

Designing Human-Centered Services

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Within an expansive view of options and possibilities, Michael Eckersley demonstrates how in-depth market and strategic trends research is instrumental in pinpointing what should be developed and why. Projects in the fast-food and healthcare industries suggest the subtleties of his methods and the opportunities they can reveal for innovation and more-effective competitive branding.

"I'm hungry, mom. What's to eat?" asked four-year-old Isaac. Beth mentally searched the refrigerator and couldn't come up with a thing. "Whaddaya say we go out for lunch today?" she offered. Instantaneously, the kids' eyes lit up. Isaac and his younger sister and brother (twin two-year-olds) were almost out the door before Beth could pack up all their paraphernalia and grab the car keys. Five minutes later, we were all piled into the minivan and turning onto Route 434 toward Oviedo.

It was Tuesday morning, summer 2005, the second day in a five-day field research study conducted mostly with young families around the Orlando area. Our sponsor was a major fast-food company. The assignment had three aspects to it: first, to describe in some detail the dimensions and patterns of the quick service restaurant (QSR) customer experience; second, to diagnose possible gaps or discontinuities in the customer experience; and third, to prescribe and develop new concepts targeted to improve the customer experience. Over the course of the assignment, we spent lots of time with families and other key customer types, as well as with restaurant employees—all of which yielded a wealth of information to guide the design planning process. Though our initial project focus was the physical QSR environment, the research data broadened our attention to incorporate service and system issues. This, in hindsight, is not particularly surprising, because many sophisticated business offerings today are hybrids of product, service, and setting. Increasingly, everything is connected. Consider a recent New York Times headline: "You're Not Buying Gadgets, You Are Subscribing to Them." We would only add: "You may also be sitting comfortably in one right now drinking coffee."

Design in the services ecosystem

Our firm, HumanCentered, came to services through the side door of technology. Since 1997, we had been developing web-based reservations and financial services

applications for Premier Resorts and for Sybase. We had no particular expertise or formal training in services, but we soon found that we had considerable influence over the nature and expression of that aspect of our clients' businesses. With that influence came greater responsibility and risks. Fortunately, some of our design process, problem-solving, and systems expertise was readily transferable. But because our assignments soon crossed over into diverse industries, including healthcare, enterprise software, and consumer products, getting up to speed on new, domain-specific knowledge has been a constant.

Services can involve design on at least three different levels: strategic design planning, design planning, and design implementation (Figure 1). Over the years, we have gravitated to the level of research-based design planning. As social scientists, our bridging expertise has long centered on humans and human behavior, complemented by the requisite market and strategic trends research. As interaction designers working in a design planning capacity, we are intent on answering the question: Of all the things that can be developed, what should be developed, and why? Because design can grow to involve many broader and narrower considerations, we have chosen to specialize here.

Not all our design programs get implemented subsequently, of course, at least as presented. But that is largely beside the point; they do tend to be influential. Companies use us to show them which concepts and offerings are possible, and how these might yield customer and business value. Concept simulations and experience prototyping are critical to representing such value. As funded concepts move toward implementation, we are often staffed to advise in that process.

Because services comprise most of all commercial activity in advanced economies today, there is bound to be growing market demand for sophisticated and systematically designed services. However, services tend to be underoptimized, generally. In fact, many services actually contribute to a widening gap that separates people (consumers) from the latent value that brands could provide if only they could decode salient customer needs and fill the gap with smart, sustainable offerings. As socio-technoeconomic systems, services are complex. How to innovate them is not well understood. This is ironic, in that better-designed services are generally regarded as more useful, usable, and economically valuable.

Among designers, the growing interest in services is understandable-not necessarily because service design offers a forum for creative validation or for professional publicity (the products of service-based design are usually anonymous and the

closely guarded intellectual property of the sponsoring organization). Rather, services pose inherently interesting design problems and contexts for design thinking. This has consistently pushed our own firm beyond existing capabilities and challenged us to take on assignments of the widest manageable scope.

