

# SOLVING PROBLEMS WITH DESIGN THINKING



JEANNE LIEDTKA, ANDREW KING,  
AND KEVIN BENNETT



Columbia Business School  
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## *Solving Problems with Design Thinking*

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For Debra and Matt

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### POSTSCRIPT

Educating Managers for Design

## Preface

## The Story Behind Our Stories

For those of you who don't read prefaces, feel free to continue on without remorse—the stories you are about to hear will be just as satisfying. But for those who like to know what is going on backstage, we thought a bit of detail about the origin of our ten stories might be of interest.

In the spring of 2010 the Design Management Institute (DMI) and researchers at the University of Virginia's Darden School of Business (a team that included us) launched a multistage research program to assess the prevalence and impact of design thinking in business organizations. Sponsored by the Batten Institute, a center for the study of entrepreneurship and innovation at Darden, the study set out to develop an understanding of the extent to which the methods, techniques, and processes traditionally associated with design and designers had been adopted within established business and social sector organizations.

Spurred by burgeoning attention to the topic in the popular business press, we set out to assess the *actual* impact that design thinking was having. We wondered: Was the increasingly prominent role for design in business just *talk*, or could we observe it in action? To what extent was design thinking just the latest fad, destined to fade away as quickly as it had arrived, or was it really driving some fundamental changes in the way managers saw and interacted with their world? But since design has been around in organizations as long as there have been products, we wondered to what extent design—and designers—had been embraced by corporations *beyond the traditional design functions*?

By gathering information about the pace and process of the adoption of design thinking in business organizations, we hoped to inform designers and practicing managers about how to improve their collaboration and elevate and accelerate the recognition of design's capability to enhance innovation within their organizations.

We began Phase 1 of the study by conducting a series of interviews with design and innovation executives across a variety of industries. The idea was to start with design advocates who occupied roles at the interface between designers and managers and who, we felt, would be best positioned to help us understand the relationship between the two and how it was evolving in their organizations.

A fascinating thing happened as we progressed through the Phase 1 interviews: Our conversations with the design executives surfaced a different set of issues than those we had anticipated (perhaps not a surprise at all to designers), which sometimes seemed to have little to do



with our hypotheses and more to do with organizational politics. Rather than talking about the prevalence of design thinking per se, interviewees wanted to talk about questions such as, Who owns design? How much design thinking should managers be encouraged to do? How do you sell design to business executives? Even the definition of design thinking itself emerged as a contentious issue. We heard neither inspiring stories about how design thinking was in fact permeating new spaces in organizations, helping designers and managers work together in new ways, nor confirmation of the competing hypothesis, that design thinking was mostly smoke and mirrors with little output resulting from it.

As *researchers* we were perplexed by what we heard in these initial interviews and unsure of what made sense for the next stage of the study. What we were learning might make for some great business school cases about how organizational structure and politics challenge the introduction of new approaches to business, but we didn't think it would help practicing designers or managers on the front lines figure out how to work together to meet the challenges they faced more creatively and successfully. However, as *educators* we saw an opportunity to help organizations and individuals sort this all out. Our feeling was that we could do more to aid managers interested in learning about how to use design thinking by profiling success stories than by detailing political battles. We hoped that by gathering examples of the adoption of design approaches to solve problems in various kinds of organizations, we could identify the ways in which it was enhancing organizational performance beyond traditional incremental product development.

So we wrote to a wide range of DMI and Darden stakeholders to ask for their help in identifying examples in which design thinking was affecting organizational performance in ways not traditionally seen as "design." We wanted to explore the adoption of design thinking across a range of organizations and geographies through interviews with those involved in pioneering efforts to extend the influence of design beyond formal, established design groups or traditional research and development (R&D) functions. We created a website that made it easy for people to nominate organizations they knew about.

The response to our request exceeded our best hopes. The stories that people sent us were truly inspirational. The breadth and richness of the ways in which design thinking tools and approaches were being used to innovate around a varied and important set of problems and opportunities were impressive. So we tossed out our original plans for

Phase 2 of the study, which had focused on identifying the variables that would indicate the prevalence of design thinking in organizations that we could use to survey a larger and more diverse group of people. Instead, we opted to go the best practice route—to do a deep dive into situations where design thinking *was* working, sometimes despite the politics going on around it but more often because these forward-thinking organizations were doing it right.

In the end what we discovered was so inspiring that we decided to write this book, in the hope that we could help the people we cared most about—managers and designers—see new possibilities to break through inertia and politics to use design thinking to accomplish the things we believed it was capable of, if we could only get it into the right hands.

And now maybe we're ready to go back and try that survey as Phase 3 . . .

## Acknowledgments

First things first: Our profound thanks to the managers and designers who have shared their stories with us, for their generosity with their time, the candor with which they told their stories, and the insights that accompanied them. They were nothing short of remarkable. They inspired us to write this book: We felt a keen obligation to pass on to a broader audience all that they shared with us.

We also want to acknowledge the support and involvement of the Design Management Institute and, in particular, Tom Lockwood, who participated in many of our initial interviews.

The support of the Darden School, Dean Bob Bruner, and the Batten Institute has been essential to our ability to do the work that allowed us to produce this book. Our colleagues and friends at Darden have been a source of inspiration, learning, and encouragement, especially Ed Hess and Marian Moore, our partners in design crime.

And of course, as always, our deepest thanks to Amy Halliday, whose wise advice and superb editing make us sound so much better than we deserve.

*From Jeanne*

To Karen Musselman, who never hung up on me even though I was five hundred miles away and being a pain. To Rachel Brozenske and Tim Ogilvie, my very own design posse. Where would I be without you? To my family and friends for their support and encouragement, especially Debra and Matt, always there and always porch partners in crime, whose glasses of wine and wisdom I can always count on. And of course, above all, to my saintly beloved husband, Salz, who has saved my sanity so many times and in so many ways.

*From Andrew*

To Jeanne, who has been a first-class mentor, for taking me on this fantastic ride. To Mike Lenox and Sean Carr, who have supported my research efforts and doctoral aspirations. And most importantly, to my wife, Eva, whose inspiration has helped me in countless ways.

*From Kevin*

To Jeanne, a wonderful professor and mentor, who taught me the craft of design thinking, I remain eternally grateful. To Andrew, without whose impenetrable fortitude we would never have completed our journey, I thank you for your patience and generosity. To my Darden professors and classmates, you taught me more than you will ever know. And finally, to my saint of a mother, LuAnn Bennett, my inspirational brothers, Bryan and Richard, and to the world's most patient and supportive girlfriend, Kristen Lamb, I say thank you.

## Dispelling the Moses Myth

MOST OF THE MANAGERS we meet harbor a deep, dark secret: They believe in their hearts that they are not creative. Picasso they know they are not. They also know that being seen as short on talent for invention in these days of innovation mania is almost as bad as not knowing how to populate an Excel spreadsheet.

It all seems so unfair. After years spent focusing on prudence and proving the return on investment of any new idea, years spent trying not to look stupid, now all of a sudden we are also expected not to look—what would the word be—*unimaginative*? And each time some “creativity” consultant asks us to imagine ten novel uses for a paper clip, it confirms what we already know: We are no Steve Jobs, either. For most of us there will be no Moses-like parting of the waters of the status quo that we might safely cross the Red Sea of innovation. Drowning is more likely our fate.

But despite popular misconceptions, innate genius isn't the only way to solve business problems creatively. Those of us who can't part the waters need instead to build a bridge to take us from current reality to a new future. In other words, we must manufacture our own miracles. And a technology for better bridge building already exists, right under our noses. What to call it is a matter of some dispute, but for lack of a better term we'll call it *design thinking*. Whatever label it goes by, it is an approach to problem solving that is distinguished by a few key attributes:

- It emphasizes the importance of discovery in advance of solution generation using market research approaches that are empathetic and user driven.

- It expands the boundaries of both our problem definitions and our solutions.
- It is enthusiastic about engaging partners in co-creation.
- It is committed to conducting real-world experiments rather than just running analyses using historical data.

And it *works*. Design thinking may look more pedestrian than miraculous, but it is capable of reliably producing new and better ways of creatively solving a host of organizational problems. Best of all, we believe that it is teachable to managers and scalable throughout an organization.

Despite some confusion over what to call it—the term design thinking sounds fuzzy to some people, and design is clearly about a lot more than

thinking—prominent examples of companies applying the tools of design to improve business results come readily to mind in the wake of Apple's success and IDEO's visibility, and many organizations now *get* the attraction of design thinking. Although some companies still appreciate design's power only for developing new products and services, organizations interested in innovation increasingly recognize it as a way to create new business models and achieve organic growth. In fact, using design thinking to identify and execute on opportunities for growth was the focus of our previous work. Now we want to take our exploration of design's potential a step further.

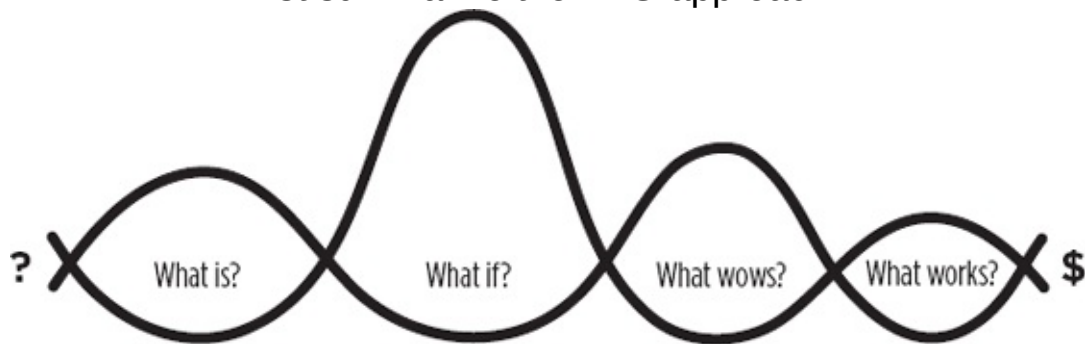
Our goal in this book is to push the visibility of design thinking in business and the social sector to new places and to demonstrate that design has an even broader role to play in achieving creative organizational and even civic outcomes. This book is built around ten vivid illustrations of organizations and their managers and design partners doing just that—using design thinking in ways that work. Each story showcases a particular new use of design thinking. And each provides palpable examples of how organizations and individuals can stretch their capabilities when they approach problems through the design thinking lens. Using the voices of the managers and designers involved, we illustrate the value of a design thinking approach in addressing organizational challenges as diverse as reenvisioning call centers, energizing meals on wheels for the elderly, revitalizing a city's urban neighborhoods, and rethinking strategic planning.

Our ambitions here are grand: to offer a blueprint for deploying design thinking across levels and functions in order to embed a more creative approach to problem solving as a strategic capability in organizations.

Building Bridges with Design Thinking Design thinking offers a great start to bridge building. It fosters creative problem solving by bringing a *systematic end-to-end process* to the challenge of innovation. A few years ago, Jeanne Liedtka and Tim Ogilvie, the CEO of the innovation strategy consultancy Peer Insight, wrote a book called *Designing for Growth (D4G)*, in our parlance, in which they laid out a simple process and tool kit for managers interested in learning how to use design thinking to accelerate the organic growth of their businesses. Here we aim to build on that work by examining how design thinking can be used to solve a broad array of other organizational problems, outside of growth. Whether your focus is producing growth, redesigning internal processes, engaging your sales force, or a host of other issues, the basic



innovation methodology behind design thinking remains the same. Let's first summarize the *D4G* approach:



The process examines four basic questions, which correspond to the four stages of design thinking: 1. *What is?*

2. *What if?*

3. *What wows?*

4. *What works?*

*What is?* explores current reality. *What if?* uses what we learn to envision multiple options for creating a new future. *What wows?* makes some choices about where to focus first. *What works?* takes us into the real world to interact with actual users through small experiments. The widening and narrowing of the bands around each question represent what designers call “divergent” and “convergent” thinking. In the early parts of the process, and even within each stage, we are diverging: progressively expanding our field of vision, looking as broadly and expansively around us as possible in order to escape the trap of our mental models. We then begin to converge, gradually narrowing our options to the most promising ones.

Let's look at each question in a bit more depth: QUESTION 1: *WHAT IS?*

All successful innovation begins with an accurate assessment of what is going on today. Indeed, starting out by developing a better understanding of current reality is a hallmark of design thinking and the core of design's data-intensive and user-driven approach. Managers frequently want to run immediately to the future, to start the innovation process by brainstorming new options and ideas, but attending to the present pays dividends in two crucial ways. First, it helps broaden and perhaps reframe our definition of the problem or opportunity we want to tackle. A lot of managers throw away all kinds of opportunities before they even get started by framing the problem too narrowly. Second, this attention to the present helps uncover unarticulated needs, which are key to

producing the kind of innovative design criteria that generate valuable solutions. *What is?* saves us from having to rely entirely on our imaginations as we move into idea development and gives us solid and, ideally, deep insights into what our stakeholders truly want and need, reducing the risk that our new idea will fail. It specifies what a great solution will look like without telling us the solution itself.

