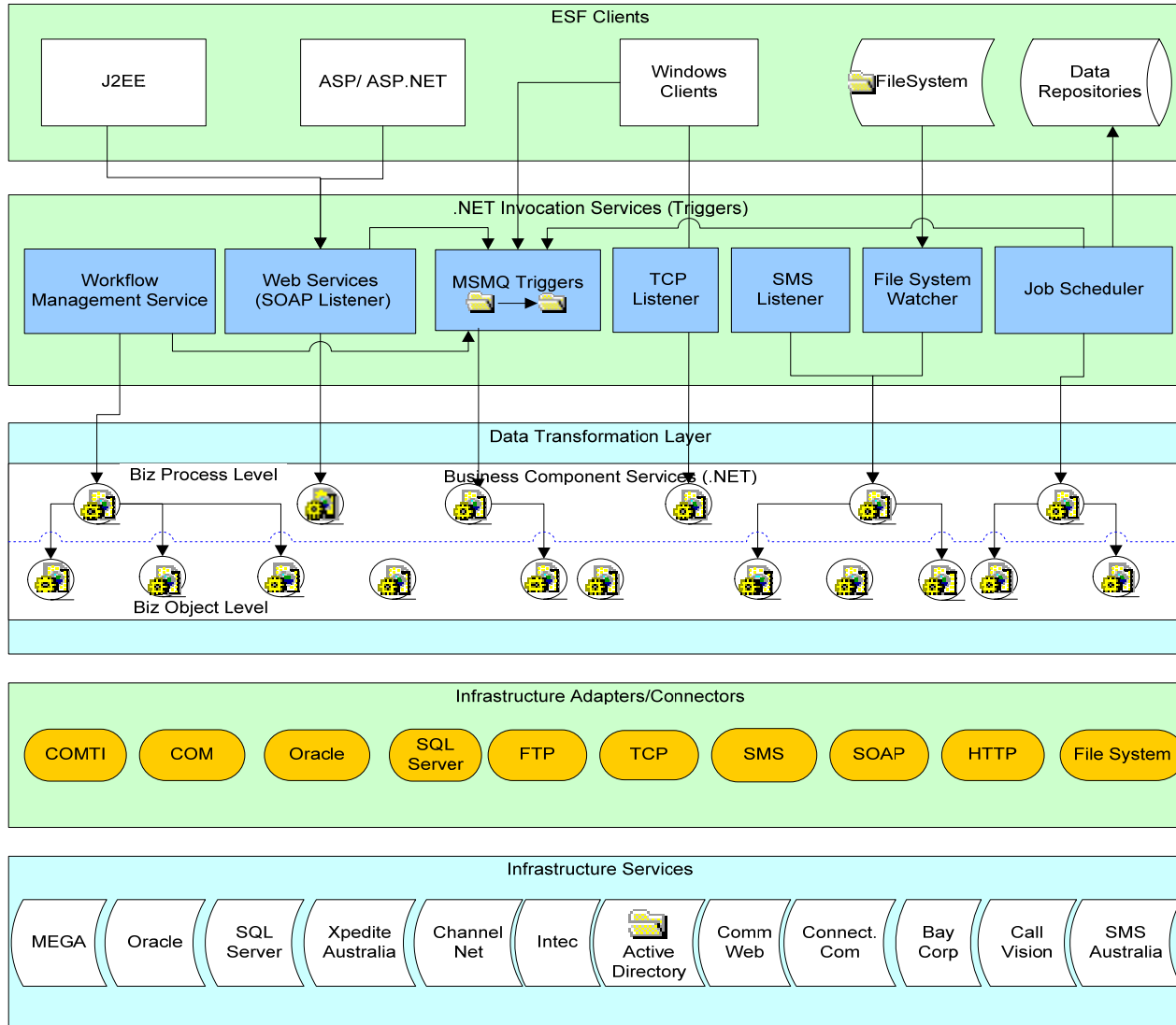
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TILIS Enterprise Services Framework Architecture