Service and the quick service restaurant (QSR) model

Some telling deficiencies in the fast-food experience were not hard to spot, beginning with a good deal of waste in the QSR model. No, not in the hyper-efficient restaurant operation itself, but in the customer's own expenditure of time, attention, and energy spent interacting with it. Natural human patterns around food and eating (for example., sample tasting, personalization, watching the preparation, serving oneself, second helpings, after-meal sweets and desserts, hosting, socialization, and conviviality) are virtually ignored in the industry. That blind spot means that such variables go unrecognized, unmeasured, unmanaged, and unmined for innovation opportunities. Sure, customers have gotten used to modern fast-food conventions, but the sacrifices-conscious or otherwise-of impersonalized dining are real.

Fast food is intended to be fast. But at peak lunch and dinner times, the customer experience is all about waiting. Most QSRs still process customers on a serial, undifferentiated basis, with newbies and "super-users" all together in the same line. Burgeoning, hard-to-read menu boards place an additional cognitive load on those unfamiliar with the various food options. Asking questions about the menu is treated as slowing down the process, so ordering is often rushed, and done without a clear idea of what food will show up. Unfortunately, various technological options for customer self-service face stiff internal resistance. But the design opportunities for multiplying the number of ordering points throughout the QSR offer the potential for expedited order processing during peak periods, not to mention shorter service queues, reduced customer stress, and increased order volume. Operational challenges to this approach are not trivial, but the first QSR brand to design and implement such a reflexive system will probably enjoy real competitive advantages by offering customers better and more flexible options for ordering.

Another behavioral pattern we observed among QSR customers involved issues of germ anxiety, restroom convenience, and hygiene. It's a good bet that most fast-food customers eat with dirty hands. Only a small percentage actually wash up before eating. Moms with young children tend to avoid the restrooms altogether if possible, concerned that they or their kids will exit the restroom dirtier than when

they went in. We saw a lot of user work-arounds in response to this concern. These included changing diapers in the car rather than in the bathroom, using napkins or toilet tissue to open restroom doors, and sterile wipes for the kids packed along in a bag of convenience snacks, books, and toys-just to manage the experience of going out for fast food with the kids. These findings inspired subsequent design of convenient hand-washing alternatives separate from restrooms and adjacent to the QSR dining area.

In all, we spotted five latent opportunities for innovating the QSR model. One was the idea of "brand-channeling" the dining room (Figure 2). This insight derived not so much from something we saw in the QSR environment, but from something we did not see: conscious human engagement. Many fast-food customers undergo the fast food experience as if in a virtual stupor. We found many customers apparently unengaged, sensorially or cognitively, in the QSR dining area after ordering and during the meal. This gap of "attention space," we determined, could be intelligently managed by the brand in the same way airlines manage the in-flight experience. It's not hard to imagine 6,500 flat plasma screens in existing restaurants across North America feeding a regular stream or periodically updated loop of music, entertainment, and offers to a live customer audience. A live news crawler and an updated list of order numbers would run below and to the side of the screen. Done imaginatively, the experiential and economic benefits of brand-channeling the QSR dining room could be significant.

Customer expectations of the fast-food experience are generally low. Our design recommendations for expanding the versatility and ambiance of the QSR keyed on variables of information, time, and space, and deemphasized issues of matter and energy (Figure 3). In other words, we identified ways of making the system smarter and more adroit in serving the customer, rather than simply adding more overhead cost in terms of material and energy. Most successful fast-food brands are highly engineered, efficient machines. But their models are suboptimal, at best, when it comes to important human touch-points. Having largely mastered the mechanics of food delivery, innovative QSR brands will have to win customers and market share more on the basis of customer experience than on cost.

Serving moms and newborns

"But why did I have the contractions?" Viola asked the nurse anxiously. (Viola worries if anything seems unusual, or if she doesn't understand something.) The nurse said the tests were normal this time. But Viola had had a couple of

contractions during the procedure, and she was concerned. The nurse took her blood pressure and mentioned that it was a little high, but gave no explanation or reassurance that it was acceptable. When the doctor came in, he indicated his intention to induce labor the following Monday. But when Viola expressed surprise over the date, he checked his records again and realized that he had gotten the date wrong. She still had some weeks to go. Viola asked both the doctor and the nurse about the blood pressure and the contractions, but they seemed distracted and offered no comment. The nurse explained that the contractions were "probably just Braxton Hicks." The doctor and the nurse use technical terms like this with little or no explanation of them, and they don't ask her if she understands....

