Usability Body of Knowledge

May 26, 2010

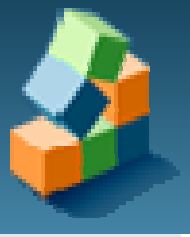
upa

Presented by:

Duane Degler **Lisa Battle**

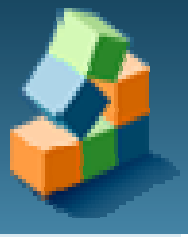
Design for Context

Making software applications and web sites easy to use



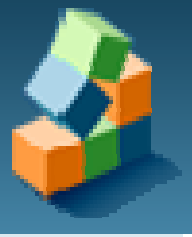
Agenda

- What is a "Body of Knowledge" for the Usability Profession?
- Who Will Use It?
- Content Topic Areas
- Content Organization
- Editorial Perspectives and Processes
- Categories as a Usability "Map"
- Future Site Design & Architecture



What is a "Body of Knowledge"?

- Every mature profession creates a framework to define its practices, techniques, and standards
- This framework may be used to
  - Define the scope of the profession
  - Establish educational curriculum
  - Certify practitioners in their knowledge and performance
  - Guide professional development within the discipline
  - Increase understanding and confidence among people outside the discipline (public perception)



What is a "Body of Knowledge"?

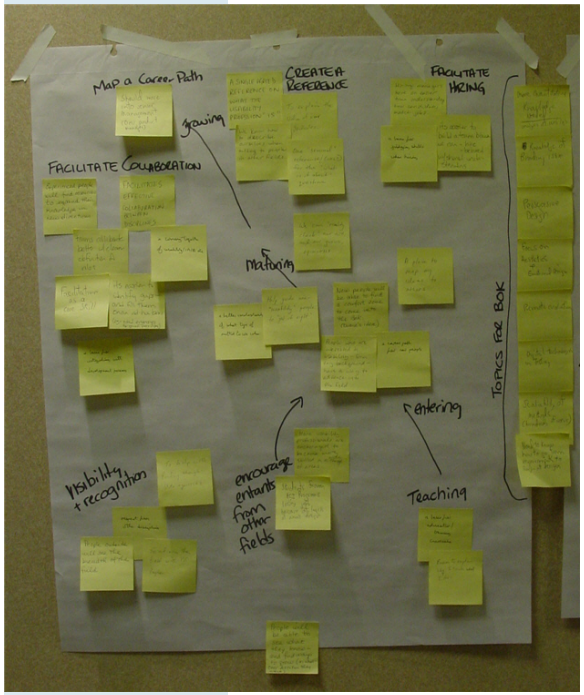
- What professions have this?
  - Law
  - Medicine
  - Nursing
  - Project management
  - Software engineering
  - Massage therapy
  - Health information management
  - Operations management
  - Geographic information science (GIS)
  - Quality auditors
  - Landscape architecture
  - Interior design
  - Business analysis
  - Event management
  - Procurement
  - Service management

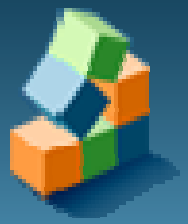
A Usability BoK

- In 2002, the UPA Board first discussed creating a BoK to support the usability profession

A Usability BoK

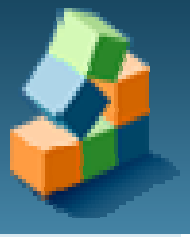
- In 2004, the project was initiated in a UPA workshop





Discussion

- Have you heard about the Usability Body of Knowledge project?
- Do you think our profession would benefit from a body of knowledge?



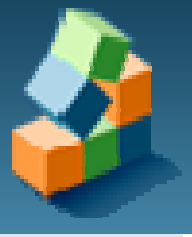
Who will use the Usability BoK?

PRIMARY AUDIENCES

- Usability and UX practitioners
  - People new to the field
  - Experienced people faced with new challenges or new types of projects
  - Managers of UX teams
- Educators and researchers

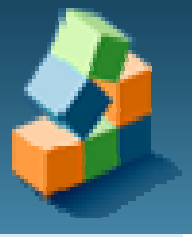
SECONDARY AUDIENCES

- Hiring managers, project managers, clients and decision-makers
- Collaborators and colleagues from other disciplines
  - Developers, analysts, artists, and other project team members
- Policymakers
  - Standards bodies, other professional associations, government
- Other interested people – journalists, students, etc.



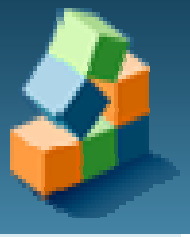
Example Scenarios

Title	Introducing usability/UCD into an organization
User	USR-1 (an experienced usability/UX practitioner)
Trigger	Hired for a new job that will involve introducing usability/UCD into the organization
Story	The usability specialist starts a new job with a company that has not paid much attention to usability before. As he gets familiar with the organization, he realizes that integrating usability & UCD will be a difficult task. He comes to the BoK looking for information about how other organizations have successfully and unsuccessfully introduced UCD, including best practices, articles, case studies, etc. It helps to read about how other people have approached this same problem before.



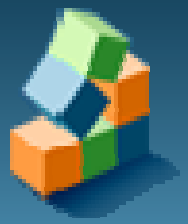
Example Scenarios

Title	Designing for a new technical platform
User	USR-1 (an experienced usability/UX practitioner)
Trigger	Assigned to work on a project involving a [kiosk/mobile device/iPad/mainframe application conversion]
Story	The practitioner has been working in the UX field for almost 10 years, but this is the first project of this type that she has had the opportunity to work on. She wants to know if there are any standards or guidelines for designing the user interface for this type of product. It would also help to know if there is anything different or unusual to keep in mind when conducting user research or usability testing for this type of device.



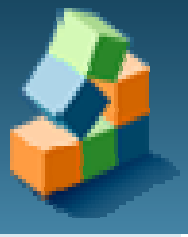
Example Scenarios

Title	Choosing a consultant for short- or long-term collaboration
User	USR-3 (a UX manager)
Trigger	The manager is considering hiring a contractor/ consultant
Story	The usability group is overloaded, but there is a corporate freeze on hiring full-time personnel. The Director is willing to hire a contractor or consultant to augment the in-house team. The UX manager has not hired a contractor/consultant before and wants advice on how to go about it, including finding the right person and writing a contract. She also wants to know what lessons other organizations have learned from working with outside consultants, and any pitfalls to avoid.



Discussion

- Can you think of scenarios in which you might want to use a Body of Knowledge?
- What questions do people ask you, for which it might be useful to refer them to a Body of Knowledge?



