

- 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 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.
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### 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**

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### 1. Analyze Organizations as Information Ecologies

#### INFORMATION ECOLOGY

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

Davenport 1997

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## 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

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## 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)

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### 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**

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### 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.**

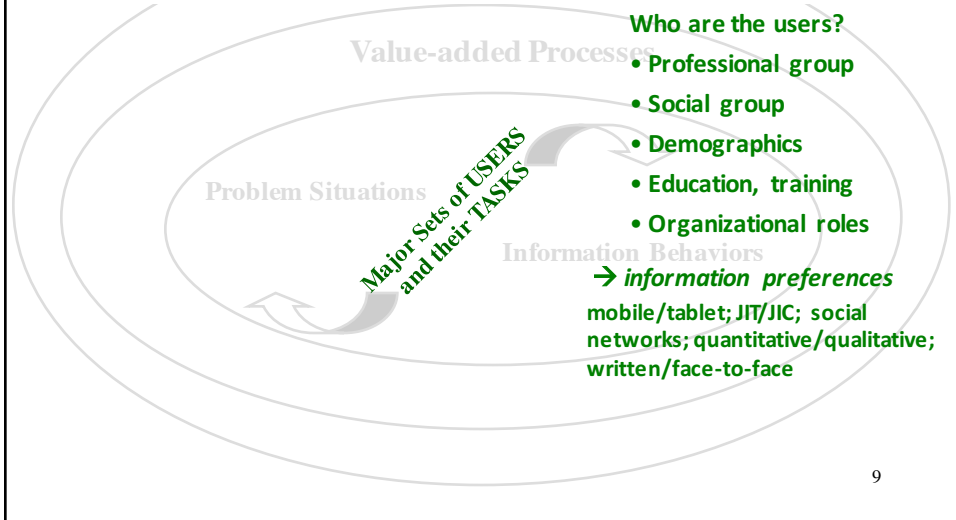
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## 2.1 Information Use Environment: Sets of People or Users

Who are the users?

What are their information preferences?

What information tasks do they work on?



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## 2.2 Information Use Environment: Problem Situations

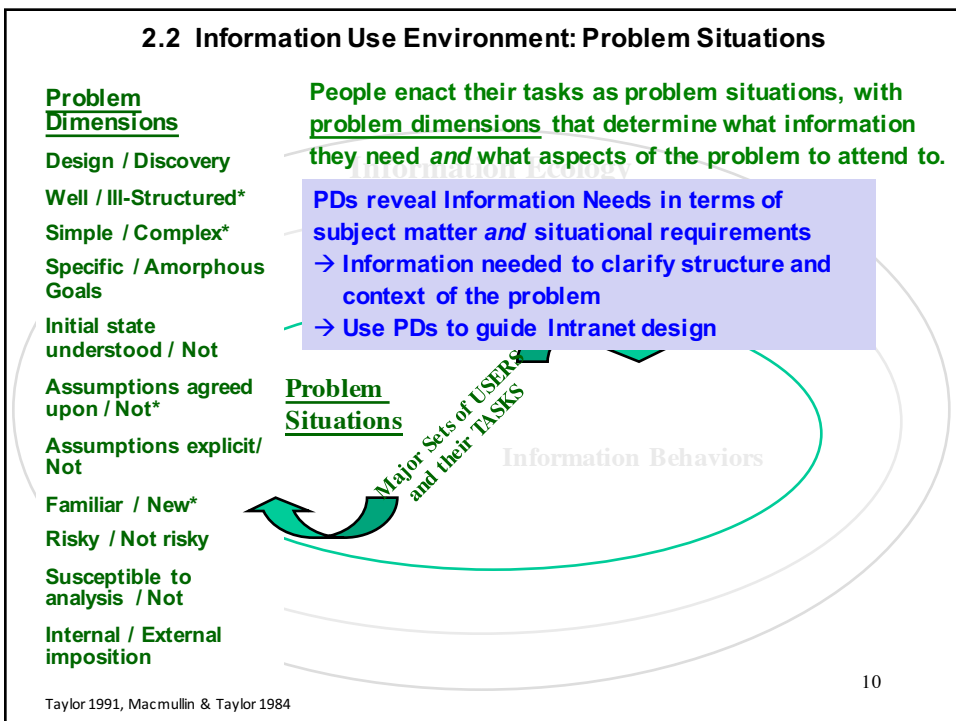
### Problem Dimensions

- 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  
 → Use PDs to guide Intranet design

