Investing in User Research: Deciding what Research to Perform

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Abstract:

This panel provides real-world guidelines for user experience managers and others who deal with user research budgets. It examines the relationship between methods and business strategy: how should an organization spend whatever budget it has for user research? Despite the many in-depth explorations of user experience research methodology, practitioners—especially user experience managers—still struggle with the challenge of choosing the research that will add the most value to their company's products and services. This panel will reveal how and why some of the best managers in the UX community make these decisions.

Panel Summary

How do managers and user researchers in industry decide what customer research to carry out? Our panel of practitioners—with track records at Microsoft, eBay, Seagate, VMware, PayPal, Autodesk, and VeriSign—will debate:

• How does your group decide what user research to perform?
• What trade-offs do you make, under what situations?
• What political, social, or psychological issues affect your decisions?
• How do you balance short-term and long-term investments?
• What would you do if management handed you an extra $10,000, $100,000, or $1,000,000 for user research?

The idea for this panel arose when the panel organizer, who heads a user experience consulting firm, reviewed how we define engagements with our client companies. Our first contact from an organization needing customer research is usually an email or phone call saying, "We want a usability test." When the call comes from a marketing group (rather than engineering), the phrase is often, "We want a focus group." The caller has identified a need for user data, and is often fixated on one research method.

The next step becomes an in-depth conversation with stakeholders. We elicit the client's questions and concerns about their customers' needs, expectations, and behavior regarding a product, service, website, or application. We help identify what data will answer their questions, then define what user research methodology will collect the best data.

The decision about how to spend available budget depends not only on the research questions and the desired data, but also on the target audiences for the product or system. Frequently, the challenge of deciding which methodology and schedule to recommend under what circumstances requires more skills, expertise, and experience than carrying out the agreed-upon research.

There is no single answer to the question of how an organization should spend its user research budget. An intensive interactive discussion among panelists from different companies and the audience will elicit insights and provide attendees with ideas to improve and enhance the user research programs at their own organizations.

Session format

Unlike many panels at professional conferences, this panel will not include "introductory" remarks from the panelists, which often reduce a panel to a succession of mini-lectures. By moving immediately into our debate questions for the panelists, we will have more time for audience participation. After a 10-second introduction to each panelist, the panel will be asked to respond to the series of "debate" questions listed above. The session chair will elicit spirited and insightful discussion both among the panelists and with the audience.

In addition to taking questions from the audience during the panel discussion, we will reserve the last 30 minutes of the session for in-depth audience involvement. We will ask audience members to volunteer their own answers and experiences to the questions the panelists address. The audience can also ask additional questions of the panelists during this period.

Biosketch of panel organizer/session chair

Stephanie Rosenbaum is founder and CEO of Tec-Ed, Inc., a 15-person consulting firm specializing in user research and user-centered design. Headquartered in Ann Arbor, Michigan, Tec-Ed maintains offices in California and New York. A charter member of UPA, Stephanie often facilitates conference events, including successful UPA sessions on "Exploring Best Practices in Longitudinal Usability Studies" and "Measuring Usability ROI to Justify Usability Investments." She co-chaired the Usability Community for the ACM SIGCHI 2006 Conference, and moderated a panel on "Investing in User Research: Making Strategic Choices" at the HFES 2010 Conference.

Stephanie contributed an invited chapter on "The Future of Usability Evaluation" to Maturing Usability, and a chapter on "Making User Research Usable" in Software Design and Usability. With Chauncey Wilson, she contributed a chapter to the second edition of *Cost-Justifying Usability*. Her research background includes anthropology studies at Columbia University and experimental psychology research for the University of California at Berkeley.

Panelists' Summaries

Kelly Braun

Building a Strong User Research Portfolio: Diversify!

User research was once synonymous with usability testing, but as our discipline has grown, so has our toolbox of research methods. Usability testing is the workhorse of user research and a great way to insert user research into the product development lifecycle—think of it as the money market account you use to save for major purchases. You could use this method to save for your retirement, but it may not be the best return for all your savings over the longer term. You want to diversify your investments for a higher rate of steady growth, while still keeping tried and true methods to reduce portfolio risk.

Some methods may have a higher initial investment but can reduce cost or risk to the product down the line. For instance, going out into the field to gain insights into user behaviors is usually more costly than lab testing but it can provide a richer, fuller set of user requirements. A diverse set of research methods also gives you the flexibility of experimenting with new methods without putting all products at risk.

