

From Ethnographic Insight to User-centered Design Tools

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This case study illustrates how Wells Fargo, a leading financial services institution, builds user-centered online experiences on a foundation of ethnographic insight. The research maintains a shelf life of several years and findings are kept alive through multidisciplinary participation and reusable user-centered design tools.

We want to make customer experience everyone's business by making the process of creating experience intuitive and repeatable.

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Ethnographic Research at Wells Fargo

A five-year program to establish ethnographic research as a core competency in the Customer Experience Research & Design (CERD) team led to the development of user-centered design tools that now form a foundation for multidisciplinary collaboration in Wells Fargo's Internet Services Group (ISG). This paper traces the transition of ethnography from an approach used by outside consultants to inform discreet projects to a program that produces insights that extend across multiple design projects and strategy initiatives. This case study demonstrates the power of collaborative research participation to embed ethnographic insights into the corporate culture through the creation and use of user-centered design (UCD) tools. A key component of success for ethnographers at the bank has been their willingness to let go of findings so they can evolve to suit the needs of the business.

Outside consultants initially introduced ethnography as a means to explore discreet, project-specific questions such as *'How do people invest online?'* Previously, Wells Fargo project teams were typical in their focus on market research to drive business planning, new product development, and sales forecasting. Usability testing was often conducted late in the process to validate website designs. The introduction of ethnographic inquiry heralded a transition both from a reliance on numbers-oriented market research and task-focused usability testing. While market research and usability testing remain core to CERD's user-centered design practice, teams hungered for data that would illuminate the stories underneath survey

numbers and expose the “life context” outside of the moment when designs were tested in the lab.¹

Internal researchers capitalized on the initial momentum created by external consultants and began to lead ethnographic studies with multidisciplinary teams of researchers, product managers, and designers. The scope of inquiry for these internally-conducted studies widened from project-specific questions to broader explorations of ‘*How people manage their financial lives*’ and ‘*How finances affect and fit into notions of personal wellbeing*.’ This shift to broader, project-agnostic inquiry marked a transition from a product- to a more customer-centric culture. This shift was becoming crucial as disconnects in customer experience increasingly arose not within the boundaries of the product and service platforms but in the transition and integration points between different areas of the Wells Fargo website.

Participation from a wide group of stakeholders and collaboration between researchers, designers and business people is central to ethnographic practice at Wells Fargo. Internal ethnographers act dually as expert researchers and as facilitators of a change process that prods us to challenge and question our embedded and emerging organizational assumptions. Distributed ownership of the findings empowers organizational members to evolve their meaning and use the insights in unique ways over time.² This ongoing process of mining research findings, baking the insights into UCD tools and repurposing the tools as they are reused in unique contexts are critical success factors of our ethnographic practice and is the focus of this paper.

Managing Finances Case Study

The *Managing Finances* study, conducted in 2004, was pivotal in providing a well of findings and insight that later morphed into user-centered design tools. These tools are used today in most strategy initiatives and design projects to explore and resolve problems from the customer’s point of view. A deeper dive into the *Managing Finances* study will show how the collaborative process and the findings themselves provided the foundation for the tools.

¹ As Gilmore (2002) notes in “Understanding and Overcoming Resistance to Ethnographic Design Research” market research provides a list of needs, without much depth or texture, whereas designers of experiences need to understand how the product or service is going to fit into someone’s life.

² This model encourages ownership and integration of the insights deep into the fabric of the culture. As Forrester analysts Dorsey & Bodine (2006) report in their survey results of customer experience leaders, it is *culture* and *process* that drives the creation of better customer experiences, as opposed to other organizational factors, such as structure. They argue that to improve customer experience, firms must 1) build a shared understanding of how to think about customer experience and 2) put the process and skills in place to make improvements. The authors of this paper contend that wide participation in ethnographic research studies and ongoing use of the findings via user-centered design tools are core practices for understanding the customer and the means by which to create a customer-centric culture and processes.

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The study focused on customers' financial management behaviors and online adoption and usage. Stakeholders from multiple business groups were asked to co-fund the study and in exchange were invited to shape the research agenda, participate in data collection and analysis, and use the findings to inform projects on their roadmaps. This approach created excitement and buy-in for the study from the beginning. Funding from multiple business units mitigated perceived risk and resistance to ethnographic research because the cost to participate was lower when shared. CERD established the expectation from the onset that the areas of inquiry would be varied enough to meet the requirements of all stakeholders.

