

# JISC e-Framework Workshop

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## JISC Development as Innovation

### JISC Strategy 2007-2009

- **JISC Mission and Vision:**

“JISC’s mission is to provide world-class leadership in the innovative use of Information and Communications Technology to support education and research.”

- Why the e-Framework approach?

  - What Principles?

- What are the elements of the approach?

  - How do they fit together?

- What does this mean for JISC Projects?

## JISC Strategy 2007-2009

### **Technology Principles:**

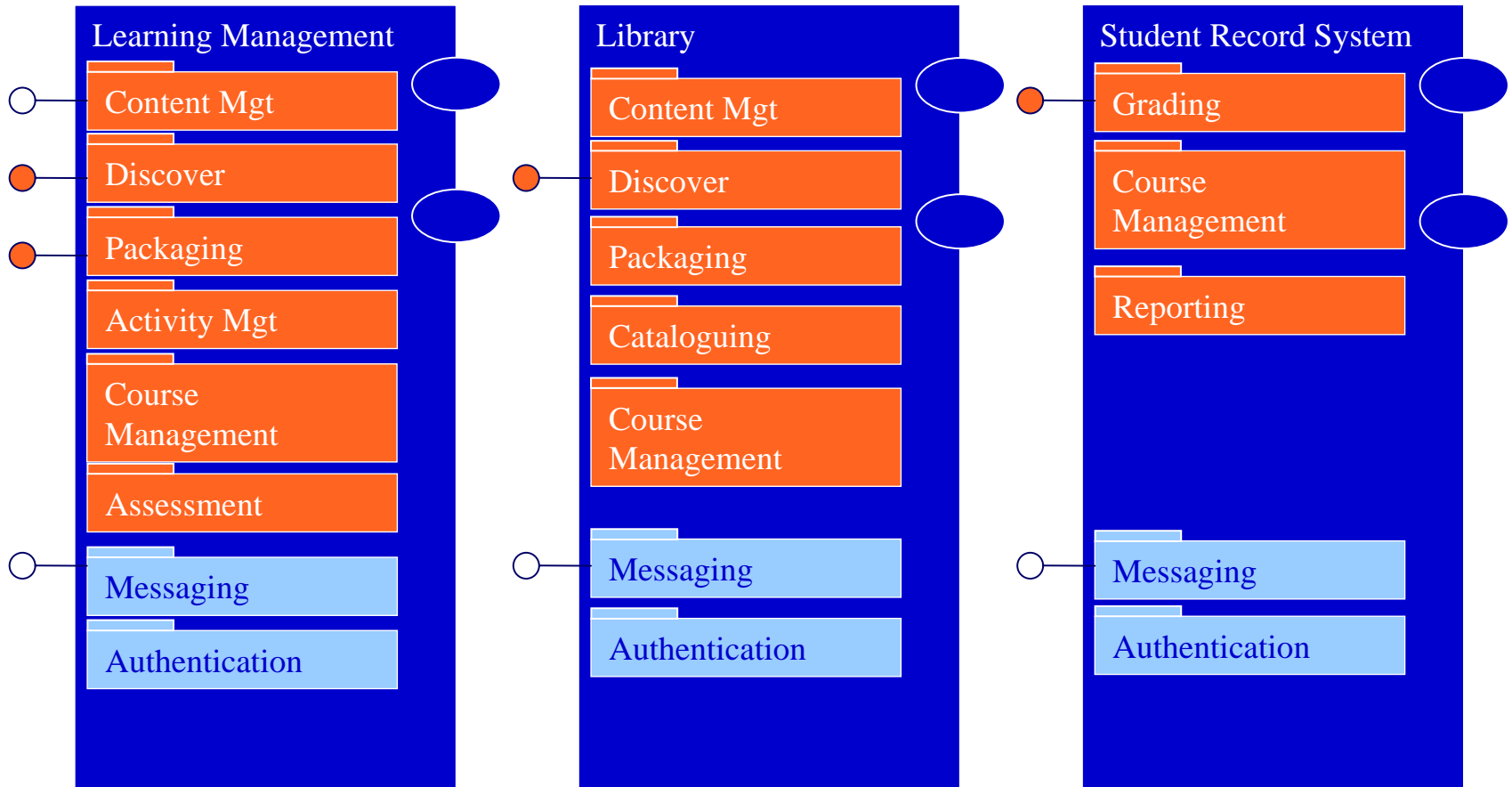
- **User Engagement**
- **Open Standards**
- **Modularity**

At a high level:

- JISC funding is Top-Sliced – unlike Research
- Have to show Benefit to the Community – “Value for Money”
- It’s development activities need to show “Sustainability”
- e-Framework is an attempt to answer:
  - How does JISC, together with the Projects that its funds, address these issues?
  - How do Project Outputs translate into Positive Outcomes?