#### QUESTION 2: *WHAT IF?*

Having examined the data we gathered, identified patterns and insights, and translated these into specific design criteria, it is time to move from the data-based exploratory *What is?* to the more creativity-focused *What if?* Again, rather than rely on our imaginations in the idea generation process, we use a series of trigger questions that help us think outside our own boxes. Next, we take these ideas and treat them explicitly as hypotheses (in the form of concepts) and begin to think systematically about evaluating them against our design criteria.

#### QUESTION 3: *WHAT WOWS?*

If we get the first two stages approximately right, we will find—to our simultaneous pleasure and dismay—that we have far too many interesting concepts to move forward all at once, and so we must make some hard decisions. As we winnow the field of concepts to a manageable number, we are looking for those that hit the sweet spot where the chance of a significant upside for our stakeholders matches our organizational resources and capabilities and our ability to sustainably deliver the new offering. This is the “wow zone.” Making this assessment involves surfacing and testing the assumptions underlying our hypotheses. The concepts that pass this first test are good candidates for turning into experiments to be conducted with actual users. In order to do this we need to transform the concepts into something a potential customer can interact with: a prototype.

#### QUESTION 4: *WHAT WORKS?*

Finally, we are ready to learn from the real world by trying out a low-fidelity prototype with actual users. If they like it and give us useful feedback, we refine the prototype and test it with yet more users, iterating in this way until we feel confident about the value of our new idea and are ready to scale it. As we move through this process, we keep in mind some of the principles of this learning-in-action stage: work in fast feedback cycles, minimize the cost of conducting experiments, fail early to succeed sooner, and test for key trade-offs and assumptions early on.

We will see these four questions at work in each of the ten stories we are

about to share. Sometimes the entire process plays out. At other times, only pieces of it are evident. One of the most valuable aspects of design thinking is that you don't need to follow every step soup to nuts. You can begin with any piece of it or with some of the tools. But process alone won't be enough to build a bridge from current reality to a new future. You also need some tools to accompany the steps. In *Designing for Growth* Jeanne and Tim laid out a set of ten tools. In this book we consider several more. Although all of them are useful, and most will appear frequently in our stories, different tools are used for different purposes.

- 1 **Visualization**  
using imagery to envision possibilities and bring them to life
- 2 **Journey Mapping**  
assessing the existing experience through the customer's eyes
- 3 **Value Chain Analysis**  
assessing the current value chain that supports the customer's journey
- 4 **Mind Mapping**  
generating insights from exploration activities and using those to create design criteria
- 5 **Brainstorming**  
generating new possibilities and new alternative business models
- 6 **Concept Development**  
assembling innovative elements into a coherent alternative solution that can be explored and evaluated
- 7 **Assumption Testing**  
isolating and testing the key assumptions that will drive the success or failure of a concept
- 8 **Rapid Prototyping**  
expressing a new concept in a tangible form for exploration, testing, and refinement
- 9 **Customer Co-Creation**  
enrolling customers to participate in creating the solution that best meets their needs
- 10 **Learning Launch**  
creating an affordable experiment that lets customers experience the new solution over an extended period of time, to test key assumptions with market data

Some tools, such as *journey mapping*, use ethnographic methods

such as interviewing and observation to help us escape our mental models by immersing us in the lives (and giving us access to the mental models) of stakeholders, whether they are customers, partners, internal clients, or citizens. These tools let us get at the unarticulated needs of these people and, in the process, build a human connection that helps us see the possibility of making someone's life better. They are the very core of the *What is?* stage and are the foundation for generating value through the design thinking process. In general, your ultimate solutions will only be as good as your learning during this discovery phase.

*Mind mapping* is a clustering tool that helps us make sense of the torrent of data that comes at us at various points in the design thinking process. It can involve turning raw data gathered through ethnography into deep insights or sorting through the individual ideas we created during brainstorming to find those that can become concepts. This tool keeps us purposeful rather than overwhelmed.

*Brainstorming* and *concept development*, two tools used in the *What if?* stage, work *with* rather than against our natural tendencies. Instead of asking us to come up with ideas based purely on our imaginations, they provide structure and allow us to leverage the insights generated during the *What is?* stage. They let us play with new ideas without risking a lot and invite various stakeholders into the problem-solving process: employees who eventually must make the new concepts work, customers who must buy them, or partners who need to work together in order to deliver them. This is the collaborative heart of design.

*Prototyping* can be used at various stages of the process: to map *What is?* or to visualize *What if?* It expresses our ideas in tangible form and makes them feel real. Prototyping plays a central role in all ten stories. Our focus will be on what experts call "low-fidelity" prototypes, which are much simpler and less finished than what the word *prototype* conjures up for most managers.

*Learning launches* help us plan and conduct the small market experiments that are so critical to the learning by doing that underlies design thinking.

Taken together, the design thinking process and tools let us envision and build better solutions. But to do this we have to move beyond thinking of creativity and design as a black box. We must demystify design thinking and teach people how to do the research that generates deep insights, translate these insights into new ideas, and get these ideas in front of people who will react to them and act with us to make

them real.

Design as a Choice Deploying design throughout an organization involves more than providing a process and some tools. It involves helping individuals make a new set of choices: to seek deep insights and be user driven, to keep looking for great solutions even after hitting upon a good one, to risk not getting it right the first time, to continue to try in the face of failure. Because it runs counter to how managers have been trained and rewarded, and to how organizations are structured, design thinking won't happen naturally. Committing to use the approach is a deliberate *choice* for managers, and often a tough one. So how do we help managers get comfortable choosing a new set of behaviors? By making that choice safe for them. We believe that the biggest obstacles to making better choices are ignorance and fear. To dispel these, we need success stories; we need to see others in action in order to envision and act on new possibilities. That is the role of the stories in this book.

These stories emerged from the second phase of a research project, sponsored by the Batten Institute at the University of Virginia's Darden School of Business in partnership with the Design Management Institute (DMI), on the ways in which design thinking was being used in organizations (see our preface for more details). In the first phase, we generated an interesting and somewhat unexpected set of findings, suggesting that our ingoing hypothesis that we would find managers and designers working together in largely positive ways was not uniformly supported. True, we did speak with boundary spanners between business and design who were reaching out to managers to help them understand and exploit design's potential, but we also uncovered a lot of tension between the worlds of business and design. With this tension came political and turf battles in which control over the "ownership" of design—and even the nomenclature—was a central issue.

#### THE CHALLENGES OF DESIGN IN A BUSINESS ORGANIZATION

Our previous research on the use of design thinking in business organizations gave us some insight into the challenges—and the opportunities—of the approach. Here are some highlights:<sup>1</sup>

- *The innovation space was hotly contested territory in many organizations*

Responsibility for innovation seemed to lack clarity and uniformity. It was distributed across many groups in the organization: R&D (sometimes with internal conflict between applied and "blue sky"

work), newer “innovation” groups, and business unit managers with P&L responsibility. All of these groups needed the skill set of design to do their work, but they often operated in silos that did not communicate or collaborate. Friction and turf battles were not uncommon.

- *The language of “design thinking” was a prime source of contention*

The definition of *design thinking* itself was a hot topic. Some defined it as “what designers do” and saw no meaningful distinction to be made between design and design thinking. Some disliked the nomenclature, noting that design emphasized doing even more than thinking. Others saw it as a distinctive way of solving problems that could be applied to any business issue and scaled throughout an organization. Many in this group described the discrete aspects of what they saw as a design thinking approach: ethnography, visualization, pattern finding, ideation, and rapid prototyping.

- *Teaching design thinking to managers was either a very good—or a very bad—idea*

From the basic conceptual divide around definitions, a related set of views emerged about who should be encouraged to use design thinking. Those who defined it as something that trained designers do did not see it as a useful tool set for managers to acquire. They not only doubted whether it was possible for managers to acquire such skills but also thought it was a bad idea to encourage them even to try. Managers trying to do design work were likely to lower the quality and credibility of design! We heard the opposite view from other experts: Managers not only *could* become design thinkers but *should*—so powerful was the process for finding innovative solutions to all categories of business challenges. They believed that teaching the design thinking approach to executives only increased designers’ visibility and clout.

In the second phase, we decided to focus on collecting real-life best practice stories in which design thinking was working well, rather than those in which it wasn’t. Our hope was to inspire action among those interested in learning more about how to practice design thinking by collecting data that moved beyond theoretical debates and instead identified specific and concrete ways in which it was already achieving significant results. So we asked DMI members around the world to

nominate exemplary design thinking projects for our study.

Though we didn't set out to find stories that specifically featured partnerships between managers and designers, that was, in fact, what we found. Rather than battling for ownership of the process, these designers wanted to share design, and the managers involved were eager to learn new ways of thinking and acting. The stories they told us were inspiring, diverse, and global. Here is a preview of what we heard: ***Some organizations were applying design thinking to internal process redesign:*** We learned about Suncorp, Australia's second-largest insurance firm, driving a postmerger integration process with design thinking ([chapter 3](#)); about SAP imbuing its strategic planning process with a design approach ([chapter 5](#)); and Toyota using design thinking (coupled with change management) to redesign its West Coast customer contact center from the ground up ([chapter 6](#)).

***Others were leveraging design thinking to deepen customer engagement:*** We learned that IBM was transforming its approach to trade shows through design ([chapter 2](#)); 3M saw in design thinking a chance to reimagine the sales process in the materials science business ([chapter 4](#)); and a group of financial service executives from the largest banks and insurance companies in France were using it to explore how to restore public trust ([chapter 8](#)).

***Some organizations were bringing design thinking to management development and individual skill building:*** Healthways' MeYou Health social networking application ([chapter 7](#)) and Intuit's story of embedding designing for delight into its DNA ([chapter 11](#)) are both about using design thinking to create communities of people helping one another to develop their capabilities and learn more effective behaviors.

***Outside of the for-profit sector, other organizations were bringing design thinking to address social issues:*** In Denmark, The Good Kitchen transformed meal delivery service for the elderly using a comprehensive design thinking process from end to end ([chapter 9](#)), and the city of Dublin, Ireland, embraced it as a way to improve civic engagement in revitalizing urban spaces ([chapter 10](#)).

In each and every one of our stories, you will see a strong partnership between designers and managers. There are no stories of either managers or designers succeeding without the other. The deep expertise of the designers is fundamental to the success of these management initiatives, as is the management acumen of those on the business side. These designers want to "give design away rather than hoard it" (as



Joseph O'Sullivan of Intuit described it). They let everybody touch the tools. The managers involved are invariably open to learning from and with their design partners. Matthew Holloway, the head of the design services team at SAP, had a wonderful way of describing the partnership: We saw our job as showing managers how design thinking worked. We taught clustering and visualizing the problem and then breaking out all the assumptions and making everything very explicit. The tools that we used for doing research and ideation were classic. Then we showed them how to make their ideas tangible in a prototype. And they quickly got that one plus one equals three. One manager we worked with who loved French cooking said, "It's like we started off with just some milk, some eggs, and some flour, but by the time we were done, we had this beautiful cake. And the cake is way better than those three things by themselves."

You will also notice the diverse ways in which the design process plays out. This, we discovered, is one of the best aspects of design: You don't have to buy the whole enchilada to have a taste. As Ryan Nichols, Matthew's colleague at SAP, told us, "It doesn't need to be intimidating. You can take bits and pieces of this and bring it to whatever you are doing in the traditional process just at the parts where you get stuck. These are just very simple tools that can help break logjams." We find a lot of the managers in our stories doing just that.

At the outset of our study, we had no intention of writing a book. But as we heard these stories, we came to believe that their diversity, creativity, spirit of partnership, and global reach made them deserving of a wider audience and a more detailed telling. We became convinced that we needed to share these stories of the many ways in which design thinking was working to help organizations solve problems in new ways—around the world.

As we get started we should remind you, in the interest of full disclosure, that the sad stories in which organizational politics killed an otherwise excellent design thinking initiative didn't make it into this book. Had we tried to catalogue them, we would have ended up with an encyclopedia-sized volume. We have here the stories at the happy convergence of talent, opportunity, and environment. And though they cannot tell a multifaceted tale about the various political environments that would-be design thinkers face, they can suggest the conditions under which they have a fighting chance.

It is with great pleasure and anticipation that we share these ten



stories, and it is our hope that you will find them and the managers and designers who star in them as inspiring as we have.

<sup>1</sup>These findings are summarized in S. Carr, A. Halliday, A. King, J. Liedtka, and T. Lockwood, "The Influence of Design Thinking in Business: Some Preliminary Observations," *Design Management Review*, Volume 21, September 2010, pp. 58–63.

