



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 an 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

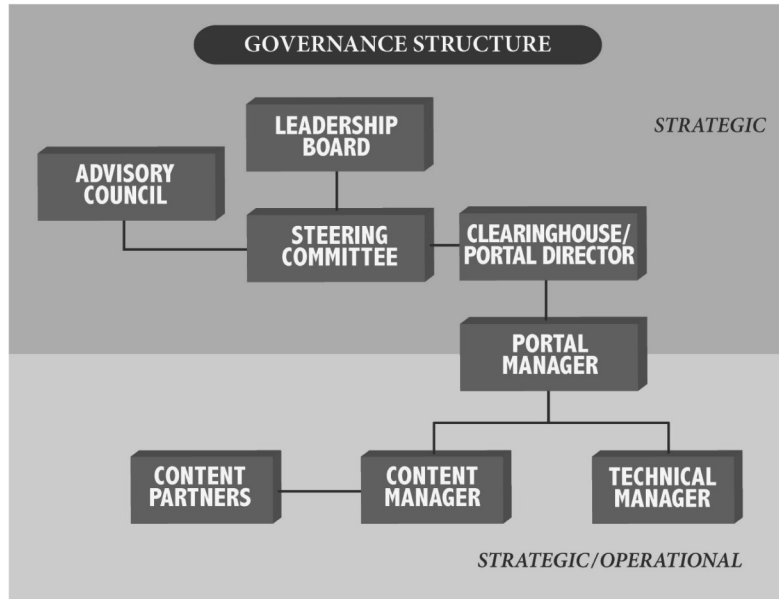


Figure 1.
Governance structure

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; user support; and communications.

Table I provides an overview of each key management component associated with the research portal by identifying its primary function, activities and lead manager.



Figure 2.
Portal key management components

Key component		Description
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
Marketing	Manager	Clearinghouse/portal director
	Objective	Market the portal to potential users and to stakeholders
Security	Activities	Develop and implement an awareness campaign to include branding and promotional activities Identify opportunities for co-branding with partners
	Objective	Marketing manager Provide physical and electronic security for all hardware, software and data
Technology	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
Organisational support	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 Network/security administrator
Human resources	Manager	
	Objective	Recruit and select appropriate staff and effectively manage the employment relationship, with a strategic and operational view of human-resource requirements
Financial	Activities	Develop policies and procedures for personnel recruitment, training and evaluation Manage all employee contract-related issues
	Manager	HR manager
	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)

Key component		Description
Legal	Objective	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	Objective	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	Objective	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	Objective	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	Objective	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	Objective	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.

Role	Description	Responsibilities
Clearinghouse/ portal director	Directs, leads and facilitates portal planning, design, development and implementation; provides for continued oversight of the project, including strategic and tactical leadership	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
Portal manager	Manages and coordinates the content, technical, marketing, human resources, quality assurance, fiscal and legal portal components	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
Marketing manager	Spearheads all marketing and branding related to the portal and is integral in maintaining and improving visual design standards	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
Quality assurance manager	Manages all quality-assurance activities	Reviews and maintains standardisation guidelines for content Ensures adherence to standardisation guidelines Assesses system functionality
Human resources manager	Manages all personnel matters (i.e. recruitment, contracts, training and evaluation)	Develops organisational plan and assists in determining personnel levels needed for successful operations Recruits, trains and evaluates personnel
Fiscal manager	Maintains accounting of all fiscal matters related to the portal	Oversees payroll administration Assists in determining appropriate capital-outlay strategies Assists in developing partner and vendor contracts
Legal manager	Ensures legal compliance of all portal functions	Oversees e-commerce applications Oversees creation of partnership agreements Creates privacy policies Ensures copyright compliance Creates access agreements Oversees e-commerce agreements Addresses other legal issues, as applicable

Table II.
Portal administrative
team roles and
responsibilities

Role	Description	Responsibilities
Technical manager	Oversees all technical matters related to the portal (i.e. portal development, network security, application development and user services)	<ul style="list-style-type: none"> 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
Portal application development coordinator	Coordinates the development of all portal applications	<ul style="list-style-type: none"> Implements standards and guidelines Coordinates development tasks with other technical staff Supervises application development team Develops system design and architecture
Network/security administrator	Implements and maintains all operating systems, server applications, hardware, software and security	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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

Role	Description	Responsibilities
Content manager	Oversees all content matters related to the portal	<ul style="list-style-type: none"> Develops and implements a content-management plan Schedules and verifies content theme and updates Ensures content life cycle procedures are in place and are being used properly Ensures continuity of content themes
Content partner coordinator	Provides oversight for external partnerships in relation to research portal objectives	<ul style="list-style-type: none"> Develops and creates, with the clearinghouse/portal director, content partner participation agreements Develops and creates, with the clearinghouse/portal director, success measurement standards for productivity and content quality Assesses portal content partner participation and quality of content based on predetermined standards Coordinates communication, training and support to content partners Monitors feedback from content partners on ways to improve the portal Ensures that content is being provided in an appropriate and timely manner
Content developer (includes internal staff and external partners)	Creates and maintains up-to-date, high-quality content	<ul style="list-style-type: none"> Creates content for usage in one or more portal tools according to content life cycle model Searches and procures new and timely content themes and topics for various portal audiences Mines and selects appropriate topical data, etc. Reviews content for appropriateness Revises and reformats data, according to standardisation guidelines, as needed
Editor	Ensures that content provided adheres to research portal editorial and style guidelines	<ul style="list-style-type: none"> Verifies that data is complete, appropriate and properly formatted Verifies that content adheres to editorial standards Edits and proofreads content for spelling, punctuation, grammar, semantics, formatting, style, logic and flow

Table IV.
Portal content team roles and responsibilities

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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