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Executive Summary

It seems rare, these days, to encounter a conversation about the future of journalism that does not make some reference to the cluster of concepts known variously as design thinking, design practice, or human-centered design. Innovative news organizations, for example, are successfully deploying versions of this philosophy to develop journalism products with remarkably high user engagement. But there is much confusion over what design and design thinking really mean, especially in a journalistic context—never mind how the philosophy might actually be implemented with successful results.

This report first proposes a clearer definition of design—*as a practice based on a set of processes and a mindset*. It then suggests moving away from the phrase “design thinking,” which has become closely identified with a specific five-step process that could actually be limiting to news organizations. The report also identifies those types of problems, known as “wicked problems,” which could benefit most from the design process, arguing that many of the severe challenges journalism faces today belong to this category. Drawing on interviews with designers and journalists, and four in-depth studies of design in use—at BuzzFeed, *The New York Times*, National Public Radio, and AL.com—the report next explores concrete ways in which others might use these processes as a foundation for news innovation.

The research in this paper identifies several key benefits of design philosophy in creating new possibilities for journalism, including the ability to rapidly prototype and modify new products before major resources have been committed; to improve journalism by deeply understanding its role in the real lives of those who consume it; and to work directly with the communities in which news organizations are embedded to generate coverage and tell stories of direct relevance.

The report also sounds some cautionary notes. First, we must avoid seeking to fix the definition of design too rigidly into a specific sequence of steps that need always be followed, otherwise we risk undermining the very flexibility and responsiveness to context that are central benefits of the approach. Second, while embracing design’s emphasis on paying close attention to the needs and preferences of users, as journalists we must retain a commitment to reporting in the public interest, rather than making editorial decisions solely in favor of stories and products that bring the most success in financial terms.

Key Observations

This report specifies the following eight aspects as central to design in the context of journalism:

- Thinking in systems; understanding news stories and news organizations as existing in a wide variety of larger informational, social, and organizational ecosystems.
- Centering innovation on humans, not technology; serving audiences while resisting the assumption that an innovation is worthwhile just because new technology makes it possible.
- Identifying the true problem, thereby avoiding the many pitfalls of simply assuming you know what it is.
- Deep listening and other tools to empathize in profound ways with the realities of users' lives so as to meet their needs more effectively.
- Open ideation; a democratic and transparent set of approaches for generating ideas (in which brainstorming is only a first step).
- Synthesizing and interrogating ideas, a process distinct from initial ideation, to winnow the best ideas from the rest and combine related ideas into coherent wholes.
- Prototyping and iterating, or "the learning that happens through doing"—the process of making and using versions of the product from the earliest stages to reach understandings that could not be achieved through thinking alone.
- Testing, part of the prototyping and iterating cycle wherein designers observe people engaging with what they've made to see how it's actually used—not how they assumed it would be used.

The report also identifies several primary applications of design in journalistic contexts, offering detailed suggestions for implementation in each case:

- Testing and adapting new product ideas before they absorb vast organizational resources, to rapidly and affordably identify the most promising avenues for innovation.
- As a tool for directly interacting with news audiences to better understand how they really use news organizations' products.
- As a way to reconceptualize each instance of journalism as belonging to a wider journalistic system, so that stories and other elements can be created to exist and reach users in a wide variety of forms and on a variety of platforms.
- To facilitate civic journalism—drawing directly upon the experiences of news consumers as a primary source of stories—and solutions-focused journalism, exploring not only the problems of the communities served by news organizations, but also ways to address them.

Introduction: What Design Means Now

As recently as five years ago, design was considered to be something handled by the graphics desk. In just the last few years, however, a tremendous shift has taken place; one can hardly enter a conversation about the future of journalism without hearing breathless references to the power of design thinking to transform newsrooms. But do we even know what design means when we're not talking about graphic design? Do we actually know what design thinking is? And what does human-centered design have to do with any of this?

In this report, I will attempt to clarify what design means in a context useful for the journalism industry, why it's important, and how various newsrooms around the country are using it. I will not, however, suggest that design is the salvation of journalism—there is no single panacea for the challenges the news industry faces. Rather, I will argue that design is an important ingredient in the production of high-quality journalism that invites people to engage, as well as a vital tool for tackling the seemingly intractable problems we must overcome as an industry.

> Journalists need to be more active in building stories digitally, and I don't see an incumbent process for doing that other than design. And I don't just mean interactives. I mean, what should an article look like in three years? What do readers actually want? How do we do a live blog that actually makes sense? What products should we be developing? As we move from the print world to the digital world, I just don't know another process other than design thinking that can help us thoughtfully answer these questions.
>
> -Aron Pilhofer, interim director of digital, *The Guardian*

Why Design?

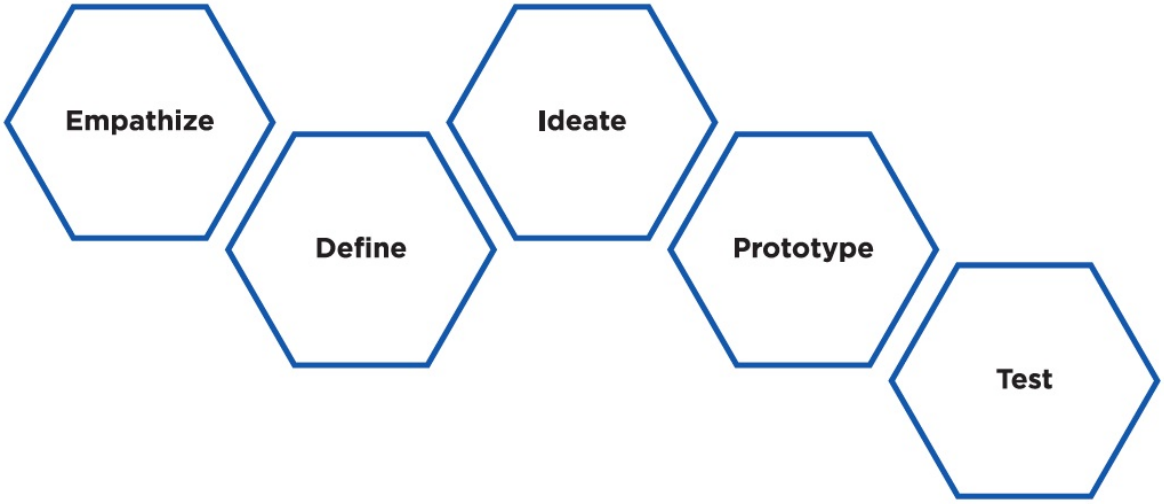
The historical moment in which we live could well be defined as an era of constant change. John Seely Brown, co-author of the book *Design Unbound* and former chief scientist of the Xerox Corporation and director of Xerox PARC, said, “We have transitioned into an era of constant transitioning.” Rapid change is certainly a hallmark of today’s journalism industry. The mass exodus from physical media to digital media destroyed the business models of traditional news organization and altered consumer behavior beyond recognition. By the time the industry started to seriously acknowledge digital, “digital” had already fractured into an ever-expanding number of platforms and possible opportunities. In this environment, a willingness to experiment and innovate is paramount, as is the ability to think systemically.

In this faster-paced and competitive digital environment, the model of news organization as a hub of important information to which people come has shifted toward a model of news organization as a provider of information pushed out in search of readers to digest and share it. “The user is at the center of the diagram, not the content,” Liz Danzico, creative director of NPR, said. Reconsidering the nature of the relationship between news organizations and audiences is an enormous paradigm shift, requiring a different kind of thinking on the part of editors, reporters, and news executives. A design practice may be extremely useful in this new world, because fundamental to good design is the question: Who are you designing for and why? Designers today talk about designing alongside stakeholders.

Legacy newsroom cultures as we know them today emerged to create a product—the newspaper—that is no longer the industry’s focus. Cultures, however, are notoriously difficult to change. So what happens when your culture no longer suits your end goal? If we believe that news organizations must become more creative and nimble, and that journalists should reconsider their relationships with “the people formerly known as the audience,” then the issue of culture change is central.[1] I recently asked Aron Pilhofer, interim chief of digital at *The Guardian*, what he saw as the long-term strategy for the industry. He said: “The cure for the future of journalism is to build cultures where the cure to the future of journalism will emerge.” As we shall see, the model of a design practice, with its democratizing and collaborative bent, may be an important one for journalism to consider.

Clarifying the Terms of the Discussion

In recent years, many people have been exposed to the notion of design as something beyond graphics—thanks to the rise of global consulting firm IDEO, which popularized a five-step process it terms “design thinking.”



IDEO’s five-step design process.

As IDEO CEO and president Tim Brown explained it in his 2009 book, *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*, he was approached in the 2000s to tackle problems that didn’t seem at all related to traditional notions of design.[2] For example, a university wanted help thinking about new learning environments; meanwhile, a health care foundation wanted help restructuring. In other words, he was being asked to do design work beyond the creation of a standalone product or brand. Stanford professor and IDEO founder David Kelly told Tim Brown one day that he found himself using the word “thinking” to explain what they did. “The term ‘design thinking’ stuck,” Brown wrote.[3]

Interestingly, there is no definitive body of work on the history of design thinking. People disagree about the origin of the term, and whether it is wise—or even possible—to reduce the power of a serious design practice to five easy-to-follow steps. The term was certainly used before the 2000s. Peter Rowe’s book *Design Thinking*, for example, was published in 1987. And many people cite its origin as tied to the great economist and social scientist Herbert Simon and his book *The Sciences of the Artificial,* which was published in 1969.[4] While Simon does not use the phrase “design thinking,” his work is seminal for articulating a vision of design as a practice supremely useful for grappling with certain kinds of problems beyond those traditionally associated with it.

In this paper, I define design as a practice based on a certain mindset and processes. I suggest avoiding the term “design thinking” since it is too limited and too closely associated to IDEO’s five-step process, which does not encompass all that design has to offer journalists. This was a difficult decision. In recent years, as the curiosity about design and its potential use in newsrooms has grown, many people have used the term “design thinking” to refer to any instance in which design processes are used for problems not traditionally associated with the practice. In the process of researching and writing this paper, however, I was struck by how much skepticism—and outright hostility—the term generates from actual designers and innovators. “Design thinking skates on the surface,” said John Seely Brown. “It caught on because it’s formulaic and thus spreads easily.” According to him, corporations started using design thinking because they’d “lost confidence in their ability to innovate.” Seely Brown continued:

> IDEO’s five-step design thinking process served an incredibly useful role because it gave corporations a sense of confidence. I’m not trashing design thinking, but it’s a matter of shallow design versus deep design wherein one pays much closer attention to the inchoate and tactic signals in context.

Jamer Hunt, an associate professor at the Transdisciplinary Design Program at Parsons School of Design, said something similar:

> Companies needed help thinking creatively about innovation. And IDEO said, “Look, we have a rational method for this. And you can replicate it yourself.” It worked very well with corporate culture, which is very risk adverse. But I don’t use the term. It reduces design to thinking only. It’s too generic.

Many of the designers I spoke with said they don’t adhere to any particular school and, in fact, find being bound by even a prescribed set of steps confining.

A Different Kind of Reasoning for a Different Kind of Problem

In *The Sciences of the Artificial,* Simon proposed that the natural sciences are concerned with "how things are," while design is concerned with "how things *ought* to be."[5] Simon argued that every act of human creation is design—this is what he means by "artificial" as opposed to "natural"—and that everybody is a designer: "Everyone designs who devises courses of action aimed at changing existing situations into preferred ones," Simon wrote.[6]

When interviewed in 2009, Nigel Cross, author and professor emeritus of design studies at the Open University, referred to "constructive thinking" as the heart of design practice, which he described as "imagining how something *might* be, not just how it *is*."[7]

At the heart of this concept of design is a distinct kind of reasoning, which theorists refer to as abductive reasoning, and which differs from the kind of reasoning traditionally used in logic and science, known as deductive and inductive reasoning. The simplest illustration of deductive reasoning goes as follows: If a=b and b=c, then it must logically be the case that a=c. Inductive reasoning, by contrast, draws conclusions based on premises believed to be true: If I have observed swans in a given region, and all the swans observed are white, I may form the rule or prediction that all swans in this region are white.[8] The truth is not guaranteed in inductive reasoning as it is with deductive reasoning—black swans certainly exist—but the conclusion is inferred based on evidence. Therefore, there is good reason to believe the conclusion.

