

In many professions, the right balance between generalist and specialist skills is difficult to find. In UCD, we need to distinguish between method specialization and domain specialization, both of which have their own sets of pros and cons. Many internal UCD staff tend to be de facto domain specialists, simply because they naturally focus on the business domain of their employer. In this column, Peter Jones argues the case for an increased emphasis on domain specialization for external consultants as well. Any generalists out there want to take the other side? —David Siegel and Susan Dray

Minding Your User's Business

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THE USER EXPERIENCE (UX) field has evolved into numerous distinctive niches and disciplines: user researcher, ethnographer, usability analyst, interface designer, interaction designer, information architect. There are real differences among the skills needed for these different UX approaches, which I refer to as "skill disciplines." Clearly, the jobs of UX and HCI have become more specialized, in terms of such skill disciplines. However, another issue is the question of specialization within an industry or content domain. In the past, if working in one industry, such as automotive or insurance, we expected our skills to remain portable across work domains. That may be less viable nowadays. We hear of employers requesting "T-shaped" skill sets (with a deep ascender on the T), with the expectation of disciplinary mastery. So how deeply must we understand the *business of our users* to effectively design for them?

Why Specialize? User experience is no longer a general practice of applying human factors principles to software and product design. To some extent, we all specialize in skill disciplines. However, it appears fewer of us explicitly constrain our practices to industry or domain. Rather, most in our field attempt to position themselves

as cross-domain generalists. Although many UX consultants claim they can learn a user's work domain equally well across clients and organizations, there are reasons to question this practice.

One, if we are honest, we may realize we do a much better job at research and design when we deeply understand the user's work and the business drivers behind their practices. When we work across many types of projects, we have insufficient time to build this understanding in a line of business. When we specialize in just a few domains, we have *both* skill and domain expertise to offer.

Two, we do a better job at UX process consulting with our clients when we understand their industry and the special needs of their users. If we are contributing

to an organization's usability practice, their product design process requires more than generic UX guidelines and best practices. Different industries and organizations have different user relationships, which may require developing unique processes and methods. Our process recommendations have better staying power when we have a credible grounding in the client's business.

Let's look in more detail at some of the factors that argue in favor of domain specialization, as contrasted with skill specialization.

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Knowing an industry's state-of-the-art and common practices leads to better UX. As designers or UX consultants, we must understand an industry's "installed base" of systems, knowledge, and infrastructures. But we are rarely given the time to learn these during the course of a design or research project. It helps immensely to have this knowledge; it leads to better research and design. Those with deeper grounding in an industry will make fewer basic mistakes in advice and design. Those already working in specialized industries learn the daily practices, business drivers, and content needs of users. But external consultants, as well as UX people in design firms, increasingly need specialized domain knowledge as well.

Specialized domain knowledge makes us more efficient. Domain specialists will ramp up much more quickly on a project than nonspecialists. Specialists are able to set meaningful UX priorities very quickly. They know what design attributes are critical to a user's job, and what to safely ignore in evaluation and design. Specialists may have recognized prior work or templates that contribute to decision making. They know the well-established values and norms in an industry, and better, when to break them.

Domain expertise moves UX practice into business consulting. Industry specialization helps us understand our clients' business contexts. We can better identify opportunities for real innovation suggested by the intersection of user needs, business needs, and information ecology. We learn the structure of business drivers and constraints inherent in the business. Our user research can be much more thorough when we understand business drivers, sales and marketing approaches, competitive issues, and industry trends. We are better able to analyze weaknesses in market research and advise on UX approaches to supplement or argue against it. We also learn business issues such as marketing and branding in those domains.

Specialization can make us more effective at communi-

cating with and influencing our clients. We can communicate more effectively with our clients when we have deep knowledge of their domains. A good consultant learns to communicate "unpopular" user research to clients, matching the message to their unique business needs and interests. But if input is perceived as coming from an outsider, even well-supported findings may be easily dismissed once the presentation is over. Industry insiders can quickly size up organizational issues, hindrances, and opportunities for UX advocacy based on recognition of similar situations in their industry or domain. And we need industry knowledge to draw insights and develop actionable strategies for a new product line. If we ask our clients (the "users" of our services) to adapt to our arcane UX vocabulary, we limit our effectiveness. Instead, we need to learn the specific vocabularies of our clients. When we represent design problems in the common language of our user's business, we demonstrate a commitment to solving their problems. Furthermore, specialists may have more credibility in making arguments for innovation or radical and possibly unpopular recommendations, since a client sponsor is more likely to support an "insider's" bold proposals.

The most useful user knowledge is often tacit and embedded in the domain practice. When new to a domain, we don't know what we don't know. Much of the background knowledge necessary to understanding a domain is difficult to communicate directly. Our clients cannot easily share their deepest understanding of their industry during the course of project engagement, because much of this knowledge is tacit, deeply embedded in their everyday work experience. While a "newcomer's" view may lead to fresh insights, it still helps to have prior understanding of the issues in the client's business and users' work.

Specialists also bring *cumulative* knowledge of the user to a job. By concentrating on one or only a few user

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domains, we build our own learning of user work practices, cultures, and attitudes.

We conduct better user research when seriously committing to a domain. As UX specialists, we can better assist clients in developing personas and user scenarios when we deeply understand the user's business. Our usability studies will be more focused, streamlined, and driven by more meaningful prototypes. Our range of research methods may be expanded. Clients may be more willing to risk an in-depth ethnographic field study if we can identify gaps in the current research and state-of-the-art. Many clients believe they already know everything about their user and work practices, so it often takes domain expertise to credibly make such proposals. Domain experience helps in every aspect of a field research project—from recruiting participants to making informed interpretation.

To Specialize in Skill, Domain, or Both?

Specializing is a choice, and it does not make sense for everybody. I have found that between the two dimensions of skill and domain, it often works to specialize in one and generalize in the other. However, from my vantage point, it appears that our field has overemphasized skill specialization, and de-emphasized domain specialization. I think it is time to shift the balance toward industry specialization in UX. We provide extraordinary value by bringing an objective perspective to design problems, but grounded in an authentic understanding of the business and grasp of the user scenarios, content, and drivers in that industry. We can improve the credibility of our reporting and design recommendations when customers and decision-makers are more likely to adopt our design proposals knowing they are grounded in a realistic understanding of their industry and competition, not just the superficial knowledge gained in a single project. We can build trust and credibility to advise at the organizational

level, not just within defined projects. Working within a business area develops long-term relationships, connecting to industry networks and communities, expanding the range of value offered. Finally, commitment to an industry may also promote genuine *caring*, a desire to make a difference in the work lives of people we know well and whose problems we understand.

Brain Surgeon or General Practitioner? I am not saying everyone in UX should specialize, but consultants should consider the value of dedicating practice to a few areas learned well. In all professions the highest-value practitioners specialize, from medicine and law to accounting and management consulting. The narrower concentrations often demand higher compensation. Having knowledge and personal networks in a practice area increases the economic value of advice, whether in pediatrics, tax law, or retail. In professional practice, *domain* specialization is a significant strength, not a liability of overly narrow application. And business strategists and top designers usually specialize in a field, such as retail, automotive, consumer goods. Why not in UX? ♦



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