

Foundation Workshop: Participatory Methods for Analysis, Design, and Assessment

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Participatory methods produce rapid and comprehensive results whether applied to a business process, a project plan, system design, or a human-computer interface for a Web, Windows® shrink-wrap, or client-server product.

The defining characteristic of *participatory* methods is that they involve representatives from all major stakeholders in the target domain. For example, if the target domain is the design of a business process, the participants in the participatory sessions may include individuals who actually perform the day-to-day business process and experts who want to analyze or redesign that process.

Simply gathering experts and users together will not produce the desired results without a well-defined approach and method for participatory design. Good participatory *methods* avoid “unproductive meetings” and make such gatherings intense, highly productive sessions that produce:

- opinions, input, and direction from all the participants
- requirements and designs that leverage the combined expertise of all participants
- buy-in by all the participants, to the session’s decisions

The Foundation Workshop

For graphical user interface (GUI) design, The Foundation Workshop provides a proven methodology for participatory design. The Foundation Workshop methodology is comprehensive, hands-on, and user-centered. Within a short period of time, the Workshop can move a product team from ideas to a well-specified, low-fidelity prototype of the conceptual design. A typical Foundation Workshop session runs three to five days for an average to large product and has three major parts:

1. Task analysis and design (incorporates the CARD method)
2. Object analysis and design (incorporates a Task Object Design method)
3. GUI windows design, prototyping, and usability testing based on a set of GUI style guidelines (incorporates the PICTIVE method)

Below is a list of typical deliverables from the Foundation Workshop.

- User Profile
- Summary of Usability Objectives
- Task Flow diagrams
- Task Lists
- User Object definitions
- Low-fidelity, paper and pencil prototypes of the overall conceptual design and individual product components
- User Interface Specification

Part 1 of the Foundation Workshop defines user and project requirements. These requirements are represented by a set of task flows. Part 2 uses these detailed task flows as the foundation to develop “task objects”. These task objects are the *Foundation Workshop* between the task design and the GUI design. In Part 3, the participants map the task objects onto GUI objects such as windows or HTML browser pages.

For more information about The Foundation Workshop, see this book chapter: Dayton, T., McFarland, A., and Kramer, J. (1998). Bridging user needs to object oriented GUI prototype via Task Object Design. In L. Wood (Ed.), *User interface design: Bridging the gap from user requirements to design* (pp. 15-56). Boca Raton, FL: CRC Press.

Applying Components of The Foundation Workshop to Business Processes

Whereas all three parts of The Foundation Workshop methodology must be completed to fully design the user interface for a product, individual components of The Foundation Workshop can be applied separately to solve various business and design problems. For example, the task analysis and design components are extremely valuable when applied to analyzing, redesigning, or designing, high-level business processes, mid-level work flows, and low-level task flows. In fact, a version of the first step is often used as preparation for a Foundation Workshop session. We call it “Part 0,” a half-day to full-day to get a project team organized enough to be able to make decisions during the Foundation Workshop session.

Using the Foundation Workshop to Redesign an Existing Product

The initial step towards redesigning a Product is to rethink the conceptual design. In order to develop a foundation on which to build a design, it is important to perform several key steps. Each of these steps are performed within Parts 1 and 2 of The Foundation Workshop.

1. Rethink and update the User Profile and User Goals
2. Rethink and update the Usability Objectives and Product Objectives
3. Identify at a reasonable level of detail the tasks performed by each User group
4. Identify the “user objects”, information associated with each object, actions that may be applied to each object, and the relationships between the objects in the context of the product.

Based on the results of the above analysis, the design team then builds a “framework” for the user interface. This framework is a “template” for the user interface that illustrates the metaphor, illustrates how information and actions will be displayed, provides basic rules for navigation within and between product components, and specifies basic models of interaction.

Once the “framework” is developed, the task and user object models defined above are represented within the “framework” template. The result is the user interface for a product. Throughout the Framework Workshop, the team performs informal usability testing to ensure that the tasks and user objects identified are represented in a logical and easy to use manner and that the design is complete. The team then iteratively defines and refines the detail needed to complete the design. Finally, the conceptual product design is documented in a User Interface Specification and Style Guide.

Who Should Participate in the Foundation Workshop?

The Foundation Workshop is a user centered and participatory event. Thus, key project stakeholders and either actual users or end-user representatives must participate. Typical participants in the workshop include the following roles. Each workshop is restricted to 6 participants. Other stakeholders and interested parties may “observe”, but may not actively participate.

- Project Owner (envisioned product)
- End –users or someone who can accurately represent each user profile
- Product Manager
- Lead User Interface Designer
- Engineers (software development, hardware, backend)
- Usability Engineer assigned to the project.

Foundation Workshop Planning

During the planning phase of the Foundation Workshop, the project team should agree on the scope of the workshop and gather preliminary information about the User Profile, usability objectives, and product objectives. It is also important to identify anything about the environment (e.g., hardware limitations), compatibility with existing product designs, or business goals that may constrain the conceptual product design and thus the UI.

A UI “framework” is typically developed for use in the Workshop. This framework serves as a “getting started point” for design and may embody and represent the following:

- product team’s vision of the design
- metaphors
- other product designs
- known product and usability goals
- product and/or corporate standards for style
- inherent style embodied by the UI platform (e.g., browser, Windows GUI)

Whereas it is not appropriate to develop the *final* UI “framework” without the knowledge gained through the analysis of the user, the tasks, and the objects, the product team should begin to envision the design. The product team should brainstorm possible UI frameworks in preparation for the Foundation Workshop. These candidate frameworks should be communicated to *The Usability Group* facilitator as part of the planning effort.

What are the Next Steps After the Foundation Workshop?

The initial Foundation Workshop will identify the task and user object model for the product.

Because of time constraints within the Workshop, we will focus conceptual design on the overall product, at a high-level, and on one or more individual product components. Time constraints and product complexity will limit our actual scope of design.

Subsequent Foundation Workshops are recommended to develop and refine the design of other product components or products within a product suite. Each Workshop will focus on the design of a single product component or product within a product suite. Detailed design for each product is iterative and will evolve throughout the Analysis and Design stages of the product lifecycle.