Content Topic Areas

Methods

Affinity diagramming
Contextual inquiry
Focus group
Card sorting
Field study

Brainstorming
Parallel design
Rapid prototyping
Storyboarding

Heuristic evaluation
Usability testing
Pluralistic usability walkthrough

Design

Types of design
Design principles
Design patterns

Design for mobile devices
Design for web applications
Design for multiple platforms

Design for international audiences
Design for children
Design for older adults

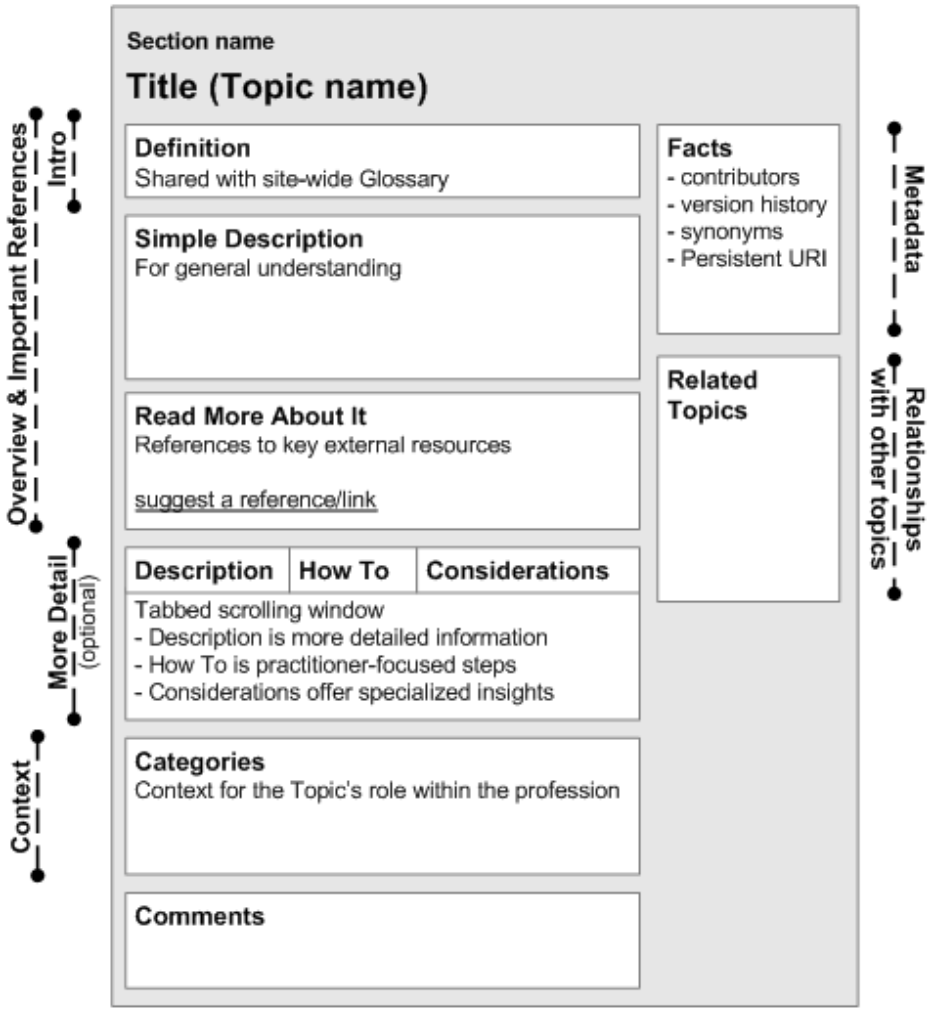
Design of specific UI elements (e.g. breadcrumbs, progress indicators, error messages)

Managing UX

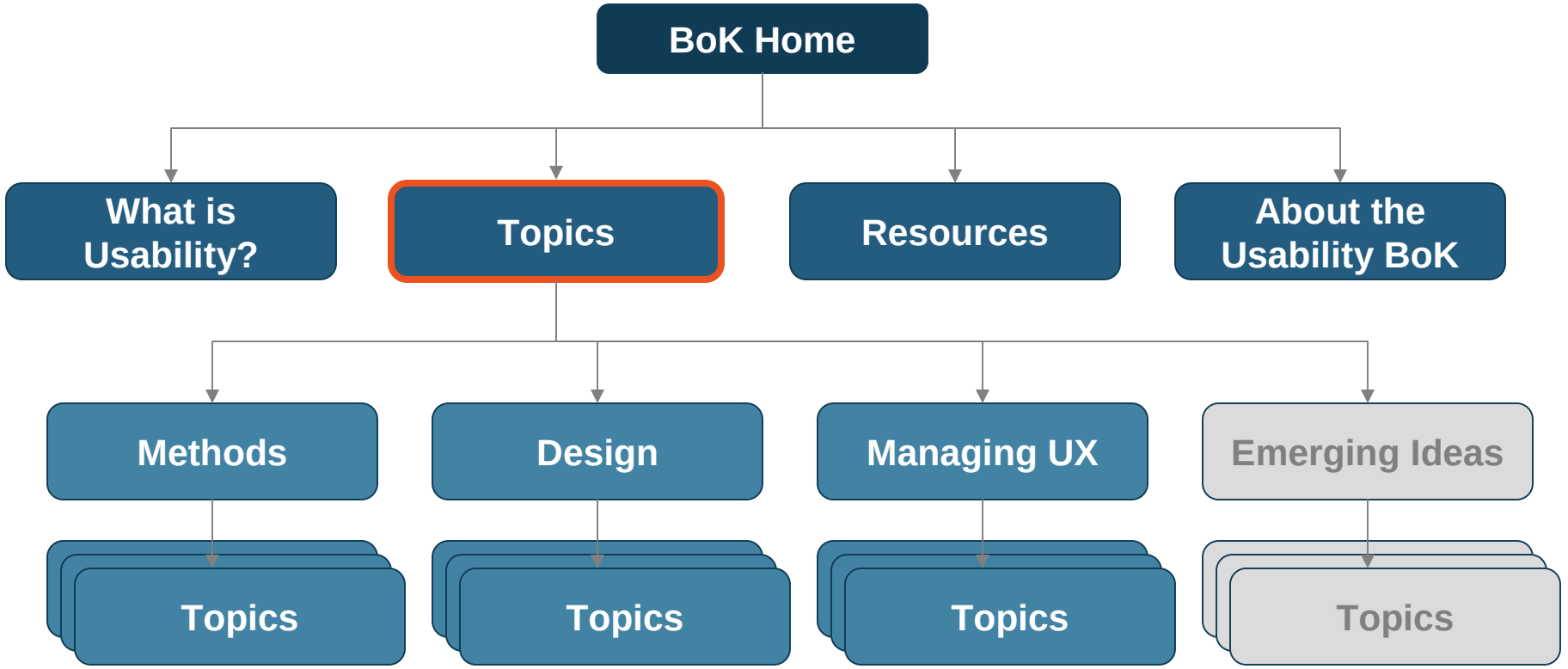
ROI of usability
"Selling" usability to executives
Planning and sizing a UCD project
Growing a team
Centralized vs decentralized teams
Hiring a consultant
Usability maturity
Institutionalizing UCD
Integrating UCD and Agile
Starting a usability consultancy