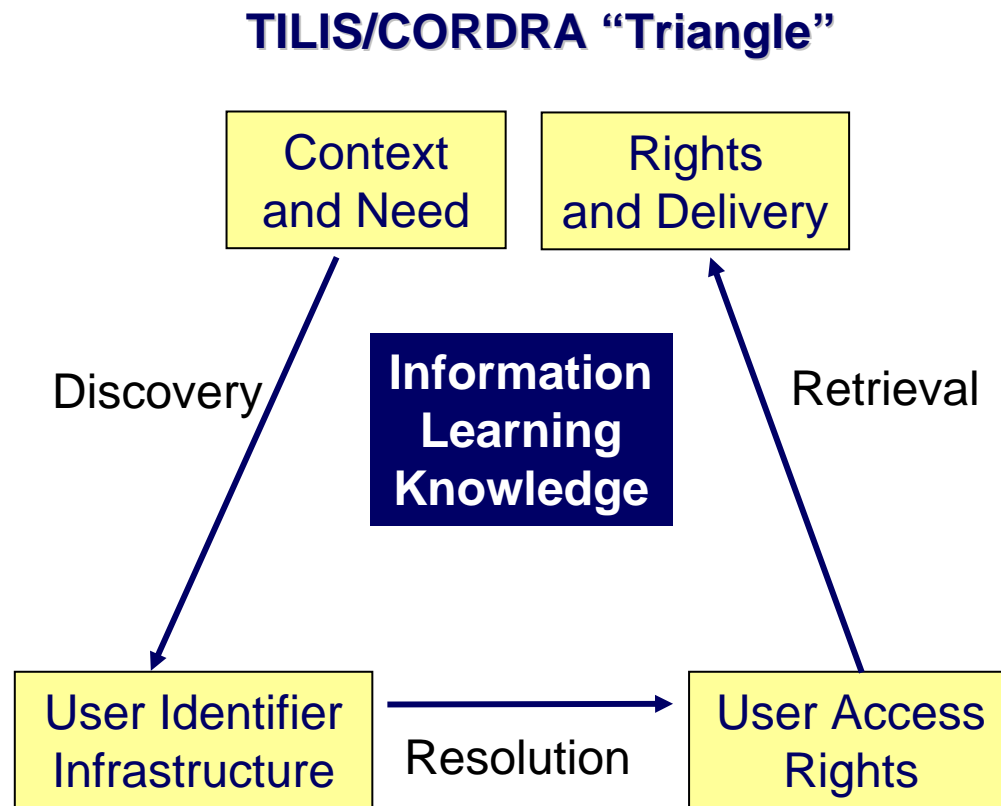
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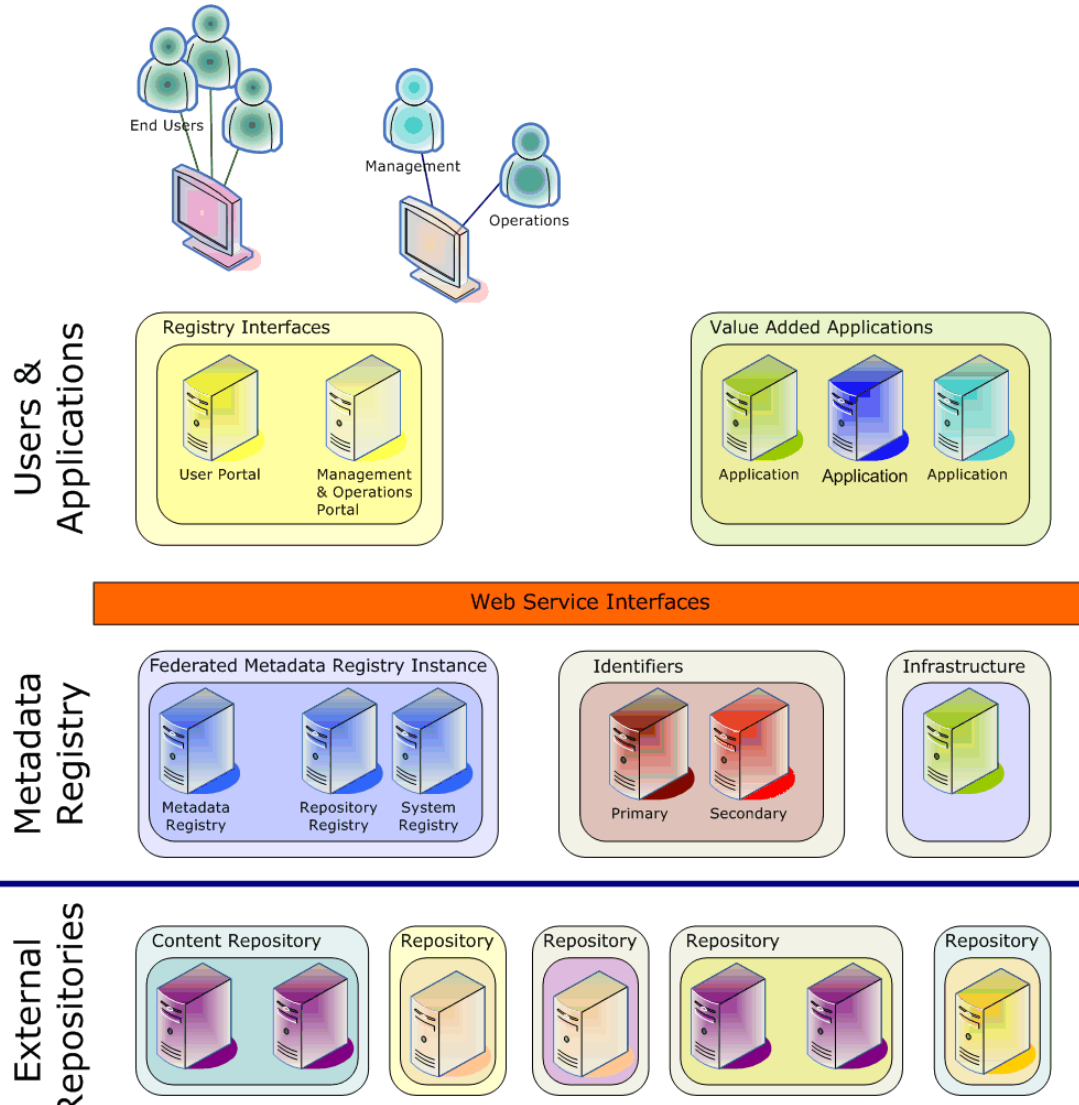
TILIS as an integrated model for shared digital infrastructure **!idea**



