

!dea

e-Framework Overview

Melbourne, October 11th 2006

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- Scene setting
- Context
- Terminology
- Making sense of it all!

A Summary ...

- Initiative of DEST and JISC (UK)
- Informed by earlier work
 - ELF (e-learning Framework)
 - IMS Abstract Framework
- Primary goal:

to facilitate technical interoperability within and across education and research through improved strategic planning and implementation processes

Guiding Principles

- A service-oriented approach to system and process integration
- Development, promotion & adoption of Open Standards
- Community involvement in development
- Open collaborative development activities
- Flexible and incremental deployment

To achieve this we must have:

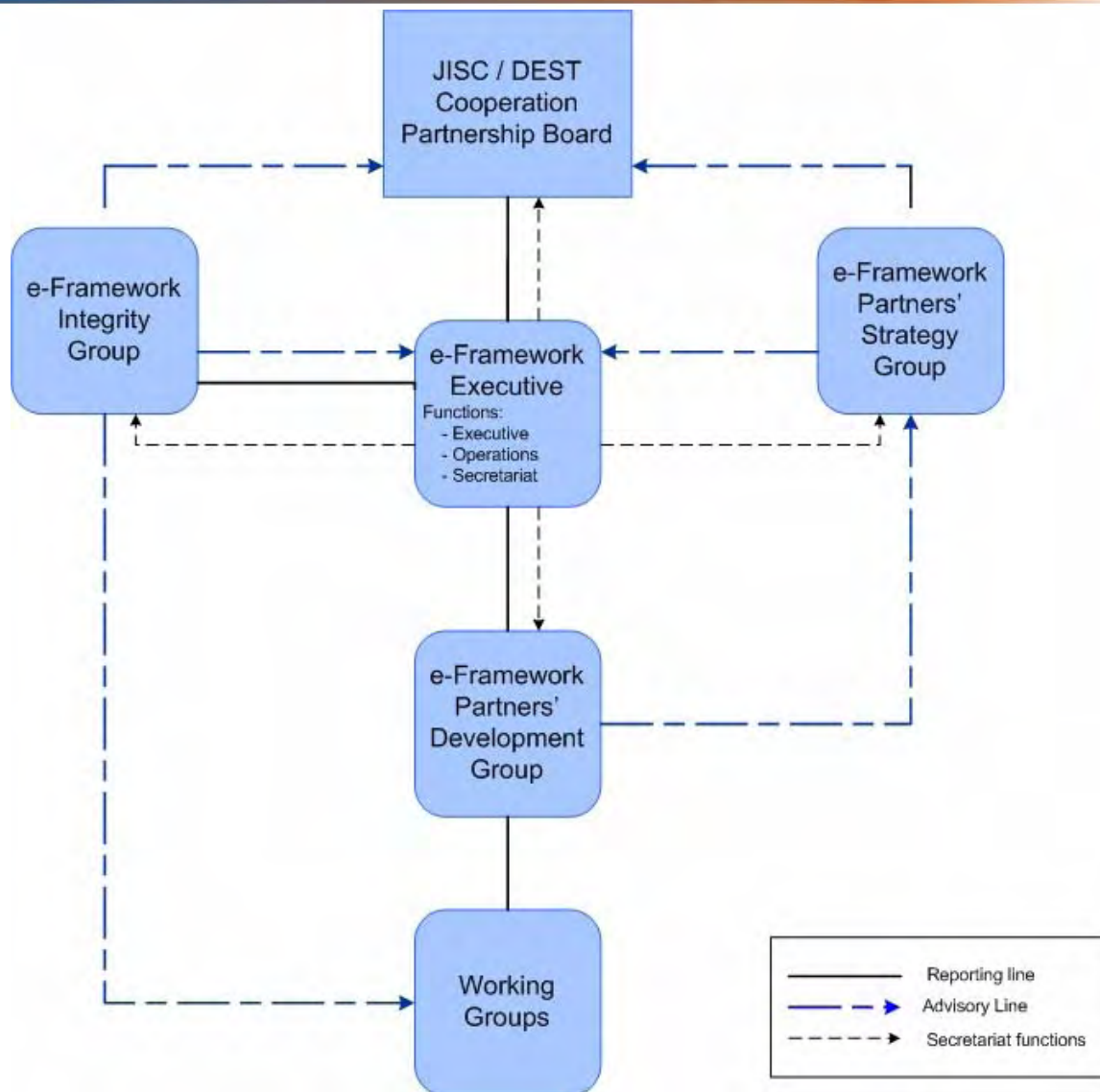
A way to...

- Describe and talk about tools & systems
- Integrate diverse tools and systems
- Develop a common understanding of what we have done & can do
- Map a path forward to work on systems

Building Community Involvement

- Recently joined
 - New Zealand Ministry of Education
 - SURF Foundation, The Netherlands
- Cooperation Agreement with IMS
- Joint Enterprise project with IBM, Rice
- IMS working group on SOA
- Local involvement

Governance



A framework for thinking about & documenting IT systems in terms of component behaviours

