ACADEMIC LIBRARIES
OF THE FUTURE

How to use the scenarios

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Wild West scenario

Beehive scenario

Walled Garden scenario

List of abbreviations

AI	Artificial Intelligence
BCS	British Computer Society
BL	British Library
CILIP	Chartered Institute of Library and Information Professionals
CPD	Continuing Professional Development
CSF	Critical Success Factor
EF	European Federation
FE	Further Education
GP	General Practitioner
HE	Higher Education
HEI	HE Institution
ICT	Information and Communications Technology
IP	Intellectual Property
JISC	Joint Information Systems Committee
LotF	Libraries of the Future
LDL	Legal Deposit Library
PVC	Pro-Vice Chancellor
RIN	Research Information Network
RLUK	Research Libraries UK
SCONUL	Society of College, National and University Libraries
VC	Vice Chancellor

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1   Introduction

1.1   General

1.1.1   The academic libraries of the future project (LotF) was sponsored by the British Library (BL), the Joint Information Systems Committee (JISC), Research Information Network (RIN), Research Libraries UK (RLUK) and the Society of College, National and University Libraries (SCONUL). LotF was carried out by Curtis+Cartwright Consulting Ltd (Curtis+Cartwright) supported by staff from SAMI Consulting Ltd (SAMI).

1.1.2   LotF has developed three scenarios which describe possible futures for teaching, academic and research libraries in the UK at some point beyond 2020, particularly in the context of the changing academic and technological landscape. The scenarios will help Higher Education Institutions (HEIs) and other organisations look at the challenges faced from a fresh perspective and help them formulate strategies to ensure the sector continues to be a leading global force.

1.2   Objective of this document

1.2.1   This document describes how to use the scenarios developed in LotF for long-term strategic planning for libraries and to a lesser extent the library sector. It is thus aimed at those wishing to understand and use the scenarios for strategic planning.[1]

1.3   Why this study?

1.3.1   Libraries are fundamental to academic learning, teaching and research. However, the world is changing, and will continue change. Uncertainties for the long-term future include: how UK Higher Education (HE) will be funded and operated; how information will be created, discovered, accessed and managed; how learning, teaching and research will evolve to take best advantage of improvements in Information and Communications Technology (ICT); the information needs of users for learning, teaching and research, the knowledge economy, and students and researchers as 'consumers'. The fundamental question is how to plan for libraries to meet these potentially disruptive challenges.

1.3.2   Developing and implementing business strategies over a three- to five-year timescale is now commonplace in HE. Looking beyond this horizon (over 10 to 20 years, or more) is less common and more challenging. To improve decision-making and plan effectively for the future, this longer timescale also needs to be considered and scenario planning is a well-tried means of doing this. The scenarios describe a world some distance away in the future, beyond 2020, to encourage workshop participants to challenge their current world view and respond in imaginative and sometimes radical ways.

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1   A separate document (*Scenarios for 2050* CC413D040-1.0, 31 March 2011) sets out the detailed scenarios.

1.3.3   The terms 'library' and 'librarian'; are used throughout. This is not intended to imply that libraries or librarians as we know them will continue to exist; rather these are a convenient shorthand for an organisation or individual that carries out all or any aspects of information/ knowledge management, curation and preservation and information literacy training. Similarly, 'librarianship' is a convenient shorthand for all aspects of the skill sets required to be a good 'librarian'. There can be no universal assumption that a library, librarians or librarianship will exist beyond 2020.

1.4   Development of the scenarios

1.4.1   The scenarios are based on the contributions from around 80 stakeholders at two workshops in the spring of 2010 and three smaller workshops to flesh out the detail in the summer of 2010. The wide range of influential stakeholders included institutional senior managers, librarians, funders, students, researchers, legal specialists, service providers, publishers, technologists and government policy makers. The scenarios and analysis in this document provide a broad overview of the broad global political, economic and social environment beyond, the nature of HE within this environment, how libraries might be organised and the services (including physical space) they might offer. The scenarios are made up of common assumptions about the future plus scenario-specific descriptions.

1.4.2   A final workshop held in February 2011 used a strategic planning exercise (see Annex A) to test the utility of the scenarios. It also provided useful feedback which has been incorporated in the scenarios.

1.5   Overview of the scenarios

1.5.1   It is important to remember that scenarios are not predictions about the future; rather they describe possible futures. The workshops identified the critical factors that led to the highest impact on, and most uncertainty about, the future. These form the axes for scenarios and comprise:

• whether society and HE have open or closed values. This is a measure of the overall values of the society and the legal or cultural constraints and protections for ownership, use and exchange of information.

• whether HE provision is dominated by the state or by the market.[2]

1.5.2   As a result of the workshops it was decided that this space could best be investigated through the three scenarios presented below. Each scenario has been given a descriptive name which expresses the essence of the scenario to the reader.[3] These scenarios are not intended to be 'preferred' scenarios; each just describes one possible future world. The scenarios can never describe the various worlds in full detail. Indeed, it is essential to leave room for 'what ifs' as part of the strategic planning process.

Wild West scenario (see Section 2)

The phrase 'Wild West' has entered colloquial use to describe any situation that has a no-holds-barred free-for-all flavour. It is used in precisely this way as the name for this scenario. Specifically, this world is dominated by capitalism and corporate power, including the HE sector.

1.5.3   In this world private providers compete with each other and the state to offer students educational services, including information services and learning material. The power lies in the hands of the consumer ('student' being a rather old-fashioned term) who is able to pick and choose from courses and learning materials to create a personal educational experience.

Beehive scenario (see Section 3)

'Beehive' is intended to draw obvious parallels with the hierarchical and structured life of the bee colony, where all is ordered to ensure the common good of the whole community.

1.5.4   The Beehive scenario is a world in which society and HE have open values and the state is the primary funder and controller of HE. Its overriding aim is the production of a skilled workforce, and to this end it has created a largely homogenous HE system for the masses while allowing the elite to attend the few traditional institutions. A limited market is used to provide competition within the HE system to drive up quality.

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2   The term market is retained because it was used in the workshops but in reality there can be market approaches both within state and private sector provision.

3   The descriptive names for each scenario (Wild West, Walled Garden and Beehive) were chosen after the second workshop and represent the essence of each future world. This workshop selected the three considered to offer the most interesting futures for academic and research libraries from a long list of potential scenarios. In considering names we drew on the suggestions generated at the workshop, and on the characteristics captured by our two primary axes: State/Market controlled and Open/Closed values.

Walled Garden scenario (see Section 4)

A Walled Garden is an oasis, shut-off from the outside world. Inhabitants of the garden neither know, nor care much about the world beyond the garden's comforting walls. After all, how could the flowers out there possibly be any better than those within the garden?

1.5.5   HEIs in this scenario are 'Walled Gardens'. The closed nature of society makes HEIs insular and inward-looking, isolated from other institutions by competing value systems. Provision of information services in this world is as much concerned with protecting their own materials for others as it is in enabling access.

Positioning of scenarios

1.5.6   The general positioning of these three scenarios against the open/closed and market/state axes is illustrated in Figure 1-1 (see Annex A).

Figure 1-1:
The scenarios positioned according to the dominant scenario characteristics
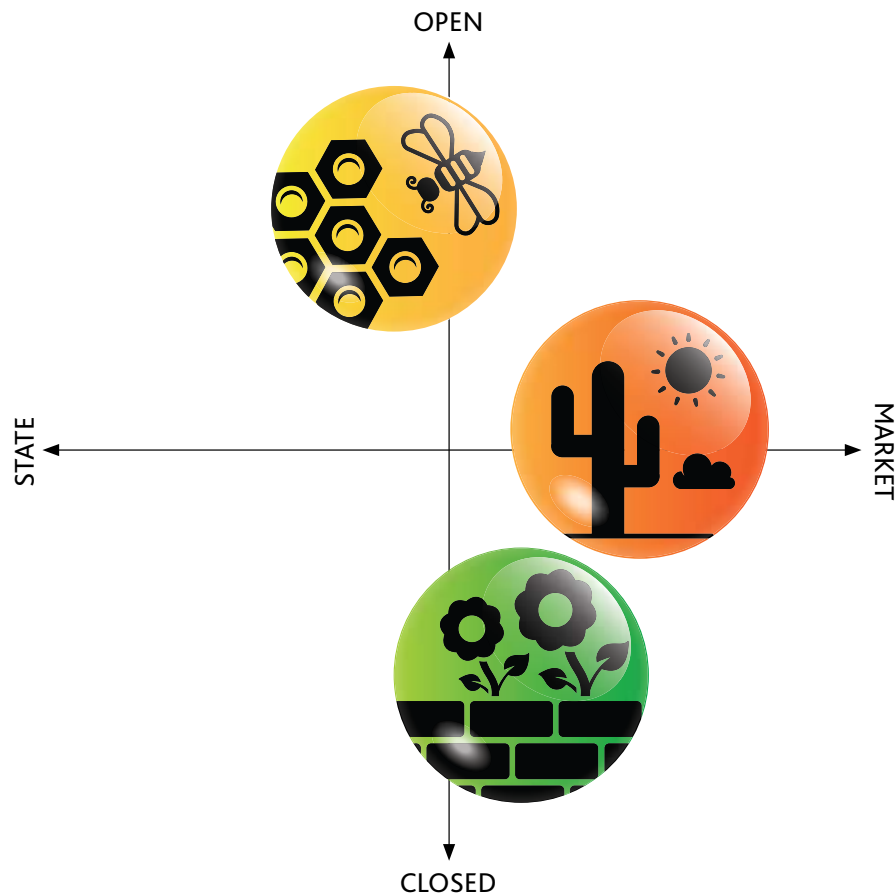
1.6 Terminology