Abductive reasoning, on the other hand, was first introduced by American pragmatist philosopher Charles Sanders Peirce in 1901 as "guessing."[9] For example: I come outside and my bicycle is wet. I know that when it rains my bicycle gets wet, so I hypothesize that it may have rained. There are other possibilities, however, so I don't know for certain. In his 1903 Harvard Lectures, Peirce said: "Deduction proves that something *must be*; Induction shows that something *actually* is operative; Abduction merely suggests that something *may be*."[10] This is important for design because design is the creation of new solutions to a problem, and there is no guarantee that it is the right solution in the scientific or logical sense. It's always going to be one of many possible solutions. Its rightness is determined by whether it solves the problem. "Abduction," wrote Cross, "is the logic of design."[11]

Design, consequently, focuses on synthesis—the creation of new forms—and as such it is a solutions-based rather than a problems-based approach. As the British mathematician and architect Lionel March put it: "Logic has interests in abstract forms. Science investigates extant forms. Design initiates novel forms."[12] Those engaged in a design process are more

likely to spend their time experimenting with a variety of solutions to see if they work, rather than behaving as a scientist might by accumulating as much data as possible, then seeking to discover a formal rule from which a solution might be generated.[13]

Wicked Problems Versus Tame Problems

It is worth noting that the rise of the use of design to tackle problems outside the traditional realm of design was, in part, a response to a new kind of problem. Specifically, the scientific, artificial intelligence, and public policy communities were seeking new approaches for addressing so-called "wicked problems."[i] Wicked problems are complex in nature and difficult or impossible to define precisely; often the detailed nature of the problem itself might not be clearly perceivable until after a potential solution has been formulated and applied. Wicked problems, at that time, encompassed everything from nuclear weapons escalation to environmental degradation and, later, the AIDS crisis. The challenge of how to keep serious, independent journalism alive in a digital ecosystem might best be thought of as a wicked problem, too.

Wicked problems are to be contrasted with "tame problems."[14] A simple example of a tame or well-defined problem might be an algebraic equation with unknown values. Discovering the values of x and y may not be easy; it may take long hours, or require a lifetime of mathematical training, or a computer for assistance. But there is a single solution—and that solution exists whether the problem-solver finds it or not.[15] In other words, solving a tame problem means moving from point A to point B. With wicked problems, however, there is no point B until you come up with it—and even then, it might just be one of many, multiple solutions, and not something that will ever definitively be right in the way the solution to an algebra problem is. The process may also be ongoing and require many goings from point A to point B as the problem morphs over time.

Design Processes

> The design process is open-ended, and full of uncertainty and the promise of the unexpected."
>
> -Jamer Hunt, associate professor, Transdisciplinary Design, Parsons School of Design

Design is "a reflective conversation with the situation."

> -Donald Schon, philosopher and professor of urban planning, MIT

If we step away from IDEO's five-step design thinking process, then the question emerges: What kind of process are we talking about when we refer to a design practice? While there are many schools of thought, and different branches of design, there are certain core processes that are likely to appear in any design practice.

Some designers are strict about the order in which they adhere to their processes. Most of the people with whom I spoke, however, are not. Indeed, since design-based approaches tend to emphasize a constant reassessment of both the problem and the solution, contemporary practice emphasizes moving through various processes as each particular problem demands and returning to earlier stages as necessary. Therefore, the elements listed below are often used in the order that makes sense in the context, and can be repeated as often as necessary. This list focuses on aspects that might be particularly worthwhile for journalists to consider—whether they are participating in the design of a new product, reinventing newsroom culture, or determining how to cover an important topic.

Systems thinking

A system is a set of interconnected parts that together form a whole. Systems thinking is the study of wholes and the interrelationships between parts, rather than just the parts in isolation. It also emphasizes a recognition of the dynamic nature of those relationships. Increasingly, I've come to see every news story as a system: It is made up of the original piece of text or images produced by the reporter, but also has multiple social media components, generates feedback and conversation, gets quoted, is used as a jumping-off point for a segment on a podcast, goes out as part of an email newsletter, and so on. To get the most out of your story, it might be worthwhile to understand not just that these different components exist but to identify the ways they relate to one another to form something larger. Then, you might pull back and see the system of your story embedded in the larger system of your news organization. You might keep pulling back until you see your story situated not simply in journalism but in the larger media ecosystem, or the system of all the information available to people through their phones. Thinking this way might change what

you produce and how you publish. Good designers from any discipline will tell you that nothing is created or consumed in isolation—and that it is important to respect the relationship between the new creation and the environment in which it arrives.

Human-centered design

Human-centered design stands in opposition to technology-driven design and is predicated on the idea that good design emerges from satisfying people's needs, rather than just taking advantage of a new technological breakthrough. (Technology-driven design risks making the assumption that because an innovation is possible, implementing it must therefore be desirable.) The notion of human-centered design grew in part out of work by Bob McKim in the 1960s and Rolf Faste in the 1970s at Stanford's Design Program. (David Kelley, who founded IDEO, worked alongside them for some of this time.) McKim and Faste were inspired by the human potential movement, which argued that every person contains a resource of untapped potential; followers of the movement worked toward "self-actualization," at the pinnacle of psychologist Abraham Maslow's pyramid of human needs.[16] McKimm and Faste were interested in bringing the end-user—humans—into the design process, and also in acknowledging their own roles as individual humans in the process. According to Jamer Hunt, associate professor at the Transdisciplinary Design Program at Parsons, human-centered design starts with the premise that you as the designer don't have all the answers—this was a big paradigm shift at the time—and that the best thing you can do is to bring other people into the process in an effort to design for their psychologies and contexts. This could be seen as echoing the journalistic notion that considering many perspectives may take you closer to the truth. The idea of designing along with stakeholders takes this idea to the next level and resonates strongly with the work being done in journalism today under the label of audience engagement.

Identifying and naming the problem and the objective and not letting assumptions get in the way

To return to the notion of wicked problems versus tame problems, sometimes knowing what problem you're trying to solve is extremely difficult. You may know the symptoms, but the symptoms may not lead in a straight line to the diagnoses. To take this metaphor further, misdiagnosis might even kill the patient. In other words, not knowing what problem you're trying to solve can lead to wasted time and resources, and sometimes much worse. Recently, in the news organization class I teach, I asked students what they hoped to achieve over the semester. "Get more people to our website," was the immediate answer. After further investigation, however, they determined that what they actually wanted was

more eyeballs on their work. This shift in objective vastly opened up the space of possibilities, and the class is now considering many ways—analog and digital—of getting their work in front of their community, rather than just throwing resources at a nicer website.

Deep listening/empathy/research

This design process emphasizes the point made above that nothing is made or consumed in isolation. If you haven't put yourself in your future user's shoes—if you haven't understood the context in which what you're making is going to be used—then how can you design something that will actually meet people's needs? IDEO calls it the empathy stage. John Seely Brown calls it "deep listening" and "listening to context"—he recalled commissioning six-month ethnography studies to help figure out interface problems with a new copier when he was chief scientist at Xerox PARC in the 1980s. Others call it ethnography, or simply research. It also embodies a deep skepticism toward one's own assumptions. I talk to my students about listening with humility: a kind of listening that puts aside what you're expecting to hear, hoping to hear, or fearing to hear. Some feel that empathy and deep listening sound touchy-feely, with no place in the hard-bitten world of journalism. But I suggest that this approach is in fact a powerful way of going beyond one's subjective experience, closer to reality as it actually is. It is a tool for overcoming confirmation bias, at least partially, and it helps us hear both what is said and what is not said. The implications not only for news product design, but also for the reporting process itself, are profound.

Brainstorming/open ideation/blue-sky thinking

At Stanford in the 1970s, designers like Rolf Faste were taking improv classes. The cardinal rule of improv is to build on what your partner does. You don't contradict; you don't stop the proceedings by refusing to play along. The ethos is "yes, and . . . " instead of "no, but . . . " In other words, this phase of the design process is one where judgment is suspended. Any idea, no matter how seemingly outlandish, can be floated. "If you're working on redesigning a car and someone suggests a fifth wheel, you don't say, 'That's stupid,'" Jamer Hunt said. "You say, 'How would that work?' It might lead somewhere. You don't want to close out potential." It is essential to remember here that brainstorming is not the end of the practice; Hunt's criticism of IDEO's five-step design thinking is that it often stops at this stage. He said the process has been widely adopted and too often fails to move from idea generation to actual materialization. It is easy to be excited about a board full of new ideas, but, as Hunt said, "New ideas are a dime a dozen. It's the materialization of them that's hard." Moreover, in recent years, some have concluded that group brainstorming may not even be the best way to generate good ideas. Jake Knapp, a design partner at Google Ventures, for example, said that in his experience the best ideas come from individuals initially generating them alone. He always gives "head-down time" for people to develop their own ideas.[17]

Synthesizing/wrestling/winnowing/interrogating

If generating new ideas is easy, at least according to some, then this next phase is where it gets harder. “You have to interrogate your ideas,” Seely Brown said. Different designers have different strategies for this—from giving everyone a number of stickers to vote on different ideas, to intense verbal debate and argument. To synthesize, according to *Webster’s Dictionary*, means to combine a number of things into a coherent whole. This is the phase where judgment comes back in.

Prototyping and iterating/learning in action/materialization

“The hard part is when you try to boil down a problem space into a single solution,” Hunt said. IDEO calls this the prototyping phase, but relegating it to a single phase seems to miss the larger point. Every designer I spoke with talked about the *learning that happens through doing*. Haakon Faste, son of Rolf Faste, and a professor of interaction design at California College of the Arts, said that even the term design thinking is an oxymoron, because design is not thinking. Rather, it’s what happens through the process of making. This is an idea familiar to every writer: Often, you don’t know what you’re trying to write until you sit down to write it. Then it emerges. So too with design. As Seely Brown said, it’s the “pushback” from the materials, and learning to “listen to what the pushback is telling you,” from which solutions arise. Hunt calls it the materialization process—moving from idea to actual solution. Liz Danzico, creative director of NPR, said: “Iteration is the air we breathe, the water, and our shelter.” The idea is to avoid spending years researching and documenting why something should work, then spending a large amount of money building it only to discover its flaws. It’s better to start *low-resolution* and then cycle through testing and feedback while building to *higher-resolution*.

Testing/feedback/playtesting

Designers of all sorts test and get feedback on prototypes before moving from low-resolution to high-resolution. It goes back to the idea that designers do not actually have all the answers. They need to see how other people engage with their work before knowing if it’s successful—to learn not what they assumed the experience would be but what it actually is. Testing and feedback usually goes along with the prototyping-iterating phase, and sometimes continues even once something has been made public. Online, feedback from users can be implemented continually. In *Don’t Follow These Rules!, A Primer for Playtesting*, game designer Eric Zimmerman and architect Nathalie Pozzi suggest playtesting as early as you can. “It is much better to playtest your ugly prototype than wait and playtest a more polished project. A playtest is not a presentation. If you feel ready and comfortable to playtest your design, you have waited too long.”[18] They also suggest going

into playtesting knowing what you want to learn, preparing variations for people to try out, knowing your testers so you can put feedback into context, and letting testers interact with the work with “the least possible explanation.”

