# KNOWLEDGE MANAGEMENT STRATEGIC PLAN

A Knowledge Management Strategic Plan is a University-wide plan which describes a framework for the application and use of information at the University of Edinburgh. Its aim is to ensure that University-wide information initiatives are directly aligned to the overall mission, strategies and operational needs of the University. It has as its base a series of functional programme initiatives that identify how information is managed to enable efficiencies and innovation in the core higher education activities of research, learning and teaching, and supporting administrative processes.

The Knowledge Management Strategic Plan is critical to the fulfilment of the University's mission and the issues are sufficiently significant to involve the University's leadership team as well as key stakeholders as the consequence of decisions and the priorities will extend across all activities of the University.

It is recognised that fundamental changes in philosophy and practice take time to evolve. The Knowledge Management Strategic Plan identifies the framework (building blocks, plans and foundations) for a knowledge culture to develop out of improved effectiveness and accountability.

An oversight group, the Knowledge Management Strategy Advisory Group, will on behalf of the University review processes throughout the development of the plan to ensure that the plan meets the requirements of the University's strategic agenda. The terms of reference for the Knowledge Management Strategy Advisory Group are provided as **Attachment 3**.

The purpose of this document is to obtain initial feedback from PSG on

- 1. The aim, benefits and environment for a Knowledge Management Strategy, Attachment 1
- The draft process for the development of a Knowledge Management Strategy, Attachment 2 (which will also be discussed by the Knowledge Management Strategy Advisory Group), Attachment 3
- 3. A Draft "scope" for the Knowledge Management Strategic Plan, Attachment 4
- 4. Draft guidelines for managers of functional programmes, Attachment 5
- 5. Guiding principles for a Knowledge Management Strategic Plan, Attachment 6

## **Knowledge Management Strategic Plan**

#### <u>Aim</u>

The aim of a Knowledge Management Strategic Plan is to create the framework to enable all members of the University of Edinburgh to seamlessly and easily connect to the information they need, whenever they need it, wherever it resides and to be able to use it effectively for research, learning and teaching and administration. A Knowledge Management Strategy implies a holistic approach to the management of information created in and used by the institution to create better leverage of the total knowledge assets of the University to generate innovation in research, learning and teaching, and efficiency and effectiveness in administration. Knowledge management in higher education has been defined as "a set of organizational processes that create and transfer knowledge supporting the attainment of academic and organisational goals."<sup>1</sup>

The Knowledge Management Strategy will describe what the University does and is setting out to achieve, rather than how it is structured to do it. The framework will need to address technology infrastructure, systems application, information access, process and management. It will provide the framework into which devolved planning units can include information.

#### Benefits of a Knowledge Management Strategic Plan

Improved organisational efficiency and effectiveness through:-

- faster decision-making and better quality decisions
- support services which are more responsive to user needs
- greater opportunities for collaboration and sharing knowledge and information
- greater value derived from organisational and academic knowledge assets
- better access to expertise
- improved ability to access relevant and authoritative information when and where it is needed
- acceleration of research and development
- easier discovery leading to innovation
- greater accountability
- more targeted and effective teaching
- better return on investment.

<sup>&</sup>lt;sup>1</sup> Townley, Charles T Will the academy learn to manage knowledge. Educause Quarterly No. 2, 2003

## ENVIRONMENT FOR A KNOWLEDGE STRATEGY

A Knowledge Management Strategy requires an environment where

- the information needs of staff and students are understood
- there are agreed processes for when and how information is made available
- there is agreement concerning who creates the information and who is responsible for managing it
- there are appropriate means for capturing information and making it available
- technical solutions and standards underpin knowledge management
- policies and practices are in place that promote a well managed knowledge environment
- information sharing is encouraged unless there are genuine reasons such as legal, ethical or commercial reasons to restrict access
- synergies and economies of scale are realised through cooperative effort
- duplication of effort is discouraged or eliminated where it is practical to do so
- access to information is not constrained by geographic location or the disciplines of individual researchers
- new technologies provide enhanced opportunities for the creation, management, storage and dissemination of information.

