

UKOLN Strategy and Work Programme

August 2007 – July 2010

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Summary

This document presents the Strategy and Programme of Work for UKOLN covering the period August 2007 – July 2010.

Acknowledgements

UKOLN is funded by the MLA: The Museums, Libraries and Archives Council, the Joint Information Systems Committee (JISC) of the Higher and Further Education Funding Councils, as well as by project funding from the JISC and the European Union. UKOLN also receives support from the University of Bath where it is based.

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UKOLN Strategy 2007 - 2010

1 Introduction

This document presents the new Strategy for the organisation from 2007-2010, together with a summary description of the first annual work programme within this period, covering activities during 2007-2008. The new strategy takes into account the positive outcomes documented in the Report of the 2007 Review of UKOLN, in which UKOLN was described by one respondent as "world leaders in their field", and builds on the Recommendations.

The Strategy reflects the strategic objectives of our core funders as described in their forward planning statements i.e. the JISC Strategy 2007-09, the MLA Partnership Strategic Statement 2007-2010 and Business Plan 2007-2008 (relating primarily to the Digital Futures Work Package). We will also support the Mission and Aims of the University of Bath. The Strategy encompasses the entire UKOLN portfolio including core-funded work and projects. The Strategy will be reviewed and updated annually on a rolling basis.

The Strategy is positioned in a changing environment characterised by a growing deluge of digital content in varied formats, of variable quality and of diverse provenance. Creators, users and institutions alike, face real challenges in locating, managing and serving these resources in the education and cultural sectors. UKOLN will provide a range of expert technical services, to lead these sectors in identifying and developing innovative solutions, which will facilitate transformational change within their communities of practice.

2 Vision and Context

We are now in a new era of the Web. This user-centric generation is characterised by burgeoning community participation and "open" content, an increasing ability to mine and re-purpose data and text to facilitate new knowledge discovery, personalised and immersive networked spaces for learning, research, business and leisure, and a highly creative refactoring of applications and services to provide new functionality. We are witnessing the democratisation of long-established publishing practices, dramatically changing economic and business models, evolving legal and licensing frameworks and the development of new virtual organisations.

We are able to see tangible evidence of social and behavioural change, both amongst students, where the mobile culture has transformed everyday communications and leisure activities, but also amongst professionals in many sectors of the workforce. New roles, skills and work-patterns are emerging, leading to higher expectations of immediate, ubiquitous and multi-channel access to visually-rich information sources. digital world. "sectoral" In the culture:tourism:leisure:learning:research are increasingly blurred and irrelevant, inter-disciplinarity is encouraged and new data and service permutations can be created in an instant. This is in great contrast to the physical world where many organisations are slow to change their structures and business processes, cultures are ingrained and there are frequent political, legal and financial constraints which impede progress. Exciting new models of practice are emerging in all sectors: in the museums, libraries and archives space, and in learning and research, the user community is creating, tagging, sharing and transforming digital content as exemplified by the Steve. Museum Project¹.

In the future, we are likely to see a significant growth in the maturity and adoption of knowledge discovery tools and added-value services, such as annotation, visualisation, data manipulation and mining: will we see "Google-Miner" on the desktop? Repository federations and aggregator services operating across sectors and disciplines will emerge, and these more open and collaborative modes of working will bring new challenges. As an example, we are starting to see issues appear in the area of synthetic biology, where standards and protocols for both the molecular components for

¹ Steve.Museum Project http://www.steve.museum/

recombination, associated data in MIT's Open Access Registry (of Biological Parts) database and in the legal and ethical domains, are beginning to be examined².

There will continue to be major challenges around many aspects of digital curation and preservation. For example, what provision has been made for preserving the rapidly growing volume of community-generated content in cultural, leisure and personal networked spaces, such as 43 Places³, Slideshare⁴, and Commanet⁵, and in the virtual worlds and islands of Second Life⁶?

Finally, the ability to create, discover and contextually link resources together in new ways across sectors and domains, will provide exciting new learning opportunities. This is beginning to happen in the arts and humanities where the increasing wealth of rich digital cultural content from museums and archives, is finding value and application by scholars and students alike. In additional, we have begun to see that primary research data can be used effectively by students, as an integral part of their science-based curriculum, leading to enhanced data manipulation skills and potentially a more critical perspective on published results⁷. However, we have not yet formulated underpinning pedagogic models which link research-based activities with learning activities, and which demonstrate the opportunities for embedding diverse primary data sets together with data manipulation tools, within a particular educational curriculum. This work is at a truly embryonic stage.

