A Designer's Research Manual

Second Edition, Updated + Expanded

SUCCEED IN DESIGN BY KNOWING YOUR CLIENTS + UNDERSTANDING WHAT THEY REALLY NEED

by Jenn + Ken Visocky O'Grady

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ROCKPORT

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This book is dedicated to designers everywhere who are pushing the boundaries of the profession to ensure its relevance, prosperity, and longevity.

(And to Lulu. See? Everybody has to do their homework. Even Mom and Dad.)

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INTRODUCTION

WHY THIS BOOK?

If you're working for a publicly traded design megalith whose creative staff is assisted by historians, anthropologists, sociologists, and marketers, you probably don't need this book.

HOW DO I USE THIS BOOK?

If you're one of the thousands of graphic designers whose education was based primarily in the art department, if almost all of your clients have MBAs, and if you've wished for some help validating your aesthetic decisions to that crowd, keep reading.

Consider this manual a primer on research methods and their practical application to graphic design. It broadly outlines common research strategies and tactics and introduces you to frameworks in which to engage them. It offers suggestions for incorporating research-driven design into your creative process—whether you're a freelancer, in-house designer, member of a studio team, student, or professor. It features success stories and examples of these methods in action: accessible and pragmatic accounts of real-world experiences from designers around the globe.

Writing this book (now for a second time) has influenced the way we approach design, and the way we teach our students. It is our firm belief that in a profession in flux, a good generalist can always find stability. You need this information for your good generalist shelf. Know when to use it and when to call in the experts. So armed, go make good stuff.

Jennifer Visocky O'Grady
Professor
Cleveland State University

Kenneth Visocky O'Grady
Professor
Kent State University

We know you're busy. So we've packaged this content assuming that you'll visit (and revisit) this book with limited chunks of time, and specific tasks in mind. It's divvied up into four distinct sections:

1. Know the Basics

Before you can integrate research into your design process, you need a little background. This section provides some historical context, showcasing applied research practices from as far back as the Bauhaus (see, art school was on to something). We'll also discuss how design creates value, helping you articulate why research-driven design methods serve your clients' interests.

2. Gather the Tools to Conduct Research

This section reviews research basics, so you understand the difference between primary and secondary investigations, and qualitative and quantitative methods before jumping into specifics. We'll survey a variety of research strategies, drilling down to tactics that you can employ on your projects, describing what these tools can (and sometimes can't) do, how and when they are used, and the level of difficulty or expertise involved.

3. Integrate Research into Your Existing Practice

So many tools and techniques to choose from. Where to begin? What research methods are a good fit for your team or project? This section provides exercises to help you get started, and methods for crafting research plans that account for resources and manage scope.

Need advice on how to turn research findings into creative gold? We'll also outline frameworks that help analyze the results of your efforts, helping you craft a research-driven creative brief and identify new opportunities for design.

4. Learn from the Experts

We've peppered the book with real world examples. This section is entirely focused on case studies from designers around the globe. Their individual practices are diverse in scale, project focus, and budget—but each shares a practical application of research that has resulted in creative dividends. Want to see research-driven design principles in action? This is where to turn.

What's Different in the Revised Edition?

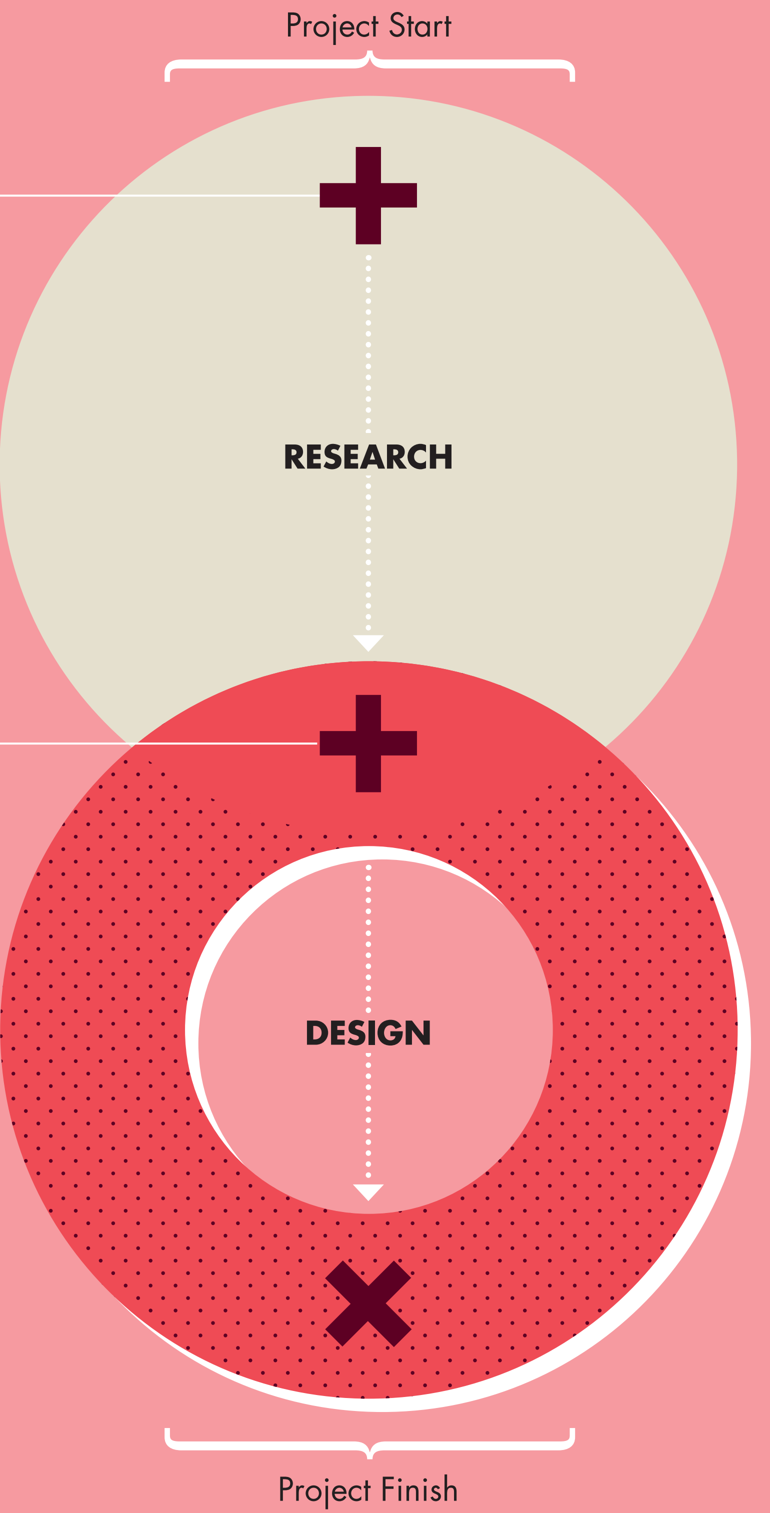
The first edition of *A Designer's Research Manual* was released over 10 years ago! Much has changed in the design research space since, but the core principles remain the same. So we've kept the evergreen content from the original book, updating it with new strategies, tactics, processes, and tools to reflect current trends.

A decade of working with designers who've adopted and adapted these methods has helped us understand where sticking points commonly occur. This second edition was written with process in mind, adding information to help you get started, plan your research strategy, analyze results—and incorporate them into a solid, action-oriented creative brief.

More content = you making more good stuff.

Getting started is the hardest part. We provide tools and tactics that help you hit the ground running, plan your research approach, account for project scope, and manage your creative process.

Once you've done the research, how do you make sense of the data? We provide frameworks to help you discover patterns in the information you've gathered—and identify opportunities for design.



CHAPTER 1

AN OVERVIEW OF RESEARCH IN GRAPHIC DESIGN

Businesses recognize, now more than ever, how important design is to financial success. However, clients are often looking for assurances that their communication dollars will be spent wisely.

WHAT IS **RESEARCH-DRIVEN** DESIGN?

This chapter explores the concept of research-driven design, how it has been used in the past, where new opportunities exist, and how these practices generate value.

Graphic designers have long been taught that form, structure, and style are indispensable communication tools. Hours spent in the study of typographic principles, color theory, grid placement, shape relationships, and visual contrasts inform a designer's aesthetic decisions. However, the demands placed on today's visual communication designer are very different from those asked of yesterday's commercial artist. As the design profession evolves, an increasingly competitive global marketplace expects measurable results for its creative dollars. Clients want assurance that designers understand their business issues and that commissioned work will deliver a return on their investment.

Incorporating research methods into the design process can aid in meeting this demand for a variety of reasons. Simply put, this approach redefines the designer/client relationship—and multiplies the creative and financial dividends for both. Research-driven design can help define an audience, support a concept, advocate for an aesthetic, or measure the effectiveness of a campaign. In a field dominated by subjectivity, tools such as market research, ethnographic study, and data analytics can be used to communicate better with a target audience, create more effective messages, or continually assess a project's development. Applying traditional research methodology to the process of graphic design also positions the designer in a consultative role. Armed with this supporting evidence, the designer (often viewed as a vendor) instead becomes a strategic consultant (newly viewed as a business partner). Designers who base their commissions around the creation of artifacts encounter clear project end-dates, while those who provide strategic services continue billing on a retainer basis.

In chapter one we'll introduce person-first design philosophies, exploring the importance of truly understanding the unique needs of the people for whom you're designing. We'll review some historical moments that helped define the role of research in design practice, because examining how the aligned fields of architecture, interior design, industrial design, and user experience design have successfully embraced research can help you learn how to apply the concepts to graphic design. We'll end on some good news you can help spread, evidence of design's connection to value generation and financial success.

WHAT RESEARCH CAN AND CAN'T DO

Research is essential to solving complicated problems. This is true in almost every profession; it's even true in complex personal undertakings! Whether you're charged with expanding your company into a new market, or selecting your next car, you can't solve the problem if you don't do your homework.

Research frames the problem. It provides context. It helps us get to know the people we're designing for, and the issues we're designing around: Who lives in this market? What distracts a new driver? We research to identify and understand needs, preferences, influences, motivations, habits. We're looking for patterns. We're seeking insight that will help us connect project goals to people. The extra work is worth doing because it places your user at the center of your design process. Research findings become a touchstone for ensuring that creative and aesthetic decisions are being made objectively. You're lining up the work to resonate with your audience.

Research can also serve internally as a client communication tool. It can provide a platform for the client and designer to agree on project goals, scope, and audience. Findings can help outline concepts and support rationale with stakeholders and partners. Actively incorporating research into the design process makes the creative problem more transparent, helps win buy-in, and mitigates perceptions of risk.

Research can help provide focus, track progress, confirm success, measure impact … and sometimes it can tell you that you've missed your mark.

Research isn't a guarantee. It's important to understand that the practices covered in this book don't automatically ensure success. While design research can be very technical and in-depth, it's still primarily a qualitative—or subjective—activity. As designers, we undertake these activities to develop insights into problem and audience. We are not building evidence for a legal argument, there is no warranty on outcome, and we do not seek definitive proof. Research cannot guarantee—but it can predict and influence a project's success. Ask the right questions, talk to the right constituents, and you will develop an understanding of central issues, a new empathy for the people you're trying to reach.

Research doesn't prescribe aesthetic. Creative decisions can be inspired by research findings—the creative process almost always benefits from more information—but research activities can't create the work. Informed decisions—based on research instead of an intuitive best guess—amplify the power of the artifacts they create. It's up to the design team to incorporate the analytical to the benefit of their art.

WHAT IS **PERSON-FIRST** DESIGN?

One of the first things we teach new designers is 'It's not about you.'

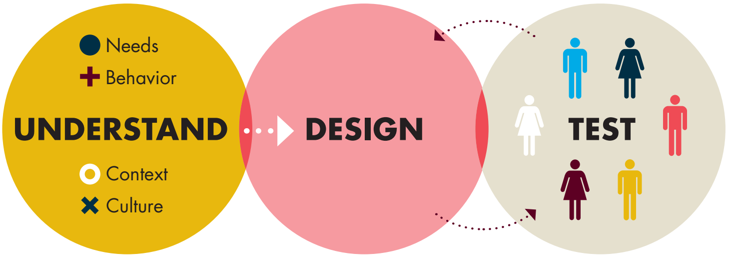
Looming deadlines can easily pressure us to jump into solving a problem visually, based on personal inferences. Undertaking a person-first approach forces the creative to slow down and invest time stepping out of his or her own experience and into another's perspective. We can craft more meaningful, targeted, resonant communications when we develop an empathy for our audience—placing those people at the center of the creative process. Embracing a research-driven design strategy means more work upfront, focused on developing a better understanding of the client and the needs of the end user. But that initial investment of time will pay dividends through the course of project development and well after launch.

Here are some ways that a person-first approach benefits all involved, client, customer and creative:

- Research findings and participant feedback allow for deeper comprehension of the problem and yield more tailored solutions.
- Creative and client can establish appropriate project success metrics together, based on research findings.
- Audience participation and iterative process can raise questions, provoke solutions, and identify new opportunities.
- The creative team has a better understanding of context including environmental factors that may influence use before they start designing.
- Validation and testing of concepts happens during prototyping, avoiding costly assumptions and post production mistakes.
- Person-first approaches have been linked with higher rates of customer satisfaction, increased time to market, and greater return on investment.

PERSON-FIRST DESIGN

A person-first approach employs research to help creative teams understand the needs, behaviors, and culture of their audience, and provide context for how they will encounter or interact with the artifact being created. Design solutions are then tested and refined with real users.



Person-First Philosophies

A number of terms are used when discussing person-first approaches to design. It's helpful to parse them into two big ideas, *User-Centered Design* and *Human-Centered Design*.

User-Centered Design

The term "user-centered" has its origins in product design, human/computer interaction, and software development but has since expanded in practice to include a broad range of design disciplines—anywhere a deep understanding of end users is essential to project success. This concept integrates research throughout the creative process, providing valuable insight into the needs, behaviors, and expectations of the target audience. User-centered design is a person-first approach focused on increasing the end user's satisfaction with a product or service, experience or brand. This approach can be applied to the development of any design system, from interactive to print, packaging to environmental, single artifact to broad campaign. It is often applied to commercial endeavors but can also be a guiding principle of socially driven projects. User-centered design targets a specific audience and seeks to develop a project that serves their needs.

Human-Centered Design

Human-centered design incorporates many of the same approaches as user-centered design, with deep research into behavior and an iterative process, but this concept attempts to address the needs of every individual, regardless of ability, age, education, or cultural background. Human-centered design veers away from the specificity of a user-centered focus, avoiding audience segmentation, and intent on creating design artifacts and systems that serve everyone. The terms "design for all" and "universal design" are often used interchangeably when discussing human-centered design.

If embracing user-centered design is a good business decision, many argue that there is a moral and ethical imperative to embrace human-centered design on certain projects, with principles of accessibility and access emphasized over aesthetics or economics.

Ultimately both person-first philosophies guide designers to address the needs of the individuals they're designing for: It's the scale of that group that differs.

Graduate students at Kent State University's School of Visual Communication Design embraced a human-centered design approach to develop a series of illustrations used for teaching basic sanitation and hygiene around the world. These images provide instruction on basic hand washing technique and emphasize when it's important. The graphics had to communicate to a diverse audience with varied ages, literacy levels, cultural backgrounds and nationalities.

USE SOAP AND WATER

USE ASH AND WATER

BEFORE
PREPARING FOOD

BEFORE
FEEDING CHILDREN

BEFORE
SHARING FOOD

EXPERT
VOICE

Mike Bond
Co-founder + Strategy Director
Bond & Coyne, London, UK

APPROACHING + REACTING TO RESEARCH

... it is not so much the kind of research that is carried out as it is the designer's ability to spot the value in their research and have the confidence to react to it.

Design is about understanding.

The graphic designer must have empathy for whom and for what they are designing. Building research into the design process avoids resultant design solutions serving only to satisfy the designer or to paint over the cracks of an issue.

In many ways, designers have to become mini-experts in all that they deal with in order to be able really to understand the subject matter and the audience to whom they are speaking. Research in this respect is essential in getting designers to understand worlds they may not normally inhabit themselves: worlds that present the designer with unfamiliar environments, scenarios, people, industries, languages, and traditions.

Research is needed to understand a client, the people they wish to communicate with, and the reasons behind the need for communication—in other words, the problem. Research should also be employed to aid the generation of visual directions and solutions.

Research should cover at least two strands at any given time. One strand provides a scenario within which the design needs to exist and potentially a surface on which to work, the other provides a visual language to employ. Together they present the designer with a means to engage. Although either strand should influence the other, they are not interdependent, and usually require separate and distinct approaches.

In my experience as a director of design consultancy Bond and Coyne Associates and as a lecturer at Kingston University, London, it is not so much the kind of research that is carried out as it is the designer's ability to spot the value in their research and have the confidence to react to it. That being said, there is also a danger that research can "dry-out" a solution. Research, if handled incorrectly, can take away the chance of surprise.

Therefore, the design process—and for that matter, the design studio—should allow for the unconventional to work in tandem with the methodical. Creation of project spaces in which observations, quotes, and facts are displayed in a nonlinear fashion enables the designer to get an instant overview of a situation and make connections between findings. It also allows designers to present interim thoughts and findings to others in the design team and perhaps even the client. Presenting research in this way can aid analysis while not alienating those less familiar with the design process.

Literally sit these findings alongside inspirational (perhaps image-, material-, or format-led) research to inform possible solutions, and you have the potential for sparks of ingenuity to fly and opportunities for innovation to be spotted. It is really important that this strand of research is not literal, that it takes conceptual leaps sideways, works metaphorically, and thinks laterally. It may lead a digital designer into looking at styles of bronze sculpture to inform an interaction, or a book designer to looking at abstract painters whilst developing a binding format … and that can only be a good thing for ingenuity.

Research is kept fluid and reactions to it free-flowing as long as there is a culture (particularly in the initial stages of analysis) of "anything goes." Deferring judgment in this way helps designers build confidence in their research processes and gives them the ability to stand back, get the bigger picture, and synthesize their data without fear of being "wrong."

Remember …

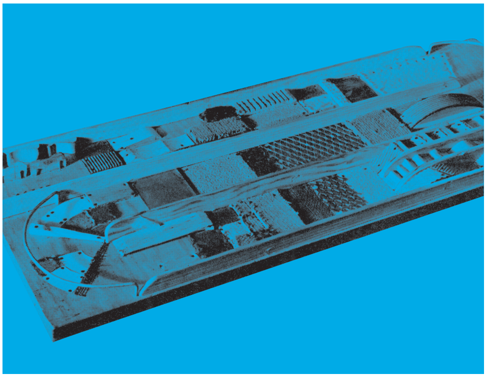
- Designers need to use research as something to react against as well as respond to.
- Research should back up thinking. Making assumptions, and ignorance, can be the death of a successful and inspiring design.
- Whenever possible, research should inform the brief first, before informing the solution. People or situations cannot ask for what they do not know is possible or do not realize is necessary.
- Don't let research kill a potential idea—let it feed and support it.
- Frame the creative process with logic, and the less expected can thrive within it.

HISTORICAL
PERSPECTIVES

While the concept of research-driven design may seem to be a new trend, many practitioners throughout history have incorporated research methods into their design processes.

Bauhaus Beginnings

In his book *The New Vision: Fundamentals of Bauhaus Design, Painting, Sculpture, and Architecture*, László Moholy-Nagy describes a tactile design problem assigned to second-semester students at the Bauhaus (Germany, 1919–'33) and the New Bauhaus (Chicago, 1937), where completed projects were user tested on the blind.[1] Students were asked to assemble different tactile values or "tones" in a manner that would create meaning or showcase the relationship between swatches. For example, a student might create a value scale by placing a smooth surface such as leather at one end and a rough material such as sandpaper at the other, with graduated steps in between. Projects were then user tested by the blind, and testers' comments and experiences informed further investigations.



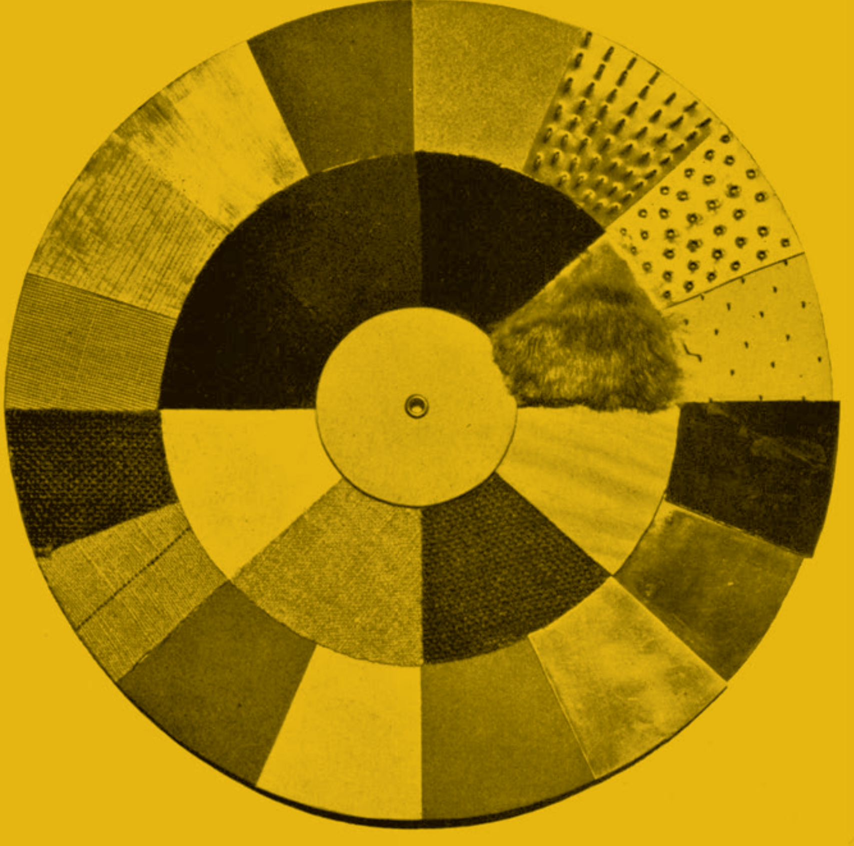
1. László Moholy-Nagy, *The New Vision: Fundamentals of Bauhaus Design, Painting, Sculpture, and Architecture* (New York: W.W. Norton & Company, 1938).

Examples

Tactile experiments may be suggested or self-imposed.

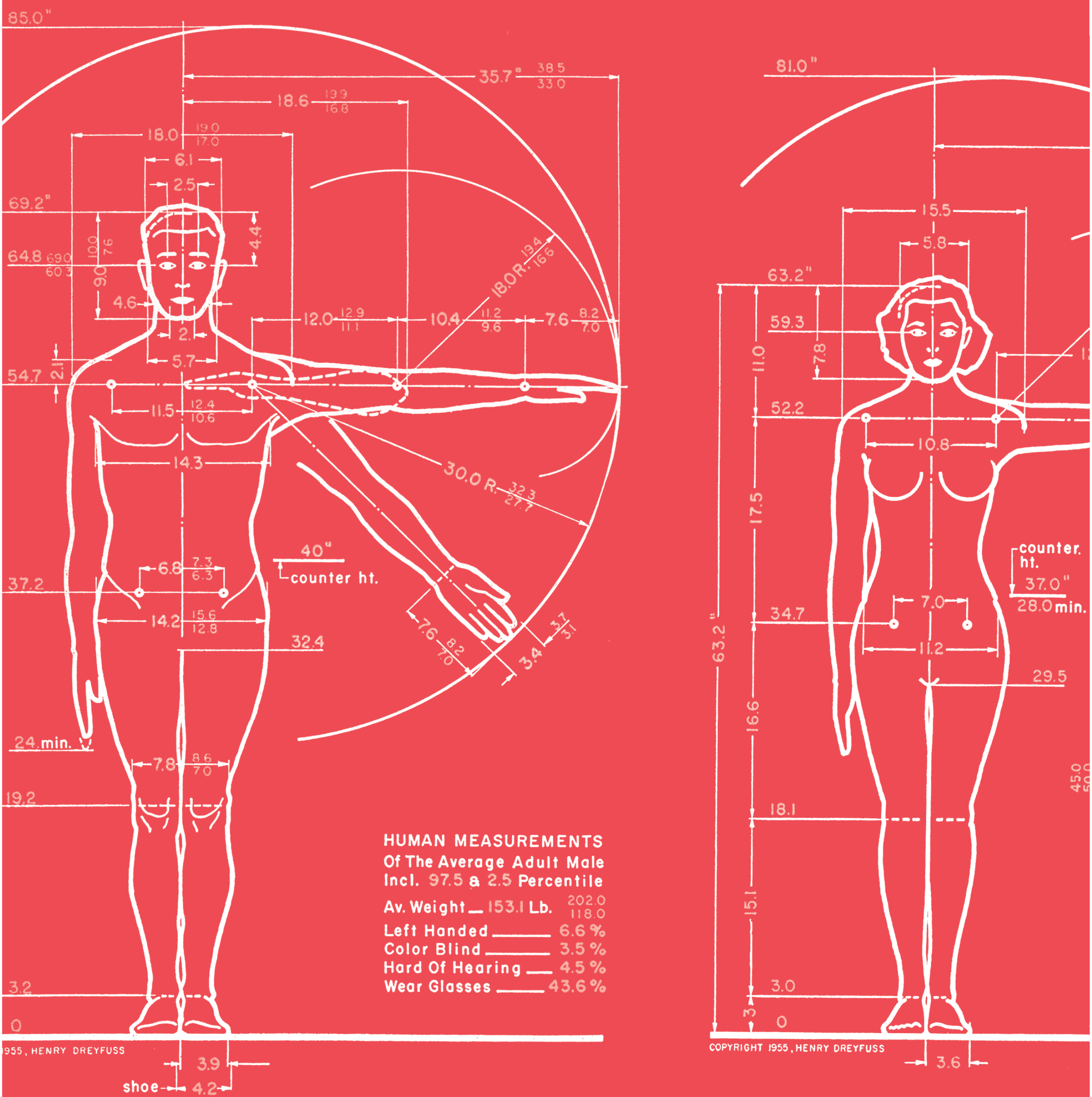
Examples:

1. A two-row tactile table, running from one extreme to the other, it being possible to touch both rows simultaneously (from hard to soft, smooth to rough, wet to dry).
2. A two-row tactile table (tactile strip) with adjacent contrasting tactile values, arranged rhythmically (Fig. 5)
3. A four-row tactile table, free arrangement (Fig. 6).
4. Free table (Fig. 7).
5. A table for vibration and pressure sensations (Figs. 8–15).



In his book, **The New Vision,** *László Moholy-Nagy recounts the process of New Bauhaus user testing tactile exercises on the blind.*

Fig. 5. Walter Kaminski (Bauhaus, second semester, 1927)
Revolving tactile table of two concentric circles with contrasting tactile values, from soft to hard, from smooth to rough.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HUMAN MEASUREMENTS
Of The Average Adult Male
Incl. 97.5 & 2.5 Percentile
Av. Weight 153.1 Lb. 202.0 118.0
Left Handed 6.6 %
Color Blind 3.5 %
Hard Of Hearing 4.5 %
Wear Glasses 43.6 %
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COPYRIGHT 1955, HENRY DREYFUSS
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The Perfect Couple

Industrial designer Henry Dreyfuss dedicates an entire chapter to Joe and Josephine in his groundbreaking book *Designing for People*, first published in 1955.[2] The fictional couple originally appeared on the walls of Dreyfuss' studio as anatomical drawings of average men and women and were used to gain an understanding of human factors in product design. Dreyfuss explains that through the years Joe and Josephine developed "numerous allergies, inhibitions, and obsessions … disturbed by glaring light and by offensive coloring; they are sensitive to noise, and they shrink from a disagreeable odor." Beyond their original purpose as physical references, these insights into the feelings and needs of Joe and Josephine—user icons—gave the studio more information on which to base design decisions. This knowledge was used in the creation of everything from bicycles to tractor controls to the interiors of airplanes.

2. Henry Dreyfuss, *Designing for People* (NY: Allworth Press, 2003).

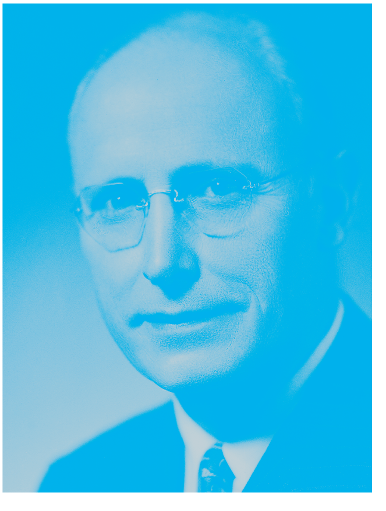
We've Been Watching You

The study of marketing research was pioneered by Arthur C. Nielsen Sr., founder of the ACNielsen company, in the late 1920s. Probably most famous for television's Nielsen ratings, Nielsen developed many innovative tools that provided clients with objective information about the effects of marketing. Using random sampling techniques, Nielsen was also able to quantify market share, making it a key indicator of financial performance. In 1939 the company expanded its operations to the U.K., with western Europe following shortly thereafter. Today they have offices across the globe, from Azerbaijan to the Ukraine, and are recognized as a world leader in consumer research.[3]

3. For more on the ACNielsen company, visit http://goo.gl/EDoVL

To help guide design projects, Henry Dreyfuss personalized anatomical drawings such as these. They helped his studio to better understand the qualitative needs of end users, beyond simple anatomical factors.

Most famous for television ratings, A.C. Nielsen pioneered marketing research in the 1920s.




XEROX

Don't Tell Me, Show Me

Most of us think of computers as something that revolutionized the last decades of the 20th century, but early computing was underway before World War II. Since the introduction of these machines, people have been looking for betters ways to interact with them.

In early configurations, computers were complex and cumbersome tools, used primarily by scientific, engineering, and military communities. The machines themselves were huge, and programmers dictated functions through physical punch cards. As advancements were made in scale and availability, command line interfaces streamlined the programming process, allowing for commands to be typed directly through a keyboard. Still, entering these lines of code required an understanding of programming languages alien to the uninitiated.

The digital world we experience today—touch screens at mass transit platforms and interactive devices in the hands of toddlers—would not have been possible if not for the practical application of a graphical user interface (GUI, sometimes referred to as 'gooey'). GUI interfaces bring computer interaction to the masses, providing simple visualizations and easy analogy with the physical world.

One of the first interfaces of this kind was developed in the early 1970s at Xerox's Palo Alto Research Center (or PARC) for the experimental Alto computer. The team at Xerox knew that several factors were critical to widespread consumer adoption of personal computers, including availability and price. But the most crucial element was creating an interface that people actually understood.

Design was the key.

And to get the design right, the team at Xerox PARC knew that they had to create a system that reflected the world of regular people. They spent years engaging in user research, employing an iterative process of prototyping and testing that allowed for the creation of design standards that still feel relevant decades later.

This vintage marketing photo from Xerox shows a 8010 Star Information System, the first publicly available personal computer using a graphical user interface (GUI), desktop metaphor, and mouse. These simple user experience innovations revolutionized human computer interaction and set a design precedent still resonant today.

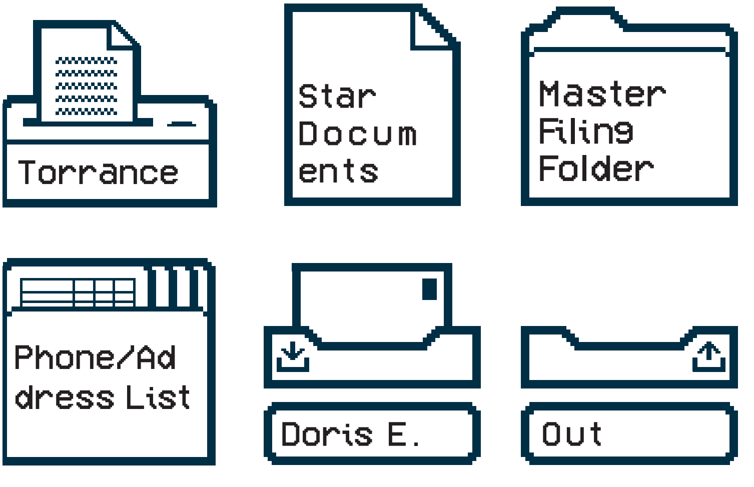
Alto, the in-house prototype, paved the way for the Xerox 8010 Star Information System,[4] the first publicly available personal computer using a graphical user interface, desktop metaphor, and mouse. Xerox PARC's user-centered approach resulted in an icon-based operating system for the machine. People using the computer would see a picture of a desk, open a folder, and physically move a file to another location—the screen, instead of blinking code, would function in familiar visual contexts. The Star system was even capable of networking, allowing for an early form of email, represented by a simple icons of in and out boxes.

As ubiquitous as electricity and running water to today's digital natives, this simple visual metaphor was a revolution in its time. One that continues to influence our interactions with technology.

Many frame the rise of personal computers as a story of engineering, but the technology is only half of the narrative. Without the value created by this early user-centered design approach, public acceptance of personal computers might have been an uphill struggle. The graphical user interface was a cornerstone of the Apple Lisa and Microsoft Windows, and the foundation for every laptop, smartphone, and tablet since—a communication innovation that has become a default for integrating technology into everyday life.

4. Read up on the amazing, historical happenings at Xerox PARC here: https://goo.gl/s6S9Tk, https://goo.gl/c753kL, https://goo.gl/8Zqen9

Xerox 8010 desktop icons underwent user testing to determine if they would reflect commonly understood actions: a piece of paper representing an electronic document, an illustration of a folder as a place to store electronic documents, just like a real desk. These visualizations became analogies, shorthand for a transitioning digital workforce.



EMERGING OPPORTUNITIES IN DESIGN RESEARCH

Design is an evolving and dynamic field. Change is one of the few givens. As communication campaigns are becoming more integrated, audiences are simultaneously more diverse (think global reach) and specific (micro communities of persons with similar interests).

Designers are tackling more than ever before—from complex business challenges to entrepreneurial endeavors to sticky social problems.

Being able to conduct research, and act on it—integrating those findings into design campaigns—is the new normal. It has become as important as our ability to marry type, image, and color with concept.

If you're fascinated with this component of the modern designer's arsenal, here are a few growth areas where you might thrive:

Experience Design

Companies everywhere are hunting for new ways to create rich experience-driven interactions between consumers and their products and brands. Designers that can craft interfaces (physical or virtual) that are useful, usable, relevant, and unique are in high demand.

These professionals live at the crossroads of user research, technology, and design, combining their insights into beautiful and meaningful interactions across multiple communication platforms. In experience design, projects are driven by empathy, so understanding what the user wants and needs drives the creative process. Conducting and understanding person-centered research is an indispensable skill for building 'what's next.'

User Research

Everyone wants to know their audience better, from businesses to political parties, because knowing your audience means knowing what they need, want, avoid, or accept. User research has grown so important to communication that it has become a singular job description.

This emerging role combines behavioral and cultural research with design thinking. User researchers understand the social, business, and communication implications of the conversations they're having with audiences. They develop insights that help marketing and design teams connect with their target and meet project goals, turning feedback actionable.

Understanding the creative process from the design side ensures that the data these researchers are collecting will be framed with design activity or design intervention in mind. User researchers do the ethnographic fieldwork that design teams need to create objects, messages, services or campaigns that are responsive to the user's perspective.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Take a BAC Test Now
TEST REMINDER IN 13:37
BACtrack 10:09
Warming up
BACtrack 10:09
Blow now
Done 10:09
0.120
Estimated Current BAC
Sober by 4:23pm
Done 10:09
0.122 @ 10:09pm
Did you wait 15 minutes?
Is this a friend's reading?
BACtrack
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Estimated Current BAC
0.11 0.10
in 1 hour in 2 hours

Design Strategy

Business is driven by innovation and customer insight. Developing new products and ideas and discovering new markets are essential to long-term success. Enter the design strategist.

She is a seasoned practitioner with a deep understanding of user research and creative process. She is the chief innovation officer, combining design paradigms and a deep understanding of audience to address business and/or community needs. This integration allows for agile response to fast-moving markets, emerging social issues, and fickle public opinions. Design strategists help companies and organizations find new ways to conduct business and serve their constituents. They are the leaders that integrate design and outreach into a company's culture—and success!

User Experience Designers create interactions for multiple platforms, including wearable devices such as this application for BACtrack, a leading producer of breathalyzer products.

Combining design thinking, strategic problem solving, and information visualization, cross disciplinary teams at Humantific engage in a term they've coined "visual sense-making."

DESIGN CREATES **VALUE**

As professional practitioners, we understand that good design creates value.

We've seen how design can visually differentiate one business from another in a crowded marketplace.

We've used it to simplify complex ideas and advance understanding. We've shaped stories out of data, making the abstract tangible. We've crafted emotional connections between people and the products they buy, the services they use, and the organizations, ideas, and communities they support. Design creates value by making a meaningful connection with individuals, and research is the tool we use to foster that connection.

However, to an untrained eye, design can be viewed as a subjective pursuit—one mired in individual style, trend, or seemingly superficial decoration. Many clients understand the rough concept of design as a 'point of differentiation' but are still completely unfamiliar with the rigors of the creative process, or unclear on the difference between audience appropriateness and personal taste. To that outsider, design can represent risk. As budgets tighten and market cycles accelerate, clients want more assurance of projected successes and return on investment (ROI). Proving value generation specific to design, especially hard value calculations such as ROI, can be difficult on a per-project basis. While agencies and larger studios may have established methods and specialized staff tasked with measuring impact, those processes are often proprietary. Smaller firms often lack the time, resources, and expertise to gather this proof.[5]

Luckily, for all of us, professional organizations around the world have marshalled their resources to investigate the link between design and financial success. This helps the collective profession articulate its worth in ways that resonate with business and frame our design services in language that resonates with our clients. The studies

5. Want a deeper discussion of value as it relates to design? Check out our other book, *Design Currency*: https://goo.gl/KVCKNc listed below are especially important because of their scope, proving the power of design beyond a single project's outcome or agency's body of work. They also highlight the value of research-driven practices, proving time and again that when design strategy is embedded into corporate culture, success occurs exponentially. Use these resources as general examples when discussing the value of your own creative services.

Design + Investment

Design Council is an industry advocate with decades of experience advising the UK government and investigating the link between financial performance and design. The organization conducted a longitudinal investigation, between 1994 and 2004, that linked the strategic use of design to stock performance. Called the Design Index,[6] this investigation discovered that over that ten-year period, the share prices of companies that invest in design performed up to 200% better than the FTSE 100, the 100 largest companies listed on the London Stock Exchange. During the course of the study, not only did this group of companies outperform the market, they were also more stable, doing better when gains were positive, and falling less when markets dipped into negative territory.

Building on the evidence generated by the Design Index, the Design Management Institute, an international membership organization based in the United States, partnered with Motiv Strategies to conduct similar research focused on companies headquartered in the USA. Their study, called The Design Value Index,[7] yielded similar patterns. Between 2004 and 2014, design-led businesses in the USA outperformed the Standard & Poors 500 Index (S&P 500), 500 stocks grouped to measure the economic health of the nation, by up to 219%. These findings are significant because the companies in DMI's Design Value Index continually outperformed the market during the economic crisis of 2008, mirroring the market stability indicated in Design Council's original study.

Expanding on their stock index investigation, and compiling several initiatives documenting the many ways design strengthens financial performance, Design Council generated a more expansive study, resulting in "The Value of Design Factfinder Report."[8] This document is a must read for designers everywhere, clearly demonstrating the old adage that 'good design is good business.'

6. Read the whole report: "Design Index: The Impact of Design on Stock Market Performance Report to December 2004," London: UK Design Council, 2005, https://goo.gl/Sd7Sza

7. Read the whole report: "Good Design Drives Shareholder Value," Design Management Institute, May, 2015. https://goo.gl/XFDR2E

8. Read the whole report: "The Value of Design Factfinder," London: UK Design Council, 2007, https://goo.gl/BUqLA6

After interviewing 1,500 UK businesses, the research team discovered that sales and revenue growth are more likely to occur for companies that increase their investments in design. Money spent on design yielded products sold and customers acquired. Companies that viewed design as an essential tool for developing new products and services, rather than only as a tool used to market existing ones, saw significantly increased revenue.

Design Council identified 250 study participants that utilized design in unique ways. Classified as Design Alert businesses, these companies were studied in more detail, providing even more evidence to support the link between design spending and positive business outcomes. Design Alert businesses saw a significant 125% return on investment for every Pound spent on design. They also saw an average of 6.5% increase in market share. In certain cases design was used to reveal new opportunities and identify new markets. The Design Alert businesses were also less likely to compete on price, indicating design played a key role in influencing customer perceptions of value.

RETURN ON **INVESTMENT**

Spent: £1.00

Earned: £2.25

Design Council's "The Value of Design Factfinder Report" found that design-led businesses yielded a 225% return on investment for every British Pound spent on design.

The Design Staircase

Established in the 1970s with the intent to boost exports and promote business and industry, The Danish Design Center (DDC) initially focused on the practice of industrial design. Their efforts have since expanded to include diverse design disciplines with an emphasis on value generation. The DDC created a framework for understanding how design creates value for business, called The Design Staircase. They then used that framework to survey 1,000 Danish companies, presenting their findings in "The Economic Effects of Design" report.[9]

The Design Staircase has four levels, or stages:

- Stage One: No Design
  Design plays no significant role in product or service development, or company culture.
- Stage Two: Design as Styling
  Design is used in a decorative way.
- Stage Three: Design as Process
  Design is used as a process to develop new products or services.
- Stage Four: Design as Strategy
  Design is integrated into company culture and aligned with business objectives.

The DDC discovered that companies that were operating at the top of the model (stages three and four) saw significant returns on design investment and had up to 20% more growth in revenue. These companies also had increased exports.

The methodology used in The Design Staircase was embraced by the Centre for Design Innovation in Ireland,[10] where the study was replicated with a focus on Irish businesses. Adding validity to the DDC's findings, despite market variances, the Irish survey yielded similar results. In their study, the Centre for Design Innovation found that companies operating on the top two levels of the Staircase were more than twice as likely to see increased demand for products and services, while companies operating at the bottom were much more likely to remain stagnant.

Both studies illustrate that design, when integrated as a part of corporate culture, becomes a tool for innovation and a predictor of success.

9. Read the whole report: "The Economic Effects of Design," Denmark: National Agency for Enterprise, 2003, https://goo.gl/59LbQ5

10. Read the whole report: "Design-Driven Innovation: Why it Matters for SME Competitiveness," Dublin: Centre for Design Innovation, 2007, https://goo.gl/q2sF5R

THE DESIGN **STAIRCASE**

VALUE CREATION

4

DESIGN AS
STRATEGY

Design is integrated into company culture and aligned with business objectives.

3

DESIGN AS
PROCESS

Design is used as a process to develop new products or services.

2

DESIGN AS
STYLING

Design is used in a decorative way.

1

NO
DESIGN

Design plays no significant role in product or service development, or company culture.

The Design Staircase, developed by The Danish Design Center, provides a framework for analyzing the relationship between design and value creation. As an organization moves up the staircase, integrating design into its culture of practice, more value is achieved. This includes higher returns on investment, exposure to new markets, and increased brand loyalty and customer satisfaction.

QUICK TIPS

You're looking for insight, not evidence.

As you begin to consider what research can do for your design practice, also try to understand what it can't do. You're undertaking these actions to generate better, more effective problem-solving. You're not trying to definitively prove that your solution is the best or only answer.

Shift your orbit.

Put people at the center of your process. Aesthetics absolutely matter, but not at the expense of audience. Understand what's important or resonant to the user and you can impact their lives (and the project's success).

There is nothing new under the sun.

(Very little, anyway.) Don't let clients balk at research as a newfangled service, add-on, or extra. There's ample historical precedent for the success and importance of research-driven design. Use these stories as evidence for your own intentions. Remember, you're positioning yourself as a strategist and partner, not a take-out menu of à la carte creative services.

What's next?

Adding new skills to your creative arsenal helps you solve communication challenges. It can also increase career opportunities. Familiarity with the research practices covered in this book will serve the graphic design generalist well; fluency is the minimum expectation in aligned fields. If you like what you're learning, dig deeper, and expand your options. (There's a resources section in the back of the book to get you started.)

CHAPTER 2

RESEARCH STRATEGIES + TACTICS

Though the power of design may not always be easily measured, there are many steps that practitioners can undertake to ensure that they are making informed communication choices, rather than producing artifacts rooted solely in aesthetics.