1.6.1   The following terminology is used throughout this document:

- **vision:** a succinct statement of the future state to be developed as a result of implementing the strategic plan.

- **strategic objective:** a long-term goal that represents an element of the desired end state of a strategic change;

- **action plan:** a set of activities that will contribute towards achieving a strategic objective.

1.7 How to use this document

1.7.1   • for guidance on carrying out strategic planning for an institutional library using the scenarios for beyond 2020 (read Section 3 and refer to Annex A as required);

- for guidance on carrying out strategic planning at the library sector level using the scenarios (read Section 4 and refer to Annex A as required).

1.8 Resources to help you

1.8.1   There are many available resources to help with understanding and using scenario planning. Useful guidance can be found in books by Gill Ringland,[4,5] on the JISC InfoNet website[6] and on the FOR-LEARN website.[7] However, as ever, practical experience is the key.

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4   *Scenario planning* Gill Ringland, 2nd edition, John Wiley and Sons, 2006.

5   *Scenarios in public policy* Gill Ringland, John Wiley and Sons, 2002.

6   http://www.jiscinfonet.ac.uk/tools/scenario-planning (accessed 14 March 2011).

7   http://forlearn.jrc.ec.europa.eu (accessed 14 March 2011).

2 Using the scenarios

2.1 Introduction

2.1.1 Librarians can use scenarios to develop their own strategic plans, which address the strategic issues for libraries described below.

2.1.2 There needs to be a comprehensive institutional strategy covering research, and teaching and learning to set the scene for and drive the library strategic plan. This can be either pre-existing or prompted by the development of the library strategic plan.

2.1.3 As part of the strategic process, the institution should establish, continually monitor and review early indicators that suggest a movement towards one of these scenarios and then adapting the strategy as necessary.

2.2 Background

Introduction

2.2.1 Institutions or sector bodies can use the LotF scenarios to plan for the future. Scenarios are stories of possible (rather than predicted) futures, and can be used to help deal with uncertainty and to anticipate real-world behaviour. They create mental models which can be shared between people, institutions and sectors to explore the external environment and assess the potential implications of change.

2.2.2 While developing coherent, imaginative and useful scenarios is important, this process is not an end in itself. Scenarios create a shared language for understanding the environment in which they are operating, and for discussing future options for academic libraries. They can be used to frame strategic discussions between stakeholders, and can improve decision-making. For example, people find it engaging to be asked: What would our organisation be like under each scenario? How would we plan for each scenario? Which scenario is better for us? What are the decision points when action has to be taken for each scenario? What are the policies and actions that are indicated under all the scenarios? Workshops or strategy work can be built around the scenarios and these types of questions.

2.2.3 Five possible uses of the scenarios are presented in the remainder of this Section. These are:

- developing new strategies;

- assessing existing strategies;

- highlighting early indicators of change;

- providing a long-term planning focus;

- avoiding complacency.

Getting the most out of scenarios

2.2.5   Using scenarios in the ways described below can be very valuable for an organisation. However, translating the implications of the scenarios into improved decision-making and creating explicit links to the strategic management process is crucial. Most of the barriers to this are cultural. Turning it from a 'fun' exercise to a more strategic endeavour is challenging. People may be sceptical about the process, and the key to success will be the quality of the people involved and their willingness to open their minds to the scenarios.

2.2.6   Iterating the process of envisaging future challenges and opportunities is important to sustain value. Furthermore, the scenarios themselves will go out of date and will need to be periodically updated to keep them current.

2.3   Developing new strategies

Choosing the scenarios

2.3.1   The scenarios provide a framework for discussing the desired future state for the library or the sector. There are two main approaches to using them as part of formal strategic planning - aligning the strategy to a favoured scenario, or aligning the strategy to common elements in all the scenarios:

- **Align the strategic plan to one scenario.** Identify a preferred scenario for the institution and use it as a 'planning focus'. The preferred scenario may be the one judged to be most probable (eg early indicators might suggest that a specific scenario would be most likely to occur), or the most desirable (if the organisation is in a position to create the necessary conditions for the desired scenario in their sector).[8]

- **Align the plan to the common elements across two or more scenarios,** and aim for the development of a resilient strategy that can deal with wide variations in business conditions. This is the most demanding approach as it requires careful evaluation of the different elements of the strategy against differing assumptions about the future.

2.3.2   Having decided on the approach, the next step is to review the LotF scenarios to be used and decide if:

- either the LotF scenario(s) to be used is/are appropriate for the institution/sector; or

- the LotF scenarios are not entirely appropriate and then generate modified or replacement scenario(s) that reflect the needs of the institution and/or library and/or sector.

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8   The LotF scenarios are deliberately aimed at the sector level and so it is unlikely that any one institution would be in a position to create the necessary conditions to ensure that the scenario occurs. This does not preclude development of alternative scenarios for which this would be the case.

2.3.3 As input to the development of modified or replacement scenarios, the various materials produced during the course of the LotF project will be useful. These include working papers on the background,[9] an horizon scan[11] and a statement of the drivers used during scenario development.[11] These are available on **www.futurelibraries.info**

Strategic planning

2.3.4 Using the scenario(s) for strategic planning against the LotF scenarios[12] has the following steps at either sector or institution level and is illustrated at Figure 2-1:[13]

1. Identify and understand the specific problem and context that you are trying to address (eg develop a strategic plan for a library within an HE institution or for a sectoral component).

2. Consider what the Critical Success Factors (CSFs) for the strategy might be. These provide a clear focus for strategy development and are the small number of areas of strategic concern that must be resolved by application of the strategy. The CSFs will depend on the problem and context. Examples of CSFs include a strategy for content and space or a strategy for librarianship.

3. Develop and maintain an understanding of the overall institutional strategy; this includes establishing close working relationships with managers responsible for institutional strategy and funding (eg Vice Chancellor (VC), Pro-Vice Chancellor (PVC) for Research, PVC Teaching and Learning, and Director of Estates).

4. Identify and understand users' needs for library services to be provided, including space for research, and teaching and learning, information literacy etc.

5. Understand and assess the specific scenario(s) by reading them through and discussing them with others.

6. Articulate the vision; the intention here is to provide a framework of guiding strategic principles for your institution or sector for development of the strategy.

7. For each scenario identify the strategic objectives that you consider you need to achieve; these must align with the general sense of the scenario and the vision.

8. For each scenario identify specific questions you will need to address within the scenario for your institution. This helps with the next step of defining options that are designed to suit your institution and in getting inside the scenarios. A basic list of questions would have content services, other library services and librarian skills and staffing as headings. A starter set of issues for consideration against these headings is given at Section 3.

9 *Background papers* CC413D041-1.0, 31 March 2011, WORKING PAPER.

10 *Horizon scan* CC413D036-0.2, 8 April 2011, WORKING PAPER.

11 *UK HE drivers* CC413D010-0.5, 18 March 2010.