- While some software needs are common with industry...
- Many are unique to universities
- Two ways of providing this software:
  - Bespoke or Self-developed
    - Very Expensive
  - Commercial Package
    - Cheaper, but:
      - Inflexible – dependent on supplier for changes
      - Widest market = Lowest Common Denominator
      - One Size does NOT fit All

## Application View (common now)



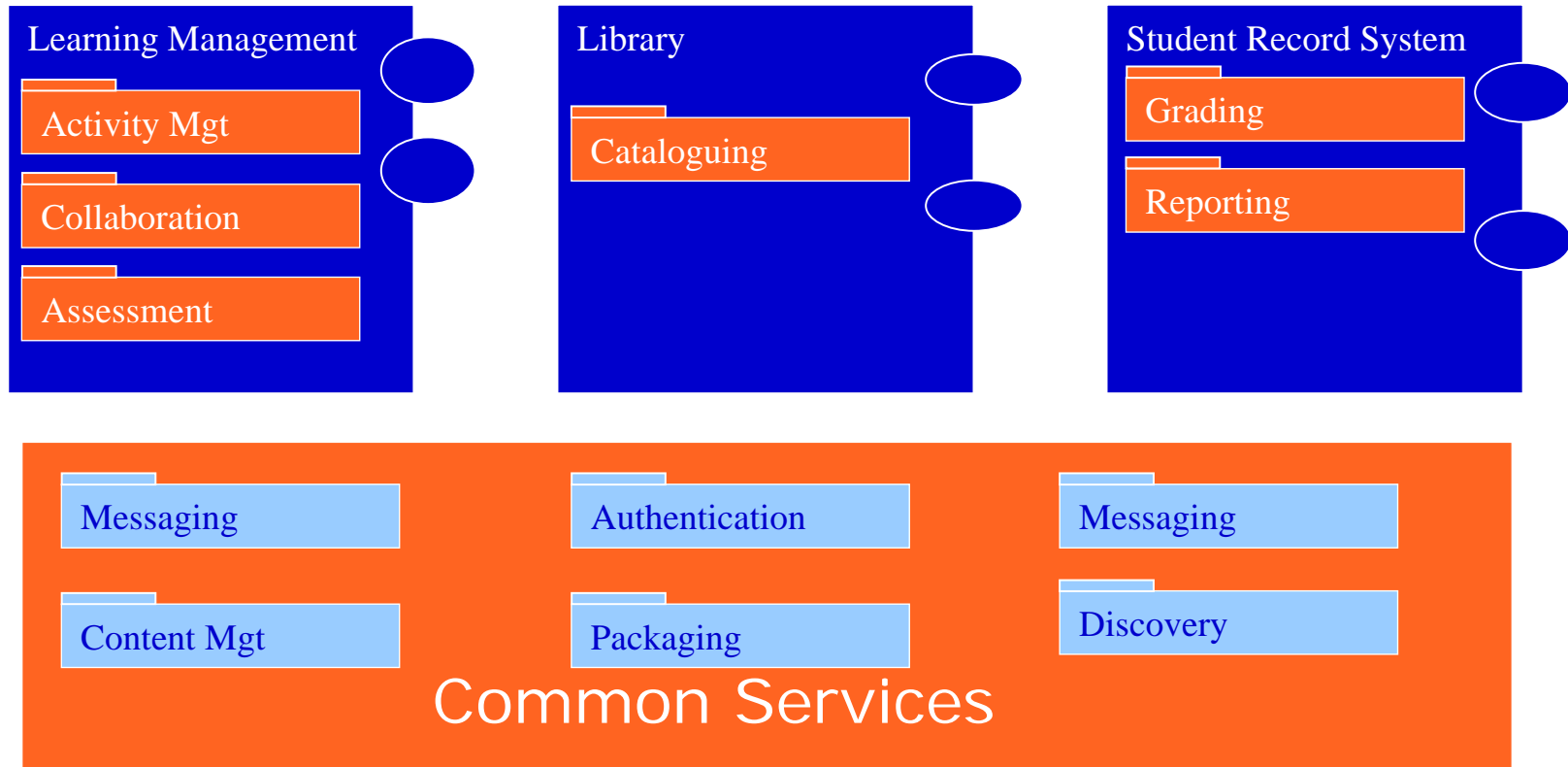
- Overlapping function and duplicated data
  - Data is incomplete, inaccurate, or entered many times
  - Confusing for users
  - Duplicated functionality - even single sign-on is often missing
- Core data and functionality are locked up in individual applications.
  - Difficult to customise systems to meet diverse requirements
  - Legacy systems costly to replace
- Integration is limited
  - Synchronisation is problematical
  - Users forced to use multiple systems for one task