One stakeholder group was particularly interested in understanding people's budgeting behaviors and tasks. Wells Fargo had launched an online tool called *My Spending Report* that enabled customers to see how their spending broke down into categories such as utilities, groceries, and transportation. Business proponents wanted to know more about people's budgeting habits to inform future iterations of the service.

Sixteen research participants kept a one-week journal of all of their financial management activities and also made collages or drawings of their attitudes and emotions toward money and banking. These journals grounded the in-home visits. We found that only two people kept a formal budget but all of the sixteen participants reported tracking their balances and account activity several times per week, if not daily, via the phone, website, and ATMs. Constant tracking indicated that customers lived in a reactionary, present-time mode with regard to their finances and most were not engaged in planning, organizing, and forecasting modes associated with budgeting.

Researchers asked participants directly during the interview if they kept a formal budget. Often the person would look sheepish and say something like, "Well, I have a feeling for how much money I have," or, "I keep a budget in my head." The two participants who did keep a formal budget tended to be more financially savvy and enjoy interacting with numbers. But for most, the term "budget" carried a negative connotation mixed with guilt, like the feelings associated with needing, but not wanting, to go on a diet.

"It's terrible but I don't do a budget, I just keep track of balances."

"I budget in my head. My wife wants to have these meetings where we go over the books. We don't have them."

"Generally, budgets aren't all that interesting to me."

Corporate anthropologist Barbara Perry, Ph.D, teaches her corporate clients that ethnographic research findings result in two kinds of learning – "out there" and "in here."³

³ This concept was introduced to the authors through a Wells Fargo Ethnographic Training Manual prepared by Barbara Perry Associates, which contained a reprinted article from *The Journal for Quality and Participation* (November / December, 1998) with a discussion of the two types of learning. The concept of the two types of learning is core to Perry's consulting practice.

The first kind of learning – “out there” – occurs from listening to people describe their experience and observing them in their own environment. The distinction between tracking and budgeting is a fine one that we would have likely missed if not for the close attention paid to the mundane details of the frequency with which people checked their balances, their bill paying routines, and where and for how long they stored their bank statements.⁴

The second type of learning that Perry refers to as “in here” is also what she calls “the real gift” of ethnography, which is that it prods and prompts the business to articulate the internally held assumptions about customers and then go out and see if they hold up in the real world. Personal and organizational assumptions are articulated when planning the research and making decisions about which kinds of people to include and what we want to learn from them. In the *Managing Finances* study, business proponents wanted to learn about customer’s budgeting activities and routines because they assumed that 1) customers did indeed engage in formal budgeting and 2) these findings would reveal opportunities for making better online budgeting tools.

Designers and business people participate in data collection and analysis for the usual reasons of enabling non-researchers to get that “being there” experience and creating ownership and buy-in for the findings.⁵ But participation is also crucial when organizational assumptions collide with data collected in the field. In the case of the *Managing Finances* study, not only did we find that people didn’t budget, we also found that most didn’t particularly enjoy managing their money, as the following journal picture and interview quotes from one of our participants illustrates.

Participant journal entry

“I don’t like to manage finances. I find it really tedious. I am a creative person and the more energy I put into stuff like that, the less time I have for things that I really care about. I need ‘Bookkeeping for Idiots.’”

“The load that my wife carries because of my theater company really weighs on me. It’s not like we will ever see that money again...the best we can hope to do someday is break even. It’s a labor of love but we haven’t had a family vacation in 3 years. But I couldn’t be happy if I wasn’t doing art.”

⁴ In fact, a quantitative market research survey was conducted in parallel with the ethnography and the survey contained a question about *tracking* and *budgeting* together, thereby conflating these terms and leaving us wondering which activities respondents were referring to in their answer.

⁵ In fact, internal researchers have come to regard this participation as critical to interpreting and analyzing data in studies where our audience has highly specialized needs, such as our Small Business Customers. The contribution of subject matter experts on the business side leads to more accurate and specific analysis and more compelling findings.