## Reimagining the Trade Show Experience at IBM

### ***THE BUSINESS PROBLEM***

Differentiating IBM's character and brand experience at thousands of trade shows around the globe

### ***THE CONTEXT***

IBM's desire to make its trade show experience reflect the company's "Smarter Planet" initiative and to find a way for trade shows to better demonstrate the depth and breadth of IBM's expertise, strengthen customer relationships, and drive revenue growth

### ***DESIGN'S CONTRIBUTION***

Allowing the IBM team to generate insights from a wide-ranging study of human interaction and translate these into design criteria and then ultimately learning launches that transformed the IBM trade show into a collaborative experience

TRADE SHOWS SEEM the ultimate in old-fashioned ways of doing business: a Las Vegas-like cacophony of booths, banners, and attractive people handing out brochures. Yet despite their often-predicted demise at the hands of the Internet, trade shows remain a \$100 billion industry growing at 3 percent per year, according to BusinessWeek estimates. In this chapter, we get a look at how a team from experience marketing firm George P. Johnson collaborated with IBM to use design thinking to transform trade shows from spectacles into conversations that engage customers in collaborative experiences and yield stronger relationships and better business leads.

IBM's Smarter Planet initiative was born out of the recognition that the world was becoming more dynamic and complex, that technology was playing a larger role in addressing global pressure points across industries, and that IBM could help solve those problems through technology. To IBM, Smarter Planet was not just a campaign or a slogan but a way of looking at the world. It was a call to action to use systems thinking and technology to address the world's biggest problems using IBM's technology and business practices. IBM, accordingly, wanted to create experiences that embodied the principles and elements of Smarter Planet. Enter George P. Johnson (GPJ), a premier global event and experience marketing agency and long-time partner of IBM.

Ben Roth and Kurt Miller, both of GPJ, led the project's design-focused efforts. Ben began his career as a designer before moving up through

creative positions at marketing and advertising agencies, where he worked with clients in industries ranging from retail to consumer packaged goods. As vice president for creative strategies, he focused on brand and experience marketing. Kurt, vice president for strategy and planning, had a background in communications and theater, having developed programs in creative persuasion in the context of political advertising as well as governmental and business communications. IBM asked the GPJ team one question: “Can you tell us confidently that every event we do—more than 8,000 per year worldwide—exhibits the essence of Smarter Planet?” The answer was no; there was a disconnect between these events and IBM’s positioning, strategic capabilities, and legacy of innovation. IBM and GPJ quickly identified trade shows, which constituted the majority of these events, as the largest opportunity. “Trade shows make up hundreds of millions of dollars every year that corporations spend individually, billions and billions of dollars overall, to get people together to essentially *listen*,” Ben told us. “You walk up and down alleyways, and on both sides people are trying to hawk shirts and squeeze balls and whatever else. There are tables, banners, monitors, and people talking at you, people pushing things at you.” Jim Gargan, IBM’s vice president of demand programs, explained the disconnect this way: “Fifteen years ago when people went to trade shows, it was to find out what was going on and to learn about the products. That’s no longer really the case. When they go to trade shows today, they’re looking for a deeper level of engagement.”

With this much complexity, Ben explained that IBM and GPJ’s focus was on “shifting from a monologue to a dialogue” both within their internal team and in the new trade show experiences they designed.

Leveraging IBM’s Legacy of Design and Core Competencies  
Kurt and Ben, along with John Kennedy (IBM’s vice president of corporate marketing), agreed that leveraging design thinking to align IBM’s trade shows with the Smarter Planet approach would be important to the project’s success. Indeed, using the tools of design would reflect IBM’s legacy of innovation—in particular, the company’s design and innovation work in the 1950s and 1960s. Over this period Charles and Ray Eames created some of the company’s best design and brand expressions. It was their innovative approach to design that distinguished them and, in turn, IBM during this period. Drawing on this legacy would be key.

Importantly, IBM’s capabilities matched those needed to transform the

trade show experience. Kurt explained that they would have to balance the art and science of trade shows, working with the diverse skills and capabilities within IBM: “the marrying of traditional design and brand systems thinking with social science, scientific thinking, and, ultimately, predictive revenue generation.” IBM’s competitive advantage lay with the intelligence of its experts and the ability to leverage their knowledge to provide learning moments and to be learners themselves.

As IBM’s vice president of demand programs, Jim Gargan led a team of several thousand to craft strategies and create methods, systems, and processes that could be scaled across the company. When it came to bringing these capabilities together, the rubber met the road with Jim. He emphasized that any sustainable solution would have to “embed the things that make IBM special and unique” in the way it conducts business and engages customers.

#### Incorporating the Four Questions Into a Three-Step Approach

The team took a three-step approach to the project that resembled the four questions we talked about in [chapter 1](#). Step 1 examined *What is?* and current state-of-the-art knowledge on human interaction with a goal of generating powerful insights into learning and collaboration. Step 2, mirroring our *What if?* stage, involved coming up with new ideas that could be used across multiple events and contexts. Step 3 combined *What wows?* and *What works?* to create testable prototypes that could be validated in the marketplace.

#### *Step 1: What Is? Learning About Learning*

Event experiences are critical to IBM from both a marketing and a business development perspective, and it was clear that, in the end, the project’s deliverable would be new experiences that could be implemented not only in the context of trade shows but also at onstage events and group sessions and on digital platforms. But the GPJ team wanted to begin by explicitly *stepping away* from the existing model of the trade show and focusing instead on a much broader topic: how human beings engage and learn. Ben explained the rationale: “Call it a trade show, call it a meeting, call it whatever you want. All these events depend on the interaction of people, the ability of people to engage, to bring insight, to address problems, to collaborate, and ultimately to drive some sort of business problem solving.”

With this research goal in mind, team members decided to cast their nets wide to gather data on human interaction from experts in a variety of fields, from theater design to military training.

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## DESIGN TOOL

### *Secondary Research*

Designers do not rely exclusively on primary ethnographic research—they use secondhand data as well. This information may come from interviewing experts, as it does in GPJ's case, or from previous studies, books, articles, or Internet searches.

Over the next several months, the GPJ team interviewed more than one hundred experts in roughly twenty fields, seeking to understand why people behaved the way they did, how they learned, and how to engage them. Out of these interviews, many rich insights into human cognition and learning began to emerge. The team then sorted through them, looking for patterns and themes. “It was like a movie revealing itself,” Ben told us. “For instance, Tim Seldin, the president of the Montessori Foundation, said in his interview that the more you can create comfort, the more people behave as if they are comfortable. So the right meeting environment for learning might be the exact *opposite* of the typical conference room, where the walls are closed off, the temperature varies, and there is one glass of water on the table that everybody is eyeballing.”

## DESIGN TOOL

### *Mind Mapping*

Mind mapping is the tool we use to cull large amounts of data in order to spot patterns and develop insights. It is a clustering technique. By grouping observations, it's easier to see patterns emerge and distill the insights that accompany them. Pattern recognition comes up again and again in design thinking as a critically important skill. We see it in the interpretation of ethnographic research and other data, as well as in customer journey mapping and working with subject matter experts, as GPJ and IBM have done here. Observations, patterns, and insights are the building blocks of value creation.

The team also went back to IBM's roots to meet with Eames Demetrios, the grandson of Charles and Ray Eames, who talked about his grandparents' design principles. They understood, as Kurt explained, that “you don't design for design's sake; you design to solve a problem.

Design is first and foremost about problem solving.” One of the themes centered on “planned spontaneity,” interactions that seemed like they were spontaneous but were actually designed to occur in a certain way. “Planned spontaneity,” like “creating comfort,” had implications for the team’s work on trade shows.

In their discussions of the critical aspects of human learning, interviewees continuously returned to five general themes: engage, inform, discuss, persuade, and inspire. Ben explained how these words developed organically in the team’s discussion: “We talked about how inspiring someone to change their beliefs and actions required first engaging them. You had to have a discussion with them. There had to be some sort of collaboration, some mutual outcome, and then they would be inspired.”

The challenge was to enact all five themes in the new trade show experience. So, team members needed to translate them into design criteria that IBM could execute at thousands of events spanning diverse markets and audiences.

They began by focusing on the physical environment that would be part of the new trade show experience and creating a client journey that reflected the insights they had gathered. The physical environment would need to incorporate the different ways—visual, auditory, kinesthetic—that people learn. It would need to be comfortable, engaging, and conducive to informal communication. It would need to encourage the building of mutual trust and facilitate dialogue, collaboration, and co-creation.

## **DESIGN TOOL**

### *Design Criteria*

Once you have discerned patterns in your data, you can use them to draw out the insights that help identify the criteria that your solution must meet. Translating insights into design criteria is important to ensuring that you have a reliable filter as you enter the brainstorming and concept development stage. Without design criteria, it is difficult to methodically sort through potential ideas and concepts. The design criteria developed by GPJ and IBM—creating comfort and facilitating dialogue—don’t tell them what the ideal solution is; those criteria tell them what the solution needs to accomplish.

*Step 2: What If? Putting Insights to Work*

The team now sought to use the insights, themes, and design criteria to create great trade show experiences using best practices from the world of human physical and visual experience creation.

Team members thought in terms of creating physical spaces as “communications landscapes” to facilitate collaboration. In the past IBM might have organized eighteen technology-based banking solutions and pointed people toward a different part of the space at the trade show depending on which solution they wanted. Kurt explained that they “wanted to create a more flexible, interconnected environment” where participants could engage in a variety of settings. They wanted to focus on the way that conversations naturally take place.

For the new trade show experience, the GPJ team created various settings, including seated and standing areas that would accommodate different learning styles and situations. “There might be a seated one-on-one arrangement or some other kind of seated area like you would see in a park or in a kitchen or at a dining room table or on a train,” Kurt noted. Team members wanted the spaces to be informal and comfortable so participants would engage naturally. They also created spaces for planned spontaneity in order to facilitate the sorts of conversations that occur around a watercooler or at a bar—places where people gather briefly and have short exchanges or stand comfortably for long periods of time and have more extensive conversations. They also created opportunities for formal conversations in conference rooms with large screens and whiteboards. “We have to look at all these different conditions and also at levels of intimacy, closed conditions, open conditions, soundproofing,” Ben told us.

Importantly, the team also created hybrid environments so clients could use them in ways that felt most comfortable to them and shift seamlessly across communication contexts. Ben and Kurt described the hybrid environment of standing tables that “looked like puzzle pieces and acted as interlocking conversation zones.” These enabled participants to enter and exit the space as the dialogue shifted or as they sought to transition the conversation to a different environment.

The GPJ team members focused on the details of each environment and the implications for human interaction. They wanted to ensure that people felt comfortable, so, for example, they used doubled-padded carpet in areas where they knew people would be standing. If people were comfortable standing, they would spend more time talking.

The physical environment was not the only consideration. The GPJ

team also knew that to make people truly comfortable and create opportunities for “planned spontaneity,” it would need to guide and facilitate the experience. In pondering how IBMers could best do that, team members turned to another Eames concept: the guest-host relationship. Ben explained: “If you bring someone into your home, there are certain ways you conduct yourself so your guest feels comfortable. You don’t call from the other room. Visitors don’t come in, sit down, and grab a drink for themselves, unless they know somebody really well. So we decided to bring clients into the space with a concierge.”

This approach enabled subject matter experts acting as the concierges to develop an understanding of a visitor’s needs and either handle the conversation or, like a good host, hand off the person to someone better suited. Ben observed that these were basic principles, but the business-to-business world had never integrated them into its work.

Building these and other insights into the new trade show concept, the team was able to develop a client-centered, multidirectional communication and learning experience.

### *Step 3: What Wows and Works? Testing with Pilots*

Now that the GPJ team members had created new environments, they sought an opportunity to build prototypes and test their assumptions. “At that point we were willing to be wrong,” Ben explained. “We thought our concept was right—it felt right. But we needed to know.” The goal was to launch pilots in order to learn what worked and what didn’t, and then build a scalable model. They wanted to see what happened when a real customer stepped into the new IBM experience.

## **DESIGN TOOL**

### *Learning Launch*

We use the term *learning launch* to describe the pilot that GPJ and IBM run. The goal is to get out of the lab or conference room and actually test your concept and the assumptions behind it with real customers in a live market environment. This process de-risks a project by not scaling a concept until you collect real data from real customers outside your company.

Jim Brill, the director of marketing for IBM Financial Services, had volunteered to work with the team on IBM’s presence at Sibos, an event



that brought together senior executives from the financial services industry and their technology partners. Compared to large trade shows like the Consumer Electronics Show, which might draw more than 100,000 visitors, Sibos is small, generally drawing about 7,000 participants, but it is among the most important financial services trade shows that IBM participates in each year. That year, 2010, it was in Amsterdam, where the team would be conducting a learning launch of its new design.