## Problems: Un-coordinated/Isolated Development & Innovation

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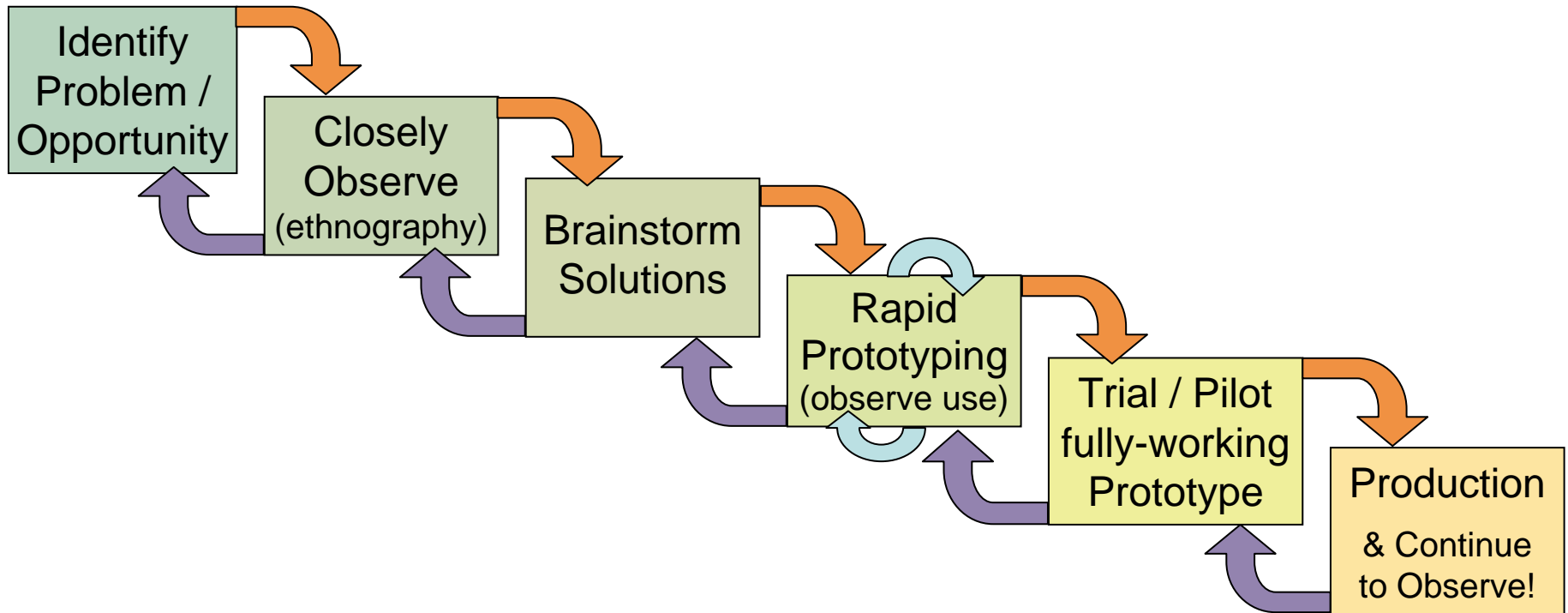
- Different communities and different domains:
  - Duplicate effort - waste
  - Incompatible systems - lost opportunities for synergy
- Innovative ideas fail to flourish because:
  - Too many resources are lost implementing the same well-known elements in each application
  - Too many dependencies on unique infrastructures
  - Too idiosyncratic to be sustainable beyond a particular person or project - slow development of new practice