Content Topic Areas

- Each page is a stand-alone topic
  - Topic links: Users go from topics they know to topics that may be new
  - Web links: Users go to relevant information on the Web, through links to online articles and sites

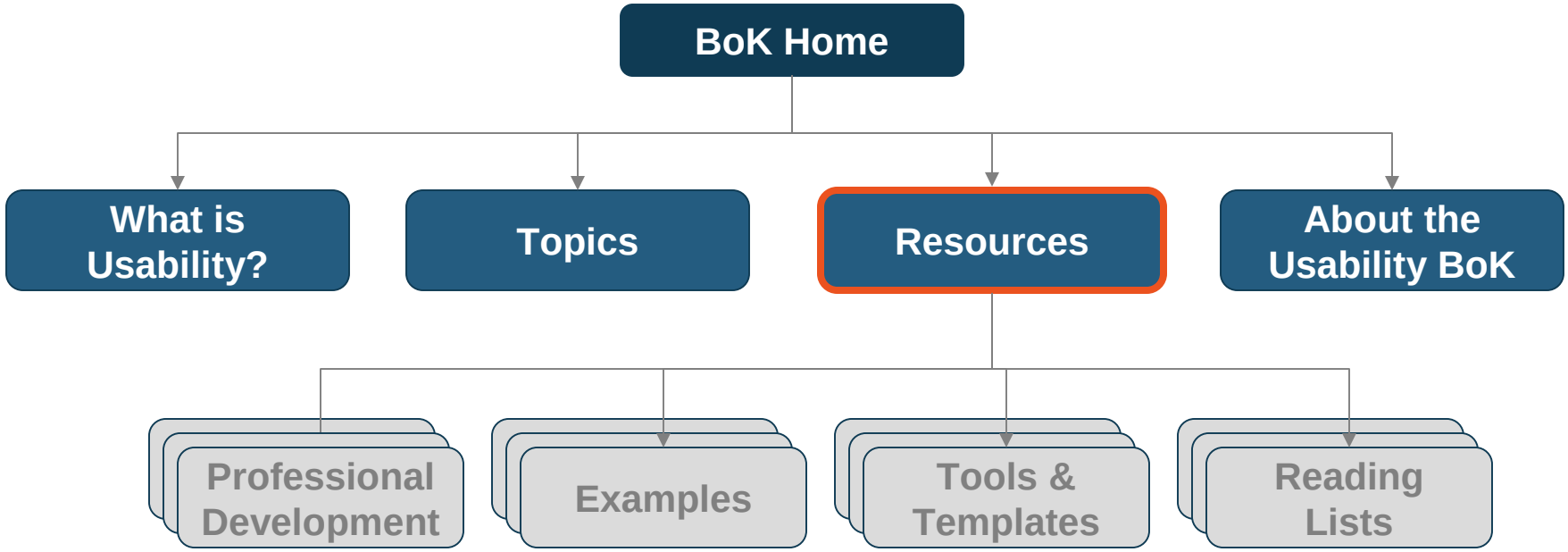


Content Organization

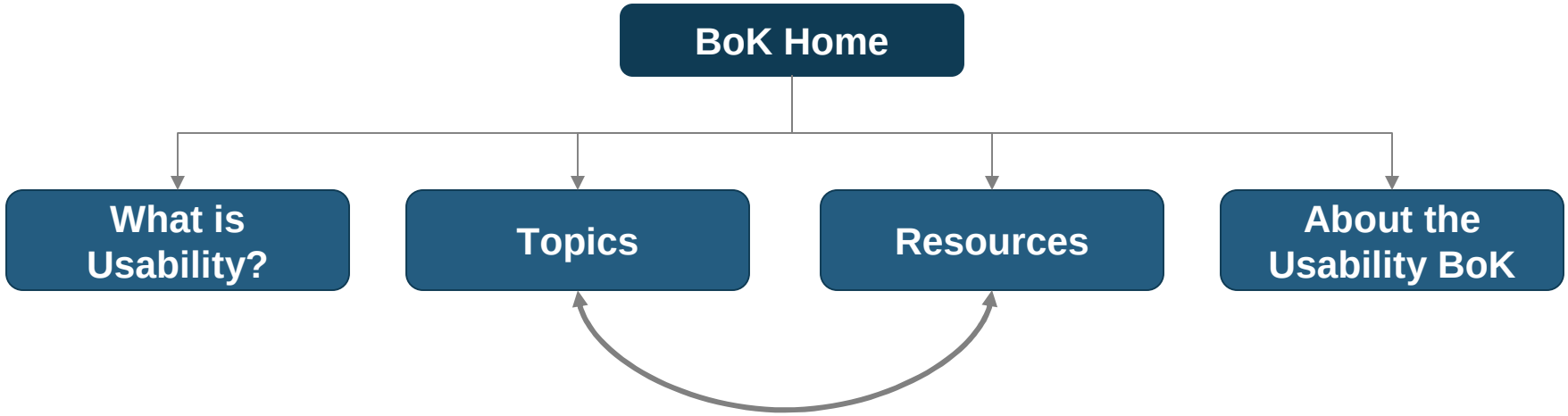


techniques and ideas that are not yet part of mainstream practice, but are being researched as ways to solve new challenges