BIG CONCEPTS
IN RESEARCH

Research findings can help the designer in a variety of ways. From supporting great concepts to measuring the effectiveness of finished projects, a research-driven approach can help define the way problems are solved and illustrate the value of those solutions.

This section provides an overview of traditional research methods and a discussion of their application to the field of graphic design. Because design artifacts (websites, brand collateral, annual reports, mobile applications, etc.) are generally visual vessels for the application of research findings, it is important to begin with a survey of methods (theory), strategies (planning), and tactics (action).

Quantitative + Qualitative Research

When discussing research methods, there are two distinct categories into which most data-gathering exercises fall: quantitative and qualitative.

Measuring sets of variables or quantities and their relationship to one another produces quantitative research. This form of research is built around numbers, logic, and objective data. For example, a person studying the effects of global warming may take measurements of temperature over a given amount of time to determine the rate in which the climate is changing. Though well suited to scientific pursuits, applying these metrics to creative inquiry is less successful. Instead, designers look to the social sciences for a model that better suits our specific needs. Also incorporating statistical methods, quantitative marketing research is a social research technique

Quantitative research measures objective data, whereas qualitative research measures subjective data, such as the qualities surrounding an area of inquiry.

QUANTITATIVE	QUALITATIVE
He is 6 feet 7 inches tall.	He is tall.
They eat 6 meals a day.	They eat all the time.
The president's approval rating is at 60 percent.	The president is well liked.
The cruise ship served 3,000 passengers.	The cruise ship was huge.
The cat weighs 20 lbs (9 kg).	The cat is fat.

focused around the development of questionnaires, the responses to which can be scored and measured. For example, if a designer wanted to determine the relationship between a user interface and user satisfaction, the designer could ask a population of users to fill out a questionnaire. The information gathered would then be scored and measured. The resulting information could be useful in developing further iterations of alternate structures, measure the success of the current design, or even inform future projects.

Whereas quantitative research deals with objective data such as numbers and logic, qualitative research deals with subjective material such as words and images. This research approach strives to understand the qualities of a specific field of inquiry. This form of investigation uses tools such as individual or group interviews, literature reviews, and participant observation to understand and explain social behavior. For example, if a researcher wanted to gain insight regarding the shopping habits of teenagers, she might spend several days on location watching the subjects at a mall or shopping center, documenting her observations. Reviewing the resulting documentation, the researcher might be able to find commonalities and thus formulate a theory on teenage purchasing behavior. In visual communication design, the majority of research practices fall under the qualitative umbrella. As designers continually develop new objects for diverse audiences, they must strive to understand the detailed needs of those consumers. Human behavior is not easily quantified; hence qualitative research strategies, born of the social sciences, are often a better fit for creative pursuits.

Primary + Secondary Research

The terms "primary research" and "secondary research" might imply they happen in succession. However, they instead refer to proximity and specificity of source. Primary refers to original research that is conducted by an organization for its own use. For example, a cosmetics company in the United States might use observational research combined with surveys and questionnaires, targeted at middle-school-aged girls, to determine preteen purchasing habits. They would then use the resulting data to inform their packaging, product placement, and other marketing and design elements.

Secondary research refers to the practice of reviewing a collection of data or findings that have previously been published by an outside party, for an alternative function. For example, if a record label in the United Kingdom could obtain a copy of the research produced by the cosmetics firm we've just mentioned, they might be able to use that information to aid their marketing strategies for music sales to teenage girls. Chances are that reviewing the cosmetics firm's brief would be much less expensive and faster than commissioning a focus group or conducting individual interviews or surveys. The information certainly would be relevant to those planning a campaign directed at the discretionary income of an adolescent. However, lipstick and music are vastly different products. Additionally, though the subjects of both inquiries share gender and age commonality, they may well vary from a cultural perspective. Secondary investigation, though less expensive, may or may not fit the exact needs of the researcher.

Formative + Summative Research
Formative or exploratory research is used to gain insight into an area of study or to help define a question. This kind of research is especially useful for design applications, because in the business of innovation, identifying and then clarifying communication issues is essential. Formative research aids in problem identification and problem solving. There are a number of research tactics that could be considered formative, including (but not limited to) literature reviews, trend forecasting, video ethnography, surveys and questionnaires, demographics, and user testing.

Summative or conclusive research is used to frame and decipher the outcome of an investigative process. It confirms that the original hypothesis is correct or illustrates that it is flawed. Summative research can

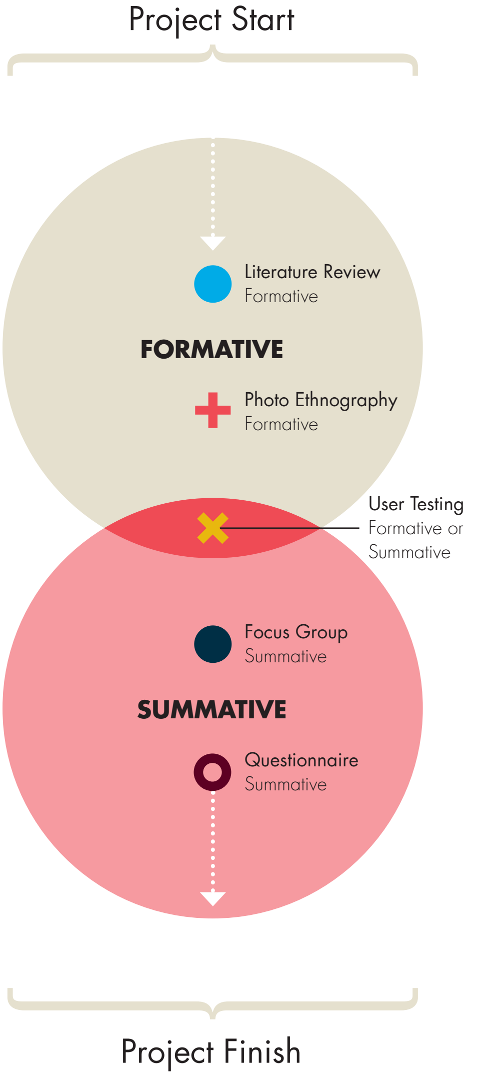
Primary research is conducted specifically for an individual commission. Secondary research has already been completed for a different project but may apply in some way to the current investigation.

PRIMARY	SECONDARY
Commission a focus group of skateboarders, aged 12–18	Read skateboard magazines to familiarize with youth subcultures
Hire a marketing research firm to collect data about BMW owners' mean income	Purchase previously published demographic data about the luxury car market
Engage octogenarians in a photo-ethnographic study at a nursing care facility	Surf stock photography websites for images representative of seniors in nursing care facilities

answer questions such as, "Did I do it correctly? Did I make it better? Is it more successful?" There are many research tactics than can be summative, including (but not limited to) focus groups, user testing, surveys and questionnaires, and web analytics.

Most research tactics can be either formative or summative, depending where and when they are employed during the cycle of a project. For example, user testing might be performed before beginning the design of a new website by having test subjects navigate selected URLs while tracking their responses. The data collected in those sessions would then inform navigational structures developed for the new site. A focus group could be used to determine a target audience or to evaluate a newly designed magazine cover. Observational research might be employed to assess information architecture at a library—both before new systems are implemented and afterward. The possibilities and combinations are as limitless as creativity, time, and resources will allow.

Formative research is conducted at the start of a project to help frame the design problem. Summative research is used to evaluate prototypes or finished products, measuring them against pre-established project goals.



Basic + Applied Research

Basic research may sound like something elementary or easy, but the term actually refers to research conducted to gain new knowledge within a specific area, or research undertaken to satisfy the curiosity or personal interest of the researcher. A defining factor for basic research is that the activity isn't initiated with intent for commercial application.

In a design context, basic research may take the form of personal creative exploration through things such as drawing, painting, or photography. Experiments with form, composition, and color might then influence design decisions on future projects undertaken for clients. Designers may also experiment with new programming languages or software to add skill sets and learn new tools. While each of these scenarios may have indirect commercial application, the motivation and resulting creative outputs have not been commissioned by clients. They have been undertaken to explore ideas or techniques that add to the individual researcher's toolbox, or provide a safe creative outlet to experiment with new concepts.

For designers, basic research supports the growth of the individual or creative team. Experiments conducted through basic research might later lead to new service offerings, client acquisitions, or entrepreneurial opportunities.

Alternatively, applied research is the term for any research activity commissioned specifically for a project, or with the intent of commercial or public use. Applied research efforts are focused on developing new products, experiences or services, serving commercial and/or social needs.

Applied research is an increasingly expected component of design practice, conducted to identify and clarify issues related to project goals; influence aesthetic choices; meet the business problems of the of the client; and serve the needs of an audience.

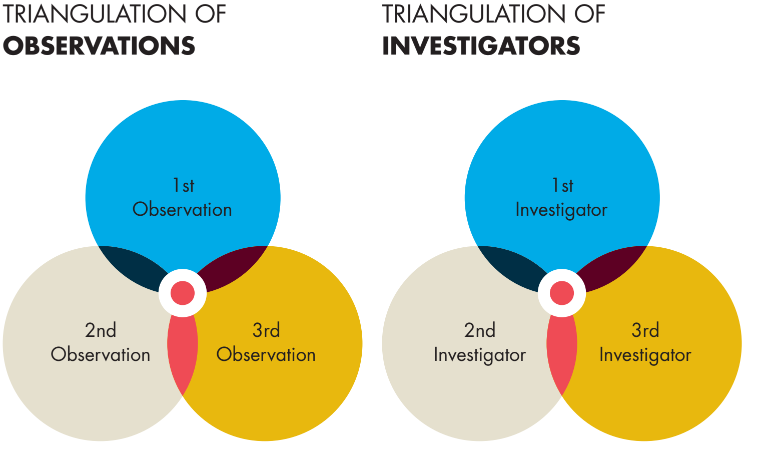
TRIANGULATION

Confirm Research Findings

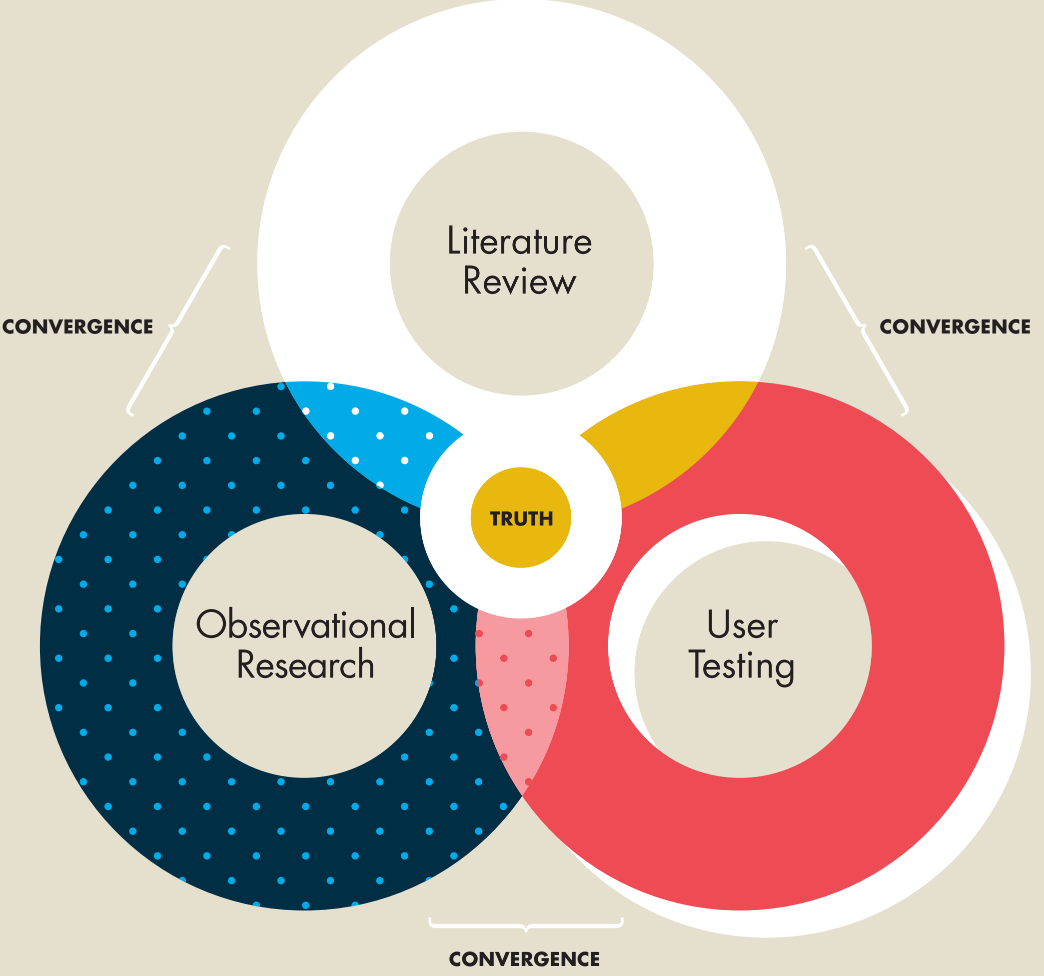
Triangulation is the process of combining several different research methods to illuminate one area of study, in other words using several research tools to examine the same thing. Triangulation is commonly used by the social sciences and adds credibility to qualitative research. By incorporating different tactics, the researcher can overcome issues of validity inherent with many singular qualitative approaches. The goal of triangulation is to confirm the findings of each individual tactic by focusing on where the collected information overlaps. This area of overlap, called convergence, is considered to be the most accurate representation of truth.

Research findings can be triangulated in a number of ways. For example, secondary research triangulation would compare a variety of previously published data (perhaps aggregated via articles, books, journals, and reports). Method triangulation would compare the findings of multiple and varied research tactics (perhaps collected via focus groups, user testing, and observational research). Investigator triangulation would compare the findings of multiple researchers (perhaps collected over a period of time, or from multiple sessions in the field). To be unequivocally thorough a researcher might employ multiple variations of triangulation, comparing areas of convergence.

The concept of triangulation doesn't just apply to the use of multiple research methods. You can also triangulate results from observations collected over a span of time, or use the process to compare notes from multiple investigators.



TRIANGULATION OF **METHODS**



Triangulation is a process that compares and validates findings from qualitative methods by looking for overlapping and common results. Where findings begin to overlap is called convergence, which is the best representation of truth in the information gathered.

STRATEGY: **LITERATURE REVIEW**

Literature reviews are undertaken as a starting point for all other research strategies. A literature review is a comprehensive investigation of all documents, publications, articles, websites, and books regarding a specific area of study. This first step in the research process can also include a client's corporate communications, as well as those of their competitors, in which case it is often referred to as a communications audit.

TACTICS COVERED:

Communication Audit (p 44)
Competitor Profiling (p 46)

RELATED:

Visual Anthropology (p 62)
Demographics + Psychographics (p 68 + 69)

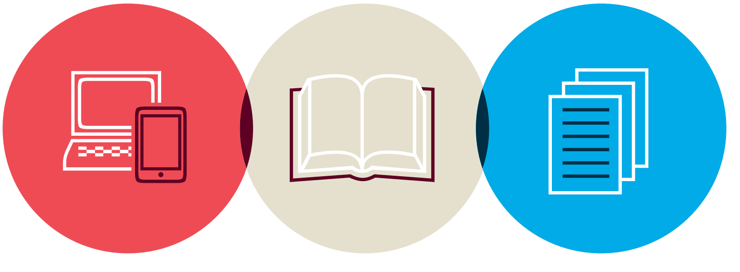
A literature review is an important initial step, allowing the researcher to become familiar with historical references and parallel associations, as well as current market conditions. Literature reviews can also clarify research problems and be influential in the development of investigation strategies during later phases of the creative process.

Literature reviews help save time by enabling the design team to frame their problem and understand how similar communication problems may have been approached in the past. A comprehensive literature review will ensure that the researcher does not redouble efforts undertaken during previous investigations of the same subject.

Literature reviews are a formative tactic, used to orient the researcher to the current body of knowledge in a given area. In client/designer relationships, a literature review can be undertaken to gain insight into corporate culture, competitor analysis, and market trends. It can even influence search engine optimization, use of social media, and media buying practices.

Literature reviews are a relatively easy task compared to many of the other forms of investigation discussed in this chapter. Literature reviews require a strategy for finding and extracting relevant information, which can be aided by the help of a librarian or other research professional. Librarians, whether at community or university institutions, are trained professionals who have extensive knowledge of and access to proprietary research tools unavailable to average Internet users. They can help guide a search and may also assist in locating credible source materials directly or tangentially related to the area under study.

LITERATURE **REVIEW**



Literature reviews compile secondary research from multiple sources to help the investigator become familiar with the area or problem being studied.

TACTIC: COMMUNICATION AUDIT

What is it?

A communication audit is a comprehensive review of an organization's marketing materials and an assessment of the channels they use to communicate with clients, customers, or constituents. The goal is to better understand what a company is saying about itself, to whom, and how.

What can it do?

Communication audits outline the messaging an organization intends to project, and analyze how it actually resonates with an audience. These audits determine if those messages are being received and understood. This undertaking builds on the information gathered in literature reviews by engaging with the audience through actions such as interviews, focus groups, surveys, and questionnaires. A communication audit can tell you if internal perspectives of an organization match external perspectives—and if not, where the messaging breaks down.

How is it used?

Communication audits are used to illustrate how an organization's internal image and external image overlap, and identify contradictions. This assessment can help reveal which components of current communication strategies are working, where there are disconnects, or even new or missed opportunities.

Design teams can analyze the results of a communication audit, looking for holes, and then propose actions aimed at filling the gaps.

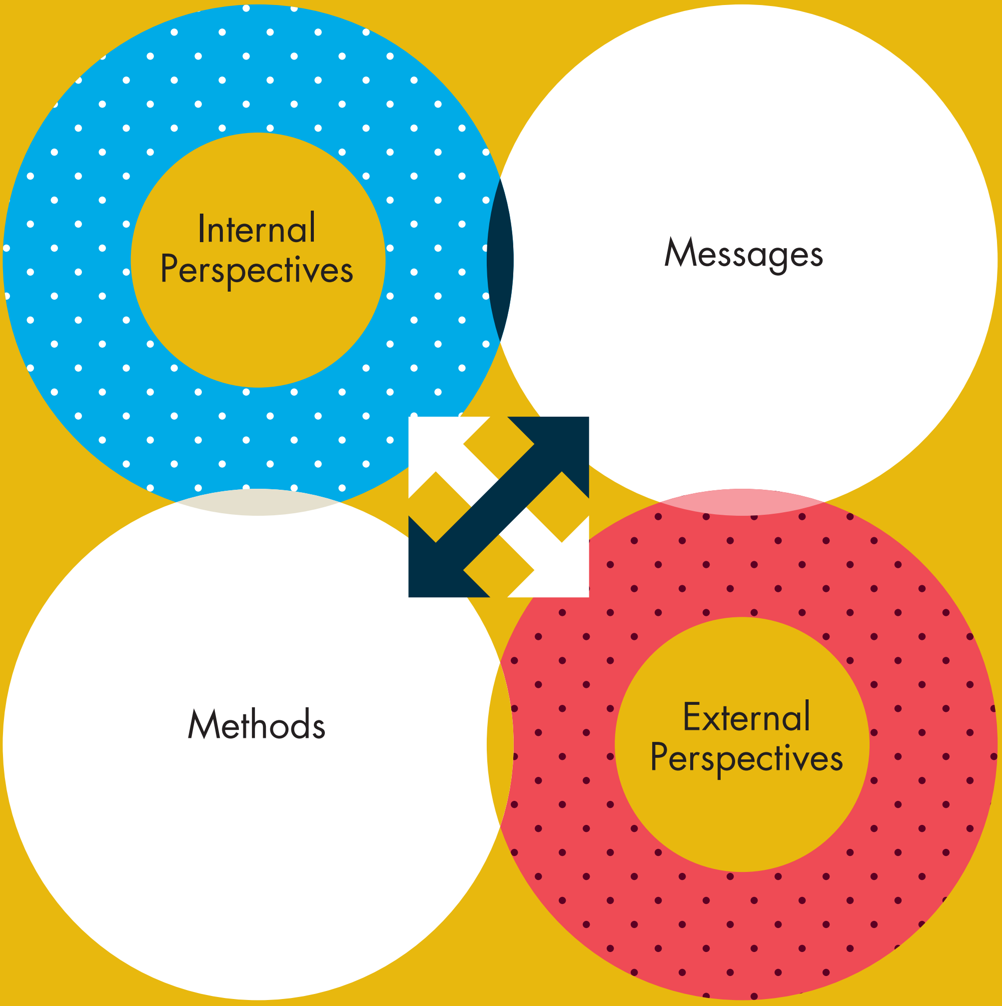
When is it used?

Communication audits should be undertaken early in the research process to help diagnose breakdowns in existing messaging. Data collected through this exercise can inform which media channels to use, influence project messaging and approach, and support aesthetic rationale.

Level of difficulty/complexity?

Communication audits are approachable. Most designers already collect information from new clients to establish a better understanding of history, brand, and audience. This extends the basic literature review process by assessing how those communication materials were received. In addition to basic business acumen and secondary research experience, interviewing know-how and strong interpersonal communication skills will help establish dialog and moderate discussions.

COMMUNICATION **AUDIT**



Communication audits investigate how an organization views itself, and how it is viewed by others. Designers use communication audits to see if a client's messaging matches their internal vision, and if it resonates with their intended audience. Alignment of these criteria indicate that communication programs are successful. Gaps may indicate that communication efforts are breaking down.

TACTIC: **COMPETITOR PROFILING**

What is it?

Competitor profiling is the process of evaluating the strengths and weaknesses of an organization's competition. It uses open-source intelligence—information published in the public domain (secondary sources)—to determine competitive advantages.

What can it do?

Competitor profiling helps differentiate. This information can be used to enhance brand position, adjust or confirm mission, and focus communication strategies—revealing unique qualities that help a product, service, or organization stand out in a crowd.

Competitor profiling provides the designer with a broad understanding of their client's market conditions. This knowledge can help a creative team communicate empathy for the factors influencing a company's bottom line, the shared understanding mitigating perceptions of risk in new designer/client relationships.

How is it used?

Think of competitor profiling as a communication audit of the competition. The goal is to draft approachable summaries of companies or organizations practicing in the same market (read more about communication audits on page 44).

Competitor profiling requires the collection of open source information. Assembled profiles may include details about competitive companies' history, finances, products, markets, facilities, personnel, brand positions, and marketing strategies. The facts, stats, and observations gathered are assembled into reports, used to determine the following about industry peers:

- What does Competitor A say about itself, to whom and how (social media presence, advertising, press releases, corporate communications pieces)?
- What do external audiences (customers and strategic partners) say about Competitor A?
- What are Competitor A's discernible strengths and weaknesses?

When is it used?

Competitor profiling is a formative tool; use it at the beginning of a research plan to help the creative team understand market conditions and history. Combine with a communication audit and identify a client's unique strengths and assets by comparing those of peer companies. This exercise is part of a comprehensive literature review strategy, not a stand-alone method.

Level of difficulty/complexity?

Competitor profiling is a feasible research strategy for many designers. While careful investigations may be time intensive, they can prove beneficial when applied to a larger communication campaign. The information gathered can help determine messaging, media buys, target audiences, and other factors, and is essential to differentiating a client from other companies in their marketplace.

When discussing competitor profiling, the term “competitive intelligence” can arise. Competitive intelligence combines the secondary source tools of competitor profiling with primary research. The goal of both strategies is the same, but competitive intelligence often employs much more aggressive tactics. Some corporations have gone as far as hiring “informants” on their competitor’s staff, or releasing—and then rehiring—an employee after he or she has worked for the competition. Many businesses now use no-compete clauses and confidentiality agreements in an effort to prevent such practices. For the purposes of this discussion of research techniques and how they aid design practice, competitor profiling is a useful and ethical strategy when compiled from previously published material.

Matchstic, a brand identity firm in Atlanta, shared a unique technique employed before designing corporate identity programs. They catalog the use of shapes, colors, even typography in competitors’ logos (similar to the chart shown here). The resulting report outlines that market’s aesthetic culture, providing easy points of differentiation for their client’s new mark.

PRIMARY USE OF **COLOR**		PRIMARY USE OF **FORM**	
Red	••	Square	••••••
Orange	•	Circle	••••
Yellow	•••	Triangle	•
Green	••••	Pictographic	•••
Blue	•••••	Organic	••
Purple	••	Typographic	••••••
Neutral	••	Combination	•••••••

STRATEGY: **ETHNOGRAPHIC RESEARCH**

In a design context, ethnographic research endeavors help the creative team understand what it's like to be a member of their project's target audience (*Who is it for?*). Immersing in the user's perspective provides insight on how a design piece needs to perform (*What will they do with it?*). The empathy gained by being immersed in the user's perspective may also expose new opportunities for design (*How can we make this better?*).

TACTICS COVERED:

Contextual Inquiry (p 52)
Observational Research (p 54)
Photo Ethnography (p 56)
Self Ethnography (p 57)
Unstructured Interviews (p 60)
Visual Anthropology (p 62)

RELATED:

Focus Groups (p 70)
Surveys + Questionnaires (p 72)
A/B Testing (p 76)
Card Sorting (p 80)
Personas (p 90)
Color Psychology (p 94)

Ethnography is a research strategy, created by anthropologists, that focuses on the link between human behaviors and culture.

Ethnographers strive to understand and separate the emic perspective (pronounced *ee-mik*) from the etic perspective (pronounced *eh-tik*). Emic investigations define cultural phenomena through the perspective of the community under study. For example, to develop an emic understanding of graphic designers, one might conduct individual interviews directly with practicing design professionals. Etic investigations define cultural phenomena from the perspective of an individual who is not a participant in the community under study. So an etic view of graphic designers might be found by interviewing their clients or family members. Ethnographic researchers try to focus their efforts on understanding the internal perspective of the community, using outside perspectives only to augment the data gathered.

When choosing subjects for ethnographic study, geographic clusters, interests, ages, or a variety of other segmentation criteria can be used. Macro-ethnography studies large populations of people, whereas micro-ethnography conversely focuses on smaller populations. When a community has been chosen, the ethnographer—sometimes called a field-worker, or field researcher—will conduct background research and identify a specific question to be examined. Immersion into the chosen culture is sometimes necessary for the researcher to gain credibility from participants (subjects won't act "naturally" if they are uncomfortable or anxious about observation). The researcher may identify key "informants," who then lead to other informants, using a snowball sampling method to conduct interviews and re-interviews over an extended period of time. These interviews use open-ended questions to draw more details from the subject. Documentation of interviews, copious field notes, photography, and video can provide valuable information in understanding end users in context. After researchers have developed a theory, they may return to the group to test that assumption.

Though ethnography is qualitative research, the subjective observations made by the researcher are considered to be as much, if not more, valuable than any quantitative or objective data that may exist about the chosen community. This research strategy is considered subjective for several reasons:

- Some researchers may have previous experience with the group they are studying, while others may have no prior exposure at all. Therefore, observations collected by multiple researchers may occasionally conflict.
- Because ethnographic research involves humans in a specific context, time and place, ethnographic research experiments can never be exactly replicated.

- No matter how objective the researcher tries to be, it is impossible to separate one's personal worldview from interpretive observations.
- The researchers cultural background and personal history may influence their observations and interactions with the group being studied.

Good researchers will also use several different tools to document the experiences leading up to their conclusions. This triangulation of interviews, recordings, field notes, and photographs helps confirm the researcher's distilled observations. Additionally, many ethnographic inquiries occur over an extended period of time, and the deep immersion of the researcher adds to the validity of the study.

Because ethnographic research involves the study of and interaction with human beings, researchers must make certain ethical considerations before engaging in fieldwork. With rare exceptions, the community under investigation must be made aware of the intentions of the study and must agree to participate. The American Anthropological Association's statement on professional ethics is a good resource for ethical guidelines.
If working at or in partnership with a hospital, laboratory, or university, you should consult with its Institutional Review Board (IRB)—an entity created to ensure the ethical treatment of human subjects—before undertaking any ethnographic study. IRBs can provide best practice guidelines and assistance drafting consent forms and other legal documentation that may be relevant to (or required for) the human subject components of your research program.

Note: For more information on how to triangulate research, see page 40.

MACRO-
ETHNOGRAPHY

Market segments are often defined by standard demographic categories such as age, sex, and race. That view alone may lead to the false assumption that certain individuals have little in common.

MICRO-
ETHNOGRAPHY

Mapping micro-ethnographic groups around a variety of categories and specializations (personal interests, geography, career pathways, and so much more) can help researchers discover patterns of behavior that expand past traditional macro-enthnographic boundaries.

TACTIC: CONTEXTUAL INQUIRY

What is it?

When unstructured interviews are conducted in a location related to how a person will use a design piece, the process is called contextual inquiry. For example, if working on a new self-checkout interface, the researcher might conduct interviews at a grocery store, rather than bringing shoppers to a neutral setting, such as a conference room or lab.

What can it do?

Contextual inquiry gives the researcher an opportunity to document what the subject actually does, instead of what they claim to do. This process places the user and their activities in context, permitting them to be the expert who demonstrates how tools, products, and services integrate into their daily experience.

Contextual inquiry allows the design team to consider influencers such as physical space, objects in the environment, and expected time-on-task. It also provides an opportunity for the researcher to take cues from facial expressions, body language, and interpersonal interactions.

How is it used?

Contextual inquiry reveals the real-world user issues that might go undiscovered in a more sterile lab setting. This tool is especially important in design endeavors that strive to modify or change behavior. Contextual inquiry grants direct access to the user's environment, highlighting the ways it may affect their activities. This provides a baseline for behavior, and allows the researcher to see firsthand where design might influence change.

Insights collected from contextual inquiry can be aggregated into experience maps, which document the action from start to finish. These can chart a single user's experience, or those of multiple participants. Multi-user maps can demonstrate continuity of experience, or identify gaps, and either result might reveal opportunities for design. The maps also become effective tools for sharing research analysis with team members and clients (read more about experience maps on page 124).

When is it used?

Contextual inquiry is used as a formative tool, helping creative teams frame their assignment. Interviewing and observing the people using a product or service in the environment where it exists (or will exist), provides a critical understanding of use.

Level of difficulty/complexity?

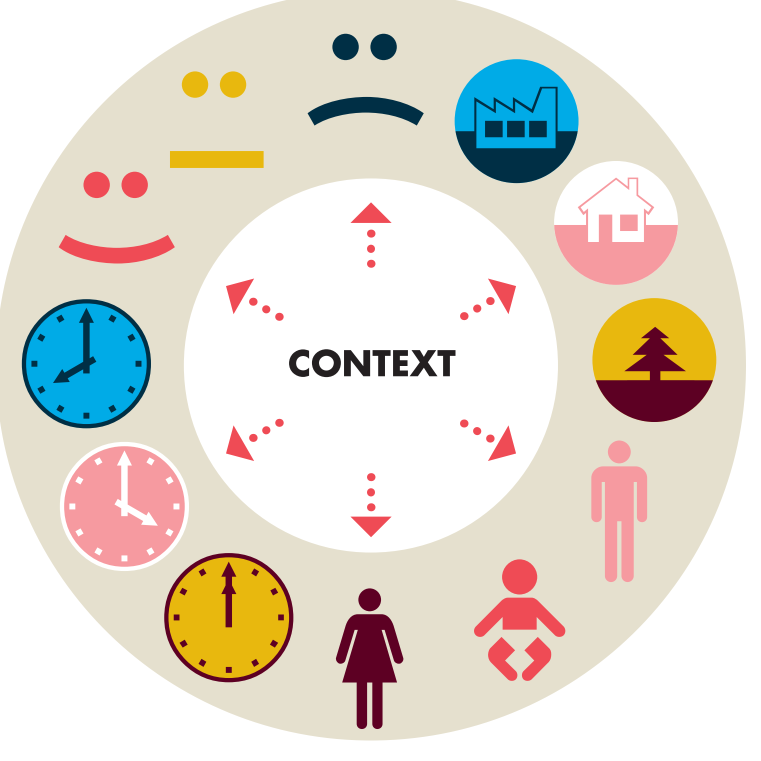
Contextual inquiry is a blend of observational research and unstructured interviews, so basic interpersonal and interview skills are essential. Since the researcher is trying to perform two separate tasks at the same time, conducting an interview and making observations, working in teams results in more accurate information gathering. Assign one researcher to engage in conversation with the participant, while another is taking field notes, photos, or video.

Having help in the field also provides a second perspective on the events witnessed, affording more observational validity. Follow-up immediately after information gathering to compare thoughts while the experience is still fresh.

Whenever possible, record audio. This ensures your interpretation of the events remains accurate, and allows for sharing of research with team members and stakeholders not present during the original observation. They may hear things essential to the project that seemed unimportant at the time.

CONTEXTUAL **INQUIRY**

Contextual inquiry requires the researcher/observer to consider all the factors that might influence a person performing an activity, including things such as physical space, time-on-task, and other people or objects in the environment.



TACTIC: OBSERVATIONAL RESEARCH

What is it?
Observational research is the systematic process of viewing and recording human behavior and cultural phenomena without questioning, communicating with, or interacting with the group being studied.

What can it do?
Simply observing people and phenomena, rather than conducting interviews, may provide a great deal of useful information. Through the resulting documentation of social behavior, researchers learn many things about attitudes and perspectives without influencing group behavior. This tactic allows for greater observational validity because the group under study is unaware of the researcher. The researcher is able to record and analyze what the subjects are actually doing, rather than what they *say* they are doing.

How is it used?
There are several keys to conducting successful observational research. The investigator must remain quiet and observant and try to understand the behaviors exhibited. It is important to remain objective, and therefore not interact with subjects. In this case, the researcher does not ask questions or solicit opinions—the focus, instead, is to watch and closely examine group behavior.

Observational research can be conducted in different ways. Researchers can go into the field and record their observations, or they can record images mechanically with video cameras (for example, to study human traffic patterns in an airport). Of course, if images are recorded with cameras, it is important to the anonymous nature of the study that those devices be concealed. This kind of research can also be conducted in controlled laboratory settings—as is done in purchase labs, artificial environments in which research participants buy products. The use of purchase labs does, however, stray somewhat from tenets of traditional observational research, since participants do know that they are part of a study, which may influence their behavior.

When is it used?
Observational research can be used in a formative fashion before a hypothesis is established. Notations from this process provide valuable insight into the behaviors of the target audience. Assumptions derived from observational research should be used as part of a multilateral process of discovery. They can also be used to support design decisions, as a form of evidence.

Level of difficulty/complexity?
To be reliable and fulfill project objectives, the investigator must be trained to document his or her observations and must have a strong understanding of research goals. Observational validity may

be higher in this case (compared with visual anthropology), as the researcher is not influenced by the subject's opinions. However, the investigator's personal bias still can skew the documentation. Another problem with this tactic is that only public behavior is visible. Individuals often behave differently in solitary or smaller group settings, and ethical considerations prevent hidden cameras from intruding into private scenarios. Observational research also rarely gives an indication of the true motivations driving the behavior being witnessed.

Observational research can be conducted in the subjects' normal environment or in specially constructed labs. For example, observation of consumers in retail environments may help provide insights into their shopping experience. However, when dealing with a rights protected group, such as children, laboratory settings may be more appropriate.

TACTIC:
PHOTO ETHNOGRAPHY

What is it?

Photo ethnography is a field exercise in which subjects are asked to record their daily experiences with still or video cameras. Participants capture their own behaviors, motivations, and attitudes by documenting them with images over an extended period of time. Researchers then combine individual case studies to form a larger understanding of the community being studied. This practice is similar to visual anthropology because both use visual media for interpreting cultural human behavior. Visual anthropology differs by placing the camera in the hand of the researcher rather than in the hand of the subject.

What can it do?

Photo ethnography can help illuminate the emic, or internal, perspective of the community or individual under study ("How do the elderly view themselves?"). Analysis of the collected images can provide the researcher with insight into the lives, needs, and motivations of the subject(s) and may also help identify ways to communicate with them.

How is it used?

Photo ethnography should be a part of a larger research strategy and not a stand-alone exercise. As stated previously, ethnography is subjective and cannot be replicated, so other methods of data collection should be used to qualify the researcher's position.

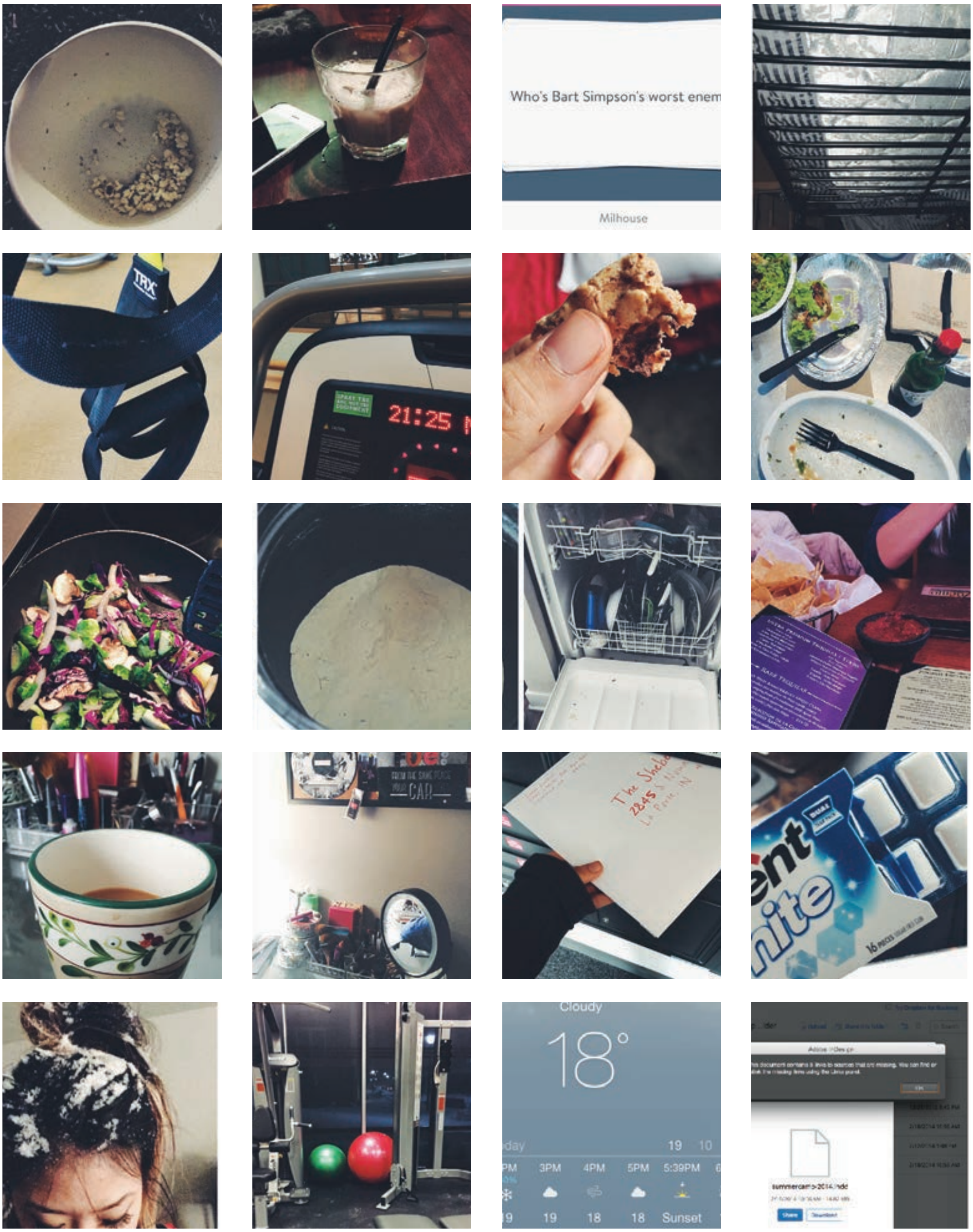
When is it used?

Photo ethnography is often used as formative research, to help gain better understanding of the intended audience's needs and behaviors. This kind of study can be used as a method in problem solving or in problem identification.

Level of difficulty/complexity?

Before undertaking a photo ethnographic study, the researcher must first complete investigations to identify participants (also called informants) representative of the larger community. Some time will then be spent training those participants on image-capturing skills. (Training time will vary depending on skill; for example, operating a digital camera and uploading the collected files can prove complex for some participants.) Photo ethnography can be relatively inexpensive and places control in the hands of the subjects, essentially making them self-ethnographers. An added benefit of this tactic is the psychological buy-in created by involving the subject directly in the investigation. Conversely, problems with observational validity may occur because the participants are actively aware of what they are supposed to be cataloging and therefore may alter their "normal" behavior. Additional issues may arise if participants are not able to objectively select or capture images that accurately represent their larger community.

Students in Professor Sarah Rutherford's Human-Centered Graphic Design course at Cleveland State University conduct photo ethnography as part of a 48-hour self ethnography project. After research is complete, they must identify a problem or need in their lives and suggest a design-led solution.



TACTIC:
SELF ETHNOGRAPHY

What is it?

Self ethnography (also referred to as auto ethnography) is an investigative method where an individual documents his or her own experience, acting as both researcher and participant. In a design context, the researcher/participant engages in an activity specific to the intended audience in an effort to better understand the users' experience firsthand.

What can it do?

Self ethnography provides a personal lens into the world of the user. It allows the design team to familiarize itself with issues relevant to its audience, gained through primary interaction with the activities, products, or services under investigation. It is used to gain a deep understanding of specific experiences, and to look for ways to enhance or improve them. This first-person participation establishes a depth of empathy, revealing issues that may have gone unnoticed in other information collecting methods. Because the researcher is directed to be hyper-aware and document every detail, self ethnography can even reveal new insights in commonplace situations.

Self ethnography is a useful tool to kick-start the primary research phase of a project. It doesn't require the recruitment of prospective research participants, and the associated screening, scheduling and coordination related to other types of field research.

How is it used?

Information collected during self ethnography can take the form of field notes, user diaries, photography, and video, that can then be shared with the creative team for analysis.

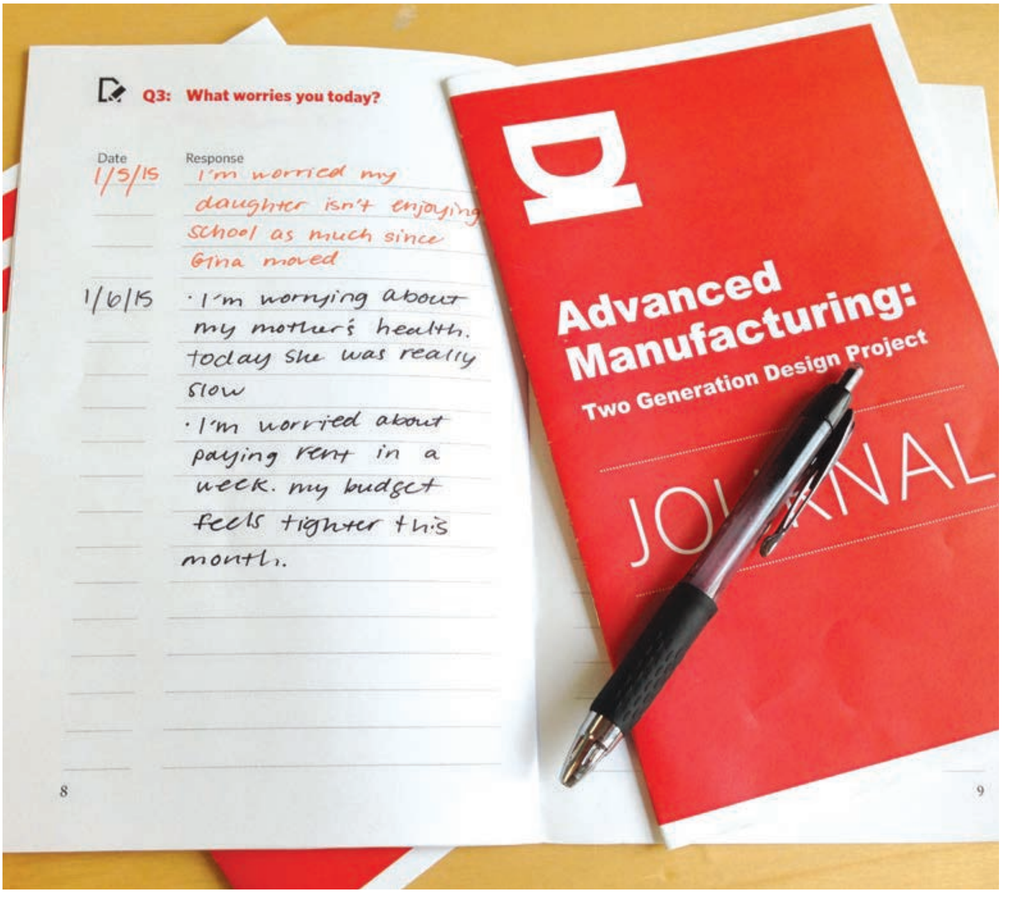
Like contextual inquiry, insights collected from self ethnography can be aggregated into experience maps, which document the activity from start to finish. Research gathered from multiple participants can be cross-referenced to reveal opportunities for design intervention. The assembled findings can be shared with project stakeholders and used to provide rationale for future decision making. (Read more about contextual inquiry on page 52, and experience maps on page 124.)

