IDMAPS

Institutional Data Management *for* Personalisation & Syndication

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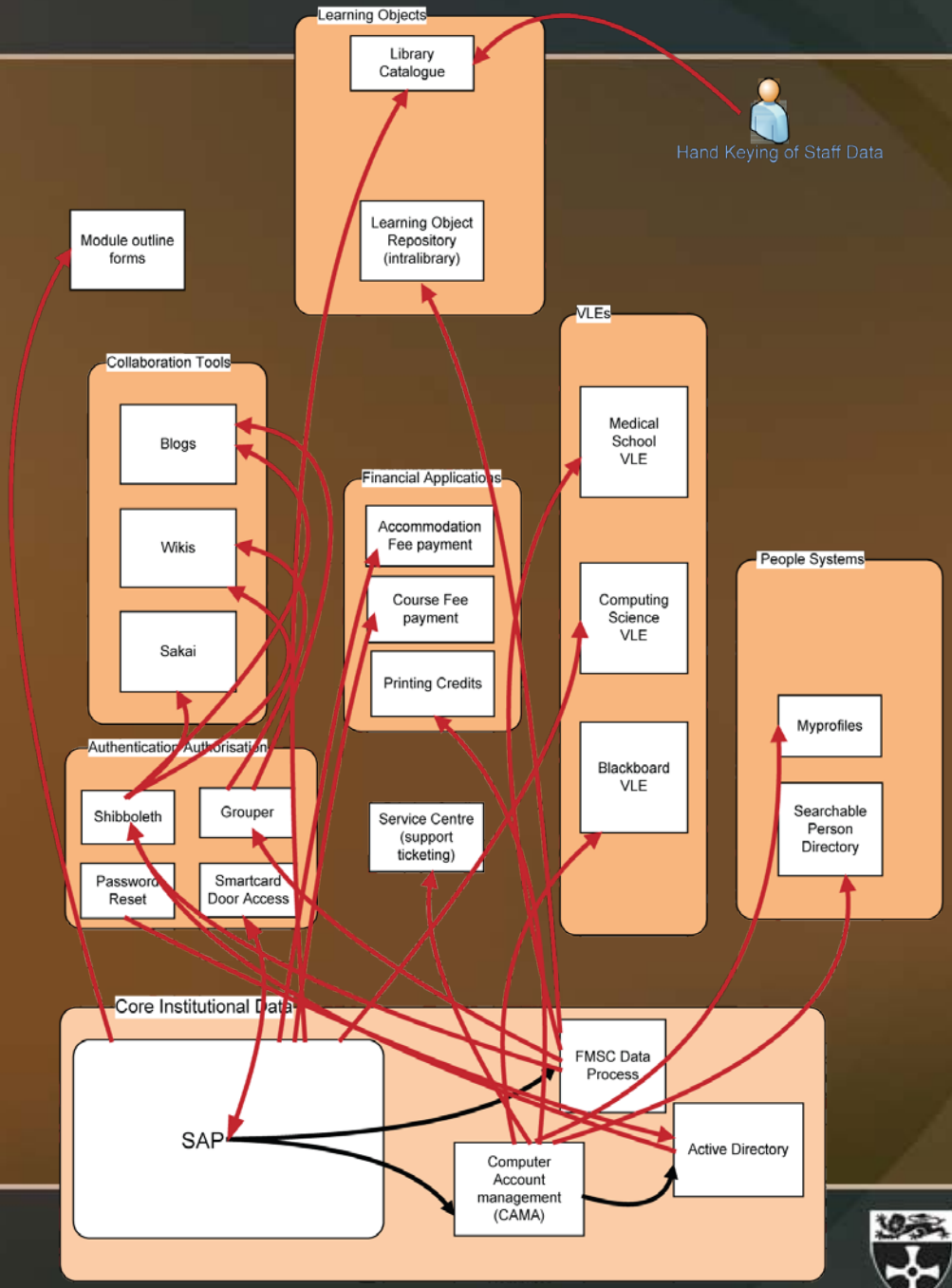
http://research.ncl.ac.uk/idmaps/