A Word About Agile

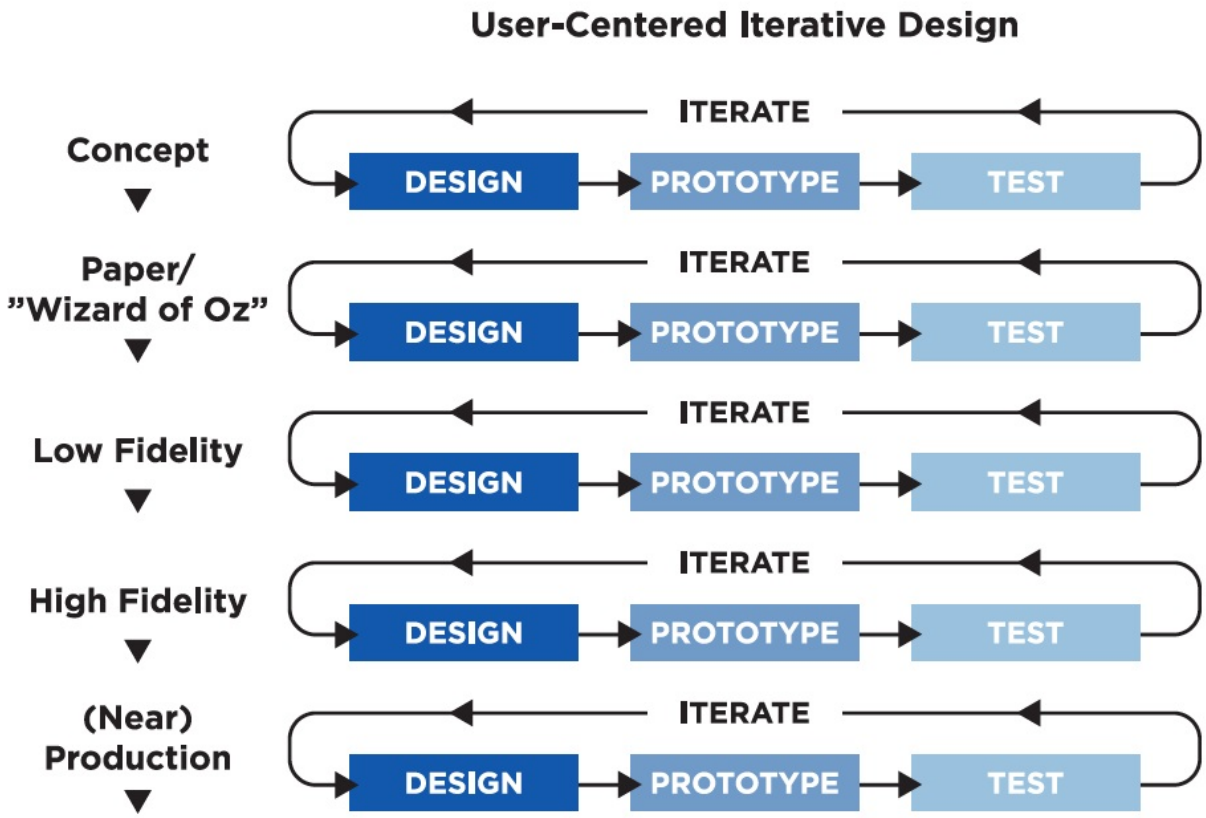
This idea of prototyping, testing, and iterating is so central to contemporary design practice that it's worth mentioning the highly influential methodology, Agile, that helped crystalize the philosophy. While it had been gaining momentum since the early 1990s, the movement officially launched in 2001 when a group of seventeen software developers who were "organizational anarchists" met in Snowbird, Utah, and created the *Manifesto for Agile Software Development*.[19] Among other things, they were revolting against the creation of large amounts of documentation before anything was built. Such documentation showed how a single idea was going to work, after which company bosses poured money and resources into the creation of that single product. The problem with this way of working came when development teams would discover, once already deep in the process, that there was a flaw in the initial concept. Or perhaps that while the concept had been perfect at the moment of conception, by the time it was ready to ship it had already been rendered obsolete by some technological advancement or shift in the marketplace, thus wasting a lot of money and human effort. Out of this conundrum arose the notion of building lots of small, cheap prototypes simultaneously as potential solutions, while constantly soliciting feedback in order to approve and adjust. Designers call this iteration, and it has since become the dominant design process.

Visual Examples of Design Processes

Below are some visual examples of design processes as defined by different disciplines and organizations.

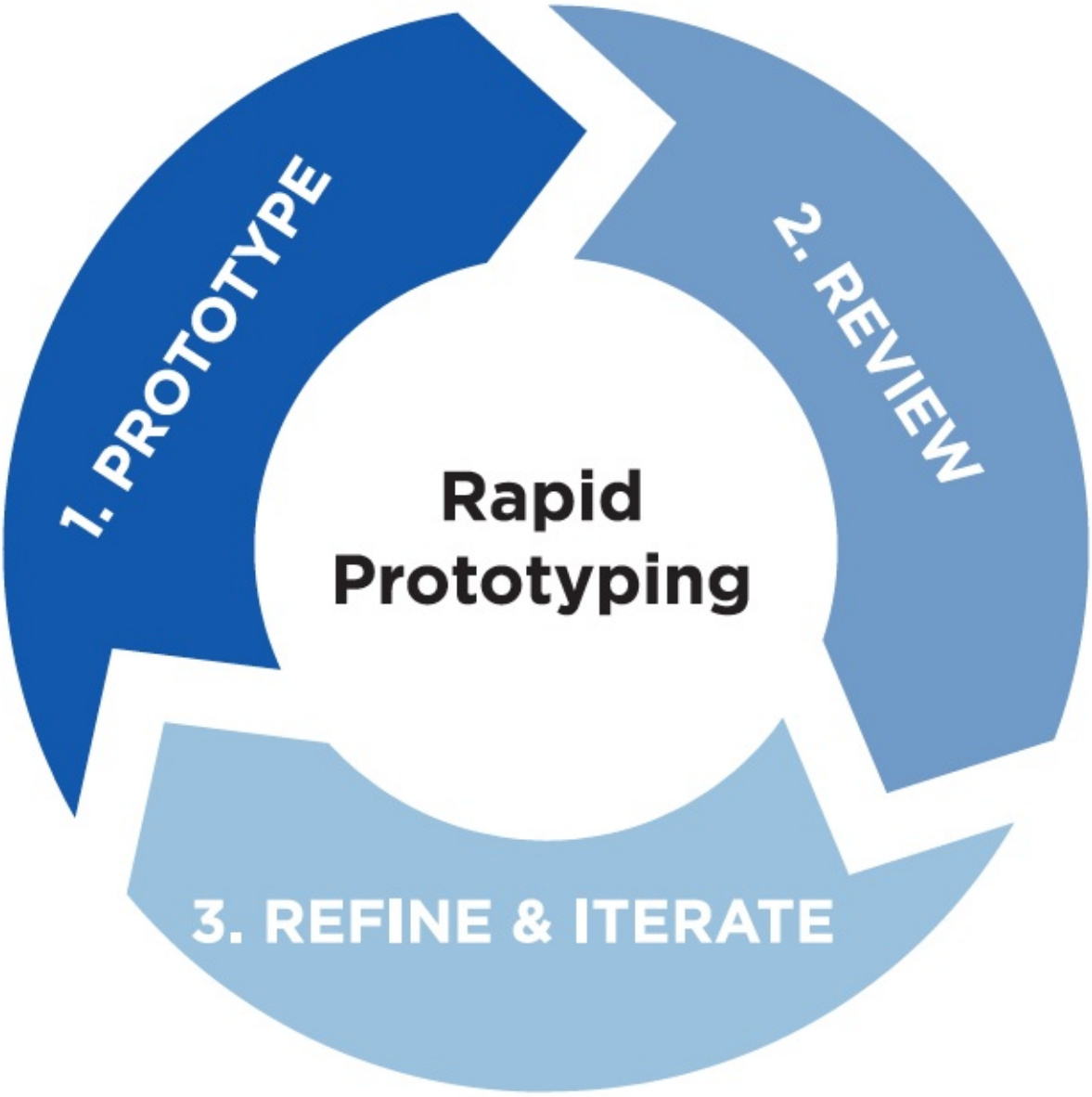
It's interesting to note how similar these are, even when the language around them varies. Also, you can see how different disciplines—from engineering to user-experience design—follow similar processes.

User-Centered Iterative Design



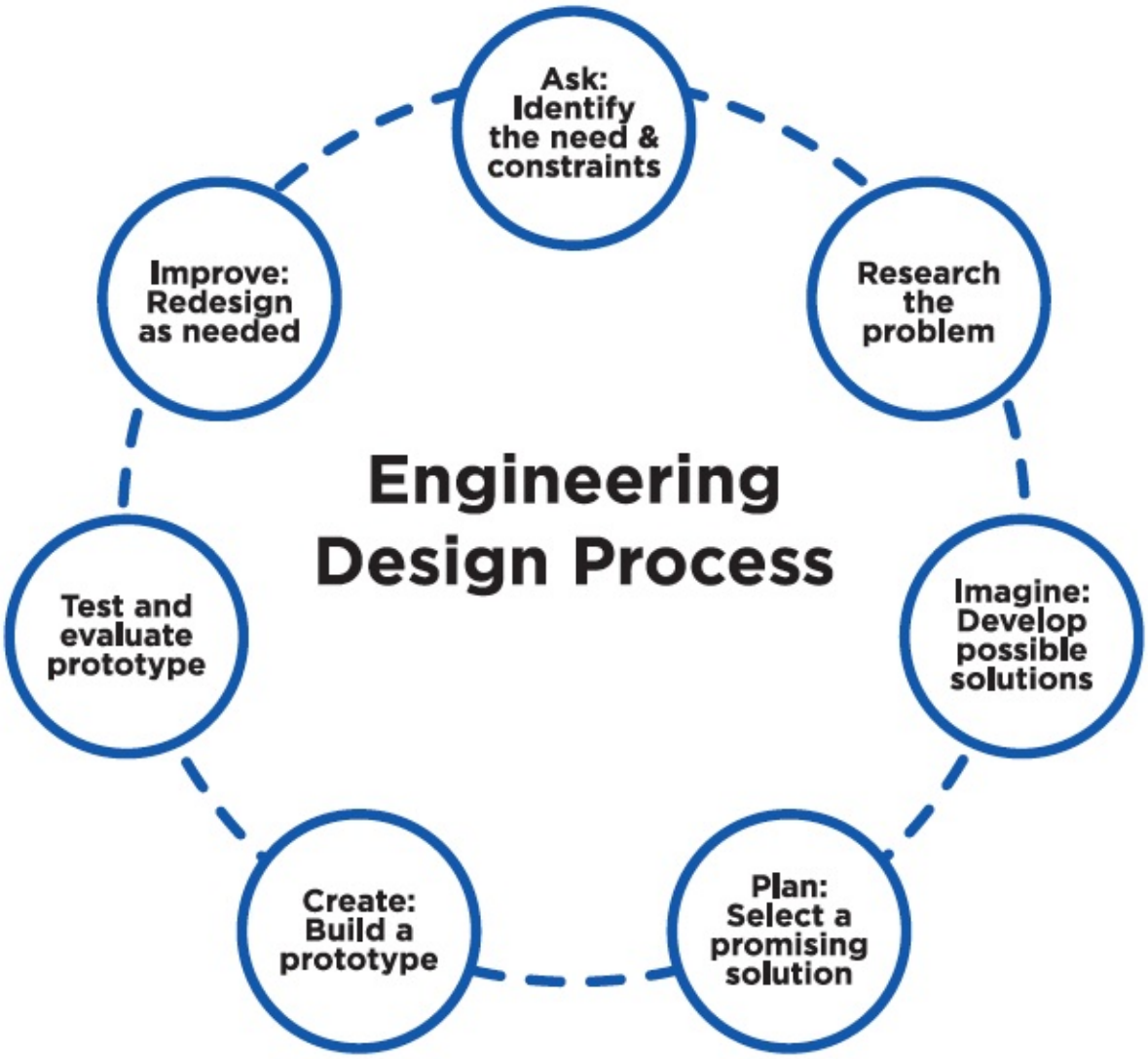
This diagram shows the iterative nature of the design process and some of the key terms.[20]

