

- An Organizational View of Intranet Design**
- **Many stakeholders:**  
management, IT department, library/information center, user departments, employees, content providers, ...
  - Information behaviors, culture, politics are necessary and important elements of the analysis/design process
  - **Intranet design should leverage detailed knowledge about its internal audience**  
 Unlike a public website where the audience tends to be heterogeneous and vaguely defined, **intranets can be highly customized to a specific knowledgeable audience.**  
 This audience is accessible, can be studied, can provide feedback.
- 2

## Intranet Design Framework: 3 Steps, 3 Concepts

- 1 Analyze organizations as **Information Ecologies**
- 2 Analyze information behaviors as being shaped by **Information Use Environments:**  
**Major sets of users and their information tasks**
- 3 Design Intranets as **Value-Added Processes**

3

### 1. Analyze Organizations as Information Ecologies

#### INFORMATION ECOLOGY

- Information Goals & Strategy
  - Information Politics
  - Information Culture
    - Information Staff
  - Information Processes
  - “Information Architecture”

Davenport 1997

4

1. Analyze Organizations as Information Ecologies

**INFORMATION ECOLOGY**

- **Information Goals & Strategy**

Documented or de facto

- **Information Politics\***

Information governance structures

- **Information Culture**

Attitudes, norms that shape behavior

- **Information Staff**

Professionals coordinate, collaborate

- **Information Processes**

Work-flows, roles, responsibilities

- **“Information Architecture”**

Formal definitions and rules

Davenport 1997

5

1. Analyze Organizations as Information Ecologies

**INFORMATION ECOLOGY**

- **CREATING A VISION** of how the org wants information to make a strategic contribution to the success of the organization
- **ENCOURAGING and SUPPORTING** certain types of information **BEHAVIOUR**, e.g., sharing, collaboration, innovation
- **FINDING** ways to manage **COMPLEXITY** that arises because information in organizations is created and owned by different groups or **STAKEHOLDERS** with different interests.

Davenport 1997

6

## Information Politics

5 models of information governance:

- **technocratic utopianism:** technology can solve all problems of information governance
- **anarchy:** individuals manage their own information
- **feudalism:** units define and control their own information and share little information
- **monarchy:** a central person dictates information management policies
- **federalism:** units have autonomy but also consult and form consensus about policies.

(Davenport, Eccles, Prusak 1992)

7

### 3 Steps, 3 Concepts

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8

## 2. Analyze Information Behaviors in “Information Use Environments”

Taylor (1991): IUE are elements [of the work context] that

- affect the flow and use of information
- determine the criteria by which the value of information will be judged.

The elements of the IUE are:

- **sets of people** with information preferences
- they work on tasks enacted as **problem situations**
- they **seek and use information** to resolve these problem situations.

**We use IUE as a framework for analyzing and asking questions about users and their information behaviors in the workplace.**

9

### 2.1 Information Use Environment: Sets of People or Users

**Who are the users?**

**What are their information preferences?**

**What information tasks do they work on?**



10

## 2.2 Information Use Environment: Problem Situations

### Problem Dimensions

- Design / Discovery
- Well / Ill-Structured\*
- Simple / Complex\*
- Specific / Amorphous Goals
- Initial state understood / Not
- Assumptions agreed upon / Not\*
- Assumptions explicit/ Not
- Familiar / New\*
- Risky / Not risky
- Susceptible to analysis / Not
- Internal / External imposition

People enact their tasks as problem situations, with problem dimensions that determine what information they need *and* what aspects of the problem to attend to.

PDs reveal Information Needs in terms of subject matter and situational requirements  
 → Information needed to clarify structure and context of the problem  
 → Address PDs in Intranet design

### Problem Situations

Major Sets of USERS and their TASKS

Information Behaviors

Taylor 1991, Macmullin & Taylor 1984

11

## 2.3a Information Use Environment: Information Behaviors

Which information sources do users choose to rely on?  
 What information use outcomes are they trying to achieve?

Information Ecology

### INFORMATION SEEKING Sources and Content

- Files and records
- Colleagues, supervisors
- Meeting minutes
- Office memos
- Spreadsheets
- Presentations
- Policies, standards
- Projects
- Press releases
- Databases
- ...

