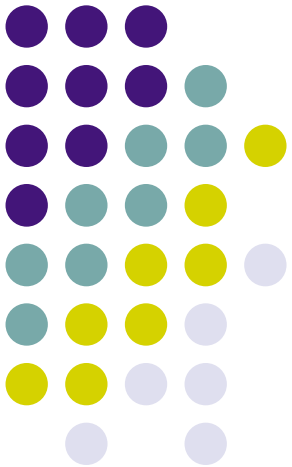
Information Architecture—
The IA Model



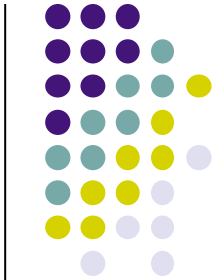
Week 11:

Online Class

A Discussion about Information Architecture—
Why User-Centered Design Improves Performance—
The IA Model

By Steven Heitman, MAIA / MAEd
Sr. User/Design Researcher
Information Architect
User Experience Designer
Interaction Designer
User-Centered Designer
Usability Tester
Project/Product Manager
Director

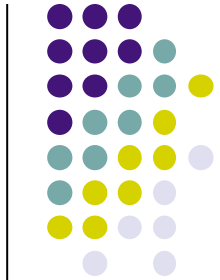
Discussion about Information Architecture



- Need for Information Architects
- What is Information Architecture?
- The IA Model

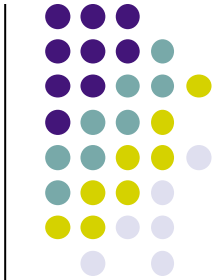
1. Design Research
2. Concept Generation
3. User Scenarios
4. Wire Frame Mockups
5. Prototyping
6. Usability Testing
7. Implementation
8. System Testing

Discussion about Information Architecture



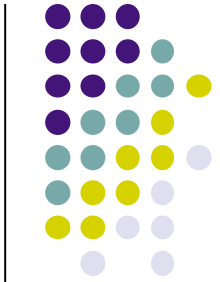
- Information Architecture Curriculum
- How Does One Develop Information Architecture for a Website?
- Conclusion: Information Architecture Increases Productivity
- References
- Online Resources

Need for Information Architects



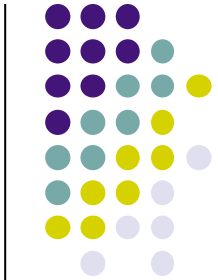
- Information Architecture is a newly developed profession and started in 1994 with the advent of the Internet industry.
- Many corporations realized the need to employ Information Architects to work at making their Websites more usable.

Need for Information Architects



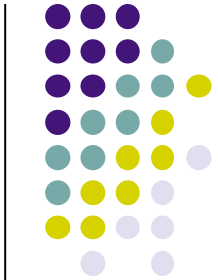
- Information Architecture or Information Architect is commonly abbreviated as “IA.”
- What does an Information Architect do?
  - An Information Architect performs a needs assessment to figure out what the client’s real need is and what end users need to use a Website.
  - Another term for needs assessment is—competitive analysis.

Need for Information Architects



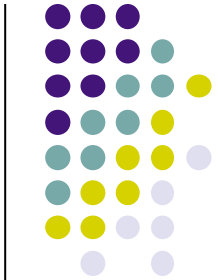
- Information Architects do a lot of design research about Websites.
- Usually, doing a competitive analysis, an Information Architect might look at three other Websites—to see how others approach their design or conceptual developments.
- What is the reason then for doing Information Architecture research?

Need for Information Architects



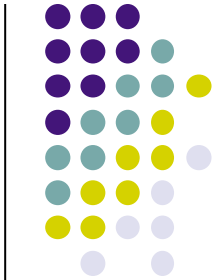
- The point of practicing Information Architecture is to develop high-quality blueprints to promote implementing user-centered design into a Website before it is implemented.
- Information Architects creates meaningful user experiences, since Information Architecture provides a way in which to structure Websites or other digital design products.

Need for Information Architects



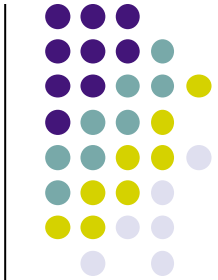
- Why is this relevant to instructional designers or Information Architects?
  - Because instructional designers design online learning environments for distance educational virtual classrooms.
  - Instructional designers desire to create Websites that deliver information to end users quickly and efficiently.
  - Because end users can use Websites with ease, finding learning materials without getting lost, then navigating on Websites successfully.