## Service View (aspiration)

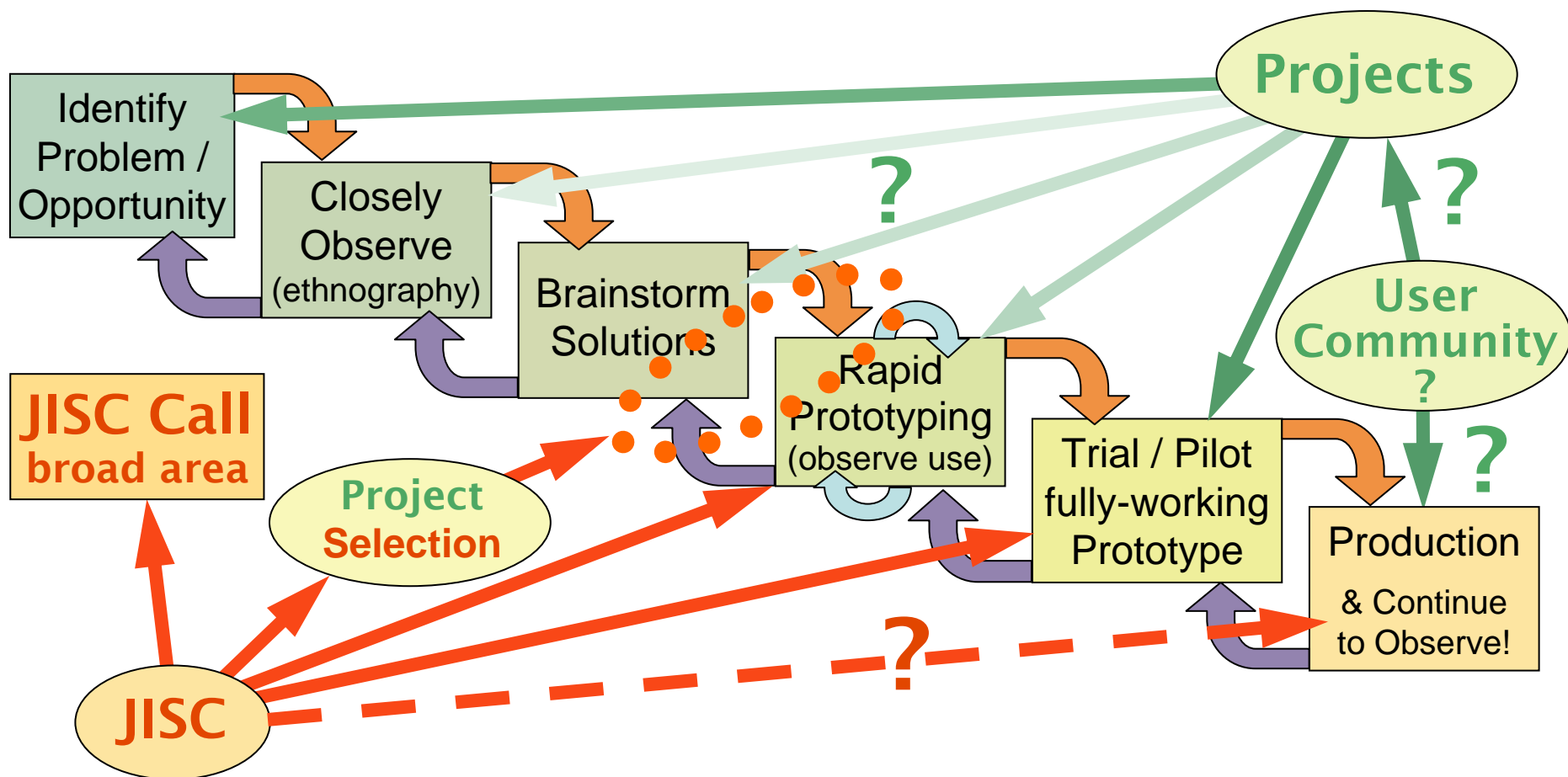


... but to do this is not easy

## IDEO's Rough Innovation Pattern