UKOLN is positioned as an agent of change in this fluid digital space, however it also performs an important function as a futures "think-tank", providing an essential service to the funding organisations and to the wider community. We are seeking to reinforce that position, to continue to pioneer innovative research and development and at the same time, use this expertise to deliver advocacy support to the funding agencies and to the community at large.

3 Mission and Values

UKOLN has a clear and simple mission statement:

UKOLN is a centre of expertise in digital information management, providing advice and services to the library, information, education and cultural heritage communities by:

Influencing policy and informing practice

Promoting community-building and consensus-making by actively raising awareness

Advancing knowledge through applied research and development

Building innovative systems and services based on Web technologies

Acting as an agent for knowledge transfer

UKOLN has based its Strategy on three fundamental Values, which underpin all our activities:

A collaborative and open approach

We believe strongly in working in productive partnership with other organisations and individuals and ensuring that all our publicly-funded outputs are openly available including reports, papers, presentations, data, programs and services

² Rai A., and Boyle, J. Synthetic Biology: caught between property rights, the public domain and the commons. 2006 https://dspace.mit.edu/handle/1721.1/34274

³ 43 Places http://www.43places.com/

⁴ Slideshare http://www.slideshare.net/

⁵ Commanet <u>http://www.commanet.org/</u>

⁶ Second Life http://secondlife.com/

⁷ Conole, G. External evaluation of the eBank Project. http://www.ukoln.ac.uk/projects/ebank-uk/evaluation-report-december-2006.pdf

Delivering value-for-money

We believe our products and services represent good value-for-money to the funders and their sectors. The unique blend of expertise and deep knowledge at UKOLN results in rich, authoritative and intellectually rigorous outputs.

Environmentally-friendly business processes

We are taking steps to enhance our business processes to ensure that we fulfil our collective obligation to supporting a "greener" environment.

4 Objectives, Outcomes and Benefits

Our organisational strategic objectives are linked to specific and measurable outcomes and benefits, to enable both qualitative and quantitative indicators of success to be reported. They are also aligned with the strategic aims of our core funders. For the period 2007-2010, we will:

Objective 1:

Provide leadership in innovative "futures thinking" in scholarly and cultural digital contexts, in order to inform UK and international strategy and policy at the highest levels.

- 1.1 Inform UK and international work on policy formulation for emerging e-infrastructure, digital repositories and community content, curation and preservation services and knowledge discovery, for collaborative open scholarship and for museums, libraries and archives.
- 1.2 Raise the profile of UK digital developments on the international stage.
- 1.3 Build productive partnerships with key national and international organisations, professional bodies and government agencies.
- 1.4 Demonstrate the wider strategic impact and operational outcomes of UKOLN activities, outputs and products, acting as an agent for transformational change in the sector.

Outcomes:

- 1A The relevant policies, strategies, programmes and projects of JISC, MLA, the University of Bath and other major digital library funding organisations such as the European Commission and the US National Science Foundation, reflect strategic input from UKOLN advisory, research and development activities.
- 1B New projects, research reports, conferences and other outputs will be delivered as a result of collaborative national and international partnerships.
- 1C High quality, user-focussed services are delivered as a result of UKOLN activities

Benefits:

The global visibility of UK digital initiatives is increased, and broader strategic coherence and engagement in collaborative developments, is achieved.

Strategic Alignment:

JISC Aim 1, Priority 6 Promote emergent technologies.

MLA Digital Futures WP, Track technical and social change; Build horizon scanning.

Objective 2:

Advance the development and deployment of social networks and ICT service frameworks, to engage the individual user and enhance cross-domain and semantic interoperability.

- 2.1 Apply user-centric and personalised approaches to digital content and services which reflect the growing social fabric of the Web.
- 2.2 Contribute to work on service-oriented frameworks, information architectures and data models.
- 2.3 Participate in the global development and adoption of open standards, specifications, metadata schema and protocols for e-infrastructure services.
- 2.4 Promote and inform work on both formal and informal approaches to terminologies, knowledge organisation systems, folksonomies and other semantic networks.
- 2.5 Provide advocacy and expert technical advice to core funders, policy-makers and the community, to inform strategic planning and develop operational best practice.

Outcomes:

- 2A The user-focussed models, service frameworks and associated standards are embedded in the development methodologies and practitioner approaches adopted by core funded programmes and projects.
- 2B The development of semantically-enabled Web services will demonstrate the value of synergy between formal and informal terminological approaches.