When is it used?

Self ethnography is used at the start of a project, helping to frame the design problem. Insights gained through the personal experience of self ethnography can formulate additional research questions and help plan subsequent research activities.

Design Impact in Cincinnati, OH, uses ethnographic journaling as a tool for self-reflection. The journal shown here was part of a project focusing on removing employment barriers for women in manufacturing.

Level of difficulty/complexity?
Self ethnographic studies can be immersive, and require the researcher/participant to be reflective and honest about the experience. Repeating the experience, recording multiple rounds of observation and reflection, will provide more observational validity. Because self ethnography relies on an individual's perspective, if possible, assign more than one researcher/participant to collect data. Sending more than one person into the field provides a broader perspective of the experience being studied and accounts for personal biases.



TACTIC: **UNSTRUCTURED INTERVIEWS**

What are they?

Unstructured interviews are an information gathering tactic where the researcher allows the participant to guide the direction of the interview.

That is not to say that the interviewer doesn't do extensive secondary research on the area to be discussed! A list of topics to cover and a set of questions are prepared in advance. The goal of this tactic is to foster a comfortable rapport with the research participants, letting them openly describe their understandings, feelings, and interpretations in their own words.

What can they do?

Unstructured interviews allow the researcher to see through the eyes of the respondent, uncovering relevant information specific to that individual or group. They can reveal primary knowledge of the participant's beliefs, interests, and opinions. Often the information gathered was known only to the participant, so an unstructured interview may also reveal areas of opportunity for the project not previously imagined by the designer.

How are they used?

Use unstructured interviews to help frame a problem. The information gathered can determine project objectives or priorities. Here are some tips for successful interviews using this tactic:

- Craft a plan. Before the interview determine what kind of information you want to collect, and draft the questions that you want to cover—but be adaptable should the conversation go in different directions. Adhering to a list of questions too closely can impede the organic nature of the dialog.
- Ask open-ended questions. The structure of your questions should allow participants to answer in their own words. Avoid yes/no questions, or questions that can be answered in a single word.
- Be persistent. If a participant doesn't provide adequate feedback to a particular question, come back to it from another direction later in the session. If an answer is unclear, ask for clarification. When applicable, ask the participant to show you or teach you how to do something (even if you're already familiar with the task).
- Use human nature to your advantage. We're all uncomfortable with pauses in conversation. If you feel participants are not providing adequate feedback to your questions, don't say anything after their response. Be sure to look them in the eye and smile, but wait. Forcing them to fill the empty space can lead to richer answers.
- Bring a friend. Often, taking field notes while conducting the interview can be difficult because you're focused on two things at once. Bring along a partner to take notes and pay attention to body language so you can focus on the conversation. Afterward you and your colleague can compare impressions; two opinions provide more observational validity.

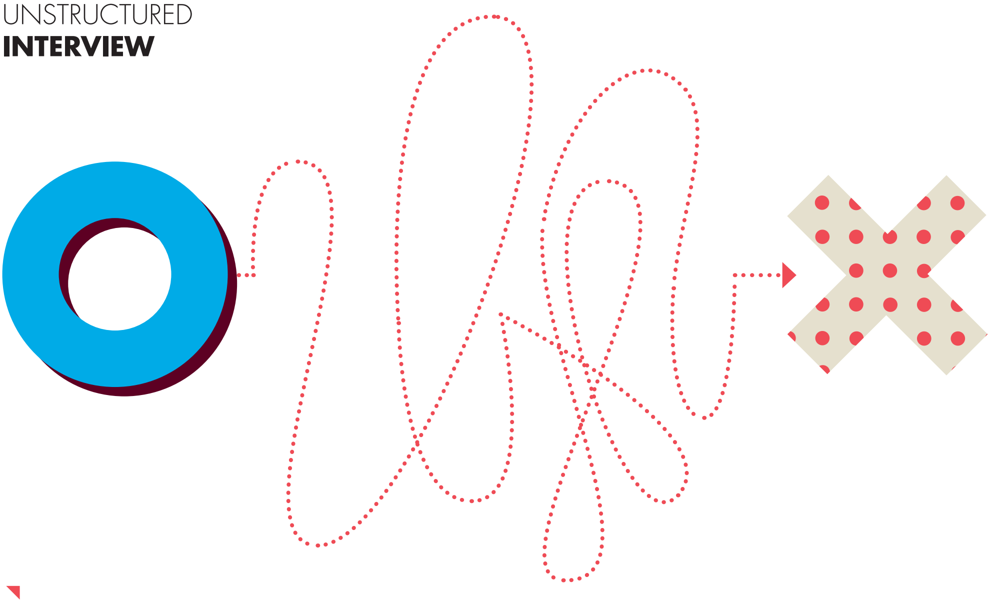
When are they used?

Unstructured interviews are a formative activity, generally scheduled at the beginning of a project to help establish context, confirm, or invalidate assumptions from secondary research, and reveal concerns relevant to the user. This tactic is particularly useful when engaging with a new experience, problem, or group of people.

Level of difficulty/complexity?

Conducting unstructured interviews is relatively easy, but does require some practice on the part of the interviewer. People skills are essential. The researcher needs to be comfortable with letting the participant lead the dialog. This may mean multiple interviews will be necessary to cover all areas relevant to your study.

UNSTRUCTURED
INTERVIEW



Unstructured interviews allow the participant to drive the conversation, sometimes meandering into unknown areas. While more time consuming, the unstructured approach allows for deeper exploration of participants' unique perspectives—in their own words.

TACTIC: VISUAL ANTHROPOLOGY

What is it?

Visual anthropology is another field research tactic that uses visual media to aid interpretations of cultural behavior. Visual anthropology differs from photo ethnography by placing the camera in the trained hands of the researcher rather than in the untrained hands of a subject. These investigations can help to illuminate an etic, or external, perspective of the community under study ("How are the elderly viewed by others?"). Visual anthropology may also include a review of cultural representation in areas such as performance, museums and cultural institutions, art, film, and mass media. In these cases the investigation provides a secondary emic perspective, answering a question such as "How do the elderly view themselves?" by reviewing artwork created by octogenarians, or films directed by Clint Eastwood when in his eighties.

What can it do?

Visual anthropology provides a collection of discernible samples that help the researcher gain insight into the common cultural understandings of the community being studied.

How is it used?

Use visual anthropology studies as a method of documentation, augmenting other ethnographic research practices to illuminate understanding of a target group.

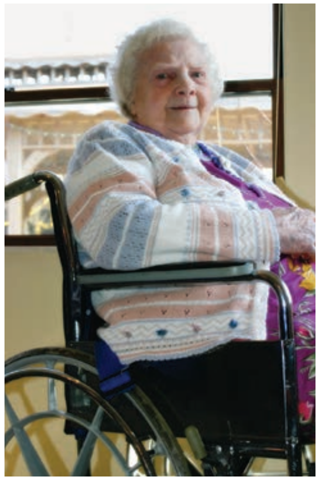
When is it used?

Visual anthropology, similar to photo ethnography, is suited to formative research. Visual anthropology can help determine the behaviors, attitudes, and preferences of the target audience. Using visual anthropology as a tool may help the designer discover previously unknown factors. Information attained using this tactic can help define a problem or formulate a hypothesis.

Level of difficulty/complexity?

This method of documentation addresses the problems inherent in photo ethnography by placing the lens in the hands of a trained researcher, through whose objective vantage point the relevance of events and symbols are cataloged. However, issues of observational validity still occur because the subject is aware of being under observation and thus may not behave in a truly candid fashion.

Visual anthropologists can assess an external view of a specific group by examining how that group is represented in the media. For example, a quick scan of these images might indicate that perceived concerns of the elderly are retirement, grandchildren, and health care.






EXPERT **VOICE**

Ashwini Deshpande
Founder, Director & Practice Head
Elephant Design, Pune, India

MULTI-CULTURAL ASSIGNMENT, MULTILATERAL RESEARCH

Row 1: Turkey, Morocco
Row 2: Laos, Russia
Row 3: India, Sri Lanka

In creating a retail presence for a new shampoo, we faced enormous challenges that required intensive and unique research. Our large corporate client markets everyday and luxury necessities internationally, but had only focused on developed countries.

Our client was looking to tap into the endless opportunities in the markets of developing nations. They knew that the developing world buys and sells goods differently and that methods of retail communication used in modern retail are not effective in those countries. This client has presence throughout the world, so we examined buying and selling tactics in eighty prominent developing countries and found similarities in the stores across these regions.

Most developing markets feature small, locally run shops that have disorganized and cluttered retail displays. Beauty soap may appear next to a box of biscuits or even a pack of cigarettes. Additionally, these markets do not have a steady supply of electricity and often face extreme weather conditions.

Research helped us develop a deep understanding of the diverse cultures being examined so we could create designs that would work in a wide variety of developing regions. Our challenge was to come up with retail design solutions that would reinforce global brand equity, answer some of the issues that our research exposed, and attract shoppers in small corner shops across all these regions.

Since the purpose of this exercise was to understand the possibilities and limitations of traditional, compact shops, extensive photo-documentation and classification of shops across all relevant markets was required. Research was done by local client teams, our partners from The Design Alliance in Asia, and designer friends from Eastern Europe, the Middle East, and Latin America.

Along with photographs, we collected some basic information about the shops. This primarily consisted of floor area, orientation, shop layouts, illumination, display space, display patterns, frequency of change, and other factors.

This research was followed by three other elements:

- Shopper observations: The people purchasing consumer goods in developing nations are almost always female. Our teams observed the shopper's path, focus, concerns, angle of vision, questions to the shop's staff, and the relation between her shopping list and actual purchase, as well as what she noticed first, and whether it had any impact on her purchase.
- Unstructured interviews: Along with a research company, our team interviewed shoppers to get insights into preferences for colors, shapes, and materials. These interviews also helped us classify the preferences of planned shoppers and impulse shoppers.
- Focus group discussions with shop-owners: This was done with the help of a research agency. We worked with five groups of shop-owners to get their understanding of shopper behavior and successful display ideas. They also provided insights on the effects of weather, certain colors, materials, shapes, maintenance of point-of-sale devices, power consumption, and other factors.

Based on our analysis of the above, Elephant came to the following conclusions:

- Product placement is crucial for the impulse shopper, while the planned shopper wants the product to be on the same shelf every time.
- The most crucial time to engage a shopper is when she is standing at the counter, waiting for the staff to find the product from her list.
- Anything in the line of vision during this wait is noticed and registered.
- Movement, unusual shapes, shine, glitter, shimmer, and sound attract attention.
- Although any promotion outside the shop is easily seen by the passerby, the shopper may or may not notice it. When she enters the shop, she is either placing her car keys inside her bag, finding her shopping list, returning the phone call she had to miss while driving, or is otherwise distracted.
- If a counter is very crowded, the shopper concentrates on her money rather than displays.

These findings became the brief for point-of-sale and shelving devices for the shampoo brand in developing countries. Without the research, a well-defined brief could not have been achieved, and as a result, the design solutions may have been inaccurate.

STRATEGY: **MARKETING RESEARCH**

Marketing research and market analysis are two frequently confused terms. Marketing research is a form of sociology that focuses on the understanding of human behavior as it applies to a market-based economy. The term does not refer to a singular research method but rather a multilateral strategy used to describe a broad sampling of research practices surrounding consumer preferences.

TACTICS COVERED:

Demographics + Psychographics (p 68 + 69)
Focus Groups (p 70)
Surveys + Questionnaires (p 72)

RELATED:

Contextual Inquiry (p 52)
Observational Research (p 54)
Unstructured Interviews (p 60)
A/B Testing (p 76)
Card Sorting (p 80)
Personas (p 90)

Market analysis, in contrast, is a quantitative business tool that measures the growth and composition of markets or business sectors. Market analysis considers elements such as interest rates, stock performance, price movements, and other measurable statistics that define the financial climate in which a business operates.

For example, a manufacturing company might commission a market analysis to determine trends in outsourcing fabrication to foreign countries to help advise an appropriate location for its next assembly plant. In this instance, that same manufacturing company might commission marketing research to determine the opinions of consumers regarding the need for a new version of a classic product. Would a new version be covetable? Would a new version replace the classic model, or is there enough consumer loyalty to support both?

Marketing research can be used to gather information about any number of marking related issues, including new product launches, brand equity, consumer decision-making processes, the effectiveness of advertising, and even leveraging against competitors.

Depending on the question being asked or the issue under investigation, marketing research can be either qualitative or quantitative as well as formative or summative. Qualitative practices may include such tactics as focus groups, interviews, or other observational techniques. This approach often samples randomly from a large population, conducting surveys or distributing questionnaires that are then statistically scored. In an exploratory (formative) role, marketing research can be used to determine an area in need of investigation: Would the market support an offshoot of this brand specifically targeted at teenagers? In a conclusive (summative) role, marketing research can be used to better understand such things as the effectiveness of an advertising campaign or consumers' opinions regarding new or existing brands and products: What were teenagers' new brand perceptions, and did they prefer the original?

As with all well-designed research plans, the results yielded by marketing research are the most accurate when several different tactics are used to inform a conclusion, rather than depending on one tool to determine the results.

TACTIC: DEMOGRAPHICS

What are they?
Demographics are collections of statistical data that describe a group of people or a market segment. Demographics generally include information on a variety of quantifiable cultural, economic, and social characteristics.

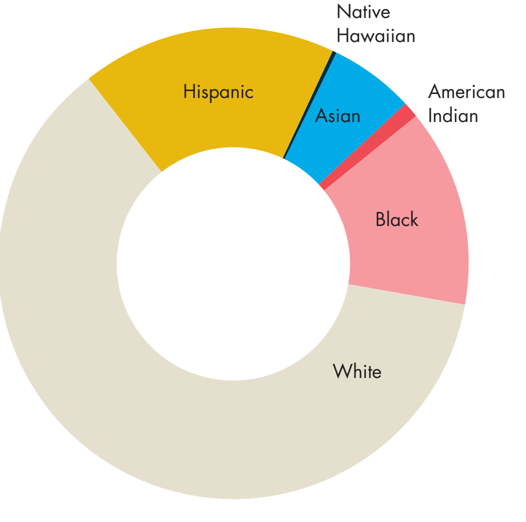
What can they do?
By grouping people into segments based on demographic variables, researchers can use the collected data to create hypothetical profiles. This research tactic can provide insight regarding what groups of people are doing, thinking, or buying. Common demographic variables include age, gender, sexual orientation, household size, personal income and family income, education, race, and religion.

How are they used?
Researchers study demographic data to clarify their understanding of the needs and motivations of individual market segments.

When are they used?
Demographics provide formative information and therefore should be used at the start of a project to define an audience.

Level of difficulty/complexity?
Marketing research firms can be hired to conduct primary demographics using proprietary resources and software. In addition, access to demographic information collected by both for-profit and nonprofit organizations is widely available as a form of secondary research. It is important to note that demographic profiling often makes broad generalizations about groups of people that do not account for the unique qualities of individuals—who may not always behave in the predicted fashion.

U.S. **RACE + ORIGIN**



Demographics collects information from objective data. For example, this chart shows the macro breakdown of race and origin of the U.S. population from information collected by the 2010 U.S. Census.

TACTIC: **PSYCHOGRAPHICS**

What is it?
Psychographics are a quantitative tactic used to measure subjective beliefs, opinions, and interests. In other words, this tactic is a quantitative tool for measuring qualitative information. Similar to demographic research, which gathers data on age, gender, race, and other factors, it instead counts information about opinions, religious beliefs, music tastes, personality traits, and lifestyles.

What can it do?
Psychographics can help the researcher gain valuable insight into the opinions and preferences of the groups being studied.

How is it used?
Use psychographics in a manner similar to the way you'd use demographics, keeping in mind that psychographics measure inherently subjective data. This research tactic, whether employed in a primary or secondary fashion, will help you clarify a creative approach by illuminating a target market's opinions and preferences.

Though demographic and psychographic research may seem similar, psychographic research attempts to quantify subjective information, such as opinions, beliefs and lifestyle choices.

When is it used?
Psychographics can be used for problem identification or problem solving. It is best used in the early phases of the design process in conjunction with demographic research, ethnographic research, and personas.

Level of difficulty/complexity?
Most designers outsource primary psychographic studies to marketing research firms who specialize in the process. Often these are undertaken in conjunction with demographic investigations of the same group. Secondary psychographic data may be more readily available and thus more cost effective, but, as previously noted, will not be customized to the target market.

DEMOGRAPHIC	PSYCHOGRAPHIC
Age	Values
Gender	Lifestyle
Race	Attitudes
Location	Beliefs
Income	Interests
Education	Opinions

TACTIC:
FOCUS GROUPS

What are they?
Focus groups are a social science tool used prevalently to conduct market research. Focus groups are organized discussions with a limited number of participants, led by a moderator. The goal of these discussions is to gain insight into the participants' views about a given topic. Unlike survey research, which is primarily quantitative, focus groups are qualitative exercises because they allow the researcher to understand the opinions and attitudes of the respondents. This type of research is different from the similar methods of one-on-one interviewing and group interviews, as it allows for interaction among the participants.

What can they do?
Focus groups allow for interpersonal communication and interaction between participants. This kind of dialogue can lead to new topics of discussion originally unforeseen by the researcher. Additionally, participants know that their opinions are valued, or that they are considered experts—leading them to feel ownership of the process and provide possible solutions. Also, focus group research can be done relatively quickly without huge demands on time and fiscal resources. Qualitative in nature, focus groups don't require the same number of participants/responders as survey or poll research and can therefore be assembled and evaluated in a more timely fashion.

How are they used?
Moderating the session well is key to collecting viable data. It is important to make sure that participants stay focused on the questions asked, while giving them room to deviate should new issues arise. All participants must also feel that they are being engaged by the group and feel comfortable enough to participate in the discussion. Most important, the moderator must stay neutral so that he or she does not ask leading questions that might skew participant responses.

Focus groups usually consist of six to ten people. If the group is too small, the conversation may lag or be dominated by a few individuals. Conversely, if the group is too large, discourse may become too difficult for the moderator to facilitate. Large groups may also lead to distracting side discussions among respondents or cause some participants not to engage in the dialogue at all.

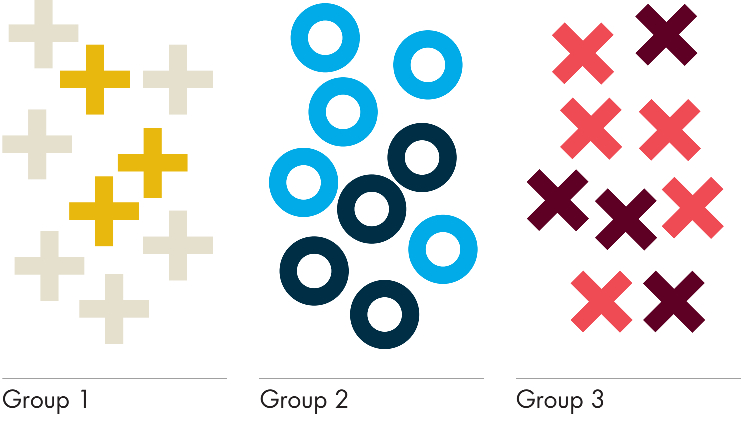
Individual background is an important consideration when selecting participants. It is essential to choose people with similar characteristics, backgrounds, or interests so that they feel comfortable talking to one another. If respondents are on the opposite ends of an issue, the conversation can become heated, preventing a free exchange of ideas. Depending on the subject, several focus groups may have to be held in order to get a representative view of the issue. People also feel more comfortable sharing their opinions with people they don't know, so limit focus groups to individuals that have no prior history with one another.

When are they used?
Focus groups can be formative or summative depending on the nature of the design problem that they are addressing. This research tactic can be used to collect new information before a project starts. Or at key points during an iterative creative process to get feedback from potential users in order to refine prototypes. (More on iterative design on page 105). As summative evaluation, focus groups can be used to assess the acceptance of a new campaign or gauge customer satisfaction levels.

Level of difficulty/complexity?
Though focus group research has many benefits, there are a couple of potential conflicts to take into consideration. As with most group dynamics, dominant personalities may sway the opinions being expressed in a certain direction. Careful selection and good facilitation on the part of the moderator can help circumvent this issue; therefore hiring or assigning trained moderators is a good investment in the success of the survey. Additionally, the results of focus groups are based entirely on the assumption that the people participating are being totally honest. Often, what people say they do is radically different from what is really happening. Preparing for these scenarios, and supplementing focus group research with other forms of information gathering, will lead to more accurate results.

FOCUS GROUP **DYNAMICS**

While diversity of opinion is essential to focus group research, to ensure a free-flowing dialogue among participants, be sure to group together 6–9 people who have similar experience. Radically divergent opinions can create conflict. To ensure validity of your findings, conduct more than one focus group, each representing a different type of end user.



TACTIC: SURVEYS + QUESTIONNAIRES

What are they?

Survey research is a tactic for collecting quantitative information by asking participants a set of questions in specific order. Questions are administered to a sample of individuals, representative of a larger population. If a researcher administers the questions, it is called a survey or structured interview. If participants answer questions on their own, either online or by filling out a piece of paper, it is called a questionnaire.

What can they do?

Surveys and questionnaires can be used to collect information about the opinions and preferences of a defined group, or to collect factual information, such as a census report. These investigations give the researcher the ability to collect large amounts of information from a wide population in a relatively short amount of time. Questions should be written and structured in ways to increase the reliability of valid findings; therefore, trained experts are the best resources for developing this content.

How are they used?

Use surveys and questionnaires to gather demographic (fact-based) or psychographic (opinion-based) data.

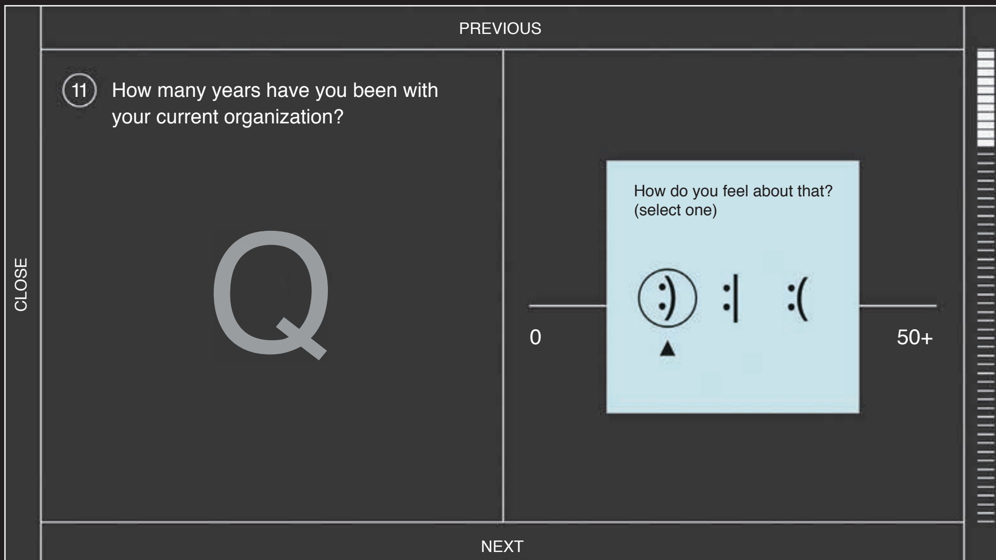
When are they used?

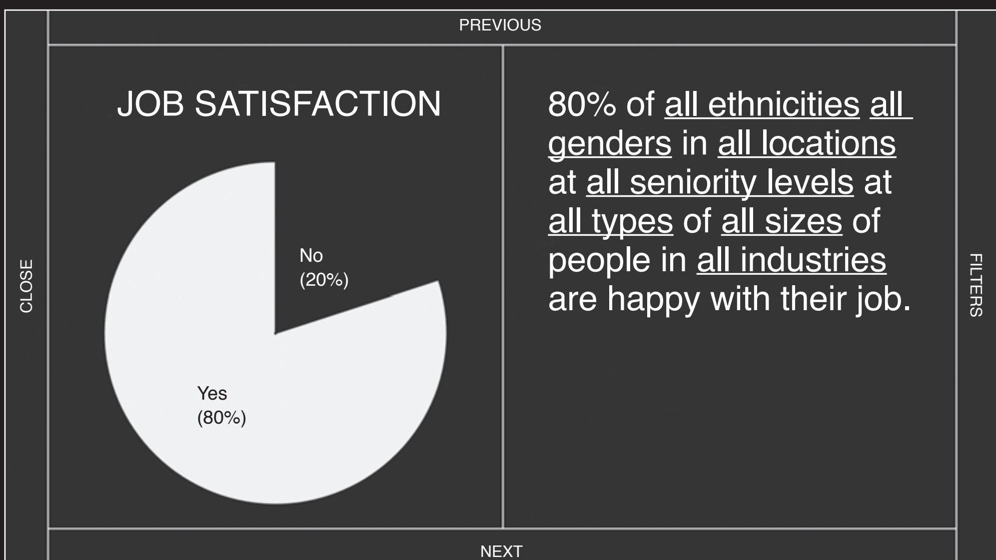
Use surveys as formative research, to gain insight into the opinions and desires of the target audience. This information can then be used to guide design decisions during project development. It can also be used as summative research, to support or confirm creative solutions, or to understand the effects of a creative campaign. For example, a group of frequent online shoppers may be asked to fill out a questionnaire regarding new features just added to the website they are using. Responses can be used to determine whether users are satisfied with or confused by the new tools.

Level of difficulty/complexity?

Survey research can be a cost-effective tool for gathering information from a large population, and there are many companies and organizations that can be retained to help construct and administer questions. Because of the complex structure, writing, and scoring inherent in survey research, working with a specialist will help increase accuracy—missteps along the way can lead to invalid results. However, if there is no budget for outsourcing, tremendous amounts of information are available in the public domain to help guide the process.

The Design Census is a collaboration between Google Design and AIGA, the professional association for design, adapting the later organization's long running salary survey into a comprehensive





online questionnaire. intended to provide a broader picture of economic and cultural factors influencing the field. The collected data, gathered voluntarily from design professionals around the globe, is free and available to the public. The organizations also produce reports and curate visualizations from the information gathered by the census.

Sample questions are shown above. You can explore the Design Census at DesignCensus.org.

STRATEGY: **USER EXPERIENCE**

User experience, also sometimes called user experience design, employs a broad range of techniques designed to measure a product's ability to satisfy the needs of the end user (accessibility, functionality, ease of use) while also meeting project requirements (budget, size, technical requirements).

TACTICS COVERED:

RELATED:

The research methods employed in user experience are most commonly used in interactive and web design, but many of the concepts can apply to any product intended for human use—digitally delivered or otherwise.

Usability in interactive and web design has been linked to several key performance indicators:

- Staying under budget: User testing in the early stages of development, as formative research in an iterative design process (more on iterative design on page 105), will ensure that usability hurdles are cleared before the project moves to production. Correcting usability issues after a project is launched can cost significant time and money.
- Higher ROI (return on investment): High usability, through user testing and iterative design, can lead to increased sales, business leads, and lower customer support costs.
- Increased customer satisfaction: Sites designed with user testing practices will provide positive viewer experiences, leading to higher customer satisfaction and positive brand associations.

Many corporations and universities specialize in advanced usability testing for web and interactive media and have labs designed around those specific purposes. User participants are asked to complete a set of “tasks”: for example, locate a press release, purchase something with a shopping cart, or live chat with a company representative. They are not given any step-by-step instructions or guidance, so the lab environment mimics a typical user experience. Participants are timed throughout the process, and often observed through double-blind mirrors. In some cases, these labs have technology that can record, in real time, the movements of a user’s eyes as they navigate information on the screen. This data can be compared with the movements tracked by the user’s mouse, illuminating the user’s perspective on active content. Though expensive to undertake, this kind of detailed analysis is often invaluable.

TACTIC:
A/B TESTING

What is it?
A/B testing evaluates two different design solutions, testing each with a unique group of users to measure feedback and responses. Subsequent comparison of the feedback collected from both groups helps determine which iteration is more successful.

What can it do?
A/B testing allows for comparative analysis of design solutions. In some scenarios, testing proposed designs against existing collateral allows the creative team to gauge the effectiveness of new aesthetics or concepts. It can also be used to evaluate or update specific components of a design, such as changing navigation, or adding new features or tools. In an online setting, A/B testing can be done while a site is live, redirecting some users to option A and others to option B, collecting actual user data over a period time for analysis.

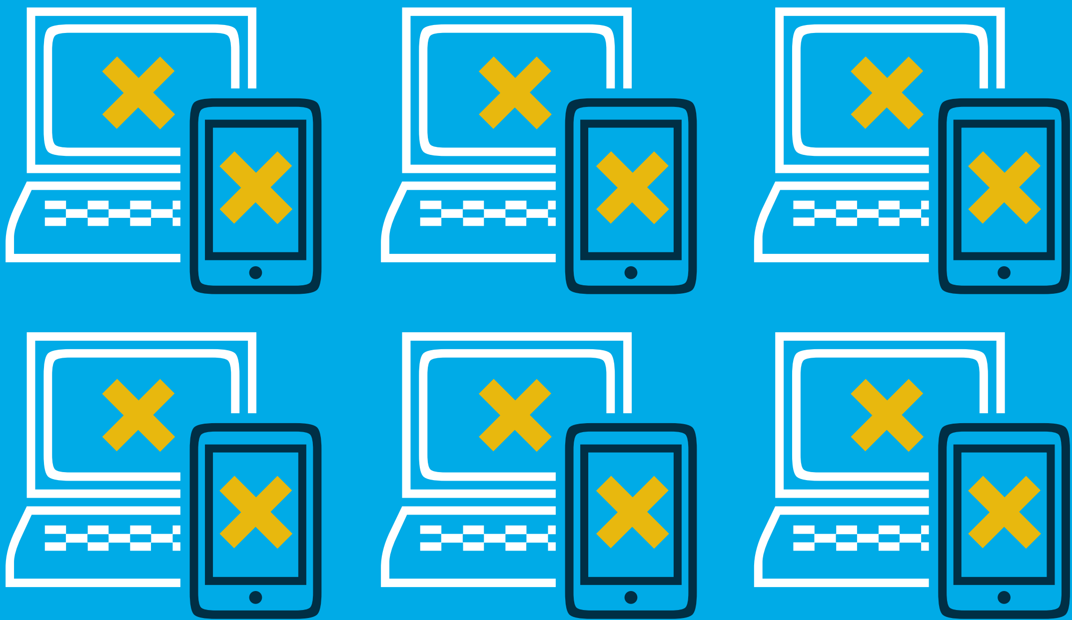
How is it used?
A/B testing can be used as part of any research plan, but is most commonly associated with user experience design projects. This process can help evaluate the success of design iterations or address specific, documented usability issues. In these instances it's important to test incremental change, to determine how minor variations in design influence user feedback. It is difficult to determine which variable a user is responding to when radical changes are shown. Feedback is only valid if the test group resembles the intended target audience.

When is it used?
Use A/B testing to evaluate new concepts, address existing problem areas, or assess proposed changes. The process produces insights before costly, time-intensive development phases begin.

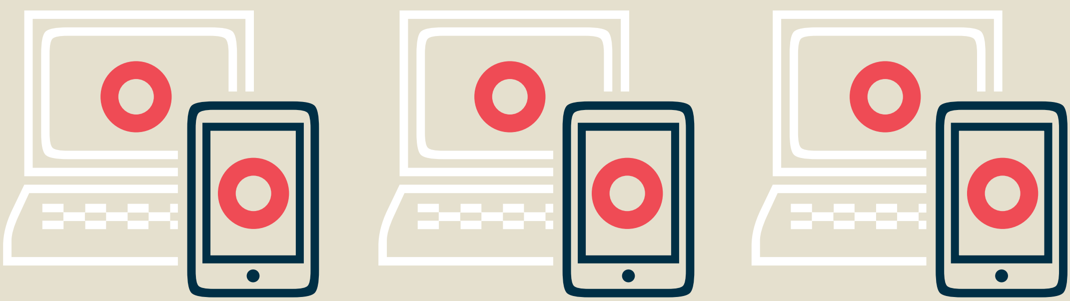
Level of difficulty/complexity?
On a basic level, A/B testing can be done quickly and inexpensively on any type of design project by establishing a "control" to test against (often an existing design), and developing the parameters for assessment (ex: Does new photography improve the experience?). When A/B testing, it is essential to establish a clear, specific question that can be answered through the testing process. If this is not defined, iterations might continue indefinitely.

For online projects, there are many third-party resources to help plan and execute A/B testing, providing quantitative results through web analytics.

TESTING GROUP **A**



TESTING GROUP **B**



During AB testing two different design solutions are tested, each with a unique group of users. The research team then performs a comparative analysis of the results to determine which design is more successful, relative to project goals.

TACTIC:
ANALYTICS

What are they?

Analytics, sometimes referred to as web statistics or technographic research, are a form of quantitative analysis that uses concrete metrics to track user behavior online. A designer can gain valuable insight into the users' needs and interests by measuring key variables through the course of a user visit.

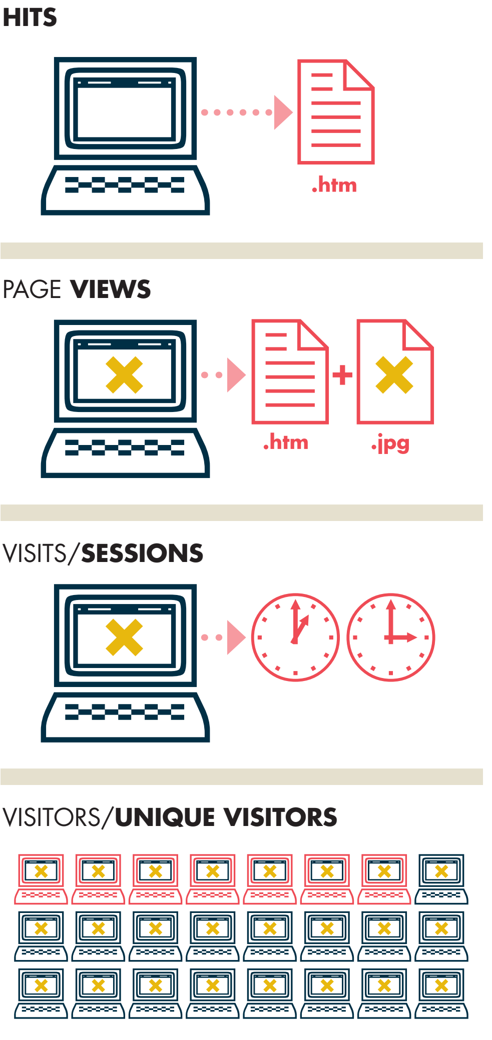
What can they do?

Analytics can provide the designer with a lot of information about users' viewing habits. For example, a designer can tell where users have come from (both via geographic location and via referring web domains); which pages are being visited most; how long users are staying on those pages; how long they stay at the site as a whole; at which times of day people are looking; and the bandwidths they are using to connect. These statistics may help the designer when thinking about where and when to run ads, whether the site is being viewed at work or at home, and can also help inform future technical considerations such as the use of video or complex interactive features.

How are they used?

Looking at technographic data for the first time can be daunting. Listed below are some of the basics to get you started:

- Hits: A hit is a request for any file from a web server. For example, when a user requests a webpage that has two images on it, that request will result in three hits. One hit is for the page, and one for each of the images, because all of those files are necessary to display that individual page.
- Page Views: Page views are a more accurate measurement of web traffic because they indicate the use of individual pages rather than server hits. As stated in the example above, a single page view might result in several server hits because of image files, style sheets, and so on.
- Visits/Sessions: A visit, or session, is the amount of time that a user spends on a website. For example, if a user requests a page and stays at that page for thirty seconds, that counts as a visit. When the amounts of visits are totaled for an extended period of time, the amount of traffic to the site can be determined.
- Visitors/Unique Visitors: These terms refer to a user who visits a website more than once within a specified period of time. Web stat software is able to differentiate between visitors who come only once to the site and unique visitors who return. This information differs from a site's hits or page views—which are measured by the number of files that are requested from a site—because they are measured according to the users' IP addresses, which are unique to every computer on the web.



Hits: A request for any file from a web server.

Page Views: A measure of how many times a single "page" has been viewed.

Sessions: The amount of time a user spends looking at a single page.

Visitors: Differentiating new users from those who frequent regularly.

When are they used?

Web analytics can produce formative and summative data. In a formative role, they can help the designer understand which features or content users find valuable in a current design. This information can then direct future iterations. In a summative role, they can tell the designer whether a redesign has increased visits, or whether a new feature is being used.

Level of difficulty/complexity?

Hosting providers for websites often supply web analytics software. Often the tools provided go far beyond these basic functions and include features that indicate the user's platform, bandwidth, peak usage hours, and even location. More comprehensive web analytic studies can be outsourced to companies that specialize in evaluating this type of data. Those firms have developed proprietary tools that go beyond what a web hosting company can provide. While this information may seem to be web-centric, the information gathered from web metrics can also help inform broader campaigns by indicating which types of information interest users and where users are geographically clustered.

TACTIC:
CARD SORTING

What is it?

Card sorting collects feedback about information architecture by allowing participants to organize content in hierarchies that make the most sense to them. Subjects are given numbered cards, representing content, and asked to structure that information in a logical sequence. Each sort can be recorded, providing measurable data for the design team. While the sorts are scored, they measure subjective opinions, making it a qualitative exercise. Card sorts can reveal audience preference for different types of content, methods of communication, features, tools, or even ideas.

What can it do?

Card sorting helps establish logical hierarchies of information, and identify user preferences and priorities. It's also a simple way to engage an audience, allowing them to create structures that are meaningful and relevant to them. That's why this method is also useful when engaging new clients or starting new projects. Performing sorts with key stakeholders can help everyone agree on the relative importance of project goals. In this context, card sorting is used as a communication tool and consensus builder between designer and client.

How is it used?

There are two ways to approach card sorting:

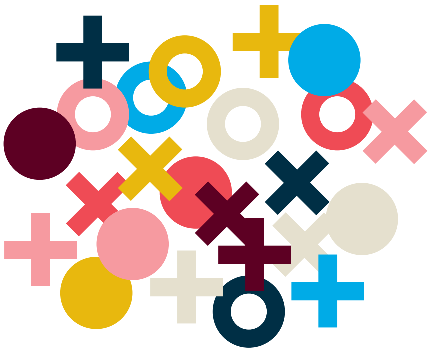
Open Sort—Subjects are presented with randomized cards then asked to organize them into representative groups, labeling the resulting clusters in their own words. Participants are asked to group like cards and structure hierarchies. In some cases, blank cards are provided for adding information to the deck. Open card sorts tell researchers how people organize and label information, and/or how they prioritize content, functions, and features.

Closed Sort—Subjects are given cards and asked to place them in categories predetermined by the design team. Closed sorts confirm the findings of previous open sorts and other research methods. They can also be helpful integrating new content or tools into existing designs.

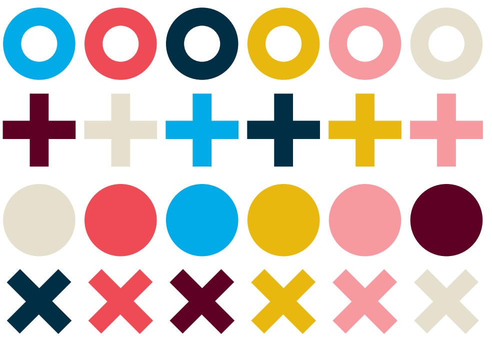
When is it used?

Card sorting is a formative tool. Use it early in your process to clarify areas of uncertainty or confirm original assumptions. When conducted in person, this method is especially valuable because it helps begin a dialog between the creative team and their audience. Researchers can ask why decisions are being made, and encourage the participant to expand their discussion beyond the cards provided.

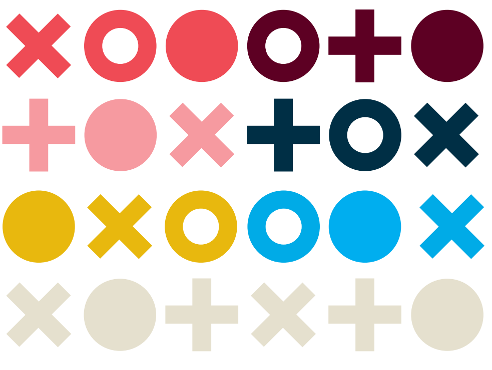
CARD **SORTING**



ARRANGEMENT BY **SHAPE**



ARRANGEMENT BY **COLOR**



Level of difficulty/complexity?

Card sorting is approachable. It's often done by hand, utilizing simple and inexpensive tools such as sticky notes or index cards. There are also affordable online tools and mobile apps that allow you to create virtual cards for users to manipulate. These digital sorts automatically tally and collect data, and many present visualizations of the results. Although research teams can certainly tally with custom spreadsheets and create their own reporting tools.

Card sorts require interpersonal communication skills, as it may be necessary to engage participants in the process (similar to conducting an unstructured interview or facilitating a focus group). Whenever possible, bring another researcher along to make observations and take field notes. Often the cards' content becomes a discussion prompt, allowing the conversation to veer in unanticipated directions. That partner can help make sense of unplanned interactions, relating them to project goals.

Card sorts allow subjects to organize information into hierarchies based on their own views, preferences, or experiences. This simplified example shows a sort by color and shape. The key is to allow users to organize information in ways that are meaningful to them.

TACTIC: EYE TRACKING

What is it?

Eye tracking studies the movement, pattern, and duration of the human gaze.

Even when we feel like we're in a staring contest, our eyes are in a constant state of motion. These rapid micro-movements allow the brain to capture sensory data, seamlessly stitching innumerable images together to help us visualize the world around us. Behavioral scientists and psychologists divide these eye movement into three distinct activities: fixations, saccades, and scanpaths.

- Fixations occur when our eyes appear to pause,
- Saccades are the movement between two fixations,
- Scanpaths are the accumulation of a series of fixations and saccades.

Eye tracking research requires specialized equipment. The process is generally conducted in a laboratory setting, where a safe infrared light source is directed toward a subject's pupils. The subject is shown images or content on a monitor placed in front, while a high speed camera captures the infrared light reflected from the subject's eyes. This records the eye's passage across the screen and tracks the associated eye movements.

What can it do?

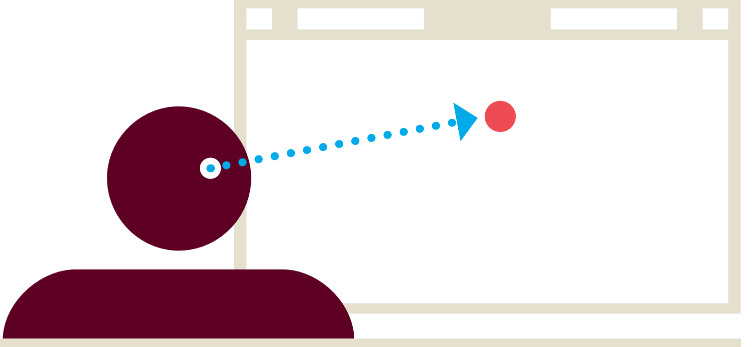
Eye tracking equipment can determine the location and duration of each individual fixation, the subsequent saccades between them, and the length of the total scanpath. This allows the researcher to ascertain what participants are looking at, the order in which they view information, and how long their gaze lingers on specific details. Each participant's test can be documented. The results of multiple tests are often compiled into a visualization called a heat map. Heat maps help triangulate multi-user data, removing the outliers and identifying common movements.

How is it used?

Eye tracking is a component of usability studies for screen-based media, undertaken to evaluate page layout or interface design. Each participant's eye movements can be followed in real time. This means eye tracking can can help researchers understand the way users visually process hierarchies of information, how long it takes them to perform specific tasks or find distinct content.