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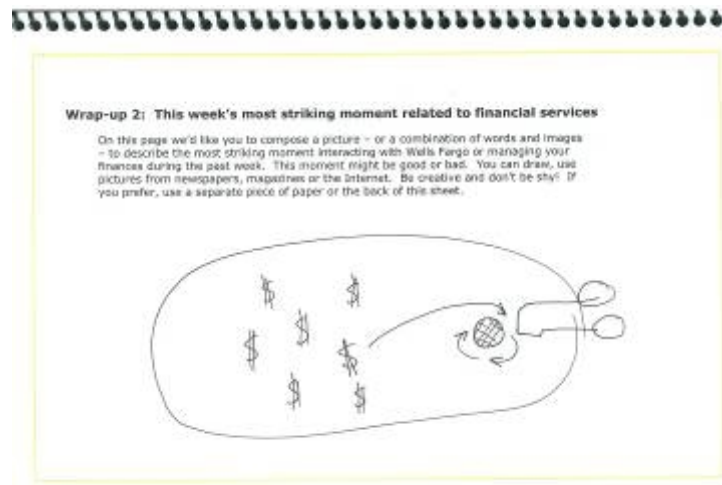


Figure 1

The fact that many people regard managing finances as tedious and anxiety-producing may not seem particularly earth shattering to you and me, but to business people who spend their work life thinking up new ways the bank can engage and deepen the relationship with their customers, this is a finding that bore explicit representation because it ran counter to the orientation of the business.

A dedicated project room and open analysis sessions encouraged designers and business people to grapple with and make sense of the data. In these sessions, we covered the walls with sticky notes, drew diagrams on the whiteboard about what we thought the data meant, and ultimately summarized the findings in the Managing Finances experience model.

Managing Finances Experience Model

The smallest circle shows the current reactionary mode that drives customers to track day-to-day balances constantly and to periodically make payments, record activity, and archive documents. The next circle displays activities that require more engagement, which many customers reported that they didn't do. This led to feeling guilty or embarrassed regarding their lack of an organized financial plan. The "engage" space is where the business's assumptions lived and the "actualize" sphere is where people want to be; to feel in control of their finances and to be free to attend to other priorities in their life.



FIGURE 2 Managing finances experience model

We recommended to our business partners that they conceptualize their product ideas in terms of the control and freedom our participants described as their ultimate goal and to help them to achieve this state. The key was not to attempt to convert customers into budgeters or more detail oriented bean counters, but rather to empower user actualization by helping customers to:

- 1) Know what they had in terms of types of accounts and their balances
- 2) Know what they need – and ‘need’ could be thought of from a task perspective – *‘I need to transfer \$300 from savings to checking’* – or from that of life stage – *‘I’d like to buy a house, how much can I afford?’*
- 3) Know what they need to do by providing easy-to-use online functionality, as well as relevant and helpful advice.

These recommendations continue to influence decisions for how we evolve site functionality. For instance, after the study, the mantra for future phases of *My Spending Report* became ‘make it automatic’ so that customers could track their spending without the effort of creating and updating a budget.

User-Centered Design (UCD) Tools

The Managing Finances ethnography had far wider implications than simply thinking about experience from the perspective of the customer, their goals, and their tasks. More significantly, it set a precedent for using ethnographic research to achieve a depth of understanding about financial life, enabling us to use a common lexicon and to develop shared understanding. This lexicon is represented in our User-Centered Design toolkit and consists of two core elements:

- I. Modeling tasks: The User Task Model

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II. Understanding people: Enterprise Profiles & Scenario Starters

These tools act as the interface through which organizational members can consider and absorb the insights from ethnographic research.

