

# Fixing what matters: Accounting for organizational priorities when communicating usability problems

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## ABSTRACT:

Usability practitioners are not only responsible for identifying usability problems with a product, but also for communicating those problems to the product team. The challenge for practitioners is combating the common “quantity over quality” approach that many product teams take when addressing the problems. To encourage a team to fix important problems first, practitioners need to understand the team’s priorities and take these into account when presenting their findings.

## INTRODUCTION:

Although much has been written about different kinds of product evaluation techniques [2], less has been written about prioritizing problems once they’ve been discovered. Most prioritization methods rate problems according to severity—how pervasive problems are, how many users are affected, whether the problems are cosmetic or deeper. Although severity is a useful metric, it doesn’t take into account the larger context in which the product is being developed, and the organizational goals driving its development (e.g., company, marketing, or sales goals).

We argue that it’s important for usability practitioners to incorporate the needs of the decision makers and product team as well as the users into a prioritization scheme for the following reason: The people who evaluate the product are often not the ones responsible for fixing the problems or deciding what gets fixed. Nevertheless, usability practitioners can strengthen their influence on the decision makers (and thereby increase the chance that some of the more important problems affecting the user experience are fixed) by incorporating the goals and constraints of the product team into a prioritization scheme.

In this paper, we discuss an approach to analyzing and prioritizing usability problems that takes into account the needs of users and the product team. (Note that the phrase “product team” refers to the people who are ultimately responsible for making changes to the product.) We will present our arguments from the perspective of a usability practitioner or user experience team member who is not integrated with the product team, although the practitioner could be a consultant, a member of the product team, or a member of another group within the organization.

## MAIN BODY:

### The Challenge

Most usability practitioners are faced with an interesting challenge when they present the results of a usability evaluation to the product team. First, they must recognize that although they are advocates for the users, the product team is likely to have very different priorities, which often leads to differences in opinion on which problems should be fixed first. For example, the product team members may prioritize problems based on how difficult or easy it is to fix them, rather than on how important it is for users to have the problems fixed. As a result, the product team may fix a lot of easy problems that aren’t as important to users as the more difficult ones. Thus, the usability practitioners must balance this “quantity over quality” approach by effectively communicating the importance of fixing some problems (even if they are more difficult) over others. Second, practitioners must also consider how their recommendations will be viewed after they deliver their report and lose contact with the product team, because, in many cases, practitioners ultimately have no control over which problems will be addressed or how they will be fixed.

### The First Step: Cost-Benefit Assessment

The first step of our approach is to evaluate usability problems in terms of their importance (from a user’s perspective) and their difficulty to fix (from a developer’s perspective). McQuaid and Bishop [1] discuss a method for collecting, organizing, and prioritizing usability problems in which problems are first discovered

and collected (using any number of evaluation techniques, including heuristic evaluation), categorized based on similarity (using affinity diagramming), and then prioritized along the dimensions of importance and difficulty.

By mapping both Importance and Difficulty, practitioners can communicate the Return on Investment (ROI) associated with addressing each category of issues. This prioritization is helpful because it allows usability practitioners to readily identify which usability problems will be seen as easier to fix versus those that are more difficult to fix. In addition, this prioritization method allows developers to have a say in the prioritization process, as it takes into account the estimated amount of effort that will likely be required to fix a problem.

### **The Second Step: Accounting for organizational issues and latent priorities**

Once the assessment of usability problems in terms of importance and difficulty has been completed, the usability practitioner will have a better grasp of which solutions will have a higher ROI for usability. However, there are factors other than usability that affect the product team's prioritization strategy. We call these factors "latent priorities" because they influence the product team's decision-making process, but are not necessarily apparent or acknowledged.

#### **Sources of Influence**

The first step in identifying latent priorities is to determine which people or groups have the most influence on the product team, and what goals are driving each group. Although practitioners need to consider which groups and cultural influences are most relevant, we present the following groups and goals as a starting point:

- *Company (or institutional) goals* relate to the strategic positioning of a company, its brand identity, and its approach to growing or developing itself.
- *Product management* goals relate to the influences that are most strongly communicated (verbally or non-verbally) to the team responsible for building the product. They often include a project management component; such as meeting a specific set of deadlines, quality criteria, and cost targets.
- *Marketing (or Product Strategy)* goals are associated with the business and product requirements in the context of the target market. These goals are often communicated through requirements documents, although marketing employees may have a different or more specific agenda that is not formally documented.
- *Sales* goals are related to the sales force's ability to engage potential customers, generate interest in the product, and retain the existing customer base.

To help identify the priorities associated with each group, consider representing each group as an internal customer that the product team must answer to. Because latent priorities are often vague, shifting, and multi-dimensional, it helps to identify one overarching goal for each internal customer by asking the following question: "What does this internal customer want from this product?" After identifying the goal, determine the kinds of activities that facilitate or inhibit achievement of the goal

One group that is notably absent from our list is a category representing end-users. Unfortunately, many organizations, especially those that call for a usability practitioner to conduct a review mid-way through the product development cycle, do not have end-user priorities in mind during the development process. However, if user advocacy is represented as a specific party in the organization, provided with sufficient decision-making authority and power to influence product development, then an "End User" priority group should be added to the list.

