Moving Upstream in Product Development – From Writer to User Experience Analyst

by Robert Govoni

There's a new job title that is starting to catch on. And it's a marriage of technical writing and usability engineering.

The technical writing profession has certainly changed over the years. Originally, the technical writer took material from engineering and turned it into readable prose. Today, many professionals have titles such as technical communicators, information specialists, and information architects. They also work in various mediums, including print, online help, voice, and video. Because technical writers are attuned to the end users, they have the advantage of understanding the users' informational needs. In many cases, technical writers will also influence the design of user-friendly interfaces.

The same is true for usability engineers. These professionals have moved beyond strict usability to more fully understand the end user tasks. This knowledge, combined with their background in human factors, provide user-friendly improvements to product interfaces.

The user experience analyst is the next step in the evolution of information development and usability. Similar to an information design professional, the user experience analyst delivers information through a well documented product design based on user tasks. And like a usability engineer, the analyst incorporates human factor elements into the design while paying close attention to details.

The responsibilities of a user experience analyst

The user experience analyst develops product specifications that engineers use to build a user friendly product that meets predefined requirements. In a typical product development process, the marketing department gathers customer input in a specific business environment. With additional research and business input, this becomes a user product requirements document. The user experience analyst then translates this high-level document into a detailed product workflow based on the tasks that users perform to accomplish their jobs. This workflow forms the basis of additional engineering design work.

The workflow often takes the form of a behavior specification -- the user actions and product reactions are considered and documented before the product is built. The behavior specification provides enough detail for the following items:

- Engineering: forms the basis for user interface design (e.g., software screen flow, hardware display and control placement);
- Quality Assurance: the behavior specification forms the basis for test scenarios; and
- Documentation and training: the behavior specification forms the basis of an information architecture or document design.

Example Behavior Specification

Here's a simple example of the detail that a behavior specification provides:

> User Action: User selects a file and clicks the Delete button.
>
> Product Action: The file name is highlighted and a confirmation message appears: Delete the file permanently? [Yes] [No]

All possible user actions and product reactions should be considered. Of course, this isn't always practical. Therefore, developing a product behavior specification is a team effort, especially when designing a complex product.

The Interaction Design Team

As a user experience analyst at Enmed, Inc., I work as part of an Interaction Design Team (IDT). The IDT consists of two other members: a user interface developer and a subject matter expert. The UI developer provides input to the actual layout of the screens for ease-of-use and accomplishing the defined tasks. The subject matter expert helps develop the steps users take to accomplish their real-world tasks.

As a team, we draw on the expertise of other departments, such as sales/marketing, who gather the original user requirements; engineering, who determine what is technically feasible; and the actual users, who provide clarification on the tasks they perform.

So why do we need user experience analysts?

What the user experience analyst provides is essential for product development. However, the user experience analyst deliverable has previously been by people in other related roles.

For example, usability engineers understand the product users well enough to suggest modifications that minimize or eliminate tasks that the users rarely perform. Information specialists may influence engineering to check automatically for system information instead of asking a user for input, thus ensuring accuracy while reducing the time to accomplish a task. Depending on individuals, a very good user interface can be created that satisfies the customers. However, this process is not often repeatable.

What does a user experience analyst need to know?

- The informational needs of the users;
- The product requirements;
- An understanding of how the product behaves technically; and
- A complete understanding of the product development process.

How does an information specialist become a user experience analyst?

When creating the information set, focus on how to make the product more intuitive and how reduce the need for the user documentation or online help. Document how the tasks should be performed and use it to better the product. Finally, work more closely with the usability engineers and understand how users interact with the product.

Remember, the purpose of a user interface is to facilitate using the product to accomplish a task. The graphics and information must be designed so that the task can be accomplished easily and quickly. A successful user interface combines a good graphical interface and a good informational interface. The success of the user interface is measured by how easily someone can learn and use the product to accomplish a task.

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