What is Information Architecture?



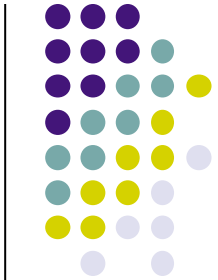
- Information Architecture courses are not generally offered at Universities.
- Information Architecture programs are now becoming available.
- But one can usually find a Library Science & Information or Graphic Design programs that provide relevant courses or other programs.

What is Information Architecture?



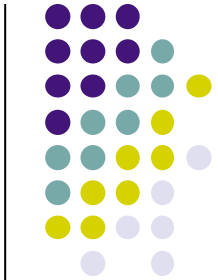
- Information Architecture (IA) is the art and science of expressing a model or concept for information.
- Information Architecture is used in library systems, web development, user interactions, database development, programming, technical writing, enterprise architecture, critical system software design and other activities that require expressions of complex systems.

What is Information Architecture?



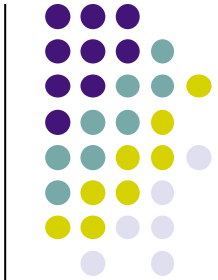
- Information Architecture has somewhat different meanings in these different branches of what might be called IS and/or IT architecture.
- Most definitions have common qualities: a structural design of shared environments, methods of organizing and labeling websites, intranets, and online communities, and ways of bringing the principles of design and architecture to the digital landscape.
- Information Architecture is defined by the Information Architecture Institute as:

What is Information Architecture?



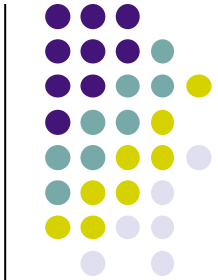
1. The structural design of shared information environments.
2. The art and science of organizing and labeling Websites, intranets, online communities and software to support findability and usability.
3. An emerging community of practice focused on bringing principles of design and architecture to the digital landscape.

What is Information Architecture?



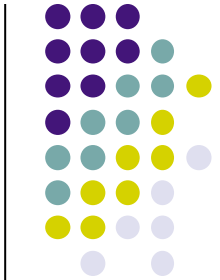
- The term Information Architecture describes a specialized skill set which relates to the interpretation of information and expression of distinctions between signs and systems of signs.
- It has some degree of origin in the library sciences. Many library schools and graphic design schools teach Information Architecture.

What is Information Architecture?



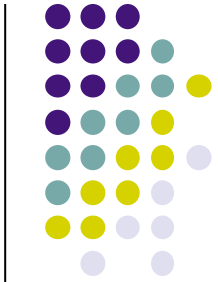
- Instructional designers use the ADDIE model.
  - Why?
- Because it provides an instructional designer with a solid framework by which to design meaningful learning experiences to end users.
- That is why it is important, since it provides a robust framework by which to incorporate user-centered design into digital design products (Websites) prior to implementation.

What is Information Architecture?



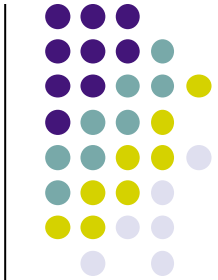
- Instructional designers use the ADDIE model on projects.
- Information Architects use The IA Model on projects.
- The IA Model is a systematic approach for doing Information Architecture.

The IA Model



- Why is this important?
  - Information Architects educate, teach, and inform others about what a good model is for using a standardized system to develop high-quality Websites or other design products.
  - Information Architecture is a real profession.
  - Because we all desire to give clients high-quality service, we think about user-centered design—how to incorporate it into Websites.