### Problem Situations



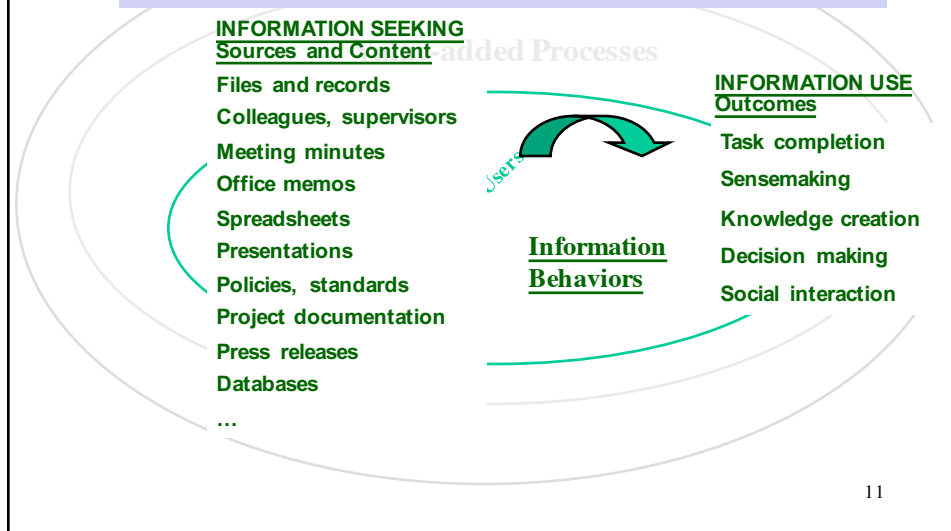
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Taylor 1991, Macmullin & Taylor 1984

### 2.3a Information Use Environment: Information Behaviors

Users rely on information from selected sources to produce desired outcomes

→ Design Intranet with the knowledge of desired outcomes and provide efficient access to preferred sources/content



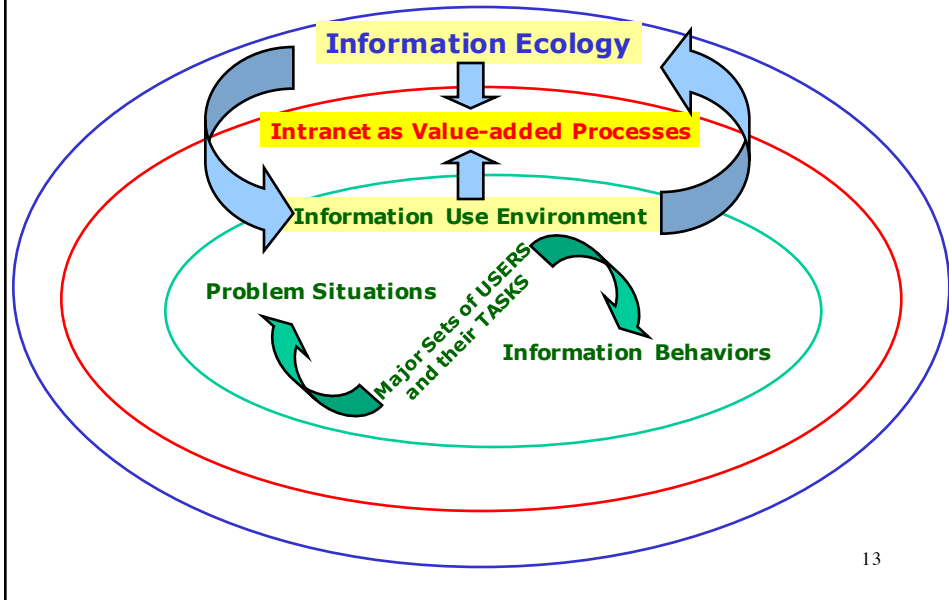
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### 3 Steps, 3 Concepts

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

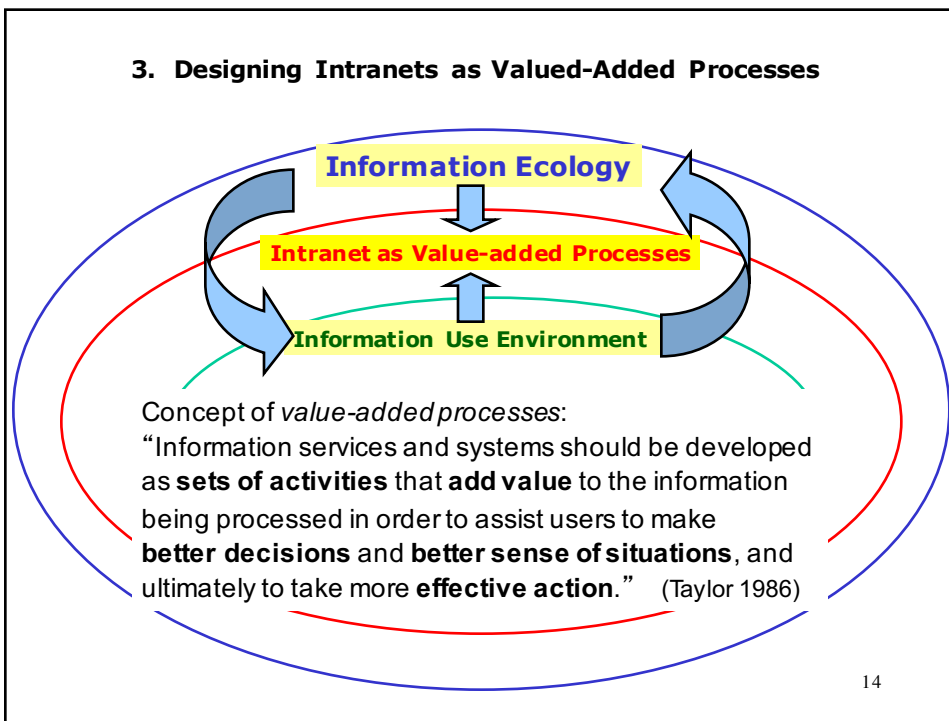
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### 3. Designing Intranets as Valued-Added Processes