12 This applies to either a selected scenario or all scenarios.

13 Figure 2-1 covers all three LotF scenarios but is simply adapted to the other cases identified in paragraph 2.3.1.

Figure 2-1:
The typical strategic planning process using the LotF scenarios
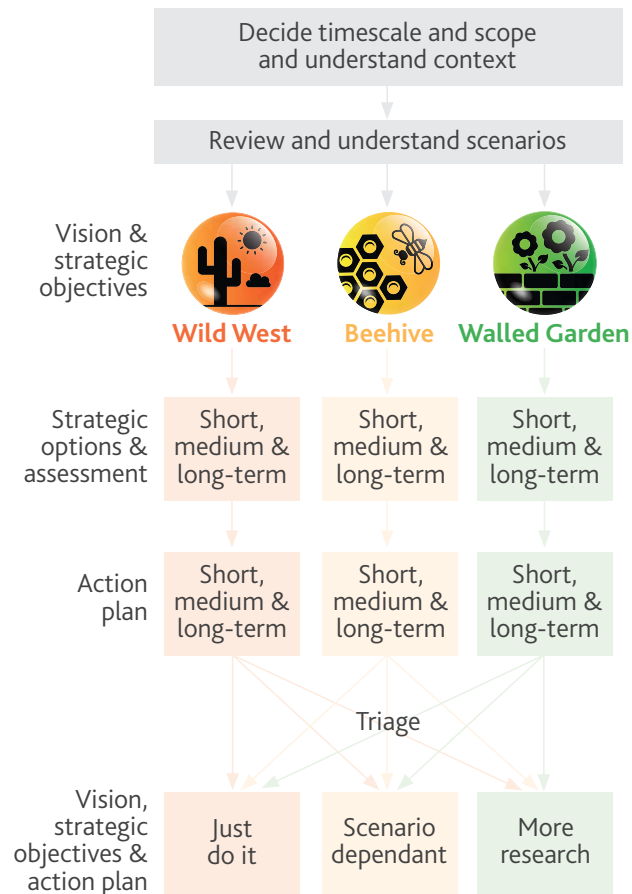
9. For each scenario and strategic objective develop implementation options and assess them, thus creating an action plan setting out the key steps and decisions that would deliver the strategic objective.

10. Review the strategic options and action plans for each scenario and consider the common elements and the differences. Use triage[14] to determine common elements to form the basis of a strategic plan that can deal with wide variations in business conditions.

11. Refine and document the strategic plan. You will need to consider the underlying business case as part of justifying the strategy.

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14 Triage is here the process of assessing whether an activity should be undertaken as: **just do it** as it makes sense in all scenarios; **discard** as it is highly scenario dependent and presents too big a risk; or **explore further** for any options that require more data or more analysis etc. Experience suggests that when an activity is discarded it is likely to be prudent to retain the analysis as part of dealing with changes to the strategy arising from early indicators.

12. Identify early indicators[15] (these are headlines now or soon that would suggest one scenario rather than another) and monitor for any occurrences of them.

13. As you go through the above steps document assumptions you consider that you need to make; these might concern, for example, interpretations of elements of the scenario or the ethos of your organisation or sector.

14. Get buy-in from stakeholders by presenting and discussing the strategy, and revising as necessary.

15. Publish the strategy.

16. Monitor early indicators (see sub-section 2.5) and review and adjust the strategic plan as necessary.

2.4   Assessing existing strategies

2.4.1   Most organisations with an existing strategy have built it with a set of explicit or implicit assumptions. These assumptions are usually based on events in the past. By placing the existing strategy in each scenario in turn and asking 'how would my strategy turn out if this scenario is the one that evolves, and how would it need to change?' you can assess the robustness of your strategy. This process is commonly called 'wind tunnelling' – like testing an airframe in a wind tunnel to find the weak points. Strategies and policies that are good under all the scenarios are called 'robust'; those that are aligned to one or another scenario are called 'contingent'. Contingent strategies should be reviewed.

2.4.2   Essentially, assessment of existing strategies can take place by adapting the approach for developing a new strategy (see sub-section 2.3). You need to assemble a team who understand between them institutional strategy and the library strategy and its assumptions. One way of proceeding is for a sub-group to identify issues and shortcomings and then discuss these in the context of the scenarios with the full team.

2.5   Highlighting early indicators of change

2.5.1   Following on from a strategic planning exercise, librarians and others can use the scenarios as mental models to look for and identify signs of change, to alert an institution if it needs to take action. The physiological reason for this is that the brain matches incoming signals to existing models in the brain – and so is more likely to recognise signals of change with a set of possible scenarios. One way of heightening this capability is through 'early indicators' which are headlines which would appear earlier, and are easy to spot, if a particular scenario was unfolding. A range of exemplar early indicators has been identified for each scenario and others will normally be added as a part of the strategic planning process.[16]

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15   Early indicators are documented at sub-section 1.7 of *Academic libraries of the future – scenarios for 2050* CC413D040-1.0, 31 March 2011

16   *Scenarios for 2050* CC413D040-1.0, 31 March 2011.

2.6 As a long-term planning focus

2.6.1 Perhaps the most powerful use of these longer-term scenarios is in thinking about the people and facilities implications of each scenario. Librarians' careers span perhaps 50 years and buildings often last for 100 years, so planning for these needs to take into account possible futures over the timescale of the scenarios.

2.6.2 Library Directors and senior management may wish to explore in more detail the 'what ifs' of each scenario, the implications for different types of libraries, with the aim of reaching a shared view of the robust decisions that librarians and institutions can make, which will be positive whichever scenario evolves. For example:

- What sort of people should be recruited as librarians now to be able to cope under each of the three scenarios? What jobs will there be? What skills will be required?

- What facilities will be needed in existing HE institutions under each scenario? Will the different functions of academic libraries – archival, access point, information source – be co-located? Will archival repositories become merged? These uncertainties suggest that facilities for access, information source and archival should be flexibly designed.

2.6.3 Another major factor is the extent and nature of digitisation. Should storage of digital content be migrated to a few UK Universities, with others (and other international institutions) having remote access? What is the role for paper archives and artefacts? The answers are again different in each scenario.

2.6.4 The approach described in sub-section 2.3 can be adapted for this. The team will need to be assembled from across the institution to bring together the right mix of stakeholders and subject experts.

3 Strategic planning for academic libraries

3.1 Introduction

3.1.1 This Section sets out issues and insights obtained from developing the LotF scenarios that need to be taken into account as part of the long-term strategic planning of academic libraries in universities and colleges.[17] These provide a 'starter set' of questions to be addressed when tackling a real strategic planning problem. As part of your preparation for using the scenarios you should review the issues and insights set out below and augment them with others which reflect the culture and process of your institution in the context of the scenarios.

3.1.2 The material is organised under the following headings:

- content services;

- other library services (eg stewardship, search and navigation, information literacy, repository and publication services, space for teaching, learning and research);

- librarian skills and staffing.

Content services

Cross-scenario

3.2.1 All the scenarios assume that at some point beyond 2020 libraries will have made significant progress towards completing the digitisation of paper-based records. Practically all scientific books, papers and other records post 1900 will have been digitised. Arts and humanities materials will have the majority of post-1950 books, papers and records digitised. Remaining paper materials required for teaching or research will normally be digitised on demand. Some special collections (eg extensive collections of frail manuscripts) are likely to be the exception. Libraries will develop and change to encompass the new practices and technologies.

3.2.2 The strategy you develop for achieving this goal will clearly be heavily dependent on the nature of the institution (eg a Legal Deposit Library (LDL) may retain paper materials for longer than non-LDLs). Particular issues for consideration are:

- the timing of the ending of acquisition for paper materials;

- what digital materials will be held to meet the institution's strategy for research, teaching and learning, the sources for this and types of licence sought; this will need to include consideration of new and emerging information resources (eg in 2011, these might include news websites or Twitter);

- approach to provision of digital services (eg separately negotiated with providers/ publishers, part of a shared service);

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17 This Section needs to read in conjunction with the relevant parts of the LotF scenarios (*Scenarios for 2050* CC413D040-1.0, 31 March 2011).

- how radical will the divestment of paper holdings be;

- what will be done with any special collections (eg retained, merged with another collection, sold or otherwise divested);

- the approach to metadata acquisition to support current and emerging search and navigation tools for both digital and remaining paper holdings;

- the approach to publishing and licensing of research data, and teaching and learning materials produced by the institution or other associated institutions.

Wild West

3.2.3   In this world, provision of standard content services is typically outsourced competitively to commercial vendors across the UK, Europe and other countries, depending on the subject area. No supplier has yet obtained global dominance. The market sets the interoperability standards.

3.2.4   Particular issues are:

- How will the library interact with the mix of traditional academic publishers, self publishing and new peer review approaches in this scenario?

- How should any special collections be exploited for the benefit of the institution;

- How any content developed by the institution covering research, teaching and learning should be exploited (eg this might be internally or through sale to another institution or company)?

