Contextual Design

Contextual Design is a **structured, well-defined user-centered** design process that provides **methods to collect data about users in the field, interpret and consolidate** that data in a structured way, **use the data to create and prototype product and service concepts, and iteratively test and refine those concepts with users**.

Contextual Design philosophy - **understand users in order to find out their fundamental intents, desires, and drivers.**

Contextual Design has primarily been used for the design of **computer information and IT systems**, including **hardware and software**. Parts of Contextual Design have been adapted for use as a field **usability evaluation method**. Contextual Design has also been applied to the **design of digital libraries and other learning technologies**. Contextual Design has also been used in a variety of **other industries, including web applications, process reengineering, consumer product design, manufacturing, and automotive and medical device design, to name just a few**.

Motivations and Key Principles

System design must support and extend users' work practice

A central tenet of **Contextual Design is that any technology, product or system must be designed to support and extend its users' work practice** . If it does so well, it will be accepted and valued; if it fails to do so, it will cause dissatisfaction, frustration, avoidance and workarounds

In Contextual Design, the term work practice **refers to the complex and detailed set of behaviors, attitudes, goals and intents** that characterize a set of users in a particular environment.

People are experts at what they do - but are unable to articulate their own work practice

The first is that people are **not consciously aware of their own work practice**; all of their knowledge is tacit.

The second is that **work practice is complex and varied, and that useful design data are hidden** in everyday details.

Contextual Design holds that design team members **must go into the field and observe and talk with users in their natural work or life environments** - their **natural contexts** - in order **to understand work practice**.

Implications for the designer: Use **field interviews to reveal tacit aspects of users' work practice** - the **motivations, workarounds, and strategies that they may never articulate, but structure their work**.

Good design requires partnership and participation with users

Don't just observe when you're in the field. Ask **questions and suggest interpretations** of the user's actions and motivations. **Articulate what matters about the work together**.

Good design is systemic

Any good design considers the system and its impact on users as a whole: the handles on a **Mini Cooper reflect the aesthetic of the entire car**; the iPhone's **characteristic user interface elements (including gestures) are carried through the entire design and the apps**; all parts of the amazon.com site support the **focus on user interests, community ratings, related material, and easy purchase**. And all pages of the site look like they are part of the site - a single page could not be changed

Design depends on explicit representations

Use **drawings, sketches and models to capture key design considerations** at every step of the process.

Description of the Contextual Design Process


Requirements & Solutions
Define & Validate Concepts
Contextual Inquiry
Talk to specific customers in the field
Interpretation Session
Interpret the data as a team to capture key issues
Work Models and Affinity Diagramming
Consolidate data across customers for a full market view
What matters to users – characterizing what they do
Visioning
Redesign people's work with new technology ideas
New ideas and direction
Storyboarding
Work out the details of particular tasks and roles
User Environment Design
Design system to support this new work
Redesign activities and technology to provide value
Paper Mock-Up Interviews
Mock up the interface using interaction patterns for testing
Interaction & Visual Design
Design and test the final look and user experience
Iterate the system with users