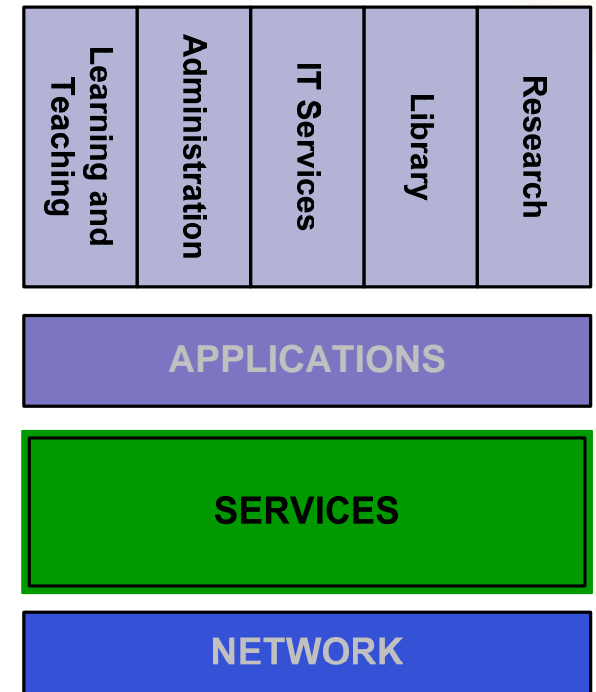
... described as services

and aimed at understanding better the points at which we need to integrate & interoperate

Open standards-based interfaces
for interoperability
In a service-oriented environment

The e-Framework analyses and
documents

SERVICE INTERFACES



Context

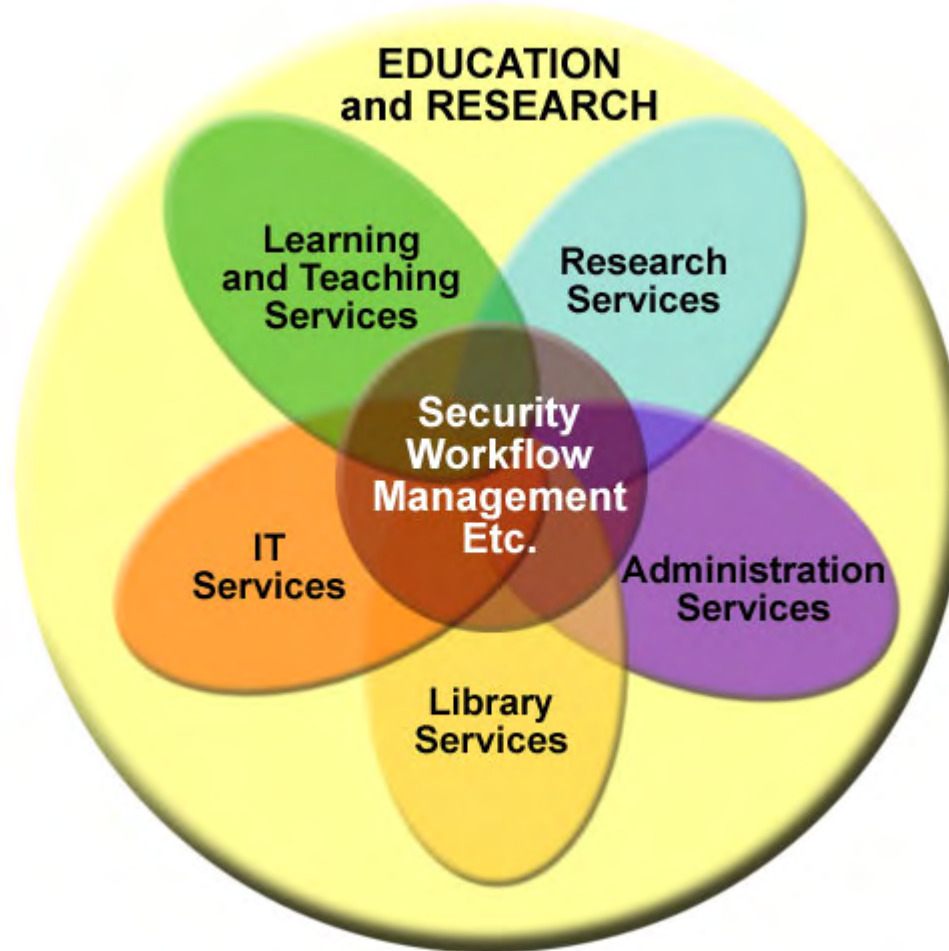
- New capabilities of Internet technologies
 - Web 2.0
 - Service Oriented Architectures
 - Grid computing
 - Wireless & mobile access
 - Open source innovation
 - Standards & specifications are key

- “e” is enabling & transforming more than learning
 - Teaching, Learning, Training
 - Research
 - Administration
 - IT Services
 - Library Services