Viola (not her real name) was a 25-year-old Hispanic female in the third trimester of pregnancy, a special-needs patient in the maternal fetal medicine program of a large American Healthcare system. She was in acceptable condition, considering that she had had a liver transplant and splenectomy just two years earlier. Viola's pregnancy was unplanned, and she did not become aware of it until she was a full 20 weeks along. Viola and her husband had plenty of reason to be concerned.

Healthcare is a personal matter. But healthcare is often served up in the most impersonal manner. For those Americans fortunate enough to be covered by some form of health insurance, dissatisfaction rates run high,³ having doubled since 1998. Cost is the biggest reason; insurance premiums have risen 87 percent since 2000-more than five times the rate of employee compensation. Despite these endemic problems, we find working in the healthcare industry gratifying. The issues are complex, the people are smart and well-intentioned, and-put simply-healthcare matters.

If you happen to have spent substantial time at a typical clinic or hospital recently, the seams in the healthcare customer experience are apparent: labyrinthine policies and payment systems, duplicative documentation, inconsistent care formularies, and to-the-bone cost-cutting. For perfectly healthy pregnant women and their families, a healthcare system that is essentially engineered to treat the sick does not always support their special needs.

Between 1994 and 1995, we researched the experiences of mothers and families as they engaged with a complex healthcare system during pregnancy and childbirth. Our assignment was to develop design recommendations to improve the quality and value of healthcare environments and services. Sponsoring the research was a large and highly respected integrated healthcare system based in the western

United States. Our work would inform the planning and design of a new hospital for women and newborns. Our client's motivation for using a firm such as ours was simply stated: "We get market research reports all the time, but they're not relevant to us in our planning and design. The information is mostly generalized and has no texture. It never deals with exceptions."⁴

We conducted in-depth contextual research with expectant mothers and families in their homes and in healthcare environments, beginning from their second trimester visits and onward through labor, delivery, and postpartum. Our team was small—just two skilled colleagues, Judy Rice and Hillary Leonard, and myself. But we learned a great deal, identifying four general patterns or themes driven by the research data. These, in turn, inspired a design program comprising seven key concepts.

One theme from the research involved the role of expectant mothers. We wanted them to have greater control in co-managing the experience with care providers. Pregnant women and couples enter the healthcare system seeking the safest, most humane, and most affordable prenatal, delivery, and postnatal infant care. The system can treat these women and their families as faceless, temporary occupants of waiting rooms, beds, and wards. Expectant mothers and their partners are often anxious and not clearly informed about the experience they are undergoing. Nevertheless, they do not check their minds or autonomy at the door when they virtually move their families to the hospital for two to five days. Disappointments and affronts happen at this emotionally charged time, even in the best of systems. Empathy can be in short supply. This kind of naturalistic data informed the subsequent design of a program for the family, as well as the mother (Figure 4), geared to provide information, choices, and a better sense of control over such things as food, snacks, privacy, telephony, lighting, entertainment, and sleeping options. The program extended to facility plans for a family day-room area adjacent to the maternity ward for immediate family and guests to gather. Plans also included dedicated lifemanagement facilities for special-needs families with infants receiving intensive or long-term monitored care. Other design requirements involved ways of "smoothing the corners" in care interactions and transitions, facility affordances, amenities, and send-offs.

Another theme that emerged from our research involved what we later called transformation and rite of passage. We learned that women, couples, and families undergo various obvious, and subtle, kinds of transformation as a result of the experience of pregnancy and childbirth. Some mothers and families today do not

have the same kinds of cultural support that was available to past generations processing this experience. In fact, this experience has physical, emotional, cultural, and even spiritual implications that should not be ignored, but could conceivably be honored, by design. To this end, we developed a program to assist families in making meaning from the experience. An element of this program, called Recording and Remembering, involved a branded remembrance book with ideas and examples for assembling thoughts, photos, ultrasound recordings, digital files, birth announcements, and other artifacts. Another element of the program engaged with architects in phases of site and facilities planning to create themed environments and interactive exhibits for children and families to use and enjoy during the long hours and days of semi-residence at the hospital (Figure 5). A capstone of our design program, Legacy Affiliation, was meant to enrich and extend the mother's relationship with the hospital long after her stay. It included a membership affiliation program with opportunities for volunteer service, topical discussion groups, educational offerings, and news. The program would introduce expectant mothers to the program and facilities months before the scheduled birth and would be gently reinforced with tasteful welcome and goodbye gifts at the hospital.