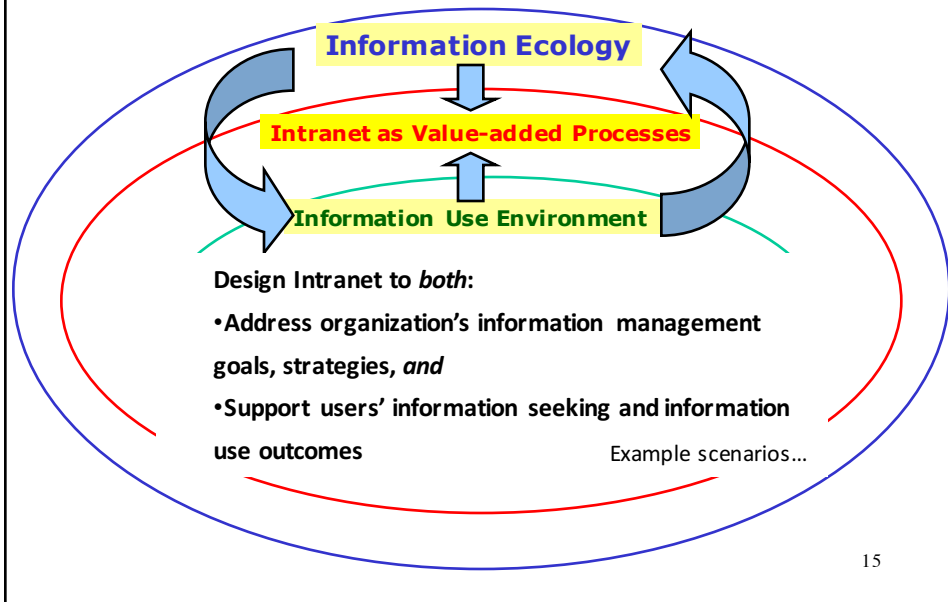
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### 3. Designing Intranets as Valued-Added Processes



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



#### 3 common Intranet design scenarios

##### 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

##### 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

##### 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*



### 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

Identify stakeholders and their interests, concerns  
Propose **governance** structures for decision making

#### Information Behavior & Culture

Users need to develop **trust** in IN as new platform  
Address need for change management

#### Information Staff

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

#### Information Processes, Architecture

Systematic processes to capture, create, share and **access** knowledge and content

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

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### 3b. Design intranet to support users' information behaviors

Design Intranet tools and functionality to address task-related Problem Dimensions

#### Well-structured Ill-structured

Provide **template** spreadsheets, reports, workbooks  
**Informal communication** with clients, colleagues, ...

#### Simple Complex

**Efficiency tools**, save time and effort  
**Collaboration tools**, project management tools

#### Assumptions agreed Assumptions not agreed

**Authoritative sources**; industry-standard methods  
**Exploratory tools**; forums to discuss alternative views

#### Familiar New

Access to **precedents**, support **workflows**  
**Discussion boards** to canvass ideas,  
**Directories** to find **colleagues** who can help, ...

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### 3b. Design intranet to support users' information behaviors

#### Design Intranet to provide value-added access to information

##### Intranet search function

**Single point of access** to many types of sources  
**Features** to focus search query and filter search results  
Search performance needs to be **monitored & tuned**

##### Authoritative sources

Quick access to most up-to-date version of **authoritative sources**

##### Recommendations Suggestions

Suggest relevant sources based on **recommendations** of librarians, other users

##### Information about context

Include **contextual information** that helps users to evaluate usefulness of information

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### 3c. Design intranet to support users' information behaviors ... more than just task completion ...

##### 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** experts who can help, advise: *expertise directory*

##### Decision making

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

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## 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

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## 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

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### 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

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### 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*, information *use*, and information *seeking*
- **information politics**
- **physical setting** and its effects on information access and use
- **information staff** (e.g. librarians, records managers, information systems staff, communication staff)
- **information handling** rules & routines for the creation, organizing, storing, distribution, and preserving of information.

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### Analysis/Design Framework Summary (2)

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

Identify the sets of major users you studied for this 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.

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### 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

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**Intranets as information management platforms**

**Intranets are easy to learn, easy to deploy, yet highly customizable to a specific audience**

**Provides flexible access to a broad range of sources and information types: datasets, documents, people, groups, projects, ...**

**Renders knowledge work more visible and available for reflection, codification, and transfer**

**Enriches the organization's information environment, fosters engagement, and a sense of community and shared purpose**

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