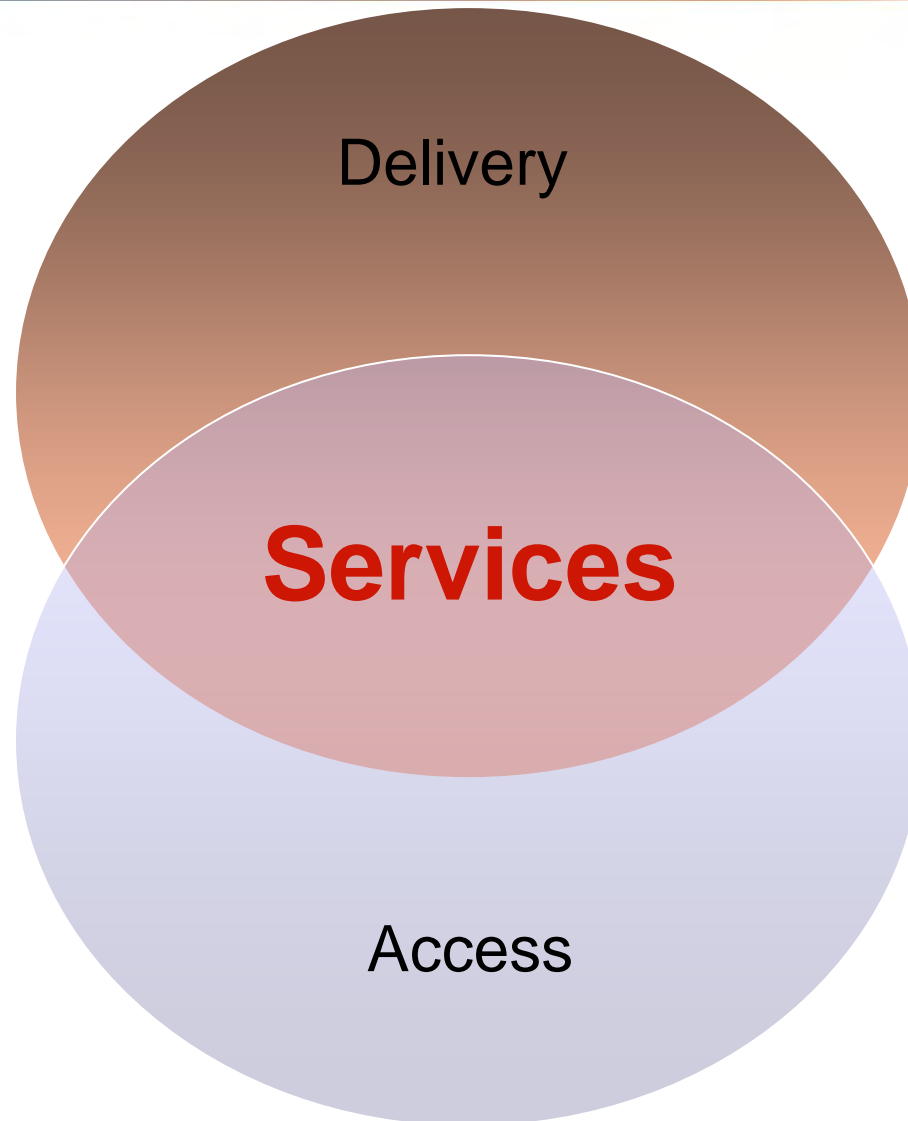
a complex ecosystem

- ICT Infrastructure is costly to build & maintain

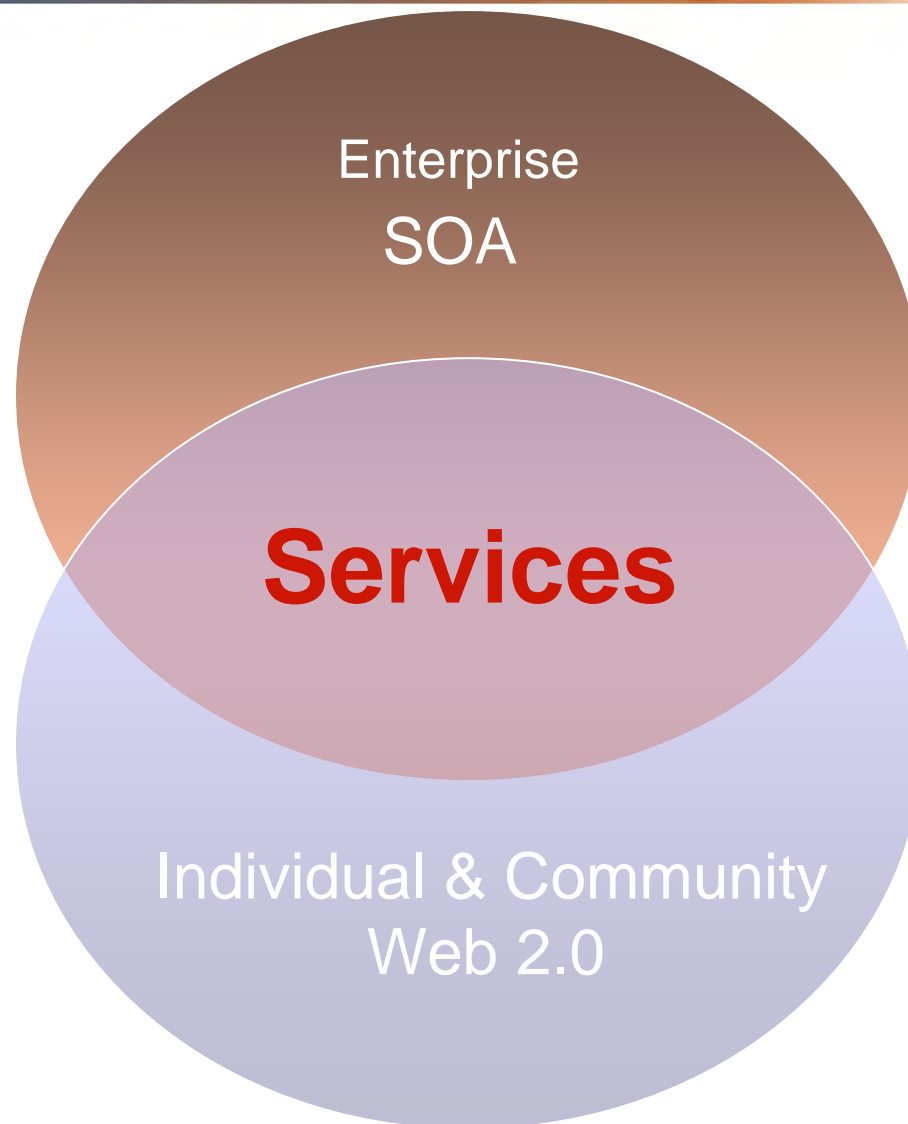
Domains in Higher Education



A Buzzword?