In the Sibos learning launch, team members implemented the physical space redesign they had envisioned as well as the concierge service. They also focused on integrating communications and technology into the experience in ways that would increase flexibility and flow across formal and informal situations. They loaded tablets with the same content that was showing on the larger screens so participants could experience a seamless flow of information as they moved through the space, from, say, a conference room area to a more informal space. Each of the three inner walls of the IBM booth was covered with a touch screen, and there was a touch table so people could engage in whatever way was most comfortable. The team members also trained IBM employees in storytelling, listening to clients, and navigating the experience on the basis of clients' needs. Importantly, the physical spaces, technology, and employee training were integrated to provide a cohesive and engaging client experience.

### Success at Sibos

The results at Sibos spoke for themselves. Physical elements like the puzzle-piece tables were a huge hit. Ben explained that "the most effective areas were those that were most open and felt like you could come and go but were clearly areas for discussion and collaboration." People came and talked and stayed. Ben went on:

Even when we did a cocktail hour in the same space, people immediately went to those areas because they just made sense. There was a table that was high enough. It was counter height so you could lean against it, you could put your laptop there, and you could put your drink down. But you could also stand around and talk, and you could access technology and research and data and other stuff an arm's length away.

In the wake of the Sibos pilot, IBM realized double-digit increases in client engagement leads, lead capture, and revenue. In fact, the number of leads during the Sibos pilot was greater than it had been in the

previous two years combined (an increase of 78 percent, year over year). When IBM executives saw the results, they decided not to do further pilots but to scale the new approach immediately. As Ben described it:

Jim [Brill]'s sponsor and colleagues were all interviewed in a short video we put together talking about how great the experience was. And it literally was night and day from previous years, when we may have had pedestals with laptops on them, a screen above them, and a banner, and every pedestal had its own discrete solution with an expert talking about what it was they were selling and showing a PowerPoint presentation. That was it. There were none of those in the pilot year.

Jim Gargan linked the positive client reaction to the intimate workspaces and to the ability to leverage technology in a way that fostered dialogue instead of just broadcasting one-way communication. For Jim, this was a home run: "The reactions were really quite stunning. We are expanding this as quickly as we can and scaling it."

The redesign was also attractive to IBM's clients and business partners. The company's presence at Sibos was among some of the largest financial services companies, which reinforced the message that IBM was a trusted partner in this industry. "Folks from J.P. Morgan Chase, Citigroup, and other financial institutions were right there watching people stand in the booth, discussing for hours," Ben told us. "This whole dynamic was on stage in front of them throughout the event. And that led to new business-to-business relationships."

But Ben emphasized that the success wasn't about the booth or the technology per se; it was about the more personalized experience they were able to create:

I think the real story is that when you design an experience based on real knowledge of how people act and interact and want to engage, you have, in effect, broken down the barriers and eliminated the obstacles to human engagement in such a big way that people actually do connect, and relationships are formed and business gets done and is done better.

He concluded that while they achieved success in the context of trade shows, the outcome of the project was about something more: "It's not about trade shows," he told us. "It's not about conferences. It's not about booth design. It's about learning and engagement and relationship building. It's about a unique way of collaborating." Jim Gargan emphasized a similar point: "One of the reasons that C-level executives

continue to go to events is that they are a trusted way for people to learn and to make meaningful connections. For us, it's really about understanding whether we've helped the client begin to think about their business problems in a different way."

### Internalizing the Changes

Now that the team had redesigned the trade show, it needed to socialize design thinking with the IBM employees who would be expected to deliver the experience. Jim Gargan put the challenge succinctly: "It's great to come up with a strategy, but you've got to operationalize and deploy it." Ben explained that team members knew they had to be thoughtful about how they presented their work. They wanted to recreate their own discovery process for IBMers by taking them on a kind of "archeological dig." He described their approach: "We reported on what we had uncovered in our research. We brought in some video clips of the interviews, transcripts, voice recordings, and illustrated examples like books, which all revealed the nature of our discovery process. We also shared a document full of our insights."

Next, they set out to share the terrific data and insights on human interaction and learning with IBMers all over the world. GPJ had often put together books for clients, but that did not seem to fit this project. The insights had emerged as part of an organic process, they did not occur in a certain order, and they were not all necessarily helpful for every case. So instead, the team created a card for each insight so people could engage with them in a more modular way. The goal was to use the deck of cards in a "train the trainer" model in which the GPJ team would train IBMers, who would then train other IBMers to use the cards when creating their next event.

## DESIGN TOOL

### *Cards*

Cards are visualization tools that are especially popular in the world of design. GPJ creates cards that include photographs and text and uses them to engage and inspire. They provide a hands-on activity (people can select individual cards or group them), which makes them particularly well suited to eliciting deeper thoughts and more creative ideas.

Each card contained one insight, the theme it fell under, where it came

from, a photograph representing it, and tips for leveraging it. Each of the five themes that the GPJ team had uncovered in its interviews (engage, inform, discuss, persuade, and inspire) became a category like a suit in a deck of cards, and each category had ten insights. An entire deck of fifty cards consisted of the keys to successful human engagement and learning, as well as ten insights related to each and tactics to help IBMers bring these insights to life at IBM's more than 8,000 annual trade shows.

For "creating comfort," for example, the tip explained that organizing and creating physical spaces can dramatically influence whether participants feel comfortable and how they engage. This insight had led the GPJ team to understand that designing flexible spaces where people were greeted by IBM hosts would make them more comfortable than an arrangement of fifty-five pedestals and siloed solutions.

#### Card Games

The team introduced the cards to IBM employees all over the world, watching as they engaged the cards in different ways. Some organized them by suit, while others picked out the photos they found most appealing. Some people gathered into groups to work with the cards, while others chose their favorites individually and then presented them to the group. Ben explained that they saw instant collaboration: "The cards worked the way they were intended to, which was to find inspiration, to brainstorm, and to help solve your problem."

Once people became familiar with the cards, the team set up challenges for them. These often involved developing a narrative about a group of characters with a problem to be solved. Ben said that many of the participants pointed to specific insights from the cards that helped them come up with solutions. "It was an ownable thing," he noted. "If I gave you that deck of cards, it was yours, and, in some respects, those insights became yours."

The cards helped those on the ground understand the new approach to live events and trade shows and shortened their learning curves. In the end, they were a critical bridge between the strategy GPJ had developed and the IBM employees who had to operationalize it. "We needed something that we could leave behind that would help people latch onto the strategy," Ben told us, "and the cards were a really important piece of that." In the end the cards communicated the context and core insights needed to help IBMers across the globe create trade show experiences. Jim Gargan added, "They gave employees a new lens to think about their jobs and about engaging clients."

The cards that GPJ created were so successful that IBM adopted them as an integral aspect of the company's approach, and they reached more than 5,000 IBM employees globally. By integrating the cards into their processes, IBM internalized design thinking. "We realized that people were more prone to adopt information when they felt like it was in their possession," Ben noted. "Then they owned the experience. They owned the insights, and the problem looked different to them because their expertise had changed." Jim Gargan provided another point of validation when he explained that he had a dog-eared deck of these cards in his office: "It's not uncommon for me to speak to the person in the office next to me, going, 'Hey, look at card 38.' We pull it out and start talking about it. It's a wonderful tool."

#### Converting the Holdouts

Cards and training acclimated IBM employees to the ideas behind the new trade show experience, but there were still a few holdouts along the way. While preparing for a trade show, one subject matter expert in particular, whom Ben described as a "curmudgeon," just wanted to give his PowerPoint presentation like he had always done. At the onsite training, he stood in the back of the room with his arms folded. Ben tried to engage him, to no avail. As the trade show was starting, Ben tried one more time, approaching the disgruntled IBMer, asking him what he liked to do. He loved fishing and began to talk about his fishing trips. "Before you knew it, his face relaxed, and he was telling me stories," Ben recalled. Clients standing nearby began to join the conversation, listening to his anecdotes and asking him questions. Ben talked about what happened next: "He started talking to them in the same way he was talking to me. He said, 'Wait a minute. Let me show you something.' In two steps, he got to his PowerPoint and started going through it, but instead of going through page by page, he went right to slide 12 and started talking about the client's issue, still referring to fishing. And he became the most vivacious, most gregarious guy there. He was like a changed person."

That experience was a great learning moment for Ben and his IBM colleague. In a very real way, it all came back to the early ideas about creating comfort and planned spontaneity. "At the end of the day, we set up the conditions for him to be comfortable," Ben explained. "He was using storytelling. He was in a mode where he was really collaborating, really talking to people. Once you buy into this whole design-thinking approach, everybody involved is in a learning mode. Everybody involved

is in a different place.”

### Rethinking Metrics and Delivering Results

Rethinking the trade show experience also meant rethinking metrics. Ben emphasized the importance of stepping back to consider the intent of measurement. In this case, it was to assess whether trade shows produced high-quality sales leads. Whereas IBM had a robust system for capturing quantitative data, such as scanning a participant’s badge to record foot traffic, it did less to measure the qualitative elements of engagement, such as the likelihood that it would convert into a revenue-generating client relationship. The GPJ and IBM team sought to look beyond this traditional approach of counting eyeballs and impressions to focus instead on duration and depth of experience.

The team believed that it could help IBM achieve its ultimate goal of increasing validated lead revenue. Kurt explained that the team “looked at behavioral metrics, such as engaging clients and prospects around a particular solution.” In the new trade show environment, IBM employees could share content with potential customers in real time and collect data about what was shared with whom. In previous years at Sibos, IBM employees may have had only seventy-five pieces of content to share with participants. With the trade show redesign, they had four hundred pieces of content, which gave them the ability to provide much more relevant, targeted material to participants in real time rather than tracking it down after the conference and then trying to deliver it to the right person, who would experience it out of context.

Data around depth of engagement showed that the new trade shows were leading to greater relationship building and revenue generation. Ben saw that the experience was less about “I’m selling you something” and more about “I’m partnering with you to get to the heart of the problem.” These deeper relationships drove results. As Ben explained:

We are seeing more deep engagements, which is really important and pretty amazing. We are also seeing more revenue generation results. We’re having fewer, better transactions to the tune of multiples of sales year over year. IBMers are even saying that ten times the number of hot leads have come from these events, even if the total number of people coming through the space was lower. From a qualitative standpoint, interviews now happen in our spaces. We have senior leaders who come and want to see the new trade show experience in action.

Jim Gargan echoed this perspective from inside IBM: “What we tried

to do was not focus on how many people got into the booth but on the quality of the experience and the dialogue that they were able to engage in with us once they got there. We created intimate spaces that would allow the IBMers and the clients to be able to engage in a different way.”

For Ben it all came back to design thinking. “Design thinking gets into the emotional side of all this in a really meaningful way,” he observed. “Not just in turning people on or getting them excited about something, but helping them see that there’s more opportunity in what they do than they had thought. It is based on understanding people better. And you don’t understand people better until you undertake this kind of design discipline and start digging.”

For Jim Gargan, this spelled results. He praised design thinking for “its ability to put business problems in a context and framework” and “as a way to build a consistent methodology that scales.”

In the end it added up to a more effective trade show experience for IBM and its clients.

### What Do We Take Away from IBM’s Story?

GPJ and IBM provide a great example of an end-to-end process of gathering data, recognizing patterns and themes, generating insights, using these to develop design criteria, coming up with new ideas, and conducting learning launches. These are a few of our favorite takeaways:

#### *Know Thyself, Know Thy Company*

Socrates famously urged us to “know thyself.” We believe it is also important to “know thy company.” Design thinking is a powerful tool, but the context in which you integrate it into the organization matters. Think about your company or even your business unit. What are your core competencies? What is your legacy? What’s in your DNA? For IBM, the powerful legacy of Charles and Ray Eames’s work provided traction. Later, in the Toyota story, we’ll see how design thinking linked to the “Toyota Way.” Finding a link to your own organization’s history and values is important to the successful deployment of design thinking.

#### *Look Outside Your Industry to Drive Value Creation*

One of the greatest value creation opportunities design thinking offers is the invitation to look beyond a company’s industry or comfort zone. It is often our own internal mental models, rather than external constraints, that blind us to more innovative ways of doing something. IBM, working with GPJ, broadened its definition of the problem, stepping back from the trade show construct and considering instead the nature of human learning. It then sought out experts from far afield, from education to the

arts, to find penetrating insights that could transform IBM's trade show experience.

### *Exploit the Power of Visualization*

Visualization is a powerful tool that can be used throughout the design thinking process. The GPJ team used it to communicate and translate concepts and ideas at various points. Visualization can be especially important when communicating ideas that are less intuitive and accessible or are more likely to face resistance. Whether it's the way GPJ crafted its "archeological dig" to present research findings or the cards that the team created to make profound and somewhat abstract insights more meaningful for IBMers around the world, visualization was critical to GPJ and IBM's success.

### *Deepen Your Thinking on the Metrics That Matter*

Metrics are critical, but it's important to remember why you have them in the first place. Keeping the ultimate goal in mind will help you pick the right metrics. In GPJ and IBM's case, the goal was high-quality sales leads that would eventually drive revenue. Adjusting metrics to include qualitative data around engagement informed the stuff that was easy to count—the more quantitative metrics.