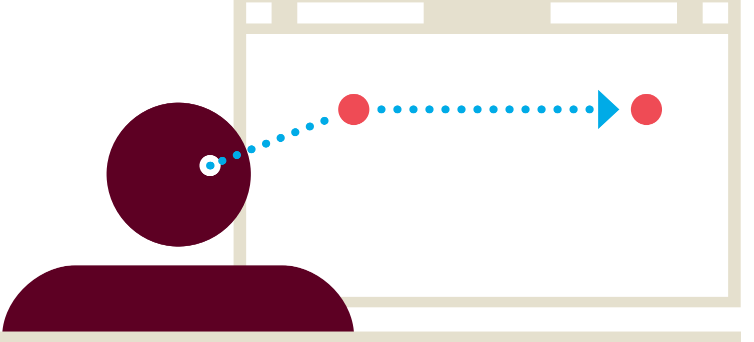
Eye tracking allows the research and design team to literally see through the eyes of the user. It documents how much time they spend reading content or how rapidly they jump from one area to the next—ultimately determining the success, or failure, of page structure.

FIXATION



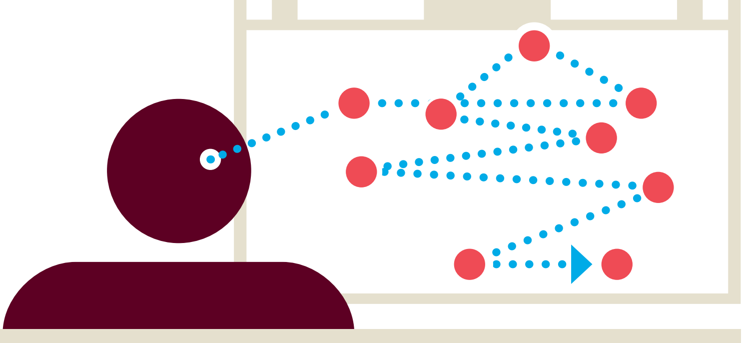
Fixations occur when the eye appears to stop or pause.

SACCADE



Saccades are the paths that connect two fixations together.

SCANPATH



Scanpaths are the total collections of a series of fixations and saccades.

When is it used?

Eye tracking is often used as a part of the diagnostic process when usability issues arise. For example, if users are consistently having trouble performing a specific task, or they are overlooking key page elements or navigational items, eye tracking can tell us what they see and what they overlook. It can also tell us if fixations and saccades move in a logical way, mirroring page structure, or if they are scattered, potentially indicating that the user may be having difficulty with the layout of information. Measuring the length of scanpaths can help optimize productivity. Shorter and more direct scanpaths may indicate information sets are easy to navigate and hierarchies easily understood, where long scanpaths may imply a less efficient structure.

Level of difficulty/complexity?

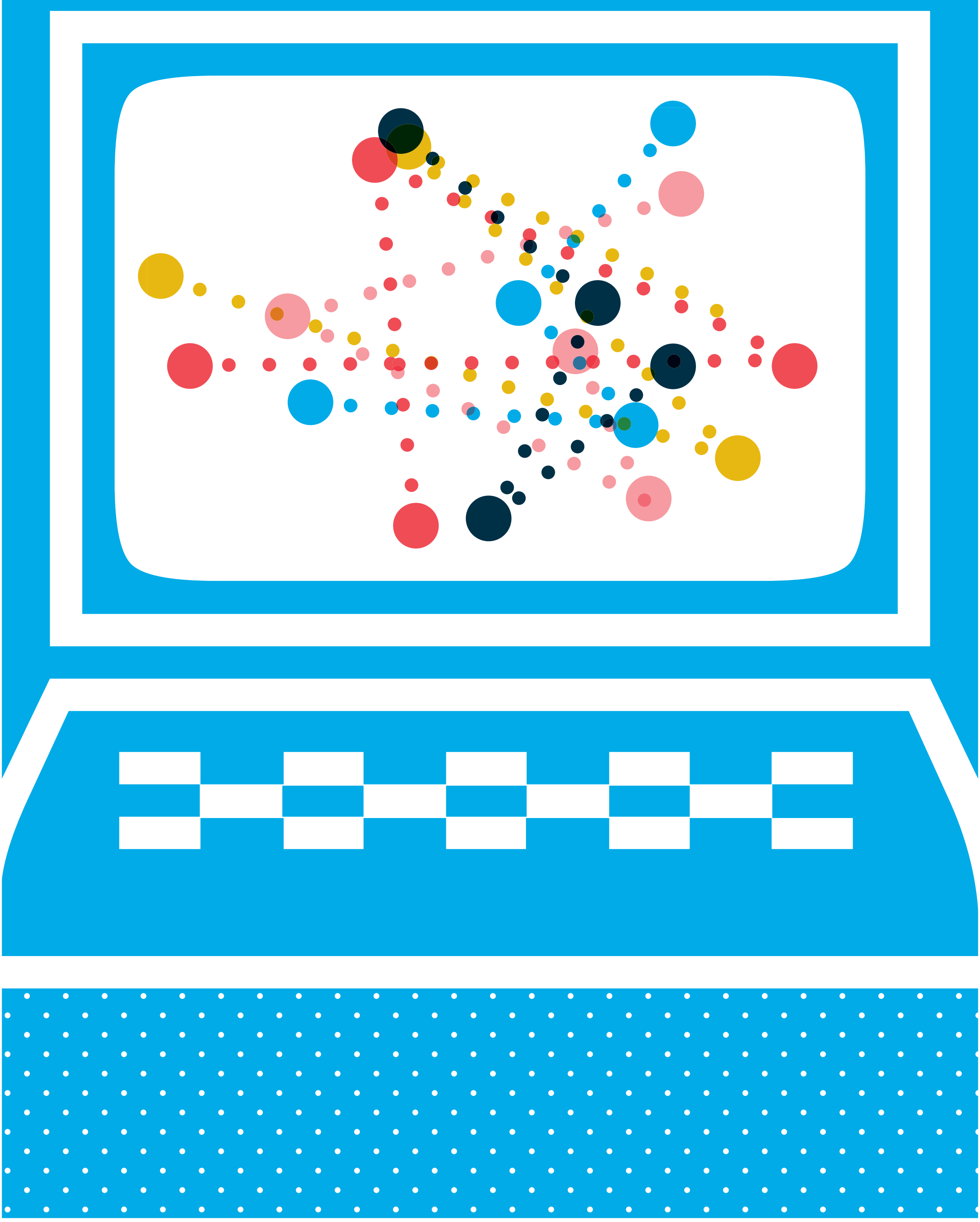
Because eye tracking requires specialized methods, equipment, and software, it often requires the help of an outside resource or third party, adding additional time and cost.

Eye tracking provides a quantitative analysis of user behavior, because each participant's experience is measured and recorded—but it may not always tell the whole story. One complication is that eye tracking only records the path of a participant's direct line of sight, not accounting for peripheral vision. And while the process can show us what the user has been looking at, it doesn't tell us why.

Eye tracking should be used in conjunction with other forms of qualitative testing, such as interviews and contextual inquiry, to establish a broader awareness what users see, value, and understand.

Scanpaths from multiple users can be recorded and then superimposed to create heat maps, documenting the areas of the page most commonly viewed.

HEAT **MAPS**



TACTIC: PAPER PROTOTYPING

What is it?

Paper prototyping is a low tech—even no-tech!—process of testing digital and interactive experiences before programming or development occurs. Users are shown sketches and point to the options they'd pick, moving through drawn or printed sheets instead of finished, interactive digital presentations.

What can it do?

Paper prototyping helps the design team work quickly and gather audience participation from real users. It can identify usability issues with navigation, architecture, or layout before costly investments in development.

How is it used?

Pages or screens are designed for every option (or button) represented in navigation. Users "press" interface elements, and are handed new pages for each option they select. Prototypes can be simple sketches or detailed design compositions. For the test to be valid, it is essential for each and every clickable option to have a subsequent page.

Testing typically involves a moderator who helps guide the user through the experience, handing them sheets related to the design elements they've selected and occasionally asking questions or seeking clarification about specific choices. Other research team members may observe and take notes about the interaction between the user and page elements.

When is it used?

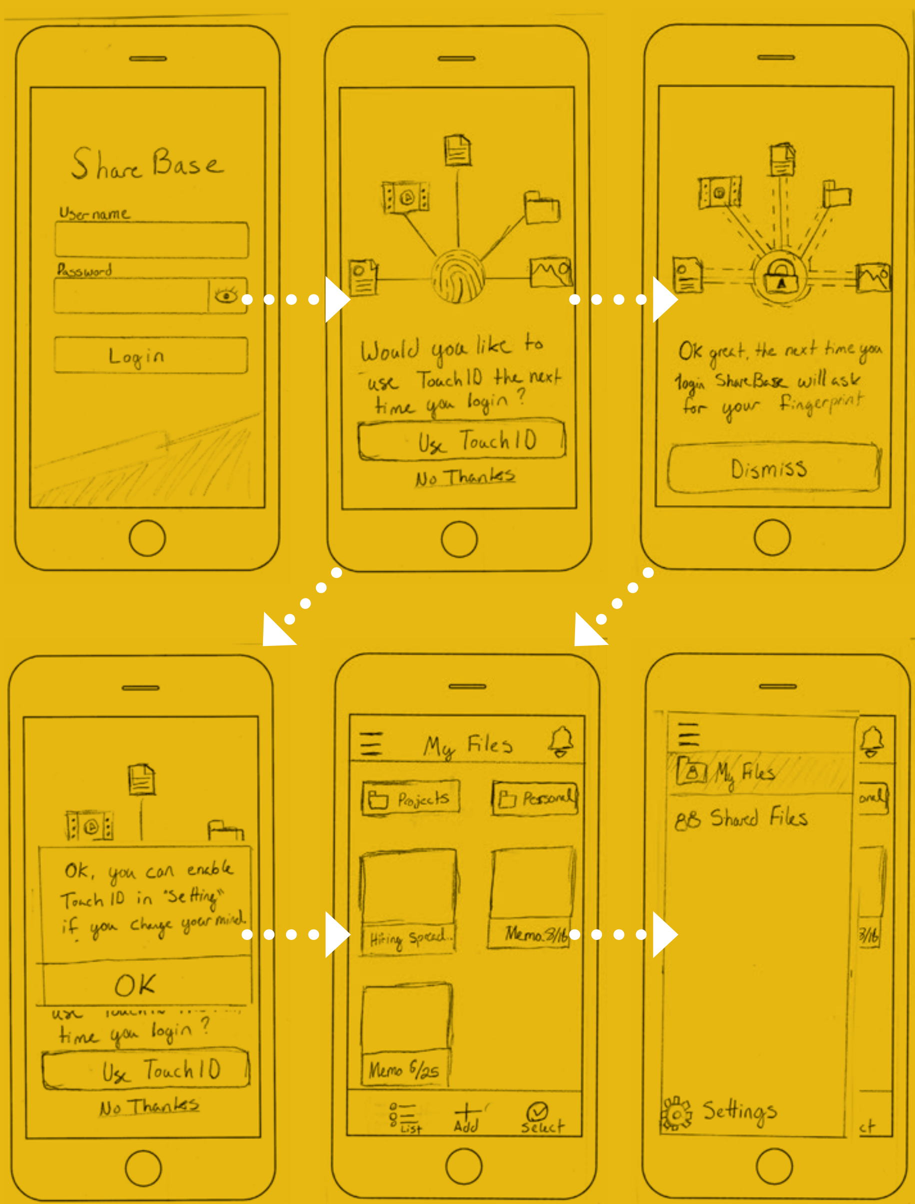
Paper prototyping can influence project development, testing initial assumptions on interface design and architecture. It can also be employed later in the design process, when high-fidelity layouts are complete, as a final assessment before development.

Level of difficulty/complexity?

Paper Prototyping is a quick, approachable, and affordable way to validate design decisions while engaging actual users.

Because paper is a static medium, things such as sound, motion, and video cannot be easily expressed. As interactive environments become more rich, paper prototypes may be limited in their ability to accurately represent finished projects.

This paper prototype was created by Hyland Software's UX team for their enterprise cloud-based file sharing application, ShareBase. *The interaction displayed is designed to persuade people to enable a fingerprint scanner on their device to protect their files. Hyland's UX team tested this paper prototype during user interviews to gauge the features' appeal before investing in development.*


Share Base
User name
Password
Login
Would you like to use Touch ID the next time you login?
Use Touch ID
No Thanks
Ok great, the next time you login ShareBase will ask for your Fingerprint
Dismiss
Ok, you can enable Touch ID in "Setting" if you change your mind.
OK
time you login?
Use Touch ID
No Thanks
My Files
Projects
Personal
Hiring Speed...
Memo 3/16
Memo 6/25
List
Add
Select
My Files
Shared Files
Settings

EXPERT
VOICE

Jenny Lam
Design Director
Amazon.com

COMMON PITFALLS OF USER TESTING IN A DIGITAL AGE

User testing can never answer 100% of the questions, so there will always be the need for leadership that has a cohesive vision of the product that's being created.

In an age where technology really is solving many real problems, what's not to love?

Twitter helps revolutions form. Uber shatters the taxicab monopoly of lousy customer service. Facebook connects you with long lost family. Technology is pretty amazing. And when it comes to user experience, shouldn't we use some of the principles around making our code better to make our user interface better? The answer of course is, yes. Unfortunately for many executives and engineers, "test it with users" is the end of the conversation about whether a user experience design is any good. In reality, that's not why we do user testing.

Here are some common pitfalls to watch out for as you conduct your user testing. These are focused on digital products in tech (web, apps, etc.) but the principles apply across many different canvases.

A/B Testing Old + New Designs: You might be lucky enough to have a design that has a big installed base. Then you can beta test the latest design with a limited set of existing users of the old version of the product. This is a fruitful approach to user testing because these are your likely users. But in this case, it's important to remember, that you are asking your hardcore users to nitpick about changes you've made that they will almost invariably complain about. Users don't like change. They often equate "easy" with "what they know." They may even like the fact that your user interface is difficult because now that they've mastered it, it gives them a sense of superiority. It's really important to take this feedback with a grain of salt. Understand where it fits into the factors that deserve your attention.

Lab Bias:
Most importantly, when it comes to user testing your unreleased design, odds are that your testers are treating this for what it is, a test. They're not necessarily using real data in their natural environments. When it comes to software that affects mission critical data, they'd be crazy to run your beta software in a situation that actually counts. What if it broke? What if it corrupted their file? What if, what if?

Over-Optimizing the First Experience:
Finally, when testing software with new users, it's invariably their first experience. First impressions count, but they take up a progressively smaller percentage of the user's time with the software as they use it. Optimizing all efforts to take user feedback into account around a user's first hour with our software can be like a misapplication of resources.

User testing has a role, and an important one. But user testing is not a crutch that obviates the need for designers to have a clear point of view.

The process of creating great design is an iterative one where, with each loop, the team uses user testing, both passive and active, to refine their own vision of the design. User testing can never answer 100 percent of the questions. There will always be the need for leadership that has a cohesive vision of the product that's being created. When that leadership uses user tests in just the right quantity to inform their own opinions and guide them, the design improves, and teams reach their destination of delighting customers. When that leadership thinks that user testing is the final word on user experience design, in my experience, the ship ends up rudderless and meandering.

TACTIC:
PERSONAS

What are they?

Personas are fabricated archetypes, or models, of end users. Personas identify user motivations, expectations, and goals. Think of a persona as a singular icon representative of an entire group. Conjecture regarding the persona's reaction in a variety of situations can help designers identify common needs.

In communication design, personas are most commonly associated with interactive work. The American firm Cooper (formerly Cooper Interaction Design) and its principal, Alan Cooper, have been pioneers in the use of this technique. In his book *The Inmates Are Running the Asylum*, Cooper explains why personas are often preferable to actual test subjects: "The most obvious approach—to find the actual user and ask him—doesn't work for a number of reasons, but the main one is that merely being the victim of a particular problem doesn't automatically bestow on one the power to see its solution."[1]

Although personas are fictitious, they represent the needs of real users and are developed through traditional research processes. This formative research is critical to being able to validate the characteristics of the prototype and ensure that they are not instead based on the designer's opinion.

1. Cooper, Alan, *The Inmates Are Running the Asylum: Why High Tech Products Drive Us Crazy and How to Restore the Sanity* (Indianapolis: Sams Publishing, 1999).

What can they do?

Personas help guide the design process by shifting the focus directly to the user. Findings will help organize information, structure navigation, or even influence formal presentation and color choice. Because design efforts are based on these carefully researched and developed personas, the users' goals and needs are sure to be addressed. As agreed-upon identity benchmarks, personas can also help the creative team substantiate their decisions when presenting design rationale to clients.

How are they used?

Personas are created using several sources of information, including ethnographic research, focus groups, and demographic data. A brief description (maybe one to two pages long) is then created to flesh out individual attitudes, behaviors, environmental conditions, goals, personal details, and skill sets. It is important for the researcher to try to identify several different user types so that the goals of all users will be met. Keeping persona sets small ensures that the design process remains manageable, with one primary persona as a focal point.

Personas should be used as a component to a larger research strategy, not as a singular research method. Combining personas with other tools, such as user testing and market analysis, can give the designer valuable insight into the user's needs.

When are they used?

Personas can be used throughout the design process. In the planning or formative phases, they can be used to align project goals with audience needs. During the creative development phase, personas can be used as a standard to measure structural or aesthetic decisions.

Level of difficulty/complexity?

There is a lot of information available about the creation of personas, specifically regarding their use when designing interactive projects. However, creating functional fictitious identities takes time, so production schedules should be written accordingly.

PERSONA **RESEARCH**

PERSONA 1: KENNY

Would rather spend time riding his bike than shopping with his girlfriend.

Still buys new clothes during the "back to school" rush in the fall, even though he graduated from college 10 years ago.

Lives in the Midwest.

Works as a graphic designer and aspiring art director.

PERSONA 2: DANA

Has a dedicated "clothing" category allocated in her monthly budget.

Shops both online and in retail stores, often on a biweekly basis.

Lives on the East Coast.

Works as a research analyst for a venture capital firm that funds socially relevant entrepreneurial endeavors.

PERSONA 3: ABELINO

Frequently entertains clients in both casual and formal social settings.

Due to time constraints, does most of his shopping online, both personal items and gifts.

Lives in Southern California but travels frequently for business.

Works in biotech.

By creating detailed fictitious personas, designers can develop systems that meet the needs and goals of primary and secondary users. Personas help make research results more relatable because they use a singular icon to represent a group of individuals. Featured here are three abbreviated personas, created as user models for a theoretical online clothing retailer.

STRATEGY: **VISUAL EXPLORATION**

Visual exploration is a method of primary research most commonly used by designers for solving problems of form and communication. Studies during this phase can include multiple variations of color, imagery, typography, and structure. Beginning with a series of thumbnail sketches and concluding with a realized prototype, this process is used to vet the most viable graphic solution.

TACTICS COVERED:

Color Psychology (p 94)
Mood Boards (p 96)
Sketching (p 98)

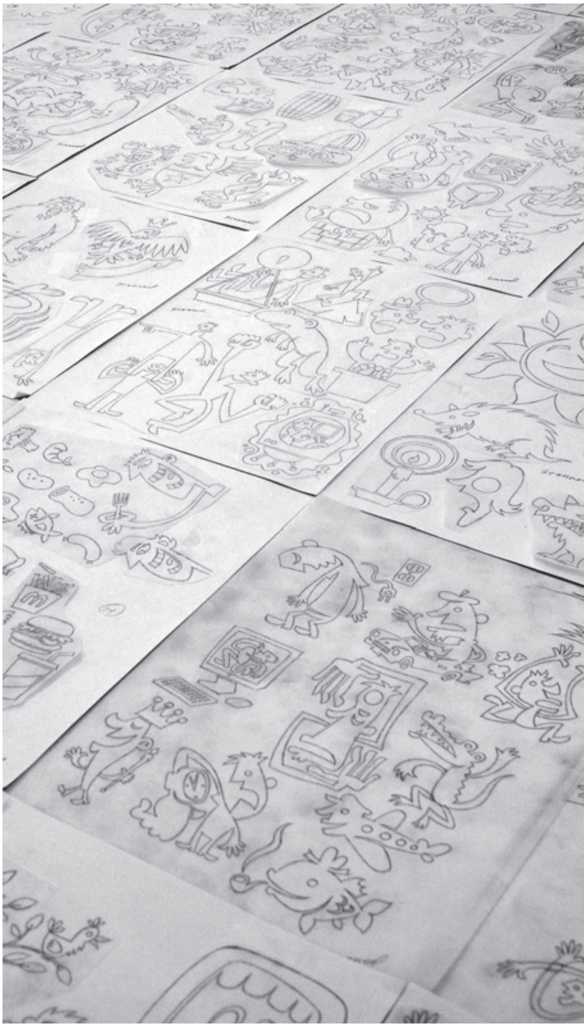
RELATED:

Contextual Inquiry (p 52)
Observational Research (p 54)
Unstructured Interviews (p 60)
Focus Groups (p 70)
Surveys + Questionnaires (p 72)

The process of visual exploration forces creatives to move beyond initial concepts, often resulting in unique and innovative solutions.

Through the graphic testing of type and image in varying structural forms, the designer can prototype rapidly in either low- or high-tech fashion (traditional paper and pencil sketches or computer roughs). This rapid investigation allows the designer to develop grids and typographic systems that are appropriate for delivering concepts and content to the end user. This generation of multiple visual solutions allows for comparative analysis of a broad sample of possibilities, which enables the designer to see the most successful vehicle for communication. A spirit of experimentation, openness to new ideas, and rapid prototyping without fear of failure are key to this developmental process.

Visual exploration occurs after formative research has been completed. Using the information collected, the designer now focuses on creating visual prototypes engineered to meet the needs outlined during the research phase. Traditional sketching with pencil and paper remains the dominant form of rapid investigation, though designers develop their own methodology over time. Deadlines and budgets necessitate that these systematic visual development processes are executed fluidly.



Designer and illustrator Von Glitschka prepared hundreds of sketches to refine content for his **Take And Make Art** *vector illustration collection and book.*

TACTIC: COLOR PSYCHOLOGY

What is it?
Color psychology studies the effects that colors have on human behavior.

What can it do?
Color is a powerful nonverbal communication tool and can play an important role in the success of commercial projects. Color can evoke emotions, elicit feelings—even cause hunger (reds and oranges have been linked to inspiring hunger and even speeding up food consumption)! Color perceptions are frequently based on shared experience and cultural association. For example warm colors such as yellow and orange are colors linked with heat, fire, passion, love, and excitement. Cool colors such as blue, green, and violet are connected with the sea, sky, calmness, tranquility, and unity. Designers should be sensitive to the cultural perceptions of their target audience; for example, in many Western countries black is evocative of death, whereas in many non-Western countries death is represented by white. When branding a product for a global market, color selections require especially close consideration.

How is it used?
By studying cultural associations and trends designers can use color to help support their concepts. Pantone, Inc., provides free documentation on color forecasting every year and offers for-hire color specialization services for designers. Beyond supplying ink to printers, Pantone can help your team with color ideation and validation by doing research into target market, brand positioning, substrate suitability (web, paper, or textile), color meanings and association, trends, and psychology. Pantone can also provide guidance on achieving consistent reproduction across varying media.

When is it used?
Decisions on the use of color are tested during visual explorations of form. Designers can choose the most appropriate color palette for a project based on preliminary research findings that illuminate the target market and color trends.

Level of difficulty/complexity?
Choosing the right color palette is essential to any design undertaking. In addition to Pantone, there are several organizations, including the Color Association of the United States and the International Color Marketing Group, that can be helpful when forecasting and selecting appropriate color. In addition, there are numerous books available on color theory, psychology, and palettes.

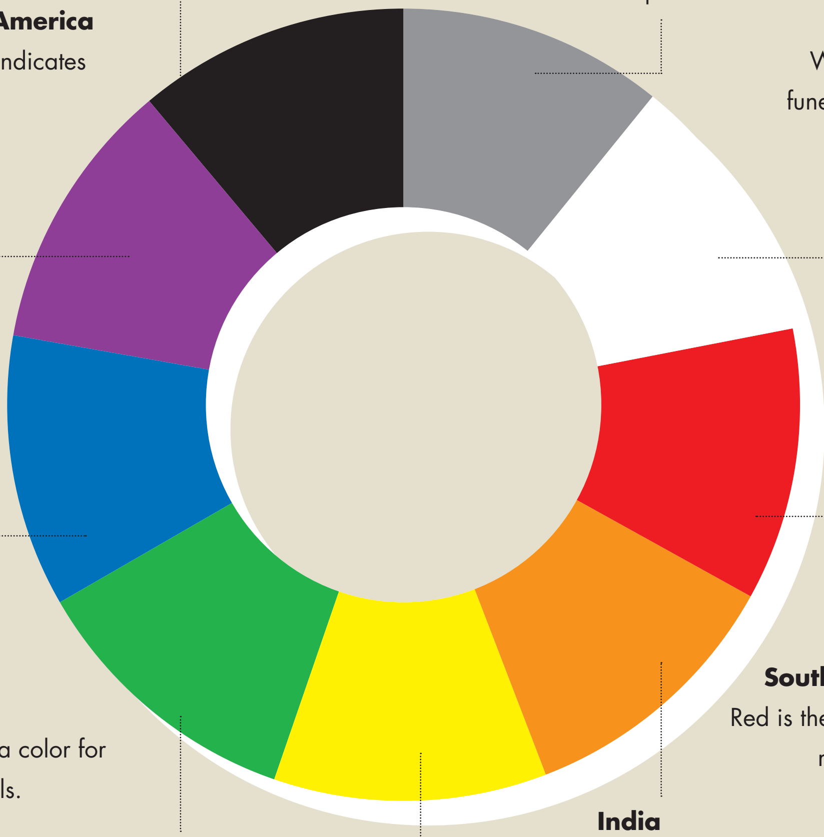
CULTURAL INTERPRETATIONS
OF COLOR

China
Black is for little boys.

Native American
Gray is associated with honor and friendship.

Latin America
Purple indicates death.

Japan
White is a funeral color.



China
Blue is a color for little girls.

South Africa
Red is the color of mourning.

India
Orange signifies Hinduism.

Islam
Green is associated with paradise.

Japan
Yellow is associated with courage.

Colors can have strong negative or positive emotional impact. This diagram outlines cultural color associations from cultures and countries around the world.

TACTIC:
MOOD BOARDS

What are they?
Mood boards are rapid visualization tools that aggregate imagery from numerous sources, helping the design team establish and convey an aesthetic tone.

What can they do?
Mood boards help communicate and clarify ideas, establishing a graphic approach. Assembling visual influences can combat the creative roadblock familiar at the start of new design endeavors. Mood boards can provide a tangible representation of design direction to non-designers, visually supporting concepts. They may also serve as a litmus test for a client's response to visualization, helping creative teams understand what's needed to achieve subsequent rounds of approval.

How are they used?
Mood boards get the ball rolling for the creative team. They assemble a tone that influences decisions about type, color, imagery, even editorial or narrative voice. They can provide historical reference for aesthetic choices and diagram current trends. Mood boards can be used to build consensus, internally or externally, around the visual direction of a project. They help overcome misunderstandings in the verbal descriptions of visual ideas.

When are they used?
Mood boards are formative. Like sketching or other forms of visualization, mood boards are most effective when crafted after initial audience/user research has been completed. Because mood boards convey concepts quickly, they can help the creative team bridge research and design, assembling imagery around ideas generated in the research phase.

Level of difficulty/complexity?
Assembling mood boards is fast, easy, inexpensive, and collaborative. Whether physically collaged or digitally collected, mood boards are an efficient and effective visual brainstorming method that can kick-start the creative process.

The Studio of Christine Wisnieski uses mood boards to help convey look, feel, and attitude to clients early in the design process. These (top) were assembled for Trentina, a restaurant from James Beard Award winning Chef Jonathon Sawyer and his wife, Amelia. The graphic language of the restaurant's identity (bottom and left) reflects an eclectic and inspired menu, and elegant interior.

TACTIC:
SKETCHING

What is it?
Sketching, or visualization, is a rapid prototyping tool that designers use to make concepts easily understood. Visualization techniques help designers examine form, concepts, or even usability. Whether executed on paper or rendered in a three-dimensional modeling program, visualization helps turn abstract ideas into concrete tangible objects.

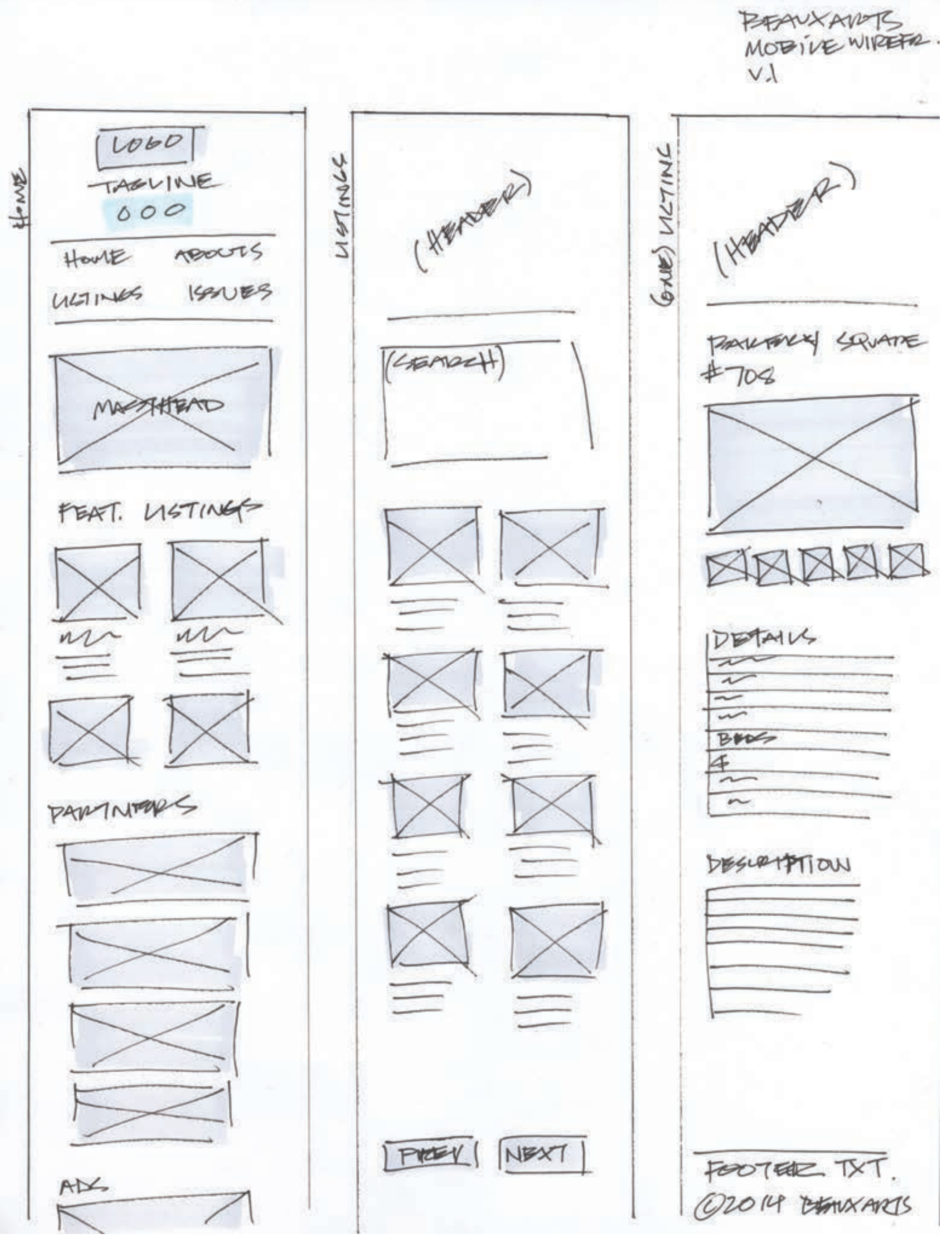
What can it do?
Sketching can help the designer/researcher avoid potential misconceptions with both clients and members of the design team. For example, presenting competing products, or storyboards, showing the client's product in context, provides others with a greater understanding of what a designer is trying to ultimately achieve. Using visualization as a part of an iterative design process allows for earlier testing and reduces the risk of going to market with a product that doesn't resonate with the public or meet the needs of the end user.

How is it used?
Designers can use a broad range of tools for sketching, including computer renderings, models, comps, wireframes, storyboards and mood boards to visually articulate their concepts. Computer renderings and prototypes help communicate three-dimensional objects and environments. Storyboards or visual narratives can show how the product can be used in context. Designers can also use visual thinking or graphic organizers such as mind maps, to communicate concepts.

When is it used?
Sketching is formative research. In the early phases of the design process, rough visualization techniques such as sketching wireframes or paper prototypes are quick, cheap, and easy to execute and update based on client feedback. During later stages of the design process, refining these prototypes ensures that research findings are reflected in the end product.

Level of difficulty/complexity?
Designers are by nature visual learners, and this research tactic is a component of almost all design educations, making it the most commonly used form of design research.

Wire frames, like these by Andrew Twigg a UX Designer and Professor at the School of Design at Carnegie Mellon University, allow designers to quickly ideate and conduct comparative analysis between potential solutions. Wireframes can increase in fidelity from simple sketches to digital prototypes, accounting for complexity of features and interactions.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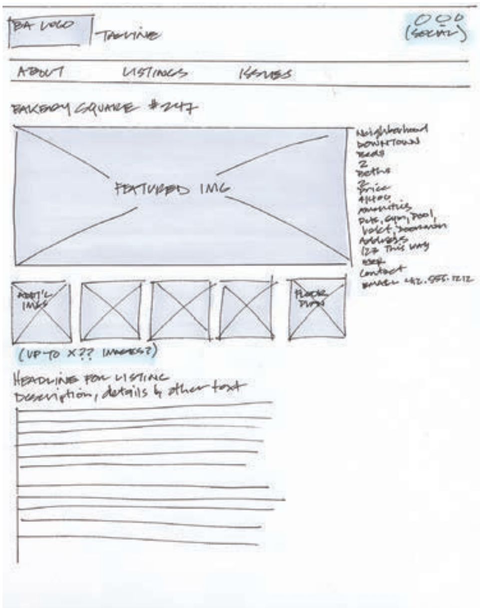
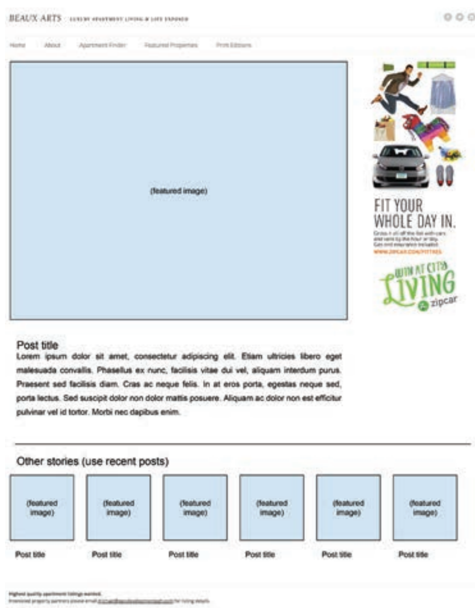




Wire framing helps designers explore and address usability issues before investing time in programming, or polishing aesthetic.

Shown here is a progression from pencil sketched wire framing (top left), to a digital rough (bottom left), and finally the finished page (above).

QUICK TIPS

Get organized.

It may sound elementary, but in fact it's essential to clearly record, source, and organize your research. To get the most out of the investigative process take copious notes, organize the results into categories, and keep them in a job ticket of some kind (one that's shared if you're working as a team). Establish your filing system before you begin your investigations. Keep it simple to encourage consistent use. Proper documentation makes processing your findings more efficient and easier to share with your client or other members of the creative team.

There's always more than one side of the story.

Design research focuses on people, arguably making everything you do an ethnographic exercise with few absolutes. As such, never depend on a single data point. You won't have a clear picture. Triangulate your research, comparing commonalities, looking for outliers. Where you see convergence you're closest to the truth. Just as you shouldn't get all of your news from a single source, your research efforts are most legitimate when diversified.

Always use the buddy system.

Choose research methods that support each other. Pick a combination of exercises that serve different purposes, each designed to gather what another might miss. For example, surveys or demographic data rarely reveal user motivations; pair them with contextual inquiry or ethnographic investigations to build a deeper understanding of the subject.

Not sure where to begin?

Self ethnography is an approachable starting point for the researcher in-training. Want to know what it's like for your audience to navigate a museum, order a new product, or tour a college campus? Get out there, have the experience yourself, and begin documenting. The next chapter is filled with frameworks to help you become a good observer.

CHAPTER 3

PRACTICING A RESEARCH-DRIVEN APPROACH

All designers are familiar with the creative process, but incorporating research methods into design practice, documenting findings, and articulating the value to both peers and clients can present new challenges.

MANAGING THE DESIGN PROCESS: **YOU NEED A PLAN**

All graphic designers and their respective studios move through an often complex process to create design collateral.

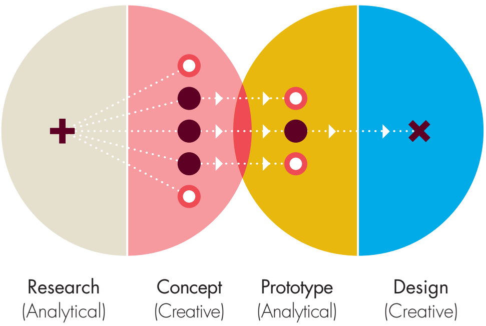
Whether the project is print, interactive, or three-dimensional in nature, designers use an established set of procedures to create innovative solutions to communication problems. Many studios offer their method as a proprietary service, noting the value that process adds in the otherwise intangible medium of creativity.

The graphic design process, as traditionally defined, is modeled around the physical creation of a single artifact: an annual report, a website, a poster, an app, and so on. As such, the process is inevitably project-oriented as well as linear—it starts with research and progresses through concept development, prototype, production, and delivery. Historically, the research phase begins with a review of a client's internal documents, interviews with key personnel or customers, and/or competitor analysis. These actions help a designer better understand an organization's goals and determine strategy and direction. While these forms of preliminary research are invaluable to a project's success, they are but an early step in its creation.

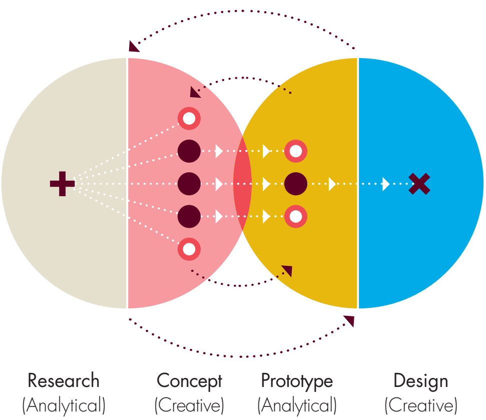
Research, as defined in this book, does not merely initiate the process, but rather augments it by integrating systematic investigation into each phase of a project's development. The research-driven design process also depends on assessment, or summative evaluation, which is undertaken throughout the course of (or even at the end of) a project. This allows the designer to reconsider assumptions gleaned from preliminary research. Using this data, the designer may opt to make adjustments to a design either before or, in certain situations, after production. This process of reevaluation creates a culture of consultation. As a result, research-driven designers can engage in long-term relationships with their clients, acting as strategic business partners rather than service providers assigned to singular commissions.

Graphic design researchers gather information, and use those findings to solve specific visual communication problems. Because each project or commission has a unique set of goals, requirements, and budget and time constraints, it is imperative to outline a plan before beginning the design process. Developing a plan creates a clear framework in which the designer can conduct and vet the investigation. Whether the tactics employed focus on market trends, consumer preferences, or brand perceptions, a comprehensive plan for gathering data will help clarify both the problem to be solved and the resources necessary to accomplish project goals.

LINEAR **PROCESS**



RESEARCH-DRIVEN **PROCESS**



Design is often viewed as a linear process. It begins with formative research—define the problem—then progresses through concept development, prototype, production, and delivery. Process, as depicted above, focuses on the creation of a singular artifact or campaign.

Applying research in multiple phases, an iterative process allows the designer to redefine early assumptions. While this model may involve more revision during development, better-informed design decisions often lead to more successful outcomes.

Many large design studios or advertising agencies are already billing their clients for research services, and have proprietary processes—the details of which they guard closely from the competition. Numerous small firms, sole proprietors, in-house teams, and freelancers have also outlined research patterns, customized to their resources. Creative processes, whether proprietary or public domain, allow the designer to pair the most appropriate research tools with project requirements—without reinventing the wheel for each assignment!

Furthermore, research indicates that studios that have an internally documented design process in place experience more successful project outcomes, with increased time-to-market and higher client and end-user satisfaction. Documenting and adhering to a standardized process—regardless of what that process may be—serves as a management tool, helping the creative team to work collaboratively, clearly delineate team roles, and manage client expectations.[1]

Individuals new to the concept of design research may find the established processes described on the following pages to be an invaluable foundation on which to base their own investigations. Adapt as needed.

1. Read the whole report: Design Council, "A Study of the Design Process. Eleven Lessons: Managing Design in Eleven Global Brands," (Nov. 5, 2007), goo.gl/xq9l6r

ITERATIVE DESIGN

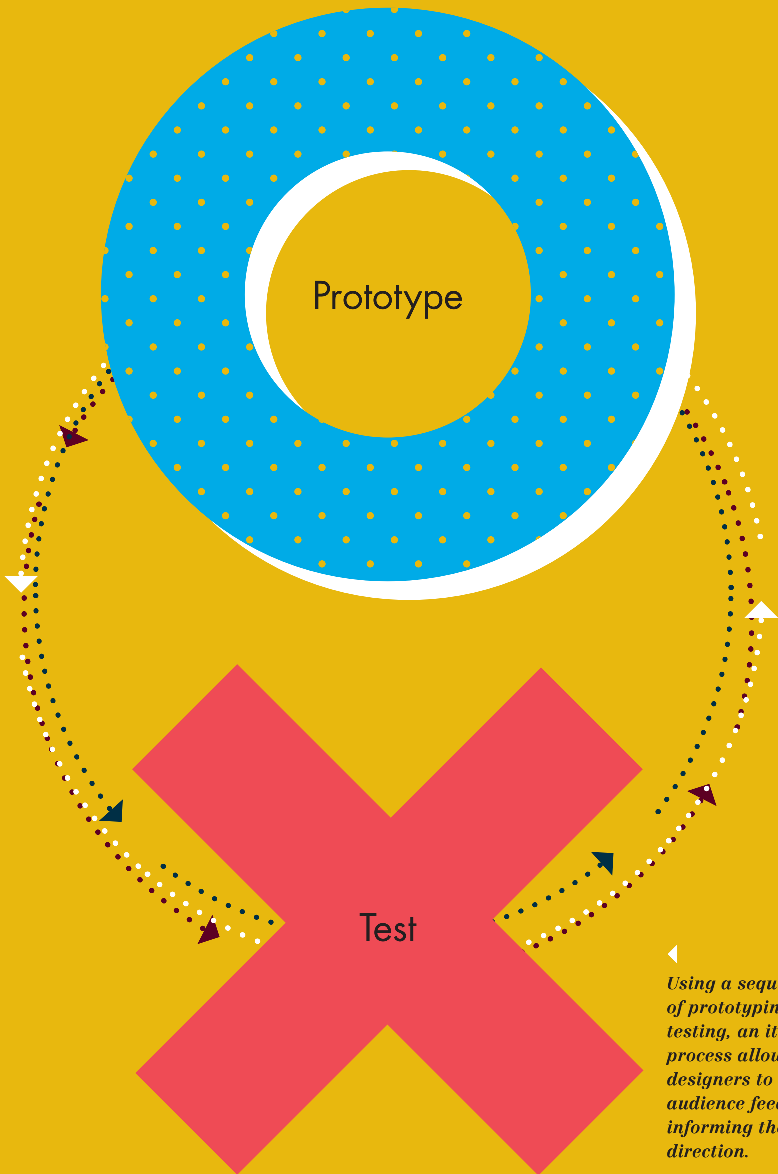
Iterative design is a cycle of prototyping, testing, analysis, and refinement. In this process the creative project is evaluated with user-based research methods, comparing successive versions, or iterations against project goals.

Interaction with the target audience can reveal complications, generate new questions, and sometimes uncover solutions. Any design commission can benefit from this process of collecting and integrating audience feedback. But, it is an especially beneficial practice for interactive and experience-based projects with multiple, interconnected components.

The complexity of an iterative process depends on which research tactics are chosen and how many iterations are intended. If working on the redesign of an existing system, or updating the functionality of existing tools, time should be allotted for benchmark testing of the original—before new iterative cycles begin. Understanding how well the original design functions in tests with audience members can provide the design team a baseline metric to work with when validating new designs.