# The Process for the Development of a Knowledge Management Strategy Plan

- 1. <u>Develop a Knowledge Management Strategic Plan aligned to the mission and</u> goals of the University including
  - Vision and mission
  - Guiding principles
  - Environmental analysis
  - Strategies and goals
  - Key priorities
  - Resourcing the plan

## Implementation

- Establish a Knowledge Management Strategy Advisory Group to oversee process
- Consult with PSG, CMG, Colleges, APC, EUSA and other support groups
- Drafts developed by key managers with input as appropriate for Knowledge Management Advisory Group
- Communicate draft process and planning stages through website, publications and meetings with key groups.
- Feedback on priorities within functions and University-wide
- Review the high level view then investigate in further detail each identified purpose as appropriate to identify logical business areas
- Once priorities have been identified, review existing processes and identify gaps. Consider ways of addressing gaps
- Consider existing structures and how they best meet the planning priorities
- Assign responsibility for delivering the plan
- Approval process CMG, Senatus
- 2. <u>Review the University Committee and College structures which guide and support</u> <u>the strategy</u>
  - Management Information Committee
  - Information Policy Committee
  - Computing and IT Committee
  - Library Committee
  - University Collections Advisory Committee
  - Management Information Committee
  - Other

## Implementation

• Review and develop terms of reference and membership

- Approval process
  - CMG, Senatus
  - Court

## 3. <u>Review the management structures for achieving the plan</u>

Review the functional alignments and management structures to integrate organisational units in a way that will provide more seamless interactions and which recognises the interdependence of the key suppliers of information services to members of the University.

#### Implementation

Identify areas of alignment convergence and overlap Work with staff and HR and, where relevant with Unions to re-define work roles and responsibilities Revise existing structure to deliver the plan

## 4. Communication Plan

Develop a communication plan to ensure members of the University are informed of the Knowledge Management Strategy

#### Implementation

• Website, University publications, meetings with key groups

#### 5. <u>Review Strategy</u>

Agree a review process for the Knowledge Management Strategic Plan

## **Implementation**

- Knowledge Management Strategy Advisory Group to recommend process
- Approval PSG, CMG, Senatus.

# Attachment 3

# Knowledge Management Strategy Advisory Group

#### Terms of Reference

To oversee the development of a Knowledge Management Strategic Plan by:

- Reviewing the planning and communication process
- Approving the methodology for assessing current and future strategy
- Ensuring that the strategy is aligned to the vision and strategies of the University
- Assisting with the identification of the major challenges in Knowledge Management over the next five years
- Establishing working groups to address particular issues
- Guiding the prioritisation of the responses to these challenges
- Creating integrative mechanisms where cross-University connections are required
- Recommending a reporting framework that allows information policy and planning issues to be addressed

## Membership

This is a high level strategy which requires a broad understanding of how Knowledge Management supports the University of Edinburgh in research, teaching, learning and administration. The group (which should be as small as practicable) will be representative of Colleges and Administration including ISG, Corporate Services and Administration, Communications and Student Services.

## Scope of the Knowledge Management Strategic Plan

Functional areas: a map of what exists as well as the desired future strategy

- 1. Vision and mission
- 2. Guiding principles
- 3. Environmental scan
- 4. Functional areas strategies, goals and priorities
- 5. Business case and priorities for action against each business area
- 6. Priorities established against the combined business needs of the University
- 7. Responsibilities, resource implications and timeline for implementation and completion of strategies and objectives
- 8. Identification of barriers to effective and efficient access to information
- 9. Identification of required system and process improvement
- 10. Process to review and monitor strategy and objectives

## Scholarly Communication

# Supports University goal areas: excellence in education, excellence in research, interaction with the community and internationalisation

The development and management of information resources including the Library, University archives, records of the University, galleries and museums. This involves the rigorous evaluation of the needs of staff and students to ensure that information which is acquired or accessed provides the broadest coverage, the greatest relevance and the highest quality possible.

The Library

Collection development strategy

Print and other physical resources Digital resources Cooperative collection management Resource sharing Reserve and e-reserve Document delivery and ILL Digitisation Conservation and preservation Digital curation Library management system University Records Archives Museums Galleries Storage and deselection/deacquisition

#### Scholarly Information Support Services

Supports the University's goal areas: excellence in education, educational opportunity, interaction with the community and internationasation

Library Online, collections gateway and insight Portal Accessibility including 24x7, usability, disability, medadata Community access including professional training and support for professions Community relations Student and staff support and liaison Alumni support Internal communications Connectivity services for staff and students, on campus, locally, nationally, global Information/Help Desk support Self help

The capture and management of information created in the University in support of research, learning and teaching