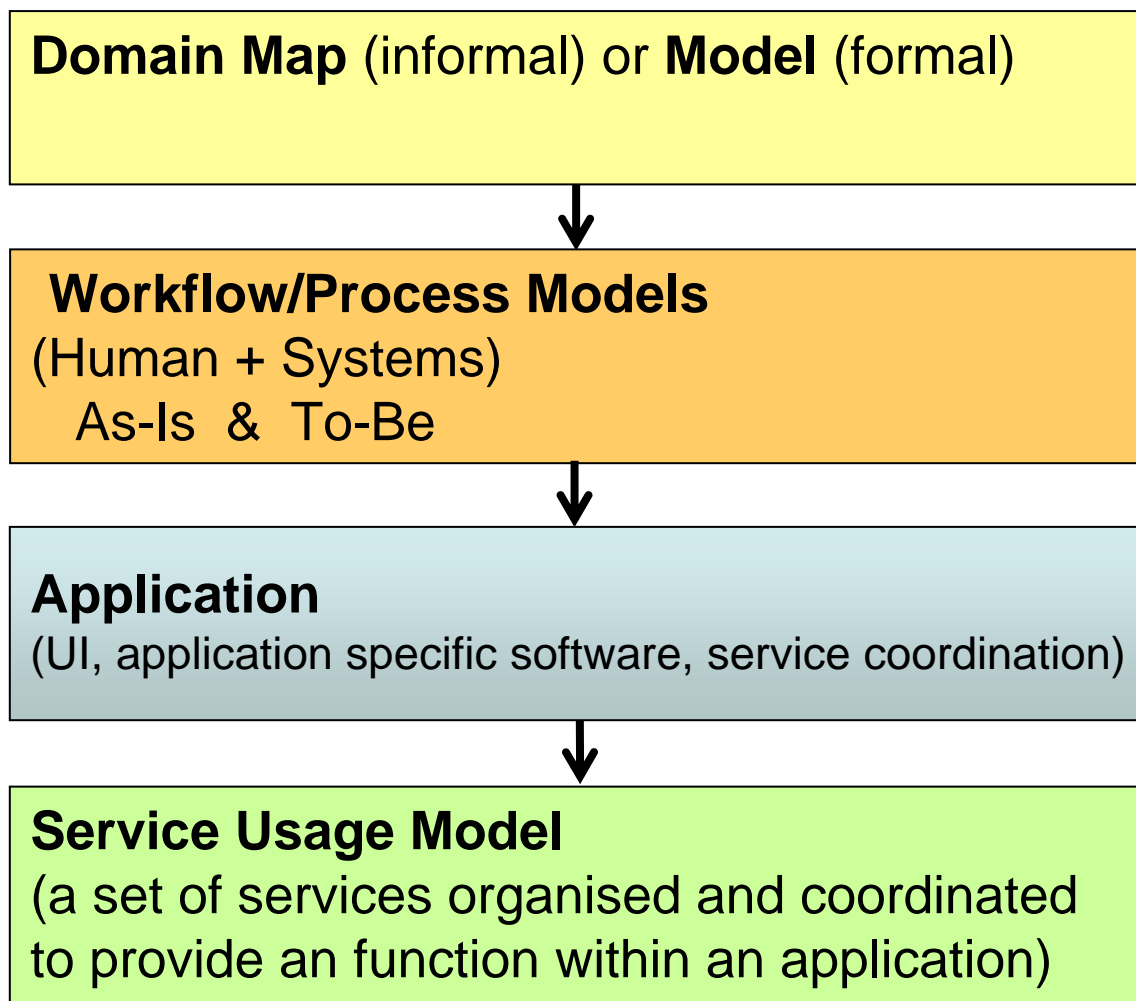


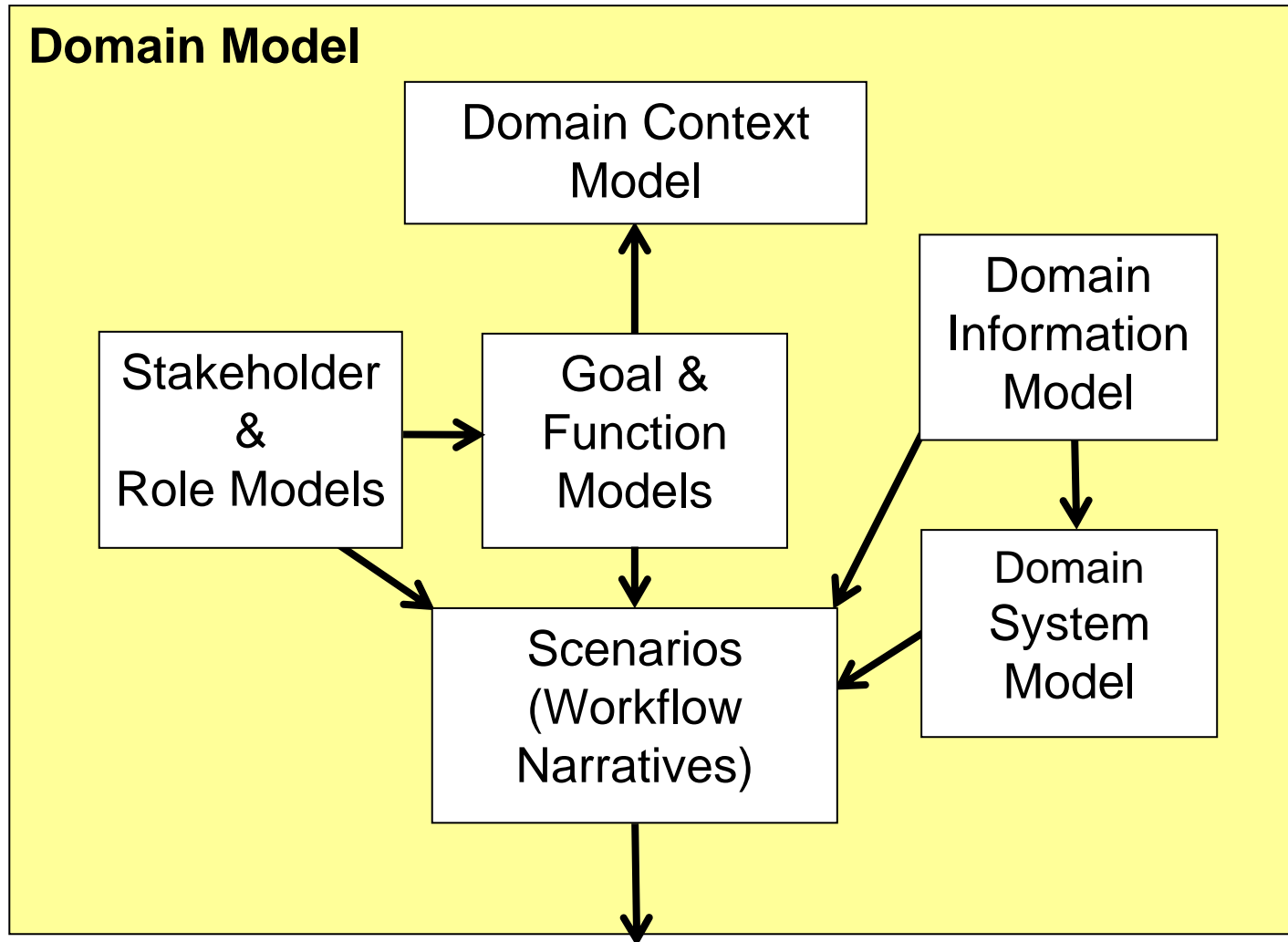
## How do JISC Programmes relate to this Innovation Pattern?