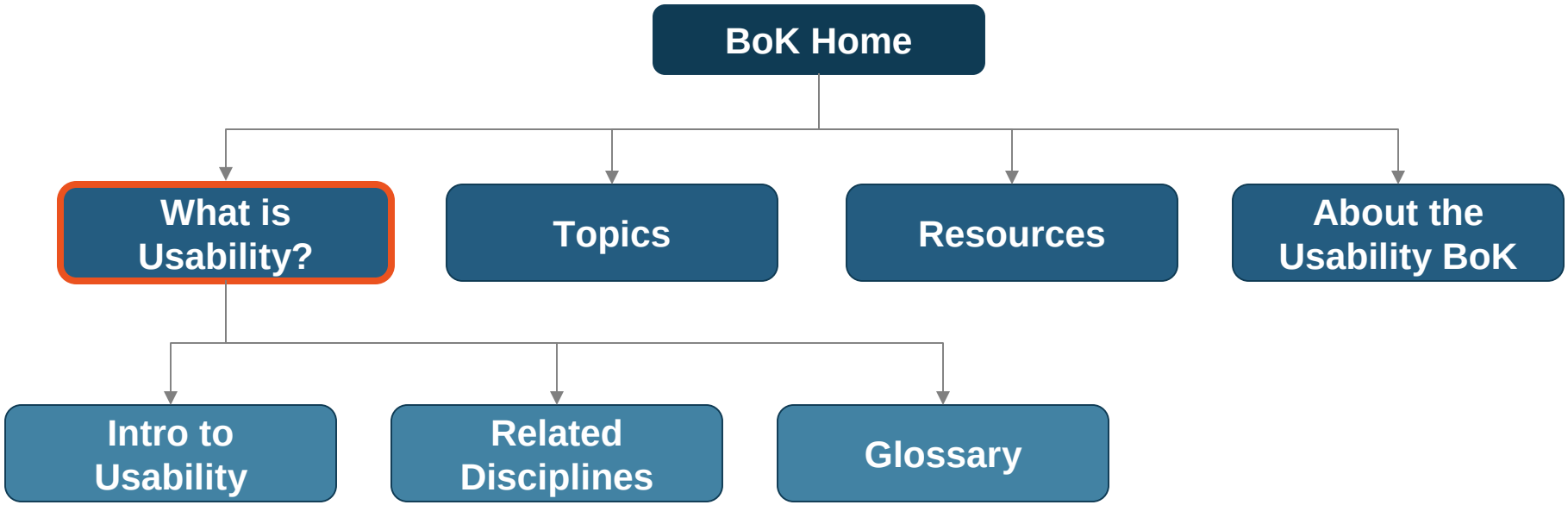
Content Organization



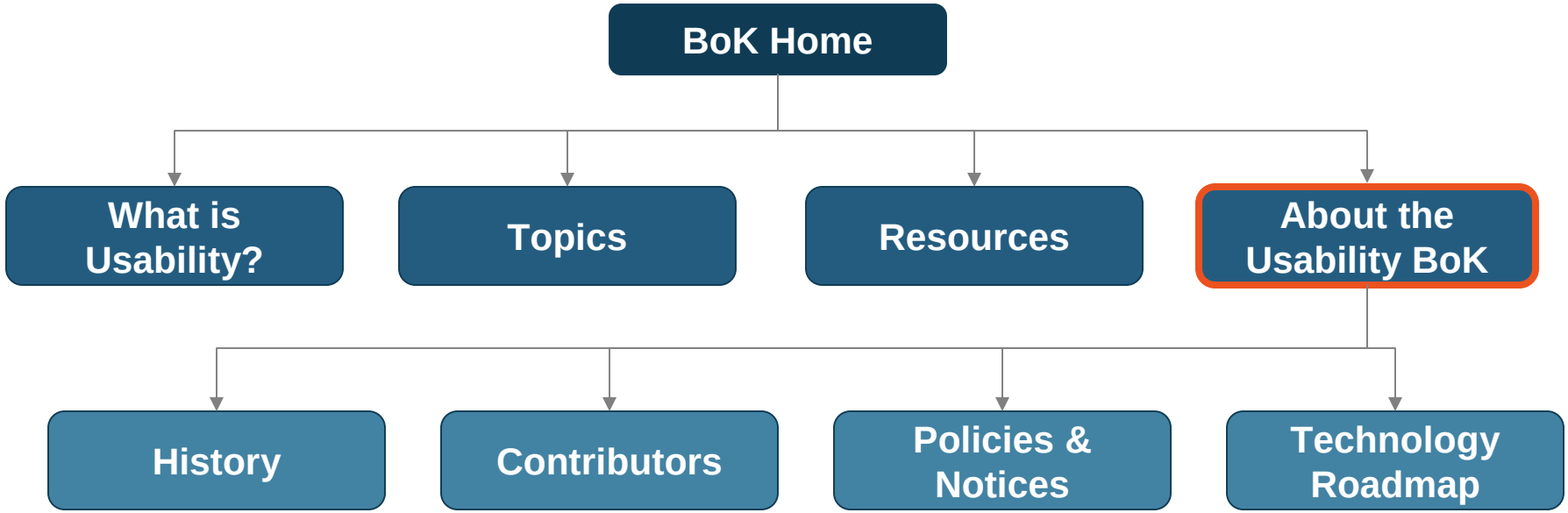
Content Organization



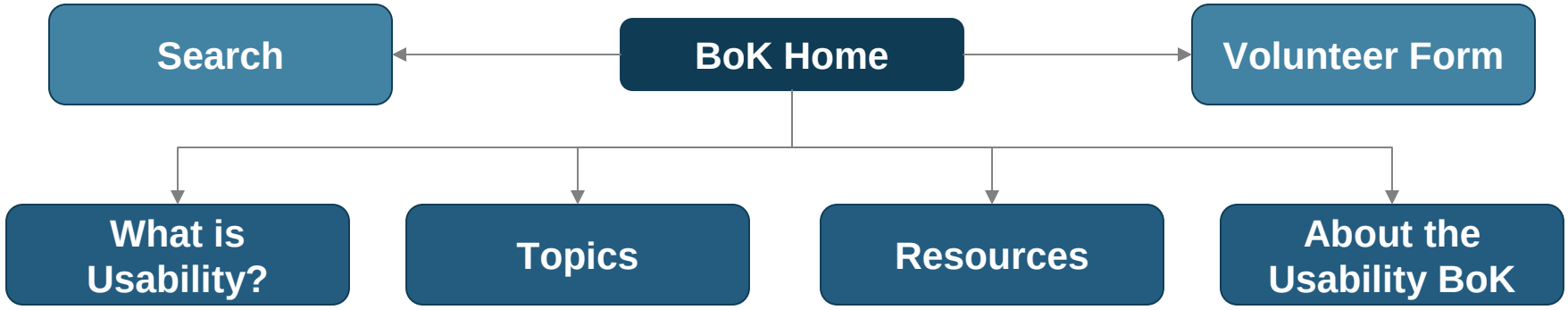
Content Organization

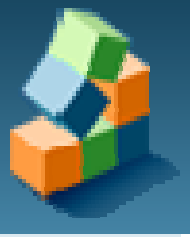


Content Organization



Content Organization



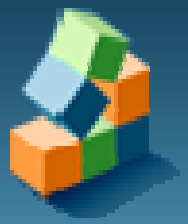


Preview Site

www.usabilitybok.org

- Custom content management system built in 2005
- Purpose: visibility for the Usability BoK, sharing early examples of the topics with the community, getting feedback
- Quite simple, so that people could browse through a few example topics
- Not planned to continue beyond 2010

- Some early work was done with Spanish translation to understand some of the issues that would arise with having a multilingual resource

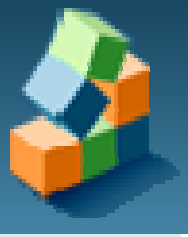


Discussion

- How can the BoK meet the needs of a multi-lingual, international audience?