Be aware that even when using accessible techniques, multiple iterations will increase production timelines and, consequently, budgets. Be certain to clearly define project testing goals, with client approval, at the start of a project. This helps avoid perpetual testing cycles which can result in ballooning project scope, delayed production, increased costs, and general frustration. Because most of design research is qualitative in nature, prototypes rarely make everyone happy. Stay focused on how test results relate to project goals. Testing is about informing, not paralyzing the process or predicting design outcomes.

ITERATIVE **PROCESS**



Using a sequence of prototyping and testing, an iterative process allows designers to collect audience feedback, informing their design direction.

DESIGN COUNCIL'S **DOUBLE DIAMOND PROCESS**

Seeking to better understand design's application in a corporate setting, Design Council, an industry advocate in the UK, studied the processes of eleven top design-led companies.[2] Those selected represented multiple business sectors, showing consistent and successful use of design related to business outcomes.

The research team wanted to find out how design was integrated organization-wide (beyond creative departments).They examined the development and execution of ideas, products, and services, distilling best practices in problem solving and design management that could be shared with the broader profession.

While each company varied in size, market, and product offering, Design Council was able to identify similarities in approach. They used this information to craft a model, The Double Diamond Design Process, outlining four stages that all designers must navigate when undertaking a commission: Discover, Define, Develop and Deliver. Research is integrated throughout, helping to define the problem and delineate the best possible design solutions, with iterative loops often occurring within or between each phase. The model is summarized here:

Discover: This initial step focuses on posing a question, analyzing a problem, or identifying a potential opportunity. In the Discover stage it's essential to remain open-minded to diverse concepts, ideas, and influences.

Define: This phase aligns ideas generated in the Discover stage with overall business objectives, potential return on investment, and feasibility. It concludes with a clearly articulated project brief, outlining goals, deliverables, scope, schedule, and budget. This ensures that client and designer have a mutual understanding of project purpose, and that members of the creative team understand individual roles and responsibilities.

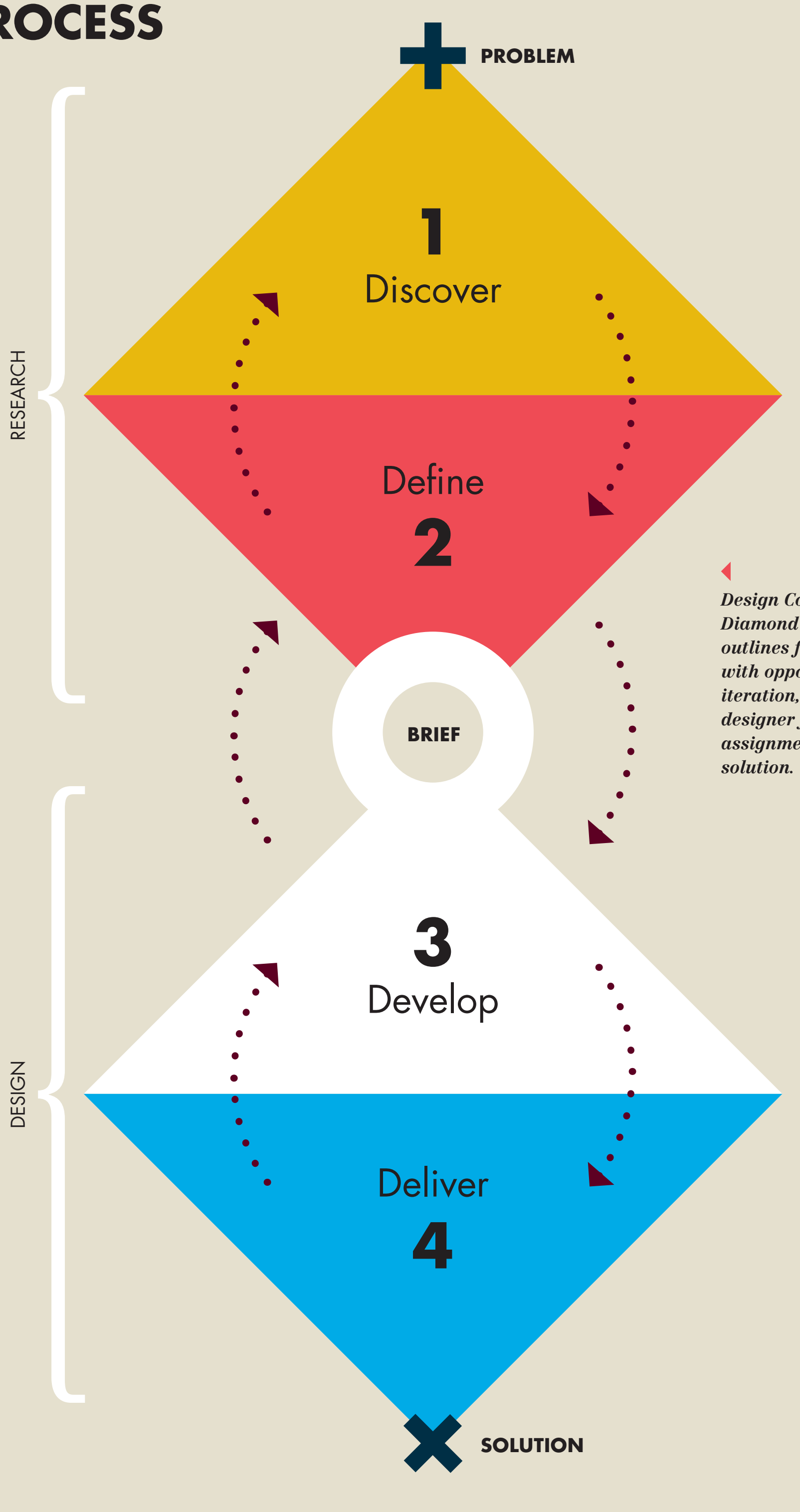
Develop: Design concepts transition into working prototypes, tested with users, ensuring they meet the objectives outlined in the previous Define stage.

Deliver: Final products, messaging, or designs are delivered to the audience. Summative evaluation may occur in this phase, confirming alignment with project goals or identifying areas for further development.

These project development steps can be applied by creative professionals working in any field. Use of the model doesn't guarantee project success, but it certainly helps manage the creative process. Amidst chaotic rounds of ideation and innovation, Double Diamond helps the designer stay on track. The model is most functional when there is active collaboration between creatives, clients and project partners, demystifying creative and showcasing the value it generates.

2. Read the whole report: Design Council, "A Study of the Design Process. Eleven Lessons: Managing Design in Eleven Global Brands," (Nov. 5, 2007), goo.gl/xq9l6r

DESIGN COUNCIL'S **DOUBLE DIAMOND PROCESS**



Design Council's Double Diamond Process outlines four stages, each with opportunities for iteration, guiding the designer from problem assignment to finished solution.

INFORMATION LITERACY
THE BIG6 +
THE SUPER3

Information Literacy, a lifelong learning strategy, focuses on empowering individuals by instilling the ability to recognize when information is needed, and to have the skills to find, evaluate, analyze, and effectively use that information.

Designers will find that information literacy strategies coincide with their ability to find, harvest, and analyze complex content, creating a familiar environment for the practiced information architect. While there are numerous documented models for framing research problems, one that coalesces particularly well with the problem-solving skill sets of visual communication design is The Big6. The Big6 is an information literacy model, or information problem-solving strategy, developed by Dr. Mike Eisenberg and Bob Berkowitz (Dean of the University of Washington Information School, and School Library Media Specialist with the Wayne Central School District in Ontario Center, New York, respectively). This model, which provides the user with a formula for problem solving, has been widely used, from educational settings to corporate professional development programs to adult retraining. Because of its inherent flexibility, the Big6 can be used as a model for approaching any information-based problem, design projects included. Many designers will, in fact, find that they are already going through a number of the documented Big6 steps when working on creative communication projects. Eisenberg and Berkowitz say of the Big6: “It’s not necessary to complete these stages in a linear order, and a given stage doesn’t have to take a lot of time.” This is especially welcome news to creatives with tight production schedules and modest budgets. The Big6 process uses these six steps to clarify an information-based problem. Try applying them to your next project.

1. Task Definition
   - 1.1 Define the information problem
   - 1.2 Identify information needed

2. Information Seeking Strategies
   - 2.1 Determine all possible sources
   - 2.2 Select the best sources

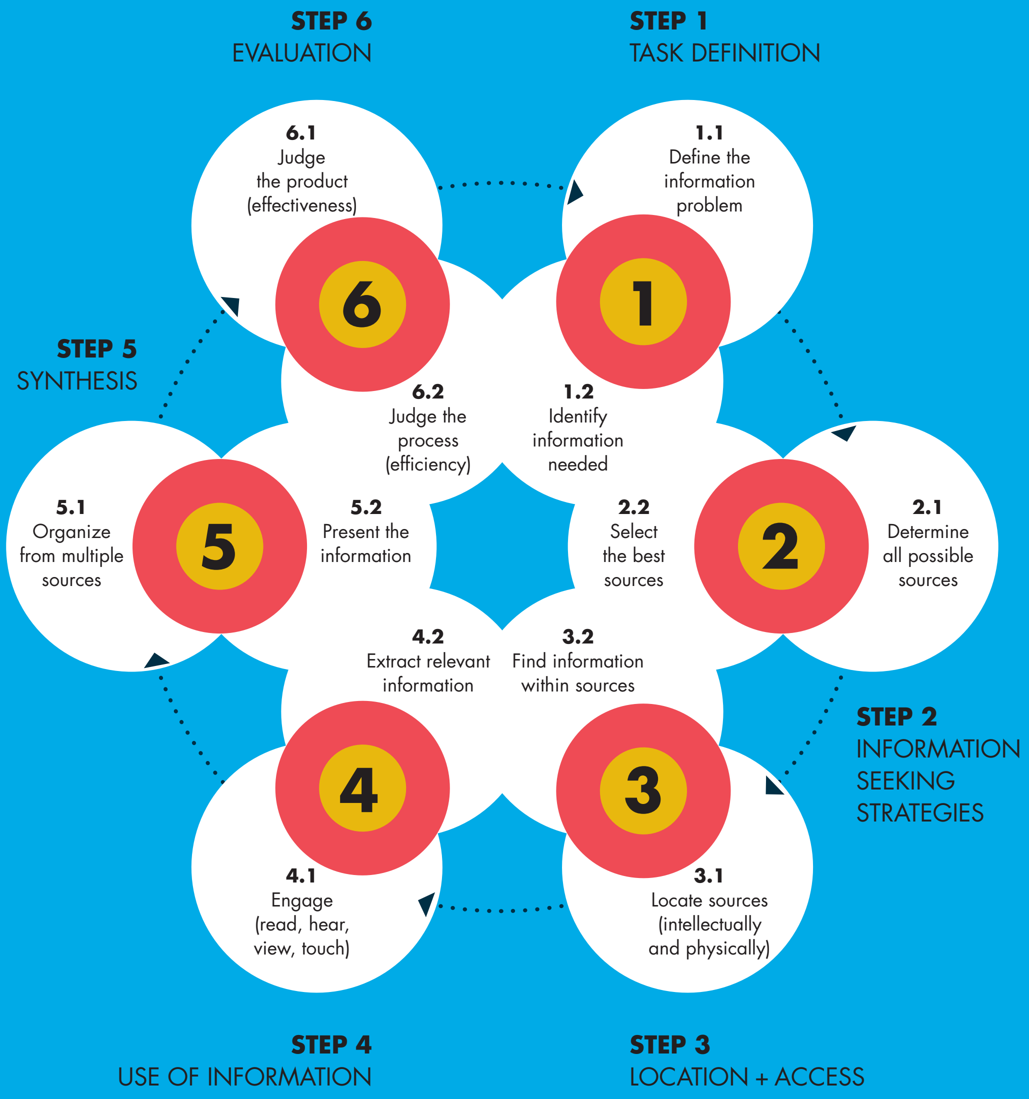
3. Location + Access
   - 3.1 Locate sources
   - 3.2 Find information within sources

4. Use of Information
   - 4.1 Engage
   - 4.2 Extract relevant information

5. Synthesis
   - 5.1 Organize from multiple sources
   - 5.2 Present the information

6. Evaluation
   - 6.1 Judge the product (effectiveness)
   - 6.2 Judge the process (efficiency)

THE BIG6


STEP 6
EVALUATION
STEP 1
TASK DEFINITION
6.1
Judge
the product
(effectiveness)
1.1
Define the
information
problem
6
1
6.2
Judge the
process
(efficiency)
1.2
Identify
information
needed
STEP 5
SYNTHESIS
5.1
Organize
from multiple
sources
5
5.2
Present the
information
2.2
Select
the best
sources
2
2.1
Determine
all possible
sources
4.2
Extract relevant
information
3.2
Find information
within sources
STEP 2
INFORMATION
SEEKING
STRATEGIES
4
3
4.1
Engage
(read, hear,
view, touch)
3.1
Locate sources
(intellectually
and physically)
STEP 4
USE OF INFORMATION
STEP 3
LOCATION + ACCESS

The Big6 is an information literacy model that can be applied to any situation where people need to find, understand, and apply new information. It is also considered a metacognitive model, which means it helps users assess their learning process. This reflection can be especially valuable for designers or creative teams looking to become more effective and efficient.

The Super3 contains the same basic elements as the Big6, but was written for a younger audience, breaking up the steps into *Plan*, *Do*, *Review*. This simplified version provides an essential structure for developing and understanding your own creative process. You might think of the Super3 in a design context such as this:

1. Plan (Beginning):
   - 1.1 What is the assignment?
   - 1.2 What does success look like?
   - 1.3 What information is needed to do the job?

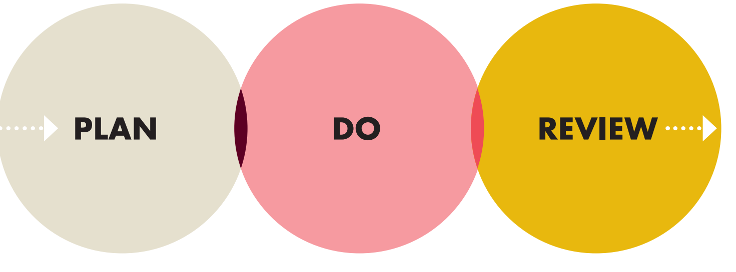
2. Do (Middle):
   - 2.1 Conduct research
   - 2.2 Synthesize findings
   - 2.3 Design

3. Review (End):
   - 3.1 Were project goals accomplished?
   - 3.2 Are all stakeholders satisfied?
   - 3.3 Is there anything else left to do?

Note: Read more at www.big6.com

THE **SUPER3**

The Super3 breaks the Big6 down into smaller and easier to understand steps for younger users, or people who are new to the concept of information literacy.



RESEARCH **PLANNING**

With so many different research methods to choose from, integrating them into your practice can seem overwhelming. Which do you choose? How will they benefit the project? Where do they fit into your already established process? How can you communicate the value of research-driven design to your clients?

TOPICS COVERED:

KWHL Tables (p116)

Logic Models (p118)

RELATED:

Person-First Philosophies (p14)

Triangulation (p40)

Managing the Design Process (p103)

Research Summary Reports (p127)

Creative Briefs (p128)

Writing a research plan at the beginning of a project can help organize your thoughts, guide your team, and help you bring key stakeholders on board.

It outlines what you're going to do, and why you're doing it. It's an essential communication tool, describing each team member's roles and assignments. This can provide transparency for the client, illustrating that creativity and innovation aren't magic—they're the results of hard work and informed decisions.

While every project is unique and requires customization around scope, timeline, and budget, there are some basics that can help you draft a research plan for any problem you're trying to solve. Consider the following sections of an adaptable general model:

Background: Outline project goals. Explain why the work was commissioned and what is to be achieved. Whenever possible, include information about audience. Background places the project in context. Putting it in writing also ensures that you and your client are on the same page. Perhaps some of this information has even been provided by them, when the project was initiated.

Assumptions: At the beginning of any new project, all members of the team have their own ideas regarding the assignment, the audience, possibly even the client. List those assumptions. They're essential for helping you ask the right questions later. Get them all out on the table early. It clears your head and simultaneously jump-starts your research. If appropriate, you may even involve stakeholders or constituents.

Research Questions: Draft questions relevant to project goals and what you've learned in the assumptions phase. Determine what you don't know, and what you'll need to have answered in order to move forward. Try to keep the list concise. Too many questions can mean that aspects of the project remain unclear, for you and the client. An unwieldy number of research questions is usually indicative of an unfocused project.

Methods: Once you have placed the project in context, and you know what questions need answered, select research methods appropriate to time frame and resources. Select tools that will give you the most valuable information as quickly and efficiently as possible.

Implications: Implications connect research methods back to project goals. This step outlines how the research contributes to a successful solution. Implications answer research questions and validate—or invalidate—assumptions. They also show your client the value of research, illustrating how doing the homework early can save money in the long run by avoiding costly missteps.

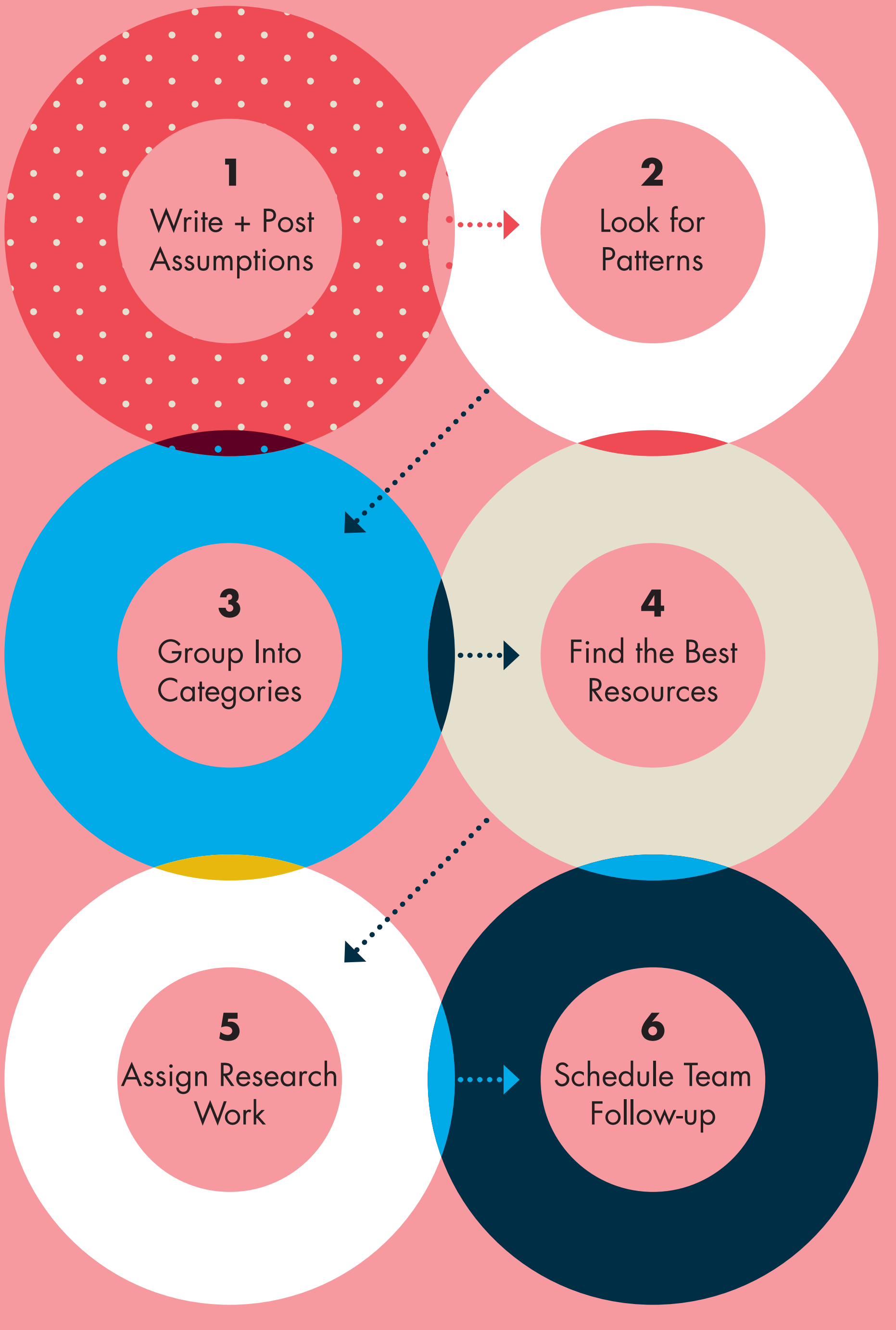
Resources: This part of the plan accounts for the impact of research on project timeline, budget, and staff. Integrating research exercises into project production schedules is helpful, providing a clear and shared understanding of who is responsible for what, and when. This also provides an estimate of time-on-task, accounting for research activities and their impact on project costs. It can reveal if the team will need outside assistance to help plan accordingly.

A research plan should be a living document. Treat it as a guide, not as dogma. Don't be afraid to adjust the plan as things evolve. Just make sure that your team and your client are in agreement when things start to shift. Regular updates on progress—both internal (to your team) and external (to your stakeholders)—keep the project on track, and that plan you've so carefully crafted from falling unused into an empty drawer.

Outline project assumptions with this simple process: Ask participants to write each assumption on a single sticky note. Place them on a wall or community work space. Individuals can write as many assumptions as they'd like. When the writing or conversation starts to lag, it's time to start looking for patterns. Group like concepts into clusters, creating categories. Once you're satisfied with those categories, start thinking about the best resources to dig a little deeper into the related assumptions (books, articles, videos, people). As you come up with answers to, 'How can I find out more about…?,' write them down and assign the work to team members. Give everyone time to investigate the assignments. Schedule a follow-up discussion to share what everyone has learned.

This exercise is intended to help the creative team focus, proving initial assumptions valid, or demonstrating that they are false. Either way, this step helps to clarify what to do next.

ASSUMPTIONS **EXERCISE**



KWHL TABLES

KWHL Tables are widely used graphic organizers that help you plan information seeking strategies and organize results. They are easy to use and broadly applicable, appropriate for both your professional queries and your kid's first big homework assignment.

Use KWHL tables to organize your assumptions and kick-start your research plan. The KWHL process forces participants to rapidly identify what they do—and do not—know. This structured approach to early ideation sessions can be done individually, with a creative team, or even collaboratively with clients and stakeholders. The basic steps are outlined here:

K: What do I know?

This step asks you to outline your understanding of facts and information related to the project/audience/message. It also encourages you to list some of those assumptions you've just generated, what you think you know about those same subjects areas. It's a good idea to visually differentiate proven fact from assumption for clarity. If assessing multiple categories, such as project/audience/message, it may be helpful to build individual KWHL tables for each, or create a more complex master chart. (Hooray grids and color coding!)

W: What do I need to find out?

Groups of people working together are often more successful completing this step. Conversation around this question tends to generate more insights and queries than one person would working alone. Here it's your job to fill in the gaps between what you know for certain, and where you're less sure and have questions. What do you need to investigate and uncover in order to make the project a success?

H: How will I find the information I need?

Time to connect research methods to questions, and hand out assignments if you're working with a team. Be mindful of how much time you have to devote to this exercise and plan information seeking strategies that will deliver the most accurate, detailed information in the most efficient manner. For example, it's easy to turn to Internet searches, but equally easy to find false information or fall down digital rabbit holes of distraction. Perhaps interviewing people is a faster path to provide some perspective?

L: What have I learned?
After conducting preliminary research to investigate assumptions and questions, complete the chart, recording what you've learned. Add a meeting with the team, if you're working collectively, and discuss the group's discoveries. Don't forget to keep your sources well documented for future reference. Findings will either confirm assumptions and answer questions, or raise new areas of investigation.

Use this tool at the beginning of the research process. It's useful for taking inventory of a new commission and crafting a more precise research plan. While KWHL tables are intended as a formative tool, the content assembled could be used as part of later reporting. Work smarter, not harder. Look for overlaps!

KWHL **TABLE**

Creating KWHL tables can help you develop a research plan. The exercise will identify holes in your understanding of the subject being studied, forcing the research team to develop strategies to find the missing information. Use this technique to kick off your research and work through early project assumptions.

What do I **know**?

What do I need to find out?

How will I find the information I need?

What have I **learned**?

LOGIC **MODELS**

Logic models can help visualize your research plan, connecting research methods to intended outcomes, time, and resources.

For individual designers practicing solo on large-scale projects, logic models help break overwhelming workloads into achievable goals, reinforcing purpose, allocating time on task, and integrating research activities into overall project timelines. For teams, a logic model can be expanded to assign research roles to each member, accounting for every individual's contribution, and illustrating how it relates to project goals. Logic models can also be shared with clients, making the case for design research by delineating why specific methods are used and how they will impact project development and success.

Logic models commonly organize a project's timeline into research and design activities, breaking each step down into Objectives, Inputs, Actions, Outputs, and Outcomes:

Objectives define why you're conducting a specific activity. What you are trying to learn? In some scenarios, the objective can be framed by a specific research question that you are trying to answer.

Inputs take stock of resources—time, facilities, staff, external experts, even research participants. List anyone or anything you need to execute the activity.

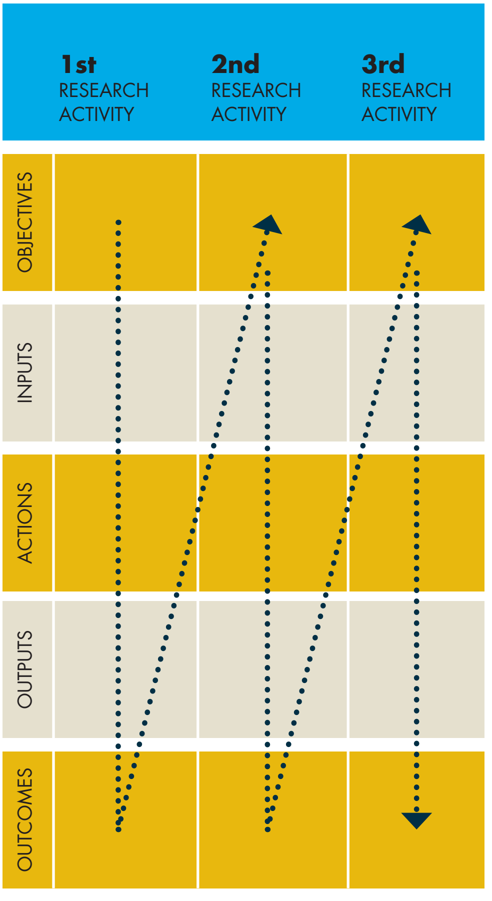
Actions outline what you are going to do. Be as specific as possible. Logic models are planning documents. Thinking through the actions helps you take stock of what really needs to be done, and what resources will be expended.

Outputs define take-aways or artifacts produced from the activity. What will be generated? How will that inform project development? Research outputs help you make the case for design decisions, reinforcing rationale.

Outcomes record the results of an activity. This category can be expanded to include projected outcomes (drafted when planning research activities) and actual outcomes (filled in after research activities are completed). Comparing these two columns either confirms or contradicts assumptions. There may be a story related to contradictions that warrants further investigation.

Let's apply a logic model to a common research action: For example, a literature review is often a first step on a new project. The "objective" of this activity is to become familiar with the problem, client, and audience. The "inputs" may include a collection of previously published marketing materials, competitor websites, and the individuals assigned to complete the review. The "action" for this activity would be to comprehensively review the material, extracting information relevant to the project. The "output" might take the form of a written report or presentation outlining key findings, or a mood board visualizing the client's current design strategy in contrast to those of their competitors. "Outcomes" could include generating an agreed-upon list of project goals with your client, identifying areas of

LOGIC **MODEL**



Logic models help structure research activities, focusing on Objectives, Inputs, Actions, Outputs, and Outcomes. As each research activity is performed, details are recorded in the framework. That information informs the next action.

potential differentiation and advantage, or outlining new questions to be explored with further primary research.

When drafting the model, place activities and categories on opposing axes, creating a grid. So the example left would fill a single row. As project development progresses the information gathered should inform the next activity. While logic models organize activities in a linear way, be sure to indicate where there may be iterative loops. For example, user testing may inform project development, but testing may need to occur more than once to ensure project success.

Adapt the category titles or structure to suit your needs. Experiment, and use what works best for you, your studio, or your market. Just be sure to clarify the need for the activity (Objective), what is to be done (Action + Output), and what you think will be accomplished (Outcome). Accounting for resources, time, and personnel (Input) takes the logic model from a research planning document and elevates it to a comprehensive production schedule and project management tool.

RESEARCH **ANALYSIS**

You've invested significant time and resources in your research efforts, gathered pages of notes, observations, testing responses, visual references—what's next? How do you sort through all that information in an efficient manner? Distill the relevant findings? Make sense of disparate feedback?

TOPICS COVERED:

RELATED:

Analysis frameworks provide structure for research findings (cataloging related people, places, things, and activities), or documentation of a user's experience (illustrating timeline and associated activity).

Frameworks allow team members to empathize with their audience. They provide a repository for information collected by multiple researchers, allowing the team to share and combine individual efforts.

The resulting visualizations provide prompts for group discussion. They can help designers connect concepts, find patterns, illustrate subject associations, demonstrate event sequences, compare and contrast, and more.

Using frameworks for analysis should feel familiar, because in many ways the process mirrors ideation exercises. Gather the standard ingredients: a pile of sticky notes, markers, an uncluttered work space, ample time for discussion, open-minded participants. Bring all the research findings you've collectively amassed.

Kick things off by writing the selected framework categories on whiteboard or wall. Start by placing your findings—or any new questions that may pop up—into the appropriate areas. One idea per sticky note—you know the drill. Look for patterns and clusters to emerge. Several observations in one column or too few in another may reveal an opportunity for design intervention, or identify an area that needs further investigation.

This is a qualitative process, so don't be afraid to try several different options for organization—some people combine multiple frameworks to distill their research. Different patterns (and opportunities) may emerge when you look at the data through an alternate lens. Apply what you have learned about convergence and triangulation (see pages 40–41) to this process. If you keep coming back to similar conclusions, regardless of the framework you're using, those ideas are worth exploring through design.

SAMPLE FRAMEWORK TO HELP STRUCTURE

Some designers use proprietary systems to process their research findings, but numerous general purpose frameworks for conducting and analyzing ethnographic research exist.

Many of these are rooted in the work of Professor James P. Spradley, an anthropologist who taught at Macalester College in Saint Paul, Minnesota. Spradley developed a tool for structuring ethnographic observations that he called the *Descriptive Observation Matrix*.[3] Spradley's matrix structures observations into the following nine categories, summarized here with instructions on use:

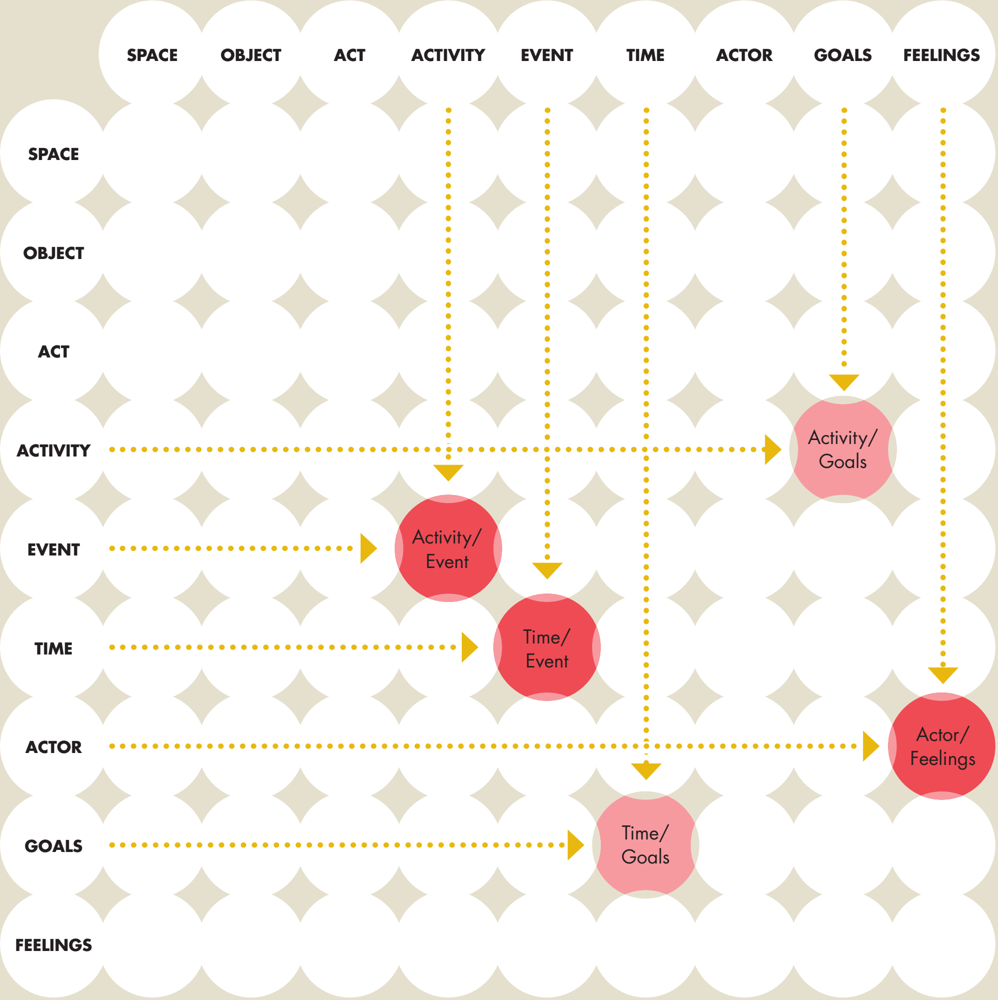
1. Space: Describe the physical environment in detail.
2. Object: Take stock of relevant objects in the environment.
3. Act: Catalog the behaviors of the individuals under observation.
4. Activity: Detail the actions performed by participants, including interactions with other individuals, objects, and the environment.
5. Event: Connect activities to happenings, or events.
6. Time: Chronicle the time and date of the observation, and the amount of time spent engaged in activities.
7. Actor: Describe the people under observation.
8. Goals: Note what the people under observation are trying to achieve in their activities.
9. Feelings: Recount any discernible emotions expressed by the individuals under observation.

Spradley suggested that placement of the categories be repeated on both the X and Y axes of the matrix, forcing the researcher(s) to explore how each classification influenced the other. For example, "What is the impact of physical space on participant goals?" or "How are activities related to feelings?"

Use Spradley's categories as a reference point for your own framework. Adjust category quantity and titles to align with the goals of your investigation or project. The take-away is to be cognizant of people, the places they go, the things they use or encounter, and actions they undertake. Research activities and observations need to be summarized before they'll fit neatly into your system. Rarely does one framework perfectly serve every research query. Experiment until you find a structure that works best for you and your practice.

3. Read Spradley's influential book: Spradley, J. (1980). *Participant Observation*. New York: Holt, Rinehart & Winston.

SPRADLEY'S **DESCRIPTIVE OBSERVATION MATRIX**



Spradley's Matrix forces the researcher to consider how categories that may seem disconnected influence each other. When compiling research (either from multiple activities or from several researchers), look for gaps in the matrix. They may indicate an area where more research is needed, or may reveal an opportunity for design to fulfill an unaddressed need.

SAMPLE FRAMEWORK TO **HELP EMPATHIZE**

Experiences follow universal patterns, they have a beginning, a middle, and an end, like a narrative arc. They can be described in simple terms such as "before," "during," and "after." Using these temporal prompts, you can organize observations and research findings around a person's experience.

Recreating their path helps you understand their actions, avoidances, frustrations, and choices. The visualization of that path is commonly referred to as an experience model (also experience map, customer journey, user journey, patient journey, etc.).

Experience models can be used to document existing activities, or to prototype new ones. Using these models, you can map the impact of a change on an established system by projecting how shifts in one area affect subsequent actions down the timeline. Experience models can describe simple interactions (How does the shopping cart work on a particular mobile application?) or complex events (What exactly happens when a patient visits an emergency room?). At any scale, the key is to document all possible choices and outcomes as the experience progresses through completion.

To create a research analysis framework that will help you empathize with your user, start by outlining simple time-related categories such as "beginning," "middle," and "end" or "before," "during," and "after." More complex experiences may require further customization; however, the general tenets remain the same: You are trying to map the experience from the active person's perspective as they move through a sequence of events. If creative teams identify in advance that experience mapping will be a part of their research plan, they can use pre-established categories to organize field notes and observations. This keeps the researchers organized, thinking of the participant at each interaction, and streamlines future analysis.

Event maps can be used by designers to determine the sequence of user behavior in an interactive environment, or even predict navigation of a three-dimensional space.

This detail from a patient journey map by The U.S. Department of Veterans Affairs outlines the experience of a VA site visit.

VA PATIENT EXPERIENCE JOURNEY

U.S. Department of Veterans Affairs
Veterans Health Administration

The VA Patient Experience Journey Map represents a common set of moments Veterans experience before, during, and after a health care appointment visit. While this map does not represent what happens to every Veteran during every appointment, it is a good starting point to define the ideal patient experience at VA and recognize high impact improvement opportunities. Veterans also identified five key moments that matter during which VA can build trust with Veterans or lose them entirely. VA can and should make sure these moments are done right.

RESEARCH SUMMARY REPORTS AND **CREATIVE BRIEFS**

Research summary reports and creative briefs bridge the gap between research and design. These documents are essential to helping an internal team process. They can be shared to help stakeholders understand research findings and creative direction. The research summary report comes first, communicating what you've discovered during the formative research phase, essentially reporting the results of your research plan. The creative brief follows, outlining what you're going to do about it. Creative briefs guide the actual designing.

TOPICS COVERED:

RELATED:

Person-First Philosophies (p14)
Triangulation (p40)
Managing the Design Process (p103)
Logic Models (p118)
Research Analysis (p120)

RESEARCH **SUMMARY REPORTS**

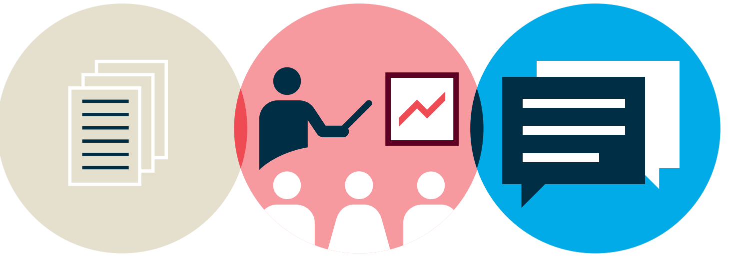
The research summary report presents investigative findings and analysis before making the pitch on how to solve the problem (that's the creative brief). The arguments crafted here, steeped in data and observations, are valuable resources should any of your future creative concepts come under scrutiny.

Research summary reports (or presentations!) should be crafted as a narrative, making the information easy to digest for the layperson. Tell stories from your fieldwork. Integrate experiences and dialog from participants whenever possible. Connect the formative research back to project goals and the experiences of real users. This places your findings in context, and can help you achieve buy-in from project stakeholders.

When drafting your research summary report use your original research plan as an outline. The report or presentation you're now crafting will walk project partners through your research process, so they can understand how you arrived at conclusions. Start with project objectives, progress through assumptions, research questions, and methods. Discuss the process of analyzing raw research: How did you arrive at the findings you're presenting? This is your chance to tell a story about what you've learned (and how you learned it).

RESEARCH SUMMARY **REPORT**

Research summary reports or presentations help connect research to project goals, making the case for creative direction. Distribute the report as a document, presention, or briefing—whatever will resonate with your team.



CREATIVE **BRIEFS**

The creative brief takes the research summary report—everything learned about audience and context during the research phase—and makes it actionable for the design team by connecting it to design deliverables.

It can be used to get a client's sign-off on strategy and conceptual direction before design begins. There are numerous takes on creative brief structure and content. The following will get you started:

Delineate Succinct Project Goals

What do we need to accomplish? These goals may mirror those established at project initiation/research planning, or they may have evolved or been winnowed during research. Project goals must be readily understood by all involved. Use clear and concise language to explain what the subsequent design pieces, activities, or creative campaigns must accomplish. Use the old "elevator pitch" as a standard: State your goal in as few sentences as possible, about 30 seconds spoken out loud. If you need more time than that, it's an indicator that your project remains unclear or unwieldy in scope.

Focus on Audience

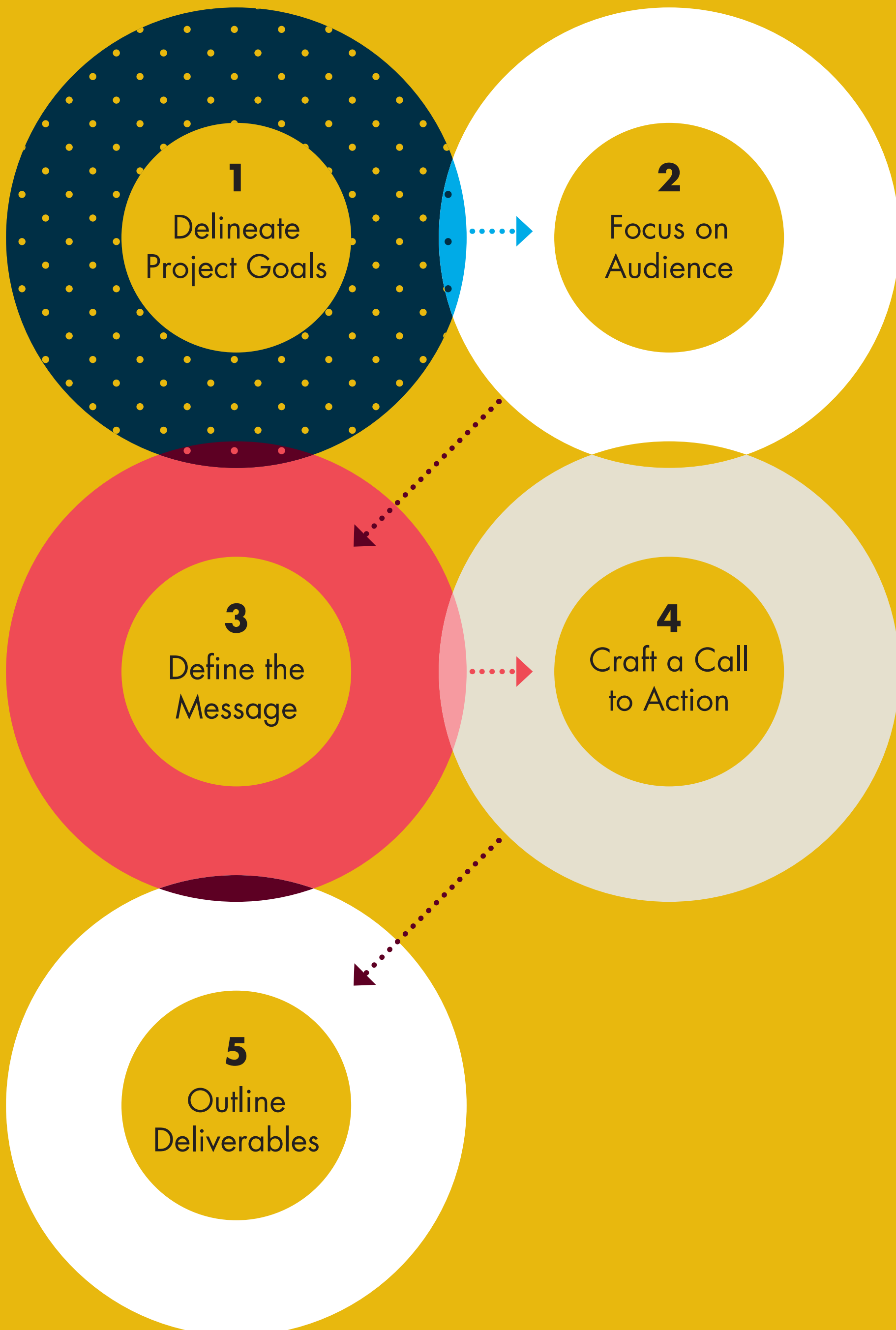
Who are you talking to, or interacting with, when the project is complete? Who will use your design deliverables? Now that you've invested research time understanding your audience, draft a clear description to share with the rest of the creative team and project stakeholders. Too often audiences are framed by demographics (ex: males, age 18–24). You've done your homework and know it's way more than age and gender, it's about culture, attitudes, behaviors, and beliefs. Present the audience as real people and you will know how to design for them.