- How will IP be best protected in this competitive world?

3.2.5   An early indicator for the Wild West scenario occurring is a sustained trend of new commercial vendors wishing to provide content and the institutions buying from them.

Beehive

3.2.6   Use of shared services to provide content is most likely in this world. Negotiation with content providers is likely to be at state or regional level.

3.2.7   Particular issues are:

- If you become a spoke for the majority of the teaching and learning materials, how will you choose your hubs?

- If you are spoke dominated, how many different hub institutions would it be feasible to deal with (eg could choose to be a spoke for the best hub for every subject but might lead to technical and other challenges to deliver this)?

- If you become a hub for specific subjects, what marketing and sales activities might be necessary to sign up spokes etc?

- If you are a hub, how far does your ambition go (would you wish to provide content to a few or many spokes)?

3.2.8   Early indicators for the Beehive scenario occurring are:

- a significant amount of content being procured and provided through one or more shared services (eg at a national or regional level);

- large institutions marketing teaching and learning materials to smaller institutions.

Walled Garden

3.2.9   Libraries have become increasingly specialised around specific disciplines, services and/or content. Some institutions have sold or otherwise divested themselves of 'non-relevant' holdings and physical special collections, or now house them off-site. Materials that supported the group's values would be exchanged with other members of the group.[18] Acquisition of content not produced by the group would most likely be through separate negotiation with content providers (ie publishers, other walled gardens).

3.2.10   Particular issues are:

- How should the holdings be reduced?

- Whether and how holdings not representative of the group should be maintained/acquired (and how this is to be done), especially for research (the latter is likely to involve complex negotiations with external publishers and other HEIs etc)?

- How should content be protected from those outside the Walled Garden?

3.2.11   Early indicators for the Walled Garden occurring are:

- institutions refusing to share content with other institutions;

- an increase in content which is specific to a particular set of institutions and values that might be a putative 'Walled Garden';

- content provision moving away from any shared service aspects of the current arrangements for content acquisition (eg the withdrawal of JISC Collections from the market).

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18   Group is used here to refer to those that share the common value system and are thus within the 'Walled Garden'.

3.3   Other library services

Cross-scenario

3.3.1   The development of the internet and related technologies means that in the majority of cases search and navigation will very much be a user activity generally requiring very little input from librarians. The exceptions are largely concerned with special collections or opening up new research fields or new types of information collection. However, advanced Artificial Intelligence (AI) interfaces will not have yet completely replaced human involvement in complex search and navigation.

3.3.2   Beyond 2020 basic-level **information literacy**[19] skills will be universally recognised as essential in the digital age. It can be expected that students and researchers will have received a thorough grounding in their passage through school and HE and require little in the way of additional training. Improvements in search and navigation will automatically support, for example, assessment of the quality of sources and citation management.

3.3.3   In the years beyond 2020, there is likely to be a real but reducing need to train researchers, teachers and learners in basic-level information literacy skills. There is likely to be a continuing need to ensure that overseas students are given basic-level information literacy training as required. Higher-level information literacy skills are unlikely to be required by all researchers and learners. It is not clear that provision of basic- or higher-level information skills and training would be a library function.

3.3.4   In all scenarios, at least some institutions will need **repositories**[20] to store and make available materials that are produced or acquired by the institution.

3.3.5   Beyond 2020, **physical space** continues to be valued for supporting research, and teaching and learning but not for storing holdings. A consequence of developments in ICT is that the provision of space by a library for research and learning is generally separable from that of content. The actual strategy is clearly heavily dependent on the nature of the institution.

3.3.6   Key issues that will need to be considered when developing your strategy are:

- What is the policy for adoption of new and emerging **search and navigation** systems; in particular, the library needs to consider whether it should be an early or late adopter?

Regarding **stewardship**:

- For which holdings does the institution need to have responsibility for stewardship and for which ones does it not need to have responsibility?

- What does stewardship (eg data preservation, software preservation, protection of Intellectual Property (IP)) mean for digital holdings compared to any remaining paper holdings, and how will the two strands be handled?

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19   For the purposes of this report, basic-level information literacy skills are defined to cover search and navigation, and critical evaluation of what is found together with an appreciation of IP issues and user security capability and procedures. Advanced-level information literacy adds in a range of information management, curation and all aspects of IP and IP protection skills that are likely to be needed in a work/research group context. The precise skills will need to be matched to the specific problem area and organisation.

20   A repository might be local or be part of the 'Cloud'.

- How stewardship might be shared with other institutions (eg holding of back-up copies by other institution, the creation of a UK or regional digital reserve)?

If a **repository** is required:

- What is to be held on the repository and for what purpose (eg administrative information, journals, research data, monographs, theses, teaching and learning related information)?

- What are the groups of users that will be permitted access to a repository (eg students, researchers, academics, support staff, institution management, parents, and funders) and under what licence conditions?

- The approach to IPR for library holdings of research, and teaching and learning materials (eg clearance process for inputs, providing advice to authors, handling and resolving IP queries)?

Regarding **physical space**:

- What are the uses for library space (eg teaching and learning, research, collaboration, support for provision of library services, office and work space for librarians, storage for special collections, and storage for paper holdings)?

- What is the split of the space between the various purposes outlined above?

- How much space is required by year to match the library's requirements (this should include how space will be re-used or divested, by year)?

- How will the space be provided (eg by the library itself, by the estates function within the institution, by a department, through the use of the librarian's home)?

Wild West

3.3.7   Key issues that will need to be considered when developing your strategy are:

- Provision of **search and navigation** facilities is typically contracted competitively to commercial vendors across the UK, Europe and other countries, depending on the subject area. No supplier has yet obtained global dominance. The market sets the interoperability standards.

- **Stewardship** would normally be the responsibility of the commercial or institutional vendor responsible for provision of the external content and information services. How would stewardship be undertaken for any repositories containing, for example, institutional research, teaching and learning materials?

- A **repository** service would most likely be a standard cloud-based service or otherwise outsourced competitively. In this world The institution would be responsible for adopting the implicit business processes and adapting the standard training package to its own needs

- How would residual basic-level **information literacy** courses be provided
  (eg covering the specific technical and procedural measures to protect IP)?

- What is the strategic approach to **protecting the IP** of information that might have
  value for or give competitive advantage to the institution (eg how to use a repository,
  licensing arrangement)?

- How will you ensure that **space** is used effectively and economically and what would
  the library's role be in this?

Beehive

3.3.8   Key issues that will need to be considered when developing your strategy are:

- The use of shared services in this scenario for the provision of library services suggests
  that **stewardship** of the external information services would also be a shared service
  and not the responsibility of the institution. How would stewardship be undertaken
  for any repositories containing, for example, institutional research, teaching and
  learning materials?

- There needs to be **repository and publication** services for the hubs for research,
  and teaching and learning. How would you arrange this and what repository services
  would you offer to your spokes (eg cloud-based, outsourced or provided in house)?

- Use of shared services for **search and navigation** is likely in this world. Negotiation with
  content providers is most likely to be at state or possibly regional (including European
  level), although hubs invest in access platforms to their own content. How would you
  manage this (eg governance arrangements, need for pan institution bodies)?

- Hubs are **self-publishers** of teaching and learning materials. To help drive up quality,
  hub materials are licensed for use by customer spokes in return for cross-funding.
  Publishers are often involved in the marketing to spoke organisations of the course
  and learning support materials developed by the hubs. If you are a hub, how will you
  manage/enforce licensing of teaching and learning materials for spokes?

- If you are largely a spoke institution for teaching and learning, what are the implications
  for your own **repository and publication services** (eg would you tend to use the
  repository services by subject as provided by the hub and how do you do this if you deal
  with multiple hubs)?

- If you are a hub institution what other library services will you provide/offer to customer
  spokes (eg residual basic-level **information literacy** courses, help desk)?

- How will you ensure that **space** is used effectively and economically and what would
  the library's role be in this (eg sharing of research, and teaching and learning space
  between regional institutions, location of shared services aspect of hubs, rationalisation
  of library versus estates provision)?

Walled Garden

3.3.9   Key issues that will need to be considered when developing your strategy are:

- **Stewardship** is likely to be entirely the responsibility of the originating group. How would stewardship be undertaken for the totality of materials for institutions within the Walled Garden?

- There would most likely be a single, shared **repository** provided by, or on behalf of, the group to which the institution belongs. How would this be achieved? What alternatives might be viable?

- What is the approach to **search and navigation** of resources outside of the institution's Walled Garden?