A Buzzword?



- is always contextual
- needs to be precise when defining specifications & standards

In the e-Framework:

- needs structure & coherence
- aligns business processes and requirements with technical capabilities

- A significant effort has been made to agree on core terminology
 - Necessary for the Knowledge Base / Website
 - Defined core concepts & models
 - Drawn on work of W3C, OASIS SOA TC...
- Attending to this issue earlier rather than later a strategic choice!

Words, Concepts, Terms, Jargon

Web Services & web services

Service-oriented approach

Service Oriented Architecture

WS*I

SOA

Service Oriented Integration

SOI

SOBAs

Service-enabled Infrastructure

Services

Service Genres

Service Expressions

Service Patterns

Service Usage Models

Service Implementation

Service Classification Schemes

Service Definitions

Service Instance

Service Description

SUMs

SOAP

WSDL



The screenshot shows the JISC website with a navigation menu, a main banner, and a 'what we do' section. A red circle highlights a search box with the text 'Select a service' and a 'view service' button. To the right of the search box are three red question marks '???'.

JISC

home about us what we do funding opportunities publications news events

supporting education and research

what we do



The mission of the Joint Information Systems Committee (JISC) is to provide world-class leadership in the innovative use of Information and Communications Technology to support education and research.

JISC funds a national [services](#) portfolio (e.g. JANET) and a range of [programmes](#) (e.g. Digital repositories) and [projects](#) (e.g. NewsFilm online).

services we fund:

Select a service

themes we cover

Select a service

- Archives Hub
- AHDS
- Athens
- Biz/ed
- BUFVC
- Census Dissemination Unit
- Copac
- CrossFire
- Digimap Collections
- Digital Curation Centre
- EDINA
- Education Image Gallery
- Eduserv
- ESDS
- ESDS International
- Film & Sound Online
- Hairdressing Training
- The Times Index
- IESR
- Intute
- ISI Web of Knowledge
- JANET
- JISC CETIS
- JISC Collections
- JISC infoNet
- JISC Legal
- JISC Mirror
- JISC Plagiarism Advisory
- JISC RSCs

Select a service

access
we do
funding opportunities
publications
news
events

ation and research

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view service

themes we cover

Guiding Principles

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- Flexible and incremental deployment

Principles of Service-Orientation

- 'Business' requirements leveraging IT resources flexibly
- Harnessing diverse IT capabilities through 'loose coupling' of discrete components
- Reducing complexity of IT systems development
- Empowering the user
- Connectedness, not silos!

“A software development strategy for describing enterprise solutions utilising discrete components of business functions”

to facilitate **technical interoperability** within and across education and research through improved strategic planning and implementation processes

Goals of SCORM

- Interoperability
 - Reusability
 - Accessibility
 - Durability
 - Adaptability
- e-learning content
& delivery systems