Rapid Prototyping



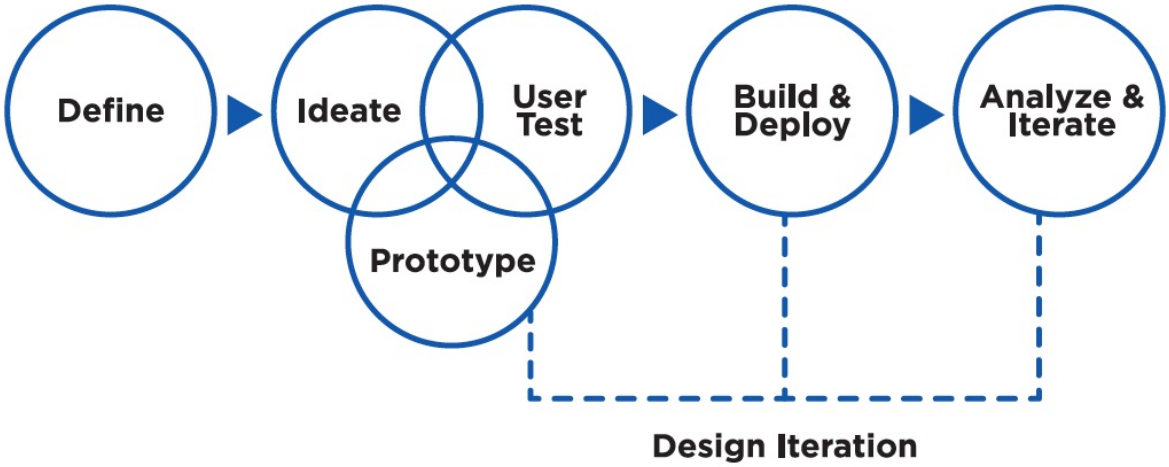
Rapid prototyping is considered key to contemporary design practice.[21]

Engineering Design Process



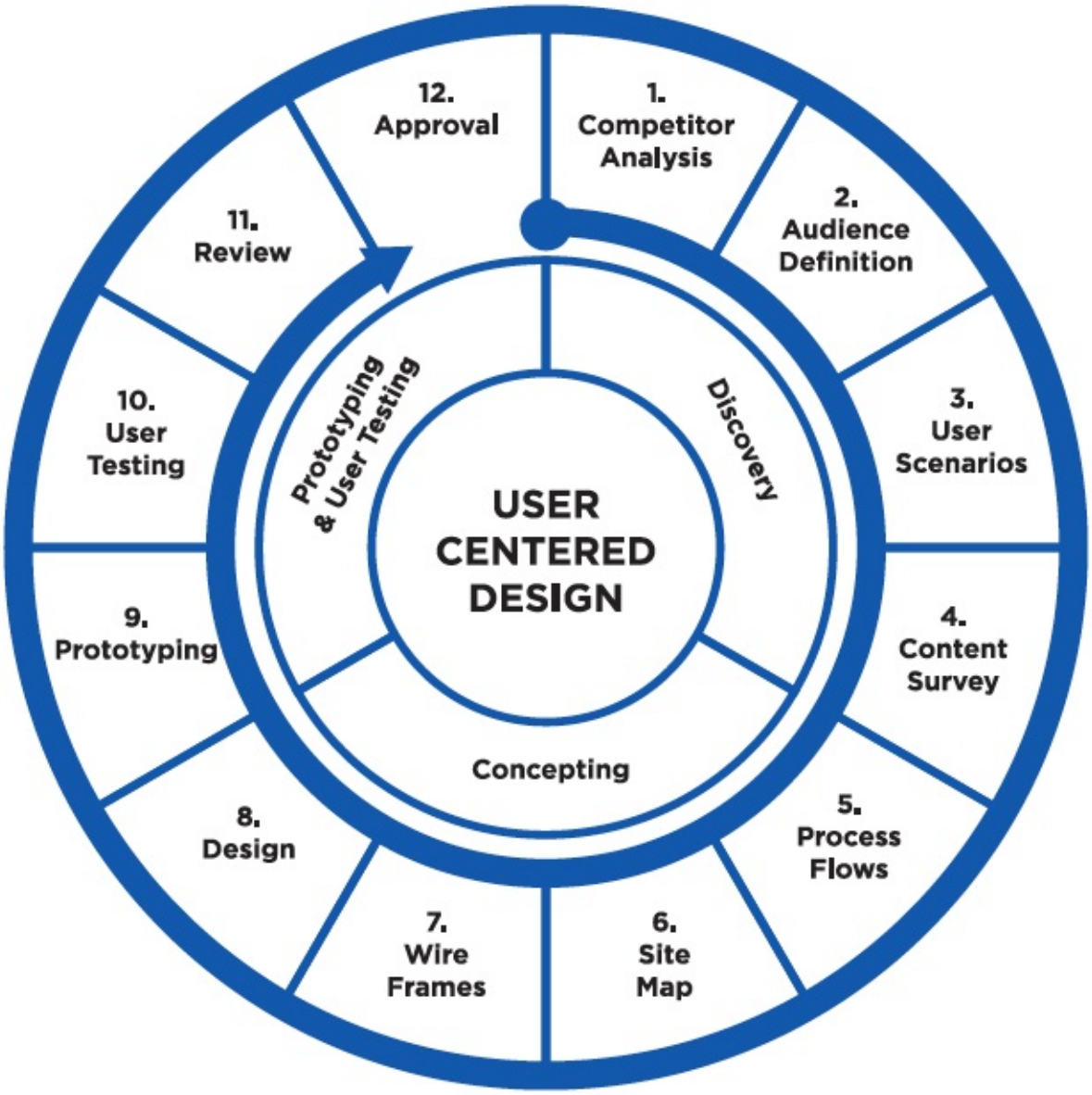
Even in this diagram of an engineering process, you can see many of the key themes discussed above.[22]

User-Experience Design



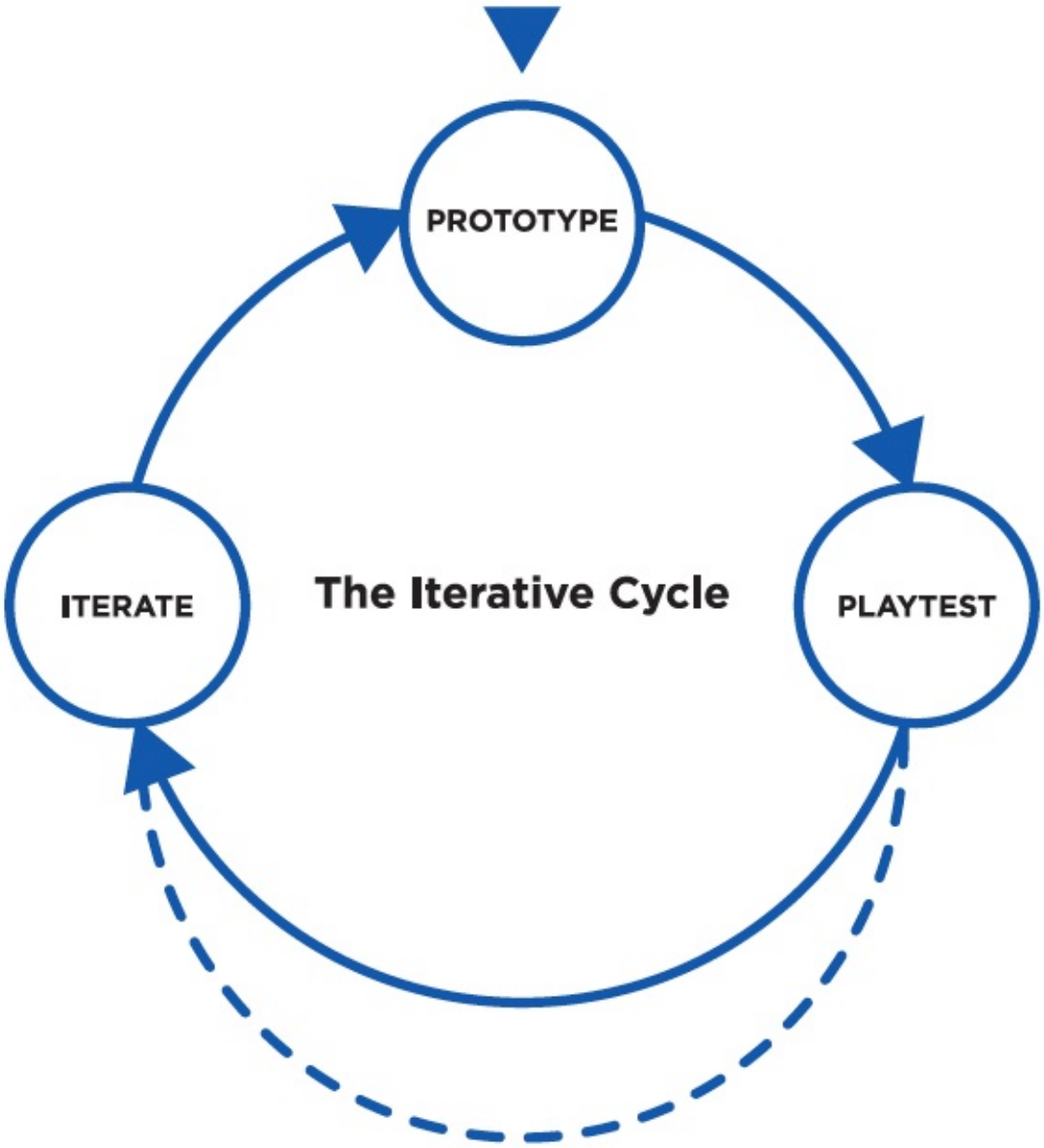
In this user-experience design diagram, process repeats itself as necessary.[23]

