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## New Kid on the Block: Marketing Organizations and Interaction Design

### A Tale of Two Disciplines

Sometimes the things that are frustrating about a project turn out to be the most valuable aspects. We recently worked with a company that recognized the necessity of usable design to the success of their e-commerce strategy. But, they were not sure how to plan for usability, so they turned to us for help.

The project team had many questions that just begged for an organizational study, but no one wanted another report filled with recommendations that would sit on the shelf. Instead, the clients agreed to have us demonstrate a usability evaluation on a Web site. We assured them that, in a real-life evaluation like the one we were about to undertake, the important organizational issues would emerge naturally. Rather than merely talking about them, we could begin to solve them.

The marketing staff were considered a key stakeholder. Not only did they buy into the importance of usability, but they also had a lot of input into the e-commerce strategy. Furthermore, they might use an eventual in-house usability lab for focus groups—and might even be

the ones to administer it. Plus, because they already had experience with screeners, knew about the market segmentation, and were the internal experts in interviewing and facilitating, they were designated as our main collaborators for setting up the study. It looked like Marketing had been put in the driver's seat for this project and might be establishing itself as the eventual organizational owner of usability.

As we rolled up our sleeves to work with the lead marketing representative, things got interesting right away. The time we spent negotiating every aspect of the study seemed much greater than usual. Time was consumed in going over minutiae of the evaluation script, which the marketing person thought must be followed verbatim. The list of highly structured questions she wanted in the protocol kept growing. Her emphasis on constructing rating scales to measure user opinions of the site began to remind us of a graduate course in psychometrics. She also believed that the sample had to closely reflect the company's existing off-line customer base, including matching its complex segmentation. So many decision rules



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would have to be added to the screener that it would start to look like the instruction manual for Three Mile Island, and the sample would have to be impractically large to achieve proportional representation of all the different types of customers.

The study could be not done within budget this way. More important, this input from marketing risked pushing the study away from being a usability study. If we went with the marketing person's approach, more time would be spent interviewing users about what they liked and disliked about the site than in observing and analyzing their task behavior.

What we encountered was not a client being a control freak, but a clash of paradigms. This is really no surprise. After all, we had promised the client that we would identify issues that would have to be addressed to build usability into their organization and development process, and here was at least one big one.

#### **Vive la différence!**

This experience was just one of several indications we have seen of a growing hands-on involvement of marketing departments in many activities related to interaction design, including usability and other aspects of user-centered design (UCD). Not only are internal marketing people becoming involved in development and in usability, but there are more presentations on usability at marketing conferences; design firms that have primarily worked with marketing departments are increasingly focusing on interaction design; and market research facilities are adding usability to their range of services.

In reflecting on this trend, we see some interesting implications. These include potential impacts on how UCD is carried out and how resources for UCD are positioned and managed within organizations. The traditional marketing perspective and the practices through which it influences product development overlap in important areas with the perspective and practices of user-centered interaction design—but they also significantly diverge. While marketing staff are potentially tremendous allies and collaborators in the

promotion of UCD, the differences in paradigm must be acknowledged and addressed as marketing becomes increasingly involved.

Therefore, in this article, we reflect on the relationship between UCD and marketing that we think may help practitioners from both sides in working together. This includes not only those working together on multidisciplinary development teams, but also those coming into usability from a background in marketing, and usability and UCD professionals being hired by marketing firms.

#### **Roots of the Trend**

It is helpful to start by identifying some of the many factors working to make marketing a central player in design and usability. These will help to clarify the areas of overlap between the traditional marketing focus and UCD.

#### **Link to the Customer**

Marketing is traditionally responsible for keeping the company's finger on the pulse of the customer. In a way that is different from sales or customer service, marketing tends to have a special role in actively capturing knowledge about the customer as an input to product planning. Because UCD is an extension of the company's need to know its customers, the tie-in to marketing is obvious. Whereas UCD practitioners preach the need to introduce knowledge about the customer into design as early as possible, marketing has been doing it all along.