- Institutions own and **exploit the IP** of research, teaching and learning materials. In-house publishing and control of teaching and learning materials is important for some variants of this scenario (such as the fragmentation of the UK described in the LotF scenarios) and can be a lucrative income stream. What mechanisms would you need to put in place and how would you manage this?

- Protection of the information resources within the Walled Garden is paramount. How will this be achieved (eg basic-level **information literacy** course focusing on procedural and technical aspects of IP protection for that institution)?

- How will you ensure that **space** is used effectively and economically and what would the library's role be in this (eg sharing of research, and teaching and learning space between regional institutions, location of shared services aspect of hubs, rationalisation of library versus estates provision)?

3.4   Librarian skills and staffing

Common issues and insights

3.4.1   At some point beyond 2020, the scenarios all suggest that the role of librarians will have changed radically (eg the embedding of specialist librarians as a team member within a research group or teaching and learning group, and the potential diversity of specialist librarian roles and skills). Particular issues to be considered when developing your strategy are:

- What is the role of the librarian (eg specialist, front-line, back-office, senior management) and what skills are required (eg the required mix of librarian, procurement, legal and IT skills)?

- What is the set of skills and experience required of the librarians and how will this be met (eg recruitment, retention, redundancies, training)?

- What needs to be done to develop the skills of the current staff?

- What is the institution's input to the debate at sector level on education and training for librarians etc?

- What is the staffing profile with grades/roles etc by year?

- How will librarian services be provided (eg librarians might be employed, freelance, contract and might work from home, a call centre, a library etc)?

Wild West

3.4.2   In this scenario, librarian skills and staffing are as follows:

- there is an increase in the amount of front-line support provided by librarians working in institutions; librarians also work for library service providers; much of the support is provided on-line;

- librarians are typically freelance or on short-term contracts, often working part-time and from home, similar to consultants, careers advisors etc in 2011;

- within the elite institutions, 'personal librarianship' services are a key selling point for an institution in recruiting star teachers or researchers;

- librarians need a mix of information management, IT and librarianship skills;

- the library manager has a key role in the institution in ensuring that management and use of information contributes strongly to research, and teaching and learning; the library manager typically reports to the institution's board;

- entry to the librarian profession is through a short course followed by an increasing array of specialist qualifications and on-the-job experience;

- jobs in the elite institutions are highly competitive and sought after by specialist librarians.

Beehive

3.4.3   In this scenario there are two basic types of librarian (hub and General Practitioner (GP) librarians), reflecting the hub and spoke structure by subject for institutions. Hub librarians include a range of specialist subject and information management skills. Librarian skills and staffing are likely to be as follows:

- hub and GP librarians undertake management of course and learning support materials and institutional repositories;

- hub librarians are closely involved in the teams creating course and learning support materials; hub librarians combine expertise in the subject and also in presentation, production, licensing of course and learning support materials;

- hub librarians support students and staff on finding knowledge and information, and access and use of course and learning support materials; similar support is provided through a help desk to librarians and learning support staff at spokes;

- many hub librarians are employed in industry and R&D institutions with collaborative links largely to hub institutions;

- hub and GP librarians provide information literacy skills and guidance for students;

- hub subject librarians typically work closely with one or more research groups;

- hub subject librarians manage research information and knowledge at both the hub and related spokes;

- many GP librarians work through an online help desk and are often freelance or part-time;

- movement between the specialist and GP strands of the profession, is possible, but can be difficult to achieve;

- some hub librarians have specialist skills (eg carrying out research into search and navigation, understanding of IP);

- the library manager manages a team with varied skills, many part-time or outsourced; normally, the hub library manager is responsible for the IT services at the institution though these are typically provided as shared services.

Walled Garden

3.4.4   In this scenario, librarian skills and staffing are likely to be as follows:

- librarians reflect the role of libraries and have become increasingly specialised around specific disciplines and services and are embedded within different areas of the institution;

- librarians work as personal librarians for research or teaching and learning teams;

- librarians seek to keep up to date with information developments in other institutions within the group;

- librarians are responsible for protection and management of IP;

- librarians commonly have strong technical skills, including especially information security to help safe-guard their institution's proprietary information;

- librarians spend a lot of time on negotiating content deals with external publishers and other institutions;

- librarians are responsible for ensuring materials are deposited with them, enforcing corporate standards on format and style, and for distributing and making the material available for approved users;

- librarians support students largely by directing them towards approved resources.

4 Strategic planning for the library sectors

4.1 What the sector needs to do

4.1.1 The scenarios provide three possible futures for the global environment, the UK HE context and 'library' services and organisation. While these are designed for developing strategy for an institution they can also be used by sector representative bodies to develop strategy for the overall 'library' sector. Strategy development needs to consider:

- developing and maintaining an understanding of the sector, covering the need for librarians and the skill sets required now and in the future;

- establishing close working relationships with overlapping membership bodies (eg British Computer Society (BCS));

- setting strategic objectives for training and Continuing Professional Development (CPD) to support development of the syllabus for librarians;

- setting strategic objectives for training of users of library services (ie higher-level information literacy);

- providing a sector view for libraries and/or librarians on issues across the sector (eg good practice on governance, content licensing, IPR, employment contracts, librarian career structures, standards of conduct);

- providing support services for librarians (eg helping retrain librarians for new and emerging roles (eg helping them find jobs, providing access to counselling);

- having a strategic development plan for each sector body (eg the relationship stance with other relevant bodies within and outside the sector, and the conditions that would need to pertain for merging with other bodies both within and outside the current library sector);

- acting as a focal point to support industry in the development of library services and products (eg search and navigation techniques, library management systems);

- representing the sector and/or librarians to government or other relevant bodies (eg the European Commission).

4.1.2 As part of the strategic process, the sector representative bodies should establish, continually monitor and review early indicators that suggest a movement towards one of these scenarios and then adapting the strategy as necessary.

4.1.3 This remainder of this Section documents issues and insights on sectoral issues provided through the development of the scenarios. It is important to note that in the Walled Garden scenario, the concept of a sector is not meaningful.

4.2   Strategic issues and insights at sector level

Introduction

4.2.1   The scenarios represent very different futures for the library sector, but many of the issues and insights are common across the scenarios. These are documented below, followed by specific issues and insights for each scenario.

Common issues and insights

4.2.2   Common across all the scenarios is an anticipated radical change in the provision of library service, for the role of librarians and for librarianship.

4.2.3   Many of the current skills of librarians are either no longer required to the same extent (eg stewardship of paper materials, management of library space, provision of basic-level information literacy training) or are replaced by technology (eg use of AI for advanced search and navigation). Equally, there will be new skills required of librarians (eg software preservation, ICT and information management skills). Rather than working in a library, librarians will often be embedded within different areas of an institution, or may work from home, or from a call centre. Similarly, many librarians may be self employed and/or work for multiple libraries or work for industry.

4.2.4   At some point beyond 2020 many librarians will no longer have experience of working in physical libraries, of the current role of librarians or current ideas of librarianship.

4.2.5   The timing of these changes is unclear. Experience suggests that it is likely there would be a number of phases of change interspersed with periods of relative stability.

Potential consequences for the library sector include:

- many current librarians will require retraining and help and support to undertake the changes;

- there may be unemployment or early retirement for some traditional librarians who are unable or unwilling to gain new skills or experience;

- the changes to the role of librarians and the meaning of librarianship will alter the career structure for librarians; moreover, the need for librarians to have IT skills may mean that more men will enter the profession at junior levels; this would have implications for career paths etc;

- the changes to the nature and range of what librarians do will require a rethink of current training courses and institutions;

- loss of identity for librarians in that the concepts of a librarian and librarianship are likely to be close to the similar aspects of IT and might be absorbed by it;

- the fragmentation of librarians' roles might lead to a fragmentation/recombination of the various bodies (eg the Chartered Institute of Library and Information Professionals (CILIP)) that currently represent librarians; in some circumstances, there might be merger with IT representative bodies such as the BCS.

4.2.7   Key issues that will need to be considered when developing the sector-level strategy are:

- What is the role of a librarian and what are the boundaries and overlaps between the role of librarians, IT staff, information managers, museum and library staff etc?

- How should the sector respond constructively to changed career prospects and opportunities for librarians, the need for different skills (eg help and support to librarians undergoing radical change, establishing retraining courses, position on unemployment, redundancy or early retirement, changes to the library school syllabus, positioning and image of sector to attract new entrants etc)?

- How should the sector ensure continuing availability of traditional librarianship skills needed to support, for example, special collections of paper holdings and what are the consequences for the career prospects and opportunities for such librarians?