Adding a diverse mix of research methods to your portfolio grows the value of the user research team and provides the flexibility to change with economic conditions within a company. Knowing which method to use can help your user research team achieve an "outperform" rating on their stock within the company.

About the panelist. Kelly Braun has been involved in the HCI field for over 25 years as both a computer scientist and a cognitive psychologist. Kelly holds a BS in Computer Science from Georgia Tech and a PhD in cognitive psychology from Duke University; she is currently a member of the Advisory Board for Georgia Tech's College of Computing and Georgia Tech's GVU Center. Kelly is currently the Senior Director of User Insights & Analytics for Walmart's Global eCommerce Division. Previously Kelly spent a decade leading user experience research teams at both eBay and PayPal. She is also a co-founder of Btweens.com, an online magazine for pre-teen girls. Kelly has participated in numerous professional conferences, panels, and papers and is a co-author of the book *Usability: The Site Speaks for Itself*.

Seema Swamy

Marketing User Research Depends on its Maturity within an Organization.

The challenges of user research are different based on its maturity within organizations. When user research is not entrenched within a company's culture, selling it widely can pose challenges that need to be resolved intelligently through relationship building and also identifying a perceived problem that user research can address and sell effectively. Marketing the effectiveness of a research study conducted with evidence and testimonials of financial savings (this can be either in absolute numbers or savings in time and manpower) and ease of use of the product, helps in making the case that it is important to include user research in the product development cycle.

When a company does not have a strong culture of user research, usability methodology is extremely effective. Engineering, as well as product management, tends to buy into the results when they observe representative users having significant challenges with the product. They become active partners in effecting both short-term changes in the product and planning more widespread changes in the long-term. Introducing other methodologies such as surveys and ethnographic research, and educating stakeholders on the right methodology to employ, becomes easier.

In companies where user research has been employed for several years, but with the methodologies generally limited to usability studies, ethnographic research, and surveys, the challenges lie in introducing other methodologies such as experimental design studies, Web-based card sorting with cluster analysis, and content analysis. In addition, changing existing sub-optimal practices can be challenging. Perceptions sometimes exist about surveys, that "anyone can write questions." Evidence from research papers can be dismissed as not being applicable in the "real world." This may require actual demonstration of the validity of proposed best practices through controlled primary research, which can both lead to changes and improve confidence in the findings.

About the panelist. Seema Swamy is Senior Manager of Market Research and Communications at VMware. She evangelizes research within the organization; obtains and manages the research budget, projects, and vendors; and works closely with the product and marketing stakeholders to identify key drivers for product adoption to increase market share. At eBay, Seema was in charge of research for Trust and Safety and Customer Support (including Help, online Contact Us, CRM applications). She worked closely with the business unit, design team, and product management; her research led to widespread revamping of the Feedback page. Seema introduced experimental design research as well as content analysis and worked with other stakeholders in improving best practices for survey methodology. As a consultant at Yahoo! News, she worked with internal stakeholders and research vendors and the insights contributed to the comprehensive redesign of Yahoo! News. For her doctoral thesis at Stanford, she theorized on cross-cultural implications of multitasking in collaborative workspaces.

Krista Van Laan

Making the Most of User Research in a Sometimes Chaotic Environment.

In today's corporate world, there are two things my team is always short of: time and money. But the expectation for meaningful and actionable results is higher than ever. How do we decide how to spend our budget when we have, perhaps, money for only one round of user research, and only on a portion of products? And more stress-inducing, how do we maximize that user research when the findings of our research may come back to haunt us?

My solution has always been for the team to do as much as we can ourselves, and give very careful thought to what and when. The expense has to result in 1) useful research that will stand on its own and provide actions that we are willing to be accountable for, and 2) research that can be presented to executives which both interests them and convinces them that what we are doing matters to the company.

I or someone on my team watches all user testing, and we do our own reports made of data that is guaranteed to meet the needs of internal clients. This requires more work from us and less of an ability to depend fully on external researchers, but it's the only way we can ensure that we are personally willing to back up the data as it is used to make decisions about our products. This method requires a deep knowledge of what the business is trying to achieve, an often artful way of interpreting the data, and is the most practical approach I've found for a business that does not have unlimited funding for user research.