Design infiltrates organizations (and is transformed in the process)

In a 1993 interview, Peter Coughlin described the work of IDEO's Transformation by Design group this way:

We took IDEO's core process and added new tools and methods to help instigate organizational change. Our high-level operating theory is to engage with the client, do a design project together. Use what you've learned from that to learn about the organization. Then redesign the organization to meet this offering you've created. So-design the offering first, then design the organization to successfully deliver that offering.

Most consulting says, here's the new offering, delivered in a tome that lays out the strategy. If the new offering fails, it's because you haven't spent the time to change the culture that's supposed to deliver it. Our promise is that we can help transform organizations by giving them the capability to design experience from a human perspective."

That is a radical point of view of design, especially for a generation of designers trained in a formalist tradition and used to performing in a subordinate, work-for-

hire, project culture. Nevertheless, everything we have learned independently about advanced design and servicebased offerings over the past 10 years ratifies Coughlan's assertion. Services are treated differently than product-based offerings. But services are central to what a company is, not just what it makes. By this logic, flawed services reveal seams in the organization itself.

Designing innovative services cannot be done at arm's length. We were inspired by embedding ourselves firsthand in the operations of organizations and in the lives of their customers. Success improved vastly when organizational teams got involved with us as collaborators. Because their detailed process and system knowledge always exceeds our own, their buy-in has been critical in making change stick.

Looking back, the popularity of Joseph Pine's and James Gilmore's *The Experience Economy*, in 1999, signaled a big turning point. The book gave tacit approval and a rationale for prepared designers to touch virtually any kind of offering that would derive value from thoughtful analysis and imaginative design thinking-services included. The only permission we needed was from organizations willing to give us a shot.

Increasingly, designers have the means, the motive, and the opportunity to engage actively in services at various levels and in various frontend and back-end capacities. We can bring a uniquely integrative point of view to services and service innovation. Parochial or narrow definitions of interests are no longer called for. Leadership is. Which prompts the question: What are the boundaries of design today, if not extraordinarily wide? We know that design scales. We suspect that the future will favor designers and teams who can scale with it.

1. Saul Hansell, "You're Not Buying Gadgets, You Are Subscribing to Them," *New York Times*, January 18, 2008.

2. cf. Karen Christensen, "The Power of Design: Questions for Patrick Whitney." In *Rotman*, the Magazine of the Rotman School of Management, Spring/Summer, 2005.

3. Ruth Helman, Mathew Greenwalk & Associates, and Paul Fronstin, "2006 Health Confidence Survey: Dissatisfaction with Health Care System Doubles Since 1998," *EBRI Notes*, vol. 27, no. 11 (November 2006).

4. John Rich, vice president, facilities planning and development, Intermountain Health Care (personal communication with the author).

4. Mark Hurst, "Interview: Peter Coughlan, IDEO," goodexperience.com, September 2003.

Suggested Readings

Christensen, Karen. "The Power of Design: Questions for Patrick Whitney." In Rottman: The Magazine of the Rotman School of Management, Spring/Summer, 2005.

Owensby, J., Maglio, P., Spohrer, J., Murphy, W., "Services Sciences, Management, and Engineering (SSME)," *Frontiers of Knowledge in Science and Technology for Africa*, University Leader's Forum. Almaden Services Research, IBM Corp., November 20, 2006

Owen, Charles L, "Design, Advanced Planning, and Product Development," *International Symposium: Nuevos Metodos & Tecnologias para el Diseno de Productos*, Santiago, Chile: Nov. 12,1998.

Pine, B. Joseph, and Gilmore, James H. *The Experience Economy: Work Is Theatre and Every Business a Stage* (Harvard Business School Press, 1999).

Tergas, Leslie, and Karyn McLean, "Inland Revenue New Zealand: Service Design in a Regulatory Context," *Design Management Review*, Winter 2008.

Verma, R., Fitzsimmons, J., Heineke, J., and Davis, M. "New Issues and Opportunities in Service Design Research." *Journal of Operations Management* 20 (2002) 117-120.

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