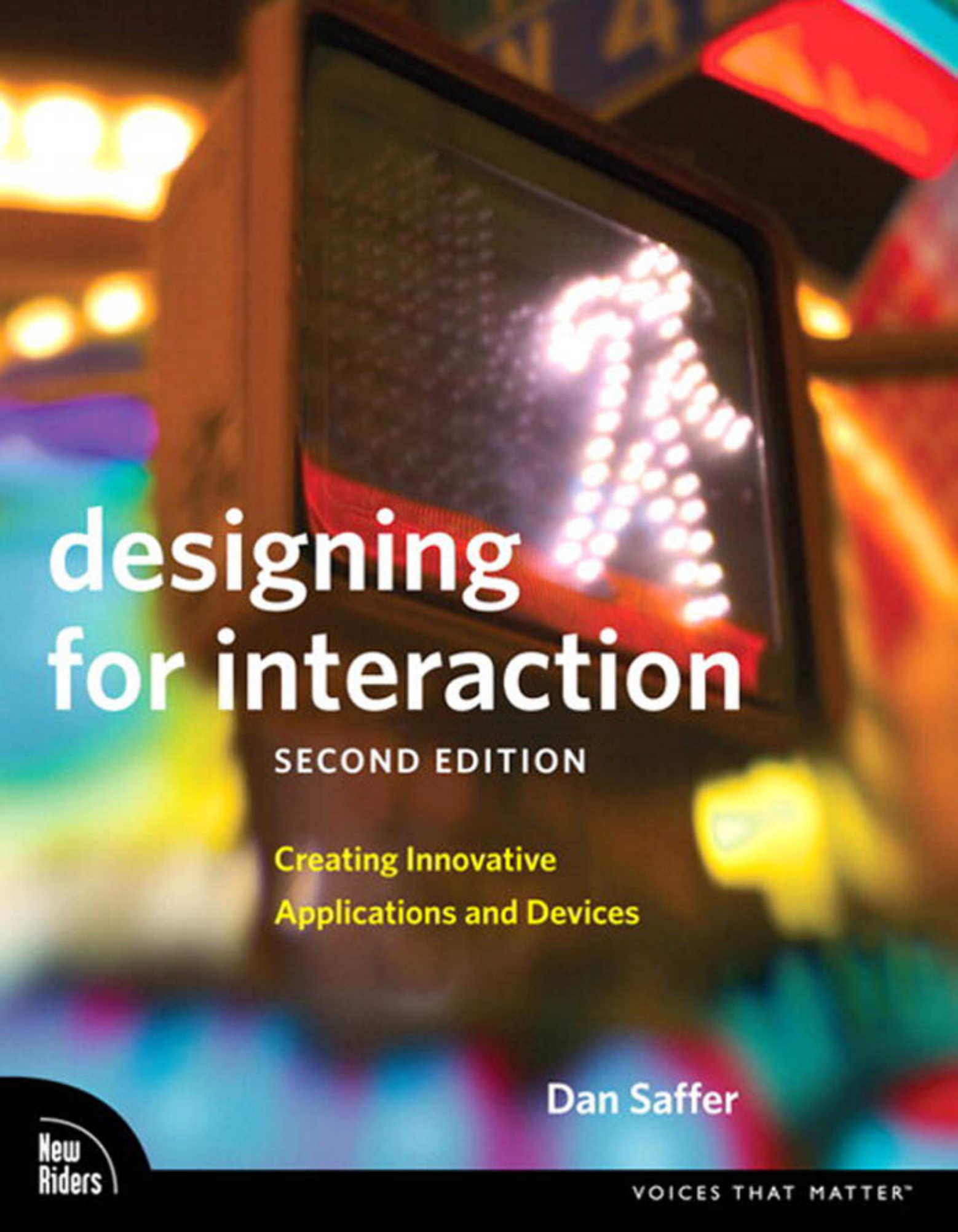
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Traditional Research

The best strategies start with a candid assessment of the organization, its resources, its customers, brand, and position in the market. Traditional research is a good place to begin this, and should be done before other kinds of strategic activities (such as stakeholder interviews).

It's almost silly to say, but a simple Internet search on the subject you are dealing with and the company you are working for can be extremely revealing, as is examining company reports, press releases, and documentation, as well as books, newspapers, and magazines. These are the sources of traditional research.

Unless specifically told not to, designers should feel free to consult outside sources as part of the information-gathering process. Thanks to a little thing called the Internet, we now have access to information quickly and easily from many different sources. Designers should make good use of it! Very few projects are in an area that no one has thought about before. Even a cursory search of the Internet, and especially of e-mail list archives, discussion boards, and technical and academic journals, will likely turn up information about the subject area, as well as information about the company, its market, and its competitors.