Define the Message

What do you need to say? What tone, language, aesthetic, medium will resonate with the audience? Sometimes, in complex communication programs, there may be more than one message. If necessary, create clearly delineated hierarchies of communication for primary, secondary, and tertiary audiences and/or phases.

A good creative brief makes research actionable. Use this outline to get started.

CREATIVE BRIEF **OUTLINE**



Establish a Call to Action

What do you want the audience to do? What's the ideal reaction to the product you place in their hands, the message you send across their screen? Define what you want from the audience, then measure new concepts and ideas against that goal. Consider who benefits from the action you're suggesting. What's in it for the audience? Make that answer abundantly clear to encourage participation or purchase.

Outline Project Deliverables

Literally, what are you going to make? What channels of communication are appropriate (social media, online video, interactive, print, advertising, etc.)? What are the campaign's overall timeline and associated time-on-task, budget, and creative team responsibilities for each component?

If your inner artist is raging at the thought of all this reporting, embrace the frustration you feel when asked to read a long-winded paper or watch someone read slides during a presentation. Now don't do that to yourself, your colleagues, or your clients. From research planning through creative briefs and even external case studies, know your audience! You aren't being paid by the word, you're being paid to communicate. Multistage reporting keeps lines of communication open between stakeholders and ensures that research and creative activities remain connected. Deliver the information that's required in a way that engages the people you're sharing it with—if you're used to doing that for a target audience, you can surely apply those principles to documentation and summarization. Budget your time. Each subsequent report should build on the previous, diverging where necessary, according to new findings or strategy shifts, but not reinventing the wheel. These processes are intended to elevate your practice. They should be illuminating and adaptive. If it turns into bureaucratic reporting, you're missing the point—and the advantage these exercises provide when done right.

EXPERT
VOICE

Megan Fath
Innovation Program Leader
Doblin, the innovation and design practice of Deloitte Consulting LLP

DESIGN YOUR WAY INTO THE RESEARCH PROCESS

Leverage your design skills to frame the research findings as an evocative story, one that is memorable, digestible, surprising, and emotional.

Research may feel foreign to our prior experiences and education as designers. However, our practices and methods offer tangible value to uncovering user insights.

Sadly, the discovery phases of the process are often depicted with a pronounced delineation between research investigation and design exploration. This separation inadvertently silos the activities and dedicated talent for each phase. Design, however, plays a vital role in the research process. Just as the design process continues to embrace research, design practices are indispensable to the research phase.

A note: *This is not intended to advocate for early problem-solving before the problem is understood. No doubt that compressed time schedules often challenge teams to do this.*

Below are some suggested methods and roles to bring design into the research fold:

Observe with the Designer Eye

When multi-disciplined teams include members with prior research experience, volunteer to observe the research interviews. Your attendance will help minimize the challenge of translating the findings to the design team. Moreover, you may identify aspects that may be missed by team members from different backgrounds. Designers contribute an observant eye to the user's physical interactions and workarounds as well as an analytical perspective regarding how the current design is challenging or limiting users. Joining a team of experienced research colleagues will also help you develop your own observational interview skills.

If you are new to research, you may want to volunteer to assist the lead interviewer with documentation by capturing photographs and video. This is an opportunity to practice observing and will familiarize you with the inventory of rich storytelling material that can be leveraged later in the project. As designers become acclimated to research, they are encouraged to ask follow-up questions that are not leading ("How about …") and that are not hypothetical scenarios ("Would you use …"). The interview participants lack skills to determine how to solve the problem. With time and practice, you will be able to lead interviews. In the interim, practice observing the interviews with your own eye, attuned to the unstated user needs, interactions, and experience design. Be prepared to contribute to team discussions. Consider the following questions: What were the stated and unstated user needs? How were these met (or not)? What should a designer keep in mind in designing a future experience for this participant?

Visualize the Problem through Information Diagrams

As designers, our visualization skills are beneficial in helping teams see problems in new ways and identify patterns that appear across the research. Information diagrams and visual models can provide a narrative about findings, communicate problems as they were experienced, and identify new opportunities. Use them to bridge the problem-understanding aspects of research and the problem-solving aspects of design.

Creating information diagrams can start early in the team's analysis process. It begins with listening to the discussions and sketching visual diagrams to capture the team's emerging thoughts. These can start in your own notebook during debriefing and later be shared more broadly with your team. As you become more confident in these settings, this may evolve into early, rough sketches on a whiteboard as you and the team discuss the research findings, followed by collaborative sketches. Later in the process, the diagrams become higher-fidelity and often take the form of a journey map or ecosystem map. Experience or journey maps are a good place to start, capturing what the team saw as the participant's behaviors, needs, and emotions set along a process.

Engage in Critique and Dialogue

Dialogue and critique are invaluable while the research team is analyzing the data and interpreting the findings. As designers, we inherently understand the iterative nature of identifying a solution. Crafting meaningful research insights, likewise, can mirror the critique culture that is integral to our own design education.

Encourage your collaborators to post their thoughts on walls to help prompt discussion. It may start with early emerging insights or "wireframing" the research/user story.

The practice of crafting insights is characterized by skills that are similar to our own design process. It involves:

- Iteration
- Dedicated time
- Internal reflection
- Collaboration with others
- Consideration of audience

Foster Empathy through a Compelling Story

One of the most valued aspects of ethnographic research is the empathy it sparks for your clients and teams. This type of research is rich with human stories, emotion, and narratives that nurture emotional connections. However, it can be challenging to distill these findings into a set of final deliverables (typically flat documents and presentations).
For designers, this challenge can be flipped to a creative moment that breaks conventions. Leverage your design skills to frame the research findings as an evocative story, one that is memorable, digestible, surprising, and emotional.

Preparing to craft a captivating story can happen prior to completing the research. Consider the end experience at the start of the project. Doing so will ensure that the right plans for the desired documentation are in place from the onset. Designing with high-quality photographs and video is much easier than working with myriad back-lit, blurry, or inconsistent images. Early communication of a creative vision will also ensure that the team is able to deliver on the final outcomes.

Integrating these familiar design practices into the research phase will help create invaluable insights, build a true multi-disciplinary team, and minimize time invested in knowledge transfer when it comes time for the design phase.

CUMULATIVE DOCUMENTATION

Once a project has been completed and delivered to the client, research is *almost* over. Documenting the functionality and success of a finished project is an important phase in the research cycle and should not be overlooked.

When making a case for the value of design, the information gathered toward the end of completion is often the most compelling. Additionally, designers and their respective studios can learn important lessons by reflecting on the achievements and failures encountered during a project's development. Clients may be asked to contribute a letter or fill out a questionnaire describing their experience and level of satisfaction with the finished project. This appraisal should be documented in an internal case study and used to streamline future assignments.

Build a Personal Research Morgue

Don't pack those internal case studies away in moth balls. Build your own library. By documenting and archiving research and processes, and creating case studies of past projects, designers can start to build their own research library. Secondary research done for new projects does not always have to come exclusively from outside sources. Research undertaken for one project may also be valuable for later commissions. By archiving research and creative processes, documenting learning outcomes, showcasing end products, and understanding how they work, the designer can build a proprietary body of knowledge that will be invaluable for soliciting and retaining future work.

Contribute to a Body of Knowledge

Build your profession. Publishing successful research-driven projects—either individually or through organizations such as AIGA, Design Management Institute, the Design Council, or ICOGRADA—contributes to the collective body of knowledge in the field and promotes the undeniable value of design.

QUICK TIPS

Process vanquishes creative block.

Invest time outlining research plans and creative processes at the start of a project, and efficiency will be amplified during development. When you hit a creative road block (and everyone does occasionally), a dedicated process model provides a task list that will keep you and the project moving forward.

Logic models facilitate team building.

Remember hating group projects in school, when inevitably only a few people carried the load? Logic models force accountability by outlining each task and the party responsible for completing it. This system clearly delineates who's doing what, and how that connects to other people's assignments. It's harder to drop the baton when you know you have to hand it off to a team mate.

Work smarter, not harder.

As you're developing a research plan consider what you'll use to analyze results, it may frame how you record or document primary activities. Research reporting can take the form of presentations or papers; choose a manner of delivery that will resonate with your team. Keep in mind that during research planning, collection, and reporting, each step builds on the next and all share a common goal: You're building a comprehensive argument for what you'll produce in creative. This chapter is filled with a variety of methods, frameworks, and processes that can be used to your advantage—but you don't need all of them on every project! Use a combination scaled to time, resources, and project goals.

Borrow, build, share.

Professional organizations and universities have the time and resources to investigate things that small businesses don't (we've shared more than a few of them in this book). Borrow their models, and adapt them for your own use. Return the professional favor by spreading the word about these studies, and by making the time to document and share your own results. The field is richer when we build on example.

CHAPTER 4

PROJECT SPOTLIGHTS

It's one thing to read about a concept, another to see it in use. The following pages feature research-driven design projects of all sizes, from experimental social concepts through massive shifts in corporate culture.

AUB
BRAND
STRATEGY

AUDIENCE:
Prospective national and international students considering degree-level creative study in the UK

CREDITS:
Bond & Coyne

CLIENT:
Arts University Bournemouth (AUB)

RESEARCH TACTICS INCLUDE:
Communication Audit (p44)
Competitor Profiling (p46)
Paper Prototyping (p86)
Personas (p90)
Mood Boards (p96)
Sketching (p98)

Recruitment has become a high-stakes game for universities everywhere, each seeking to increase enrollment and attract the best and brightest.

To stay competitive, Arts University Bournemouth (AUB), a leading specialist arts university in the United Kingdom, needed to refresh its brand strategy. They sought to capture the imagination of students from around the globe who were looking to enter the creative industries.

Goals

AUB had identified specific recruitment targets. Their campaign would need to hit a variety of touch-points with potential students from initial discovery to submitting an application, through enrollment. They recognized the need for an external perspective but the university's small internal marketing team would need to easily manage the project's rollout.

AUB retained Bond & Coyne, a brand design agency with a history of excellence serving arts, education, and nonprofit markets. They would work closely with the school to create a strategy and visual language that could transcend media formats and communication scenarios. The charge: Cut through the clutter of a competitive market, resonate with a discerning audience, and hit AUB's new enrollment metrics.

Bond & Coyne designed a full suite of collateral for the Arts University Bournemouth rebrand. Central to recruiting efforts was a physically interactive prospectus/ view book.

Research + Deliverables

The Bond & Coyne agency has a deep commitment to research, "context is critical to success" is a tenet of their practice. They began the project by investigating trends in higher education recruitment. Close attention was also paid to the specific needs of AUB. Organizational strategy was analyzed and mapping exercises were undertaken to align recruitment efforts with academic and budgetary calendars. "We know that as a studio there is no point in delivering a 'big idea' if the practicalities of making it a reality prevent it from flying," says Mike Bond, the firm's cofounder and strategy director.

Understanding the audience would also be critical to the project's success. The creative team gathered research to create a working knowledge of the individuals their campaign would target—going well beyond what demographics could offer. They sought qualities and values unique to that group. Curiosity, passion, individuality, and the desire to explore were identified as themes that resonated with young creatives. With this information the team could craft a purposeful message, regardless of form.

Going beyond the brief, Bond & Coyne determined a conceptual direction flexible enough to work across multiple channels (online, print, and environmental). It would be adaptive to a variety of marketing needs, and easily scalable for special events. The brand refresh focuses on the journeys of AUB students, rather than selling an institution. The team produced a distinctive range of collateral, including exhibition materials and take-away promotions for site visits, animations, and illustrations used across mediums, a detailed course guide, and a unique prospectus/view book designed as a metaphor for the AUB experience. Using imagery created by students and course information from the university's website, combined with inspiration from the Eames' House of Cards, Bond & Coyne broke the prospectus out of its traditional book form. The resulting cards interlock in unlimited arrangements, allowing prospective applicants to create their own journey, building classes into exciting new combinations, mirroring the dynamics of the campus' creative culture and expansive resources.

Results

Bond & Coyne's strategy is on target. The campaign's success can be measured through a rise in inquiries to the university, and in applications submitted for admission—which have grown by 30% since the initial iteration of the project was launched. This is a significant increase relative to their competition in the higher education sector. AUB has also experienced elevated levels of engagement through social media with both prospective and current students. The campaign has even inspired 'Aberdeen to Bournemouth,' an alumni relations and networking project that documents the success of AUB grads across the UK.

AUB's new brand strategy and the related marketing campaign have also been recognized by several prestigious creative and education industry awards for effectiveness and innovation. That's significant for the university, because those professional bodies are filled with potential future employers of AUB grads. It's also another opportunity to build the university's reputation for excellence within the market it serves. Bond & Coyne appreciate the recognition as well, it builds the studio's morale as it provides the basis for conversations with future collaborators and clients.

The prospectus package opens to reveal a set of interlocking cards, each with a piece of AUB student artwork on one side and a course description from the catalog on the other. Potential applicants can literally build their own unique journey.


BA (HONS) VISUAL COMMUNICATION
FOUNDATION DIPLOMA IN ART AND DESIGN
BA (HONS) ILLUSTRATION
BA (HONS) COMMERCIAL PHOTOGRAPHY

ASSET
PROMISE

AUDIENCE:
The City of Middletown, Connecticut

CREDITS:
CO:LAB

CLIENT:
Middletown Youth Services Bureau

RESEARCH TACTICS INCLUDE:
Communication Audit (p44)
Contextual Inquiry (p52)
Observational Research (p54)
Unstructured Interviews (p60)
Focus Groups (p70)
Surveys + Questionnaires (p72)
Analytics (p78)
Personas (p90)

Can a brand development firm hired to create a resonant white paper use design thinking to build a stronger community instead?

Goals

Middletown, Connecticut, is a unique New England community with an ethnically and economically diverse population spread out over 42 square miles of rural, urban, and suburban landscape. Since 2006 the community and its public schools have administered a survey to students in grades 7–12, seeking to identify, measure, and articulate the experiences that youth need to thrive (and avoid risky behavior).

The Middletown Youth Services Bureau (MYSB) wanted to develop a white paper to share the results of that survey with the community. They contacted CO:LAB, a regional creative studio with a reputation for excellence in socially driven projects, to help them create a document that would be easy to utilize.

The survey, Search Institute's "Profiles of Student Life: Attitudes and Behaviors Survey," is a popular tool in youth development work. The data it gathers is cast as "developmental assets" and those are used to initiate conversation and action around improvement. Middletown's initial results were dismaying, one critical indicator reflecting youth perceptions of being valued and supported by their community registering at only 19%.


SEE
ME
Only 19% of our youth feel
valued by the community.
Go to AssetPromise.org to get involved.
Middletown Youth Services Bureau initiative

CO:LAB partnered with the Middletown Youth Services Bureau to create a social awareness campaign that challenged perceptions of young people and inspired action.

Youth volunteers asked local business owners to hang posters for the awareness campaign in their shop windows. Just placing the posters began inter-generational dialogues.

CO:LAB created "promise" buttons, challenging individuals of any age to make a commitment to their community. These were used as personal reminders and conversation starters.

Working with MYSB, CO:LAB saw opportunity for design to do more than communicate survey results. The partnership developed a strategy to intervene. Rich Hollant, CO:LAB founder and principal, describes their vision: "Ultimately, our goal was to bring youth issues to the center of the community not as 'a problem to resolve,' but as an opportunity that can impact everything from quality-of-life measurements to property values to economic development." Theirs would be a campaign in multiple phases, seeking to increase conditions for area youth to feel a "sense of belonging," and planning for measurable outcomes.

Research + Deliverables

Data from the initial Search Institute survey had inspired the project, but the partnership knew they would need to gather more information to adequately address its findings. They undertook video interviews with survey participants, their role models, and other community members. Youth participants were asked three questions:

- How do you believe the community views youth?
- How do you feel about these perceptions?
- What would you want from adults in your community?

Hollant describes the results of that documentation as "both heart-wrenching and filled with hope." They shared edited video with community members, asking each adult participant to commit one thing they could do to help build up the deficit of developmental assets. This became raw material for the campaign.

An extensive variety of designed collateral was created to support outreach efforts, including websites, posters, postcards, buttons, program logos and t-shirts, environmental design and signage, and more. Some of the materials performed traditional marketing functions, others were used to encourage students to engage in a dialogue around their own self-interest. As the campaign progressed, the creative team focused on norms-building, telling the story of community members who were making great strides connecting with youth to the benefit of their organization or business.

The partnership avoided a singular solution, understanding that no activity, event, or entity alone could address such a broad need. Their messaging emphasizes coalitions of impact.

Results

What was once envisioned as a one-off report became the Asset Promise campaign. Inclusive of all Middletown residents, the ongoing efforts involve elements designed to empower young people to deliver messages in their own words. It also endeavors to shift adult perspectives, targeting any grown-up a Middletown kid might encounter, from parents and teachers to coaches, neighbors, shop-owners, and more.

Most importantly, Asset Promise facilitates participation across the community. Sometimes openly declarative, such as the "Asset Promise / I Promise" program, which incorporated buttons, posters, and video pledges from participants of all ages publically committing to build opportunity. Other times evident through action:

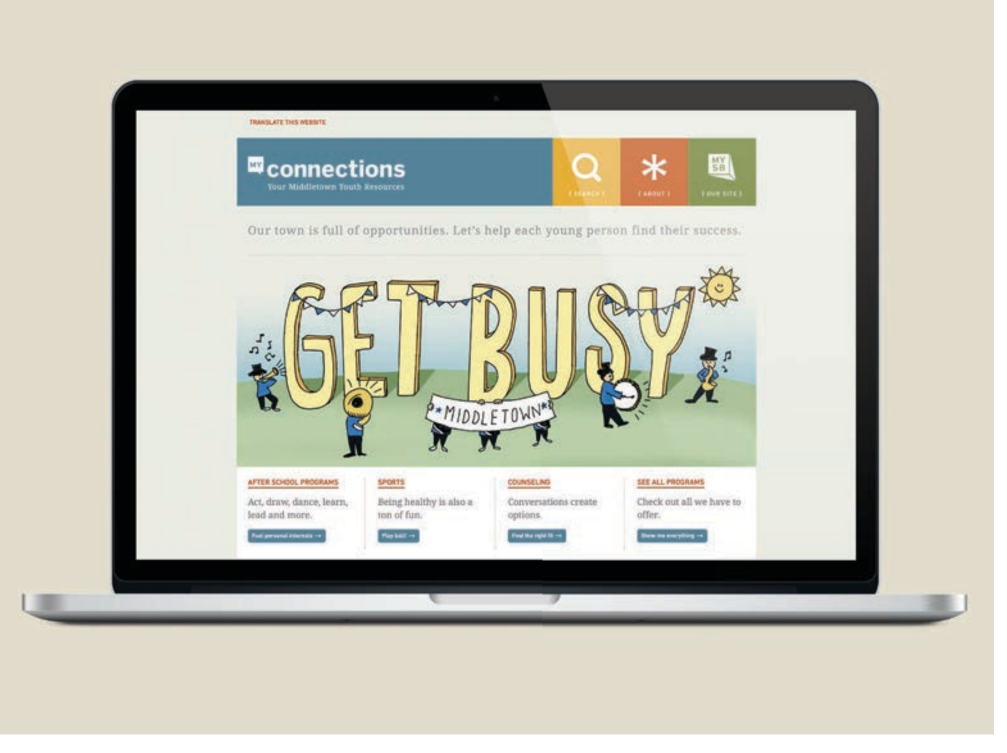
- Local merchants have co-branded TeenTuesdays, extending discounts to youth who were previously kept at arm's length.
- MYSB was able to build a vetted, verified online directory called MyConnections, where parents and children can find local activities and services to support juvenile development.
- Middletown's Mayor even participates, meeting at a local cupcake shop to bake and talk about policies that affect kids.

The longitudinal project is ongoing, and remains rooted in measurement. The schools continue to administer Search Institute's survey. Results following the three-year span between initial survey and next assessment revealed improvements of nearly 40% in the five lowest rated asset areas. The community-wide investment, led by design and powered by a robust, collaborative ground game, has generated real social value for the city of Middletown. It has also been recognized as a model of success in the state of Connecticut, and is being studied by other communities.

For CO:LAB the project has reinforced the firm's reputation as a purpose-driven social design consultancy. The Asset Promise experience has made their team especially adept at identifying organizational and programmatic capacity, and establishing appropriate pacing as change catalysts. Hollant says he now asks different questions when entering into partnerships, focused on selecting meaningful projects that also stand a good chance of yielding significant results. As you might imagine, referrals from their Asset Promise work abound.

The campaign included a rebrand of the Middletown Youth Services Bureau and a new web resource connecting young people to activities, programs, and services.


Middletown Youth Services Bureau
Justin Paul Carbonella, MPA
Youth Services Coordinator
carbonellaj@mpsct.org
middletownyouthservices.org
Middletown Youth Services Bureau
VISIT US
372 Hunting Hill Avenue
Middletown CT 06457
T 860 854 6030
F 860 854 6028
middletownyouthservices.org
Every encounter is an opportunity:
facebook.com/MtownYSB • twitter.com/MtownYSB
Make a promise
> Visit assetpromise.org
Find resources
> middletownyouthconnections.org
Let's get together
>


TRANSLATE THIS WEBSITE
connections
Your Middletown Youth Resources
Our town is full of opportunities. Let's help each young person find their success.
GET BUSY
MIDDLETOWN
AFTER SCHOOL PROGRAMS
Act, draw, dance, learn, lead and more.
SPORTS
Being healthy is also a ton of fun.
COUNSELING
Conversations create options.
SEE ALL PROGRAMS
Check out all we have to offer.

BEAM BRAND STRATEGY

AUDIENCE:
Residents of Brooklyn, Tourists, Online Consumers

CREDITS:
GFDA

CLIENT:
BEAM: Modern Home Furnishings

RESEARCH TACTICS INCLUDE:
Communication Audit (p44)
Competitor Profiling (p46)
Contextual Inquiry (p52)
Photo Ethnography (p56)
Unstructured Interviews (p60)
Demographics (p68)
Personas (p90)
Sketching (p98)

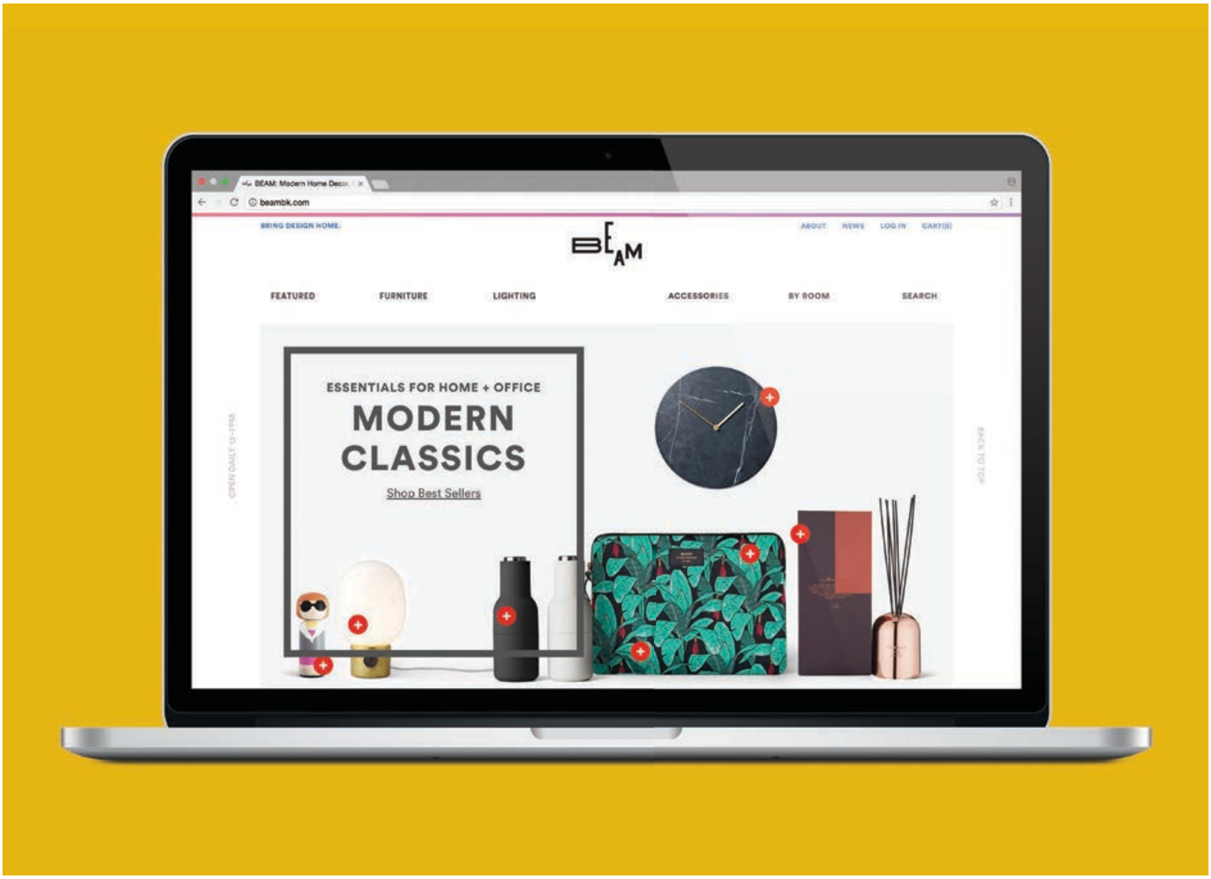
Studies tell us the millennial generation craves discovery.

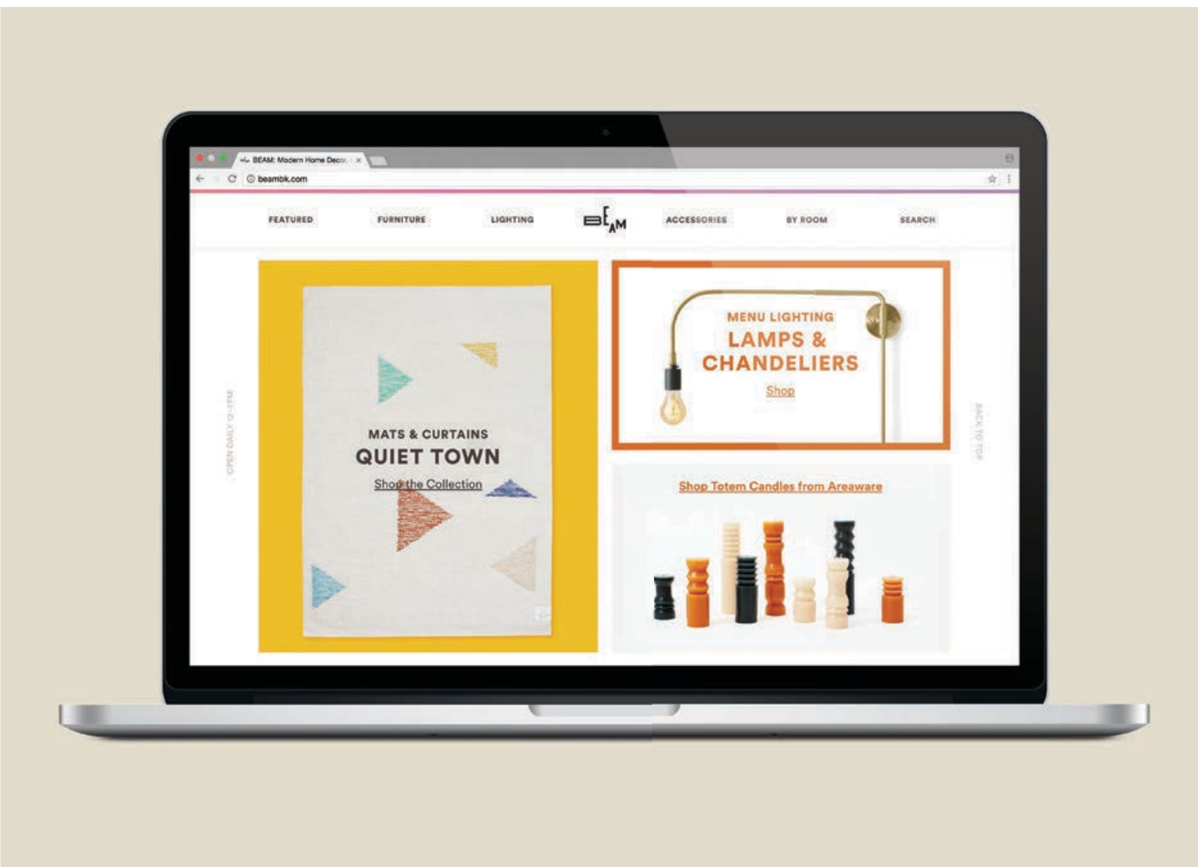
They seek to be on the edge of new products, movements, and trends—always a step ahead of peers and colleagues. Nowhere is that desire more prominent than in New York City, especially in the Brooklyn neighborhood of Williamsburg (possibly the epicenter of hipster nation). As millennials eschew mega brands for smaller, curated experiences, can good design help an emerging home furnishings retailer expand its brand but keep its sense of novelty?

Goals

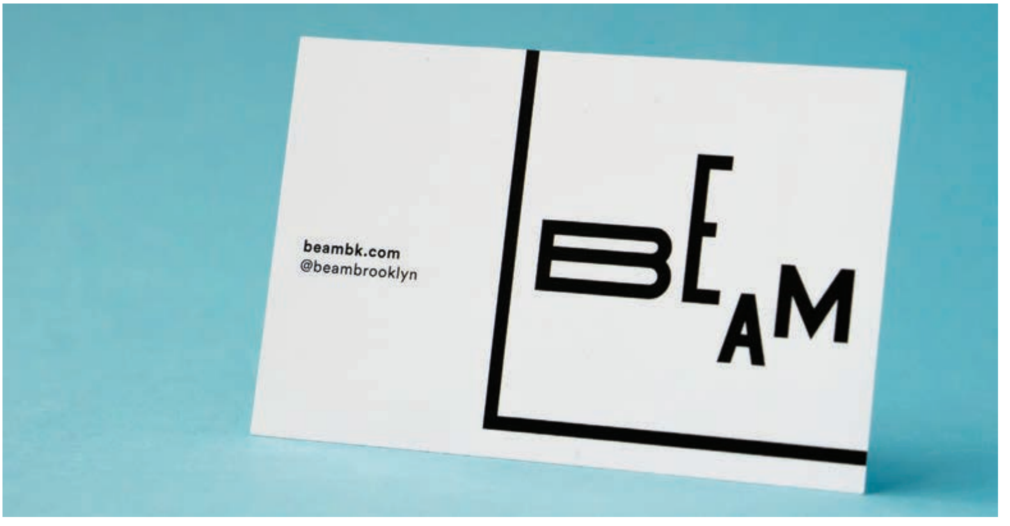
BEAM is a home furnishings store in Williamsburg, focused on the well-designed life. The co-owners established the store's success curating furniture, home goods, accessories, and interior design services. They'd developed a rapport with locals and drop-in tourists, and had a knack for catering to an audience hungry for new. But they needed help extending those in-store experiences to a broader online customer base.

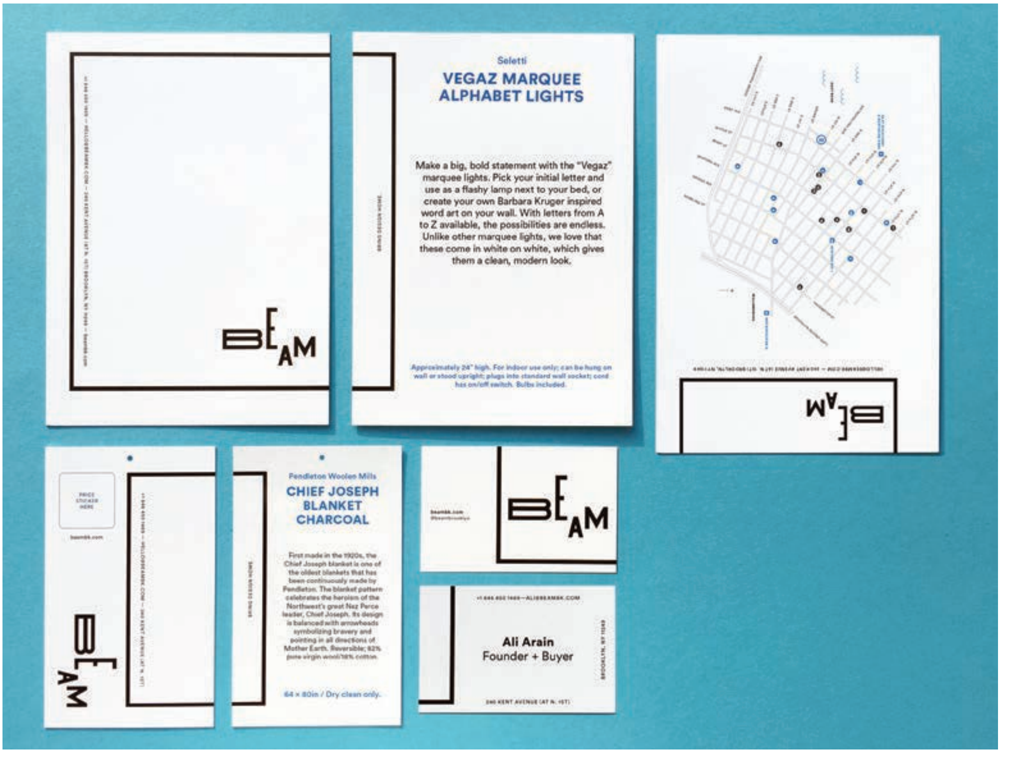
The duo selected GFDA to tackle their branding project because, in addition to traditional design and communication services, the firm had experience with product development and distribution, and a research-driven approach to problem-solving. BEAM's owners knew that they wanted to create a stronger brand, grow revenue, and increase their online presence—and they knew they needed help to do so.


beambk.com
FEATURED
FURNITURE
LIGHTING
ACCESSORIES
BY ROOM
SEARCH
ESSENTIALS FOR HOME + OFFICE
MODERN CLASSICS
Shop Best Sellers


beambk.com
FEATURED
FURNITURE
LIGHTING
ACCESSORIES
BY ROOM
SEARCH
MATS & CURTAINS
QUIET TOWN
Shop the Collection
MENU LIGHTING
LAMPS & CHANDELIERS
Shop
Shop Totem Candles from Areaware

BEAM is extending its reach, beyond the storefront. Its new digital presence allows the Brooklyn retailer to compete with larger, more established furniture and home brands.





Research + Deliverables

GFDA started with those broad initial goals, then engaged in exploratory research to establish a list of qualitative and quantitative metrics for evaluation, and specific strategies for achievement. They reviewed BEAM's business plan, including market analysis, industry analysis, competitive analysis, and strategic positioning. This helped frame the problem, allowing the designers to understand their client's vision for the growing retailer. Then they engaged in competitor profiling, digging deeper into both the local market (Williamsburg design retailers) and the online market (retailers with established reach). The team conducted unstructured interviews with the owners and a random sampling of store patrons. These helped to build a deeper understanding of the shop's day-to-day culture, and of an average customer's experience. Photo ethnography was used to determine how the storefront was perceived by potential customers, assisting exterior signage placement with an intention of drawing in more walk-by street traffic.

At the conclusion of their research GFDA compiled a 17-page report that synthesized their findings, outlining their proposed communication strategy and associated deliverables. A successful project would help BEAM increase sales through traditional in-store shopping and online sales, while bolstering social media engagement with their audience. They also wanted to help BEAM build better media relations, increasing the nature and volume of press coverage online and in print.

GFDA wanted the brand to reflect the personality and energy of BEAM's owners. Previous iterations felt static when compared with the dynamics of the in-store experience. The design should be flexible, responding to the customers' interest in change and originality. GFDA created a new identity system with usage guide, collateral for the shop (including pricing cards, area maps, shopping bags, and more), marketing materials such as postcards and email templates, and an e-commerce website to launch the new brand.

The visual components of the brand were designed with the rotation of the retailer's stock in mind. Simple typography and black lines ground the whimsy of color and pattern evolutions in merchandise.

The outcome serves as evidence that making informed design decisions ultimately generates tangible business results.

After the rebrand and e-commerce platform were implemented, online sales increased by 344%, and combined sales, including the retail location, increased by 40%.

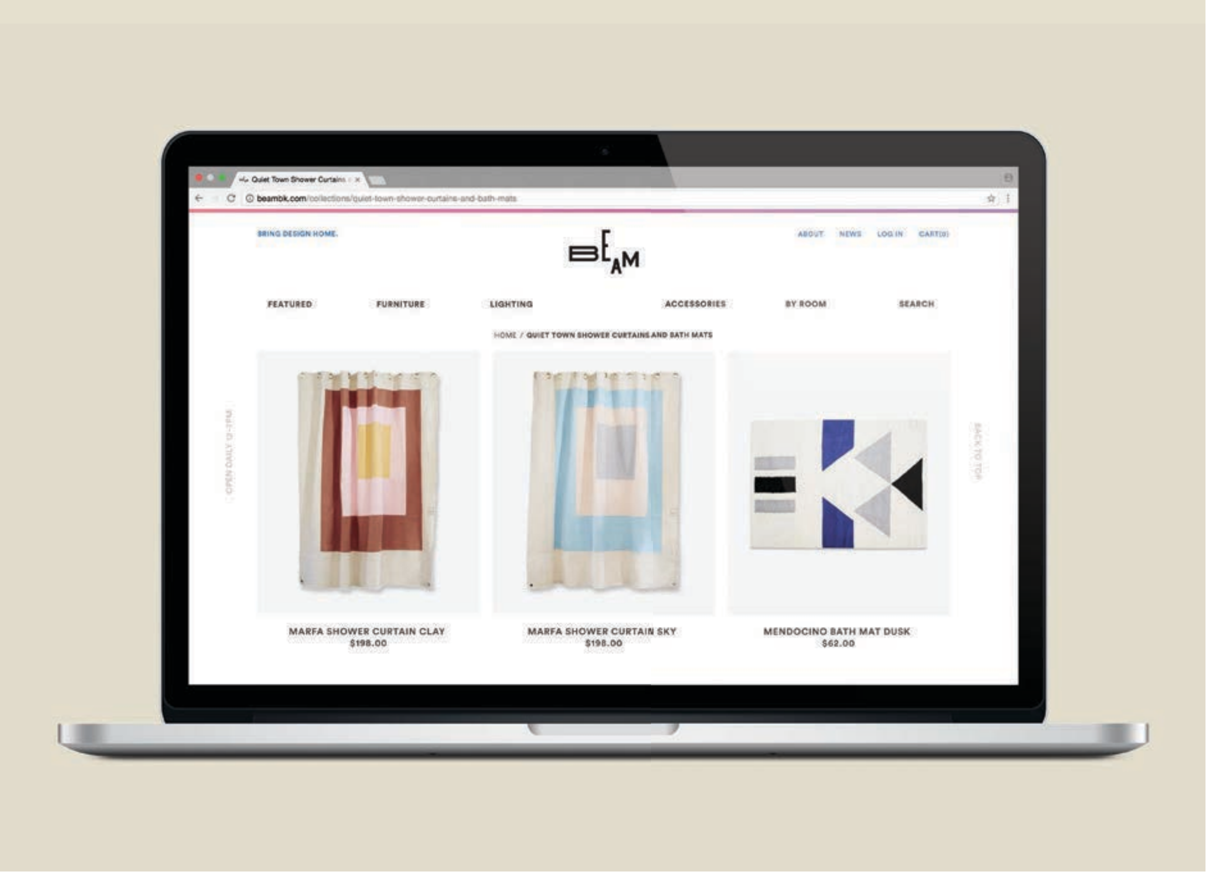
Results

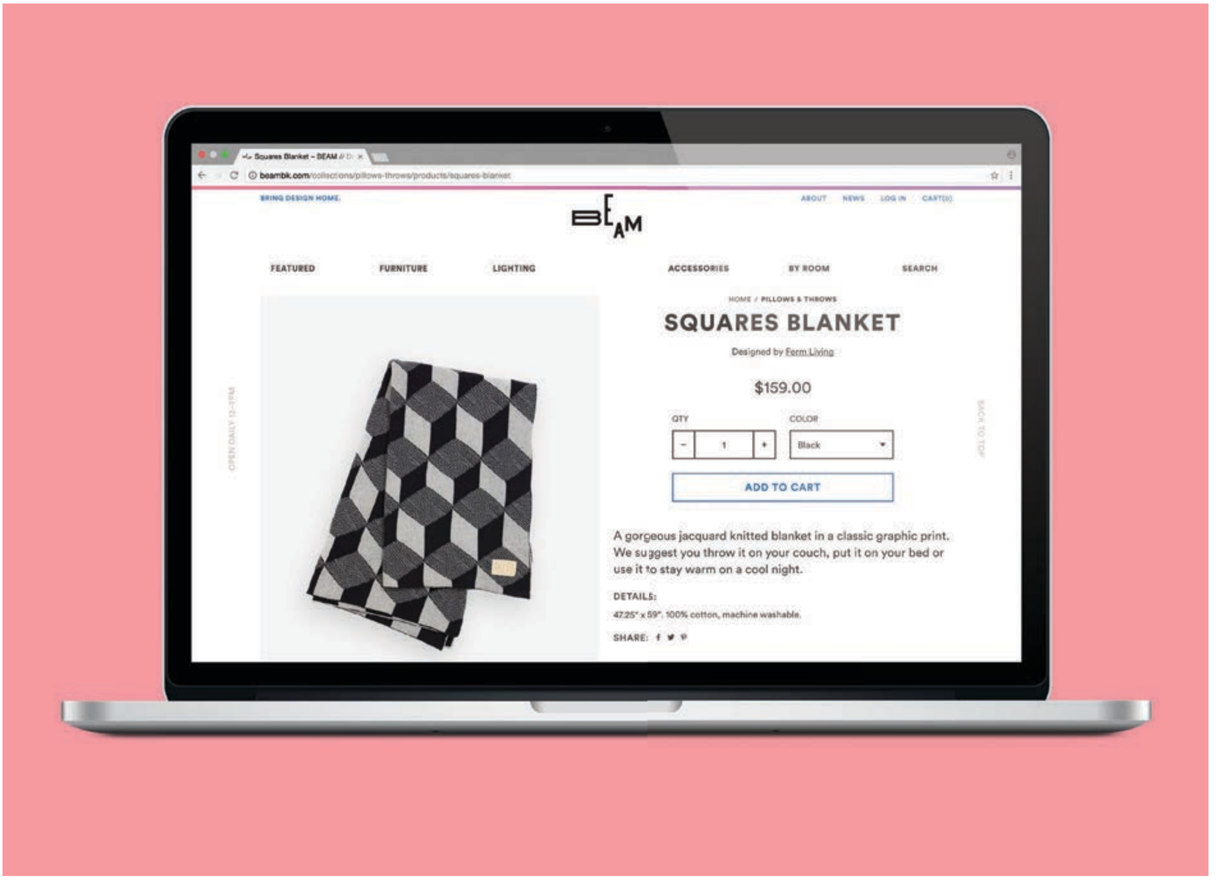
GFDA's research-driven process paid off in big ways for their client, hitting multiple success metrics, including:

- A 40% increase in overall sales
- A whopping 344% increase in online sales
- A 43% increase in visitors to the site
- An 162% increase in average orders/cart size

Project results have extended beyond increased revenue. The rebrand increased exposure to new audiences too. Co-owner Greg Coccaro says, "The branding has elevated BEAM's place in the market. Not only have we seen a noticeable increase in sales, but the exposure has continued to snowball. This year we've been picked up by various industry publications and blogs that were previously out of reach for us."

For GFDA principals Jason Bacher and Brian Buirge, the success of the BEAM project reinforces an appreciation of research-driven process. The outcome serves as evidence that making informed design decisions ultimately generates tangible business results. The studio uses the success of BEAM's rebrand to educate new clients on the value of design, emphasizing that research is essential to achieving project success.


Quiet Town Shower Curtains
beambk.com/collections/quiet-town-shower-curtains-and-bath-mats
BRING DESIGN HOME.
ABOUT
NEWS
LOG IN
BEAM
FEATURED
FURNITURE
LIGHTING
ACCESSORIES
BY ROOM
SEARCH
HOME / QUIET TOWN SHOWER CURTAINS AND BATH MATS
MARFA SHOWER CURTAIN CLAY
$198.00
MARFA SHOWER CURTAIN SKY
$198.00
MENDOCINO BATH MAT DUSK
$62.00


beambk.com/collections/pillows-throws/products/squares-blanket
BRING DESIGN HOME.
ABOUT
NEWS
LOG IN
BEAM
FEATURED
FURNITURE
LIGHTING
ACCESSORIES
BY ROOM
SEARCH
HOME / PILLOWS & THROWS
SQUARES BLANKET
Designed by Form Living
$159.00
QTY
COLOR
1
Black
ADD TO CART
A gorgeous jacquard knitted blanket in a classic graphic print. We suggest you throw it on your couch, put it on your bed or use it to stay warm on a cool night.
DETAILS:
47.25" x 59". 100% cotton, machine washable.
SHARE:

STUDIO INK

AUDIENCE:
The US Millennial Consumer

CREDITS:
Hallmark Creative

CLIENT:
Hallmark Cards, Inc.