Mediated Processes

### INFORMATION USE Outcomes

- Task completion
- Sensemaking
- Knowledge creation
- Decision making
- Social interaction

Users  
Information Behaviors

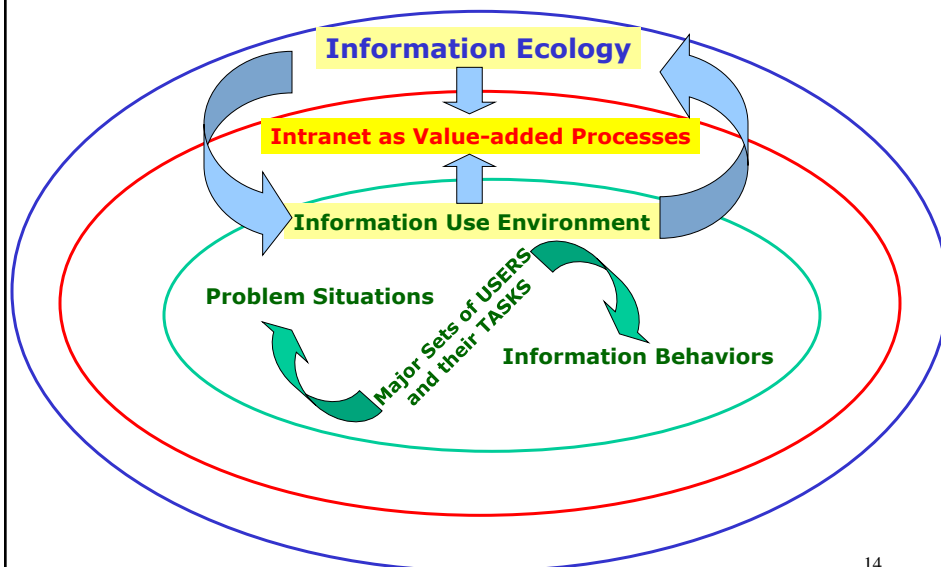
12

### 3 Steps, 3 Concepts

- 1 Analyze organizations as **Information Ecologies** ✓
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- 3 Design Intranets as **Value-Added Processes** 📄

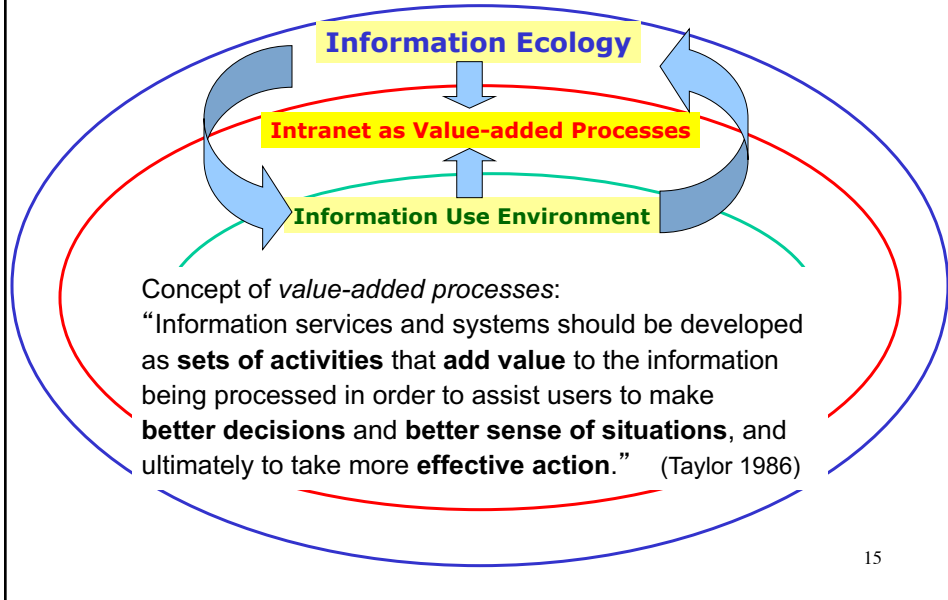
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### 3. Designing Intranets as Valued-Added Processes