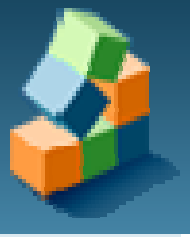
Editorial Perspectives and Processes

Design for Context
Making software applications and web sites easy to use



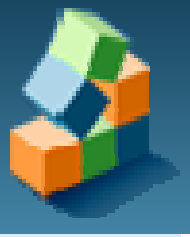
Editorial Perspectives

- Consensus
- Breadth
- Depth
- Authoritativeness
- A living reference



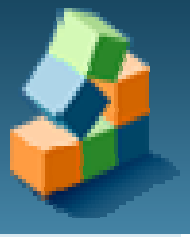
Consensus

- The BoK should represent a broad consensus regarding the profession itself and the range of knowledge, skills, and methods that should be mastered by practitioners in the field
  - Where differing perspectives exist among experts, acknowledge and describe the issues



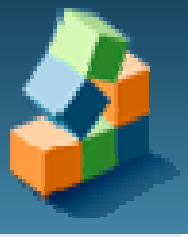
Breadth

- The BoK should be broad and inclusive in scope, because our profession is inherently multidisciplinary and draws on a wide range of other practices
- It needs to have sufficient breadth of content to be useful and realistically represent the scope of the profession



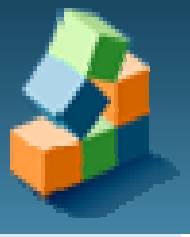
Depth

- The BoK should be derived from published literature, conference proceedings, and the experiences of practitioners accumulated over many years
- The outcome will be a guide that contains core material supplemented by pointers to existing resources, and continues to evolve as the practice of usability evolves



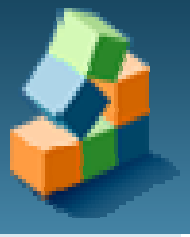
How Much Detail is Needed?

- Overview
  - Definition
  - Summary
  - Important References
- More Detail
  - Description
  - How To
  - Special Considerations



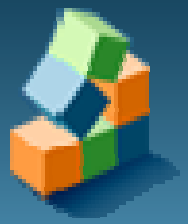
An Authoritative Reference

- A **framework** for answering the questions "what is the practice of usability?" and "how does it relate to me and my experience?"
- **Sufficient content** to be useful and realistically represent the scope of the profession
- **Consensus** on content, reviewed by multiple experts, not just an individual person's perspective
- **Citations** of published works that are generally agreed to be important



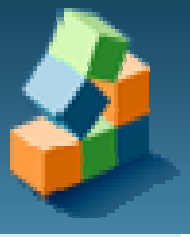
A Living Reference

- Fresh, timely content
- Keeps up with changes in the field



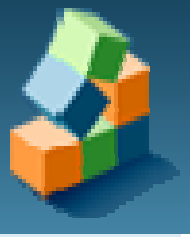
Discussion

- What would make the Usability BoK an authoritative reference?
- What would make it a living reference?
- Can "authoritative" and "contributed" content co-exist?



Can "Authoritative" and "Contributed" Content Co-exist?