User-Centered Design



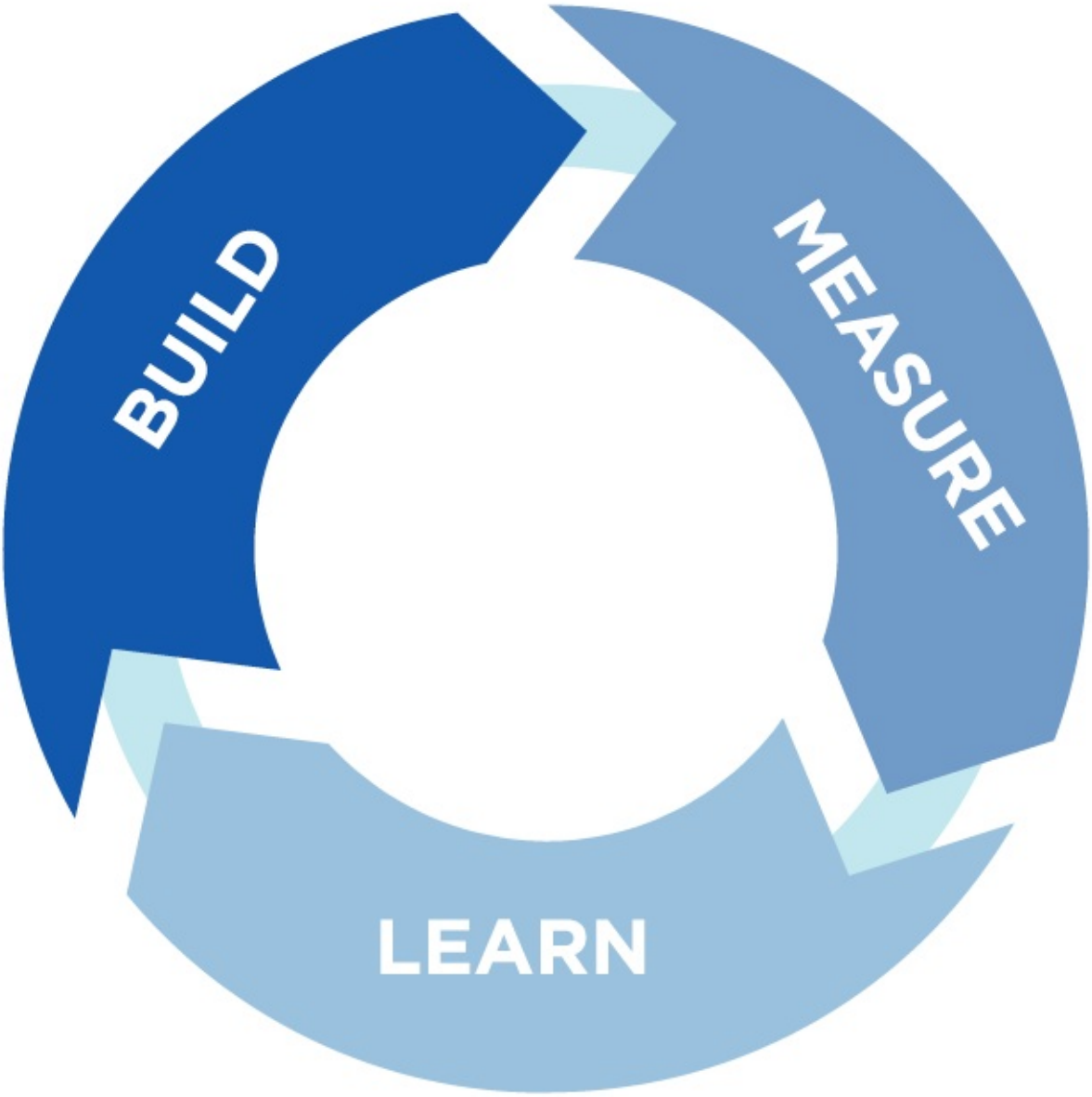
Here is a user-centered design diagram with a lot more detail.[24]

Playtesting



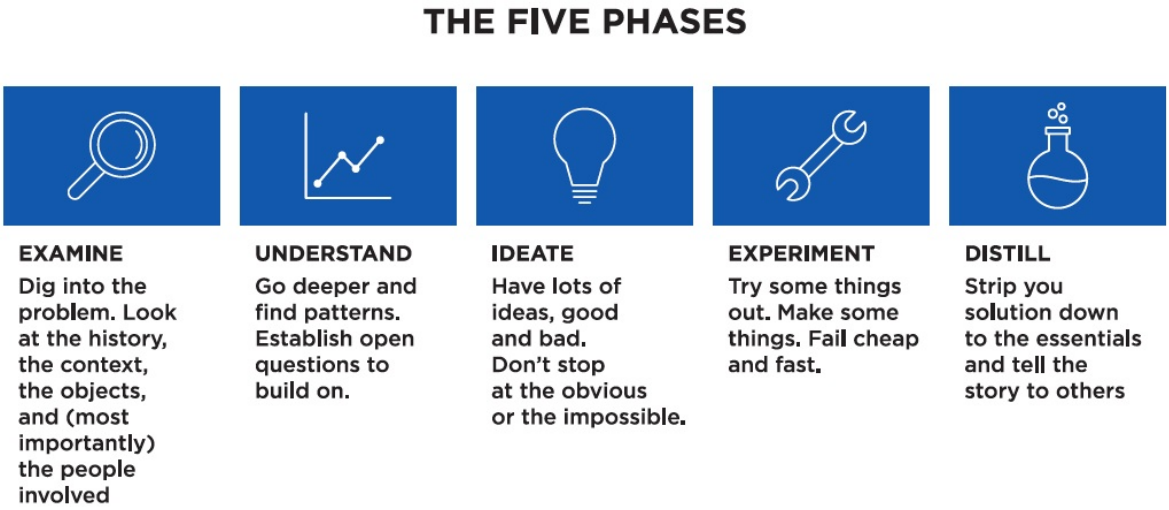
In this diagram, playtesting is given equal weight to prototyping and iterating.[25]

Wireframing



Whether design process diagrams have three steps or ten, or use any number of languages, the principles are the same.[26]

Design Steps



Here is an example of a five-phase design process different from IDEO's.[27]

Research Methodology: Four Key Uses of Design in the Newsroom

To see the ways design is being used in newsrooms, I selected four people and four organizations to investigate.

Product Development: The most obvious place to start was new product development. I chose BuzzFeed because, unlike most legacy news organizations, product development is an integral part of how it does business. In addition, I'd been impressed with BuzzFeed's recent focus on mobile innovation under the direction of Stacy-Marie Ishmael. After discussion with Ishmael, I decided to focus on product design manager Sabrina Majeed. In our interview, I asked her to give a nuts-and-bolts account of the design sprints she leads.

Audience Engagement: Next, I selected Emily Goligoski at *The New York Times* because she had recently been embedded in the newsroom as a design researcher, the first position of its kind at *The Times*. While graphic designers have long been in newsrooms, design research work has generally been relegated to the business side of operations. I spoke with Goligoski both about why design research belongs in the newsroom and the specifics of what she does.

Identity Across Platform: Since news organizations today must distribute across a multitude of platforms, I wanted to investigate the use of design in creating a coherent experience for users. In 2013, NPR created the new position of creative director and hired Liz Danzico. I was interested in understanding what design had to offer a news organization based on audio experiences. In our interview, I asked her what kind of design process she uses in her work at NPR.

Civic Journalism: One of the most interesting ways design is being used in newsrooms is as part of the reporting process itself. With its emphasis on a more collaborative relationship between producer and consumer, I was curious about the ways design-infused editorial work is being used as the next step in civic or community journalism. I chose to speak with Michelle Holmes, executive director of content for AL.com, because I knew she had gone to the d.school at Stanford and tried to directly apply some of the design thinking work she'd learned. We spoke about how design processes do and don't fit directly into editorial work.

Case Study 1: Design as New Product Development

The newspaper was a great product: fast and reliable, easy to use for the consumer, and highly profitable for the producer. People sometimes glorify the newspaper as being the essence of news itself—but it wasn't, and it's not. It is a product that worked really well for a really long time. Some journalists react badly to the idea that their work is a product. It violates their sense of being involved in a public good and not just a moneymaking operation. Last year, I hosted a design sprint for journalists in New York City, and some of the participants had an extremely negative reaction to the challenge of creating a news product for people's morning commutes. It's not that they didn't think it was a good idea, it's just that a few of them were offended, as if we were undermining the very nature of their work as journalists. "Journalism isn't a product," one of the attendees said. I was struck by how viscerally upset he was. In our advanced capitalist society, business language and paradigms have crept into every aspect of our lives, and in this sense the journalists at the design sprint were right to be wary. I too believe that serious, independent journalism is a public good (and that such a thing as a public good exists). However, while we can assert that journalism is in a different category than mouthwash, throat lozenges, and bobblehead figures of baseball players, there is a real danger in conceiving of ourselves as above the fray. This need not mean selling out or dumbing down. Rather, it means being pragmatic and staying relevant. For the purposes of this report, I use the word "product" to mean something that is produced for consumption by others.

News Organization: BuzzFeed

Person: Sabrina Majeed, product design manager.

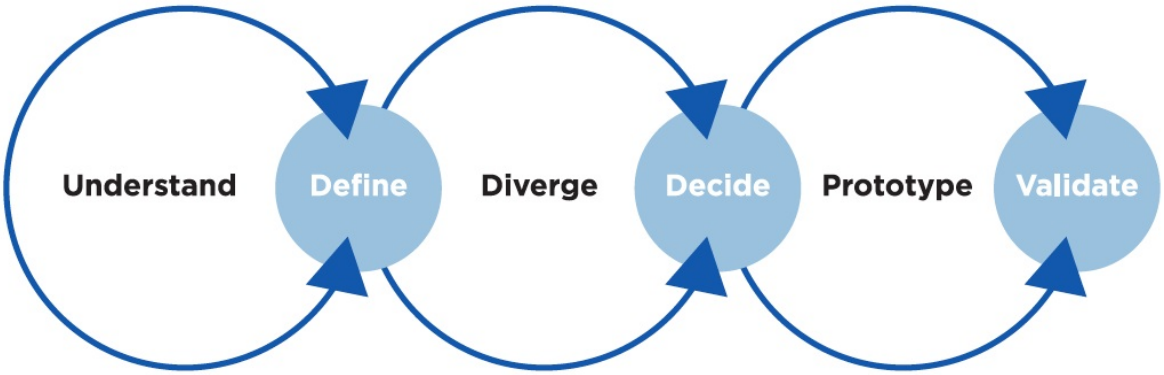
Majeed studied communication design and human-computer interaction at Carnegie Mellon, and worked at a financial software company as a product designer before coming to BuzzFeed. She had no previous experience as a journalist.

Setting: There are about fifty people on the content and publishing team, three of whom are designers. The team sits in BuzzFeed's technology department. Before BuzzFeed's move to new offices in February 2016, technology was in a different building than editorial; at that point, the two teams made a point to visit each other a few times a week and to communicate over Slack's messaging system. Now that they're all in the same building, the flow of visits is more fluid. "We see each other pretty much every day," Majeed said.

The Process: Whenever BuzzFeed is considering launching a new app, Majeed organizes and runs a weeklong design sprint "to help validate the concept." The design sprint method, credited to Google Venture design partner Jake Knapp and now widely used across different industries, involves a five-day "sprint" of designing, prototyping, and testing ideas.[28] The design sprint is a successor of the design charrette, a similarly fast-paced process that has its roots in nineteenth-century Paris, when Ecole des Beaux Arts architecture professors would give assignments so difficult few students could finish them on time. Professors would send around "charrettes"—carts in French—to collect final drawings while students were still feverishly trying to finish them. (To miss the charrette was to fail.)[29] "We do design sprints because it's a way to validate whether a new venture is worth pursuing. Sometimes you have an intuition about something but no data, especially if you want to build something that doesn't exist yet," Majeed said. "With a design sprint you can very quickly build and test an actual thing to get people's reactions. So it's not just describing an idea to someone—it's putting several possible solutions to a problem in their hands and seeing what people gravitate to." For her design sprints, Majeed brings together three developers, three designers, three editorial staff, a product manager, and a facilitator. It was on her second design sprint—to create a quiz app—that Majeed realized the importance of having members of editorial involved. Editorial in a news product context serves the role of content expert, a representative of the people who know the domain of exploration better than anyone else. In this case, those from editorial—experts in quizzes—brought up the idea of people taking quizzes in pairs. What if people could send quizzes to their friends and get the results jointly, they wondered. They came up with quizzes such as: "Where should you and your best friend move?" The developers on the team knew that Facebook had recently opened up its API for innovation and that this idea of joint quizzes could be done through Facebook Messenger. The result was a new app for BuzzFeed called Quiz Chat. And while

a new quiz app may not seem very important, the idea of multidisciplinary teams working across the newsroom to create successful new products is. Moreover, Majeed said, participating in design sprints has helped those on the editorial side think differently about what they produce. “It helps them remember the mindset and environment of the person who’s going to be reading their content,” she said.