#### **Social Science Methodologies**

Marketing is usually the corporate repository of knowledge about people and the resources to systematically study them. Much of the traditional methodology of marketing research is similar to UCD methods. Examples include one-on-one interviews on buying behaviors, which resemble those used by design teams to create user profiles or scenarios. Marketing also uses qualitative, ethnographic methods, such as "mystery shopping," which are similar in process to those used in UCD.

From the perspective of UCD, some of these similarities are merely superficial, but to

an outside observer, the differences in method or emphasis (which we will discuss later) may seem pretty subtle. Certainly some of the infrastructure (facilities, video, recruiting resources) that supports marketing research is shared with UCD. Given the common ambiguity and uncertainty about where to organizationally house formal UCD activities such as usability evaluation, the marketing department may look like a pretty good fit on the basis of shared methodology and infrastructure.

#### **Usability as a Product Differentiator**

The growing awareness of usability as an important product attribute is making user-friendliness a more common and important marketing claim. Marketing is traditionally concerned with whatever will differentiate products in the marketplace, and to the extent that usability is perceived as important in this regard, marketing may be the most logical champion for it.

#### **Marketing and Product Development**

Marketing plays various roles in product development that can involve it with usability and user-centered design. Marketing often supplies the leaders of product development teams—and sometimes the product managers who manage entire product lines. Marketing people can be structurally positioned to oversee the design process and may be the final arbiters of design decisions. Usable design therefore is unlikely to happen unless they give high priority to usability in design trade-off decisions.

Even when marketing is not running the product development process, it can play a major role in product development. This is particularly apparent in the requirements definition phase, which is often led or “owned” by marketing. UCD has to begin with an understanding of customer needs, and marketing specializes in this. Furthermore, specific usability objectives are showing up with other product requirements in product definition documents, which are typically generated by marketing. Marketing can have an ongoing influential role in development as ini-

tial requirements are renegotiated in the course of product development. As “owner” of the product requirements, marketing usually has to sign off on these changes. Furthermore, it often happens in the design process that new questions arise about the user, and marketing may have the answers.

#### **E-commerce and Design**

The growth of e-commerce is also blurring the distinction between marketing and interaction design. A great deal of Web content is an extension of the company’s marketing strategy and advertising, so marketing tends to play a leading role in overseeing the company’s use of the Web to project its image, brand, and identity. As the evolution of e-commerce makes Web pages increasingly interactive, marketing inevitably is becoming more involved in interaction design. There are many examples of design firms that originally focused on providing graphical design for client companies that are now at the forefront of interactive Web design (and fortunately some of them that approach the design process in a user-centered way!).

#### **Contrasting Paradigms**

The involvement of marketing in design is not accidental. In fact, in many ways the mindset, role, and organizational placement of marketing and its role in product definition may make it a powerful champion for usability and UCD. However, we should not gloss over the differences.

At a high level, it would be obvious to say that marketing focuses on what to build for the market and how to attract buyers to it, and UCD focuses on how to implement the product. We want to go beyond this and elaborate the contrast while acknowledging that the divergence is not complete. We hope this contrast is instructive and not overly simplistic. We also hope that it is clear that both perspectives are not only needed but also interdependent.

#### **Focus**

Marketing tends to focus on the strategic level. It is concerned with social and market trends, and perceived customer needs, and

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tries to draw out the strategic implications of this information for product opportunities, product mix, and ways of shaping perception of the company and its products. Both the information it is preoccupied with and the interventions it generates are aimed at directly influencing purchasing and market share. This means that its focus is on the aggregate level and on interventions that will influence purchasing behavior at a population level, rather than at the individual level.

In contrast, UCD tends to focus on the tactical level. It is concerned with the specific details of implementation of a product or line of products. Satisfaction after purchase, rather than purchase alone, is the aim. Although marketing may aim at incremental increases in market share, UCD has to aim at design that is successful for essentially all target users. This requires an intensive focus on the individual, as opposed to the aggregate, and naturally calls for a different style of investigation.