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CORDRA Model

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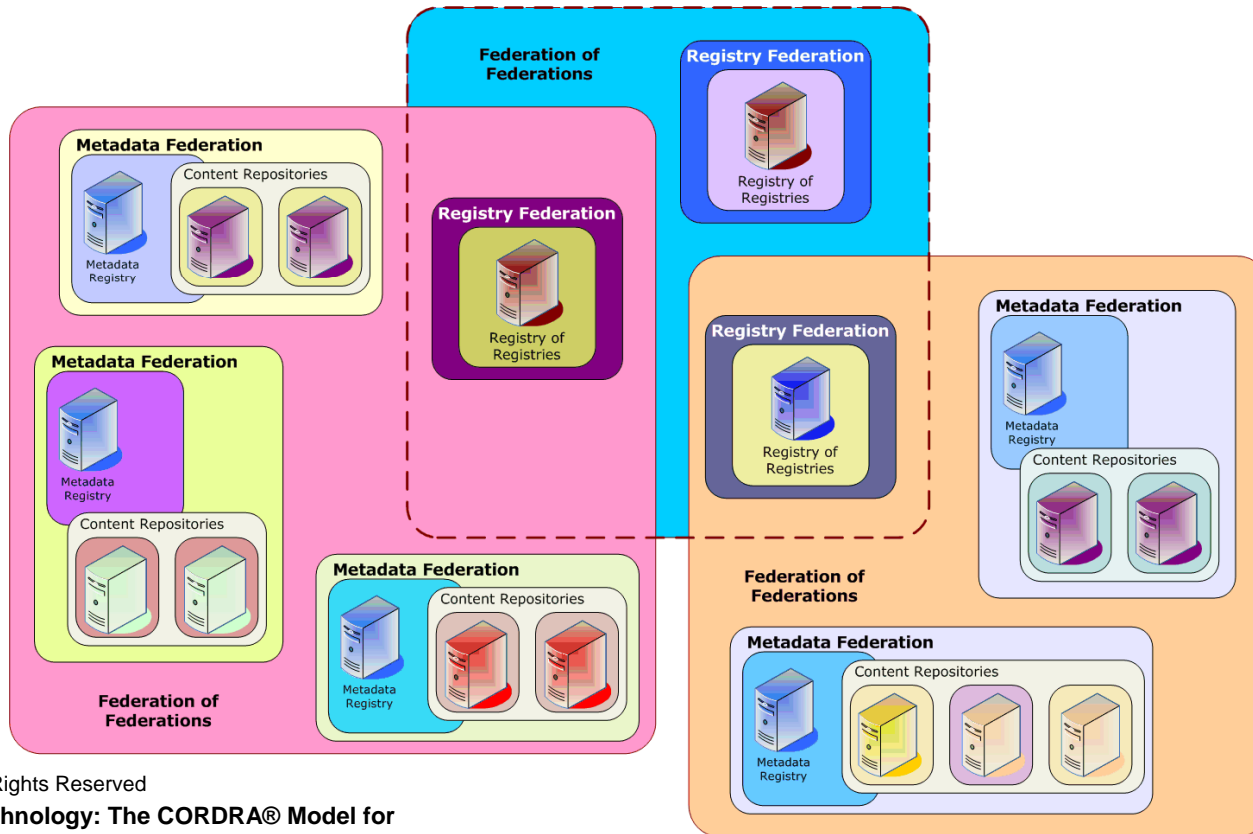
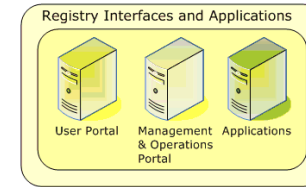
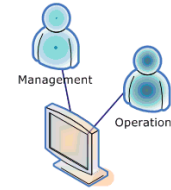
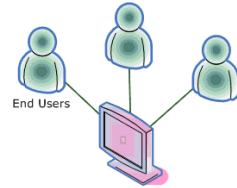


TILIS



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TILIS can help form a national **!dea** federated CORDRA



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