During sprints, Majeed’s team takes over one of BuzzFeed’s open spaces for five days. There are lots of whiteboards and bulletin boards, and as the days pass, the walls fill up with storyboards, prototype sketches, and stickers for voting on prototypes. There are plenty of one-pagers on the pros and cons of other, possibly similar apps. Day one is an “information dump,” Majeed said, where the team reviews whatever data it has acquired that might be relevant. This can be tricky if the participants are trying to create something that doesn’t have a category yet, but the teams put together a competitive analysis as best they can. If it’s something sports-related, for example, they might collect data on how people consume sports news. The team then goes over editorial and design principles, and maps out the “basic flow” that a user would experience if presented with the hypothetical product. Day two is sketching. Everyone is involved, including editorial. Rounds of sketching are followed by critiques, followed by more rounds of sketching; everyone posts their sketches on the walls anonymously and votes on them with stickers. Sticker voting is a common method of narrowing down ideas. It’s important to note that the stickers aren’t simply about voting on a winner, but also a method for generating conversation around ideas in the winnowing process. As mentioned earlier, the interrogation of ideas is as important as their generation. Days three and four are prototyping and iterating. “The developers develop, the designers design, and editorial creates content that could be used in the app,” Majeed said. Day five is user testing. Majeed or the product manager facilitates the testing, and other members of the sprint observe from a viewing room and take turns coming into the actual testing room. Then the team reviews all the feedback and makes a list of key takeaways about the project in general, as well as specifics on the performances of the individual prototypes. Thereafter, they review with upper management and decide whether they have something that is investment-worthy.



This is a diagram of the design sprint process.[30]

When BuzzFeed decides to move forward with an app, the organization follows a model of "continuous deployment," Majeed said. In other words, BuzzFeed is moving away from a single release to lots of tiny releases. "Internally, we can only validate so much," Majeed affirmed. "This way, not all our eggs are in one basket when we ship." Majeed doesn't wait until something is perfect before taking it public. Instead, the testing and iterating that designers talk about so much simply continues once the product has been released. The digital environment makes this approach possible—at no point is the Internet ever sent to the printers and considered done. On a panel we did together at the Online News Association Conference in 2015, Shazna Nessa, director of journalism at the Knight Foundation, said the Internet means "the end of finished."[31] Majeed was very clear that her team does not follow any particular school of design. "Rather," she said, "it's a shared belief in the process itself." When asked what she meant by "process," she replied: "We care a lot about user research, and we care a lot about breaking down the actual problem we're trying to solve . . . Identifying the problem you're trying to solve is the key value of a designer." Majeed added that people always make assumptions about what they think they want—and the designer is there to challenge those assumptions. If the assumption is right, challenging it forces the person to find data and a rationale to back it up, which is important information for the designer to have. Sometimes, assumptions are simply misleading. For example, a news executive wants a new app—because his competitors just built a new app. For Majeed, this isn't a helpful starting place:

> If you say, "I want to design a new app," well, then the amount of possible solutions you have is a lot of different types of apps. But if you say, "The problem is I need a way to get people this news," then you're going to have a lot more possible solutions.

Takeaways:

- *Identify the actual problem, not what you assume the problem is.* It's alright if the problem continues to be redefined throughout the process. Problem identification and solution creation go together.
- *Always include editorial.* "Work with people who don't do what you do" is a useful rule for design.[32] In the journalistic context, including editorial is key. It's good for the designers, and it's good for the journalists.
- *"Content before chrome,"* Majeed said. In other words, if you're a designer in a newsroom, your design should be invisible. "Don't get in the way of editorial," she said.
- *Designers should have a say.* Traditionally, designers have worked in a design-client model, with the client in charge and the designer there to provide a service that satisfies the client. That was before the outlandish success of tech companies that give design greater prominence—Apple, above all. The success of these companies influenced the process to include designers as key decision makers. "It's a change from a client model to a stakeholder model," Majeed said. "Designers need to be outspoken."

Case Study 2: Design as Audience Engagement

Audience engagement, or audience development, are terms frequently mentioned in contemporary newsrooms. For the purposes of this paper, I take these to mean attempts by news organizations to build deeper, more interactive relationships with their readers—a move inextricably linked with the paradigm shift to a user-centric model. News organizations are no longer hubs of information to which people come; instead, organizations now seek to get their work out to readers and to interact with them more deeply. To do this effectively, they have to *know* the audience in a new way, including their habits, their behavior, their likes, and dislikes. As the media ecosystem becomes even more competitive, news outlets are fighting with every other kind of media for people's attention. This means that the pressure to anticipate the audience's needs and desires is intense—and increasingly seen as not just a business imperative but as part of the editorial mission. The idea of audience engagement is more than just a marketing ploy; it's the acknowledgment of a shift in power dynamics. Once people can determine when and where to engage—and can be makers as well as consumers—a new, more collaborative kind of relationship between news organizations and their audiences is required. In fall 2014, Alex McCallum of *The New York Times*, then assistant managing editor for outreach (a new title at the time), began embedding quantitative and qualitative audience researchers in *The Times*'s newsrooms to work directly with editors and reporters. Emily Goligoski was the first embedded design researcher. This was a straightforward implementation of the design principle that dictates starting with knowing who you're designing for and why.

News Organization: *The New York Times*

Person: Emily Goligoski, user experience research lead.

Goligoski was an arts and culture reporter in San Francisco. She has a bachelor's degree in journalism, a master's degree in learning design, and has taught at the Stanford d.school. Before joining *The New York Times*, she worked for the Mozilla Foundation.

Setting: As user experience lead, Goligoski is based in the Consumer Insight Group at *The Times*. In the spring of 2015, however, McCallum embedded Goligoski in the newsroom to work directly with desk editors. "It's really first of all to help them understand who their audiences are," Goligoski said. "If you're not doing audience research, you risk just taking shots in the dark."

It's worth noting that Goligoski's work does not represent the entirety of *The Times*'s consumer insights efforts. Her work is meant to complement other modes of research, such as real-time reader information, data analytics, syndicated tools like comScore, and more. The difference is that her work is directly alongside editorial.

The Process: Earlier in 2015, two editors approached Goligoski with a basic question: What can we learn about what people need in breaking news moments? In order to define the question, Goligoski first scheduled a series of informal lunches with people across the newsroom involved with breaking news. Each lunch was one-hour long, attended by ten to fifteen people. Goligoski acted as facilitator. "We were trying to understand what constitutes a breaking news win," she said. "What's an example of us or a competitor really meeting someone's information needs in those moments?" Goligoski framed her project with three questions: What do readers seek most in breaking news moments? What role do devices play in shaping their news gathering decisions? How important is social media as a news discovery mechanism?[33] After gathering information inside the newsroom, Goligoski did the same outside it. She worked with other consumer insights staff to find twenty *New York Times* users representing different levels of engagement, from the casual user who just stumbles across the news, to regular readers. Some of the recruits spent hours a day on NYTimes.com; others hadn't read *The Times* since the Boston Marathon bombing. Goligoski's team also selected across socioeconomic, racial, and professional lines. (Goligoski sometimes uses third-party audience research firms to help with selection, although in this case she did not. The team recruited twenty people, and ended up with fifteen, due to dropout.)

Goligoski did not ask recruits to participate in a focus group; she argues that these "encourage groupthink" and give undue prominence to the most outspoken. Goligoski is not alone in her distaste for focus groups. Steve Jobs famously said, "It's really hard to design

products by focus groups. A lot of times, people don't know what they want until you show it to them."[34ii] Goligoski advocates one-on-one work and more time spent understanding the context of a person's life. For this project, she gave each of her recruits access to an online dashboard to record their media interactions throughout the day, as well as how they felt about those interactions and whether they shared what they consumed. She also encouraged recruits to take snapshots of what they were viewing whenever possible and had them keep diaries of their experiences over the week. The dashboard and diary are a way to see what people actually do, rather than just what they wish they were doing. What people report on surveys is notoriously different than actual behavior. "We're trying to get towards what's really happening and not a person's idealized self," Goligoski said. After seven days of this, Goligoski set up interviews with each person, in their own houses when she could arrange it. As much as possible, she seeks to interview people in their real-life environments; she can learn more seeing people in their living rooms than in a *Times* conference room, she said. This is actually a key principle of human-centered design, which advocates that users be understood as full humans, not just consumers. It addresses the ever-present need to consider the larger system in which a person exists and will use your product.[iii] Goligoski's interviews are at least sixty minutes each. "I'm not listening for sound bites," Goligoski said, but for meaning and context. After the interviews, Goligoski and her team spent another week analyzing and synthesizing their findings. "Basically, we lock ourselves in a room and Post-it like crazy," she said. "What you're looking for are patterns and surprises."[iv] Like Majeed and her team, Goligoski relies heavily on visual tools in her work. The team put up portraits of the people with whom they'd spoken, alongside the images people took of themselves and the media they'd consumed over the week. Goligoski said this helps her identify with her subjects and gain a richer understanding of them as individuals. On a more prosaic level, visuals can be extremely useful tools of communication in team environments.

After completing her research, Goligoski condensed the work into a thirty-minute presentation that she showed to different desk editors. So far, she has presented her findings to design teams, product teams, and the international news teams, among others. Mostly, she said, news of the research has spread by word of mouth, and she presents to people who are curious. *The Times* does not mandate that everyone see her presentation. Some of what Goligoski found in the breaking news project was in line with what the data analytics team had already suggested: People are on their computers during the day, their tablets on weekends, radio during commutes, cable TV at night, and mobile all the time. There were also surprises, however. For example, if people didn't catch a story when it broke, they didn't care about new developments until it took up so much space in their social media channels that they felt a sense of personal responsibility to catch up. Then, when that moment came, a surprising number turned to Wikipedia. Another finding that emerged was that people were annoyed by alerts. "The volume is too high, and lot of them are irrelevant to what people want," Goligoski said. Was the exercise useful? Goligoski's presentation is still

making the rounds at *The Times*, so it's hard to give a firm answer on this. But it is considered a success, and the research is being used to further understand reader needs regarding SMS alerts, mobile live-blogging, and news personalization. I asked Goligoski if this sort of design work was essentially a business function, or if it actually made for better journalism. "To be on the editorial side and not think about business considerations, that feels like a dated approach to me," Goligoski said. "I think design and design thinking are tools we have to best meet readers where they're at. And given how competitive things are right now, why wouldn't you employ that?" This comment may raise the hackles of some journalists. The breakdown of the so-called "Chinese wall" between editorial and business is a major topic of conversation in future of journalism circles. Since the 1920s, when the industry began to develop a code of ethics—and had successfully moved away from a model of political allegiance to one of advertiser support—a complete separation of business and editorial was seen as a priority.[35] But since the collapse of the print business model, many have begun to wonder if this insistence is counterproductive. Bob Steele, the Nelson Poynter Scholar for Journalism Values at the Poynter Institute, suggested that the division between editorial and business should be a "picket fence" rather than a wall. "You can talk over the picket fence. If there's a gate, you can go back and forth," he said.[36]

The question, of course, is can you turn a wall into a picket fence without sacrificing, consciously or unconsciously, editorial staff's capacity to remain uninfluenced by business interests. This is not to imply that reporters shouldn't care if their news organizations survive—presumably, they do—but rather that they should not be making decisions about what to cover, or not cover, based on what advertisers want.

When asked if she worried that ideas generated in consumer insights might unduly affect the work of editorial, Goligoski said:

> It's delicate, because we should never get in the way of editorial judgment. I will make recommendations around, say, "opportunities on mobile alerts to do X, Y or Z." But I really try to avoid being prescriptive. My worst nightmare ever would be that we didn't cover something editorially valuable because we didn't think it would be financially valuable.

Takeaways:

- *Bring in user research early and often.* Goligoski likens her work to that done in R&D labs. "It's finding out if there's a hunger," she said. This goes back to human-centered design's insistence on creating around people's needs.
- *Don't rely on focus groups.* With focus groups, there's always the danger that the loudest person in the room will end up dominating. Because of this, Goligoski prefers one-on-one interviews, asking people to keep diaries, and usability testing. Besides, as

Steve Jobs said, people often don't know what they want in any way they can articulate—one-on-one time can help you tease out people's actual needs.

- *Focus on the individual.* Seek to understand how what you are providing might fit into a particular person's life. While members of Goligoski's group were selected across socioeconomic lines, the focus was on them as whole people. According to Goligoski and other designers, viewing people as individuals rather than generalities leads to better design.
- *Qualitative research matters.* Design research fills important gaps in knowledge that quantitative research may not answer fully.