Benefits:

The development of social networks and robust service frameworks based on common standards result in a positive information experience for the user.

The cost-effectiveness of public and institutional investments in common ICT infrastructure is maximised.

Strategic Alignment:

JISC Aim 1, Priority 5 Develop...e-Infrastructure (e-Framework & Information Environment).

MLA Digital Futures WP, Develop IE model for cultural sector.

Objective 3:

Develop new infrastructure and pilot services to support an integrated information environment for education and cultural heritage.

- 3.1 Engage in research and development activities which create prototypes, demonstrator services and innovative software tools.
- 3.2 Demonstrate added-value service integration and recombination, building on community-driven initiatives.
- 3.3 Develop shared infrastructure services to facilitate machine-to-machine and humanmediated information exchange.
- 3.4 Facilitate interoperability with e-infrastructure, grid services, e-learning systems and cultural heritage services.

Outcomes:

- 3A Cross-sectoral service interoperability is facilitated by effective resource discovery and delivery across MLA and JISC-funded infrastructure.
- 3B New Web-based services permutations are successfully integrated within the information environment and move into mainstream operation and deployment.

Benefits:

The greater levels of service integration result in enhanced system performance and richer user tools.

Strategic Alignment:

JISC Aim 1, Priority 8 Enable effective use of the JISC Information Environment.

MLA Digital Futures WP, Develop pilots to test potential of new concepts.

Objective 4:

Promote the curation and long-term preservation of scholarly and cultural digital content, to facilitate access, use and re-use throughout the knowledge cycle.

- 4.1 Deliver a range of advocacy support activities to promote the awareness of and best practice in the implementation of digital repositories and other content management systems.
- 4.2 Strengthen community knowledge and adoption of data curation best practice methodologies focusing on access to, dissemination and re-use of scholarly outputs.
- 4.3 Provide advice and guidance on longer-term digital preservation approaches to the education and cultural heritage communities, in partnership with other expert bodies.
- 4.4 Implement research and development projects to advance an understanding of knowledge extraction capabilities across a range of digital content.

Outcomes:

- AA Digital repositories and other content-based management systems, are strategically positioned and supported as the primary tool for the institutional management and dissemination of digital assets from learning, teaching, research and cultural heritage domains.
- 4B Curation and preservation policies and practice are routinely embedded within the strategic and operational plans of education and cultural sector organisations.

Benefits:

The deluge of digital content is both accessible and well-managed, with optimal prospects for long-term usage.

Institutions are positioned to provide adequate and appropriate storage facilities and technical support, for their valued digital assets.

Strategic Alignment:

JISC Aim 1, Priority 7 Build a national infrastructure of interoperable digital repositories.

MLA Digital Futures WP, Develop a strategy for curating and preserving digital collections.

Univ. of Bath Research Strategy Objective 2, Ensure that the University has effective information systems in support of research and knowledge transfer.

Objective 5:

Facilitate more informed and participative communities of practice to maximise knowledge exchange, promote inter-disciplinary and cross-sectoral interaction and build critical mass.

- 5.1 Encourage the growth and uptake of collaborative technologies and social software.
- 5.2 Deliver a range of participative and interactive Web-based information and advisory services to the wider community
- 5.3 Facilitate awareness-raising, communication, dissemination and knowledge transfer across communities of practice through high-quality events, publications and other

information channels.

Outcomes:

- A participation and partnership model is reflected in all relationships and interactions with our stakeholders, audiences and communities of practice.
- The communities, audiences and stakeholders designated as high priority for the UKOLN organisation are all aware, recognise, use and value UKOLN products, services and staff.

Benefits:

Sectoral workforce capacity is extended through the engagement and empowerment of individuals and communities.

Strategic Alignment:

JISC Aim 6, Priority 15 Improve dissemination and feedback mechanisms between JISC and its target audiences.

MLA Digital Futures WP, Raise awareness of advice and guidance through advocacy programmes.

Objective 6:

Develop the organisation and staff to optimise its relevance, agility and responsiveness to funder requirements and to rapidly changing digital worlds.

- 6.1 Ensure that our communities of practice can contribute to the evolving programme of work and the continuing development of the organisation, through more inclusive Governance structures.
- 6.2 Refine strategic planning methods to reflect external drivers and support the emerging strategies of our core funders.
- 6.3 Secure the long-term sustainability of the organisation in terms of financial robustness and space allocation.
- 6.4 Seek out and extend professional development opportunities to recruit, grow and retain expert staff.
- 6.5 Deliver value-for-money services through the implementation of cost-effective operational management mechanisms and procedures.