### *Don't Forget Design Thinking When Working with Your Colleagues*

People often learn design thinking skills and become proficient with the tools only to forget that they can be used not only to drive value but also to marshal internal support. Take an ethnographic approach to understanding your colleagues and what motivates them, help people to understand the user journey and be aware of their own journeys, and, finally, iterate with them and create value together. These steps could be the difference between a great idea that drives results and one that collects dust on a shelf.



## Postmerger Integration at Suncorp

### ***THE BUSINESS PROBLEM***

Integrating two highly successful but different organizations without loss of momentum in a cutthroat competitive environment

### ***THE CONTEXT***

The merger of two titans in Australia's commercial insurance segment, Suncorp and Promina, to form the country's second largest insurer

### ***DESIGN'S CONTRIBUTION***

Facilitating a strategic conversation to build alignment on strategy and vision using the design tools of visualization, metaphor, and storytelling

PUT YOURSELF IN THE SHOES of a leader trying to integrate two financial services organizations with significantly different business approaches and cultures. Does design thinking come immediately to mind as a way to solve this thorny problem? Probably not. That is just one of the reasons why we think this story of a group of managers from the Land Down Under teaming up with one of the most creative strategy consultancies we've ever met is so fascinating. The critical role played by design thinking in ensuring a successful merger between Suncorp and the Promina Group demonstrates its value in areas not traditionally seen as design friendly. Suncorp knew that capturing the synergies that would justify the merger, estimated to be worth several hundred million dollars annually, would require tackling significant change management challenges. The company succeeded by using metaphor-driven strategic conversations (sounds like consulting jargon, but it's not—details to follow), which allowed the two organizations to build a single aligned strategy and to engage the newly formed organization behind it. And they've got the data to prove it!

The potential for product line synergies in the merger of Suncorp and Promina was obvious to all. Suncorp-Metway was Australia's sixth largest bank and a leader in banking, insurance, and investment services, focusing on retail customers and small to midsize businesses. Suncorp's insurance group was Australia's third largest general insurer and was among the organization's largest profit contributors. Promina brought strong general insurance brands like Vero for commercial insurance, as well as personal insurance brands for car, home, and contents. Combined, the two organizations would become Australia's second

largest insurer.

But they could hardly have been more different in their organizational approaches. Suncorp prided itself on being centralized while still offering a meaningful customer experience. Its leaders believed that significant synergies could be gained through consolidating its own and Promina's operations; in fact, the company had achieved this in previous mergers. Promina, on the other hand, was highly decentralized—more a “house of brands,” as one observer commented, than a single organization.

Mark Milliner was the Suncorp executive appointed head of the new commercial insurance (CI) business, which combined the relevant subsidiaries of the two organizations. He knew he had a challenge on his hands in integrating these two cultures. He worried about losing momentum and direction in a highly competitive marketplace, where the CI business could ill afford to lose market share or profitability. In particular, he worried how Suncorp's high-level vision—“We help people build and protect their dreams”—would translate into meaningful action by employees in the newly combined business.

Like Mark, Jacqui Jordan, CI's strategy manager, was a veteran of previous mergers within Suncorp and had a sense of urgency around the need to build a new future together. “The merger was perceived as the end of something extremely precious to Vero, Promina's CI business,” she told us. “It was almost religious the way this team loved its brand and the company. We knew that we had to create something new together and that it would need to be something very compelling.”

To help them accomplish this, Suncorp chose to work with a consulting partner, Second Road, which practiced an unusual form of strategy consulting. Cue Aristotle.

#### Why Take the Second Road?

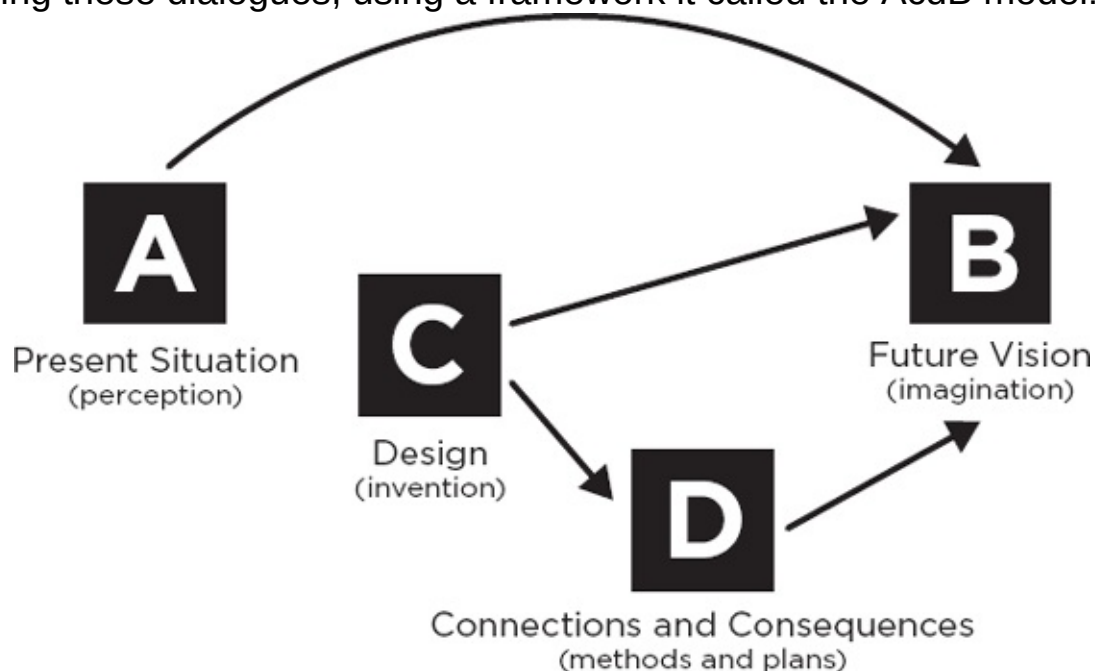
Tony Golsby-Smith founded Second Road on his passionate belief that an alternative approach to organizational transformation—one that had been largely ignored in the business realm—had the potential to facilitate large-scale change and help organizations create cultures more supportive of innovation. This belief was reflected in the name of the organization itself. Aristotle (yes, the ancient Greek philosopher) argued that there were two roads to truth: the path of rational scientific analysis based on numbers and the path of rhetorical argument based on conversation.

According to Golsby-Smith, Aristotle's “first road,” which dominated business thinking, was inadequate for confronting a world of increasing

uncertainty: “My argument is simple: Modern organizations, like the Western world that spawned them, have been built on logic and analytics. This equips them well for control but not for creativity. Twenty years ago, that may not have mattered; today it is a fatal flaw. But we need more than just extra management tools or techniques: We need a revolution in thinking.”

Second Road was built around the neglected path of conversation. The goal, Golsby-Smith explained, was to equip people to become “designers who are making worlds rather than analyzing them”—“authors” rather than “readers.” Successful corporate strategies, he believed, emerged out of dialogues that engaged not only senior executives but employees throughout the organization and that focused on invention rather than just analysis.

From these ideas, Second Road developed a set of practices for guiding these dialogues, using a framework it called the AcdB model:



The format of the framework will be familiar to advocates of design thinking, with its focus on the *What is?* question about the present and the *What if?* question that points to a new future. It will be familiar to strategists, as well, with its identification of a gap between current reality and some desirable future and the development of plans to close it. Where the framework differs dramatically from traditional strategic planning is the process Second Road uses to conduct this analysis. At its heart lies a “strategic conversation,” which uses an array of design thinking tools—visualization, metaphor, brainstorming, and rapid

prototyping—to engage participants and help them think more creatively about the future they want to create together. Led by both a facilitator and a designer, a group of people address a series of “designerly” questions: Where are we now? (in our design nomenclature, the *What is?* stage); where do we want to be? (*What if?*); what design will get us there? (*What wows?*); and how will we make this happen in the real world? (*What works?*).

There are few PowerPoint slides in these conversations. Instead, a Second Road designer creates images of the dialogue as it evolves. Early on it tends to feel chaotic and circuitous as different perspectives and issues come into play. Even the problem itself is often defined differently by various participants. As the conversation progresses, however, clarity and alignment increase, and a hypothesis usually emerges as to the best way forward.

Believing that many great ideas that bubble up during a conversation can be lost in the usual focus on conclusions and action planning, Second Road takes special care to map the conversations in real time on electronic whiteboards.

## DESIGN TOOL

### *Visualization*

Visualization lies at the very core of design thinking. But that doesn’t mean you need to be an artist to use it. Visualization is the transformation of information into images that you see, either literally with your eyes or figuratively with your mind’s eye. We can do that in many ways—using drawings, photographs, stories, and even PowerPoint (but not lists of bullet points). The whiteboards used by Second Road become a canvas on which participants paint a new future together.

The discussions over the course of a day might fill as many as twenty-eight whiteboards. Second Road consultants use all this input to create an AcdB model on one sheet of paper, which sums up the conversation. At the end of a workshop, they also produce what they call a TalkBook, which captures the thinking process of the conversation and contains sketches made during it. This visualization of the group’s thinking aims to transform participants from “managers” into “designers,” from “readers” into “authors,” with the whiteboard as their communal sketchpad.

### The Journey Begins, but the Car Stalls

The Second Road team, led by Nick Ingram and Michael York, and the Suncorp team, headed by Jacqui Jordan, expected the strategic conversation approach to meet with some cultural resistance from Vero's general managers. "When we first talked about transitioning staff from readers to authors," Nick commented, "some of the Vero guys laughed. They thought it was a joke. What kind of way-out hippy stuff is this? They had a very traditional analytical approach to strategy." To them, these conversations were "fact free."

Despite some disappointing early conversations, the team pressed on. Acknowledging Vero's preference for analytics-based decision making, the team decided to create a set of task forces, led by managers from both Suncorp and Vero, to gather data for the *What is?* phase of the next strategic conversation. The assigned topics included overviews of the current end market and the broker market, branding, the claims management process, the employee profile, IT systems, and challenges and opportunities. Second Road realized that both sides needed to buy in to the process and believed that analytics and design could work together without sacrificing the integrity of the strategic conversation.

The debrief of the task forces, Nick Ingram and Jacqui Jordan knew, would be critical. "If we left the task forces unchaperoned," Nick noted, "they were likely to walk in with twenty-slide PowerPoint presentations that would take the whole hour and leave no time for discussion."

So Jacqui and Nick decided to shake things up: They mandated that each group's presentation include only three slides and last no longer than twenty minutes. This would maximize the time for good conversation. As was the usual practice, Second Road designer Amanda Vining mapped the conversation as Nick led it.

The debrief went better than anyone had dared hope. The task forces had done a great job synthesizing the analytics as well as posing creative strategic questions for further discussion. It was the beginning of integrating the best of both cultures. "After they got over the shock of being limited to three slides, people liked it," Nick noted. "The conversation really flowed." But the biggest test was to come the following week, with a five-day strategic conversation among Mark's newly constituted leadership team.

From *What Is?* (Current Reality) to *What If?* (Envisioned Future)  
This five-day conversation was critical for the future of the business. Mark's ambition was to describe the *look* and *feel* of the commercial

insurance business the group wanted to create together. His intent was to build a team committed to a common purpose and set of outcomes.

In the lead-up to the first day, Nick and Amanda from Second Road synthesized the findings and conversations from the task force debriefs. Instead of writing a report or making a PowerPoint presentation, they elected to create something more visual: a set of posters that captured the key points. “We had discussed most of the ‘current situation’ during the task force debriefs,” Nick recalled, “but I didn’t want to lose that momentum and insight. So we created the posters to immerse the team back into that topic.”