Case Study 3: Design as Consistency Across Platforms, and Understanding Journalism as a System

Rare is the news organization today with a single platform. Even if it started out as a newspaper, magazine, radio station, or TV channel, each news outlet now has to contend with how to engage with its readers, listeners, or viewers across a growing number of platforms. That might mean Twitter, Facebook, and Snapchat, or one of hundreds of new kinds of apps. People might be on their phones, tablets, or computers. They might be in a car, out for a run, on the subway, eating lunch, or half asleep in bed. This all entails designing a multitude of possible experiences around the same piece of news, and considering a range of different contexts for consumption. News organizations must also consider what the reader, viewer, or listener is going to do with any given piece of news, besides just reading, viewing, or listening to it. In short, every piece of news delivered is embedded in a complex system of experience and possible action. In December 2013, NPR added a new position to help address all this: creative director.

News Organization: NPR

Person: Liz Danzico, creative director. She is also chair and co-founder of the MFA in Interaction Design program at the School of Visual Arts.

Setting: Danzico's position is cross-divisional. She heads a design team that sits in a sixty-person group called Digital Media, which is a standalone entity separate from the newsroom and marketing. Danzico reports to the chief digital officer, who in turn reports to NPR's chief executive officer. She has eight people on her team. Outside of Digital Media, Danzico is also involved in organization-wide user-research projects, designing workshops, and collaborating with other design groups in marketing, multimedia, and visuals, among others. "When you hear an NPR program, you recognize its sound," Danzico said. "My job is to tease out how unified—or how different—should the visual and interactive experience be. We're always thinking about our listeners, and increasingly those listeners are not only listening but touching and feeling and seeing."

The Process: Danzico's team works mostly in Agile, the work methodology mentioned earlier in this report that focuses on quick adaption to changing requirements and insights. It arose in opposition to the waterfall design method, a more highly structured approach that demanded strict adherence to stages and did not allow room for circling back or adjusting for new information and insights. One way of implementing Agile is through scrum teams. (The term derives from a rugby analogy.) Digital Media has five scrum teams working at any one time. These teams always include a product owner; a scrum master who facilitates the project process to deliver better, faster, and at a higher quality; designers; developers; a quality assurance expert; and (in many cases) content experts. The teams are all focusing on different product areas—one might focus on user experience, another on "audience journey" (a way of thinking about a person's steps through the experience of your product), someone on membership, and another on revenue. Digital Media's scrum teams work in two-week cycles that always start with a collaborative planning session, during which everyone agrees on what the team is looking to achieve during that cycle. This could be anything from an audience research goal, to putting together a prototype, to building a finished product feature. Everyone agrees how much work will be necessary to achieve the goal, and at the end of the cycle there's a stakeholder review. It's here that the team showcases the outcomes from that cycle's work, including demonstrations of prototypes and/or completed features. The point of taking the time to meet and agree on upcoming work doesn't mean that nothing will change during the process, but it helps everyone to understand what each member is doing and stave of confusion later. Transparent communication is key to successful teamwork. It's worth noting that while designers talk a lot about how messy their work is, and how it's often not until fairly late in the project that they

have a clear direction, the work process itself is highly structured. Scrum-cycle days start with stand-ups, or short meetings so named because participants don't usually even sit down. Every team member reports on what they did the day before, what they plan to do that day, and anything that's blocking their progress. Danzico describes this process as one of "radical cooperation and transparency." Ongoing, Danzico and her team experiment with patterns and behaviors across NPR's digital products. On a day-to-day basis, the team might look, as they did late in the past year, at a single experience such as a play button: In this case, they examined how menus unfurled or expanded, debated language, and experimented with the pros and cons of autoplay. Now that many people access public radio stories and shows through multiple platforms—and on their own time rather than a broadcast station's schedule—NPR no longer has the option of a simple on-off switch. Danizco's objective is to understand how the different details affect one another to create a holistic user experience. Ultimately, the question is not whether that whole is pretty or not, but what it is communicating as a system. In other words: "How do we make a play button feel, look, and behave like an NPR play button?" Danzico said.

As news organizations become more complex in structure—existing on the radio, through podcasts, on mobile apps, and social media—every piece of journalism itself contains increasing numbers of moving parts. Designers like Danzico find themselves creating not just the thing in front of them—such as a play button—but that thing as it relates to every other part of the user experience. On one hand, it's a play button; on the other, it's part of the design of a coherent and flexible system of experience. Danzico explained:

> We don't have the ability anymore to say, "Here's this singular thing. Here's how someone will experience my story." Design is no longer about "here's this website or this app." Now it's about: What does a person's life look like, and how can we be all the places they need us to be? Thinking about design this way requires people who aren't designing a singular thing but are thinking about how all the experiences hang together.

Even meetings have become less linear. When Danzico and her team are meeting with people across different divisions, she asks participants to do more than merely run through an agenda. People sketch and then trade sketches. Or they talk about assumptions. The idea of bringing out assumptions runs throughout Danzico's work. Last year, her team worked with NPR Music to reexamine its identity and how it fits into the larger sphere of NPR. To get the group started, Danzico and her team had everyone write down one assumption about the project on a Post-it note, then add it to a board.[v] Participants listed ideas ranging from who they thought the audience was, to how their own workflow might change.

Majeed at BuzzFeed also talked about the importance of noting and then moving beyond assumptions, as did Goligoski at *The Times*. This is crucial to any successful design process, and it has long struck me as an area of natural affinity between journalism and

design. Journalists are interested in facts; designers are interested in real needs; in both cases, mistaking one's own assumptions for the truth can lead you astray. But unlike any journalists I know, designers routinely build assumption-generating work into their process. According to Danzico, this assumption work is not only a critical part of identifying potential fault lines, but also serves as a great way to get people talking in a meaningful way at the start of a project. This second point echoes what Jamer Hunt called the "democratization" of design work. "Design is a great tool for leveling hierarchies in organization structures," he said. With the advent of human-centered design and its acknowledgement of the need to work collaboratively, design revolves around, as Hunt put it, "co-generating ideas" and "working horizontally." During the NPR Music project, everyone from the head of news to product managers participated in all aspects of the work. After writing down their assumptions, they clustered the Post-its, moving them around into groups according to themes that emerged. Clustering is part of the synthesis process and is a key part of almost any design work. Then they sketched in three-minute rounds, interspersed with conversation. Sketches included ideas about how communication should work and what a competitor's strategy was, forcing people to express even complicated ideas in quick visualizations. Thinking visually has long been integral to design work and was first made popular by Robert McKim's groundbreaking book *Experiences in Visual Thinking*, published in 1972. "It's all a way to get people's ideas onto paper," Danzico said. "And this is often the trickiest part of any kind of project." I asked Danzico to define her design methods. She told me she had been baking a lot of bread lately. "If you Google 'bread recipes,' you'll see every single one of them has the same ingredients, but the recipes always are slightly different." According to Danzico, the ingredients of design include visual assets—the photos, illustrations, drawn concepts, charts, and colors schemes you have on a project—the people on the team, your objectives and strategies, and the impact you want to have. The flour and the eggs? "You always start with who it's for and what you're hoping to achieve," she said. "And collaboration is essential." The methods are the recipes. Danzico doesn't worry too much about what kind of design her team is practicing. She said:

> For us, it really doesn't matter what we're calling it. What's important is that we're getting people to collaborate and to feel that the process is transparent enough that they have a voice. Design methods, for whatever reason, do a great job of making contributions feel democratic. It provides a great framework for people to get their ideas out there.

Takeaways:

- *Practice radical communication and collaboration.* Highly effective communication is necessary for successful collaboration, and collaboration is central to the design process, especially when you're designing for complexity.

- *Design isn't about creating a single item.* Focus instead on how all the parts work together.
- Do assumption-generating exercises. Realizing what's an assumption and what's reality can entirely change what you do.
- *Think visually.* Having people sketch "makes the invisible visible."

Case Study 4: Design as Civic Journalism

Some of the most interesting work happening at the intersection of design and journalism attempts to overlay design processes directly onto the reporting process. This represents another way design is being used to foster a human-centric model, with the reader placed at the center. Of course, basing coverage and reporting on a determination of people's "needs," and including their feedback as an important part of the reporting process, raises questions. It touches on issues about control and authorship—about the end of gatekeeper journalism and the rise of the audience as collaborator. Critics suggest this is dangerous, because readers may not necessarily know what they want or need. Trying to focus on that, rather than simply what is happening in the news, leads to pandering they say. These critics also often wonder how this model helps with international news, or indeed anything other than the most basic local reporting. Proponents of civic journalism, on the other hand, say editors in editorial meetings are out of touch with their communities, and that not including the audience to generate coverage is arrogant and elitist.

News Organization: AL.com of the Alabama Media Group

Person: Michelle Holmes, vice president of content for AL.com. Holmes has been in journalism most of her entire professional career, much of it as a daily editor in Chicago and northern Indiana. She also spent a year in business development for a live video-streaming company. Holmes was first exposed to design thinking while doing a Stanford-Knight Fellowship and taking classes at the Hasso Platner Institute of Design at Stanford.[vi]

Setting: The Alabama Media Group publishes the state's largest news website, AL.com, as well as the state's three largest newspapers, *The Birmingham News*, *The Press-Register*, and *The Huntsville Times*. The company's digital growth has far outpaced the state's population—in January 2016, AL.com received fourteen million unique visits. (There are fewer than five million people in Alabama.) Holmes is based in Birmingham, along with the rest of the management team.

The Process: Holmes had never heard of design thinking when she first went to the d.school for her Knight-Stanford fellowship. She remembers, in fact, the distaste she felt at her first exposure. "I thought this was the most ridiculous, absurd, stupidest thing I'd ever been involved with," she said. Designers talk a lot about "a-ha" moments—that epiphany when suddenly, after all the work, the way forward is illuminated. Holme's "a-ha" moment came in 2011, while standing in front of a whiteboard after a week of listening exercises:

> I suddenly had this idea for an app and I thought, "Wait a minute, I've never had an idea for an app before in my life." But now, after going through this process, I had an idea for a product that could really serve people's needs. And I thought, OK, this isn't just about the jargon.

When Holmes took the job at Alabama Media Group, she thought of herself as "reimagining our relationship with our consumers: What did they need from us? And what were the paths for us to reach them?" Holmes wasn't looking to make new products like Majeed at BuzzFeed. She was interested in generating a different kind of coverage. She wanted stories to arise from the needs of members of the community, not from a group of editors sitting in a room. "I wanted us to talk to people about what interests them instead of just saying 'here's the news, now leave us alone,"' she said.