Supports the University's goal areas commercialisation and knowledge transfer and excellence in education

e-Print repository e-Press Digital theses Re-usable learning objects

Capture the best available educational technologies and infrastructure to support research and teaching requirements that address new curricula and advanced modes of learning

Supports the University's goal areas: excellence in education, excellence in research

E-learning, interactive learning Learning management systems (WebCT) Learning objects management Learning infrastructure (A.V IT in teaching spaces, classroom support) High Performance Computing Online collaboration tools Student laboratories Information analysis Visualisation and presentation

# The Central Communications and Services to ensure that core functions of the University operate efficiently

#### Supports the University's goal areas: quality management

Telephones and security systems Data Network (the University Network) Wireless Edlan (The University Data Network) Authentication and Authorisation Web Development and management Content Management system PC Server Infrastructure Storage Systems Email, Ediary Backup and on-line services IT Security Other Central Services

<u>Network Access</u> that promotes research, learning and teaching through knowledge sharing, collaboration and partnership

Supports the University's goal areas: excellence in research, excellence in education

EaStMAN JANET Grid computing Teleconferencing multi-media conferencing

The acquisition of transferable information skills

Supports the University's goal area: excellence in education and interaction with the community

Information literacy IT literacy Lifelong learning

The management and development of the University's Administrative systems in support of the academic programme

Supports the University's goal areas: quality management, commercialisation and knowledge transfer

Finance systems HR systems Student record systems Estates Enterprise portal Estates Other management information systems

The management of information legislation and protocols which promote the shared use of information, while management risks involved with the ethical, legal and commercial use of information

Supports the University's goal areas: quality management, commercialisation and knowledge transfer

Copyright Intellectual Property management Digital Rights management Licence agreements, contracts (and exit strategies) Privacy Freedom of Information Risk management Accessibility

The Policies and Practices needed to underpin the Knowledge Management Strategy

Supports the University's goal area: quality management

Standards and protocols including agreed diversity protocols Policy development, approval and promulgation Procedure guides

The identification and assessment of new and emerging technologies to underpin the Knowledge Management Strategy

Supports the University's goal areas: internationalisation and quality management

EDINA (Data library) Best practice identification International engagement

The efficient and effective management of information resources and services

Supports the University's goal area: quality management

Benchmarking Service standards and agreements Self audit and external review user satisfaction Committee review and advice Communities of practice Agreed areas and levels of responsibility including degree of decentralisation or conformity to a corporate approach Sustainability e.g. asset lifecycle Disaster recovery Legacy systems vs enterprise systems

## Guidelines for Drafting the Knowledge Management Strategic Plan

Key managers of functional programmes will draft the Knowledge Management Strategy based on the following guidelines:

The strategy will briefly describe (about one page) the current position and key priorities for future development including key strategies and priorities for each business function described in the scope document and the steps and resources needed to deliver the strategy. Strategies will directly align to the mission, strategies and operational needs of the University identifying how strategies and targets will deliver the University's agenda as described in the University of Edinburgh Strategic Plan 03-07.

Managers will note the aim of the Knowledge Management Strategy and the guiding principles that underlie the strategy as described in attachment 5.

While key advisory committees and stakeholders should be consulted during the drafting stage all members of the University and the advisory groups will be provided the opportunity to provide feedback on the draft Knowledge Management Strategy and its priority areas.

## Principles for a Knowledge Management Strategy

The University's Knowledge Management Strategy will be driven by the University's Strategic Plan 03-07

The information needs of University members will be understood and information strategies will put users at the centre

Responsibilities relating to the creation, management, storage and dissemination of information will be clearly defined

There will be a judicious balance between central and local information management and support

Agreed standards, policies and guidelines will underpin a well-managed knowledge environment

Information will be provided as far as possible in a way that enables it to be made available to all members of the University via similar interfaces and tools. Where diversity is appropriate and necessary, this will be managed

Institutional and other barriers will be overcome where they prevent members of the University from obtaining information they need

The organisation and management of information will be integrated across the University

User self sufficiency will be encouraged and developed

All members of the University should have access to relevant information when they need it, regardless of where they are located

Collaboration, cooperation and partnership will be promoted where value can be added to the University's teaching, learning and research agenda

Information sharing will be encouraged unless there are genuine reasons such as legal, ethical or commercial reasons to restrict access

Effective management practices including continuous improvement, systems thinking and business planning will enable the University's management processes to operate efficiently and well.