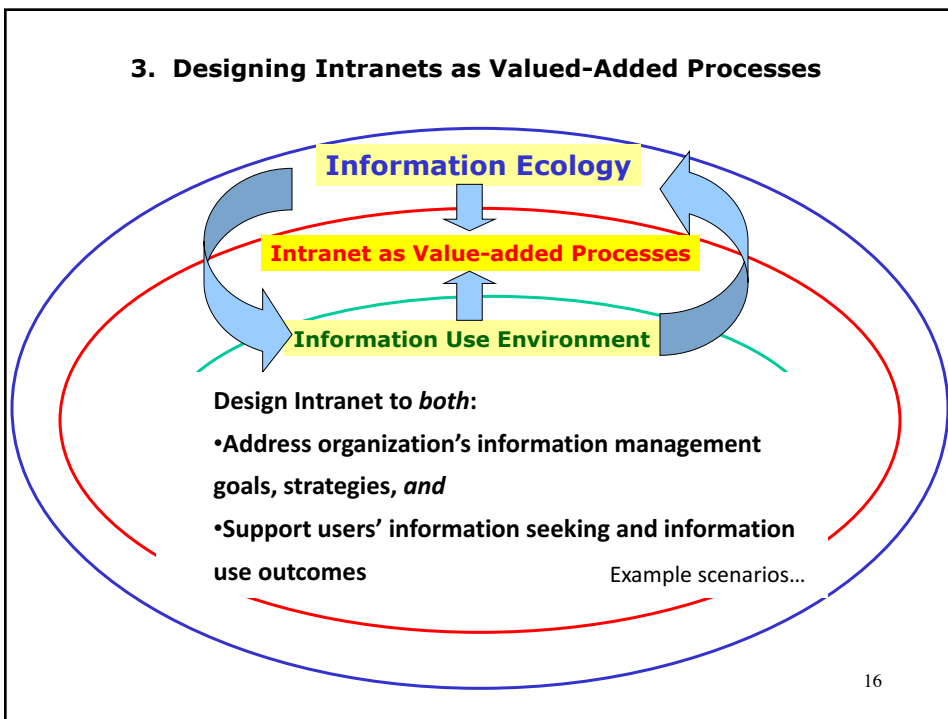


14

### 3. Designing Intranets as Valued-Added Processes



### 3. Designing Intranets as Valued-Added Processes





**3 common Intranet design scenarios:  
User needs + Organization goals**

**S1 - Design Intranet to improve access to information**

- Users: Intranet provides one-stop access to broad range of content
- Organizations: use Intranet to point to authoritative sources, to distribute new content, and to ensure content is current, complete

**S2 - Design Intranet to improve information and knowledge sharing**

- Users: sharing becomes effortless and rewarding: spontaneous; receive feedback and recognition from colleagues, ... *cf. Xerox Eureka*
- Organizations: sharing becomes more extensive, more timely; possible to incentivize sharing; able to tap into collective knowledge

**S3 - Design Intranet to improve collaboration**

- Users: create and customize online spaces for groups to work together; select tools for coordination, discussion, project management
- Organizations: possible to retain and transfer knowledge gained in projects – lessons learned, best practices, ... *cf. MCP project binders*

17

**3a. Design intranet to support the organization's information ecology**

**Information Goals & Strategy**

Clearly define **goals of the Intranet**  
Link goals to organizational mission and IM priorities

**Information Politics**

Recognize the reality of "intranet politics"  
Create **governance** structures for oversight

**Information Behavior & Culture**

Recognize that some users will resist new platform  
Address need for **change management**

**Information Staff**

Clarify roles of various information staff groups  
Create mechanisms for **coordination**, consultation

**Information Processes, Architecture**

Define processes to capture, create, provide **access** to content → **enterprise content management**

**Understanding IE crucial to developing a strong business case for an Intranet**

18

### 3b. Design intranet to support users' perceived Problem Dimensions

Well-structured Ill-structured	<b>Templates</b> for spreadsheets, reports, presentations, ... <b>Informal consultation</b> with supervisors, colleagues, ...
Simple Complex	<b>Project management tools</b> to coordinate, track progress <b>Collaboration spaces</b> for cross-functional collaboration
Assumptions agreed Assumptions not agreed	<b>Authoritative sources</b> - industry-accepted methods <b>Exploratory tools</b> - forums to develop common view
Familiar New	Access to <b>precedents</b> , support <b>workflows</b> <b>Discussion boards</b> to canvass ideas, <b>Directories to find colleagues</b> who can help, ...