Goals of the e-Framework

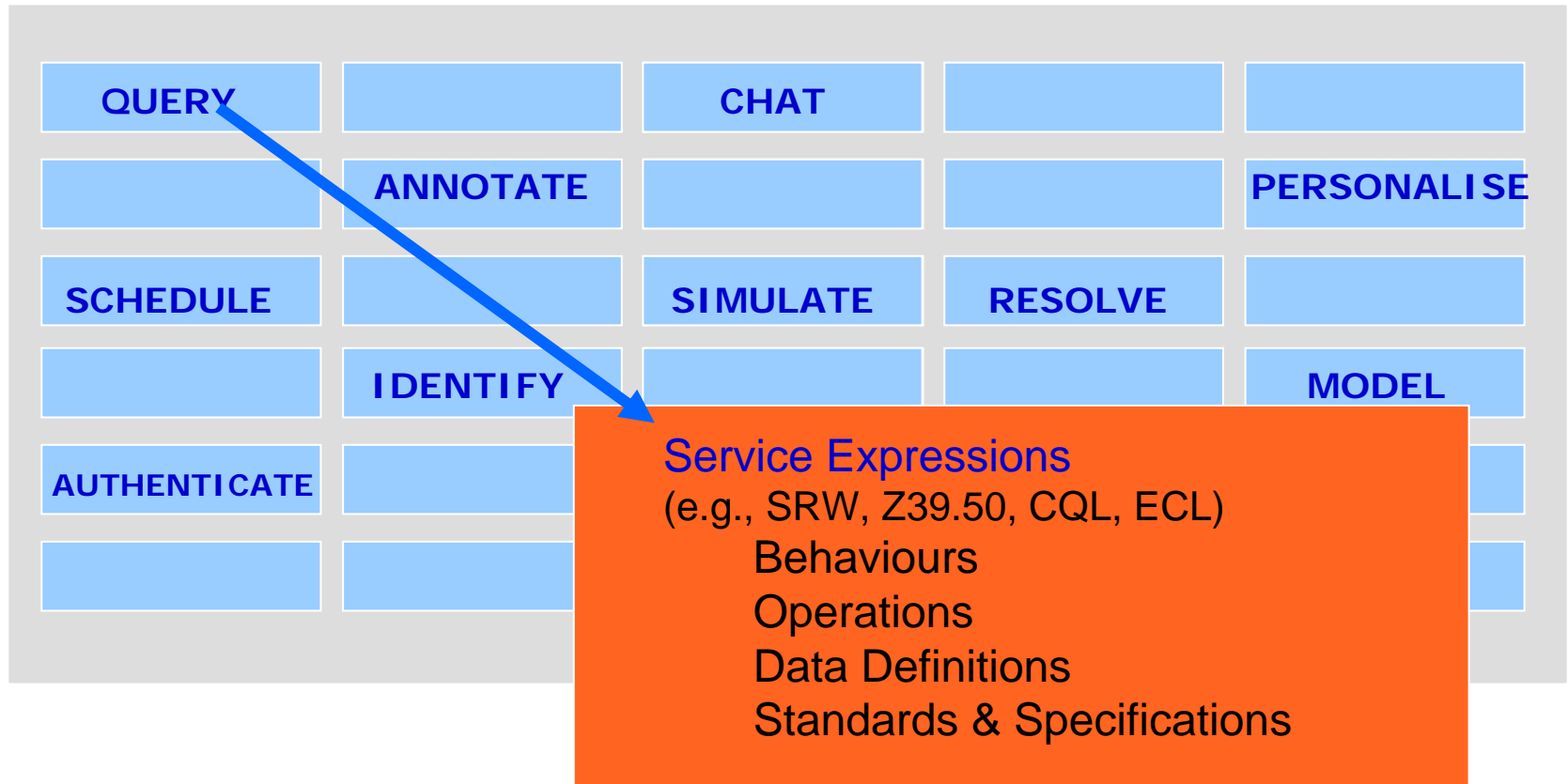
- SCORM goals ++
- Composability
- Flexibility
- Agility
- Scalability
- Sustainability
- Simplicity
- Integration

Service Exposure,
Access & Delivery
across & within
Domains

Service Genres

QUERY		CHAT		
	ANNOTATE			PERSONALISE
SCHEDULE		SIMULATE	RESOLVE	
	IDENTIFY			MODEL
AUTHENTICATE		AUTHORISE	REGISTER	
				NOTIFY

Collections of related behaviours describing an abstract capability that supports a business process

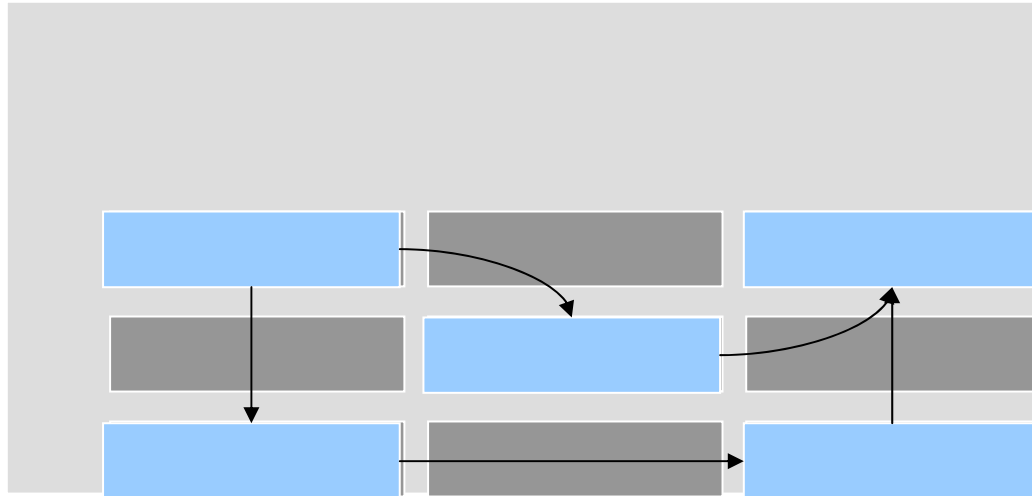


Expressions are specific cases of genres & can directly inform the design of an implementation