> **NOTE** *Traditional research does not include patent research. Interaction designers are encouraged to avoid patent filings and articles about patents at all costs. The penalties for patent infringement are high, and will be higher (at least in the U.S.) if the designers knew about the patent beforehand. Let the lawyers handle patents. Ironically, not knowing about a patent is the best defense for patent infringement cases.*

As any doctoral candidate can attest, a person can spend a nearly infinite amount of time gathering information. It's important to focus this part of the process on gathering *germane* information that will eventually find its way into the solution. The goal is to gain general knowledge about the project's subject area (and perhaps related areas), and also deep knowledge about the particular problem that is being addressed.

Design Brief

The design brief is a document, usually from the client (or an internal business manager or unit hereafter referred to as a client), although increasingly it is being made by the design team. The design brief should lay out the reasons for employing the designer (the problem) and often make suggestions for the solution as well. The brief is an excellent starting point for gathering information. Briefs can contain such information as brand considerations, technical constraints, expected timetable and deliverables, detailed goals of the project, and contact information for major stakeholders.

Design briefs are becoming less and less common, so they can also be a deliverable that the designer generates as a result of the stakeholder interviews, traditional research, and competitive analysis. The brief then becomes a way of capturing and communicating what was learned during the initial information-gathering period of the project.

In a client-supplied brief, designers usually get some insight into what the client thinks will make a successful project. This likely won't be spelled out; it may just be a throwaway line like "We want to make the new application fresh" embedded within a 50-page document filled with complicated business and technical goals. But if the designer meets all those goals but creates a conservative design that doesn't address the client's desire for "freshness," the client will be unhappy.

The brief should be only a starting point in discussions about the project. Indeed, the brief could raise as many questions as it solves. What exactly does making the application "fresh" mean? That's where stakeholder interviews come in.

Stakeholder Interviews

Stakeholders are people who have a particular interest in, and/or influence on, the outcome of the project.

Stakeholder interviews (**Figure 3.1**) are usually one of the designer's first tasks on any project. The interviews are the client's chance to tell the designer why the client thinks that the project is needed, to reveal the client's frame around the project. As stated earlier in this chapter, these reasons may be mistaken, and the designer should feel free to challenge them. The problem may not be what the client thinks it is, and the designer will have to do her own problem setting.

COURTESY ISTOCKPHOTO

Figure 3.1

If possible, conduct stakeholder interviews in-person and individually. Try to meet with as many influential and powerful people as you can.

Stakeholder interviews work best when they cast a wide net, so designers should take the time needed to do them well. The designer will want to interview not only those who are sponsoring the project (that is, putting up the money and resources), but also those in the organization who will be affected by the project. Often, people lower on the organization chart with direct access to customers such as salespeople have deeper insights into aspects of a project than those higher up. For example, consider a redesign of an application through which customers contact customer service. Although the project may be sponsored by the chief information officer and run by the director of customer service, the designer would be remiss if he or she didn't speak with the people who actually work with those contacts: the customer service representatives.

Interaction designers should not only ask the How and What questions, but also the Why questions. Why does this work this way? Why is it important to sell a million ball bearings a month? Why should this application be on a mobile phone? Why questions help designers avoid questions that don't provide much information, such as those that can be answered with a yes or no.

Here are some sample questions that could be asked in most stakeholder interviews:

- Who are you and what is your role in this organization?
- Why is this project important to you? To the organization?
- What would make a successful project?
- Has anyone ever tried to address this problem before?
- What doesn't this project cover?
- If we could only do one thing with this project, what would that be?
- How could this project affect your day-to-day life?
- Are there any issues about this project I should be aware of?
- What are the risks in doing this project? What could make it fail?
- What are your competitors doing in this space?
- Who else should I talk to about this project?

Stakeholder interviews are the time for the client to tell the designer (or for the designer to probe about) the business goals of the project. Business goals can be anything from hard numbers ("We need to sell 5 million ball bearings a day") to acquiring new customers or entering new markets to soft, company-brand goals ("We need a more elegant interface"). But again, the designer needs to be careful! Look for the *unstated* goals of the project. Sometimes, organizations want to use projects for different ends, such as to merge two departments or add staff, and will use the design project as a means to do so. Solutions that run contrary to these unstated goals could be greeted coldly.

Stakeholder interviews also help designers understand the *constraints* of the project. No project is without some boundaries that for business, technical, or resource reasons cannot be crossed—at least not crossed easily. Constraints can be placed on a number of entities, such as marketing, accounting, management, IT, and of course, users. Sometimes constraints are as simple as the medium in which the project will be created ("We want a Web site" or "We'd like to make a new mobile device"). Sometimes constraints are a lot more complex ("We've already sold advertising for each Web page, so you need to design space for that" or "This robot can make only left turns right now and occasionally explodes"). Interaction designers need to capture and document constraints throughout the course of the project, in everything from stakeholder interview notes to wireframes. These constraints will shape the design decisions that are made later in the process (see Chapter 7).