The IA Model



- Overview of The IA Model:

1. Design Research
2. Concept Generation
3. User Scenarios
4. Wire Frame Mockups
5. Prototyping
6. Usability Testing
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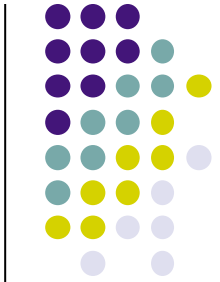
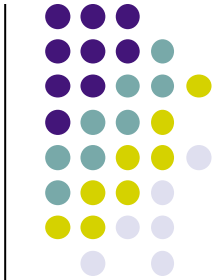
The IA Model



1. Design Research
   - A process where Information Architects does research, writing Information Architecture case studies, which includes: interviewing stakeholders, end users, and doing a competitive analysis.
   - An Information Architect interviews and observes end users to figure out how they intend to use a Website before it is designed. The rationale for doing Information Architecture research prior to design and building a Website is that it may save corporations money in the long run.

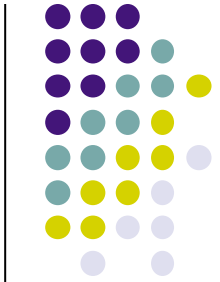
The IA Model



2. Concept Generation

- After research has been completed, Information Architects and their team members all come together to participate in brainstorming activities, numerous discussions, and then deciding on the best way to move forward with their intended design products.
- At this point in the process, an Information Architect would produce numerous flow charts to show the structure of a Website, including developing draft concepts of wire frame mockups (a way to brainstorm and think by drawing out conceptual ideas).

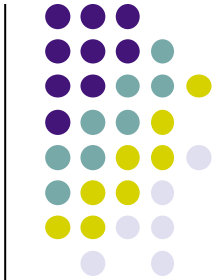
The IA Model



3. User Scenarios

- User scenarios help Information Architects and stakeholders to understand who their intended audiences will be as well as how an intended audience could use a Website, including how end users might use current computing technology devices and navigational systems.
- This also helps Information Architects to make determinations, if computer programmers can actually do required computer programming for a proposed Website. Sometimes great ideas are well thought out but cannot realistically be implemented due to budget constraints; or technology has not advanced to accommodate complicated designs.

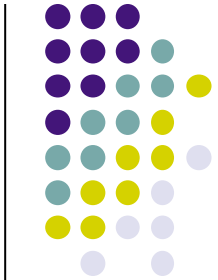
The IA Model



4. Wire Frame Mockups

- These mockups help an Information Architect to clearly design and draw out what a Website might look like prior to developing it using code.
- By drawing up wire frame mockups, it saves a company spending a lot of money to develop a Website because it costs a lot of money to pay a computer programmer to actually write code. Wire frame mockups can also be used to communicate Information Architecture design conceptual ideas to clients as well as computer programmers.

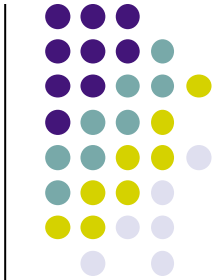
The IA Model



5. Prototyping

- Information Architects work with other team members to develop “experience prototypes.” Working prototypes are developed quickly—end users can also be tested to see if they can easily use a prototype.
- Another inexpensive way to do prototyping is to use wire frame mockups to test end users. One might also consider doing a focus group and recording or videotaping the sessions to provide Information Architects and clients with additional research documentation.

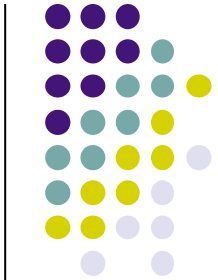
The IA Model



6. Usability Testing

- An Information Architect would develop a usability test plan since it provides a structured way in which to test end users. Most likely, an Information Architect requires two other team members to assist with usability testing.
- An Information Architect leads end user in the taking the usability test, a note taker jots down notes, and another team member observes end users. Oftentimes, end users are video taped for future references.

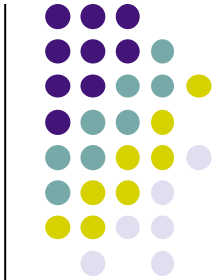
The IA Model



7. Implementation

- This is when the actual design product or Website is produced.
- Of course, many additional changes might have to be made.
- It is an iterative process—leading up to the final development of an intended design product per an Information Architecture design plan.

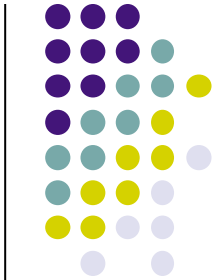
The IA Model



8. System Testing

- This is the final stage of development where tests are run on a Website to see if it works and to catch any bugs or code errors prior to launching a design product or Website.
- For example, load tests are performed on a Website to see if it works when numerous end users use it, including additional tests to see if the computer codes work, and again additional usability testing to make sure the final product is good and works for end users.

