The IP’s guide to the galaxy of portal planning: part III – administrative framework

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Abstract

Purpose – This article is the third in a four-part series that aims to illustrate the process involved in planning a portal and creating a portal definition document.

Design/methodology/approach – Based on a review of the academic and industry literature and using a case study, the authors share their experience in planning the Florida ExpertNet Research portal.

Findings – Portal development is a complex and costly endeavour that requires meticulous planning and design. As with any system development initiative, the time and energy spent in the planning process is reflected in the success or failure of the end product. A portal administrative framework encompasses governance (strategic) and management (operational) models. The governance model contains a description of the governing units and their responsibilities. The management model includes a description of key management components (primary function, activities, and manager) and management roles and responsibilities.

Originality/value – This series will be useful to the information professional who is contemplating portal development and may be used as a model in developing a blueprint – the portal definition document. Whether the information professional is considering doing development or outsourcing, it is important to understand the architectural requirements of a portal.

Keywords Governance, Management, Portals, Project planning, Knowledge management, Information management

Paper type Case study

Introduction

In the universe of portal planning, the spectra of stars and galaxies contain an overwhelming number of guides for charting a course. As part of the IP’s galactic quest to build a multi-dimensional portal, finding the right model for an administrative framework is essential for enduring success. A comprehensive framework provides a coherent approach for organising the strategic and operational components needed to realise the implementation and ongoing management of portal services and applications.

The portal administrative framework acts as the plan for mission command and control. Not having an administrative framework is like building a spacecraft and then launching it with no flight plan, astronauts or ground-control support. The mission has no chance of being successful. The administrative framework provides the specifications for managing and operating a portal by defining a universal process for organising people and resources that will direct activities toward common goals and objectives.

This article is the third in a four-part series that illustrates the processes involved in planning a portal and creating a portal-definition document. The first article provided a general overview of portals and the specifics for defining a portal vision – the first
component in a portal-definition document. The second article discussed and illustrated
the components of a portal content management (CM) strategy, including content
inventory and analysis, content acquisition, access structures, classifying content,
content life cycle, CM software and metadata standards. Incorporated in the series is a
case study of the planning of the Florida ExpertNet Research Portal (research portal).

The third instalment in the series focuses on a portal administrative framework that
encompasses governance (strategic) and management (operational) models. The
governance model contains a description of the governing units and their
responsibilities. The management model includes a description of key management
components (primary function, activities and manager) and management roles and
responsibilities.

Governance model
Portal governance “is all about an enduring set of rules and practices – and roles and
organisations to support them.” (IBM Business Consulting Services, 2004). Portal
governance deals with establishing and administering the processes and systems
necessary to ensure the ongoing viability of the portal. Portal governing units provide
a plan of action for ensuring that the portal is appropriate, effective, coordinated with
stakeholders, meeting performance objectives, supported by adequate and skilled staff,
successfully marketed, timely and up-to-date, well managed, flexible, and within scope.

The governance model represents the strategic arm of the administrative framework.
It encompasses the decision-making units that provide direction, accountability and
leadership. It may include advisory councils, steering committees, partners, sponsors,
boards of directors and key executive staff. These governing units are responsible for
establishing and maintaining goals, objectives, roles, policies and procedures necessary
for the ongoing maintenance and operation of the portal.

A portal governance model includes clear descriptions and delineations for the
governing units in each of the following: policies and procedures, roles and responsibilities,
process flow diagrams, organisational charts and standard operating procedures.

Governance enables smooth operation of the portal by:
- establishing clear lines of authority;
- ensuring timely decision-making;
- avoiding content sprawl;
- maintaining alignment with business imperatives;
- enabling stakeholders to influence portal strategy;
- ensuring consistent high-quality user experience;
- averting too much influence by one group; and
- building organisational commitment and sponsorship (Lackey, 2005).

Governance structure
A portal governance structure provides the framework within which the governing
units operate. The governing units should represent all of the major portal stakeholders.

The following is a preliminary governance structure for the research portal based
on one created for a information management portal developed by the government of
Canada (Government of Canada, n.d.) (Figure 1). At minimum, any portal governance
structure should have the following: an executive sponsor to provide funding and
advocacy; a steering committee to provide leadership and accountability; and a clearinghouse/portal director to provide coordination and support for all levels of portal administration. An advisory council is strongly recommended to provide user perspective and advice.