Outcomes:

- 6A UKOLN is recognised as an exemplar of organisational best practice within the education and cultural heritage sector.
- 6B UKOLN is valued as a leading and fully self-sustaining world-class department within the University of Bath.

Benefits:

A competitive Return on Investment is realised for core funding agencies, with excellent value-for-money demonstrated in the sector.

Staff have a rewarding working environment with good prospects for personal growth and development.

Strategic Alignment:

JISC Aim 1, Priority 9 Provide cost-effective and user-led advisory and support services.

MLA Governance, partnership and co-ordination Work Package summary, Continue to improve our effectiveness....to support and promote the sector.

5 Risk Statement

| Risk | Factors which might make this happen | Likeli- hood | Impact | Control | Action Required | Responsibility | Time- scale |
|---|---|-----------------|--------|---|---|---------------------|----------------|
| Approval for Strategy not obtained | Core Funders do not agree with plans JIIE not engaged | Low | High | Consultation and feedback | Shared planning Review and negotiate plans | Director | Annual |
| Unable to progress key Programme Deliverables | Problems with partnerships Additional requirements from Core Funders Over-commitment of staff | Med | High | Monitor progress of activities Performance management | Review priorities Investigate obstacles Consider alternative delivery mechanism | Oper Group / SMT | Monthly |
| Unable to meet funder/partner/ sector expectations | Limited resources Failure to communicate function of UKOLN Inappropriate activity | Low | Med | Monitor feedback from community | Clarify and communicate function of UKOLN Review activities | Director, staff | Ongoing |
| Staff retention /absence | Skilled staff leave Unable to fill vacancies Long-term sick leave | Med | High | Monitor workloads & absences Staff development | Review workloads and roles Proactive staff development policy | Oper Group/ SMT | Ongoing |
| Space constraints | Inability to acquire additional space | Med | High | Seek space off-campus | Implement space strategy | Director / SMT | Ongoing |
| Unable to cover institutional costs | Reduced income Increased costs | Low | High | Monitor income available to cover charges | Financial planning & forecasting Diversify income streams | Director/ SMT | Ongoing |
| Under funding or loss of core funding | No annual increase in Core Funding Increased costs Loss of core funder | Med | High | Monitor income / expenditure | Early indication from Core Funders of future funding levels Reduce activity | Core Funders | Annual |
| Loss of credibility of UKOLN | Failure to deliver Work Programme Failure to communicate function of UKOLN | Low | High | Monitor Programme delivery & community feedback | Review activities Communicate function of UKOLN | Director /SMT | Monthly |

6 Appendix Work Programme 2007-2008

This section describes a summary Work Programme for one year 2007-2008. The Work Packages relate to the Objectives.

WP1 Provide leadership in innovative "futures thinking" in scholarly and cultural digital contexts, in order to inform UK and international strategy and policy at the highest levels.

TASKS WP1

- 1.1 Participate in the work of the cross-sectoral UK Strategic e-Content Alliance.
- 1.2 Inform JISC and MLA Partnership Development projects and programmes.
- 1.3 Enhance partnerships with core-funder sponsored bodies including the 24 Hour Museum, MDA, CETIS and JISC services, such as MIMAS, Edina, AHDS.
- 1.4 Engage with MLAP Research and Evidence activities, the Digital Cultural Content Forum, and Museums & the Web, to ensure thinking transfers to UK policies and programmes appropriately.
- 1.5 Contribute innovative thinking and UK perspectives to European Commission Programmes.
- 1.6 Facilitate collaborative initiatives with a range of key US organisations including CNI, NSF including the Office of Cyberinfrastructure, DLF, Science Commons and the OAI-ORE Project, to ensure maximum benefit to UK.

1.7 Collect data and information as evidence to demonstrate our impact and value.

WP2 Advance the development and deployment of social networks and ICT service frameworks, to engage the individual user and enhance cross-domain and semantic interoperability.

TASKS WP2

- 2.1 Provide expert technical support to MLAP Digital Futures Advocacy and Delivery activities.
- 2.2 Contribute to the development of the e-Framework and its Service-Oriented Architecture.
- 2.3 Support the development and implementation of the JISC integrated Information Environment (IE) and its underlying technical architecture.
- 2.4 Develop IE models for the cultural sector.
- 2.5 Review and update the structured approach to support JISC standards best practice.
- 2.6 Develop and maintain MINERVA standards guidelines.
- 2.7 Provide support for Enrich-UK metadata enhancement projects.
- 2.8 Devise and deliver a programme of activities as the UK DCMI Affiliate.
- 2.9 Extend advisory work and research and development projects on terminologies, KOS and folksonomies.