#### **Audience**

In order to be effective, the two disciplines must be able to put themselves in the shoes of their respective audiences, who differ in their mindsets, concerns, and accountabilities. The consumer of marketing input is traditionally the executive who has authority for deciding what product opportunities to pursue and how to position the company and its products in the market. The consumer of UCD input during the design phase is the designer, engineer, or development manager who needs help finding specific design solutions. This audience needs a very different type and level of input.

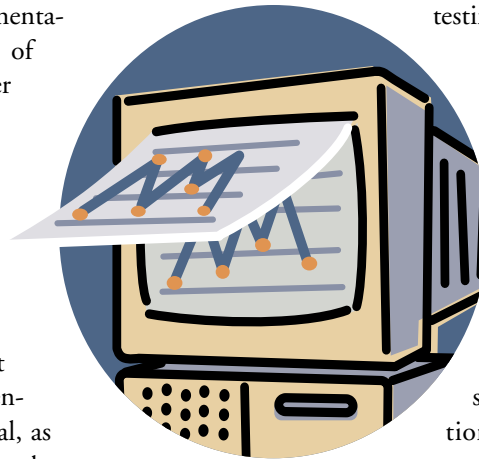
#### **Methodology and Data of Interest**

Marketing differs from UCD in the type of data it collects, as well as what kinds of samples are of interest.

Marketing emphasizes subjective data, retrospective self-report, and opinion. This makes sense, because these are clues to attitudes and motivations that affect buying. Marketing is also concerned with behavioral data that relate directly to buying. In contrast, UCD tends to be skeptical of self-report and opinion. The research tradition in cognitive psychology holds that people's introspection about their cognitive processes is not accurate, especially in retrospect. Therefore, users' cognitive processes must be inferred through intensive, interactive behavioral testing.

The variables of interest to marketing make it more likely to collect data from large samples, which are amenable to meaningful statistical analysis. The emphasis on statistics requires the kind of standardized data collection necessary in survey research. Because the cost per person sampled is small and sample sizes can be large, it is possible to make statistically meaningful comparisons, such as between demographic groups. Even studies looking at combinations of variables are feasible. Marketing has an ultimate variable of interest, one that sums up multiple inputs in one global measure, that is, the actual purchase. This also promotes an emphasis on large-scale statistical research, because any variable that empirically correlates with this one measure is of interest.

In contrast, the intensive behavioral investigations of UCD tend to make the cost per person sampled relatively high, and samples in a single study are small. Thus, statistically meaningful analyses and quasi-experimental comparisons are generally not feasible. In addition, UCD does not have a simple global outcome measure equivalent to purchasing. The closest measure in UCD is probably "successful task completion," but in any given usability test, we only approximate this with a



sample of representative tasks, and we can usually only test a portion of the total functionality.

Sampling for marketing studies often attempts to approximate the actual or potential purchasers of products as closely as possible. Because the emphasis is subjective opinion data, and because these data vary widely with demographics, it is critical that different potential purchasing groups be proportionally represented in a sample. In UCD, however, we are looking for usage information—information that is less likely to be usefully predicted by external demographics and that can often be assessed directly through behavior. The sample is small, so we are usually constrained in the number of sample characteristics we can allow to vary in any given study. Furthermore, the composition of the sample may be determined more by patterns of technology experience and usage than by other factors more relevant to motivation and purchasing.

When you consider all of these differences in focus, variables of interest, and approach, a coherent set of differences between marketing research and usability emerges. This is the meaning of “paradigm.” The difference in mindset tends to be persistent and pervasive. For example, even in areas of overlap, such as in early user studies to determine user needs, marketing is more apt to focus on expressed user wishes and UCD is more likely to infer needs from behavioral observation of existing work flows and task behaviors. One way of summarizing the differences between these paradigms is by analogy. Whereas marketing research can often resemble survey research, UCD research such as usability testing is much more like a process of clinical diagnosis.