Defining governance units

Leadership board (executive sponsor). The executive sponsor represents the organisation that provides funding and overall support for the portal. The executive sponsor positions and champions the relationship of the portal with other agencies and organisations, chairs the steering committee, works with the clearinghouse/portal director and is ultimately responsible for the development of the portal definition document. The research portal executive sponsor is the chair of the leadership board for applied research and public service, which is the parent organisation of the clearinghouse for applied research and public service. The function of the leadership board is to focus and coordinate applied research and public-service activities for Florida’s state universities.

Steering committee. The steering committee is a cross-section of high-level stakeholders who are responsible for providing guidance on overall strategic direction. The steering committee is made up of organisational peers representing both end-users and content providers. The research portal steering committee will be comprised of representatives from the offices of sponsored research, technology transfer, media relations and centres/institutes, as well as research faculties from Florida’s universities and the clearinghouse/portal director.

Advisory council. The advisory council is comprised of stakeholders who represent specific user groups. The council generates ideas and provides feedback to enhance the content and usability of the portal. The advisory council has no decision-making authority. The Research Portal Advisory Council will be comprised of representatives.
from business and industry, government, research faculty, content partners, university administration and clearinghouse staff.

Clearinghouse/portal director. The clearinghouse/portal director is responsible for facilitating governance board meetings and communications, developing a management model to implement policies and procedures to meet the business objectives set by the steering committee, and developing a communication strategy for the governance team.

Portal manager. The portal manager provides reports and other metrics on all aspects of day-to-day portal operations. The portal manager also makes recommendations and alerts governance-team members of current or potential problems.

Content manager. The content manager is responsible for communicating all matters related to the development, collection and management of specific portal content to the governance board. This may include issues related to content providers.

Technical manager. The technical manager is responsible for communicating all matters related to portal security, hardware, software and data.

Management model
Portal management serves as the operational arm of the administrative framework. It encompasses the implementation of the decisions made by the governing units. The portal management model includes key management components and administrative roles and responsibilities.

Key management components
An effective management model should delineate management and administrative components. In developing a management model for the research portal, the following key management components were identified: governance; marketing; security; technology; organisational support (human resources, financial, and legal); content management; implementation and deployment; evaluation; and user support (Figure 2).

Table I provides an overview of each key management component associated with the research portal by identifying its primary function, activities and lead manager.
<table>
<thead>
<tr>
<th>Key component</th>
<th>Description</th>
</tr>
</thead>
</table>
| Governance         | **Objective**: Coordinate communication and resources for all governing units  
|                    | **Activities**:  
|                    | Coordinate meeting logistics  
|                    | Work with the steering committee chair to fill vacancies on the board and various committees  
|                    | Create and implement a plan for an information/communication system for collaboration and sharing                                                                                                           |
|                    | **Manager**: Clearinghouse/portal director                                                                                                                                                                   |
| Marketing          | **Objective**: Market the portal to potential users and to stakeholders  
|                    | **Activities**:  
|                    | Develop and implement an awareness campaign to include branding and promotional activities  
|                    | Identify opportunities for co-branding with partners                                                                                                                                                        |
|                    | **Manager**: Marketing manager                                                                                                                                                                              |
| Security           | **Objective**: Provide physical and electronic security for all hardware, software and data  
|                    | **Activities**:  
|                    | Configuration management – integrate the security policy and the technical security-control mechanisms:  
|                    | Antivirus management – identify, install and maintain antivirus software and updates  
|                    | Data classification – assign the appropriate level of sensitivity to data as it is being created, amended, enhanced, stored or transmitted  
|                    | Encryption – re-arrange data into an unreadable or unintelligible form for confidentiality, transmission or other security purposes  
|                    | Access control – deploy rules and mechanisms that control access to information based on role or identity  
|                    | Physical security – secure the physical location (locked, only authorised access) and environment (climate controlled)  
|                    | Disaster recovery – recover data and systems according to the disaster recovery plan  
|                    | Backup – perform systematic backup of all data and systems according to established policies  
|                    | **Manager**: Network/security administrator                                                                                                                                                                 |
| Technology         | **Objective**: Maintain hardware, software and data for all portal components and the portal backbone  
|                    | **Activities**:  
|                    | Review, test, select, deploy and maintain hardware and software  
|                    | Troubleshoot software/hardware problems  
|                    | **Manager**: Network/security administrator                                                                                                                                                                 |
| Organisational     | **Objective**: Recruit and select appropriate staff and effectively manage the employment relationship, with a strategic and operational view of human-resource requirements  
| support            | **Activities**:  
| Human resources    | Develop policies and procedures for personnel recruitment, training and evaluation  
|                    | Manage all employee contract-related issues  
|                    | **Manager**: HR manager                                                                                                                                                                                      |
| Financial          | **Objective**: Maintain accounting of all fiscal matters related to the portal  
|                    | **Activities**:  
|                    | Oversee payroll administration  
|                    | Assist in determining appropriate capital outlay strategies  
|                    | Assist in developing partner and vendor contracts  
|                    | Oversee e-commerce applications  
|                    | **Manager**: Fiscal manager                                                                                                                                                                                   |