WP3. Develop new infrastructure and pilot services to support an integrated information environment for education and cultural heritage.

TASKS WP3

- 3.1 Provide general technical support for shared infrastructure services.
- 3.2 Develop exemplars to illustrate the potential of service integration and Discovery 2Delivery concepts.
- 3.3 Inform the further development of the MLA collections description service and MICHAEL.
- 3.4 Support the extension of the Peoples Network Service and other services for public libraries emerging from the *Blueprint for Excellence* consultation
- Investigate the potential of demonstrator services to support the 2012 Cultural Olympiad.
- 3.6 Extend and support research and development projects implementing shared infrastructure services such as the IE Service Registry and IE Metadata Schema Registry.
- 3.7 Collaborate with JISC data services to provide support for the creation and maintenance of an IE test-bed.
- 3.8 Set up and maintain a JISC Development pilot repository.

WP4 Promote the curation and long-term preservation of scholarly and cultural digital resources, to facilitate access, use and re-use throughout the knowledge cycle.

TASKS WP4

- 4.1 Provide general advice and guidance on digital repositories and other contentbased systems, digital curation and preservation best practice, to complement other established expert services.
- 4.2 Facilitate collaboration with key strategic organisations working in the digital preservation and curation arena, including the DPC, TNA, Web Archiving

- Consortium, AHDS, UK Data Archive and research council funded data centres.
- 4.3 Deliver synthesis and analysis of JISC-funded activities at programme level, to inform JISC Development work.
- 4.4 Lead the Common Repository Interfaces Group (CRIG) through the JISC Repositories Research Team.
- 4.5 Provide technical support to the Intute-X-Search project as part of JISC RepositoryNet activity.
- 4.6 Supply expert advice and support for setting up digital repository services to UK HE institutions through the JISC Repositories Support Project.
- 4.7 Support the development of digital repository initiatives at the University of Bath.
- 4.8 Enhance collaboration with the research community in data curation activities through leadership of the Digital Curation Centre Community Development work programme.
- 4.9 Lead and partner in innovative research and development projects which pioneer new approaches to scholarly communications, management of cultural digital resources, knowledge utilities, data curation and digital preservation.

WP5 Facilitate more informed and participative communities of practice to maximise knowledge exchange, promote inter-disciplinary and cross-sectoral interaction and build critical mass.

TASKS WP5

- 5.1 Launch the new user-facing UKOLN Web site.
- 5.2 Set up and maintain the UKOLN repository.
- 5.3 Create and implement a new participative model for *Ariadne* Web magazine.
- 5.4 Deliver two issues per year of the *International Journal of Digital Curation*.
- 5.5 Provide an events management service with a full programme of conferences, workshops and seminars for both external and internal audiences.
- 5.6 Develop a new Marketing and Communications Strategy based upon detailed analysis and understanding of audience and stakeholder requirements.
- 5.7 Produce a suite of UKOLN publications, which include the Focus on UKOLN Newsletter, the Annual Report and promotional flyers, which reflect stakeholder requirements and the new Communications and Marketing Strategy.
- 5.8 Use collaborative technologies such as Wikis and blogs, to enhance our internal communications and engagement with our user communities.
- 5.9 Support the University of Bath in the design and development of participative Webbased resources, services and content.

WP6. Develop the organisation and staff to optimise its relevance, agility and responsiveness to funder requirements and to rapidly changing digital worlds.

TASKS WP6

- 6.1 Implement a more inclusive approach to governance in liaison with core funders, through re-instatement of a Strategic Advisory Committee.
- 6.2 Carry out appropriate strategic planning and reporting.
- Refine our organisational structures to deliver optimal service delivery to funders and wider community.

| 6.4 | Develop a space strategy to address staff and service requirements and physical constraints. |
|-----|---|
| 6.5 | Continue to refine financial management approaches including predictive forecasting and monitoring. |
| 6.6 | Enhance the professional development of staff and capacity building, including support for training, seminars, Awaydays and other developmental events. |
| 6.7 | Implement a team-based support model across all areas, to mitigate against individual staff dependency and associated risks. |
| 6.8 | Refine our hardware and software systems and services to operate as a more flexible and environmentally-friendly development environment. |
| 6.9 | Facilitate internal and external communications through a range of face-to-face meetings and other dissemination channels. |