Wild West

4.2.8   Wild West is highly fragmented; there is little agreement of what constitutes a library or a librarian. In this world there would be fragmentation of sector bodies representing either libraries or librarians.

4.2.9   Indeed an early indicator of the Wild West scenario occurring is a reduction of interest in institution sector bodies such as SCONUL and RLUK or fragmentation of bodies representing librarians.

4.2.10   Information professionals are increasingly embedded through the lifetime of the research project or teaching development work as members of the team with specialist knowledge on the discipline. The emergence of different types of librarian in this scenario suggests that the strategy should establish what the sector represents, given the fragmentation of the meaning of library and librarian in this scenario.

Beehive

4.2.11   In this world there is emergence of different types of librarian (referred to in the scenario as General Practitioner (GP) and hub librarians). The scenario suggests that there would be fragmentation in sector bodies between these two groups as set out in the scenario. While this is a realignment from the current situation, the representative bodies would continue to have a lot in common and would work together to achieve common objectives. The latter is considered to be an early indicator for this scenario.

4.2.12   This scenario also has a strong European dimension. One possibility would be for the sector bodies to collaborate/merge with similar bodies within the European Federation (EF). This provides another early indicator of the Beehive scenario occurring.

4.2.13   The emergence of new representative bodies for libraries and librarians in this scenario suggests that the sector strategy should seek to establish how interaction should occur between them to discuss elements of mutual interest.

Walled Garden

4.2.14   The key issue regarding the Walled Garden scenario is whether there is an overall library sector because of the potential level of fragmentation between groups of institutions with common values. While the issues faced by libraries and librarians are likely to have a lot in common between value groups, the defensive and closed posture may make it difficult to form working networks.

4.2.15   Depending on the size of the value group, representative bodies for libraries and librarians within it might be viable. For example, if Walled Gardens formed around the different countries within the British Isles, representative bodies for the English, Welsh, Scottish and Irish institutions might each be viable. Some collaboration between representative bodies in different value groups is feasible but would require extensive formal negotiation and agreement and even then would be limited to particular issues (eg use of technology).

4.2.16   An early indicator for the Walled Garden scenario occurring is fragmentation of bodies representing either institutions or librarians with subsequent collapse, or merger with bodies representing a similar value network.

4.2.17   The sector strategy should consider carefully what 'sector' means for this scenario and what might feasibly be done.

A   Case study: University of Westshire

A.1   Introduction

A.1.1   The final libraries of the future workshop held on 28 February 2011 at the Woburn Place Conference Centre considered the use of the libraries of the future scenarios for strategic planning at the University of Westshire. Attendees were asked to advise Westshire's librarian to identify and review options for taking forward the library as part of the Vice Chancellor's overall strategic review.

A.1.2   This Annex builds on the work undertaken at the workshop to provide a long-term strategic plan for Westshire. The starting point is the vision, assumptions, strategic objectives and action plans developed in the separate groups considering each scenario from the research or teaching and learning perspectives.

A.1.3   Development of long-term strategy requires careful and considered analysis (eg triage of options). The constraints of the workshop format meant that this could not be done in detail. Consequently, the case study is somewhat rough and ready. However, it does provide a good example of the issues of strategic planning and the use of scenarios. It is important to remember, however, that in this case the approach is the important aspect rather than the details of the example.

A.1.4   Because of the uncertainties of the outcome of the VC's review, participants were encouraged to make and document assumptions regarding the outcome, where this would directly affect the library.

A.2   The Westshire problem

A.2.1   A task force was assembled from across the University and related institutions. The task force agreed to split into three, and each group would analyse the situation and possible solutions under one of the three scenarios, considering both the research, and teaching and learning aspects.

Background

A.2.2   Westshire has been created over the last 20 years by merging a number of bodies in HE and Further Education (FE), some of which have a long history. This legacy has left it with 5 campuses, which creates some inefficiency. On the other hand student numbers have grown so that there is little space for development. Consolidating onto fewer campuses is not practical in the short-term as none of the sites have nearby additional land which could be developed.

A.2.3   Each campus has, for historical reasons, its own library resources. A recent inspection of one of the buildings (referred to as the 'X library') a 60's library, has indicated that it is nearing the end of its life because of 'concrete cancer'. This presents an opportunity to rethink the provision of library and information support for students and researchers alike. The review should cover both physical spaces and the electronic delivery of information. The Library service and IT department report to the same PVC.

A.2.4   Until recently, the students tended to be largely drawn from the region, which has a high ethnic mix. Over the last few years, as the reputation of Westshire has improved, the number of students from overseas has increased. This is a pattern that the VC wishes to see maintained.

The problem

A.2.5   The VC is leading a strategic review, of which the library review is part. In particular, she is looking at three possible options for the future direction of the University:

- building on the current good performance and the largely good, but quite small scale, research base at Westshire and moving towards a near-market research-intensive model with higher quality students;

- keeping the focus strongly on teaching and learning and the widening participation agenda while retaining but not growing the existing research base;

- having a balanced strategy where there is some growth in the research base and some in teaching and learning.

A.2.6   There are two aspects to the research challenge which the VC has raised. First, to cut costs and overheads the number of faculties and departments is being reduced. Within the new structure, the VC believes that there will be opportunities to create niche areas of multidisciplinary and interdisciplinary research where Westshire can achieve both a unique position and economies of scale. The implication is that academic research which is less than excellent is at risk over time.

A.2.7   The focus on impact of research as a measure of success is opening up possibilities of a new kind of collaboration between research universities in which 'blue' sky research in one institution is taken close to market by partner institutions. Westshire sees the opportunity of increasing its near-market research by seeking funding partnerships with business, particularly local business.

A.2.8   The vision for research at Westshire will be presented to the evolving Local Economic Partnership later this year, it is believed.

A.2.9   Westshire has standardised on Moodle for its VLE. Uptake by staff and students has been slower than expected or required, but the offering is maturing and student satisfaction is improving.

A.2.10   The following areas have or are developing a strong national reputation in near-market research and teaching and are, thus, likely to be affected by outcome of the VC's review:

- School of Education;
- School of Librarianship;
- School of Computing;
- Media Studies;
- Publishing Research Group, focused on books, magazines and newspapers;
- School of Television Production;
- School of Law, with a reputation in IPR.

A.2.11   While these developments provide an internal context for Westshire, there are external factors which may be considered:

- The neighbouring local authorities are planning to close a significant number of Public Libraries. While there are protest groups locally about the provision, the local authority argues that they have no alternative. With students at Westshire drawn from the local region, some students use the local public libraries for private study, but the scale of this use is unclear.

- The local FE colleges are facing a similar financial squeeze and are fighting to maintain their independence. Rather than merge into a large college they are looking to develop shared services, both in administration and in teaching and learning.

- The FE colleges have developed better relationships with local small businesses than Westshire to date. Much of the local private sector is in small and medium enterprises. There are a number of Multinational Organisations in the area. They are mainly administration centres for Europe, though there are a few who have R&D centres on a Science Park at Western University, near one of Westshire campuses.

A.3   Wild West

Assumptions about HE/FE context

A.3.1   Westshire's research is near to industry and to the public sector (eg in health), so that knowledge transfer and access is important. Westshire's role would be in applying blue sky research, and in business incubators (ie Research and Development (R&D) rather than research). In this scenario much of the research is funded by industry rather than government. It was considered that one approach for Westshire would be building on the journalism and media elements to build an excellent applied research focus.

A.3.2   Westshire could also profit through its proximity to Western, sharing staff and attracting good students. A focus on taught Masters' degrees could allow good students to undertake research at Western or in industry or in Westshire.

A.3.3   In the Wild West scenario, brand is important so that good standards of the physical estate were important for attracting students, staff and funding.

A.3.4   Students in universities will be better able to use information for research, having been trained throughout education. However, in the short-term there was a need to cater for students who did not have books or information access at home. Westshire was also considering establishing Academies to attract high quality students (and ambitious parents).

Assumptions about libraries

A.3.5   Over the last decade there have been a number of attempts to create Libraries of the future as big iconic buildings. In the discussion, it was felt that these attempts had failed and what the scenario pointed towards was the need to design to a broad vision but implement incrementally and learn from the experience of what works.

A.3.6   The group considered a library hub (central library facility) and spoke (embedded space and library services) model. Initially it was felt important to build the library hub, but that switched quickly to the spoke. It was viewed that the hub could evolve virtually and physically over time but that the spoke needed to be the focus for early investment. What was envisaged was the development of a location and ambience that would and could be branded to deliver a student experience that would be worth paying for.