Holmes was inspired by the empathy phase of design thinking, and in particular a tool called needfinding. In his book *Needfinding: Design Research and Planning*, Dev Panaik advocates the practice as a way of discovering needs that people might not be able to articulate themselves. "Needs aren't guesses at the future," Panaik writes. "They're existing

opportunities waiting to be unlocked."[37] Robert McKim developed needfinding as a practice while he was head of Stanford's Product Design Program in the 1960s. In keeping with the focus of human-centered practice in general, the emphasis, as the name implies, is on people's needs rather than new technology. Needfinding emphasizes listening and observation as the first step of any design process. Panaik writes about the difference, in painting, between a figure in the foreground and the background—and how by focusing on the figure in a painting, as we tend to do in Western culture, we miss the importance of the background. He calls it "the surrounding contextual information."[38] This is reminiscent of John Seely Brown's definition of good design as "listening to context," or Rolf Faste's concept of whole-person design. Holmes is very clear that she does not attempt to adhere strictly to IDEO's five-step design thinking process. For example, she gave up on textbook-style brainstorming in the newsroom early on: "I just don't believe wild brainstorming is a valuable part of our daily routine," she said. "We have to publish all day long." Instead, she said, she uses what she learned at the d.school to "create a culture that is open to new ideas, and where people build off each other's ideas." She continued, "I don't feel like we have to dive into all the specifics of design work. It's just: What can we bring from design that will make us better journalists?" Holmes was eager to try empathy work in the newsroom but knew she had to be flexible. "I knew if I got hung up on the quest to set up perfect empathy work, we'd just get derailed," she said. "It would never happen." Instead, Holmes wondered what they could do that wasn't "perfect," but also wasn't "just going out there with all our already preconceived ideas?" Health care was one of the first topics to which Holmes tried to apply empathy work. Instead of editors deciding which stories to report on, she sent reporters into the field to talk to people—not in search of quotes about specific stories, but instead those health care issues with which community members were struggling most. "Let's go out and talk to people in a different way," Holmes said. "Where are the gaps in people's knowledge about health care? And then, how do we deliver news, not in a vacuum but in a way that will actually matter to someone?" In February 2016, the organization launched a project called "Southern Girls." Its first step involved sending five reporters out into different cities and neighborhoods to talk to girls about their experiences growing up in the south. One reporter spoke with five nine- to eleven-year-olds in North Alabama, who were preoccupied with Donald Trump and how boys are mean; another reporter spent time with adopted sisters originally from China in rural county schools, talking about how it feels to be perceived as different. A third reporter spoke with four eleven- to fifteen-year-olds in a church youth group in Birmingham who were concerned about getting into college; yet another reporter talked to five teenage girls in a Boys and Girls Club in Huntsville about puberty, sex, and pregnancy—and so on, across the state. As Holmes implied, the idea was not to get a scientific sample but to use empathy work to make decisions about what to cover. On another occasion, the organization was soliciting feedback from community and business leaders in Huntsville on major issues. Holmes knew these meetings tended to degenerate into the school principal talking about education,

business owners talking about taxes, or doctors talking about health care. Trying to get more concrete about the community issues, Holmes ran a popular design thinking exercise with the group called “How Might We,” which is a way of reframing questions. For example, the question “why is traffic so bad in Huntsville?” points to a problem so complex it seems impossible to grapple with in any real way, while “how might we make sure the commute in Huntsville stays under twelve minutes?” suddenly creates a concrete problem that feels addressable. “How Might We” questions are supposed to name the right problem and imply a possible solution without being either too broad or too narrow.

The “How Might We” exercise originated with a Procter & Gamble creative manager in the early 1970s, Min Basadur, who was charged with competing with Colgate’s new hit product, Irish Spring soap. Basadur eventually got his team to move from “how can we make a better green-stripe bar?” to “how might we create a more refreshing soap of our own?” This led to the Coast brand.[39] Since then, it has become a popular tool at IDEO, Google, and Facebook, among other places.

Holmes also reached out to other former Stanford-Knight Fellows as consultants. Andrew Donohue, now a senior editor at the Center for Investigative Reporting, ran a workshop with reporters. Donohue was an early proponent of using design process steps as a way of practicing good community journalism. When he was at Voice of San Diego, he led election coverage not by sending reporters to politicians or their city hall sources, but instead into neighborhoods to talk to residents: “Show us what needs fixing,” is how Donohue described it.[40] The reporters spent days riding along with people in their cars and quizzing them about “city-level issues [that] mattered to them.”[41] They heard stories about “a promised bus route that never came. A park that never got built. A broken drain that’d become a rubbage dump.”[42] After this, the reporters went to politicians and their other high-level sources and asked them what they were going to do about the problems residents had identified. What emerged dictated coverage. Tran Ha, another former Stanford-Knight Fellow and now media experiment project lead at the d.school, also came to Alabama to consult. She led eighteen AL.com journalists in a needfinding workshop. Ha sent the group into Birmingham in teams of two to interview residents about their media habits. These were not “I-need-a-quote interviews,” Holmes said. “But instead they were designed to get to people’s needs that they might not even be able to articulate themselves.” After the needfinding workshops, Ha asked AL.com reporters to make “point of view” statements, another classic design thinking method. A POV statement is supposed to help you articulate the actual need of an actual person. While some people advocate creating a composite character based on your research, the designers I spoke with for this paper all recommended focusing on a real individual. The d.school says that a good POV statement “saves you from the impossible task of developing concepts that are all things to all people.”[43]

“The best POV statements unify the quotidian and the universal,” Holmes said. Here’s an example from AL.com’s needfinding workshop: “New business owner Animeeta, twenty-seven, needs information on how to maintain customers on US 280 because she’s a recent transplant to the area and her primary news sources are not local.” Central to the concept of POV statements is that you are designing for a specific person (even if it’s a composite), as opposed to people in general.

“You can’t hide in generalities when you’re dealing with a specific individual,” Holmes said, adding:

> It’s easy in journalism to fall into shorthand: “We need the rural perspective!” But there’s a big difference between the chicken factory worker and the family with forty acres. POV statements are just a tool to help us hone in on good details and not get lazy with the shorthand.

When I asked Holmes if she had been successful in shifting the nature of reporting and the reporter-reader relationship, she replied that while she had brought in consultants, she would ideally like to send all her reporters to design thinking training sessions. She would, however, never be able to afford that—design thinking workshops are notoriously expensive. On the other hand, the organization won a community engagement award from the Associated Press for a package it produced with the Center for Investigative Reporting on prison reform, using the empathy and needfinding work as a central part of the journalism. And morning page-one meetings have been replaced with a more open format. “It’s a very different feeling from a traditional news meeting,” Holmes said. “Things go very differently when you start with the question: What does our audience want today?”

Takeaways:

- *“How Might We” statements can offer new insights.* Correctly naming a problem is not as easy as it might seem. How it’s framed is crucial.
- *Listening is the starting place for the reporting process.* This is a profoundly bottom-up, community approach to journalism that can change coverage and lead to deeper relationships with your audience.
- *Create POV statements.* Although this is usually a method for marketing departments and product development, the trick of designing for specific people as opposed to general audiences can alter the nature of coverage itself.
- *Open up your morning meetings.* Holmes has people stand, rather than sit around a table. Also, by starting with a set of questions in place of reports from desks, she has seen more collaboration between different departments and more creative thinking around specific stories.

Conclusion

The rise of design in journalism suggests an increasing awareness of the need for a practice that helps journalists to head toward point B, even when they don't know what or where point B is. Design is a practice that can aid journalists as they seek to create new products, new ways of telling stories, and new ways of engaging with the audience. Design is, after all, a practice of invention: It offers processes and strategies for grappling with the uncertainty and fear that come from working in hard-to-define problem spaces with as-yet-determined solutions.

It's important to think of design as a way of tackling the new and unknown, rather than a way of doing any one specific thing. The future of journalism is still unknown. In coming years, we could see young people move away from the digital obsessions of their parents and older siblings, turning their backs on chat apps, alerts, and email newsletters. Or we could see people forget that analog ever existed, finding chat apps quaint as they increasingly consume media in immersive environments that nobody today can imagine. If design is the change "from existing conditions to preferred conditions," as Herbert Simon wrote in 1969, it should always be useful, no matter the particulars. It is a process, not a prescription.

As our world grows increasingly complex, a systems perspective—which lies at the heart of design—becomes increasingly relevant. If journalists are to effectively tell the stories of the complex problems that threaten our future, whether about climate change, income inequality, or the instability of a globalized economy, they would be well served to become literate systems thinkers. Also, as news organizations continue struggling for survival, seeing how they fit into a larger media ecosystem seems of vital importance.

Lastly, as traditional walls continue to break down within legacy news organizations—and new organizations launch that never had those walls to begin with—the collaborative nature of design, and its democratizing effects, may be sufficient to justify its adoption.

Further Investigation

If design is to continue growing in popularity, certain factors will need to be given more consideration—above all, ethics. Design does not have a strong ethical tradition; yet when you create something new, you always risk unintended consequences. If the new thing is part of a much larger system, every other part of the system will be affected. But not all outcomes can be predicted. To which kinds of standards should we hold designers accountable?

The user-centric model also carries ethical implications, starting with the word user. A user, the word implies, is not a human with a full life of their own, but simply the endpoint of a product cycle that serves the purpose of creating profit. The irony is that the rise of human-centered design was a radical breakthrough, intended to combat this dehumanizing tendency. Now, however, corporations, and the consultants who serve them, have so fully embraced human-centered design that the word human often seems to be just propaganda concealing the same mercenary mindset. We should take care that the user-centric model does not degenerate into the scraping of human insights and motivations for the sole purpose of creating ever more alluring products that serve no good but to enrich those who make them, and may also come with environmental costs. Some critics of our consumer culture would probably say this has already happened. Further hard-headed study of these questions is certainly necessary.

Tied to this are issues of addiction. Good design inspires delight in people and makes products irresistible. When you are intentionally designing something to be irresistible, at which point do ethical implications arise? At which point is it dangerous for people to have so many irresistible products in their lives? At which point do people's consumption habits become addiction; and at which point are designers creating that addiction as a result of their great design? Interesting work on this topic has emerged from the field of video game studies—during the many years I covered video games I found it at the forefront of important issues in digital culture. I especially recommend the book *Addiction by Design: Machine Gambling in Las Vegas* by Natasha Dow Schull and the work of Bennett Foddy at NYU Game Center. If journalism is to compete for attention using the same tools as other media makers, these issues will need to be closely scrutinized.

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Footnotes

[i]: Note: This term is sometimes credited to the American philosopher and management professor C. West Churchman, who wrote a guest editorial in the journal *Management Science* in 1967 in which he responded to Rittel's use of "wicked problems" in a recent seminar.

[ii]: Editor's note: Although focus groups have arguably suffered from becoming closely associated with commercial research, the method has a strong, and ongoing, record of being used in academic communications research. "It is now recognized as a potentially high-quality approach in its own right rather than a mere precursor to survey work. Indeed, group interviews are the cornerstone of much audience reception research" (Jenny Kitzinger, "Audience and Readership Research," in The SAGE Handbook of Media Studies, ed. Philip Schlesinger John D. H. Downing Denis McQuail and Ellen Wartella (Thousand Oaks, CA.: Sage, 2004), p.174). One of the core responsibilities of a focus group moderator is to ensure individuals do not dominate proceedings or suppress fellow participants.

[iii]: Editor's note: It is worth noting that this approach utilizes numerous elements developed in academic media audience research. Among the most famous audience studies were those conducted by David Morley. (David Morley, *The "Nationwide" Audience: Structure and Decoding* (London: British Film Institute, 1980); David Morley, *Family Television: Cultural Power and Domestic Leisure* (London: Comedia, 1980)) Challenging the artificiality of forcing participants to consume media texts in constructed research environments, Morley became interested in the home as a site of media consumption. This led him to pursue more naturalistic research methods that facilitated the study of the "living room politics" that contribute to people's consumption and interpretation of media texts.

[iv]: The interest in analysing data for thematic similarities and anomalies is another similarity with academic audience research. The emphasis on individuals is, however, a notable departure, as academic researchers typically seek to reach a theoretical saturation point before drawing any conclusions.

[v]: I always ask designers: Why the reliance on Post-its and index cards? The best answer I ever got was from game designer Eric Zimmerman at the NYU Game Center. "Sometimes thinking is good to do kinesthetically," he told me. "It's seeing how the parts relate. If you embody the system as something that is changeable, you will think you have the ability to change it. When it's a list on a piece of paper, it seems like it's done. But if you can move it with your fingers, you'll think, 'Oh, how can I make this better?'"

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[vi]: It's worth noting that the Hasso Platner Institute of Design at Stanford, known as the d.school, is different than the Stanford Design Program where Rolfe Faste and Robert McKim did their groundbreaking work. The d.school is run by Faste and McKim's former student and colleague, David Kelley, who founded IDEO. It does not offer degrees, but rather classes that students in any college can take. In other words, the d.school is focused on design thinking.

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