## DESIGN TOOL

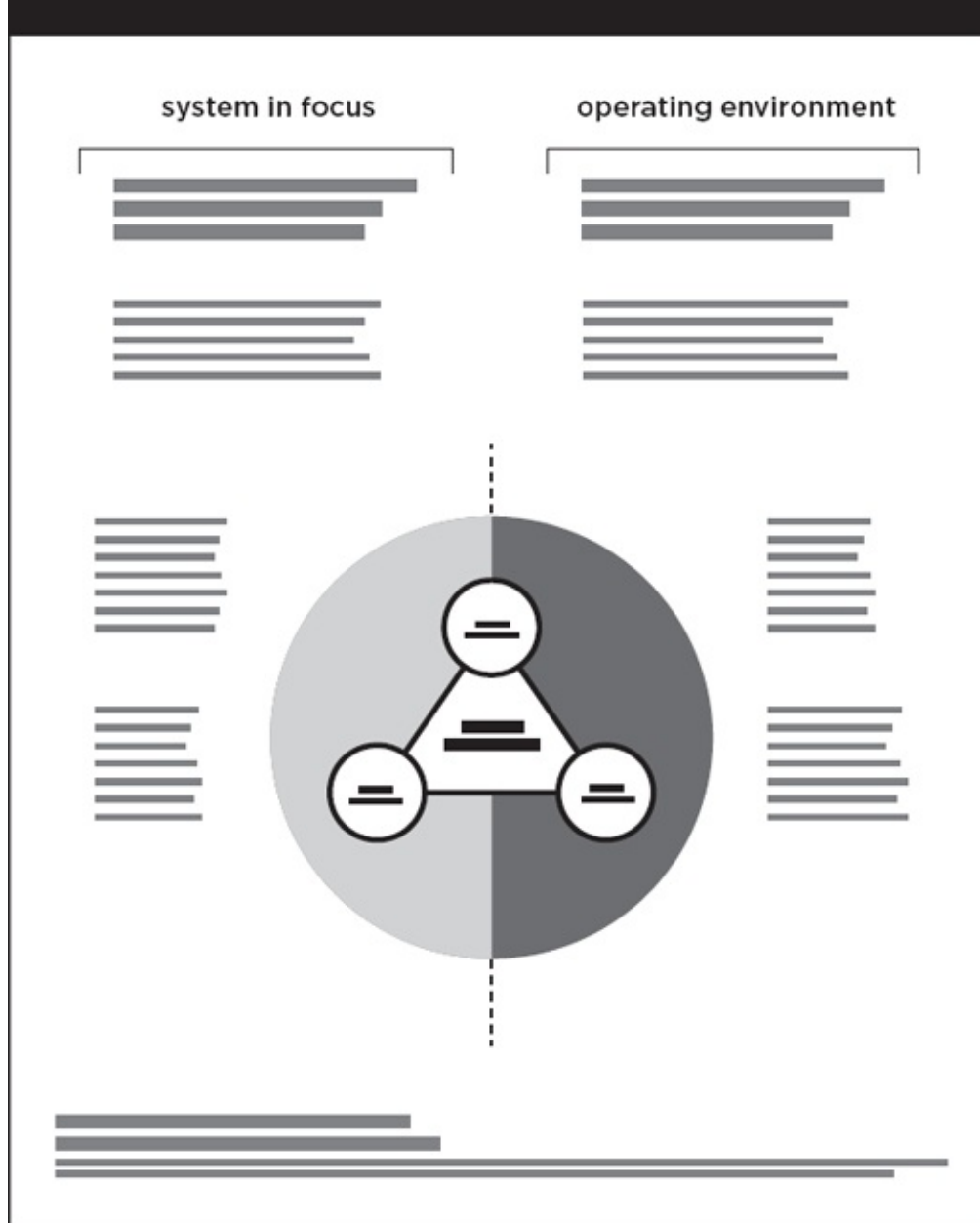
### *Posters*

In a world where everyone has too many meetings to attend and not enough time to read the materials carefully prepared in advance, posters are invaluable. For about \$2 at a copy store, you can turn a slide into a big wall poster that people can browse as part of your meeting (when you’ve got them in your power), rather than relying on them preparing the material in advance (which they often don’t). Posters like the one, Second Road create to guide the Suncorp team allow you to bring a group quickly to a shared understanding of a problem or a data set. They allow you as the conversation leader to set boundaries by determining what goes on a poster, but they give your attendees the freedom to choose what they think is important in it. They don’t have quite the stature of Post-it Notes in the innovation world, but we think they deserve similar reverence!

On the first day, Nick asked the group to walk with him from poster to poster, stopping to examine each and giving team members a chance to recall parts of the previous week’s conversation that had struck them. By the end of that session, they had cohered around a common “story” about their current situation and the challenges they faced.

# Building Our Future

## OPPORTUNITIES POSTER



### The Power of Metaphor

To transition into the discussion about the future—the *What if?* phase—Nick engaged the managers in an exercise using metaphors. “This was always going to be a ‘look and feel’ conversation,” he explained. “We were really trying to get the team to answer the question ‘What type of house do we want to build together?’ That type of situation just cries out

for the use of metaphor. Metaphors help people think creatively, and they help people play with abstract ideas.”

## DESIGN TOOL

### *Metaphor*

Metaphor is a commonly used design thinking tool. Taken from the Latin word meaning “to transfer,” it involves drawing an analogy between two objects, such as referring to business as *war* or an organization as a *family*. Using metaphor unlocks the creative side of our brains and surfaces unarticulated perspectives, feelings, and assumptions. It helps us to escape our mental models, and it encourages candor by reducing the risk of talking about difficult issues.

Nick began by presenting a synopsis of left-and right-brain thinking. He then asked the managers to break into small groups to explore, using metaphor, what they wanted CI to *look* and *feel* like when it was achieving its purpose. Each group chose five cards out of a large deck filled with images such as cafés, markets, natural landscapes, people, and art. The objective was to look for rich metaphors to express what CI *could* be. Groups took different approaches: Some articulated multiple metaphors in their cards to represent various characteristics, while others selected overarching metaphors, such as *marriage* or a *village*, represented by all five cards.

### From Marriage to Merger

Nick called the groups back together and worked with them to unpack the metaphors they had chosen in order to reveal “entailments”: the consequences that attach to a particular metaphor. For example, when asked what entailments go with the metaphor *marriage*, people came up with “love,” “children,” and “happiness,” along with two that generated a lot of conversation: “you’ve got to work at it” and “it’s public.”

At designer Amanda Vining’s suggestion, Nick asked them to replace the word *marriage* with *merger* and to tell him the entailments of the metaphor, *our merger is a marriage of two organizations*. At that point, he explained, “Mark Milliner kind of gasped, and it was a very strong moment for all of them. I think it was at that point that they saw the power of metaphor.”

### It Takes a Village (or a City)



Nick then sent smaller groups out to explore the look and feel of CI through the eyes of stakeholders such as the community, suppliers, brokers, and end customers. One group explored the business using the metaphor of a vibrant market village. People liked that metaphor but worried that it was not innovative or dynamic enough. It also seemed too small. Maybe we are really a thriving *city*, they suggested. At day's end, Amanda, the Second Road designer, and Jacqui, CI's strategy lead, created a visual representation of the day's conversation—a map of a hypothetical city—which the managers found posted on the wall when they arrived on the second day. The picture was deliberately rough and unfinished so that the team would feel comfortable about changing and contributing to it. Rough prototypes, they knew, invited a kind of engagement that more polished ones did not. During the course of the morning's discussion, the metaphor of the city gained resonance with the team.

The map remained on the wall over the next few days as the group worked on other issues, and the managers were invited to post notes and adjust the design. By the end of the meeting, CI's future had crystallized into that of an exciting and dynamic city infused with the warmth and community of a village.

On the last morning of the meeting, Nick again broke the managers into small groups and asked them to create stories using the city metaphor that they could take back to their teams. He described the result: "The energy was quite remarkable around the stories they could tell. They were really pumped about it. And it was at that point I thought, okay, this thing can fly—they can own it and tell stories about it."

#### If *You* Build It, They Won't Come

The following week Mark Milliner began a series of meetings to introduce the new leadership team to all CI employees around the country. Buoyed by the team's enthusiasm and commitment to the metaphor, he incorporated a more refined computerized image of the city into his road show.

To the dismay of all, the city bombed. The feedback on the image was decidedly negative from the broader CI staff. As Nick described it, people wondered, "What the heck is this? What is it you want me to do with it?" As the Second Road–Suncorp team regrouped, it quickly became clear that it was the *creation* of the city that had made it so compelling for the team. "All the passion in Mark's team had come from the fact that they lived and built the city," Nick explained. "It was about their *journey*."

Instead, people at the road show got handed the city in a fifteen-minute presentation. What did we expect?”

But Mark refused to give up on the metaphor. “The city let people get involved in the conversation, and so it made sense to keep it moving forward,” he recalled. The challenge, he felt, was to send a consistent message across his business units and yet leave room for lower-level managers to make the city their own. “I wanted some consistency,” he said, “but I also wanted people to be able to *play*. We had learned that if you make it look too finished, people lose interest.” As Jacqui explained, “We wanted to create a similar experience for all our people so that they could engage with the city as well.”

The solution the team hit upon was to ask each of the ten units in the CI business to design its own “neighborhood” within the larger city. As the team met to consider how to engage the rest of the organization more actively in this task, members went back and forth about how much detail to include in the map. There was some creative tension between the designers and the strategy team, which approached the challenge from slightly different perspectives. They initially elected to leave the map almost empty in order to invite input and spur conversation. But they worried about a lack of consistency across units. It was important to retain key elements of the version the leadership team had developed while leaving enough space for people to make the city their own. The design team ran prototype sessions to get feedback on the balance that would facilitate the best conversation. Some interesting dynamics emerged. Maps that were too filled in restricted creativity and resulted in stilted conversation. Maps that were almost entirely blank were equally bad: People felt unable to act. However, when prototype groups were given a map with some detail, the groups engaged in rich conversations. It was as if there was an “emptiness sweet spot” that provided guidance about the city’s identity but left enough space for the groups to make it their own.

### One City, Many Neighborhoods

The claims division, led by Paul Smeaton, one of Mark’s direct reports, offered to go first. Paul was enthusiastic about the process. “My goal,” he explained, “was to reach the hearts and minds of all my staff, to help people see, feel, and understand our strategy and how we pictured CI in three to five years.” Smeaton, supported by two internal facilitators from CI’s strategy team, ran a two-day strategic conversation with his direct reports: CI’s claims managers.

Alicia Eltherington, one of Smeaton's direct reports, described the meeting:

The workshop was quite conversational in approach. Paul described the journey that he, along with Mark Milliner and the rest of his staff, had been on as they formed their new team and started to discuss their aspirations for commercial insurance. They took us through exercises of thinking about our favorite city and then got us to articulate the attributes that we liked about that city. During the workshop we "built" the CI claims neighborhood using various location cut-outs and street names, and we discussed the different stakeholders in our neighborhood and what they would say, feel, and do. We even recorded a "tour" of the city by ad-libbing this among ourselves.

Pre-and postconference surveys were designed into the process to gain some quantitative feedback on the impact on participants of participation in the workshops. These surveys queried employees on their understanding of the new Suncorp strategy and vision, how they saw their jobs fitting into that vision, and how compelling they found it.

#### Even the CFO Likes It

Even early skeptics like CFO Matt Pearson ("As a finance guy, the visualization techniques aren't naturally appealing to me," he told us) had become involved in the rollout of the city. Matt had identified one of his managers—Paul Muir, an enthusiastic supporter of the process—to act as champion. Paul led the effort to roll the city out to the rank and file in the CFO's office. He worked with the CI strategy team to ensure consistency and quality.

In their initial strategic conversation, Matt and his direct reports had come up with the idea of using a lifesaving theme to characterize the role of the CFO's office. "Swim in between the flags" was the banner for their neighborhood. "Our job is about rules and guidelines, but we don't want to be thought of as cops chasing 'criminals'," Matt explained. Reframing their role, in their own minds and in others', from enforcers who punished violators to lifesavers who protected people was very motivating. Again, this was the power of metaphor. "One of my managers came up with the idea of the flag," Matt recalled. "Our job is setting guidelines. It's about prudential control. But as conditions change, you need to move the flags in a proactive way. Set the boundaries. Keep people out of trouble and save their lives if they get into it."

Matt's own past included membership in one of Australia's popular surf

clubs, so the lifesaving metaphor resonated with him. He continued to use it with his group after that initial meeting. At a leadership offsite he held later in the year, he selected a beach setting, gave everyone a lifesaver shirt, and played Hawaii Five-o music in background. His staff loved it.

Within the next several months, the majority of CI's leadership team convened strategic conversations with at least their own direct reports. Mark decided to pull together all these managers, 110 in total, for a two-day leadership conference featuring a session in which a "marketplace" (using language from the city metaphor) had been set up in a large room. Each group had a market stall, manned by its general manager, in which to display the output from the neighborhood conversations. The managers in attendance visited each stall to learn more about their counterparts' neighborhoods. Nick explained: "They were not in their normal work teams—they were in cross-divisional groups. The power of that was quite amazing. Afterwards, we got them back into their work teams to ground their learnings and work out their actions. That worked very well. The energy in the room with everyone going around the stalls was great. I was giving direction with a microphone and a whistle, and all of us were just having a fantastic time."

Jacqui explained to us why the cross-divisional composition of the groups was important. "We had all of the underwriters in one group, all of the claims leaders, all of the sales leaders," she told us. "This was significant for us because until this point, we had worked in product silos and didn't have any functional identity outside each division."

## **DESIGN TOOL**

### *Boundary-Crossing Teams*

Again and again we see the prominence of boundary-crossing teams in the innovation space. The reason is simple: We may be able to get out of our own box only by climbing into someone else's. There is simply no better way to help managers develop the broad systems perspective that is a foundation for design thinking than by exposing them to people who think differently than they do. Take whatever silos your organization puts people in and mix them up. Diverse teams tend to generate better hypotheses.