Vision

A.3.7   The vision for the Westshire library is that it offers very high quality content, space, access and support to its teachers, learners and researchers. In support of this it has a recognisable and valued brand built on the quality of its content, space and library services. It is caring and supportive for all its users. It is responsive to the needs of business and HE institutions it works with. It provides training in information literacy.

Strategic objectives

A.3.8   The following strategic objectives were identified:

- move to an all digital approach and divest paper holdings as quickly as feasible;

- create high quality space which would contribute to the brand of Westshire which supported the teaching and learning mission;

- create an appropriate library infrastructure to support research; the physical storage of the contents of the 'X library' was thought secondary, but providing the right sort of space to support research was most important;

- diversify the revenue model for the library (eg provide a range of services with different levels of performance at different rates through the library spoke (eg bronze, silver, gold); each service would be separately chargeable to ensure market testing and value for money.

Action plan

A.3.9 In the **short-term**, Westshire should:

- establish a radical content use policy that supports initially sufficient reduction in storage space and a move to virtual access to obviate the need for the 'X library' site in the short-medium term;

- start the transition to a single library service with virtual access and a 'shared warehouse';

- provide embedded library spaces and library services on the campus with the 'X library' to replace and enhance services provided by the 'X library';

- redefine the profile for the next generation of 'librarian' and recruit accordingly, covering

- library knowledge, ICT skills and personal skills;

- ability to guide as well as serve;

- reskilling or restructuring staff while recognising specialisms;

- develop the library brand as a subsidiary brand of Westshire but noting that it could be developed as a standalone brand for a range of institutions as a contingent strategy;

A.3.10 In the **medium-term**, Westshire should:

- develop and assess the business case for hosting library services for a variety of institutions and include local public and FE libraries.

A.3.11 In the **long-term**, Westshire should:

- ensure all space is designed to be flexible and meet green standards (in this scenario, energy costs go sky-high);

- establish a plan in which all access to information is virtual, with access points in all buildings;

- meet needs for meeting spaces, working and teaching spaces and project spaces, which will all be increasingly important;

- develop over time a range of specialist services at the hub which would require new roles and specialisms; these would be developed from the early service roll out rather than against some grand plan.

A.4 Beehive

Vision

A.4.1 The vision for the Westshire library is that it offers very high quality content, space and access to its teachers, learners and researchers. Its services enable world-class research in journalism and media and support business, local FE colleges and the community. It is caring and supportive for all its users. It is responsive to the needs of business. It provides training in information literacy. The library information system will be integral to the way that the library's users find, process, and manage their information. The library provides a highly agile offering that ensures the library is always adapted to the changing society, industry and world. Its users understand, trust, and value the services provided.

A.4.2 In support of this vision the library would:

- provide space and associated support to encourage academic collaboration, undergraduate teaching (including in a research environment), engagement with and space for local and national employers, and content providers (eg satellite operations on campus);

- need much less space because of the significant reduction in paper holdings, but some paper holdings would still remain;

- provide space for digital holdings;

- have key staff embedded in the research activity;

- be responsible for the management of all teaching, learning and research data across the institution;

- ensure space is available to drive academic collaboration;

- engage with public libraries regarding support for local learners.

Assumptions

A.4.3 The following assumptions are made:

- Westshire would seize the opportunity to create a local and regional research and teaching hub in journalism, media etc as part of a world centre of excellence for research-led practitioners in media etc;

- Westshire would develop stronger research and teaching collaboration links with Western, local FE Colleges and with local and national employers;

- in the Beehive scenario 'open' does not mean that learning materials are free and publicly available; the hub and spoke model precludes this;

- in the Beehive scenario 'open' means that higher education is open to all;

- hub materials can be generic or tailored;

- there would be a move to global licences both for external content providers and for materials available from Westshire hubs;

- current short-term actions should continue along the current trajectory comprising online courses coupled with local support and a move to complete embedding; in the longer-term this could be phased out or just restricted to those still making the transition (eg older or international students);

- the changes in academic practice would constitute a major change programme for Westshire; there would be a need to encourage and facilitate academics to make these changes.

Strategic objectives

A.4.4   The following strategic objectives were identified:

- move to near all digital holdings as soon as practicable;

- optimise space use and develop space to support library users and Westshire strategy;

- engage and appropriately embed library staff in potential research, and teaching and learning hubs;

- ensure all Westshire staff and students work to the highest standards of information literacy;

- ensure library staff have right skills and library has right staffing levels.

Action plan

A.4.5   In the **short-term**, Westshire should:

- establish and start implementing a content policy to meet needs of research, teaching and learning (eg what digital holdings are necessary, move to digital), taking the institutional strategy into account, stopping acquisition of new paper holdings and divesting existing paper holdings, leaving the minimum paper holdings possible;

- establish and start implementing a library space-use policy; this would be based on market research with users on localism/quality preferences for space and with Westshire's strategy; this would offer flexible, high-quality work and networking spaces for research, teaching and learning; each space would be flexible and include consideration of driving academic collaboration and enticing employers to operate satellite operations (where Westshire can work on research for employers); this would need to take a broad view of rationalising and divesting current library and other academic space (eg replacing library X with a new media centre building);

- support the development of good working relationships with employers, content providers and Western;

- start a major programme of internal reuse and improvement of Westshire's materials, especially working with employers, publishers and potential spoke institutions to develop Westshire's potential hubs;

- understand the needs of users for training in information literacy and develop necessary training courses and materials;

- establish and implement a change programme for library staff to include:

- Information skills, publishing and web skills;

- facilitator and change agent skills;

- basic understanding of learning processes;

- contracting skills and partner management;

- commercial experience (possibly recruit from business);

- look for new partnerships with publishing firms to enhance learning materials and use publishers' marketing capabilities (eg for sub-markets for international spokes, say);

- start research/liaison programme with School of Education to understand and anticipate the digital needs/abilities of future learners;

A.4.6
- investigate options for replacing the 'X library' with a new building to support media studies research, teaching and learning hub, including embedded library capability; factors to be considered include whether the content policy can be implemented quickly enough to allow library holdings to be relocated among the remaining libraries.

In the **medium-term**, Westshire should:

- continue implementation of content policy;

- continue implementing library space use policy;

- build new facility meeting green agenda (eg largest capacity for best energy efficiency) (maybe not libraries as we know it);

- develop partnerships with publishing firms (if required);

- establish and develop partnerships with employers (talent spotting/industry experts);

- undertake regular reviews to understand future 'customer base';

- establish and develop stronger links with FE colleges;

- provide content in packages.

A.4.7   In the **long-term**, Westshire should:

- use the new building, adapt it and promote it;

- ensure that interoperability is achieved with involved employers etc,
(eg aligning its ICT and other university technology with employer technology).

A.5   Walled Garden

Vision

A.5.1   The vision for the library is that it is the core of the institution, and embodies the experience of Westshire. It controls, coordinates, manages and protects knowledge across the institution and its strategic partners.

Strategic objectives

A.5.2   The strategic objectives identified are:

- minimise physical holdings and reconfigure space to suit the future needs of the organisation;

- invest in lots of new and exciting technology to allow new approaches to aggregation;

- exploit institution's existing academic experience to develop services, and develop skills where they do not currently exist;

- create stronger links with local primary and secondary education institutions, to nurture future talent;

- create stronger links with SMEs, publishers and other relevant parties, to build a strong base for future fragmentation.

Action plan

A.5.3   In the **short-term**, Westshire should:

- start building strategic partnerships (eg with primary and secondary education, SMEs, publishers), looking for long-term relationships; the earlier these strong connections are sought, the more opportunity for selecting the relationships we'd like in the scenario time;

- undertake a radical review of information resource management policy to facilitate the other actions;

- triage the collections in the dying building to reduce holdings;

- begin planning a flagship learning building, which forms a closed environment where Westshire controls the physical space;

- plan technology investment – in house in the first instance. Library to own Moodle.

- reconfigure the senior management team to incorporate the Chief Knowledge Officer to lead the change from service department to central knowledge management.

A.5.4 In the **medium-term** Westshire should:

- triage the entire collection as part of strategic shift to digital and thus reduce holdings;

- build a repository to hold physical collections and special collections during transition to digital and in the longer term only retain unique holdings and special collections;

- shut all the existing libraries and free up the space for other uses;

- shift library staff skills to meet these new requirements through a mix of training and recruitment.