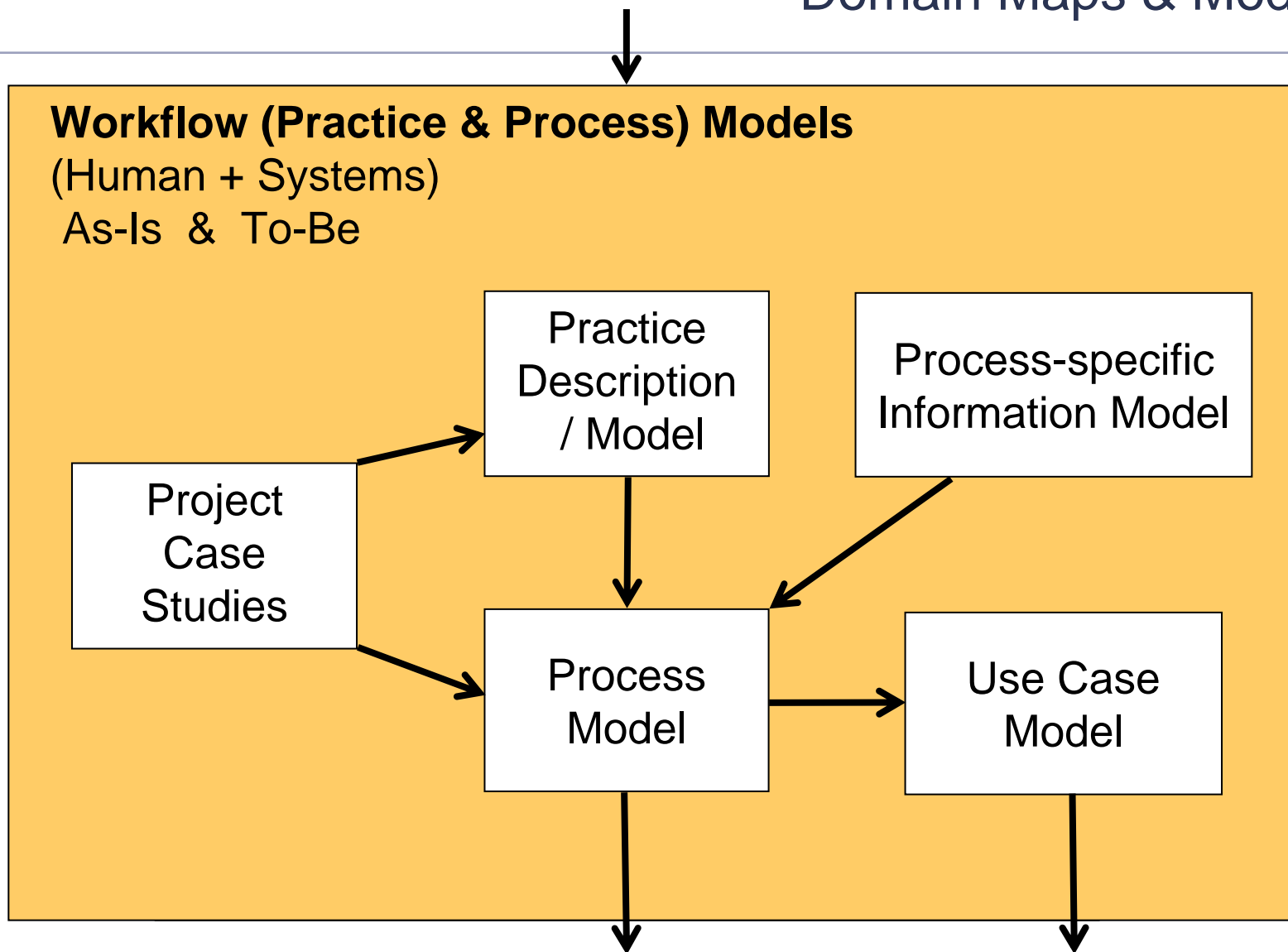


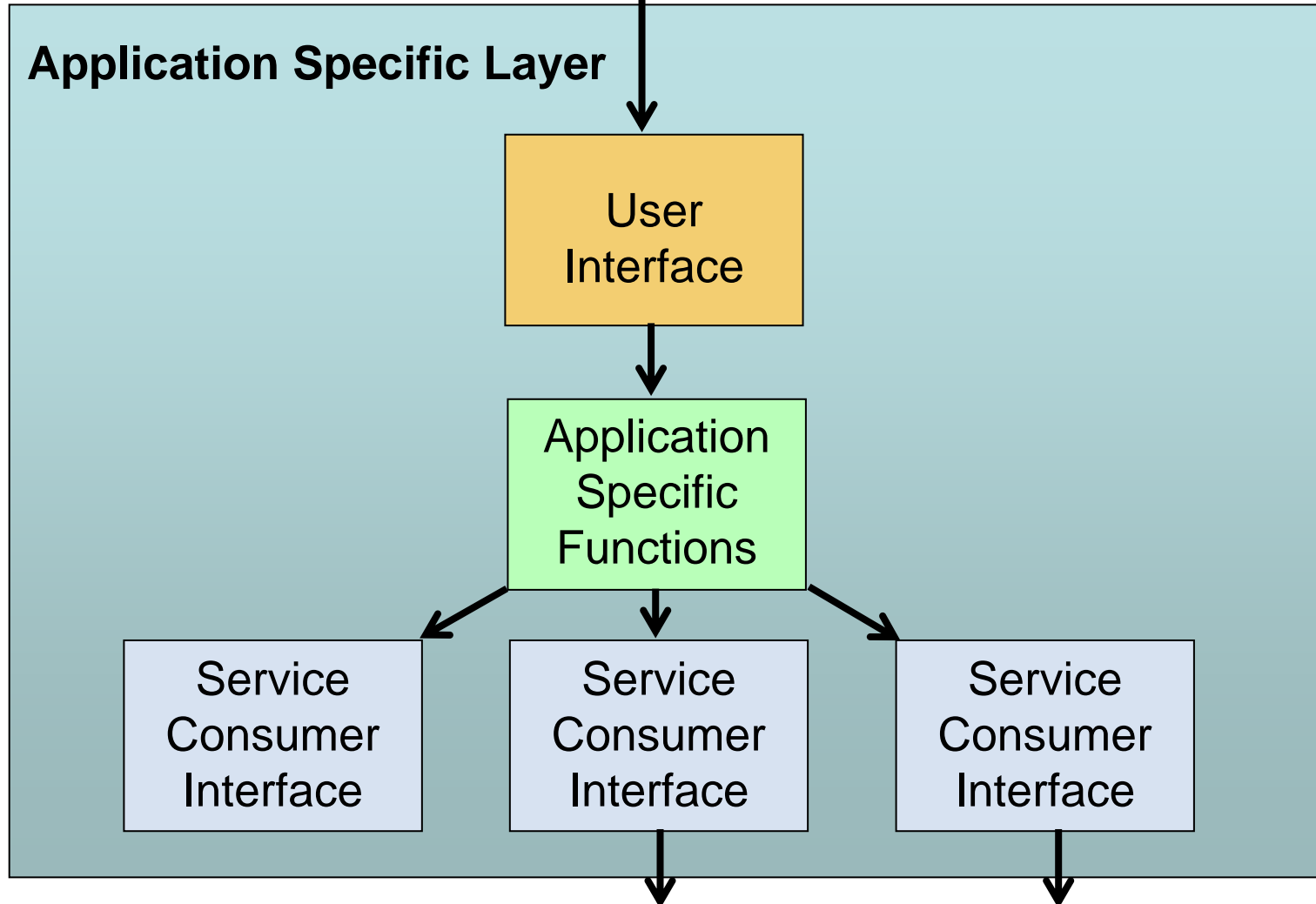
- Work with existing communities
  - UCISA have Identified Top 10 Issues
  - CETIS SIGs (start from existing Reference Models)
  - AUA, HEA Subjects Centres...
- Work with them to Map their Territory
  - Start Rough and get Approximate 'Big Picture'
  - Fill in Detail over Time to Evolve Models
- Reflect on the Map
  - Identify Problem Areas
  - Agree Priorities
  - Study Problems in the Real World