19

### 3c. Design intranet to support users' information seeking

<b>Intranet search function</b>	<b>Single point of access</b> to many types of sources <b>Features</b> to focus search <u>query</u> and filter search <u>results</u> Search performance to be <b>monitored and fine-tuned</b>
<b>Authoritative sources</b>	Quick access to most up-to-date version of <b>authoritative information</b> (policies, manuals, standards,...)
<b>Recommendations Suggestions</b>	Highlight <b>recommendations</b> of librarians, users: Best bets, Key Matches, User-added Results
<b>Information about context</b>	Include <b>contextual information</b> that helps users to assess information

20

### 3d. Design intranet to address desired information use outcomes

#### Sensemaking

Raise **awareness** of trends, events: *news feeds*  
**Overviews** of organizational activity: *dashboards, sitemaps*  
Collective sense-making through **dialog**: *social media*

#### Knowledge creation

**Share** solutions to tough problems: *tips, best practices*  
Reflect & **transfer** what is learned: *FAQs, lessons learned*  
**Find** people who can help, advise: *expertise directory*

#### Decision making

Guidelines and **checklists** for structured decisions  
Decision **aids**: *spreadsheets, models, decision trees*  
Organizational **memory** –  
*access to past decisions + rationales + outcomes*

21

### Summary of Principles

- Many internal stakeholders
- Need to leverage knowledge about audience
- Intranet users are knowledgeable users with high expectations
- Information needs to address task subject matter *and* situational requirements
- Users not only seek documents, but also information about people, groups, projects, meetings, decisions, rationales, ...
- Intranet should help organization achieve its goals and address its information management challenges
- Intranet should help users find the information they value, give them the confidence that they have the right information they need

22

### Analysis/Design Framework Summary (1)

#### 1. INFORMATION ECOLOGY

Analyze the organization's

- **goals and information strategy**
- **Intranet goals** and how they contribute to organizational goals
- **information management policies or practices**; IM problems and challenges
- **information culture**: e.g. ATTITUDES towards information, information *sharing*; NORMS in information *use*, and information *seeking*
- **information politics**
- **physical setting** and its effects on information access and sharing
- **information staff** (e.g. librarians, records managers, IT staff, communication)
- **information handling** rules & routines for the creation, organizing, storing, distribution, and preserving of information.

23

### Analysis/Design Framework Summary (2)

#### 2. INFORMATION BEHAVIORS in INFORMATION USE ENVIRONMENTS

Identify the sets of **major users** you studied for the project.

What tasks and **problem situations** do they face that lead them to seek and use information? What do they see as important *problem dimensions*?

Analyze *information needs* in terms of **problem dimensions** and traits of the information they find useful.

Identify their **information seeking** modes and sources.

Understand how they **use information** to achieve desired outcomes.

24

### **Analysis/Design Framework Summary (3)**

#### **3. INTRANETS as VALUE-ADDED PROCESSES**

Design **value-added processes** that:

- support the organization's information goals and strategies
- address the information needs and information seeking behaviors of users
- support sense-making, knowledge-creation, and decision-making as information use outcomes

25

### **Ethics of Intranet Design (1)**

Ethical design of the Intranet :

- Engenders trust in content
- Engenders trust in the processes and people that create and manage content and functions
- Encourages people to contribute and make better use of the Intranet
- Protects the rights of different groups of stakeholders

26

## Ethics of Intranet Design (2)

Ethical concerns in Intranet design:

- **Content acquisition:** what content will be captured and made accessible via search, etc.
- **Privacy:** what personal information about individuals is stored
- **Rights and ownership:** of ideas, discoveries, inventions
- **Record keeping:** retention and use of logs, blogs, online comments, ...
- **Ethical conduct:** policies and guidelines for users, developers, content creators, Intranet managers, etc.
- **Governance:** structures for decision making, policy making

27