An Analogy

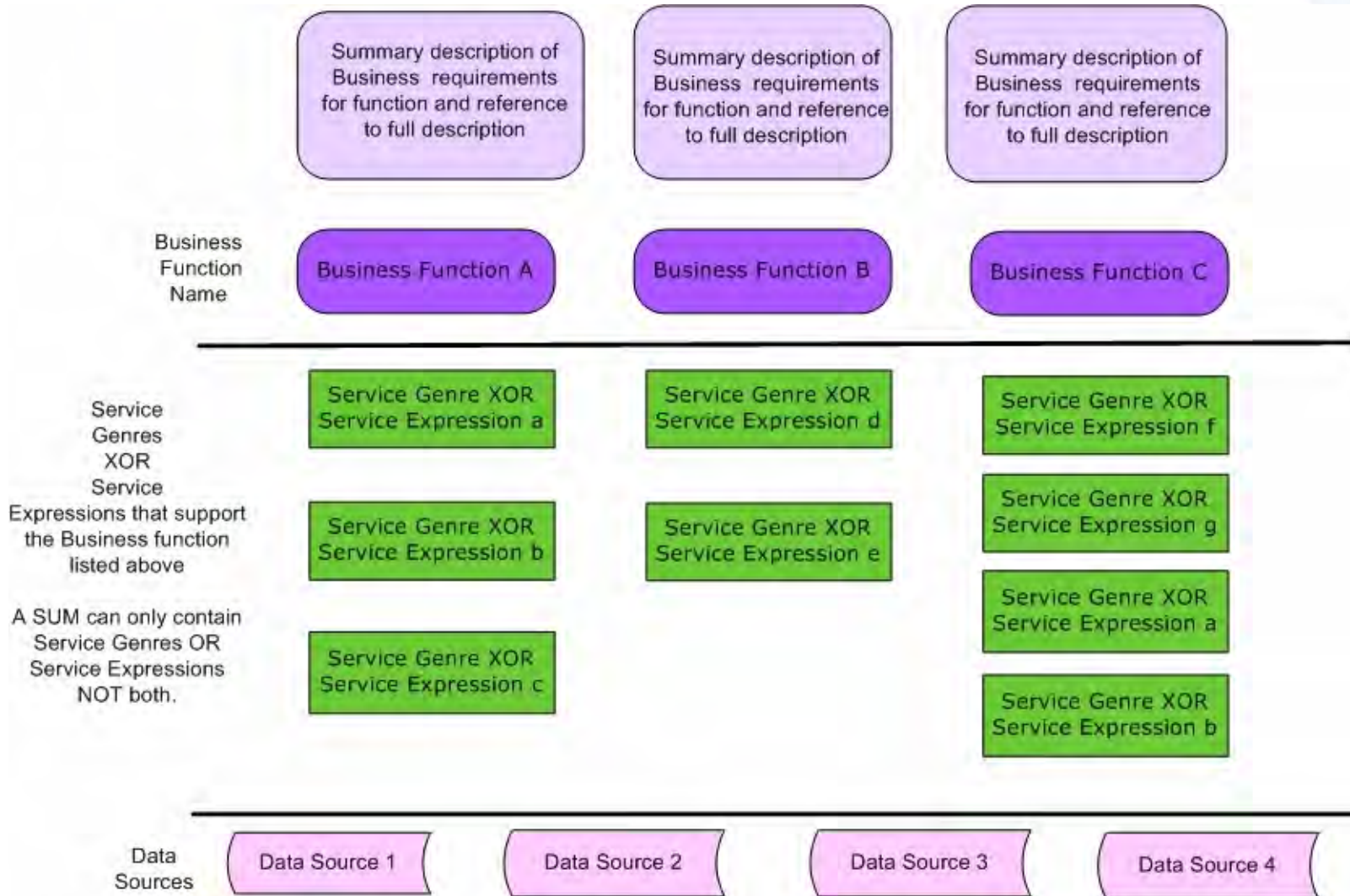
Service Genres	Behaviours	Service Expressions
Preparing Bill of Lading/ Shipping instructions	Select sender Select recipient Select delivery method (std, exp) Select payment Select insurance Select customs info	Online form Paper form prepared by sender Paper form prepared by shipper
Transfer to shipper	Ingest into delivery system Track pickup/Notify sender Track pickup/Notify recipient	Drop box Counter Home pickup Business pickup
Delivery	Track delivery/Notify sender Track delivery/Notify recipient Delivery release	Pickup from shipper Delivery to address by truck Delivery to address by postal carrier
Tracking/Alert	Track status	Notify (push email) Check status (lookup)
Delivery confirmation	Send confirmation	Electronic Post

Service Usage Models (SUMs)