Table I.  
Overview of key management components (continued)
<table>
<thead>
<tr>
<th>Key component</th>
<th>Description</th>
</tr>
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| Legal                 | Ensure legal compliance of all portal functions  
Activities  
Oversee creation of partnership agreements  
Create privacy policies  
Ensure copyright compliance  
Create access agreements  
Oversee E-commerce agreements  
Address other legal issues, as applicable |
| Manager               | Legal manager                                                                                                                               |
| Content management    | Create, integrate and manage content  
Activities  
Develop authoring standards and guidelines, including rules for indexing and source attribution  
Develop approval and editing guidelines  
Determine process order and flow, including how to handle exceptions  
Determine publishing schedules  
Identify content (sources and tools)  
Integrate internal and partner-provided content  
Monitor, evaluate and adjust processes as needed |
| Manager               | Content manager, content developer                                                                                                          |
| Implementation and deployment | Determine the strategies for the continuous implementation and deployment of portal content and services  
Activities  
Develop action plans and schedules for the development and roll-out of content and features  
Ensure plan is implemented on time and within budget  
Provide technical assistance and support to the implementation and deployment team  
Evaluate action plans and schedules and revise as needed |
| Manager               | Director and content manager                                                                                                               |
| Evaluation            | Develop and implement a continuous quality-improvement model for assessing portal success  
Activities  
Design and integrate assessment/feedback strategies and tools for the evaluation of the portal  
Monitor portal usage, response and feedback  
Deliver systematic reporting of evaluation findings to appropriate manager |
| Manager               | Quality assurance manager                                                                                                                  |
| User support          | Manage all aspects of technical assistance for portal users  
Activities  
Coordinate all help desk responsibilities, including:  
Triage and routing of requests  
Response mechanisms (phone, e-mail, instant messaging, chat auto-replies, standard service times, etc.)  
Training  
FAQs |
| Manager               | Help desk coordinator                                                                                                                       |
| Communications        | Provide effective communication mechanisms for portal administrators, partners and users to support information flow, decision-making, problem-solving and collaboration  
Activities  
Develop, implement and monitor communication strategies |
| Manager               | Portal manager                                                                                                                              |

Table I.
### Portal administrative team roles and responsibilities

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clearinghouse/portal director</strong></td>
<td>Directs, leads and facilitates portal planning, design, development and implementation; provides for continued oversight of the project, including strategic and tactical leadership</td>
<td>Guides portal planning, design, development and implementation processes; Develops and creates success measurement standards; Adjusts portal goals and objectives as needed; Initiates partnerships with content providers and portal partners; Seeks and creates ways to improve and enhance the portal, based on user feedback and other input; Reports all portal-related issues to the governance team; Coordinates all governance-team activities; Creates awareness of and enthusiasm for the portal to the general public and to stakeholders.</td>
</tr>
<tr>
<td><strong>Portal manager</strong></td>
<td>Manages and coordinates the content, technical, marketing, human resources, quality assurance, fiscal and legal portal components</td>
<td>Manages portal planning, design, development and implementation; Develops communication strategies for portal management; Ensures standards compliance; Monitors progress in relation to project timelines; Coordinates staffing issues.</td>
</tr>
<tr>
<td><strong>Marketing manager</strong></td>
<td>Spearheads all marketing and branding related to the portal and is integral in maintaining and improving visual design standards</td>
<td>Develops the marketing strategy for the portal; Markets the portal to specified audience groups; Coordinates marketing efforts to maximise effectiveness; Creates and ensures branding continuity for portal and related marketing tools; Partners with content providers to ensure continuity in co-branding.</td>
</tr>
<tr>
<td><strong>Quality assurance manager</strong></td>
<td>Manages all quality-assurance activities</td>
<td>Reviews and maintains standardisation guidelines for content; Ensures adherence to standardisation guidelines; Assesses system functionality.</td>
</tr>
<tr>
<td><strong>Human resources manager</strong></td>
<td>Manages all personnel matters (i.e. recruitment, contracts, training and evaluation)</td>
<td>Develops organisational plan and assists in determining personnel levels needed for successful operations; Recruits, trains and evaluates personnel.</td>
</tr>
<tr>
<td><strong>Fiscal manager</strong></td>
<td>Maintains accounting of all fiscal matters related to the portal</td>
<td>Oversees payroll administration; Assists in determining appropriate capital-outlay strategies; Assists in developing partner and vendor contracts; Oversees e-commerce applications.</td>
</tr>
<tr>
<td><strong>Legal manager</strong></td>
<td>Ensures legal compliance of all portal functions</td>
<td>Ensures copyright compliance; Creates access agreements; Oversees e-commerce agreements; Addresses other legal issues, as applicable.</td>
</tr>
</tbody>
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Table II.
Another component of the management model includes the identification and definition of the roles involved in portal development, implementation and operation. In the planning of the Florida ExpertNet Research Portal (research portal), the following management roles and responsibilities were defined. In the case of the