RESEARCH TACTICS INCLUDE:
Demographics (p68)
Psychographics (p69)
Focus Groups (p70)
Surveys + Questionnaires (p72)
Personas (p90)
Mood Boards (p96)
Sketching (p98)

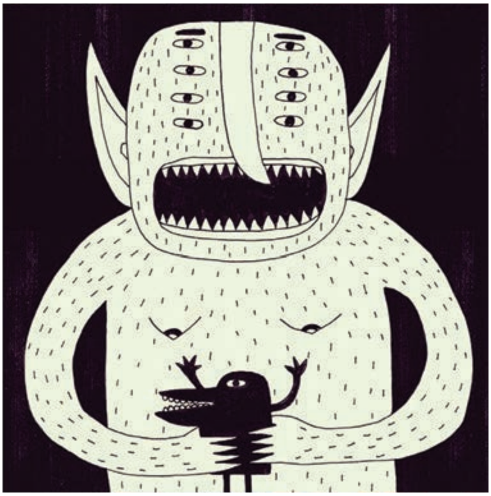
Everyone knows millennials are connected, they "like," and they "pin," and occasionally "swipe right." But do they send greeting cards?

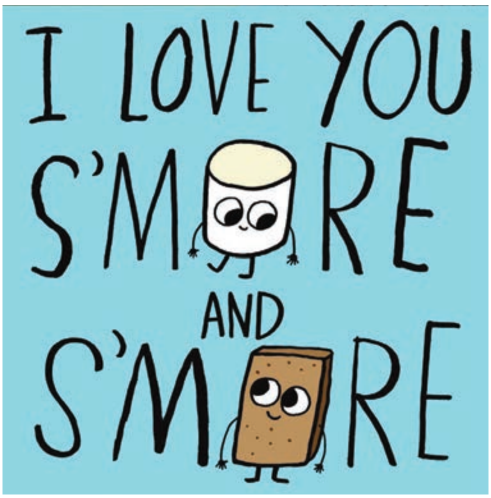
Goals

Millennials are the largest American generation to date. As a group their numbers now exceeded even the baby boomers' and are significantly larger than caught-in-the-middle generation X. Millennials are also more diverse than previous generations, with more than 40% identifying with minority race or ethnic groups in the last US census. This generation, born in the 80s and 90s, is becoming an increasingly important consumer segment.

Hallmark is a brand in the business of "helping people make emotional connections with others." They have retail stores, television channels, licensing agreements, and subsidiaries such as Crayola. But the company was founded over a century ago by a young entrepreneur with a box of cards, and greeting cards remain an essential component of the brand.

The aging baby boomer generation plays an active, important role in the greeting card industry. Would millennials continue this support? Has digital culture supplanted personal interaction or social tradition? Hallmark Cards wanted to understand the millennial customer, and determine which current products did or did not meet their needs. Their goal was




I LOVE YOU
S'MORE
AND
S'MORE


Thinking
"HERE GOES
NOTHING"
COULD BE THE START
OF everything.


TODAY IS NO DAY
FOR A !$@#
SALAD.


CLOSETS
are for
CLOTHES


BEST
thing
EVER
AWARD


INK


YOU'RE
UH
MAZING


I
LIKEY


EVEN THE SUN
NEEDS
DOWNTIME.


FROSTING
EVERY
WHERE!


HOLA
INK


MWAH!


if life were a sushi roll,
you'd be the spicy tuna.

to increase sales and brand awareness, engage new customers, and make greeting cards relevant to the largest generation living in the US.

Research + Deliverables

The Hallmark creative team began their investigation with a comprehensive literature review of existing information. They mined US Census Bureau data for hard facts and reviewed other sources to answer a variety of queries about their target millennial audience, including:

- What are prefered connecting behaviors (technology and social media platforms)?
- What life stage(s) are they experiencing?
- What is their daily landscape (encounters, experiences)?

The company's Consumer Understanding and Insights division helped dive beyond that initial data set, using consumer research, retail learning labs, and industry estimates to gain insight on how millennials perceive the Hallmark brand, and if there were any benefits or barriers to their engagement.

The findings were presented in a research report. This helped product teams understand the relatively new audience. Salient points framed an optimistic and confident generation who were also:

- The largest users of social networking
- Trend-forward, but seeking authenticity and uniqueness
- Less inclined to traditional notions of home and family, but with an affinity for collaboration and a preference for teamwork
- Under-employed, but with different expectations from previous generations about career paths and workplace culture
- Discerning with their dollars, seeking value

The research also identified opportunities and gaps in Hallmark's product portfolio. Discussions informed by this information concluded that millennial needs were different enough to warrant a new product offering.

When Hallmark establishes a new product line they begin by producing documentation to help define a customer target and associated brand strategy. This docket, including a brand imprint positioning guide, creative brief, and style guide, articulates the vision to project partners, from the creative team (responsible for generating associated

Hallmark's Studio Ink card line is an example of research-driven outreach to a new market. Targeting the millennial generation's sense of humor and unique voice, the cards feature curated illustrations and writing by popular indie artists.

The research also identified opportunities and gaps in Hallmark's product portfolio.

artifacts) to other internal members of the organization and sometimes even external retail partners. It defines ways to create assets and products that support the line's strategy.

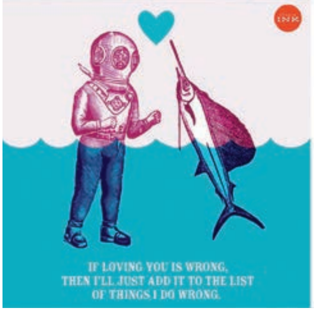
The company's research on millennials helped launch the Studio Ink card line. These new products would be targeted specifically toward millennials' unique needs, resonating with their relationships, language, sense of humor, and generational voice. The style guide for the line describes the it as "… free of pretense and willing to place itself at the center of the joke … as unapologetically real-life as the cards it represents—and the consumers who send them." The cards would feature curated indie artwork and writing, the sentiments thoughtful but open-ended and not overly polished.

Results

Studio Ink has confirmed the creative team's belief that millennials' desires to connect and enrich their relationships are greater than ever. In the first year after launch the team carefully monitored overall sales performance, online sales specifics, and social media engagement. Studio Ink exceeded its business metrics. The line connects Hallmark's parent brand to an expansive new audience, and backs up the organization's vision for creating "a more emotionally connected world."

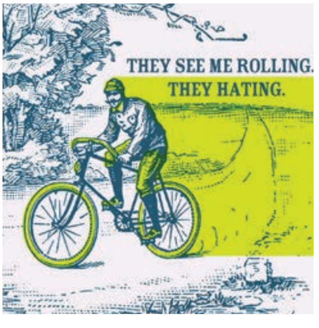

NICE BUNS!


OOOH-
YOU DONE BEEN
CASSEROLED!


IF LOVING YOU IS WRONG,
THEN I'LL JUST ADD IT TO THE LIST
OF THINGS I DO WRONG.


YOU MADE A
HUMAN!


Orange you glad we're friends?


THEY SEE ME ROLLING.
THEY HATING.


happy
happy
happy
happy


PAPER
HUG


Jazz
Hands


Peanut
Butter
Jelly

IBM
DESIGN
RESEARCH

AUDIENCE:
IBM Employees

CREDITS:
IBM Design

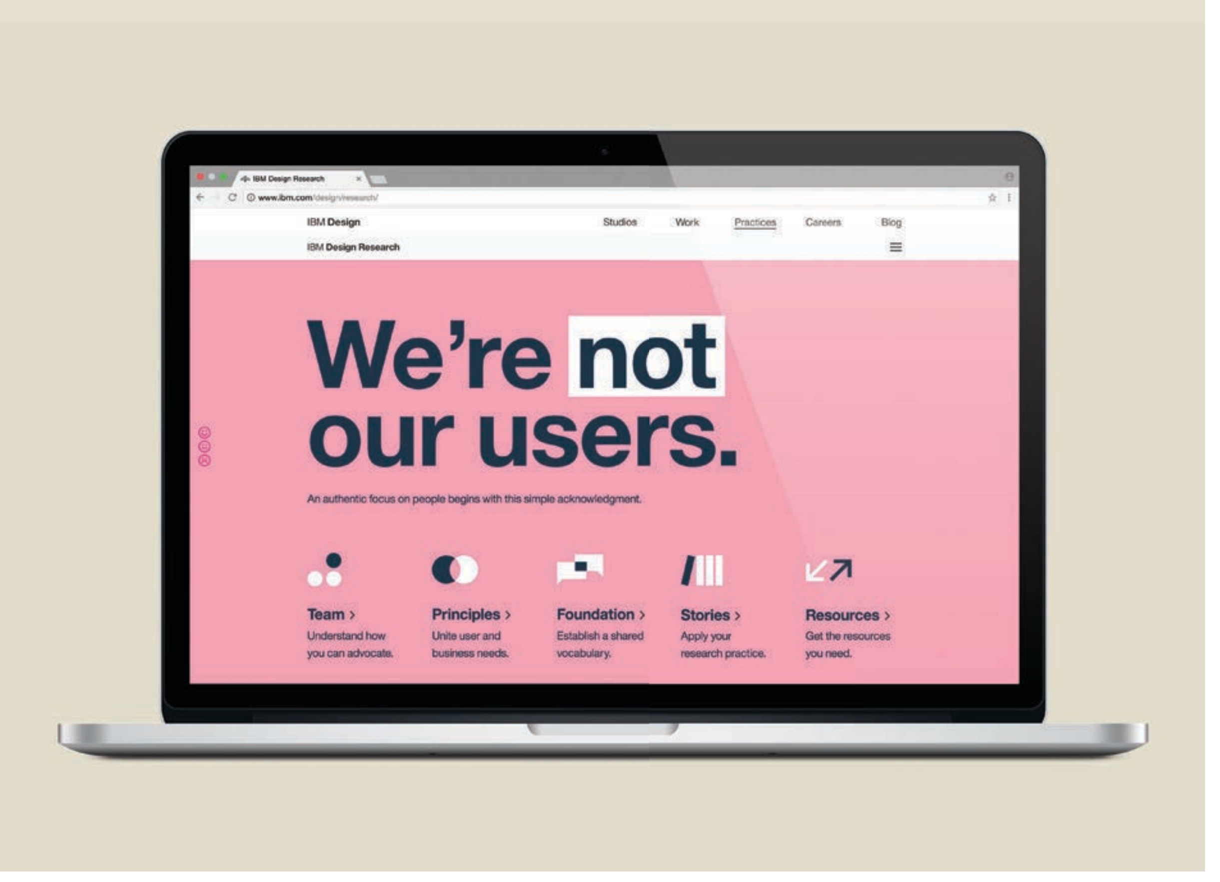
CLIENT:
The IBM Corporation

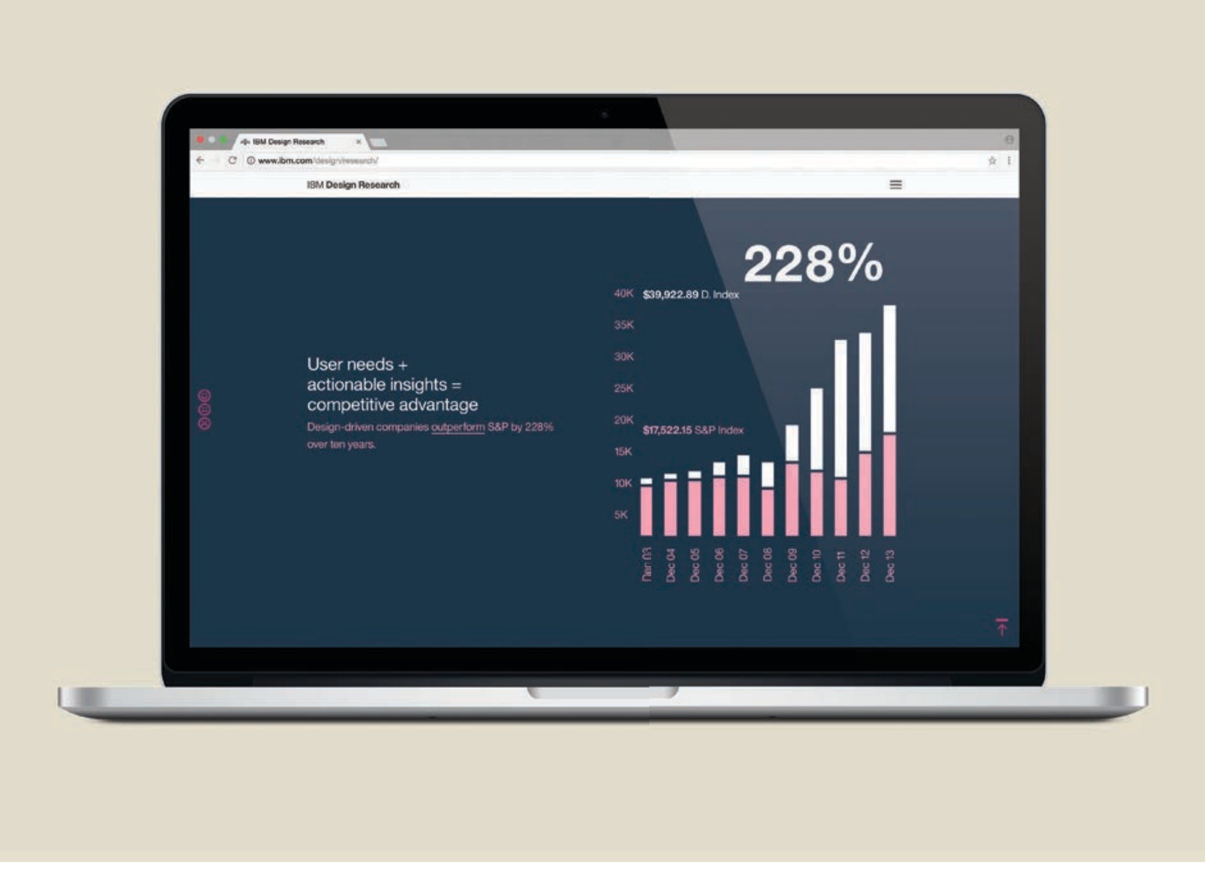
RESEARCH TACTICS INCLUDE:
Contextual Inquiry (p52)
Observational Research (p54)
Unstructured Interviews (p60)
Surveys + Questionnaires (p72)
Card Sorting (p80)

How does the company that coined the phrase "Good design is good business" pivot through rapid technological change—navigating innovation and opportunity from tabulating machines, scales, and cash registers to artificial intelligence, health care analytics, and Mars lander hardware? By design, of course.

Goals

IBM has a storied history of investing in design, and more than 100 years after the corporation was founded, Ginni Rometty, chairman, president, and CEO declared that change at IBM would be driven by it. Could an organization that many (even internally) viewed as technology-driven shift to a human-centered mission? While IBM already had some designers on staff, there was no common or systematic practice of design. Could design thinking be that common practice? Could it inspire new products and services from any team, ultimately driving better human outcomes? Could it empower diverse teams, drive collaboration across the workforce, including engineers, product managers, sales staff, and seasoned researcher scientists with no creative training? IBM Design was tasked with nothing less than changing corporate culture through design.


IBM Design Research
www.ibm.com/design/research/
IBM Design
Studios
Work
Practices
Careers
Blog
IBM Design Research
We're not our users.
An authentic focus on people begins with this simple acknowledgment.
Team ›
Understand how you can advocate.
Principles ›
Unite user and business needs.
Foundation ›
Establish a shared vocabulary.
Stories ›
Apply your research practice.
Resources ›
Get the resources you need.


IBM Design Research
www.ibm.com/design/research/
IBM Design Research
228%
$39,922.89 D. Index
$17,522.15 S&P Index
40K
35K
30K
25K
20K
15K
10K
5K
User needs + actionable insights = competitive advantage
Design-driven companies outperform S&P by 228% over ten years.
Dec 04
Dec 05
Dec 06
Dec 07
Dec 08
Dec 09
Dec 10
Dec 11
Dec 12
Dec 13

IBM Design Research curated institutional knowledge of human-centered design and design thinking practices to help project teams integrate research into their product development.

Research + Deliverables

To deliver human-centered outcomes and design thinking, the company needed to scale the practice of design research so that it was approachable, accessible, and of benefit to any employee. Chris Hammond, design research lead + practice manager at IBM Design, headed the team creating the tools to do so.

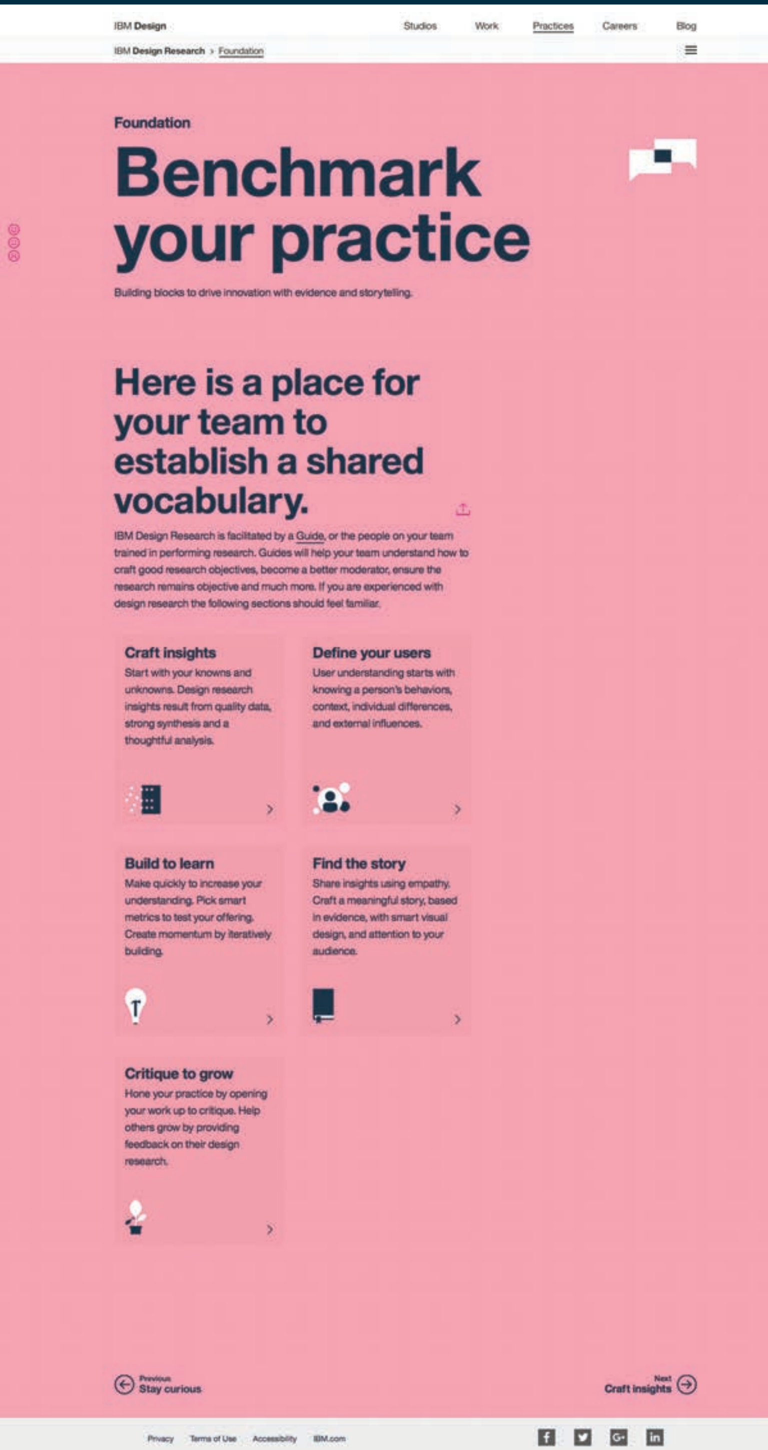
Hammond's team first needed to understand how and where successful methods were already in use. Through observation, they began cataloging IBM team operations, seeking to learn how successful teams incorporated design research into their practice, and how they fostered user empathy, generated ideas, and collaborated. When an adequate amount of observational data was collected, team members began interviewing a range of employees, including designers, researchers, and engineers, establishing a baseline of common experiences.

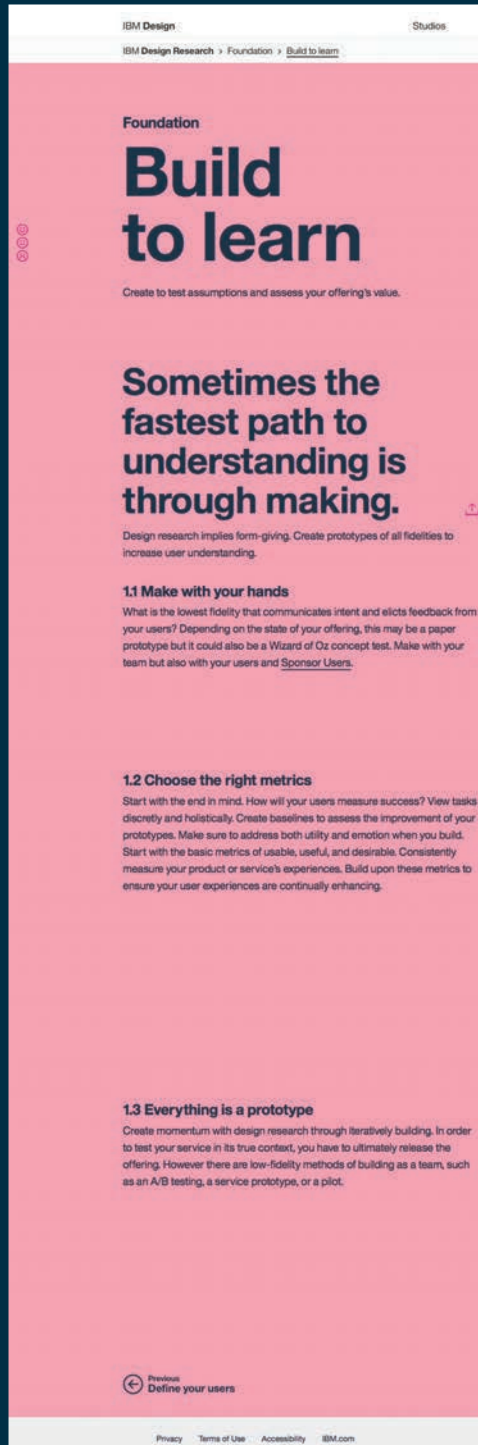
That information helped the team identify 49 key employees with expert knowledge who were asked to share their insight. The Design Research Content Creation Guide was used to solicit specific information. Three writing cues guided participants to provide thoughtful responses outlining what research methods they used, what frameworks or models helped guide their process, and how they might engage their entire team in research activities. Hammond and crew stayed in contact with the participants, encouraging thoughtful discussion, and providing feedback based on their responses to ensure the most accurate representations of the research activities and methods used.

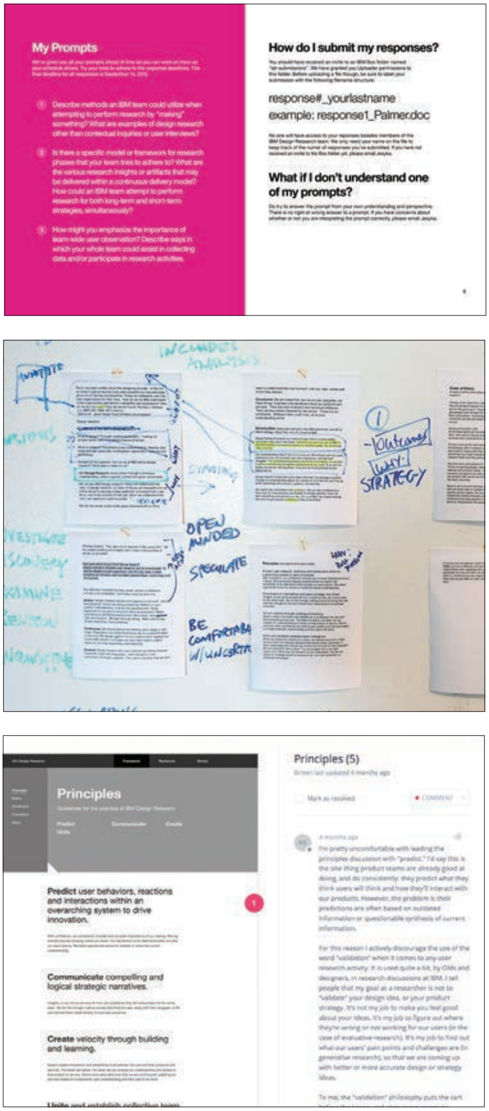
The team also conducted trial workshops, using the information collected by the guide as curriculum. The goal of these workshops was to ascertain the best ways to communicate and teach the concepts company-wide.

The results, a collaborative effort of dozens of IBM experts, is a practice that enables change and a comprehensive website repository of accessible design research methods. This approach provides IBM employees around the world with convenient and effective methods for integrating design research into their workflow. Better still, the site lives outside the IBM firewall, purposefully shared in the spirit of innovation and collaboration. You can check it out at ibm.com/design/research.

IBM Design Research lives outside of the company's firewall, providing world class design research methods and best practices for anyone, not just IBM employees.


IBM Design
Studios
Work
Practices
Careers
Blog
IBM Design Research › Foundation
Foundation
Benchmark your practice
Building blocks to drive innovation with evidence and storytelling.
Here is a place for your team to establish a shared vocabulary.
IBM Design Research is facilitated by a Guide, or the people on your team trained in performing research. Guides will help your team understand how to craft good research objectives, become a better moderator, ensure the research remains objective and much more. If you are experienced with design research the following sections should feel familiar.
Craft insights
Start with your knowns and unknowns. Design research insights result from quality data, strong synthesis and a thoughtful analysis.
Define your users
User understanding starts with knowing a person's behaviors, context, individual differences, and external influences.
Build to learn
Make quickly to increase your understanding. Pick smart metrics to test your offering. Create momentum by iteratively building.
Find the story
Share insights using empathy. Craft a meaningful story, based in evidence, with smart visual design, and attention to your audience.
Critique to grow
Hone your practice by opening your work up to critique. Help others grow by providing feedback on their design research.
Previous
Stay curious
Next
Craft insights
Privacy
Terms of Use
Accessibility
IBM.com


IBM Design
Studios
IBM Design Research › Foundation › Build to learn
Foundation
Build to learn
Create to test assumptions and assess your offering's value.
Sometimes the fastest path to understanding is through making.
Design research implies form-giving. Create prototypes of all fidelities to increase user understanding.
1.1 Make with your hands
What is the lowest fidelity that communicates intent and elicts feedback from your users? Depending on the state of your offering, this may be a paper prototype but it could also be a Wizard of Oz concept test. Make with your team but also with your users and Sponsor Users.
1.2 Choose the right metrics
Start with the end in mind. How will your users measure success? View tasks discretly and holistically. Create baselines to assess the improvement of your prototypes. Make sure to address both utility and emotion when you build. Start with the basic metrics of usable, useful, and desirable. Consistently measure your product or service's experiences. Build upon these metrics to ensure your user experiences are continually enhancing.
1.3 Everything is a prototype
Create momentum with design research through iteratively building. In order to test your service in its true context, you have to ultimately release the offering. However there are low-fidelity methods of building as a team, such as an A/B testing, a service prototype, or a pilot.
Previous
Define your users
Privacy
Terms of Use
Accessibility
IBM.com



An internal survey of best practices initiated website content. A lo-fidelity prototype was built using InVision and tested with key project stakeholders.

Results

Release of the practice is just the beginning for IBM Design. More IBM teams are engaging in design research than ever before, whether they have a trained researcher on staff or not. Hammond's team continues to update and evaluate the content, using anecdotal feedback and traditional business metrics such as Net Promoter Score (NPS) data. NPS measures how likely it is that someone will refer the site to a friend, and this site's scores are on the rise. This means word-of-mouth enthusiasm for the IBM Design Research site is spreading.

In addition to the tactical, they've incorporated internal functionality, using it as a repository for consent forms and related procedural resources needed for conducting research. It's also an opportunity to collaborate externally, bringing together the necessary tools for IBM to practice design research at a world class level, and sharing them extensively with anyone else like-minded. IBM Design employees have enthusiastically discussed these methods at creative industry conferences and events, actively championing the power of design and design thinking. Their expert ambassadors report back consistent thanks from receptive crowds. Good design continues to be good business.

IBM Design Research holds training workshops, promoting the value of a user-centered approach to project development. All IBM employees are encouraged to attend, regardless of disciplinary background.

EXPERT VOICE

Elizabeth Pastor
Partner + CoFounder
Humantific
SenseMaking for ChangeMaking

DESIGN RESEARCH + VISUAL SENSEMAKING (OR MAKING SENSE OF RESEARCH)

Humantific helps business and organization leaders makes sense of data through visualization.

Humantific practices at the intersection of three streams of activity: research, sensemaking, and organizational change.

Today's organizational leaders are being hit with terabytes of external and internal, quantitative and qualitative information from a multitude of sources. The arrival of the so-called Big Data wave has created a fire hose of quantitative content that has the potential to enrich or erode the capacity of organizations and societies to adapt to continuous change. In addition, new forms of human-centered research are generating insights that extend beyond simple data analysis.

While old-fashioned hunches and intuition continue to play a role in leadership, many leaders seek to reinvent themselves by adopting methods that integrate more tangible forms of insight into their idea and decision-making activities. These may include customized private research, purchased trends research, public research, along with private and public forms of data.

GK VanPatter
Partner + CoFounder
Humantific
SenseMaking for ChangeMaking

To make effective use of such diverse content requires visual sensemaking skills; an ability to unpack and organize fuzzy content, and differentiate which users require information in different ways. While content volume and complexity continues to rise, user attention spans continue to be compressed, presenting unique information digestion challenges for most organizations.

In our work with organizational leaders, we connect research with human-centered visual sensemaking and changemaking. We seek to humanize, shape, and then integrate diverse insight streams into a strategic co-creation process. This integration has been at the core of how we help organizational leaders since we founded Humantific in 2001.

Part of Humantific's "secret sauce" is a five-dimensional model of sensemaking which includes:

1. Making sense of the challenge/opportunity space
2. Making sense of human behaviors in the challenge/opportunity space
3. Making sense of the data/information in challenge/opportunity space
4. Making sense of the project team's thinking styles
5. Making sense of the challenge owner's thinking styles

We bring this into a workshop setting to inform the changemaking process. We encourage participants to interact with the information as strategic co-creators.

The goal of visual sensemaking is to make the complex clear, helping busy participants accelerate the process of information digestion and put it to practical use. That use might involve co-creating new strategies, addressing complex challenges, envisioning the future, or informing product, service, or experience development. We are teaching organizational leaders effective changemaking skills for a complex, dynamic world.

HYATT PLACE

AUDIENCE:
Self-Service Hotel Consumers, Business Travelers

CREDITS:
Lippincott

CLIENT:
Hyatt

RESEARCH TACTICS INCLUDE:
Communication Audit (p44)
Competitor Profiling (p46)
Demographics (p68)
Focus Groups (p70)
Surveys + Questionnaires (p72)
Analytics (p78)
Personas (p90)
Color Psychology (p94)
Mood Boards (p96)
Sketching (p98)

Can design transform a commodity chain hotel into a repeat destination for frequent travelers—turning weary business commuters into welcomed brand loyalists?

Goals

Hyatt is a global hospitality company with a broad portfolio of properties and a range of customer offerings: luxury hotels, all-inclusive resorts, boutique lodging, vacation ownership opportunities, and more. The corporation acquired the AmeriSuites chain with the intention of expanding their offerings in the fast-growing select service hotel category. Select service hotels keep consumer prices down by reducing amenities such as expansive meeting rooms and conference spaces, ballrooms, multiple on-site luxury restaurants, spas, etc. Think of the frequent traveler who values familiarity, convenience, and affordability over luxury or recreation, and you'll understand the audience.

Hyatt hotels are upscale, focused on service and design. At the time of purchase, AmeriSuites was under-invested and lacked defining character, placing the chain behind industry average in price-per-room. Hyatt had identified opportunity for growth, the challenge would be to decide where to invest to improve the guest experience. They enlisted Lippincott, a global creative consultancy, to help them reinterpret the select service category. Hyatt wanted the creative team to go beyond traditional

Lippincott addressed every detail in their branding of Hyatt Place, from exterior signage that uses lighting to reinforce its modern new mark, to colorful Hyatt Place coffee mugs that turn guests into mobile brand carriers.

The identity, applied to a broad range of collateral, conveys a modern, friendly, and whimsical tone—elevating Hyatt Place in a crowded select service hotel market.

branding, envisioning everything about the experience of visiting the hotel, how it would look, sound, smell. They also had very specific business objectives: The new offering needed to hit ROI targets by increasing occupancy at a higher room rate.

Research + Deliverables

Su Mathews Hale, senior Lippincott partner and creative director on the Hyatt Place project, describes the creative team's approach as "an integrated effort between strategy, design, and innovation." The firm undertook a rigorous and in-depth research process to understand the value of the market, and identify customer groups to be served and unique ways to serve them. Their strategic review included a wide range of research tactics, including market opportunity mapping, audience segmentation, and focus groups conducted with audiences across the nation.

The process revealed an important customer segment, labeled "Road Warriors." These individuals travel extensively for business and miss the comfort and familiarity of home. They're looking for a hotel that will work around their hours, with accessible food options and business centers regardless of what hour flight delays or traffic jams cause them to arrive. They need dependable, robust Internet access and cable TV, a place to work and a place to unwind, easy access to toiletries, towels, and linens. They value staff that are unobtrusive but available if needed. They're looking for a home away from home.

Lippincott used this information to establish a holistic positioning platform that would activate the brand throughout a guest's experience. Their positioning concept "larger than home," embraced that sense of place guests were missing when on the road—somewhere to settle-in, or return to. The new name that it influenced, "Hyatt Place," conveys that notion. The visual identity designed for Hyatt Place matches the tone: friendly, direct, modern, and a little whimsical. It elevates the chain from its select service competitive set (DoubleTree, Holiday Inn Select, Ramada, etc.).

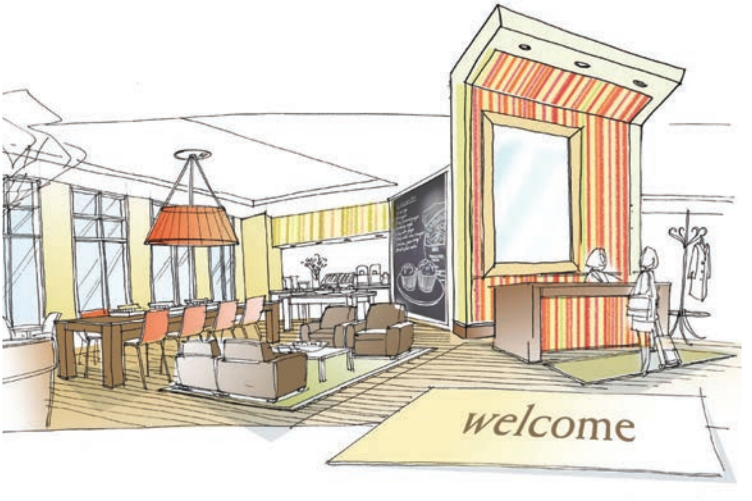
Lippincott designed a set of "signature moments" to differentiate the Hyatt Place experience. Guests can order food and drinks at check-in, a major convenience to fatigued business travelers. They are greeted by sensory experiences in the common places of the hotels: 200 music tracks that vary by time of day, signature scents, furniture to help you unwind. Each component is orchestrated to evoke the right emotional response, relief at the inclusion of custom expense envelopes to help business travelers with an essential chore, joy at convenient and colorful grab-and-go coffee mugs (that also make guests into mobile brand carriers). Great effort has been made to address every detail, yet remain approachable. Lippincott even provided training programs and employee guidelines.

Results

The transformation from AmeriSuites to Hyatt Place was more than just a dramatic visual and experiential improvement. In the first year that the brand went live there was a 35% increase in revenue per room, and Hyatt Place was voted first in its class in a JD Powers customer satisfaction survey. These successes helped attract development and expand new-build deals. They're also building brand loyalists, as satisfied Hyatt Place guests look to the umbrella of Hyatt offerings when they make additional travel plans.

Working with Lippincott sparked change within the Hyatt organization. The success of Hyatt Place proved the merits of a creative, experience-driven approach. Lippincott's emphasis on authentic interaction and emotional engagement had benefits for guests and employees alike. As a result, the partnership continues to identify new consumer segments, lifestyle trends, and opportunities within the Hyatt portfolio.

Lippincott considered every aspect of of a guest's visit, integrating sight, sound, smell, and touch into a cohesive experience.



welcome

KNOW
SUGAR

AUDIENCE:
General Public

CREDITS:
Red Jotter

CLIENT:
Design in Action

RESEARCH TACTICS INCLUDE:

Contextual Inquiry (p52)
Observational Research (p54)
Photo Ethnography (p56)
Unstructured Interviews (p60)
Sketching (p98)

Poor diets and sedentary lifestyles are contributing to a health crisis in the United Kingdom.

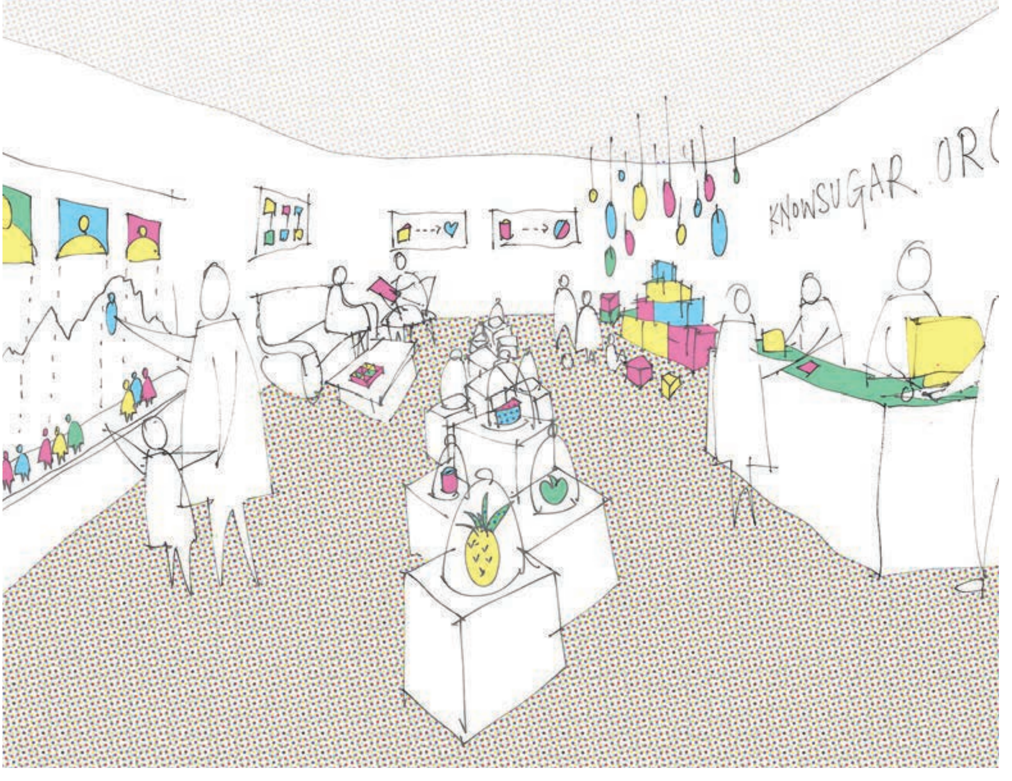
The number of individuals living with type 2 diabetes is growing at an alarming rate in Scotland, accounting for approximately 10% of the annual budget of Scotland's National Health Service. Cost of treatment per individual is expensive, and recurring, due to the chronic nature of the disease. Complications from type 2 diabetes frequently lead to loss of employment, compounding financial impact. Can design intervene?

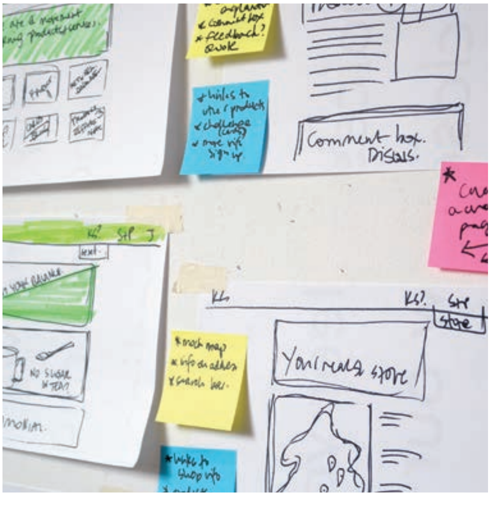
Goals

Design in Action, a knowledge exchange hub and incubator for design-led innovation in the UK, hosted a series of events challenging the creative industry to address social welfare and economic development issues. The series, named Chiasma, was adjudicated by design thought leaders. Winning teams would receive funding to prototype and test their concepts.

One Chiasma team focused on generating new ideas for Scotland's growing food sector. The event paired creatives whose skills ranged from illustration to service design, with experts in nutrition, food product design, engineering, and food science. The two-day event acted as a forum for academics and industry professionals to meet, collaborate, and innovate.

Red Jotter researched a new service design concept aimed at fighting the spread of type 2 diabetes in Scotland by educating the general public on the dangers of sugar overconsumption.






on
water these
days.
I check the
labels.
you hav
to hav
it.
I try eat no


I TRY NOT TO
AT TOO MUCH
SUGAR
I know it's a
problem! But
try & cut
down - don't
pay attention
I've cut down
a little bit
I have a
cardio check
I am fit.
I watch it
as I have
celiac.

Design researcher Lauren Currie saw the event as an opportunity. Her pitch: educate the public on the dangers of sugar overconsumption and its impact on health and well-being. Her winning concept, Know Sugar, would create an immersive educational space using design to help individuals make healthier lifestyle and diet choices. Know Sugar had three goals:

- Educate children and adults on the health impacts of sugar and the benefits of a low-sugar diet.
- Empower food producers to take positive action to reduce the amount of sugar in their products.
- Influence future changes in government dietary policy.

Research + Deliverables

Understanding nutritional science was key to project success. Currie and the Red Jotter team began by doing desk research, collecting all the necessary information related to sugar consumption, dietary requirements, and health trends. They also needed to understand the nature and cost of treatment for type 2 diabetes. A comprehensive literature review established context for the remainder of the project.

With that information in hand, the team built an online survey and conducted unstructured interviews, gathering more data about sugar consumption and dietary habits. With this as a foundation they could envision several different service design prototypes and the collateral needed to support them. Currie describes the team as having "A bias toward action—learning by doing, and thinking through making!" Design and visualization was an essential component of developing solutions.

The Know Sugar pop-up shop prototype was open for two days in the Wellgate shopping center. An empty retail space was transformed into an interactive environment to educate the general public about sugar's impact on health and well-being. Everything about the space, from the concept and educational exercises through signage, handouts, and even employee identification was designed by the Red Jotter team. The shop was staffed by designers, photographers, nutritionists, and diabetes experts who guided participants through interventions to sugar consumption.

Visitors could evaluate their understanding of nutritional information, personal eating habits, and health goals, then place a paper avatar on the Know Sugar scale to determine an appropriate challenge.

Visitors to the space were invited to evaluate their understanding of how much sugar they consumed daily. They could then take the Know Sugar Challenge, selecting an easy, medium, or hard challenge to alter their current lifestyle/ dietary choices. Health care workers were on staff to provide in-depth evaluations, and participants could visit an open kitchen supplied with grab bags of healthy, low-sugar snacks. Upon exit, visitors were asked to write on a chalkboard as a personal pledge and declaration of how they intended to change habits.