I. Modeling Tasks: The User Task Model

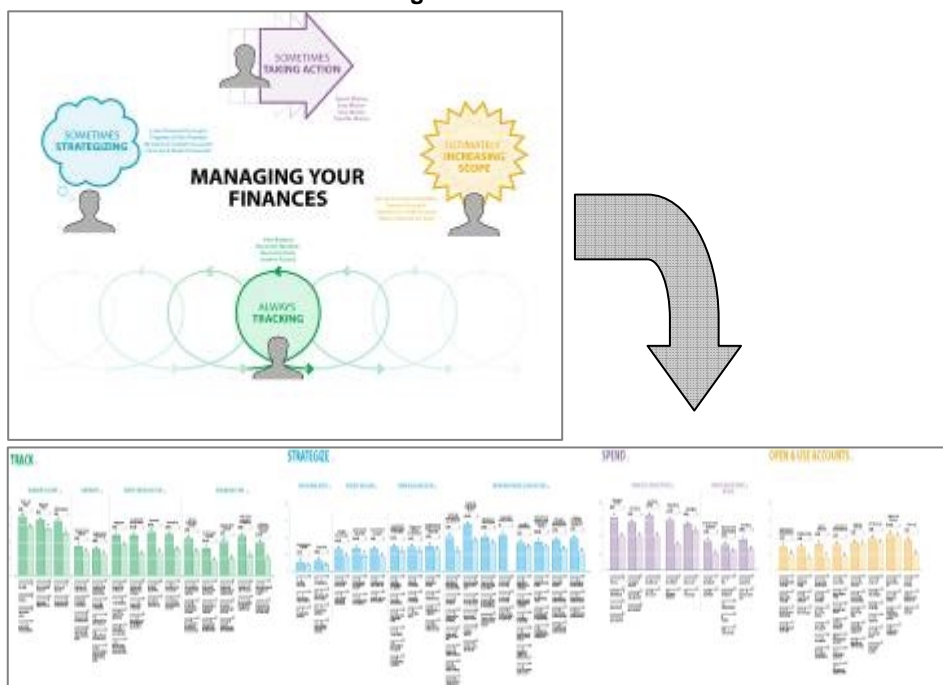


FIGURE 3 The user task model

The Managing Finances experience model evolved as researchers sought participation from strategists and designers. The different financial modes became more finely drawn out conceptual spaces through cross functional collaboration. The ‘Always Tracking’ mode encompasses daily activities whereas ‘Sometimes Strategizing’ refers to tasks that involve learning, researching, and comparing. The transition from Strategizing to ‘Sometimes Taking Action’ acknowledges that transactions sometimes result from strategizing, but not always. The last mode in the mental model, originally titled ‘Ultimately Increasing Scope’ refers to opening and setting up new accounts and has been re-labeled in our current Task Model as “Control.”

The model served effectively as a high-level framework from which to view how a given product or feature may fit into users’ overall financial world view but it did not adequately represent the complexities of financial life. We again turned to ethnographic

findings, with their focus on the details of everyday life, to develop a more robust taxonomy of tasks. The User Task Model now represents a map of all financial management tasks a user could perform throughout his or her life. While mapping all tasks into a taxonomy is inherently useful in terms of conceptualizing how modes and transactions relate to each other, the Task Model's true value emerges when used in conjunction with our Enterprise Profiles and Scenario Starters to showcase how life events and circumstance drive users to formulate goals and complete tasks that can, and often do, span mental modes, areas of the website, and on- and off-line channels.⁶

II. Understanding people: Enterprise Profiles & Scenario Starters

Our Enterprise User Profiles were created on a parallel evolutionary path with the User Task Model, becoming increasingly grounded with ethnographic insight along the way.⁷ Our earliest profiles often varied from project to project and lacked consistent defining parameters. The Managing Finances ethnography provided the real-life data and images to create 'Enterprise Profiles' containing core "truths" about key customer segments; enabling the profiles to be reused from project to project by adjusting details like account types or online behavior.



FIGURE 4 Enterprise profiles

Three Enterprise Profiles were created to represent a wide span of needs and life stages. "Philip" represents the student segment and is distinguished by a relative lack of

⁶ The "channel" refers to the preferred mode of engaging with the bank, including in-person at a branch, using an ATM, calling customer service, or using the website.

⁷ We choose to refer to user "profiles," instead of "personas" as business partners seemed to accept the former label as more concrete.

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experience with financial management and a need for support as he establishes credit. “Jane” reflects the next life stage where monthly household expenses and debt management are a primary concern; retirement planning and investment are also on the horizon, but “Janes” typically need help getting started. “Harry & Sue” have the greatest degree of financial complexity in terms of types of financial products and needs; they are often grappling with competing priorities, like simultaneously planning for retirement and saving for their children’s education.