The CI strategy team later described the market stall event as an

“accidental milestone in the buy-in and take-up of the city concept.” The team had hoped that people would find the session informative, but it never expected the level of energy and enthusiasm the event generated or the solidarity it built. Managers came away from that session with “a sense of how the components of the entire CI business came together,” as Matt described it. Its success helped build enthusiasm, even among previously “neutral” people.

### Results!

In just eighteen months, strategic conversations had been rolled out through the ranks at all ten of CI’s business units, and the CI strategy team reviewed the postworkshop survey results on the impact of the strategic conversation process. They were dramatic, with significant increases among those who participated in their understanding of the strategy, how compelling they personally found it, and their sense of their own role.

In Matt Pearson’s unit, there was a 61 percent increase in the extent to which employees felt they understood the vision and how CI would look and feel, and a 47 percent increase in the extent to which they found the vision compelling. Interestingly, survey respondents reported an even more dramatic increase when commenting on the impact of the process on their colleagues: Results showed a 76 percent increase in the extent to which they felt that their colleagues now understood the vision and a 69 percent increase in how compelling they found it. Overall 94 percent of employees now said they understood the vision and where they fit in, as opposed to 48 percent in the preworkshop survey.

Matt, an early skeptic of the strategic conversation approach, acknowledged the value of the process:

One-way approaches to communicating strategy are just missing the point. Even without the city metaphor, we’d still have the conversation. But the city allows you to make explicit the *behaviors* that you expect. We stumbled across the metaphor of the lifesaver, and it has really stuck. When I talk about lifesaver or moving the flags, people know what I mean—it makes the strategy more tangible. At the end of the day the real value was having a grassroots conversation with your team. The leader’s challenge is getting everyone engaged, aligned, and committed—setting boundaries but still allowing engagement. Teams accomplished cultural change and could talk about it in a fun way. It was a way of communicating differently.

Paul Smeaton saw similar positive results in the claims division. He attributed this to the active involvement the process demanded: “The problem with strategies is that they are very prescriptive. They’re written on PowerPoints that are expected to resonate with staff, but that just doesn’t happen. The whole process is about people *experiencing* it for themselves. The power really comes from doing your *own* tour. At the lowest levels, staff resonated with it—they were quite proud of their tours. This wasn’t a PowerPoint presentation cascaded down; it was an *experience* that people created. We’ve got 3,000 people running in the same direction now.”

Paul’s direct report, Alicia Eltherington, stressed the concreteness of the discussions: “The concept of the city brought a tangible element to a process that is often intangible or at best described only in terms of financial achievements. People got involved in it and liked feeling that they were building their future. It gave our staff a sense that they were *contributing* to the vision, rather than merely being recipients of it.”

Mark Milliner described how he saw this greater sense of inclusion directly benefiting CI: “Usually in a merger, you go backwards before you go forwards. We didn’t. Big PowerPoint documents wouldn’t have gotten us anywhere. I’d still have two separate organizations that would be fighting each other. I needed people involved, working as a team. If I’d tried to *push* them together—if I’d said you *have* to do this tomorrow—it wouldn’t have worked.”

#### What Worked and Why

Nick Ingram, Second Road’s lead consultant in the Suncorp work, saw several factors as key to its success. One was a cultural attribute: Suncorp’s willingness to cope with ambiguity and its comfort with design versus analysis and with conversation versus writing. The internal credibility and capability of the CI strategy team, and the respect and trust with which it was viewed by line managers, was also critical. Senior management, in his view, played an especially prominent role. Jacqui agreed: “Mark gave all of us permission to do things differently. His courage gained him a tremendous amount of respect from his new team. They would never have had the courage to extend themselves as much as they did with their own teams without Mark’s trust and support.”

Ultimately, Mark saw the real test of the new approach as the business results CI posted in the immediate aftermath of the merger. In a commercial insurance market that was shrinking in Australia by 8 percent per year, CI saw 1 percent growth in the first quarter and 8 percent

growth in the second. Its customer satisfaction scores, measured by industry consultant Towers Perrin (now Towers Watson), increased by two or three points, and staff engagement, at 80 percent, was far higher than the industry average.

Though Mark recognized that many of the benefits were difficult to quantify, he saw evident changes in the behaviors of his staff. “I can see a difference in what people talk to me about,” he told us. He elaborated:

They talk about what they are trying to achieve instead of complaining about the person sitting next to them doing something wrong or how hard the competition is. It’s the glass-half-empty versus glass-half-full stuff. You get people confident in what they’re doing instead of worrying about things going wrong. They get confident about what’s happening in the organization. They get respect for themselves and their ability and their team, so they can weather more adversity. The power comes from the *question*. People don’t want you to show up with all the answers. The city has helped us ask the right questions. Now I’ve got people who are passionate about the business. We’ve built something new together that people really believe can go interesting places. My own team has come together as part of the experience.

#### What Do We Take Away from Suncorp’s Story?

In this merger story, we see some compelling prescriptions for applying design thinking to the challenges of uniting disparate groups of people:

##### *Use Metaphor to Bring Higher Levels of Creativity and Engagement to a Conversation*

When people choose a metaphor, they make it their own. Matt Pearson and his team’s identification of themselves as lifesavers rather than police is deeply personal. In Australia, well known for adventure and for the danger of its surf, surf clubs play a prominent and respected role. The differences in the entailments of that metaphor and those of police are both obvious and compelling. The rest of the organization includes swimmers to be protected, not criminals to be punished. They go beyond the flags for a variety of reasons, few of which have to do with a desire to break the law.

##### *Meet People Where They Are Rather Than Where You Would Like Them to Be*

Vero’s strongly analytical culture is not ready to embrace a design thinking approach, so the team meets employees halfway, chartering a data-gathering exercise and using it to ask creative questions that open

the door to a different approach. The city bombs in Mark's original road show, but instead of complaining about the managers who fail to get it, the team assesses where it went wrong—and how to fix it. Design thinking need not be seen as competing against traditional approaches. It can be highly complementary. Managers aren't losing a son in this union; they are gaining a daughter. But you must sometimes guide them gently into the conversation.

### *Energize Through Emptiness*

As managers, we are often drawn to closure: Get the *i*'s dotted and the *t*'s crossed and get on with it! Leaving things even a little undone seems like a bad idea. But it is the work in process that grabs our attention, that invites us in, that makes us feel truly part of something. Don't kill your strategies with completeness. Leave room for the people who must make them real to make them their own.

### *Lead!*

Because leadership matters—at every level. Mark Milliner gives team members the permission and support they need to succeed. He understands what they are about and doesn't give up easily. Design, for him, is not a silver bullet. He knows it will take time and patience to achieve the engagement he wants. In the organization, champions emerge at every level, and their energy and commitment carry the message to their teams.

Leadership of the *conversation* matters as well. The skill with which Second Road and Suncorp facilitate the conversation allows them to set boundaries—when to allow traditional analytical approaches into the conversation and when to limit people to three slides—that help an admittedly unscripted process stay on the rails. They use well-honed tools and approaches to make the conversation feel safe to managers unaccustomed to ambiguity. We often like to say that design thinking is something you *should* try at home—but don't start with an organization-wide conversation about strategy! The approach can bump up against deep-seated assumptions that managers carry around, often about things like efficiency and control. Guiding them very carefully into this new world can help avoid the landmines.

### *Leverage the Power of the Question*

In management, we love answers, and we like to pass along our answers in the form of directives to others. Though this may get us compliance, it rarely gets us commitment. Left to our own devices, we often ask the *wrong* question. Allowing important stakeholders to live in the question



with you may be scary at first, but with perseverance and the right tool kit, the answers you create together come with a level of engagement and innovative spirit that far surpasses the false sense of “efficiency” you get from skipping the conversation.

## Transforming B2B Customer Engagement at 3M

### ***THE BUSINESS PROBLEM***

Helping a component supplier's sales force interest customers in new product possibilities

### ***THE CONTEXT***

3M's Electronics & Energy business, which serves the electrical, electronics, and communications industries

### ***DESIGN'S CONTRIBUTION***

Equipping the sales force to engage customers in co-creating new value propositions by moving beyond a sales process focused on presenting technical specs to one aimed at demonstrating the power of new materials, using design tools such as ethnography, visualization, and storytelling

ONE OF THE MOST pervasive myths about design thinking is that only consumer products companies can benefit from it. We disagree! While many of the firms that pioneered the use of design thinking to achieve competitive success did so in the consumer products arena, we believe that the opportunity is even more attractive in the business-to-business space, where the approach is much less widely known and its value is often underestimated. One of the greatest B2B opportunities—we think it could be a game changer—is what's known in design parlance as “co-creation,” the process of engaging customers in the development of new offerings. This shared envisioning of new futures reframes the entire sales process, not just the content of new products. Lee Fain at 3M offers a case in point about the power of design thinking as he describes the approaches he is bringing to 3M's materials science businesses, which empower sales staff in new ways to engage customers in a deeper and more compelling dialogue about new product possibilities.

Being a leader in the materials science business brings with it a particular challenge: how to help customers appreciate the new end-use products made possible by emerging technologies. Before Lee Fain, a design strategist, joined 3M's Electronics & Energy business—where he lives and breathes this sales challenge—he worked on the company's branded products, such as the famous Post-it Notes. In this role he focused on the commercialization process—turning an idea into a product. But he also saw another opportunity in the interaction between marketing and sales. After spending a lot of time developing a new product, he'd watch in dismay as marketing delivered just a few slides on it to the sales team.

He told us, “I worked this hard and sales only gets a few PowerPoint slides? We needed to change. We needed to engage. That was the spark for me to get involved with the question, ‘How can we use design to help sell?’”

Bret Haldin, a business development manager for an array of emerging technologies at 3M, saw a similar business challenge as his team entered new white-space areas from the far left end of the value chain. “The products that we are offering are materials solutions, not end products,” he explained. “And the conversations we have with our customers’ engineers and product designers can bog down. One of the issues that drives us is how to *excite* people about these products. How can we help folks see the value that we feel these products bring to the table?”

Both Bret and Lee knew that customers of 3M’s Electronics & Energy business valued design. Those companies, many of them consumer electronics manufacturers, were constantly struggling to make their products cost effective, to manage their supply chains more efficiently, and to make meaningful technical developments. And they were embracing design approaches to help with those challenges. 3M itself—at the uppermost management levels—was also open to new approaches. “I think a beauty about 3M is that it’s very organic,” Lee told us. “We’re open to seeing things through and to letting some things be tested. We are a company full of scientists, and so what do we do all day? We design experiments. We test. And so I think we have an attitude of tolerance for failure as part of the innovation process.”

Senior executives at 3M wanted to see what value a designer could add on the B2B business team, so they decided to bring someone to the table who could talk to their customers’ designers. Lee’s assignment was to make connections with those designers—through design. But as he got to work, he didn’t worry about using the terminology of “design thinking.” “Let’s not call it that,” he said. “It’s the scientific method—developing a hypothesis, testing it, refining it. Our teams do that every day.” Instead, he focused on helping the various functions in the Electronics & Energy business solve the core challenge of translating technological capability into new possibilities for customers. “We have such great technology,” he noted. “But it can be difficult to articulate that and develop key messaging that’s meaningful to different people for different uses. I try to help the business understand how to improve the customer engagement process—and how to do that using the tools of

design. This full sensory approach is one of the biggest opportunities for 3M.”

### Reimagining the Sales Process

Lee saw the salesperson as a primary stakeholder who needed help creating a different kind of sales process. The conversations with customers that fostered true co-creation were intimate, one-on-one. Lee believed that he could use design to create an elegant new set of tools—what he thought of as a “modern media approach” to customer engagement.

“Having videos on your mobile device, in your back pocket, promotes spontaneous collaborations with customers,” he explained. “If I’m in a meeting, I pull out my phone and start showing them 3M’s innovative concept designs in videos.” This would be very different from opening a laptop, waiting for it to start, and finding the right file, he noted. Using mobile handheld devices would seem less forced, more natural. “People always show you pictures,” Lee said. ““Hey, here’s my family, here’s my house, here’s what I am working on, and here’s the new product I designed.’ Making these solutions mobile and virtual enhances the customer meeting experience.”

In the process Lee envisioned, a 3M salesperson would visit a customer in response to a request and use the new tools to start building a relationship. Some customers, Lee acknowledged, might want “an unemotional, agnostic relationship,” but he hoped the enhanced tools would instead foster a deeper dialogue about new product possibilities the customer envisioned—given what 3M’s capabilities made possible. Along the way, he hoped, each party would consider how to align their objectives and outcomes.