The space served as a design laboratory. Through the two-day experience, Know Sugar staff members collected data on project participants which would be used to further refine messaging and future project deliverables. Volunteers used questionnaires to evaluate specific components of each participant's experience, staff members used clickers to track attendance and interest, and the team would regroup and share insights and observations at the end of each day. This helped determine concept feasibility, scalability, public acceptance, and impact on individual behavior.

Results

During the two-day experiment, 750 people attended the shop. Exit interviews indicated that an overwhelming majority of those visitors enjoyed their experience and learned something new. Of those 750 participants, nearly 75% took the Know Sugar Challenge, committing to make some level of change in their own sugar consumption habits.

Public sector experts and policy makers were impressed with the team's efforts, encouraging continued exploration and idea sharing. Currie and her team are in dialog with Diabetes UK and Action Against Salt to determine next steps. They plan to scale the lessons learned through the Know Sugar prototype for application to other health and wellness issues.

For Currie, the experience served as proof of concept for design-led interventions to public health problems. She also reinforces the virtue of inviting the audience to shape a solution, emphasizing codesign and active participation as key components for successful service design endeavors.

Visitors to the Know Sugar pop-up shop could interact with a variety of educational experiences. The space served as a laboratory to collect information on successful interventions and tools. Staff members and design researchers guided participants through the space, conducting interviews and taking notes on what resonated, and what could be improved.


There is a
KNOW SUGAR™
KNOW SUGAR™ is made up of shops, products, services and an online community.
www.knowsugar.org
#knowsugar

WHEELS4WATER

AUDIENCE:
Individuals and partner communities seeking to aid the world water crisis

CREDITS:
Rule29

CLIENT:
Lifewater International

RESEARCH TACTICS INCLUDE:
Communication Audit (p44)
Competitor Profiling (p46)
Contextual Inquiry (p52)
Observational Research (p54)
Photo Ethnography (p56)
Demographics (p68)
Analytics (p78)
Personas (p90)
Color Psychology (p94)
Mood Boards (p96)
Sketching (p98)

Building access to clean drinking water isn't about quenching thirst, it's about breaking cycles of poverty.

Goals

In the developing world, insufficient access to clean water leads to dehydration, malnourishment, and disease. It's also connected to individual loss of personal income; absence from family, home, and school; and exposure to criminal activity and personal exploitation—especially dangerous for vulnerable women and children in these regions.

Lifewater International, a nonprofit organization working to end the global water and sanitation crisis, was looking for ways to broaden their donor base and build awareness of their mission.

They turned to Rule29, a strategic design firm located outside of Chicago, with a rich portfolio of philanthropic and financially successful projects. Through their GIVE program the studio had a history of committing 20% of its time and resources to "causes, ideas and initiatives that help create a healthier, more equitable, more sustainable, and more welcoming world." Client and creative were a good cultural fit. Lifewater hired Rule29 to explore how a design-led approach could help them meet a financial goal of $40,000 raised to construct a well that would serve 1,000 Ugandans; increase Lifewater's donor list; and bring awareness to the world water crisis.


Fellowes


To raise awareness of the world water crisis fundraiser cyclists rode across California without potable water, relying on water purification technology similar to that used in Africa, or on the kindness of strangers.

Research + Deliverables

To craft a resonant narrative and develop a comprehensive fundraising plan, Rule29 needed to understand several key issues relevant to the project's success. Their process began with an audit of Lifewater's existing communication materials and interviews with organizational leadership to familiarize themselves with the mission, services, and goals of their client.

To accurately craft a story, the firm needed to understand conditions on the ground in the countries in which they were trying to affect change. Team members spent time in Africa, observing life in remote villages and conducting unstructured interviews with key Lifewater personnel working in the region. They documented their experience through photography and video so insights could be shared with colleagues when they returned to Chicago.

They investigated nonprofit fundraising tactics, looking for examples of best practices, and learning from failures. Personas were developed for the varied audiences to be targeted in the campaign, including sponsors, donors, participants, and more. These helped Rule29 build mini-strategies for communicating with each group necessary to the project's success.

Based on the formative research Rule29 proposed a fundraising event centered around a compelling narrative, one that would support the Lifewater brand while cutting through media clutter prevalent in the nonprofit space. Ideally the event could be repeatable, if successful, allowing for continued fundraising efforts.

The creative team planned, branded, promoted and participated in a charity bicycle ride across the state of California, called Wheels4Water, to raise funds for Lifewater's Uganda project. The small but committed team of cyclists included Rule29 principal, Justin Ahrens, and frequent collaborator, photographer, and Wonderkind Studio founder, Brian MacDonald. To draw attention to the world water crisis, the cyclists would not carry any potable water with them during their journey, relying on sources found along the route and purified with the simple tools Lifewater distributes, or provided by the kindness of strangers. This direct participation held the Rule29 team uniquely accountable for the success of the project, and clearly demonstrated a connection to both Lifewater's mission and their own GIVE initiative.

The design team created custom cycling jerseys as moving advertisements that would also commemorate the ride and acknowledge event sponsors.

Results

The Wheels4Water project exceeded expectations, raising $100,000 in its first year, allowing the organization to help over 5,000 individuals (well beyond that 1,000 person goal). Through Wheels4Water, Lifewater has added hundreds of new individual and corporate donors, and the project helped establish ongoing relationships with organizations that continue to support their critical relief efforts.

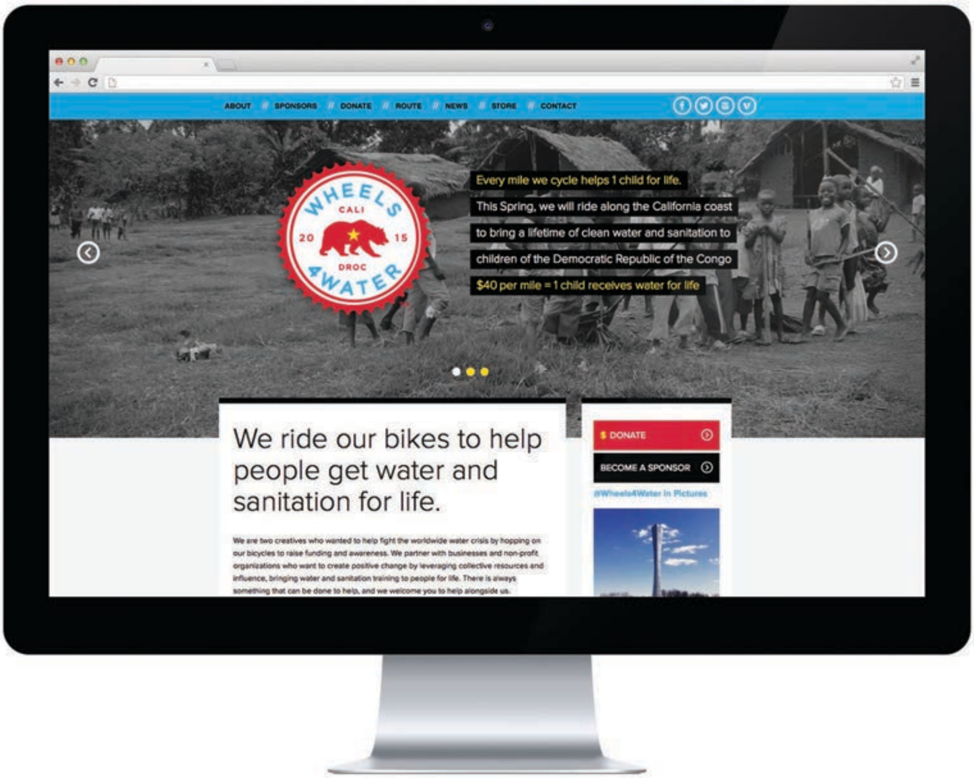
Repeat events have extended those fundraising efforts and generated hundreds of thousands of media impressions through print, social media, and traditional broadcast—fostering connections with new audiences, and building broad awareness of Lifewater's role in international water crisis relief efforts.

For Rule29, the experience changed the firm's approach to campaign projects, redefining their process. The work, from research through conception and production, showcased how design can have a tangible impact on human lives. Wheels4Water has helped portfolios and professionals grow; reaffirmed the power of creative to affect real change; and led to new business relationships, speaking engagements, and industry recognition.

Three years later, Wheels4Water has raised over a quarter of a million dollars for ongoing Lifewater projects all over the globe.

Rule29 incorporated iconography from California's state flag with graphic elements inspired by bicycles when designing the fundraiser's mark.

A broad range of materials was created to support the 16-month fundraising plan and communicate with potential sponsors, donors, and media entities.


ABOUT
SPONSORS
DONATE
ROUTE
NEWS
STORE
CONTACT
WHEELS CALI 20 15 DROC 4WATER
Every mile we cycle helps 1 child for life.
This Spring, we will ride along the California coast
to bring a lifetime of clean water and sanitation to
children of the Democratic Republic of the Congo
$40 per mile = 1 child receives water for life
We ride our bikes to help people get water and sanitation for life.
$ DONATE
BECOME A SPONSOR
@Wheels4Water in Pictures


WHEELS CALI 20 15 DROC 4WATER
450 MILES FOR 450 CHILDREN
$40 per mile = 1 child water for life
YES! I want to join Wheels4Water in bringing clean water and sanitation to children in the DROC.
1 mile ($40 = 1 child receives clean water and sanitation for a lifetime!)
3 miles ($120 = 3 children receive clean water and sanitation for a lifetime!)
10 miles ($400 = 10 children receive clean water and sanitation for a lifetime!)
25 miles ($1,000 = 25 children receive clean water and sanitation for a lifetime!)
100 miles ($4,000 = 100 children receive clean water and sanitation for a lifetime!)
Multiply the number of miles you want to sponsor by $40)
MY CONTACT INFORMATION:
I WOULD LIKE TO PAY BY:
Credit Card
Check (Checks payable to Lifewater)
ORE ON HOW YOU CAN HELP, VISIT WHEELS4WATER.ORG
This June, we will ride 450 miles down the coast of California from Santa Rosa to San Luis Obispo. By raising $40 per mile, Lifewater will help provide 450 kids at a school in the Democratic Republic of the Congo with water and sanitation for life.
We hope you will join us, along with Lifewater, a nonprofit that is making a lasting difference in the face of this urgent water and sanitation crisis.
Donate, spread the word, and be part of the story at
WHEELS4WATER.ORG
450 MILES FOR 450 CHILDREN
$40 per mile = 1 child water for life
WHEELS4WATER.ORG

ENHANCING VETERANS' EXPERIENCES

AUDIENCE:
VA Employees, Veterans + Families, Nonprofits That Serve Veterans, Congress, US Citizens

CREDITS:
The Veterans Experience Office

CLIENT:
US Department of Veterans Affairs (VA)

RESEARCH TACTICS INCLUDE:
Communication Audit (p44)
Contextual Inquiry (p52)
Observational Research (p54)
Photo Ethnography (p56)
Visual Anthropology (p62)
Personas (p90)
Sketching (p98)

The Department of Veterans Affairs is a governmental institution dedicated to serving and honoring America's veterans and their families.

Like so many bureaucratic offices tasked with an enormous service load and fiscal constraints, the organization was process-oriented and driven by efficiencies. VA Secretary Bob McDonald recognized the need to shift the organization's focus back to the individual. Seeking systemic change he established the Veterans Experience Office, a VA team comprised of service and visual designers, content strategists, data analysts, community engagement specialists, an operations team, and project managers with a mandate to help the VA become more customer-centered.

Goals

The Veterans Experience Office, led by chief veterans experience officer Tom Allin, was charged with shifting VA employees from a process-perspective (How can we work better?) to one that was person-centered (How can we help veterans feel served and supported?).

The VA has more than 300,000 employees, approximately a third of whom are veterans themselves. It is an organization empathetic and dedicated to its mission, but many of those employees think "I'm a veteran, I know what veterans want." And while our individual perspectives provide valuable insight, a singular point of reference can also be limiting. Internal organizational culture tended to parse veterans in terms of demographics: Vietnam Vets, Gulf War Vets, Women Vets, and so on. The Veterans Experience team wanted to create an understanding that went deeper.

A large number of VA employees work directly with veterans, but many others are one-step removed from the individual's experience. The team identified that it would be especially important to help that group of workers keep their focus on VA customer needs/perspectives, when it is easy to shift focus to process and organizational needs. The team's goal was to present a rich, diverse, and comprehensive understanding of the veterans being served to the people who were working for them.

Research + Deliverables

The Veterans Experience Office Insight and Design Team researchers began with a traditional "listening tour." They met with VA senior leadership, middle management, and frontline staff to gather internal perceptions. They also sought a broad sampling of veterans' voices, conducting in-depth ethnographic research with special focus on groups often marginalized, such as those living in rural areas, women, and people of color. They wanted to hear from all branches and eras of service, and from the families of veterans. Luckily several of the researchers were veterans themselves and reached out to friends and trusted colleague networks to help recruit. Most volunteers were eager to participate and motivated to share. Many referenced lifelong bonds, and an interest in doing their part to make VA services better for their friends.

The team hit the road to gather research in a series of "sprints," often with only a couple of days preparation and planning—a schedule that could adapt to word-of-mouth introductions and interviewee availability. Their first mission was to establish a baseline: "Who are our customers and what do they want and need from VA?" Followed with a deeper dive, seeking to understand key journeys through VA services. Ultimately they hoped to gather information that would assist in the creation and testing of prototypes to improve those services.

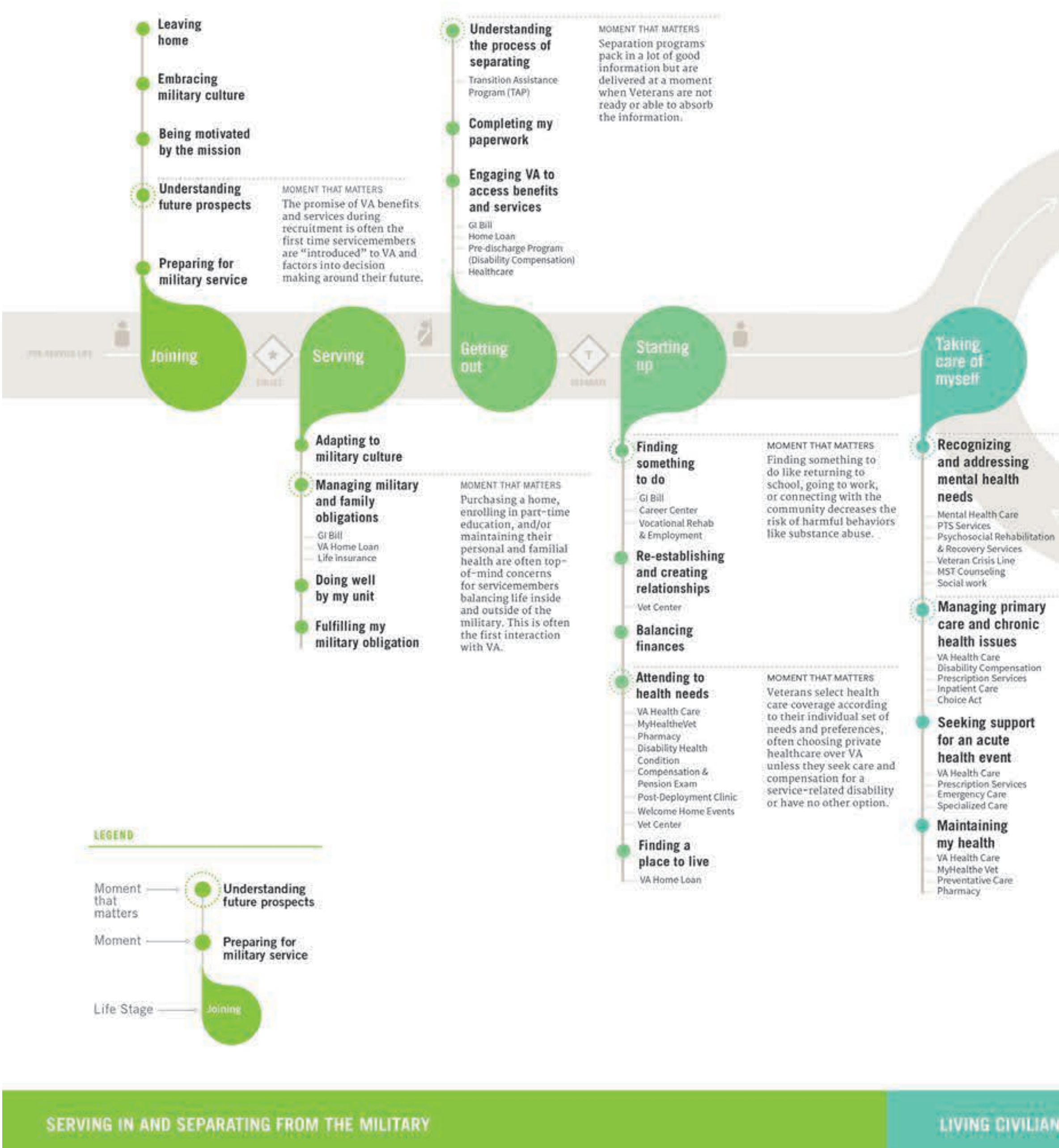
Research reporting became the deliverable. The team developed a suite of journey maps and service design interventions. These included persona cards to capture rich composite portraits of veterans; help employees understand what veterans need/want from the VA; and identify opportunities where service could improve. Example personas include:

The "Fast Tracker," separated from the military, focused and directed. Will take advantage of VA services if they aren't too difficult or cumbersome, but have alternate options. Don't perceive that they "need" the VA.

The "Day-By-Day," someone who struggles to find/maintain stable employment and housing. Likely to have medical and/or behavioral health challenges. Rely on the VA for health care, housing, support groups and community. VA is a lifeline.

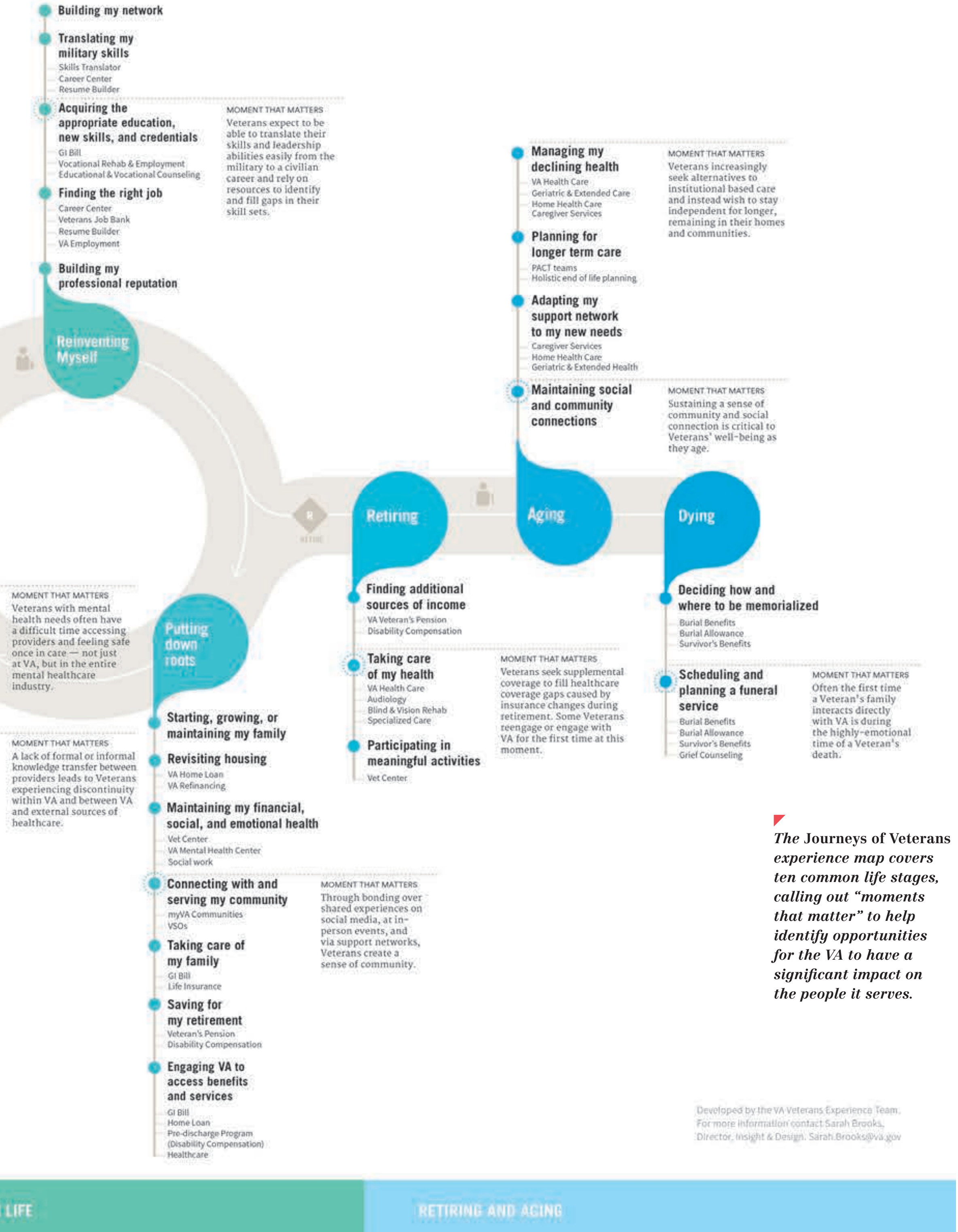
JOURNEYS OF VETERANS MAP

This map covers ten life stages any Veteran may encounter, from pre-service to end of life. These life stages are organized in three phases in which Veterans' goals and aspirations are distinctly different. Each life stage lists out moments Veterans typically experience and associated VA services, and calls out key "moments that matter" which may have significant impact on Veterans' experiences.



Not all Veterans are the same and there is no "one" veteran. There are, however, a broad set of shared moments many Veterans will encounter and live through. Different Veteran personas will experience and navigate these moments in varied and disparate ways. Using this journey as a guide to organize and align around, VA can plan for and design better experiences for Veterans.

Life events impact individual goals and change priorities. Events like marriage, divorce, widowhood, birth of a child, obtaining a new degree, loss of housing, empty nesting, major illness and so on have profound effects on people's priorities and how they approach their lives—as well as how they interact and perceive services. These events are unpredictable and may happen at any point across this journey.



The Journeys of Veterans experience map covers ten common life stages, calling out "moments that matter" to help identify opportunities for the VA to have a significant impact on the people it serves.

The "Proud Patriot," an older veteran who relies on VA facilities for both health care and a stand-in community center.

The cards present a complex assortment of veterans at different stages in their lives, but with overlapping service needs.

Where the persona cards capture portraits, journey mapping is used to track experience. It follows 10 stages of a service person's life from enlistment through death—because even in death the VA offers benefits to survivors. From one event to the next, the experience of veterans, and their related interaction with VA services were mapped and carefully cataloged.

Those using the deck and the journey maps together can envision different scenarios for common VA services, based on the individual being served. For example, a reservist and a retiree with a traumatic brain injury might have very different health maintenance needs.

Results

The accessible, engaging tools that the Veterans Experience Office created spark conversation and help provide understanding. That new perspective is driving behavioral and cultural shifts internally at the VA. Says Sarah Brooks, chief design officer leading the Insight and Design team, "We want the journeys to be diagnostics for better running our business lines—prioritizing and resourcing efforts. We've seen it start to happen." The tools have aided in strategic planning processes; been embraced by senior leaders; and created actionable insights for the organization. The visualized and curated information resonates in a way that another Power Point session or policy reports, cannot. People have commented that they see themselves, relatives, or friends in the work. The genuine quality of the content gathered, and the style in which it's presented is building credibility and sparking change. It's even caught the attention of Congress.

This is also a story about the power of research-driven design, foundational in helping people at the VA see differently and embrace a new approach. In less than two years the Veterans Experience Office went from a hypothesis to a demonstrated change agent. Brooks and her team are committed to delivering a growing body of work that delivers "effective, easy, and emotionally resonant experiences; working to principles versus rules; and spreading those behaviors through the organization, top down and bottom up." They've even shared some of their best practices with you, available at https://www.digitalgov.gov/2015/05/29/getting-to-know-your-users-tips-and-tricks-from-veterans-affairs/

LIVING CIVILIAN LIFE

PUTTING DOWN ROOTS

Veterans need to re-acclimate to civilian society after separation. In this stage, they are looking to establish a foundation for their lives, shifting from a semi-transient lifestyle (where they may not feel particularly attached to a specific location) into a more stable one surrounded by their support networks.

WHAT WE HEARD

- Starting a new life is often challenging for Veterans since they need to start making hard decisions; inaction or an unclear path puts them at risk.
- Reconnecting with civilian society is difficult for some Veterans due to conflicting value systems and cultural norms, which can lead to distrust and hamper reintegration.
- Building a new social network, or transitioning from a military-focused to a civilian social network, may be challenging as Veterans might feel disconnected to people that have not gone through similar military experiences.

Putting down roots

- Starting, growing, or maintaining my family
- Revisiting housing
- Maintaining my financial, social, and emotional health
- Connecting with and serving my community
- Taking care of my family
- Saving for my retirement
- Engaging VA to access benefits and services

"MY BIGGEST OBJECTIVE IS TO PROVIDE FAMILY VETERAN HOUSING SERVICES BECAUSE WHEN I NEEDED THEM, THEY WEREN'T THERE. THEY DIDN'T EXIST, AND I CAN'T BE THE ONLY ONE."

STARTING, GROWING, OR MAINTAINING MY FAMILY

It can be challenging for servicemembers to balance service and family life, especially if deployed overseas. After leaving the military, veterans may want to reconnect with their family which can be an exciting (but also challenging) prospect. Some Veterans may struggle adapting to a new role in their family or being comfortable with their evolving identity. For those who did not have a family during their time in the military, this can be the time where they decide to create a family.

REVISITING HOUSING

After separating and once they have created financial and career stability, Veterans might consider settling down. They may want to purchase a home and in general "invest" (not only money but also social capital) in the geographical area where they see themselves and their families staying for the long term. For Veterans who lived a transient lifestyle (and especially if they also grew up in a military family themselves), "putting down roots" may be a difficult concept.

VA SERVICES

- VA Home Loan
- VA Refinancing

MAINTAINING MY FINANCIAL, SOCIAL, AND EMOTIONAL HEALTH

After a few years outside the military, Veterans may be in a more comfortable place in their lives, continuing to work towards strengthening their sense of stability and overall well-being. Specifically, they continue to expand their social network and augment their financial security.

VA SERVICES

- Vet Center
- Social Work
- VA Mental Health Center

Moment that Matters

CONNECTING WITH AND SERVING MY COMMUNITY

Joining Veteran-focused community activities allows Veterans to create bonds over experiences they might have shared in the military. These groups enable Veterans to create a sense of community where they can feel valued and have support when they might need it most, while participating in activities to feel like they are making a difference.

VETERANS MAY BE THINKING...

+ "Being a part of community activities allows me to connect with others and develop a sense of purpose."

— "I'm not sure if I can relate to people in my community."

PAIN POINTS

Some Veterans avoid engaging with Veteran-communities because it reminds them of negative experiences in the military.

VA OPPORTUNITIES

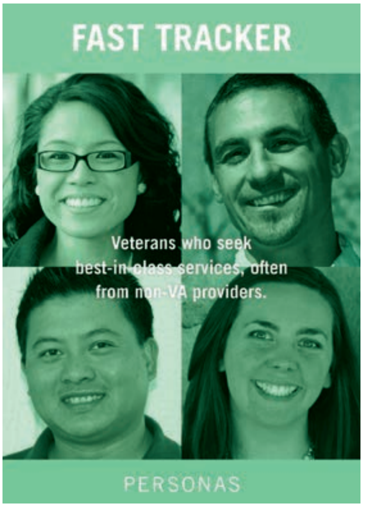
Many VA facilities (medical centers, Veteran centers, etc.) provide places for Veterans to connect with and serve other Veterans. VA can increase the effectiveness of these Veteran community connections by deliberately creating physical spaces, programming, and experiences for targeted groups of Veterans.

VA SERVICES

- Vet Center

38 39

This spread from the Journeys of Veterans book takes the reader through a point on the map, focusing on the perspective of an individual in that moment. This humanizes what might instead be generalized, providing context for VA employees and those trying to better understand veterans' experiences.



The persona cards capture composite portraits, helping to provide a broad understanding of the individuals served by the VA. Pictured here, the "Fast Tracker" card, describing a veteran that seeks best-in-class services, even if that means going outside of VA providers.

LIVE
BLUE

AUDIENCE:
General Public

CREDITS:
Willoughby Design

CLIENT:
Blue Cross Blue Shield of Kansas City

RESEARCH TACTICS INCLUDE:
Competitor Profiling (p46)
Contextual Inquiry (p52)
Observational Research (p54)
Unstructured Interviews (p60)
Demographics (p68)
Personas (p90)
Mood Boards (p96)
Sketching (p98)

The Affordable Care Act was a comprehensive reform to health care law, enacted to make health insurance available and affordable for more Americans; expand Medicaid to more individuals living in poverty; and support medical industry innovations that lower health care expenses for all.

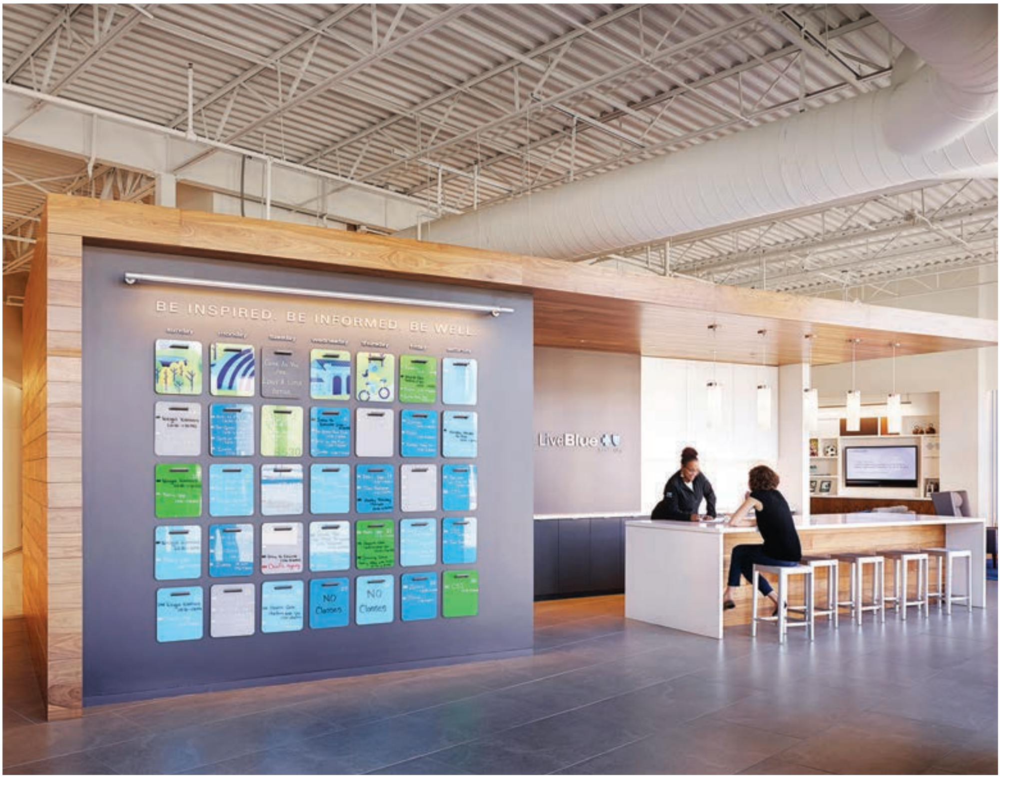
On the eve of its launch the massive legal shift left many unclear, from industry players to businesses and individuals seeking to navigate coverage options under a new system. Blue Cross and Blue Shield of Kansas City (Blue KC) saw potential in the transition.

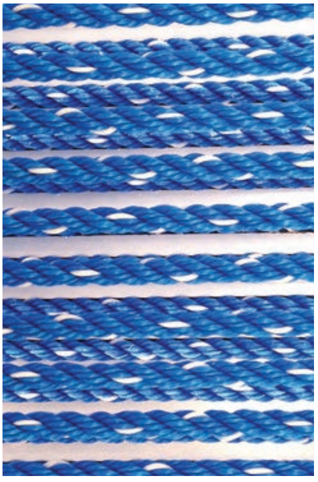
Goals

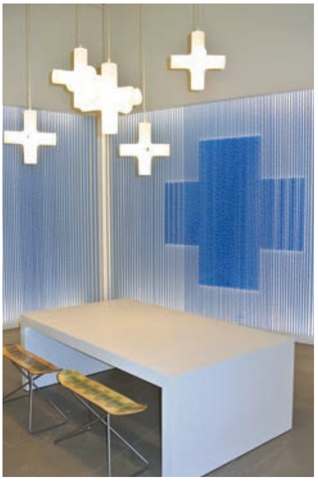
As Affordable Care Act enrollment deadlines approached, health insurance providers were scrambling to reach members and nonmembers alike. The law would prohibit insurers from denying coverage to individuals with pre-existing conditions, but also require the uninsured to hold coverage. Blue KC saw business opportunities in the act, potential to create new experiences for individuals seeking health insurance, and ways to better serve those already covered.

They envisioned retail spaces where potential customers and existing policyholders could speak face-to-face with Blue KC representatives, demystifying coverage options. The convenience,

Willoughby Design helped Blue Cross Blue Shield realize a retail concept to support Kansas City residents seeking clarification of health insurance options under the Affordable Care Act.





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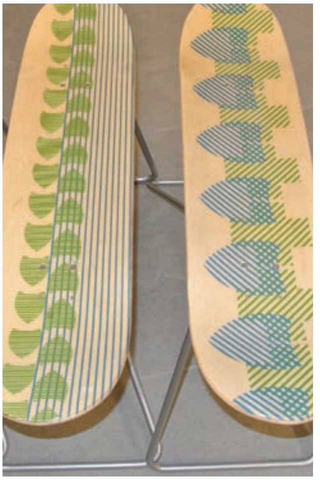

simplicity, and human interaction, would provide assurance to consumers, helping them navigate and understand complex choices. The space would simultaneously serve as lifestyle center, promoting health and well-being, and offering free exercise and nutrition classes to existing customers. It would also be a disruptive sales channel to encourage first-time applicants or attract those who questioned their own coverage.

With the project defined, Blue KC contracted Willoughby Design to craft their approach to the retail/outreach concept. The goal was to create a space that would make health planning a proactive, rewarding experience—instead of a frustrating chore.

Research + Deliverables

The design team began the project by seeking to understand the customer base. Using observational research and unstructured interviews, they visited similar facilities around the country, noting consumer interactions and speaking with employees to discern best practices and areas for improvement. The information they gathered helped identify seven different types of customers, ranging from young/uninsured to retired/insured. They crafted personas to drive design based on the varying functional and emotional needs of these customers.

The team understood that scalability was key, systems should be adaptable to both individual customers' needs and emerging health care options and industry trends. They were also sensitive to operational feasibility, knowing that to be successful the concept had to be easy to manage and staff.

Willoughby identified the importance of connecting the retail endeavor to the parent organization. They named the new service space "Live Blue," referencing the company name and utilizing its signature color, then set out to create a brand that would resonate with their identified audience segments.

The client's original plan included opening five locations across the Kansas City metropolitan area, but the creative team encouraged starting with a single location, using it as a living laboratory to gather more user research, optimizing the experience before investing in further facilities. Willoughby partnered with Helix Architecture and Dimensional Innovations signage fabricators to create a welcoming, reassuring space that would impart the brand's promise to provide clarity and accessibility amidst a sea of confusing options. They scouted potential locations and considered aesthetics adaptable to multiple sites.

Visualization of the brand was extended throughout the space, creating a friendly, motivating environment for current policy holders and potential customers.

The resulting environment reinforces the Blue Cross Blue Shield brand through color and the use of its iconic logo, which was applied to everything from skateboards to jump ropes and racquetballs. The team integrated a rotating retail area into the front of the space, making use of storefront windows facing the street. This served as seasonal or monthly display, which might showcase goods from a local running shop, nutritional products, or other wellness-inspired curations, helping to draw in passers-by and local foot traffic.

Results

The launch of the prototype Live Blue retail space was so successful that Blue KC has opened two additional locations, each actively engaged with their local community. Attendance at the free fitness and nutrition classes is growing dramatically. The retail spaces remain relevant well beyond the Affordable Care Act because they help individuals research, choose, and purchase health care. The concept builds on Blue Cross Blue Shield's service expertise, extending into other regions of the country as a model of change, shaping how health insurance is marketed.

Willoughby's careful consideration of the customer experience created a solution that will serve Blue KC, its parent corporation, and their customers through ongoing political and legal shifts in a fluid market.

The resulting environment reinforces the Blue Cross Blue Shield brand through color and the use of its iconic logo.

Exercise and nutrition classes are an added bonus, free to policyholders. The space also provides zones for retail and displays related to wellness, helping to draw walk-by visitors.


Erewhon
Cheerios
HyVee

GLOSSARY OF TERMS

A/B Testing Evaluation of two different design solutions, each tested with a unique group of users to measure feedback and responses.

Analytics A form of quantitative analysis that uses concrete metrics to track user behavior online.

Applied Research Research focused on developing new products, experiences, or services, serving commercial and/or social needs.

Basic Research Research conducted to gain new knowledge within a specific area, or undertaken to satisfy the curiosity or personal interest of the researcher.

Benchmark Testing The act of making comparisons to a pre-established standard against which other iterations are evaluated.

Card Sorting Collecting feedback about information architecture by asking users to organize content cards in hierarchies that make the most sense to them.

Color Psychology The study of the effect colors have on human behavior.

Communication Audit A comprehensive review of an organization's marketing materials and assessment of the channels they use to communicate with clients, customers, or constituents.

Competitor Analysis The process of evaluating the strengths and weaknesses of an organization's competitors.

Competitor Profiling The establishment of personas for corporations, which helps to identify motivations, goals, and possibly the actions of an organization's competitors.

Contextual Inquiry Conducting an unstructured interview in a location or context related to how a person will use a design piece.

Creative Brief A concise presentation of research findings and the resulting strategy that the creative team will use to design deliverables. The creative brief should be informed by the research summary report.

Demographics Collections of statistical data that describe a group of people. Common demographic variables include race, age, gender, and income.

Ethnographic Research A research technique used by anthropologists to understand the link between human behavior and culture.

Experience Model The visualization of an activity, or sequence of events, documented through the perspective of a participant.

Eye Tracking Study of the movement, pattern, and duration of the human gaze.

Focus Groups A social science tool in which organized discussions, led by a moderator, are held in order to collect market research.

Formative Research Research conducted at the beginning of a project to help define the problem to be solved.

Graphic Organizers Visual tools that help designers connect concepts and see the relationships between information sets.

Human-Centered Design Creating artifacts and experiences for the purpose of satisfying the needs of any individual, regardless of ability, age, education, or cultural background.

Information Literacy A learning strategy that emphasizes the ability to recognize when information is needed, and to hone the skills to find, evaluate, analyze, and effectively use that information.

Iterative Design A design process that uses a series of prototyping, testing, and refining cycles to reach a solution.

Literature Review A comprehensive investigation of all documents, publications, articles, and books available within a specific area of study.

Logic Model A visualization of a research plan, plotting research methods in sequence and indicating predicted outcomes, time allotments, and necessary resources.

Marketing Research A form of sociology that focuses on the understanding of human behavior as it applies to a market-based economy, often specific to consumer preferences.

Market Segment A subgroup or classification of a larger market; market segments may be delineated by any number of qualitative or quantitative criteria.

Media Scanning A process of scrutinizing a competitor's publicly available corporate communications (such as annual reports and press releases), ad placement, messaging, and discernible brand presence, often across multiple media channels.

Mood Boards Rapid visualization tools that aggregate imagery from numerous sources, helping the design team establish and convey an aesthetic tone.

Observational Research The systematic process of viewing and recording human behavior and cultural phenomena without questioning, communicating, or interacting with the group being studied.

Paper Prototyping Testing digital and interactive experiences with an if/then progression of paper sketches to determine user preference before programming or development occurs.

Personas Fabricated models of end users that are created to identify motivations, expectations, and goals.

Photo Ethnography A field exercise in which subjects are asked to record their daily experiences with photography or video. Individual cases can be combined in order to develop a broader understanding of a community under study.

Primary Research Research conducted specifically for an individual problem or project.

Proprietary A unique service or offering that is the exclusive property of the owner or inventor.

Psychographics A quantitative tactic used to measure the subjective beliefs of the group being studied. Common psychographic variables might include religious beliefs, music tastes, and personality traits.

Public Domain Publications, products, processes, and information not protected under patent or copyright that belong to the community at large.

Qualitative Research A research approach that measures subjective data such as words, images, and opinions.

Quantitative Research A research approach that measures objective data such as variables, quantities, and measurements, and analyzes the relationships between collected information sets.

Questionnaires A tactic for collecting quantitative information by asking participants a set of questions in specific order. Participants answer by filling out a piece of paper or online; form questions are not administered orally (see survey).

Research Plan An outline of all investigative measures needed to complete a project.

Research Summary Report A presentation of all investigative findings and analysis. The research summary report informs the creative brief.

ROI (Return on Investment) The measure of a performance by comparing the cost of an investment to the results that it produced.

Secondary Research Reviewing a collection of data or findings that have previously been published by an outside party, for an alternative function.

Summative Research Used to frame and decipher the outcome of an investigative process. It confirms that the original hypothesis is correct or illustrates that it is flawed.

Surveys A tactic for collecting quantitative information by asking participants a set of questions in specific order. When a researcher administers the questions it is called a survey or structured interview.

Target Audience/Market The group or segment to which a communication is being directed.

Triangulation Using three or more different research techniques to find areas of overlap. Common results, called convergence, are considered to be the most reliable.

Unstructured Interview An information gathering tactic where the researcher allows the participant to guide the direction of the conversation.

User-Centered Design Creating artifacts and experiences for the purpose of satisfying the needs of the specific person(s) for whom they are intended.

User Testing A broad range of techniques designed to measure a product's ability to satisfy the needs of the end user, such as accessibility, functionality, and ease of use, while also meeting project requirements, such as budget, size, and technical requirements.

Visual Anthropology A field research tactic that uses visual media to aid interpretations of cultural behavior. Visual anthropology differs from photo ethnography by placing the camera in the trained hands of the researcher, rather than in the untrained hands of a subject.

Visual Exploration A method of primary research most commonly used by designers for solving problems of form and communication (studies might include variations of color, imagery, typography, and structure).

Visualization A rapid prototyping tool used to make concepts understood.

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Additional Resources

Adaptive Path Design Research
adaptivepath.org/guides/design-research

AIGA | The Professional Association for Design
aiga.org

Design Council
designcouncil.org.uk

The Design Management Institute
dmi.org

The Design Research Society
www.designresearchsociety.org

DigitalGov
www.digitalgov.gov

IBM Design Research
www.ibm.com/design/research

Medium: Design Research Methods
medium.com/design-research-methods

RGD | The Association of Registered Graphic Designers
rgdontario.com

Society for Environmental Graphic Design
segd.org

TED: Ideas Worth Spreading
ted.com

CREDITS

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This book is a collaborative effort, not possible without the shared experiences and candor of our contributors. We're inspired by their work and honored by their participation.

Jenn + Ken Visocky O'Grady are authors, designers, and educators whose work has been featured in numerous books and creative industry publications.

Jenn is a professor at Cleveland State University, a public research university where for nearly two decades she has dedicated herself to providing access and opportunity to a diverse group of aspiring creatives. She has also served on the board of directors for AIGA, the professional association for design.

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You can learn more at *visockyogrady.com*

Ideal for freelancers and in-house designers, students, and teachers of graphic design.

—Dynamic Graphics

Good information gives designers a competitive advantage.

Understanding the wishes of a client and the needs and preferences of the audience drives innovation. The ability to gather research, analyze findings, and apply them to project goals is as important to successful design teams as their conceptual and aesthetic skills. This essential handbook will help readers understand what design research is and why it is necessary, outline proven techniques and methods, and explain how to incorporate them into any creative process.

A Designer's Research Manual was one of the first books to apply research practices to the benefit of visual communication designers. This long awaited second edition follows more than a decade of active use by practitioners, design educators, and students around the world.

Comprehensively updated, *A Designer's Research Manual, Second Edition*, includes:

- More than 25 proven research strategies and tactics
- Added content about planning research, analyzing results, and integrating research into the design process
- Suggestions for scaling research for any project, timeline, or budget
- All new in-depth case studies from industry leaders, outlining strategy and impact
- Updated images, illustrations, and visualizations
- Quick Tips for rapid integration of research

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