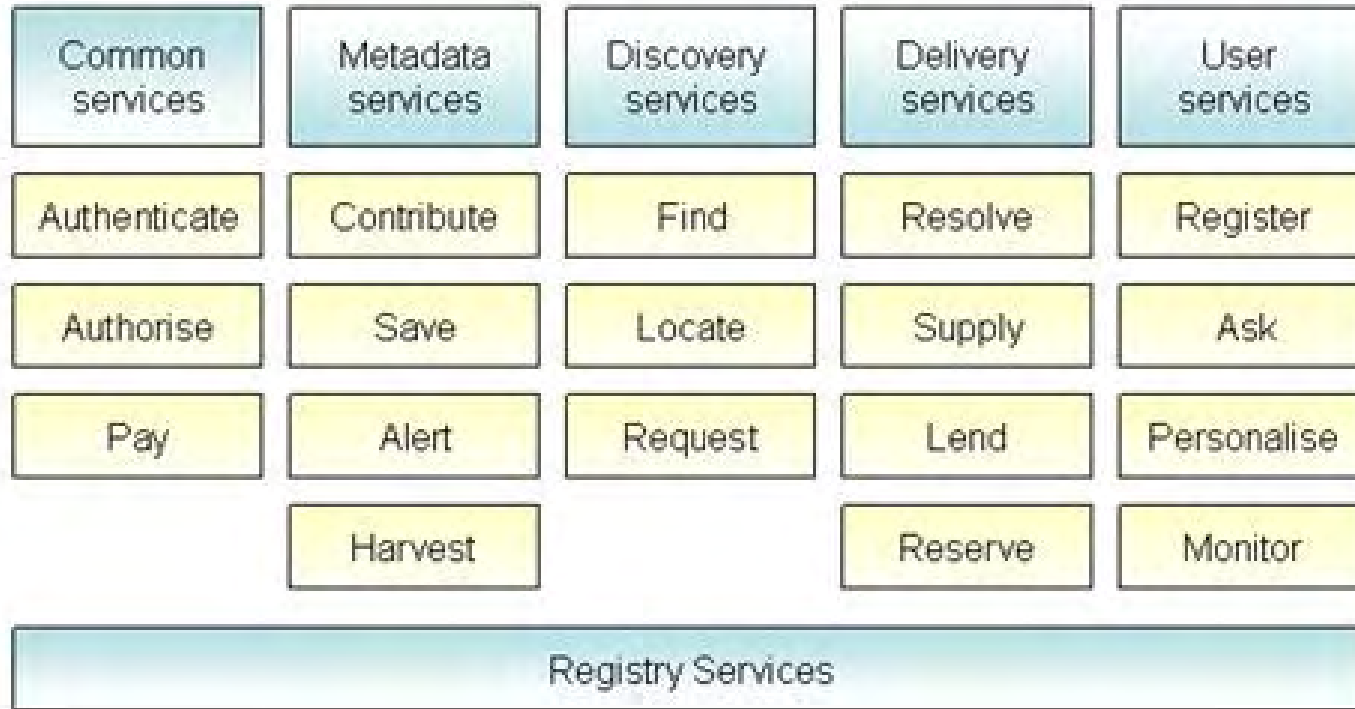


Structured collection of service genres &/or expressions and associated standards, specifications, protocols & bindings