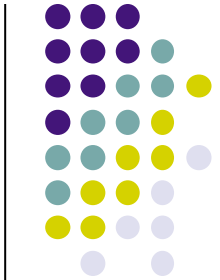
Information Architecture Curriculum



Jakob Nielsen says:

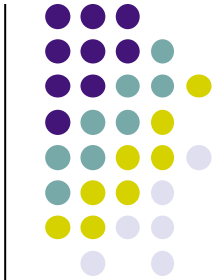
- He recounts that critics may not understand the value of Information Architecture.
- Information Architects do work on information projects such as corporate Websites and intranets.
- He thinks eventually Information Architecture will be taught at the elementary level in schools.

Information Architecture for Websites



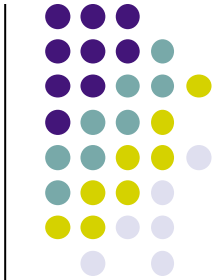
- The Information Architect does research usually accomplished by first doing a needs assessment or competitive analysis commonly using methods of design research procedures (design plan, wire frame mockups, flow chart).
- The Information Architect works closely with a client or corporation to determine what their needs will be prior to designing and implementing a Website.
- Then the Information Architect meets with clients or stakeholders and interviews subject matter experts—to get at what the real need is for a client—then to develop a viable design solution.

Benefits of Information Architecture



- Developing distance educational online training programs can benefit from having the Information Architecture done prior to designing a Website or other design products. In the long run, doing Information Architecture prior to implementing a final version of a Website may save a corporation a lot of money and time.
- If the Website is designed to work right and more usable (user-centered design), end users will desire to use the Website. End users get frustrated when online—they may not be able to quickly find the information they want to get at—creating meaningful experiences for end users makes using online products easier.

Benefits of Information Architecture



- Many Information Architects have completed in-depth graduate-level programs, enabling them to specialize in Information Architecture, designing navigational systems (fully integrated navigational systems for a design product), interaction design, and developing and performing usability tests.
- Because Information Architecture is such a specialized arena, more and more universities are beginning to develop and offer advanced degree programs. The value of doing Information Architecture, in the long run, reduces end users time spent surfing online.
- It can save corporations money—increasing productivity for their work force and increasing a return on their investment—because end users and employees are better able to use Websites.

Sources

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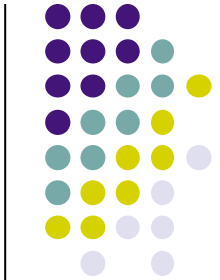
Information Architecture Resources



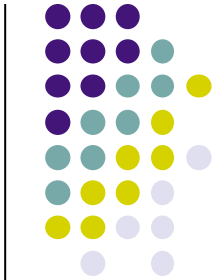
Online IA Tutorial
http://www.stevenheitman-ia.com/html/MAEd.html

Online NS Tutorial
http://www.stevenheitman-ia.com/html/MAIA.html

The Information Architecture Institute
http://iainstitute.org/

Learning IA
http://iainstitute.org/en/learn/

Steven Heitman
Information Architect
User Experience Designer
Project Manager



Expertise and Professional Qualifications

Relying on many years of professional experience in corporate environments and academia, I teach my clients why digital design products need clear Information Architecture and user experience design, including research. Defined navigation systems that enable end users to access information online, including increased usability for corporate Websites (user-centered design).

The more time an end user saves retrieving data online—this enables corporations to increase their profit margins, and improved productivity of their work force. When corporations contemplate the need for Information Architecture and structuring their Websites, they call upon me to guide them through IA/UXD projects, including usability testing.

The IA Model

1. Design Research
2. Concept Generation
3. Creation of Scenarios
4. Wire Fame Mockups
5. Prototyping
6. Usability Testing
7. Implementation
8. System Testing

The NS Model

1. Hierarchical Navigational Systems
2. Global Navigational Systems
3. Local Navigational Systems
4. Integrated Navigational Systems
5. Remote Navigational Systems
6. Ad Hoc Navigational Systems
7. Search Engines in Websites

http://www.stevenheitman-ia.com

mailto@stevenheitman-ia.com