- A strong editorial process
- A community collaborative process

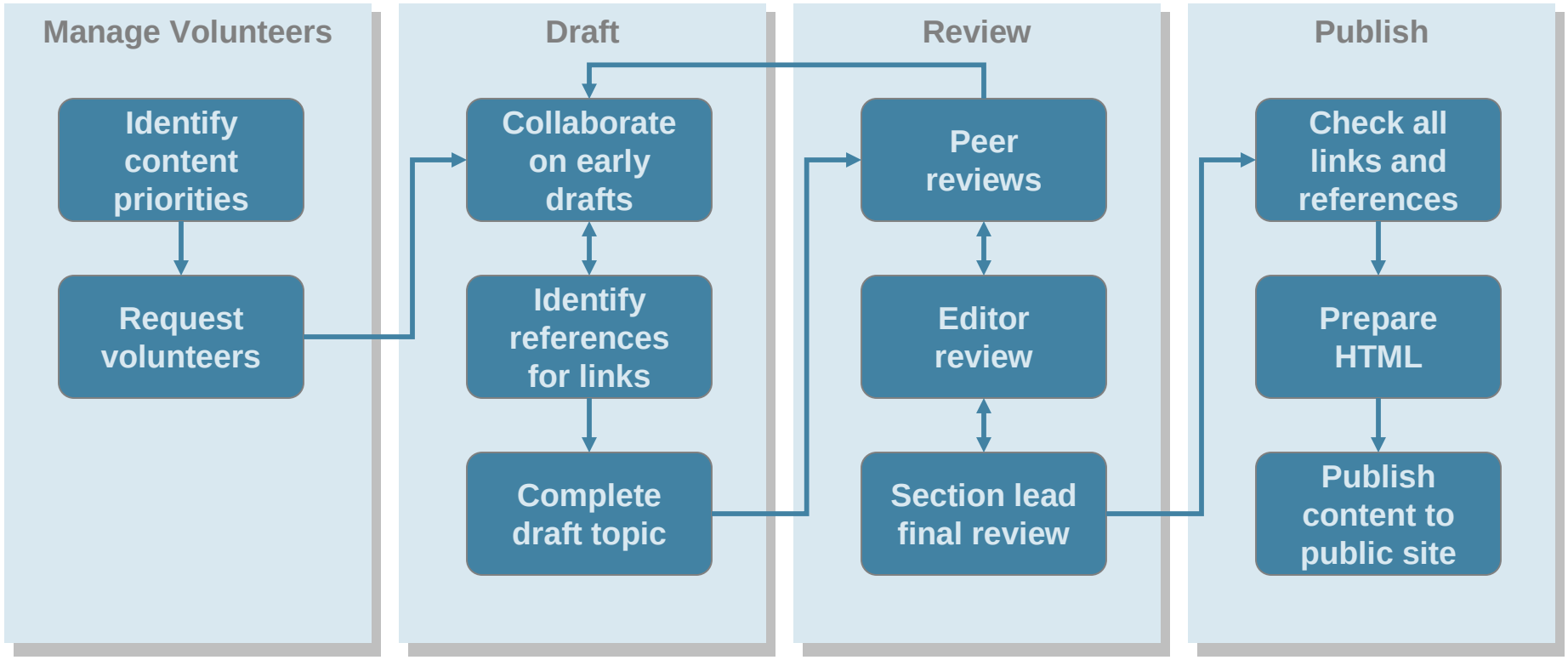


Draft Wiki

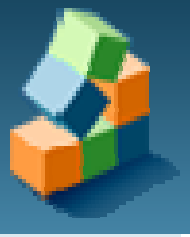
draft.usabilitybok.org

- A MediaWiki site was set up in 2006 for collaboration between Usability BoK content contributors
- The site is password controlled to create a comfortable environment for drafting content, collaborative editing, and discussions
- Drafts are not visible to the public, because exposing draft, "in progress" material did not match the project's overall goals and the authoritative nature of the Usability BoK
- Anyone can contribute – all volunteers get a login
- Over 500 people have requested logins over the past few years

Contribution and Editorial Process

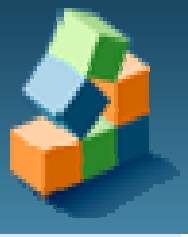


Future Usability BoK



Future BoK Site: Drupal Platform

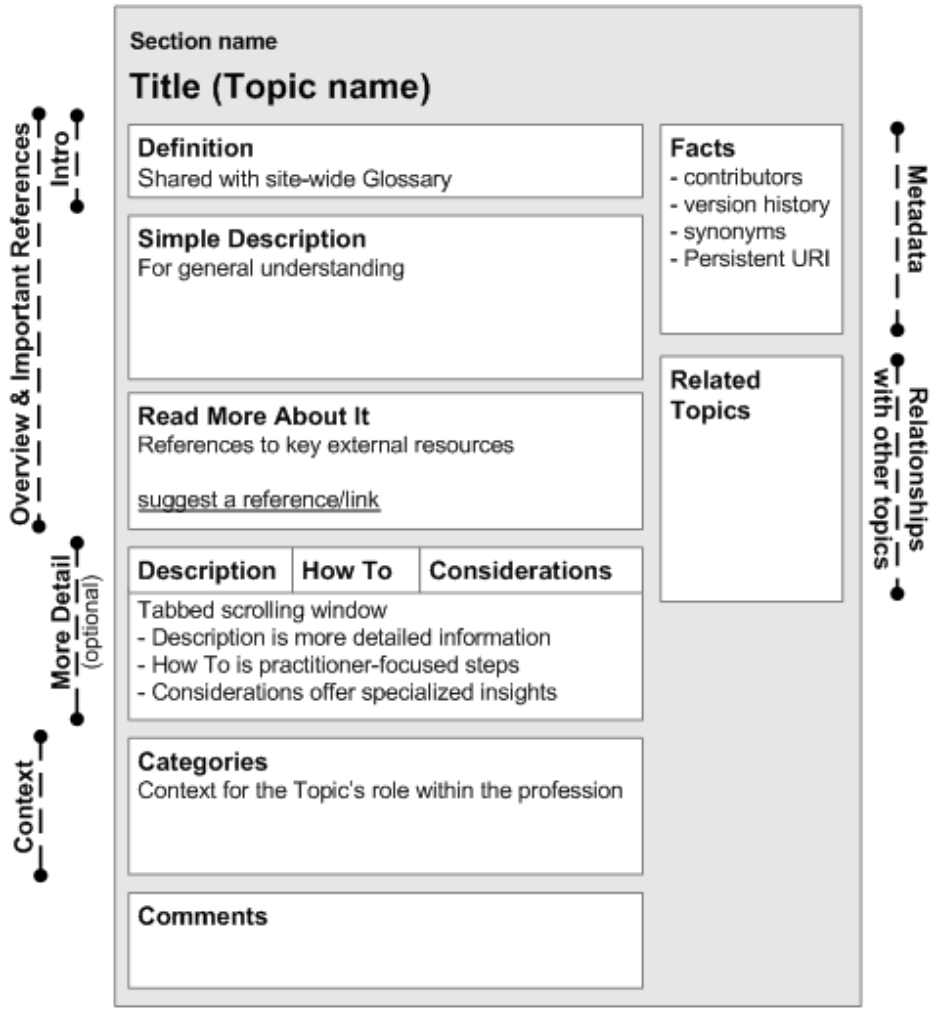
- Extensive capabilities to create and manage *structured* content
- Extensive taxonomy capabilities
- Web 2.0 social collaboration facilities, so eventually Draft Wiki can be incorporated into the same technical environment as the public site
- Also future platform for the UPA's main web site
- Widely supported by Open Source development community
  - Active development group focused on RDF and RDFa Semantic Web implementation within the product
  - Can make the Usability BoK *the authoritative database* for usability references and categorization on the Web



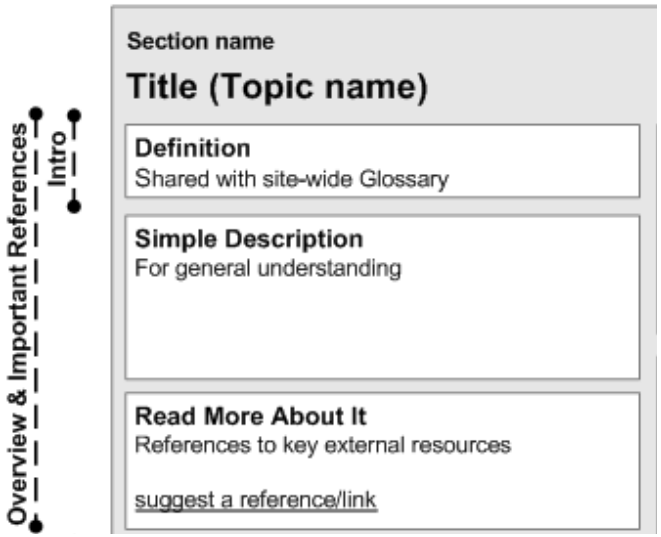
Future BoK Site: Features

- Page navigation and hierarchical browsing
  - along with site hierarchy navigation, related topics can be accessed like paging through a book
- Facet categorization
  - leveraging the taxonomy to allow users to filter content in order to focus on information that matches their specific needs
- Glossary integration
  - along with a site-wide glossary, enables pop-up definitions for terms, so people can get definitions without having to leave a page they are reading
- Rich link information
  - links to external resources are stored with additional categorization information to allow them to be managed more easily and become more useful over time

Granular "Chunks" of Content



Re-Assembling Content

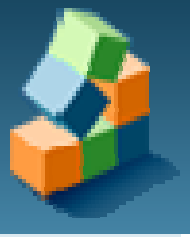


For example, if a user indicates that they are an HR manager or journalist, rather than a usability practitioner, they may have the option to see only the "overview" (title, definition, and simple description) for each Topic, as a way of matching the content to their experience and need for information

Re-Assembling Content

Title (Topic name)	**Simple Description** For general understanding	**Considerations**
Title (Topic name)	**Simple Description** For general understanding	**Considerations**
Title (Topic name)	**Simple Description** For general understanding	**Considerations**

Or, a practitioner comparing several different user research methods might see just a few fields relevant to the comparison.