Metrics and Return on Investment (ROI)

By learning about the business goals of the project, the designer should also learn about the overall business strategy as well as what the organization will consider a successful project at the end ("We sold 10 million ball bearings today!"). These measures are referred to as **success metrics**. Success metrics let you take an objective look at a project's result to see what progress has been made toward its goal. Success metrics for the project should ideally be tied to the overall success metrics of the organization as a whole (increased market share, higher profits, and so on).

In short, get some basic numbers that can be used as a baseline to compare against once the project is over.

Designers have a selfish reason to find out the impact of their work on the organization. Demonstrating value—particularly monetary value via affecting the bottom line—to an organization proves that design isn't what is known as a **cost center**. Cost centers such as human resources or research and development only add value to the company indirectly, and these are often the parts of the organization that are viewed as the least valuable and most easily disbanded or downsized when times get tough.

Evaluating success, of course, is much easier for projects that have hard-numbers expectations than for those with softer goals. It's sometimes not easy to measure what businesses call return on investment (ROI) for interaction design. If an organization expects a design to meet an ROI goal, the designer needs to be sure some mechanism for measuring success is in place *before* the design work begins. Designers should want some sort of baseline criteria culled from the existing situation that they can then use to measure the new design against. For example, before beginning the redesign of a Web site registration process, the designer should get some quantitative data: numbers, in other words. It takes six minutes to register. On an ease-of-use scale of 1 to 5, with 5 being excellent, users currently rate registration as a 2. According to server logs, half the people stop registering after the second page. With this baseline data in hand, at the end of the project, the designer can measure the new solution and compare the new data to the old and also to the goals of the project. If the designer has done the job well, the numbers will likely show it.

Competitive Analysis

In order to be taken seriously, interaction designers have to understand what the current landscape of competitors is. It is important to understand **market factors**: overall trends in the market, what industry leaders are doing, what products are popular and/or selling well (and why), and the latest technology. This is definitely not to say that designers should slavishly follow the market or trends, but rather that they should know about what is currently available so that they don't inadvertently replicate what is already out there, and thus create little or no value for the organization they are working for.

The other reason to do competitive analysis is simple: to find holes in the market and unsolved problems that a new product could address and provide competitive advantage.

When doing competitive analysis, always look for untraditional competitors as well as the ones that directly compete for market share. For example, traditionally the competitors of news organizations were other news organizations. Now they compete with blogs, photo-sharing Web sites, and news aggregators as well. A useful tool to find these competitors is to ask, "What would customers do if all the traditional competitors went away? What would they do instead?"

Once you have your list of competitors (and stakeholder interviews may turn up more), the next task is to figure out the criteria by which you will be comparing and contrasting them. These can be broad (brand, tone, users) or detailed (analysis/presence of a particular feature).

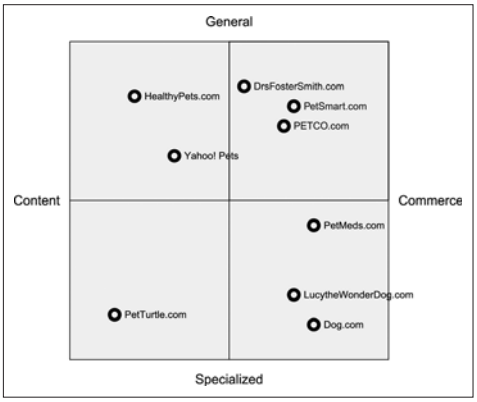
The data you collect when doing a competitive analysis (**Table 3.1**) can be anything from a simple yes/no ("Does Product X have search?"); multiple choice ("Type of search: Site only"); a scale ("How well does search work on a scale of 1 to 10?"); or a description ("Search returns 10 results per screen").

Table 3.1 Sample Competitive Analysis

Competitor	*Touchscreen?*	*Years on Market*	*Brand Promise*	*Customers*
Competitor 1	No	7	Ease-of-use, simplicity	Beginners
Competitor 2	Yes	1	Powerful, robust	Professionals
Competitor 3	No	2	Sophisticated	Professionals

Aside from this more raw, at-a-glance view of the data, overviews and conclusions drawn from a competitive analysis can be a compelling means of showing market opportunities (**Figure 3.2**) and promoting the project internally (see "Visualization and Visioning" later in the chapter).

By the end of the framing process, you should know a few things: the boundaries and scope of the project; what the internal context of the project is (that is, why the business wants to do the project); the external context (the marketplace and competitors); and



COURTESY DAN BROWN FROM *COMMUNICATING DESIGN*

Figure 3.2

In this two-by-two, different pet-related Web sites are plotted on a simple graph. The axes of the graph represent the scope of the content (commercial versus advice/information) and specialization (number of pet types supported).