Service Usage Models

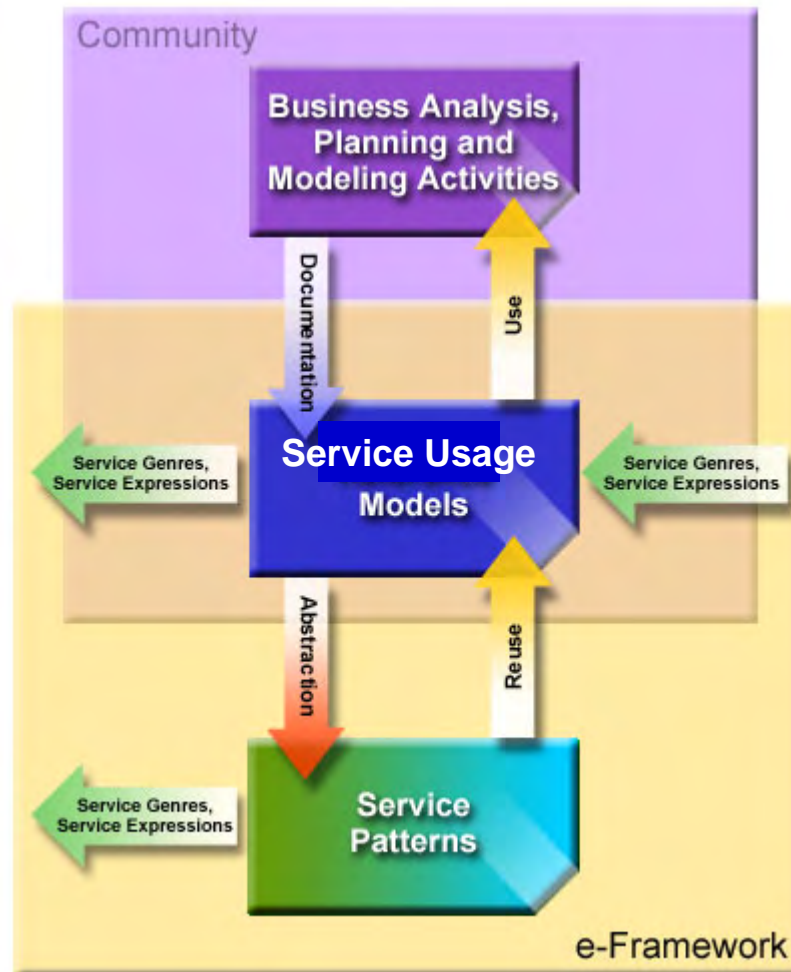


SUMs – Business Driven

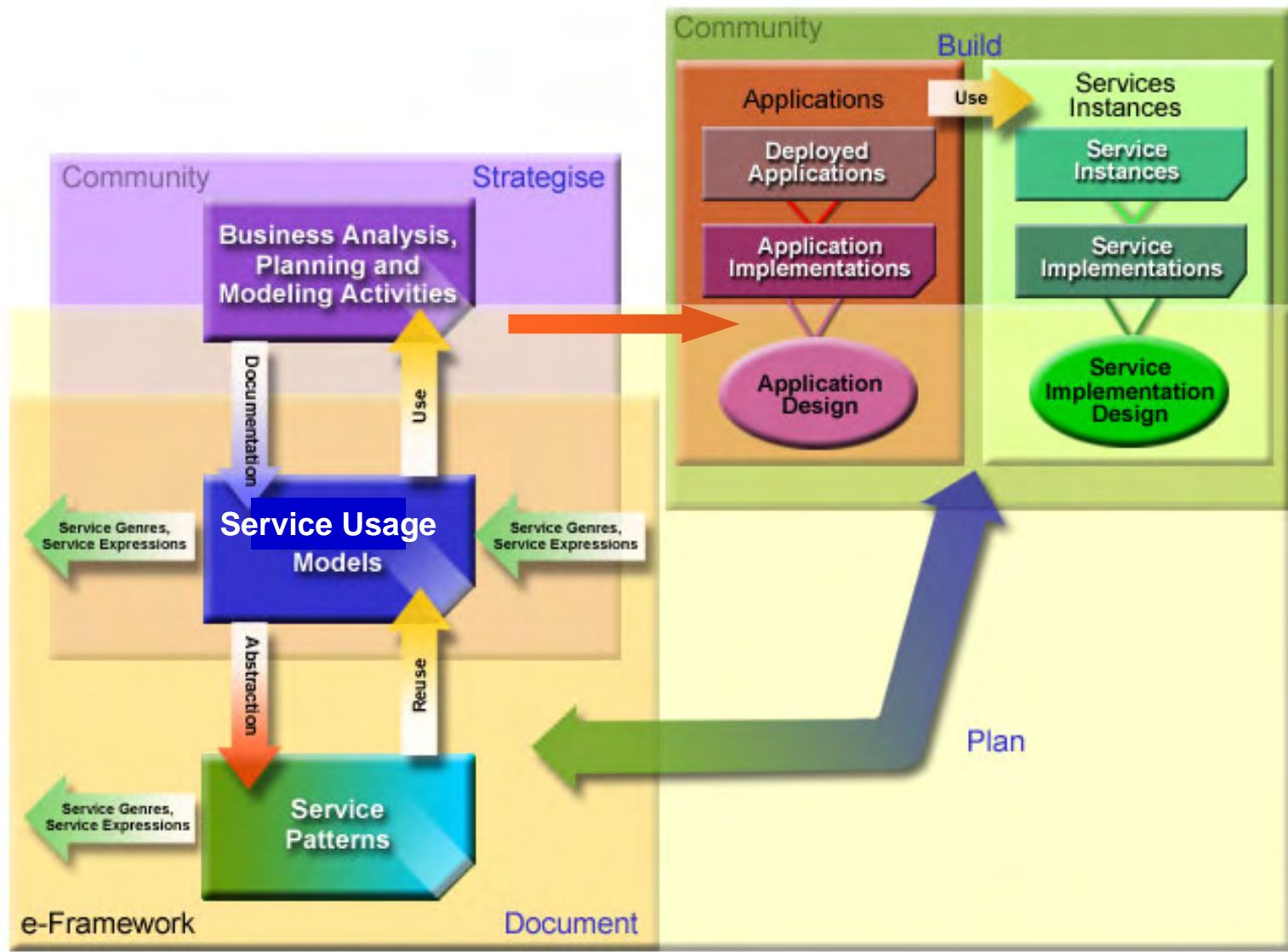


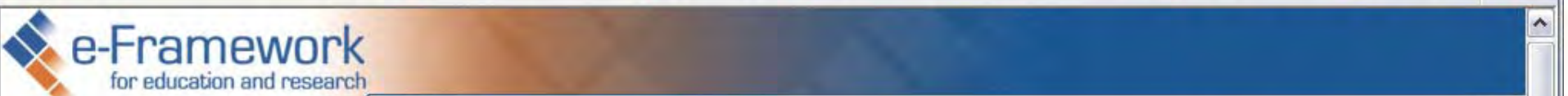
Judith Pearce (NLA) New Frameworks for Resource Discovery and Delivery
<http://www.nla.gov.au/nla/staffpaper/2005/pearce1.html>

Service Usage Model Processes



Community use of the e-Framework





Home

Login

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- About
- Guides
- Services
- Service Usage Models
- Communities
- News
- Resources
- Glossary
- Contact Us

An Overview

The **e-Framework for Education and Research** is an initiative by the UK's Joint Information Systems Committee (JISC) and Australia's Department of Education, Science and Training (DEST). The primary goal of the e-Framework is to facilitate technical interoperability within and across education and research through improved strategic planning and implementation processes.

A set of principles guides the development of the e-Framework:

- A service-oriented approach to system and process integration
- Development, promotion and adoption of Open Standards
- Community involvement in development of the e-Framework
- Open collaborative development activities
- Flexible and incremental deployment

Read More

The e-Framework is documented by:



The services model



Service Usage



The e-Framework

eFramework News

XML

Microsoft Open Specifications Promise

Friday, 15 September 2006

2006 Middleware Forum and CAMP

Monday, 11 September 2006

e-Framework Forms Alliance with IBM

Monday, 11 September 2006

Service Modeling Language proposed

Tuesday, 15 August 2006

DEST Announces Systemic Infrastructure Funding

Thursday, 10 August 2006

Subscribe

Discuss

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Go!

Knowledge Base / Web site

- Focal point for dissemination of methodologies, good practice guides & results of analysis
- Detailed technical information and a register of services & service usage models
- Opportunity for community input & engagement

Knowledge Base / Website

- Assist in supporting a strategic approach to technical infrastructure development within & across domains
- Provide a consistent technical vocabulary for documenting components & services
- Act as a catalyst for the development of further specifications & standards

But the e-Framework ...

- is not intended to be prescriptive
- is not meant to be implemented all at once
- is not an architecture

and

- can only benefit from stakeholder input!

Questions?

www.e-framework.org

Subscribe to the e-framework newsletter

<http://www.jiscmail.ac.uk/lists/E-FRAMEWORK.html>

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