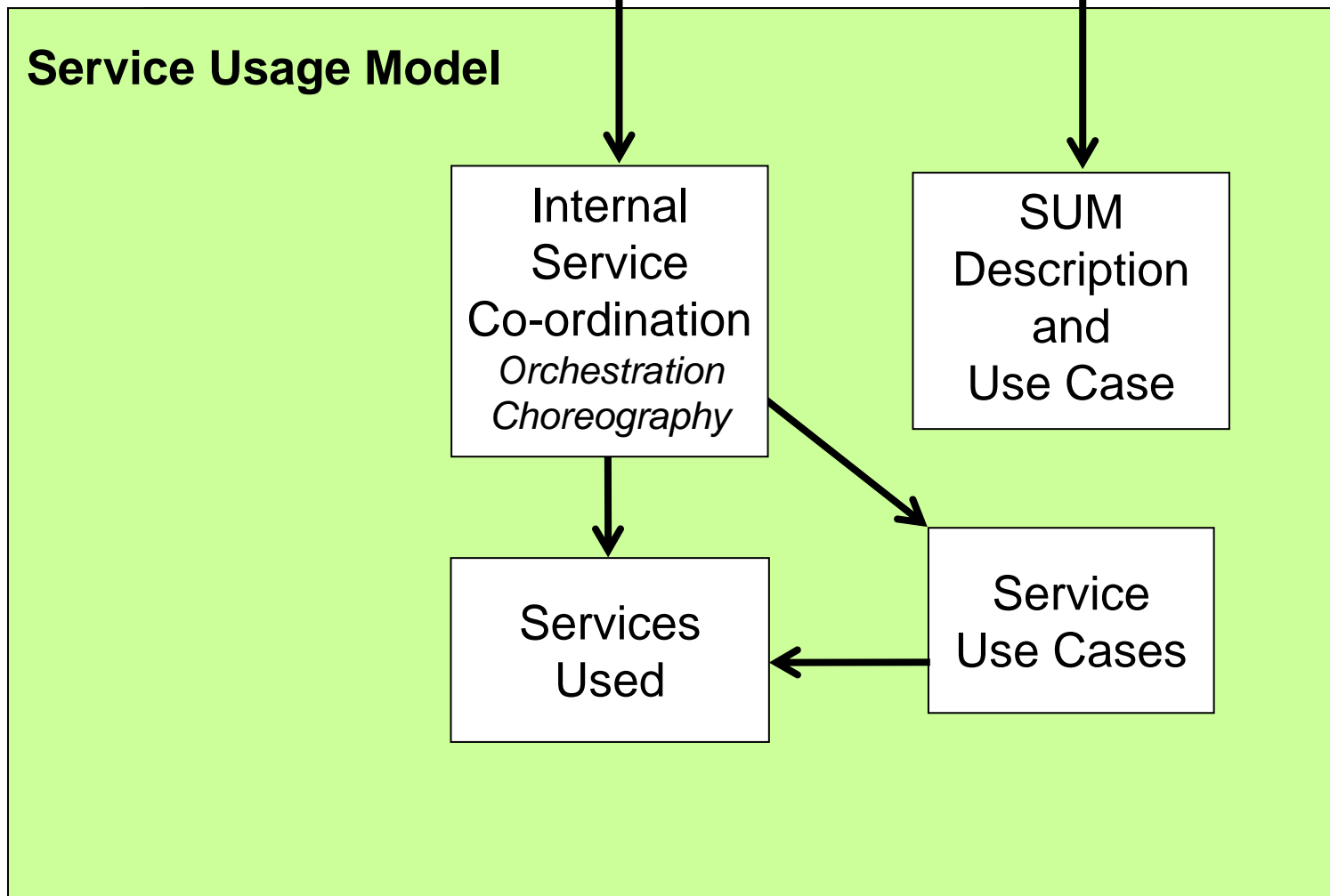
- Seeking reusable Domain Knowledge, that is relatively stable
- This forms the basis for Community to:
  - Identify and agree Key Problem Areas
  - Provide Developers with an agreed view of the Domain
  - Collaborate with Developers (open source or commercial) in Co-evolving Practices, Processes & Software
  - Ensure Coherence across their 'Family' of Applications
  - Save re-doing the same analysis work (differently) each time
  - Identify and share cross-Domain information