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| Technical manager                         | Oversees all technical matters related to the portal (i.e. portal development, network security, application development and user services) | Develops and implements a technical management plan  
Develops and implements standards and guidelines  
Develops timelines for relevant portal deliverable tasks  
Monitors and assesses task completion  
Coordinates the process for risk management to ensure that all issues are resolved in a timely manner  
Ensures communication strategies are implemented and maintained by all team members  
Reports all technical issues to the portal manager  
Implements standards and guidelines  
Coordinates development tasks with other technical staff  
Supervises application development team  
Develops system design and architecture |
| Portal application development coordinator | Coordinates the development of all portal applications                        | Selects and purchases hardware and software  
Maintains physical integrity of systems  
Provides support for hardware- and software-related issues  
Sets security standards for the physical security of systems, processes and data  
Sets security standards for virtual security measures (includes encryption, configuration management and antivirus protection)  
Enforces security standards  
Sets standards for disaster-recovery measures  
Responsible for configuration and overall operation of the portal  
Maintains, troubleshoots and provides disaster recovery functions |
| Network/security administrator             | Implements and maintains all operating systems, server applications, hardware, software and security | Selects and purchases hardware and software  
Maintains physical integrity of systems  
Provides support for hardware- and software-related issues  
Sets security standards for the physical security of systems, processes and data  
Sets security standards for virtual security measures (includes encryption, configuration management and antivirus protection)  
Enforces security standards  
Sets standards for disaster-recovery measures  
Responsible for configuration and overall operation of the portal  
Maintains, troubleshoots and provides disaster recovery functions |
| Help desk coordinator                      | Oversees help service centre                                                | Ensures that calls are handled within established service-level timeframes  
Develops and implements guidelines for triage and routing of questions  
Supervises and trains help service centre staff  |
| Application developer                      | Develops and oversees related technical matters of a specific tool or application | Designs and creates the tool  
Develops and configures tool to appropriate specifications  
Maintains and troubleshoots application after deployment  
Enhances the tool, as appropriate |

Table III. Portal technical team roles and responsibilities

Management roles and responsibilities
Another component of the management model includes the identification and definition of the roles involved in portal development, implementation and operation. In the planning of the Florida ExpertNet Research Portal (research portal), the following management roles and responsibilities were defined. In the case of the
research portal community, the role sets will be composed of the administrative, technical and content teams. The administrative and technical teams are made up entirely of in-house staff, while the content team will be composed of both in-house staff and external partners. The primary partners will be the sponsored research, technology transfer, and media relations offices from Florida’s universities that agree to provide information and data for the research portal.

The primary roles and responsibilities are defined in Tables II-IV. These roles were identified as being pivotal to the successful development, implementation and ongoing management of the research portal.

What’s next?
This article has provided the major issues and criteria in planning a portal administrative framework as part of a portal definition document. The fourth and final
article in this series will discuss the following issues and details of planning portal
development and implementation strategies:

- portal role definitions;
- prototype development strategy;
- resource requirements;
- development and implementation plans and schedules; and
- evaluation and feedback strategies.

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