About the panelist. Krista Van Laan is Director of User Experience at Silver Spring Networks. Before Silver Spring, she was Director of User Experience at Seagate Technology and VeriSign. She was hired at Seagate to build the User Experience department and drive user experience process and product improvements. She helped change the development process to allocate time for user experience design and research, and she signed off on products before they were released to ensure they met user experience goals. Before joining Seagate, Krista spent nine years as Director of User Experience at VeriSign, where she built the department from the ground up and managed the usability lab. Her team provided product design, usability testing, and content for more than 40 Web-based applications and services.

Chauncey Wilson

Measuring User Research and Marketing Successes

The world of financial investment is in a sorry state right now, but perhaps there are some lessons and metaphors that might be useful in thinking about investing in user research and making good choices.

When I think of investment, the concept of a diversified portfolio comes to mind. As a manager of a user research team, I want a diversified team with complementary skills and expertise. It would be risky to hire team members whose skills and expertise are centered only on one method like usability testing or contextual inquiry.

Metrics are critical for making good choices. The financial world is full of metrics and measures of how the market is doing. Investing in user research means developing metrics that allow others to assess your relevance, credibility, and contribution to the health of an organization. These metrics could range from simple (how many users have participated in user research) to complex (how much did user research reduce the costs of development).

While there is much talk about metrics and ROI, it is often hard to connect those metrics to profit, loss, and cost reduction. Investment in infrastructure can support efficient and effective user research, but infrastructure development in the form of usability bug databases, participant databases, templates, training, patterns, and best practices is often neglected in the rush for more immediately rewarding activities. Similarly, investment in public relations is often given short shrift by user research teams. Perhaps 10% or more of a user research team's time should be dedicated to a public relations campaign that keeps stakeholders informed about the impact of user research on the total user experience.

About the panelist. Chauncey Wilson is manager of the Autodesk AEC User Research Team and an adjunct lecturer in the HFID graduate program at Bentley University. He has more than 25 years in the field as a usability engineer, usability manager, user researcher, and development manager. Chauncey has presented at HFES, CHI, UPA, APA, IxDA, and STC conferences and has co-authored a chapter in the 1997 *Handbook of HCI* (with Dennis Wixon), and *Cost-Justifying Usability, Second Edition: An Update for the Internet Age* (with Stephanie Rosenbaum). Chauncey wrote "The Well-Tempered Practitioner" column for the ACM CHI publication Interactions during 2006 and 2007.

Dennis Wixon

Moving Beyond "Discount": The Promise of User Research

When a business makes choices between several investments, the investment with the lowest possible cost and the clearest estimate of return is the obvious choice. However, costs of investments are often more readily estimated than possible returns. Thus promising investments that require greater start-up costs may be overlooked. This truism applies to user research.

One of the driving forces in user research has been the development of "discount usability." This approach minimized both up-front and ongoing costs and probably accounts for much of the growth of user research over the last 30 years. However, looking back at cases where a riskier investment was made and it paid off could illuminate some alternatives. There may be many such investments, but one of the most striking was the investment made in the research labs at Microsoft Game Studios (MGS). Here an investment was made in large-scale testing (up to 50 people at a time), automated tools for data collection, analysis, and reporting, and in personnel to perform such research.

After almost 10 years of work, "the results are in" and the investment has paid off handsomely. The close collaboration of the user research with design teams from a number of studios has generated revenues and market position for MGS that exceeds the investment by several orders of magnitude. The widely cited example of Halo 3 returning 170 million dollars on its first night of sales is just one of many examples of this successful collaboration. In these cases the investment in an infrastructure of people and tools, combined with a receptive audience of designers and management support, have all contributed to the success of research in the competitive world of game development. I will present several examples of such successful investments.

About the panelist. Dennis Wixon has managed user research teams at Microsoft for the last 11 years. He currently manages user research for Microsoft Surface. Prior to this role, he managed user research teams at Microsoft Game Studies and at MSN. Before joining Microsoft, Dennis was a user researcher at Digital Equipment Corporation for 17 years. There he managed the Software User Engineering research team where a number of important usability methods such as Usability Engineering and Contextual Inquiry were developed. Dennis has been an active member of the Human Computer Interaction Community for over 25 years; he co chaired CHI 2002 and served as Vice President for Conferences for ACM SIGCHI. Dennis has authored numerous articles on research methods and co-edited a book, *Field Methods Casebook for Software Design.* Dennis has a PhD in Social Psychology from Clark University.

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