

Dave Musson

-User Centered Design

-User-Centred design is the optimized focus of design around what the user can, wants and needs to solve their problem

-Relies heavily on input from users in “persona” guise which is both a pro and con.

-If the team correctly identifies the correct personas for their users then they can successfully get input and feedback from the correct participants. If the personas are incorrect the design will suffer.

-By involving users at this level the process can create a sense of ownership from the participants and help maintain the correct user expectations with the product.

-End-User Design/ Prototyping

- Can be considered Meta-Design

-”How the system is applied to design that changes its designation.”

Brian Sax

-Collaborative Design

-Advantageous for large scale projects.

-Specific knowledge and experience can be broken down and assigned to specific collaborators.

-Incorporation of specific knowledge into the design process is possible.

-Effective way of developing never seen before products.

-Success of CD relies heavily on communication among collaborators.

-Fault-Tolerant Design

-Design will continue to operate in the event of a failure.

- Continues to run no matter how many failures are encountered.

-Impossible to know exactly how the fault has altered the integrity of the system.

-May unintentionally altered the output from our system in ways that we can not see and our system may be running at a reduced level.

Peng Shao

-Collaborative Design

-Main focus is to help biologists and computer scientists interact with each other.

-The research has focused on methods to aid successful collaboration between these two disciplines, which has proven to be a difficult task.

-Typically in bioinformatics labs, the biologists and computer scientists are within walking distance and benefit from verbal communication. However, even with this luxury, biologists and computer scientists suffer from a rift in communication.

Empathetic Design

-“an approach to design where researchers for developers try to get closer to the lives and experiences of (putative, potential or future) end-users.” (Wikipedia)

Jessica Speir and Joe Zeles

-Collaborative Design

-Division of work and use of more than one person’s knowledge is beneficial for the design of the system.

-Team members can contribute their knowledge base to project.

-Weakness of design using collaboration is the possibility of redundancy and overlaps in the system.

-There is a possibility of having gaps in the project because of miscommunications. This may lead to confusion and discrepancies amongst the team.

-Methodology Contextual Design

-Collecting details and data from the customers.

-By interacting with the costumers the researcher can better understand any difficulties facing them.

-Researching can be expensive and its time consuming.

-Researcher’s and consumer’s knowledge base differs.

Brian Brown

-Meta-Design

Strengths:

- Puts the tools of design in the hands of designers

- Flexible - Provides a context for a diverse set of views

- Open Systems that can be easily modified and extended to individuals needs

- Facilitates learning by pushing users from consumers to designers

- Enables designers to have a design breakthrough by having the right tools at the right time

Weaknesses:

- Providing the right scope for a Meta-Design system can be difficult (to small will feel restrictive and inflexible, to large will be unwieldy and difficult to use)

- Creating a flexible system is hard

- Some systems can have a high cost of learning

- Make a system that is open and extensible can add a great deal of complexity and work for the meta-designer

- Some times people just want to be consumers and not designers

Professionally-Dominated Design

Strengths:

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- Can be very efficient
- High quality results
- Great for designing safety critical systems where being rigid in the design process is a good thing

Weaknesses:

- Can have a lack of creativity stemming from not having varying view points
- Very rigid and inflexible
- Often times not much room for collaboration

Jason Held

-Collaborative Design

-knowledge required to solve complicated design problems is almost never in the head of one designer.

-is possible to bring in required knowledge from other sources.

-can be used in several dimensions of design, and the social structure that this creates can be very effective.

-Top-Down/Bottom-Up Design

-design method involves having a top-level description of a system, and then refining this view step by step as the system is broken down into smaller modules.

Yingdan

-User-Centered Design

-UCD is an approach to software and hardware design that identifies four different basic principles.

- 1) An appropriate allocation of function between user and system,
- 2) Active involvement of users,
- 3) Iterations of design solutions and
- 4) Multidisciplinary design teams

Questions raised:

- 1) What is the definition of “users”, representative users or real users,
- 2) Communication difficulties between designers and users and,
- 3) Depending on the design problem, how and to what level should users be involved?

-Activity-Centered Design

-Developed by Russian psychologist.

-Activity Theory became a popular framework for the design of HCI and CSCW.

-ACD compensates for User Centered Design.

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- UCD often criticized for under representation of other user groups.
- ACD is only fit for users who don't have a great aim.

Tyler Brown

-User Centered Design

Strengths:

- Pointed out problems that we (as the designers) didn't notice
- Gave us direction on what to implement next (users acting as designers)
- Assured us that certain design decisions were correct (maybe not the best but no noticeable problems)

Weaknesses:

- Took a lot of time to conduct studies with users
- Hard to motivate users to volunteer for studies (had to use \$20 incentive)
- Some participants in the studies had skewed perspectives

-Pair Programming

Strengths:

- Many of the same strengths that any type of collaboration brings
- Doesn't have the weakness of "mythical man-month" type collaboration
- Better code structure and encapsulation
- Less bugs in code
- Less boring when working with others (some prefer to work alone so this can be considered a weakness as well)

Weaknesses:

- Half of the developers are not programming they are "navigators"
- Stronger developers can be "dragged down" by less experienced partners (this however doubles as training so it is controversial as a weakness)
- Must work together on schedules, coding style, etc...
- Contrasting opinions can hinder development

Andy Hoffner

-Learner-Centered Design

- Focuses on user's ability to improve understanding.
- More effective as a teaching tool than traditional informational database systems.
- Can manifest itself as a tutoring system, open ended learning system, or combination of both.
- LCD system is that it can draw from a wide variety of backgrounds to foster learning.

-Universal Design

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-Approach of design that tries to create environments useable by as many types people as possible.

-Universal design is along the same lines, and focuses on equitable use, flexibility, and intuitiveness.

-The disadvantages of such a system is that it has to do many different things well.

-Usual effect is that they do many things poorly, instead of a few things greatly.