**Table 1. Organizational priorities associated with various internal customers.**

<b>Customer &amp; Goal</b>	<b>Facilitators (help achieve goal)</b>	<b>Inhibitors (prevent achieving goal)</b>
Company “I want to be known as a real competitor in a new product market.”	Positive media coverage, having the product available, product is competitive with others in market	“Vaporware” criticisms, failing to have product available on time, failing to live up to expectations set by the competition or public relations
Product Management “I want to meet our deadlines on time.”	Achieving milestones early and under-budget, preventing requirements changes and scope/feature creep	Changing requirements, new code development, modifying existing code, re-testing functionality, waiting for research to be conducted
Marketing “I want to have feature A, B, and C implemented in the product.”	Confirming importance of features A, B, and C, ensuring features are implemented in a way the meets original intent	Questioning the importance of function A, B, and C, conducting research on alternate functionality, encouraging the implementation of function A, B, and C in a manner that doesn’t satisfy original intent
Sales “I want to demonstrate this product to our new customers right now.”	Creating interactive prototypes and demos, fixing problems with the features that Sales wants to demonstrate	Slowing the development process, advocating against high-fidelity prototypes or demos

### **Delivering the Message**

After latent priorities have been considered, the usability practitioner should organize and deliver the review results (along with recommended actions for fixing problems) in a manner that complements the latent priorities driving the product team. By exploring how the prioritization of usability issues is influenced by the latent priorities, usability practitioners can craft convincing arguments for why certain problems should be addressed before others. For instance, if a problem is highly important to the usability practitioner, but not to the product team, the practitioner should craft a message that emphasizes how fixing the problem supports the team’s organizational priorities (see Table 2).

### **Using the approach in real life**

One of the authors recently worked with a product team that had very little time to complete a new product. Management explicitly stated that the primary purpose of the product was to demonstrate the company was a serious player in the marketplace, but that it was not expected that the first version of the product would sell well. It was made explicit to the team that the product must be released as soon as possible, and that the primary functionality simply needed to work without errors in order to be viewed by the company as a success.

During discussions with the Development manager and Marketing/Strategy manager, the usability practitioner realized that the two managers had different objectives for the product: the Development manager wanted to get the product developed and out the door as soon as possible, while the Marketing/Strategy manager wanted the product to be a strong competitor in the marketplace. After several conversations with other team members, it became clear that the overriding goal among developers was to get the product completed and shipped out the door as soon as possible. Despite that pressure, team members also confided that there was an underlying Marketing priority as well: The product needed to provide functionality that was better than its competitors, because some of the competitors’ products provided similar functionality for free.

The usability practitioner performed a heuristic evaluation and presented the results in the context of the organizational priorities that were deemed important by the team. The practitioner specifically highlighted resource investments and scheduling concessions that would allow key features to be improved without jeopardizing the schedule. The recommended action plan included performing usability tests combined with user interviews to develop a better understanding of how people might use the product, as well as to learn more about competitor's products. If resources were a factor, the usability practitioner recommended that it would be better to cut back the scope of the project in favor of conducting some research and testing, than to develop a full-blown product that would not be well-received.

By understanding the organizational priorities of the team, the practitioner was able to tailor the usability action plan message to increase the probability that the feedback would be taken seriously, focusing on user needs and usability, while not losing sight of the primary goals and priorities of the product team

**Table 2. Potential strategies and actions associated with different organizational priorities.**

<b>Customer &amp; Goal</b>	<b>Strategy</b>	<b>Recommended actions</b>
<i>Company</i> Recognition and reputation as a serious competitor	Emphasize importance of understanding the competition in the context of user needs.	Hold focus groups, interview users, conduct competitive tests or reviews of leading products
<i>Product Management</i> Management of project on-time and within-budget	Emphasize importance of understanding and testing critical requirements.	Conduct requirements inspection, interview target users to determine highest-priority issues, perform feature trade-off studies to inform resource investment priorities
<i>Marketing</i> Implementation of key features	Emphasize importance of establishing meaningful requirements (in the context of actual tasks, possibly as use cases).	Work with stakeholders to ensure common understanding of key features, interview and observe users to develop meaningful evaluation criteria, conduct prototype-and-test cycles for key features
<i>Sales</i> Ability to demonstrate product capabilities to stimulate demand	Emphasize importance of creating realistic (but not necessarily high-fidelity) prototypes to get in front of customers.	Hold participatory design sessions to prototype key features, work with target users and Marketing to develop feature wish-lists that accurately reflect user needs, develop prototypes that can be used for usability tests and Sales demonstrations

## Conclusion

By considering the latent priorities that are driving a product team, usability practitioners can increase the chance that the message that is presented resonates with the team's needs and interests, and that the recommended actions will be followed in order to improve the product. In addition, each review activity should be considered as an opportunity to teach the benefits of user-centered design and usability engineering activities, so that even if none of the recommended actions are implemented, there is the chance that one or more product team members will get the message and be more likely to request or engage in some user-centered design activities in the future.

## REFERENCES:

1. McQuaid, H. L., and Bishop, D. (2001). An Integrated Method for Evaluating Interfaces, in Proceedings of UPA 2001.
2. Nielsen, J. and Mack, R.L. (1994). *Usability Inspection Methods*. New York, NY: John Wiley & Sons, Inc.