About User-Centered Design

IA Design & Usability

Topic: Expertise and Professional Qualifications

For Doing User-Centered Design and User/Design Research

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Last updated: May 1, 2018.

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User-Centered Design

User-Centered Design Dramatically Improves Performance

- Increasing Profit Margins: Heuristic evaluations and cognitive walkthroughs (doing usability testing), collecting raw data helps us to figure out design flaws.
- Statistically speaking, following Information Architecture procedures as well as doing usability testing, user-centered design improves performance for digital design products or Websites. Thus, increases profit margins. If end users cannot use a product, they will not use it.
- That is why sense-making, cognitive factors, and wayfinding are components to human factors: cognitive information processing and usability, cognitive informatics, human-computer interaction, with regard to Information Architecture as well as end users.
- These are all important factors, as they relate to successful design activities and design implementations, working right for end users.

21 Different Aspects of Information Architecture (IA)

1. Current Trends Using The IA Model (same concepts apply to UXD),
2. Relevancy of Navigational Systems to IA,
3. Different Types of Navigational Systems for Websites,
4. Sense-Making and Wayfinding on Websites,
5. IA and User-Centered Design,
6. User Experience Architecture,
7. Website Design Architecture,
8. Web Indexing, Internet Indexing,
9. Enterprise Architecture for E-Commerce,
10. Human-Computer Interaction and Human Factors,
11. Graphic Design, Interface Design and Typography,
12. Information Design,
13. Information Systems,
14. Information Graphics,
15. Process Architecture,
16. Taxonomy and IA,
17. Ajax and CSS,
18. Web 2.0 Technologies,
19. What Does an IA Do for Corporations,
20. Unique Design Products Require IA, IXD, NS, and
21. Infinite Possibilities for IA.

Psychology of Learning & Performance—Cognitive Informatics

Adult Learning Theories: Learning by doing. Radical behaviorism; shaping, chaining, discrimination learning, fading; cognitive information processing; schema theory; situated cognition; Piaget, Vygotsky, Gagné (9 events); constructivism; understanding cognitive load (Dick & Carey); usability testing and heuristic evaluations, including:

- Radical Behaviorism,
- Principles of Behavior Management,
- Cognitive Information Processing,
- Sensory Memory,
- Working Memory,
- Long-Term Memory,
- Implications of CIP Instruction,
- Ausubel's Meaningful Reception Learning,
- Assimilation to Schema,
- Nature of Situated Cognition,
- Cognitive Apprenticeships,
- Anchored Instruction,
- Learning Communities,
- Assessment In-Situ,
- Jean Piaget's Genetic Epistemology,
- Bruner: Going Beyond the Information Given,
- Vygotsky: The Social Formation of Mind,
- Biological Bases of Learning and Memory,
- Proximate Causes: Neurophysiology of Learning,
- Motivation and Self-Regulation in Learning,
- Gagné's Theory of Instruction,
- Gagné's—The Nine Events of Instruction, and
- Constructivism: A Contrasting Theory.

Project/Product Management Experience

- Project Management Skills: Using MS Office, MS Project, OmniPlan for Information Architecture and User Experience Design projects.
- Determining goals and objectives for successful outcome on team projects, understanding milestones.
- Keeping deliverables and projects on time.
- Negotiating, outsourcing, managing projects, team members and in-house design groups; able to build a cohesive team of Information Architects or other required team members, researchers who collaborate and communicate effectively with engineers, project managers and business stakeholders.
- Worked successfully on teams—produced high-quality IA concepts and deliverables: IA projects successfully completed on time—dependable, flexible, productive, conscientious, easy to work with on diverse team.

User Experience Design Research Skills

Experienced in the following areas:

- Information Architect,
- User experience design
- Interaction design,
- Project/product manager,
- Information Architecture design patterns,
- Familiarity with computer programming languages,
- HTML,
- CSS,
- HTML5,
- CSS3,
- JavaScript,
- Ajax,
- Java,
- Foreign languages and different cultures,
- Doing card sorting sessions with end users,
- Using Axure or other softwares (Visio) to produce multiple variety of diagrams,
- Producing wire frame mockups and IA documentation,
- Doing rapid prototyping,
- Research-Based Web Design and Usability Guidelines,
- Performing usability testing,
- Writing Information Architecture design plan reports,
- Designing integrated navigational systems for Websites,
- Card sorting sessions with end users,
- Understanding business plans and design requirements for Websites,
- Doing specific Information Architecture research (Website audits),
- Writing Information Architecture Design Plan Reports,
- Understanding integrated navigational systems for Websites,
- Graphic design and typography,
- Art director,
- Corporate training,
- E-Learning Websites,
- Instructional design plan reports (ADDIE Model),
- Technical and professional writer,
- The IA Model, and
- The NS Model.

UX, IA, UXD, PM Skills & Applications

Experienced in the following areas:

- Doing design research,
- Observing psychological aspects of end users,
- Writing usability test plans and reports,
- Structuring information on Websites, findability, taxonomy,
- Incorporating wayfinding tools and affordances into UXD and IXD,
- Designing fully integrated navigational systems,
- Using stickums for conceptual brainstorming,
- Creating end user flow charts, site maps, schematic diagrams in Axure or Visio,
- Writing annotated wire frame mockups,
- Developing high-quality questionnaires and surveys,
- Interviewing subject matter experts and end users,
- Writing usability testing reports and IA documentation,
- Making IA and UXD recommendations and implementing my findings,
- Implementing IA and UXD best practices for digital structures,
- Incorporating user-centered design practices into projects,
- Complying with Section 508 ADA as necessary,
- Creating documents via desktop publishing and PowerPoint presentations,
- Adobe Creative Suite (Photoshop, Illustrator, Fireworks, Flash),
- Sketching and drafting—conceptual design—ideation,
- Prototyping using paper,
- Prototyping using Axure (preference),
- Prototyping using Dreamweaver,
- Optimizing digital images,
- Coding HTML5 and developing Cascading Style Sheets (CSS3),
- Using project management skills to deliver projects on time,
- Using MS Office,
- Using MS Project,
- Using OmniPlan,
- Using OmniGraffle,
- Determining goals for successful outcome on team or projects, and
- Negotiating, outsourcing, managing projects, personable.