### **And They Lived Happily Ever After?**

Once you recognize that there are two paradigms in play, how do you achieve harmony and avoid the pitfalls? In our experience, the best way to do this is to address the paradigm issues directly in a way that promotes interdisciplinary collaboration. This often means identifying the legitimate role of each paradigm in the larger process. Let us illustrate by

returning to the case from the beginning of this article:

Recognizing that we were experiencing a paradigm clash, not a matter of personalities, we reconvened the team and laid the issue before them as information that should be considered in planning for usability organizationally. We acknowledged the roles of both marketing and design in ensuring that products effectively met customer needs but also clarified the differences. To aid in this, and to show that there is nothing unusual about these issues, we used Table 1. This helped the team recognize how usability was truly different from what they had done before, but also clarified that both approaches had essential roles.

Where previously it seemed that the team had let marketing assume responsibility for this project almost by default, the entire team now became more involved. Tension actually dissipated as they began to wrestle in an informed way not only with how to conduct this particular study, but also with the larger issues of how to set up usability within the organization. The team decided that it made most sense for new usability efforts to remain with the e-commerce division, because the users of the information to be gathered were there, and because the ultimate mandate had to come from the head of e-commerce to ensure that usability results were incorporated in development. As a result of this project, a position was created for a senior technical staff person, reporting directly to the head of e-commerce, to oversee usability. This company has now built its own lab and carried out a number of usability evaluations. Marketing remains a critical participant in what is essentially an interdisciplinary process. In practice, a marketing person has been involved in usability evaluations, as part of the team planning, observing them from behind the mirror, and interpreting them.

Other organizational solutions are certainly possible in principle, including basing usability in the marketing organization. However, this can only work if marketing expands its focus to include the approaches specific to usability and keeps a focus on providing design input that helps designers find

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specific design solutions. In any case, because UCD begins by taking a user-centered approach in the product definition phase as

well as in the design phase, marketing must collaborate in the overall goal of achieving useful and usable products. ☺

**Table 1. Differences in Approach of Marketing Research and User-Centered Design**

<b>DIMENSION</b>	<b>MARKETING RESEARCH</b>	<b>USER-CENTERED DESIGN</b>
<b>Purpose</b>	Strategic; guide product mix, positioning	Tactical: guide product realization through design input
<b>Goal</b>	Build product attractiveness by deciding what products and product features to build to meet perceived needs; develop concise messages and clear global strategies that will quickly influence mass perceptions, at corporate level and product level, to differentiate products from competitors	Ensure continuing usage satisfaction by determining how to build identified product to facilitate user's task goals
<b>Who acts on input</b>	Executives, brand and advertising professionals, product managers	Designers, engineers, information technology developers
<b>Most interested in</b>	Broad patterns of purchasing behavior and attitudinal variables that influence it, based on trends and significant attitudinal differences between groups	Specific details of design that influence reactions to structure, in-depth analysis of individual differences in performance, cognitive processes, problem-solving approaches, confusions. Interested in idiosyncratic responses.
<b>Phenomena measured</b>	Subjective: perceptions, opinions, expectations, feelings, and preferences; attention; affective reactions as clues to product attractiveness and likelihood of buying	Objective: Task flows and task performance, usage behavior, cognitive processes; affective reactions such as confusion or frustration as clues to cognitive processes and performance problems
<b>Type of data</b>	Survey and self-report, often retrospective; behavioral measures related to purchasing. preferences, attention, and purchasing	Real-time behavioral data on usage and task performance; self-report ("thinking aloud") construed only as an indirect clue to inferred cognitive process
<b>Sampling</b>	Large samples selected to reflect the demographics of purchasers.	Small samples selected to reflect people who are similar to targets in their technology usage.
<b>Data analysis</b>	Statistics usually required, often quite sophisticated analyses	Statistics rarely done, other than descriptive statistics on completion rate, error frequency