These three profiles are regular “participants” in design sessions and have become so engrained in our lexicon that questions about the appropriateness for a given feature or a new product will often begin with “what would Philip want?” or, “would Jane really do that?” The ability to converse with our business partners using the profiles keeps us grounded in the user’s experience rather referencing our own unique perspectives.⁸

Jane		User-Center Design Tool: Scenario Starter	
Age: Mid 20's Life Stage: Moving On Up		WELLS FARGO	
The scenario starter helps to create solutions to our user's problems. This structure forms a consistent step-by-step process to building a scenario.			
Events	Goals	Challenges	Motivations
Observable physical occurrences <ul style="list-style-type: none"> Received Wells Fargo balance transfer checks in the mail with a low intro APR. Threw away balance transfer checks. Used search on wells Fargo.com to find information on balance transfers. 	Personal or financial aims that guide action (task) <ul style="list-style-type: none"> Avoid fees. Save regularly to have money for emergencies or unscheduled expenses. Wants to use coverage to open an investing account and start online investing. 	Obstacles preventing user from accomplishing a goal <ul style="list-style-type: none"> Not sure how online trading works. Understands if hidden fees. Not sure how her credit score works. Not sure how and when interest rates apply. 	Incentives to start a task or attain a goal <ul style="list-style-type: none"> Fear of fees. She wants to "build credit". Wants to consolidate her debt from other credit cards.

FIGURE 5 Scenario starter worksheet

Scenario starters⁹ are worksheets that connect the Enterprise Profile to the User Task Model. The purpose of the scenario starter is to weave in via fieldwork data the users’ life events, financial goals, and their barriers and motivations associated with accomplishing tasks. When used in concert during a facilitated working session with our partners, we are able to humanize the activities of project prioritization, business case definition, and experience design by keeping real people and their stories at the center of the problems we work to solve. In collaborative working meetings, we co-create scenarios for the Enterprise Profiles and then take these through the entire process of trying to complete a task, or series of tasks, in order to meet their goals. We literally walk our profiles through the Task Model and our website simultaneously to see where the experience breaks down for our customers

⁸ We are currently developing Small Business profiles based on an ethnographic study of small businesses in 2004. A Student/Parent ethnography planned for this summer will enable us to expand on the “Philip” segment by identifying key sub-sets of students.

⁹ Through experimentation, we found that scenario starters work better than full-blown narrative scenarios because they are co-created with the project team and they provide just enough detail to generate a realistic situation and likely tasks without too much extraneous information.

and emerge from the session with a clear understanding of the tasks germane to the experience and the problems to be solved.

Conclusion

Theory thus becomes instruments, not answers to enigmas, in which we can rest. We don't look back upon them, we move forward, and, on occasion, make nature over again by their aid. (James, 1907, p. 46)

Wells Fargo's user-centered design tools act as theoretical frameworks that describe and predict our customers' financial management goals, behaviors, and attitudes. It is important to note, however, that these tools are flexible and in continual transition toward greater specificity and usefulness; they are "boundary objects" for collaboration as well as repositories for ethnographic knowledge (Star & Griesemer, 1989). The User Task Model and Enterprise Profiles keep the human stories and research findings alive over the course of several years and multiple projects precisely because researchers invite our business partners to change, extend, and evolve the tools over time – this metamorphosis is critical to moving forward as William James underscores in the quote above.

To expand on the point of continual evolution, several developments provide further evidence that user-centered approaches are seeping deeper into the Internet Services Group's culture. In 2005, market researchers conducted a quantitative study to validate the task model. The survey-based study largely confirmed the soundness of the original Task Model but it also revealed a few important distinctions, one being that people organize tasks slightly differently when in an *investing mode* than when conducting their day-to-day banking. Now that each task is quantified to show the frequency, importance, online criticality of tasks, and channel preferences, we can score tasks to ascertain their potential return on investment, which makes the Task Model that much more useful as a strategic tool for project identification and prioritization. The business groups in ISG now organize their annual project roadmaps to reflect the key task modes – Track, Strategize, etc. – which helps to quickly place the project within the context of what it is helping the customer to accomplish.

Additionally, we are engaged in efforts to overlay the Enterprise Profiles currently used for design onto to ISG's traditional customer segmentation model so that the ways in which we design for and market to our customers interrelate. We see even more evidence that our work is spreading across the organization in the presentations created by product strategists. These strategic planning documents contain both typical business-case-building content such as site metrics and displays of quantitative information but, increasingly, they also include pictures of customers, their stories in quotes, scanned images from their journals, and video clips.

The UCD tools enable designers, researchers, and business people to make meaning together and this meaning is co-constructed such that no one functional area holds all, or

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even most, of the knowledge on a project.¹⁰ The willingness to invite full participation in the research and then release the findings so they can evolve within the organization are key factors that continue to push the Wells Fargo culture to become increasingly customer-centric.

Notes

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¹⁰ The idea of co-creating meaning in corporate ethnography is detailed in (Jordan, 1997)