Re-Assembling Content

Reading List Title

Lastname, A. (2001). Title of book or article.
Description of this reference and why it is useful.

Lastname, B. (2007). Title of book or article.
Description of this reference and why it is useful.

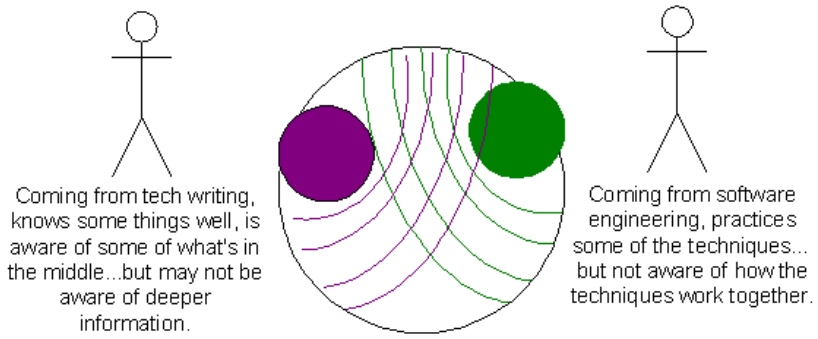
Lastname, C. (2003). Title of book or article.
Description of this reference and why it is useful.

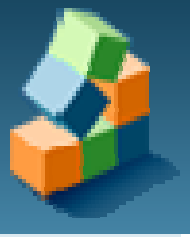
Or, a reading list might be assembled based on references that are frequently cited in the BoK topics.

Topic Relationships: Tagging

During the initial workshop, the concept of the map was expressed this way:

"The body of knowledge should be in people's comfort zone – they should come to it and see themselves easily. Each person has an entry point that can ripple across the field. Maybe we're thinking about a network?"

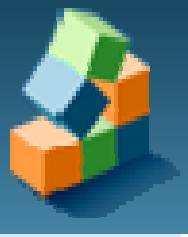




Topic Relationships: Tagging

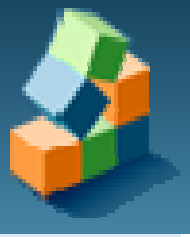
A "map" of the subject…

- Makes content findable and navigable
- Provides a framework for other efforts (such as certification) to derive their definitions of the profession



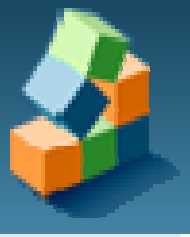
Topic Relationships: Tagging

- UX Practice Areas
- Topic Areas
- Content Types
- Contexts/Perspectives



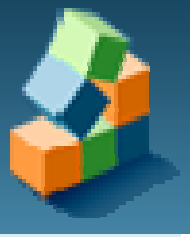
UX Practice Areas

- Content can be tagged as relevant to one or more of the core disciplines of User Experience, including
  - Strategy
  - Research
  - Design
  - Evaluation
  - Management



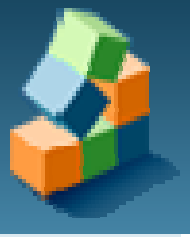
Topic Areas

- Content can be tagged as relevant to one or more of the core topic areas of the BoK, including
  - Methods
  - Design
  - Managing UX
  - Emerging ideas



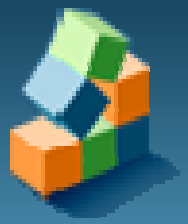
Content Types

- Content and links can be tagged as a specific type, such as
  - Glossary definition
  - How to (procedure)
  - Reference
  - Example
  - Case study
  - Template



Contexts

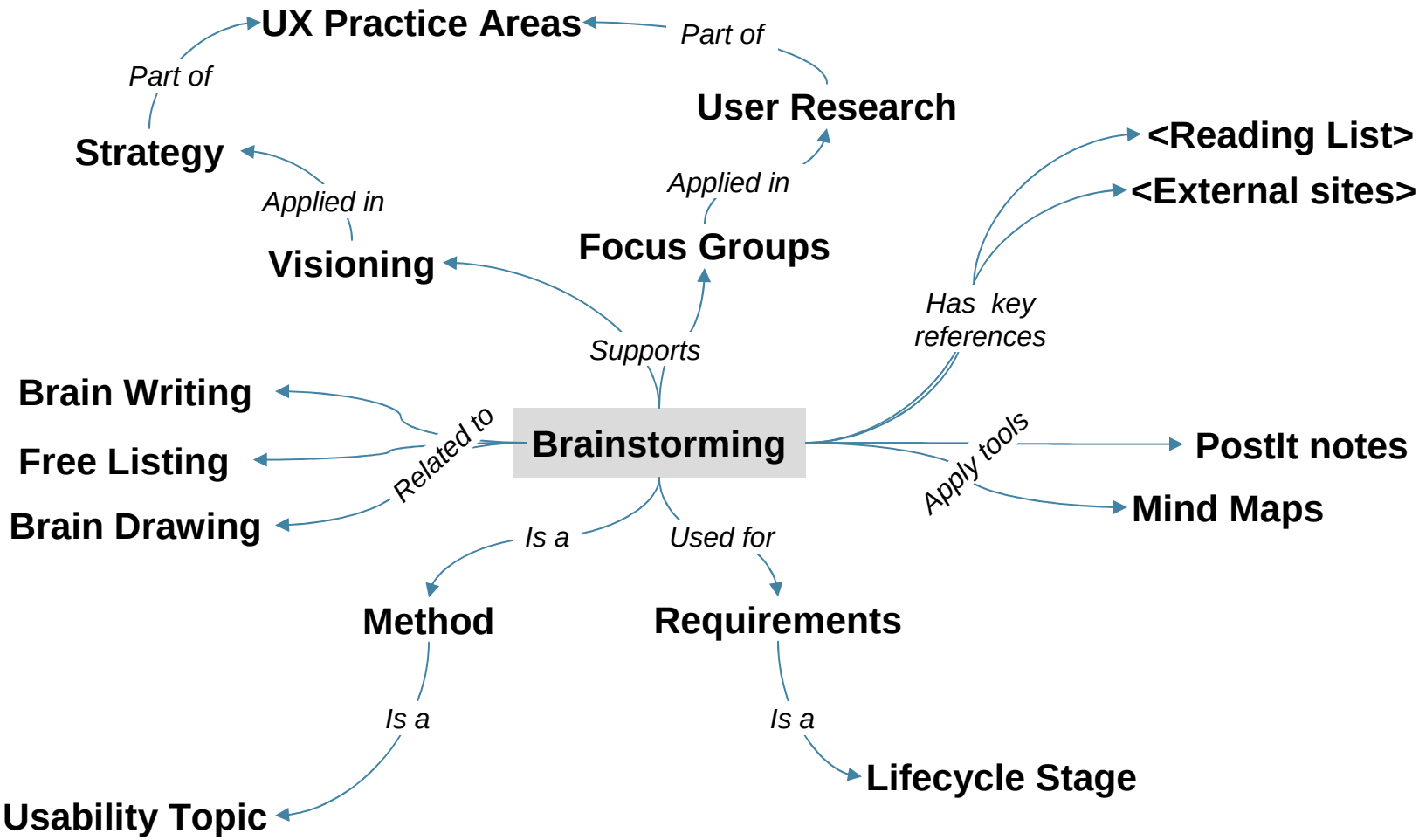
- Content can be tagged as relevant to one or more contexts, including
  - Project lifecycle
  - Technology platform
  - User type
  - Organization type
  - Subject domain
  - Culture
  - Language