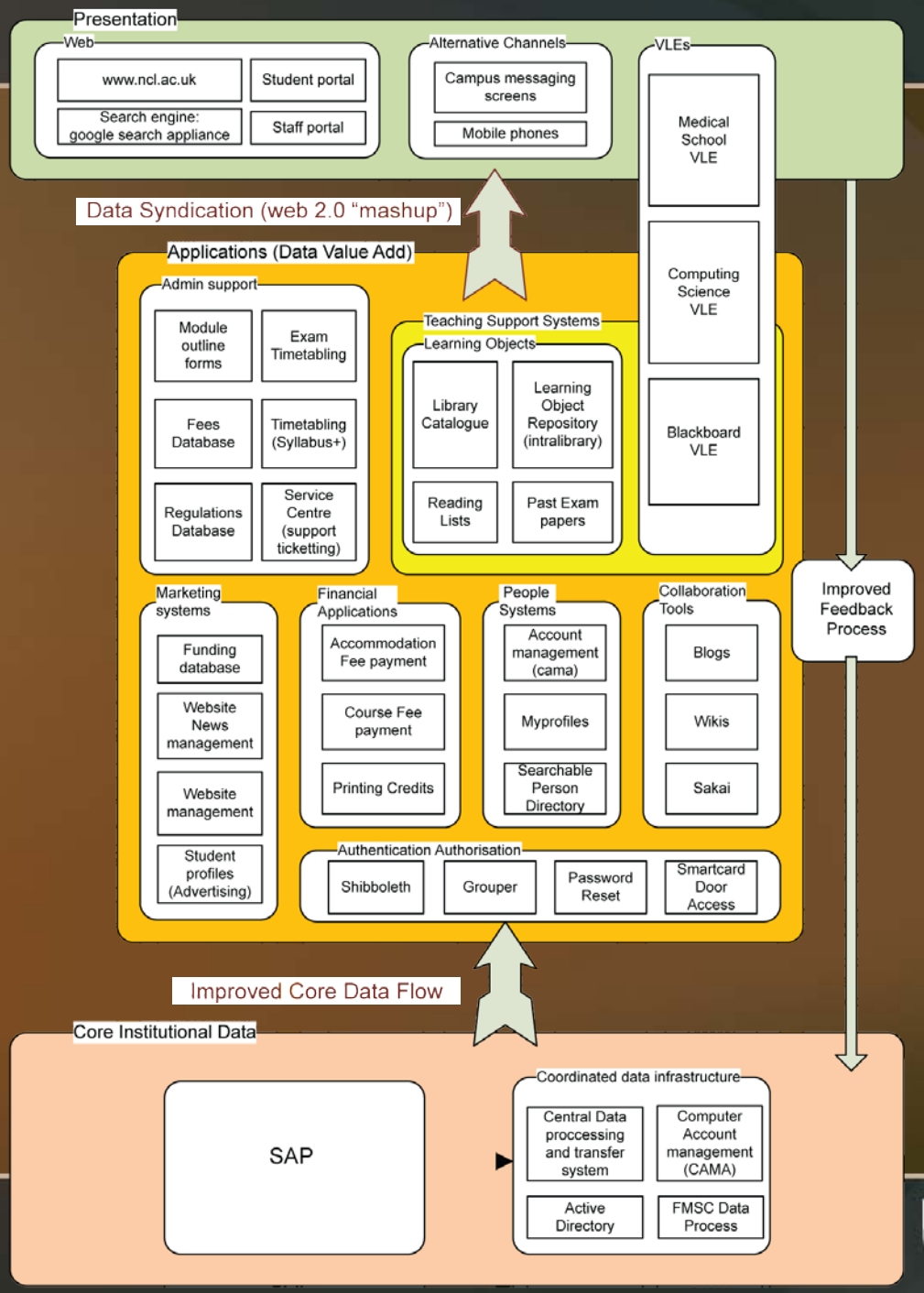
IDMAPS Overview

- Investigate existing structures, requirements, and the fitness for purpose of existing solutions
- Specify a flexible information architecture of core user data which can be adapted and extended to meet changing needs
- Specify & deploy interfaces to enable data exchange and reuse across a range of systems

Current application architecture



Future application architecture



How

- Audit
- Requirements analyses
- Data architecture
- Syndicate content

Audit/Architecture

Define Scope:

User data, not financial

Produce a clear overview of institutional data flows.

Methodology:

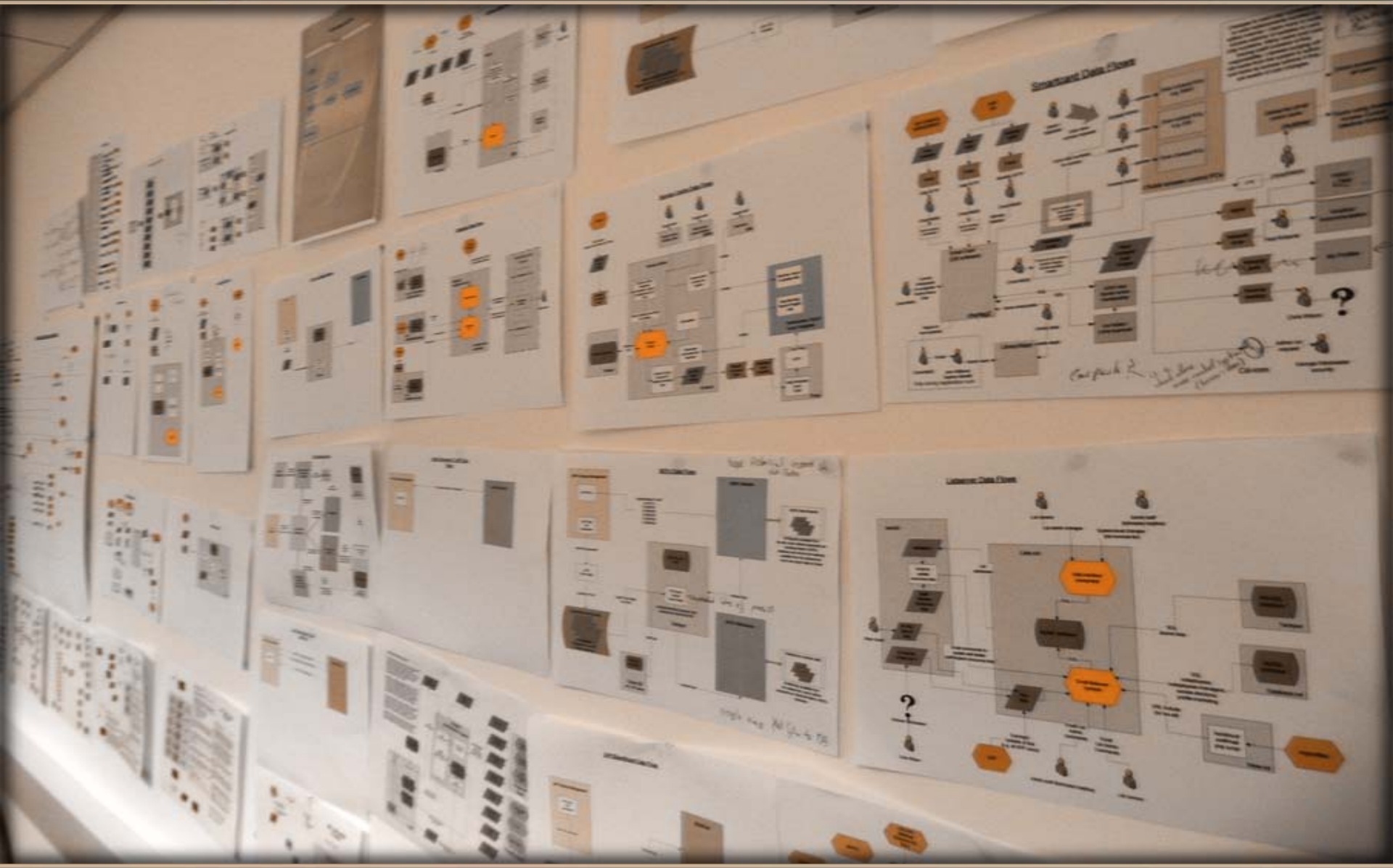
- Interviews with stakeholders
- System reviews
- Combine Existing documentation

Outputs:

- Systems integration descriptions
  - Easy to understand
  - Maintained by ISS and stakeholders
- Clear map of Institutional data flows

Affected Systems

- Accommodation
- Active Directory
- Blackboard
- CAMA (computer accounts)
- Dspace
- ePortfolios
- ePrints
- Estates ticketing system
- Exam papers
- Medical VLEs
- Grouper (role/groups)
- Individuals project (internal)
- Intralibrary (repository)
- MOFS (modules)
- Myprofiles
- NESS (compsci VLE)
- NUcontacts (tutors)
- Print credits
- Recap (lecture podcasts)
- S3P
- Service centre (helpdesk)
- Shibboleth
- Sitemanager (rss)
- Smartcard
- Student homepage
- Regulations
- Telecoms
- Timetabling
- UNIX
- www.ncl.ac.uk



Outputs

- Institutional data model
- Fully documented exemplar service descriptions & policy framework
- Data management policies published as reusable templates
- Integrated systems architecture using Web 2.0 technologies
- Best practice models for undertaking an institutional data infrastructure review

Portal strategy

- Lightweight portal (s)
  - Advertises services
  - Gives taste of functionality
  - Promotes multiple remixing
- Applications still standalone
  - eases integration

Why not uPortal?

Institutional setup

- Lack of staff resource
- Lack of teaching and learning support
- applications span political boundaries
- too many pre-existing apps
- no strategic overview on app commisioning

Technical

- Distrust of “one app to rule them all”
- Scalability concerns
- Existing apps on multiple languages/platforms

Integration requirements

- Common data in applications
  - Usernames
  - Course names
  - Module codes
- Common authentication/authorisation
  - Shibboleth
  - Grouper
- Content Syndication
  - Web services (SOAP REST)
  - Simple RSS

Single sign on

- Shibboleth
  - One sign on interface
  - Authorization via attributes
  - Removes/simplifies provisioning
  - Simplifies app development
- SPNEGO (Kerberos “true” SSO)
  - CAS + shib
  - http://gfivo.ncl.ac.uk/documents/UsingKerberosticketsfortrueSingleSignOn.pdf

Grouper

- Centralised group management tool
- Best of breed (e.g. group maths)
- Multiple interfaces
  - Web app
  - Java API
  - Web service
  - Command line
  - XML
  - Shib attributes

Benefits

- Flexible responsive architecture
- Improved support processes
- Clear understanding of system interaction
- Clear defined system boundaries
- Increased Stakeholder knowledge
- Improved processes
- Increased security
- Risk reduction/mitigation
- Quicker higher quality focussed collaboration with internal partners

Flexibility & Sustainability

For future generations…

- Platform Agnostic
- Standards Compliant
- Emphasis on Policy not Technology

Questions?

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