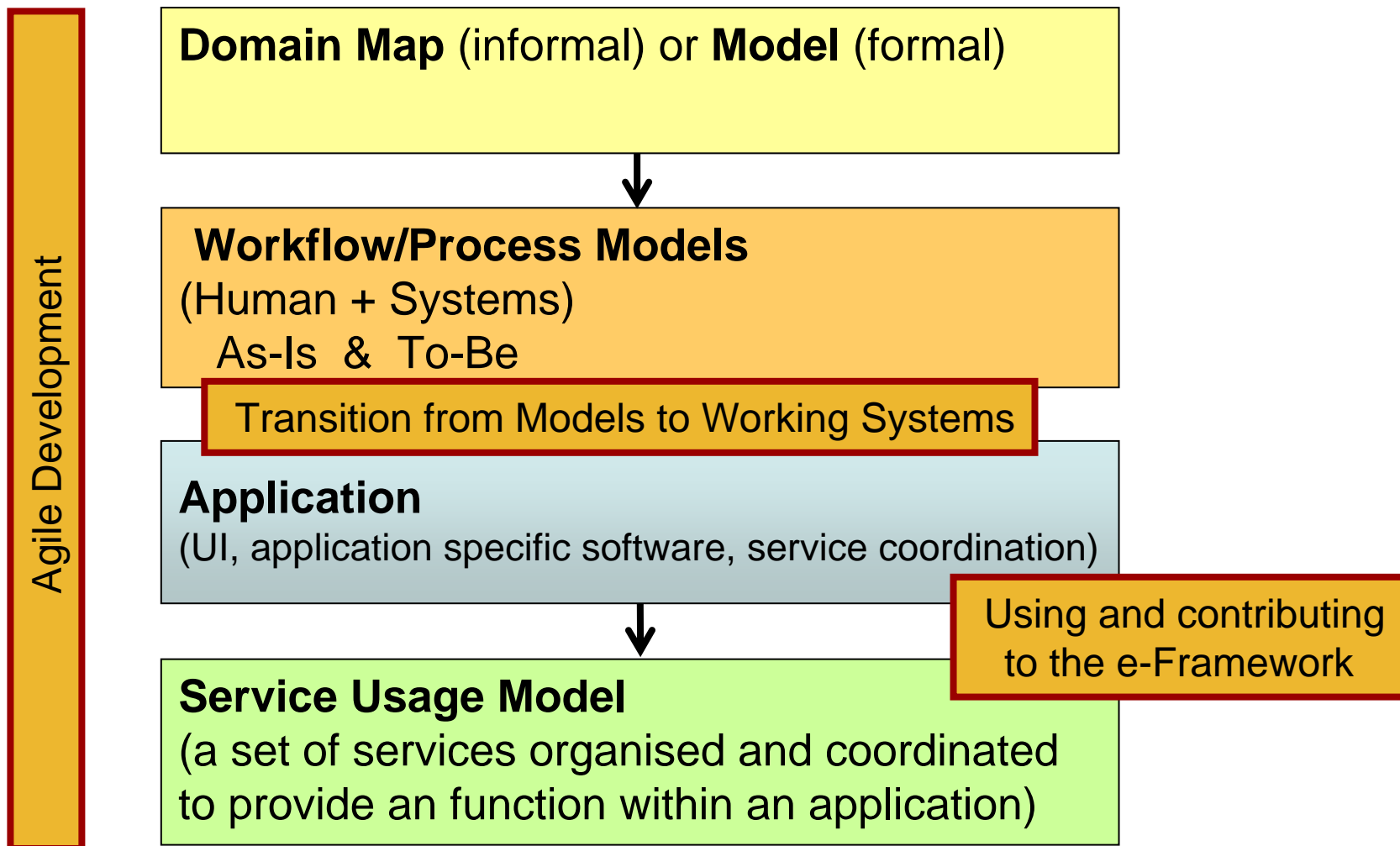












### Service Usage Models

- A Set of Services that work together
  - with links to related materials

### Services

- Services: type definitions, descriptions
  - with links to related materials

### Guides Methodologies and Analysis

- Guides, Methodologies, Analyses

## What does this Means for JISC Projects?

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By using sharable common component services,  
with open interfaces, projects should become able to:

- Build on what has already been done
  - Models, Good Practices, Code
- Produce greater value, in less time, and at less cost
- Enable projects to build on what other have produced
- Facilitate the value that projects are creating
  - being taken up by the wider community

The role the e-Framework is to:

- Provide co-ordination

- Within JISC Programmes
- Across International Partners

- Provide information:

- A knowledge base on services and their use
- Links to supporting projects and case studies
- Guidance on how to create services, how to use them and how to integrate them into an institutional SOA.