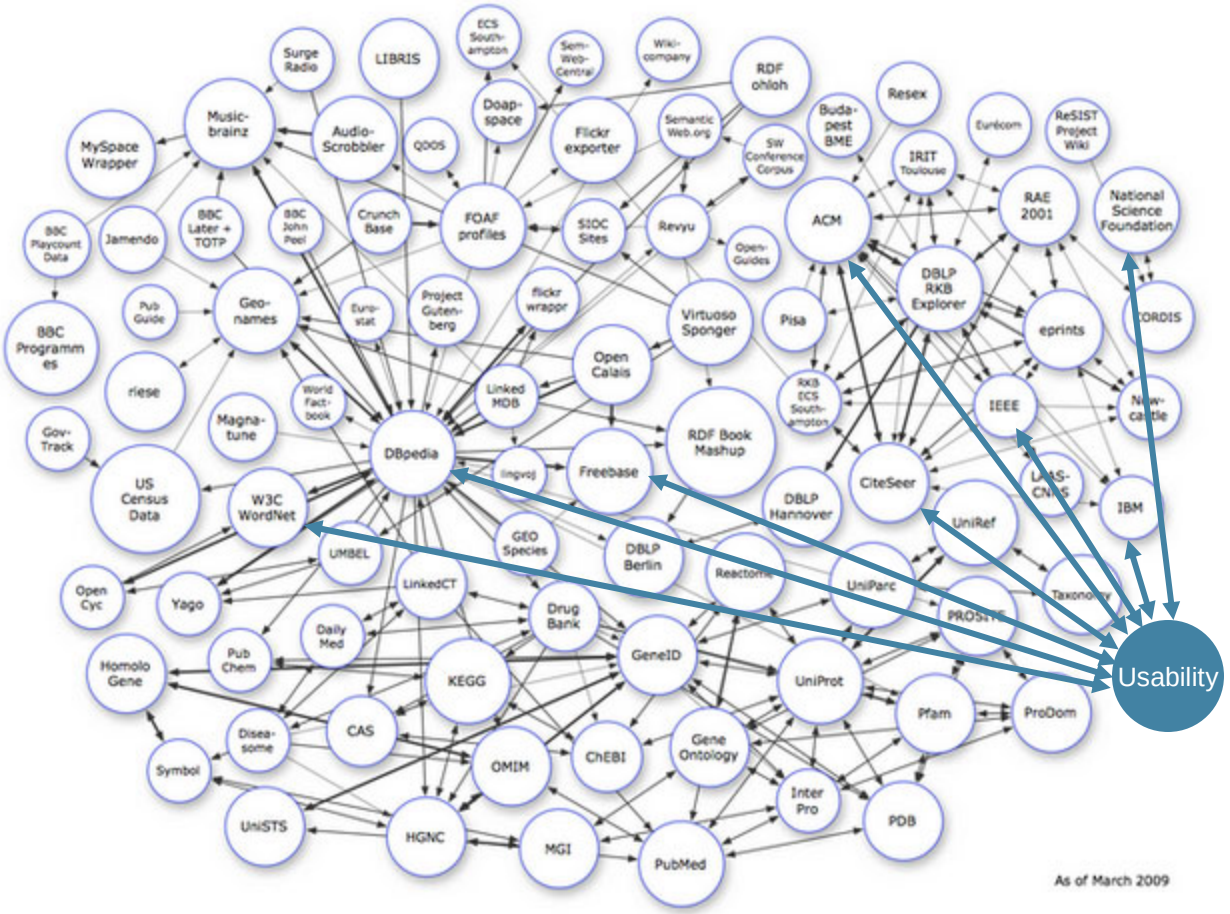
Discussion

- How would you use this new site?
- What do you feel *you* need?

Topic Relationships



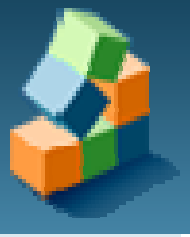
Usability Topics as Linked Data



http://linkeddata.org/

Summary

www.usabilitybok.org



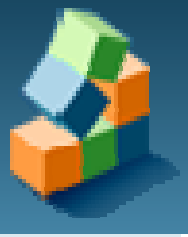
The BoK and UPA's 2010 Goals

1. Become the authoritative source on the practice of usability, user-centered design (UCD), and user experience (UX).

- **Provides a substantitive, independent resource on usability.**

2. Facilitate professional development and education within the UX field.

- **Answers the question "what is involved in practicing usability?" for professional development and curriculum planning.**



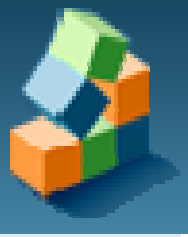
The BoK and UPA's 2010 Goals

3. Promote the business value of user experience, research, design and evaluation to business and other entities.

- **Includes topics on ROI, describes benefits of specific usability and design techniques.**

4. Foster a community of user experience professionals through knowledge sharing and networking.

- **Provides a place for knowledge-sharing with the wider community.**



Want to Get Involved?

- Volunteer contributors are needed!

www.usabilitybok.org