A.5.5 In the **long-term** Westshire should:

- review the strategic partnerships on a periodic basis and focus on those that are then most important;

- manage its strategic partnerships to ensure alignment is maintained.

A.6 Strategic plan

Introduction

A.6.1 Triage of the commonalities and difference for the strategic plans for each scenario (see sub-sections A.3, A.4 and A.5) leads to a strategic plan for Westshire that is robust against the three LotF scenarios.

A.6.2 Many institutions will choose this approach. Institutions could also choose to develop strategies against one or two scenarios depending on overall institutional strategy. As an example an institution might decide to opt out of state funding and so decide to align with the Wild West scenario. Others might decide to align with the Walled Garden scenario if, for example, institutional strategy was to become a religious university in the same way that some schools are religious schools.

A.6.3 It must be emphasised that this strategic plan has been developed to meet the needs of Westshire and is not to be taken as a universal strategic plan for all academic libraries.

Vision

A.6.4 A common feature of the work on the Wild West and Beehive scenarios was the assumption for developing a strong near market research focus on journalism and media, becoming a learning institution and supporting business, local FE colleges and the local community. While this would clearly need to be fed back into the VC's review, it has been adopted as a central theme for the overall strategic plan.

A.6.5   The vision for the Westshire library is that it offers very high quality content, space and access to its teachers, learners and researchers in support of world-class 'near to market' research in journalism and media, and a learning institution. It also supports business, local FE colleges and the community. It is caring and supportive for all its users and provides training in information literacy. Its users understand, trust, and value the services provided. The library provides a highly agile offering that ensures the library will always adapt to a changing society, industry and world.

Strategic objectives

A.6.6   The following common strategic objectives are identified for the Westshire library:

- move to an all digital approach as far as possible and divest paper holdings as quickly as feasible to free up sufficient space to handle the 'X library' problem;

- replace the 'X library' building with a research hub combining media studies, the Publishing Research Group, the School of Television Production and the School of Law; the new hub would also have a teaching and learning centre to support local FE colleges and a public library in partnership with the local authorities; the intention is to include a public library at each campus as holdings are divested;

- have high quality space for supporting those undertaking research, teaching and learning;

- have an excellent library infrastructure (systems and staff) to support research, teaching and learning;

- have excellent relationships with local businesses, Western, FE colleges and schools with the objective of building strong two-way relationships for access to and use of library services, including information resources and space;

- mutually advantageous engagement with publishers especially regarding re-use of own research and teaching materials.

Action plan

A.6.7   In the **short-term**, Westshire should:

- establish a change programme to achieve the above strategic objectives;

- establish and agree a radical resource management policy setting out the timescale for an early move to digital only resources with the possible exception of a small volume of special collections which will continue to be held as paper;

- refine and agree the plan for the replacement of the 'X library' with a media hub (see above) and for redeveloping freed-up space in existing libraries to provide flexible working and meeting/cooperation space etc.

- start the process of consolidating and divesting library space to match the reduction in paper holdings and create/update space to provide flexible working and meeting/

cooperation space for research, and teaching and learning (including, for example. embedded library space in departments etc) and, if required, a warehouse/archive for special collections;

A.6.8   In the **medium-term**, Westshire should:

- implement the agreed 'X-library' plan as part of implementing the vision of delivering high quality content, space and access to its teachers, learners and researchers in support of world-class 'near to market' research in journalism and media, and a learning institution;

- continue to consolidate and divest library space and create/update flexible working and meeting cooperation space;

- develop a staffing plan that sets out level, skills and experience required to meet the needs of the library and its users in line with the other strategic objectives;

- establish links on the back of Westshire initiatives with local businesses, Western, FE colleges and schools with the objective of building strong two-way relationships for access to and use of library services, including information resources and space;

- engage with local businesses, Western, FE colleges and schools etc;

- define and monitor early indicators.

A.6.9   In the **long-term**, Westshire should:

- use the new space, adapt it and support the evolution of a near market research capability in journalism and media studies and the learning institution;

- continue with engagement to ensure that interoperability is achieved with involved employers etc, (eg aligning its ICT aligning university technology with employer technology);

- engage with local businesses, Western, FE colleges and schools, particularly around the focus on future learning environments.

Early indicators

A.6.10   The programme team look for and assess available information (eg articles in daily newspapers, The Economist, Times Higher Education (THE), HEFCE circulars, VC briefings etc looking for 'headlines' that might suggest that one of the there scenarios might be occurring. This would then prompt a review of the strategy. The following early indicators are suggested:

- any factors that might suggest a more market-driven HE sector;

- any changes that might suggest that the world is becoming more open or more closed (eg moves away from current norms of social justice and social mobility, development of closed social and cultural groups).
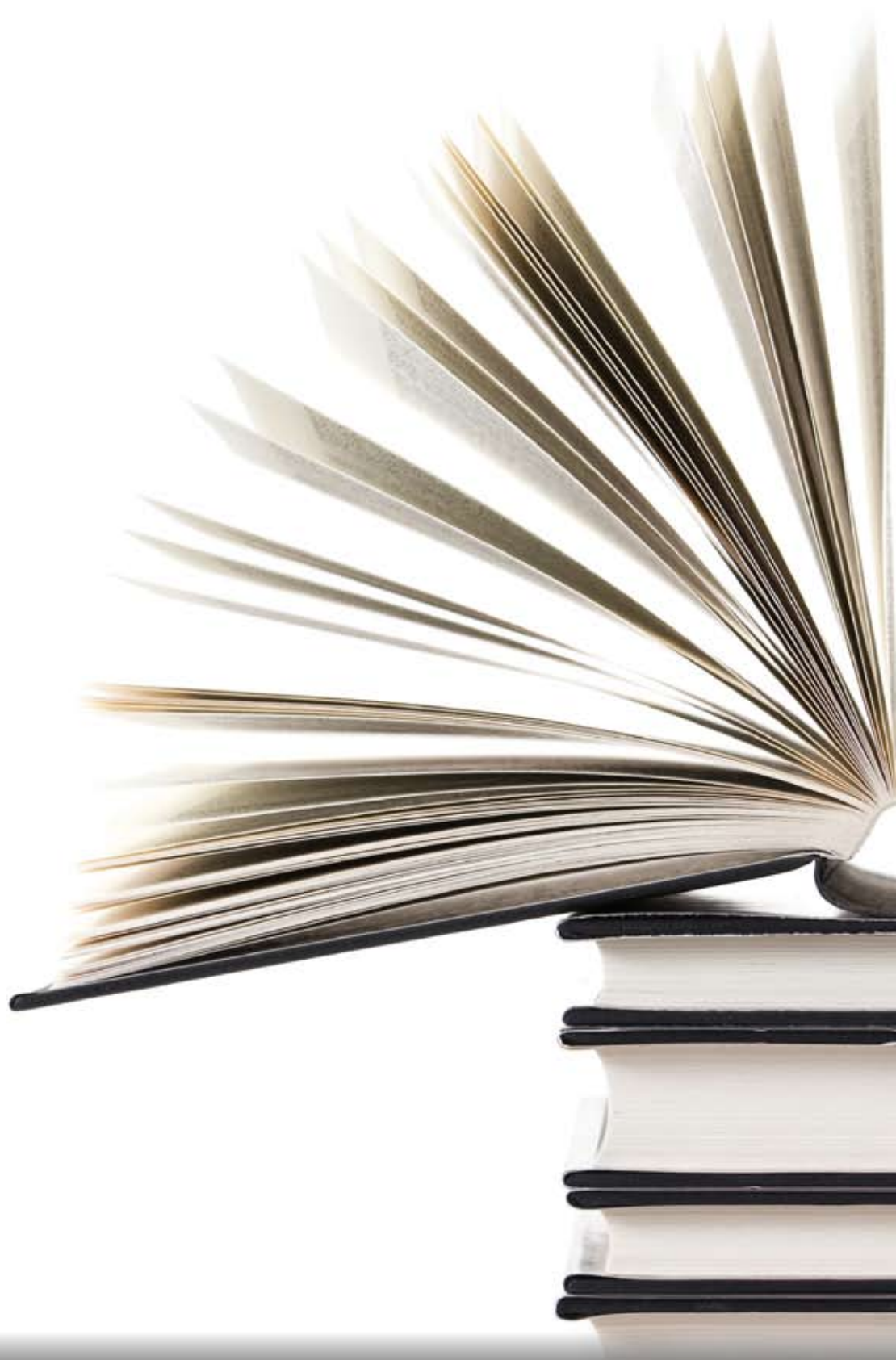
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