“I was a door-to-door vacuum cleaner salesman when I was seventeen,” Lee told us. “I wasn’t very good at it—I only sold two—but that experience impressed on me that you need the right tools to communicate in different contexts.” Each salesperson needed to be able to customize the approach to each customer in real time, but some consistency was also essential. Lee’s role, he felt, was to help make this possible. As he saw it, he was designing for his colleagues in sales as much as for the customer. “How can I make the experience for salespeople elegant and comfortable?” he asked. “If they’re uncomfortable presenting, it’s going to show. I don’t want them to be more worried about *how* they are going to present than about what they are presenting. The tools have to be portable. They need to both elevate

and simplify the dialogue. It's about activating vision."

### Selling Design in the B2B Space

As he entered the B2B side of the business, Lee's initial challenge was getting buy-in from his 3M colleagues, who were not clear about what role design could play in a materials science company and how it could improve customer relationships. Over time, he increased communications around design with key internal stakeholders, who began to see the possibilities in using distinct tools to help articulate the innovative opportunities presented by 3M's materials technology. One way he achieved this was by using simple frameworks that allowed him to cut through the conversation and highlight the points where design could contribute. In graduate school Lee had developed his own framework for doing this, which he calls *DOES*:

*Desires*: What do you want to do?

*Obstacles*: What is preventing you from achieving your desires?

*Effects*: What are the side effects of those obstacles?

*Solutions*: What could the answers look like from your perspective?

"Before I even engage in a project, I often send around those four simple questions to understand how I can use design to help articulate a path forward," he explained. "You do that for key people on the team, and then from every angle you start to understand where the team finds the most plausible solution and how you can design that into your deliverable."

To help his internal partners see the promise of design, Lee also reached out to Gaylon White, previously the director of Eastman Chemical Company's Design Industry Programs, who coached Lee on using storytelling to communicate his message and visited 3M to tell some stories of his own. White described his activities at Eastman, offered a lot of case examples, and spoke of end-user experiences in ways that resonated at 3M. White's visit, Lee felt, was a tipping point for his team. The combination of "his gray hair and my youthful tenacity convinced 3M."

## DESIGN TOOL

### *Ethnography*

Ethnography is a research methodology, borrowed from the field of anthropology, that focuses on studying people in their natural

environments. It uses both observation and in-depth interviewing to try to understand their world as they see it and the problems in their lives, and to identify unarticulated needs associated with them. It is the core market-research methodology used in design thinking. Lee uses this approach to better understand both 3M's customers and his own colleagues.

Another focus early on for Lee was spending time in the field. He thought it essential to travel with sales, R&D, and marketing teams as they presented 3M's materials and technologies to customers, practicing what he preached and using the tool of ethnography from his design practice. He went platinum in airline mileage in the first six months.

"In the product development process, I often heard user experiences through a filter," he told us. "I would have to read a report or watch a focus group out of context. It sometimes made the process very user agnostic and uninspired. Traveling to meet our customers, seeing firsthand how we engage and how we could improve, helped uncover unarticulated needs. That was the driving force behind my approach, and it was very consistent with 3M's overall approach to problem solving with customers."

In the customer meetings, Lee played the role of anthropologist, sitting in the corner and observing how his colleagues engaged. He read people's body language: If customers weren't excited, what was missing? If a designer seemed bored during a meeting, what was the reason?

What did Lee learn from his ethnography into the lives of his business partners and their customers? He saw that 3M's technical teams did a great job presenting information and potential road maps to customers. But Lee envisioned helping them go further: "I wanted to bring those ideas to *life*. I wanted to say, 'Here's what we have today, but here's where we'd like to take it tomorrow.' We needed divergent thinking, but I knew I had to balance my right brain thinking with a left brain approach."

From his observations, Lee identified several profiles of decision influencers—business managers and executives, sales and marketing staff, technical experts and designers—whom his colleagues were seeking to target in all sorts of engagements, from the trade show floor to intimate customer meetings. Business professionals, he noted, often wanted a sense of where the technology was headed. Sales professionals were concerned with numbers and timing. Technical experts wanted to understand the capabilities of the innovation.

Designers cared about the enabling aspects of the technology itself. Lee hypothesized that an effective engagement strategy required creating deliverables that appealed to all of those profiles: “I needed a medium to communicate possibilities in a compelling context.” He identified five deliverables that would appeal to various profiles: an appearance model, a technical demonstrator, an educational video, an educational material sample, and a future-use-case video (which he also called an “inspirational video”). “To interest customers’ lab folks, I need a technical demonstrator,” Lee observed. “When I partner with marketing, I need an inspirational video. When I partner with sales, I need a material giveaway.”

Designed to give a “look and feel,” the appearance model was an early physical mock-up. This was the kind of deliverable that appealed to designers, who wanted to bring an idea to life. The technical demonstrator was a working prototype of the idea, with which the customer could interact. It was created using the process and some of the larger scale manufacturing techniques that 3M anticipated the customer would use. The educational video, as Lee described it, was “like a PowerPoint on steroids,” taking what they would try to communicate in a slideshow format and putting some animation to it. These videos, which were heavy on text-based content, educated not just customers—technical experts in particular appreciated them—but also salespeople, who could view a video once and have the confidence and the authority to engage a customer.

Lee emphasized that the fidelity level of each deliverable conveyed an important message: “The level of fidelity is going to communicate, even almost subconsciously, how far along you are in the process. You could even use a level of fidelity to your advantage. If you’re not as far along in the process, you probably want to show a material sample that’s not quite polished. It gets people engaged and encourages them to offer feedback.”

The future-use-case video, or inspirational video, was especially valuable for creating a more engaging conversation with customers. As Lee described it, “It takes where we think our customers are going, based on what is in the public domain, and develops a future-use case: If our customers wanted to do X with their product and we had Y with our technology, what *might* our customers do?” It was in the storytelling aspect of this video that Lee brought most fully to life an approach he called “design provocation.”

## Design Provocation

Design's ability to help people visualize end states, arguments, perspectives—whatever matters in the discussion at hand—lay at the heart of its utility for Lee. “One thing design thinkers bring to a business process organization is the ability to create something *visual* to react to,” he told us. “You can spend all day talking and meeting, but without something to respond to and experience, it's hard to advance the conversation.”

Using design in this way—to provoke a reaction—was just one of what Lee saw as three different strategies for its use, but it was the one Lee favored in his work at 3M: “The democratic approach to design says that a majority has to be aligned in order to produce something. Visionary strategy, in contrast, lays out what the designer thinks would be best. Design provocation uses design to get a reaction, either good or bad. The real intent is to understand if the focus, ideas, and concepts are meaningful to customers. It moves the relationship into a deeper dialogue rather than waiting to uncover unarticulated needs.”

Lee's interest in design as provocation led him to an insight: “Why not create *virtual* ideas about end uses of 3M technology breakthroughs? And bring these to life through video? If the aim is to get a *reaction* in order to find out what is meaningful to customers, does it really matter how you get that response? That helped build my design provocation idea of using virtual ideas, using virtual prototypes to gauge what is interesting to our customers.”

Originally envisioned as a tool to engage customers' designers, the videos found a much wider audience. They were appealing not only externally but also internally, which meant they could be used as a championing tool within 3M.

## The Really Big Show

Lee's chance to apply his provocation strategy beyond one-on-one meetings came with 3M's decision to debut a new product, Patterned Transparent Conductors, at the Consumer Electronics Show (CES). CES, one of the largest trade shows in the world, attracts more than a hundred thousand attendees annually. This provided a concrete opportunity to apply Lee's targeted deliverables approach and encouraged managers to pull the trigger on funding the new deliverables.

## DESIGN PRINCIPLE



### *Show, Don't Tell*

This is one of the basic tenets of design thinking. Prototypes—whether in the form of stories, videos, or physical mock-ups—make the future feel real and are much more engaging than bullet points on slides. Ground what you have to say in the concrete details of people's lives and try to immerse them as completely as possible in the experience of the new world you want to create together. Lee and his team could have created a PowerPoint deck with lists of technical specs. Instead, they create videos to show their customers what the future *could* look like.

The new product was part of 3M's Touch Solutions Portfolio, headed by business development manager Bret Haldin. It offered attractive new features, primary among them that it could be formed over compound curves while retaining its ability for touch sensing. The goal for participation at CES was to gauge customers' response to this emerging technology.

Enter Lee with his singular focus on providing an engaging experience for customers. Future-use-case videos would play a prominent role in this effort, allowing Bret's team to move beyond *telling* customers what 3M's new materials made possible to *showing* them the new value proposition.

It took Lee four months to get the business behind that vision. But when the show opened and customers had a chance to react to the new videos, it was evident that the approach worked. As Bret Haldin recalled, "Numerous customers said to us afterward, 'Wow. We never knew 3M was that engaged in this type of process. We saw a side to the company that we never even knew existed.'"

The press took notice as well, visiting the 3M suite after seeing the videos on the trade show floor. Other 3M business units also saw the excitement the videos were generating and wondered if they could have the same tools for their technologies. "Business development managers were looking for better ways to accelerate the promotion of *their* products," Haldin noted. "So it became a bit of a benchmark for these other folks, who have since developed some of the same media."

As Lee recalled, "I had people internally coming to me and saying, 'Wow, I never knew we could do something like that,' or they would say, 'Now I can finally show my children what I do, besides saying I work on Patterned Transparent Conductors.'"

Finding the Right Partners and Opportunities

Lee succeeded at 3M by finding champions in two very important internal communities: technical and marketing. Although he reported to the technical director, brought in by the executive vice president, and to 3M's most senior design leader, his bosses agreed that design should be allowed to create value for various functions, not just R&D. A battle around who "owned" design, of the kind that we mentioned in [chapter 1](#), did not seem to be a problem for Lee. "At the end of the day," he explained, "those who embrace the values of design can own it. If you embrace it, then you will do everything in your power to let those values guide every decision to make a product or customer experience better."

In creating the videos that visualized possible futures using 3M solutions, staying close to the lab was clearly a priority. Lee had to make sure that the business could actually execute the vision presented in the videos. He was careful to assemble a cross-functional team including the VP of the business, the VP of R&D, and the technical director. "You are really casting a vision in front of customers and trying to move them in a particular direction, to steer the market demand towards 3M's capabilities," he said. "What I was bringing to the team was forward thinking and futuristic yet grounded in today's technology. If you don't make sure that what you are projecting is based somewhat on what you have tested in the lab, then it's science fiction."

Funding projects was always an issue that Lee gave serious thought to. The Consumer Electronics Show project, he knew, would work only if multiple stakeholders contributed to it. But he did not ask all of them for funds. "The business unit manager who really wanted it and the technical director who also wanted it—they got it funded," he said. "You need to prioritize whom you ask to keep things moving."

The materials developed for the CES met one of Lee's criteria for projects that deserve investment: Those videos would have many lives. "Whatever we do at CES is going to live for the next two or three years," he said. "We knew we were going to have a lot of customer engagements, and it comes down to the cost per view. I'm a big fan of asking, 'What's the business opportunity?' The investment should be proportional and weighted based on the opportunity."

Choosing the right partners, as well as the right opportunity, was essential to Lee. "At the end of the day," he observed, "I don't own deliverables; the business does." He selected his business partners carefully, looking for a sense of urgency—someone who got back to you quickly, not a month later—and optimism. "It's just due diligence to know

the people you're collaborating with," he said. "Are they antagonists or protagonists? Are they complaining about what they can't change, or are they proposing new ideas and new solutions?"

### Demonstrating Design's Value

The question of metrics, of measuring design's impact on business performance, remained a challenging one for Lee: "What is the ROI of what I'm doing? How do I measure my contribution of value to the business, how am I increasing sales? That's always tricky. I think that's the search for the Holy Grail, honestly. There are certain financial things you can do, for sure, but if you educate someone on design, if they start to think like a designer, does that mean that you get credit for a certain percentage of their value? Right now, honestly, I just ask customers, 'How are we doing? Is this working? Is it not working?'"

Lee recognized that there were other ways to think about how his work added value. 3M salespeople, he knew, liked the new content: It gave them a reason to go back to their customers and new tools for starting conversations that could lead to sales. He also focused on creating value for his internal stakeholders in the lab. "How am I creating relative value for our lab?" he wondered. "Am I now saving them money because they did a video that was one-tenth of the cost of actually producing that rare prototype or even multiple prototypes?"

Collecting data to demonstrate the value of the design work Lee was doing was important to him. "As I try to add value to the functions," he said, "I ask, 'How are you going to track this?' It may be a URL on the video or on material samples that allow us to track how many new visitors come via a website, how many new engagements come, how many new people inquire into a business proposal."

Lee also found himself getting more face time with his customers' creative professionals and requests for customer meetings, creating additional connections with his design network and indicating to him that his work was valued: "They know whenever I engage, I'm not going to engage with current, existing material. I'm a designer; I don't want to sit in on another PowerPoint presentation. I try to tie what I'm doing to different events. That way, when the event's over, we have that material."

Though he came from the business side, Bret Haldin was even more skeptical than Lee that traditional "hard" outcome measures could ever be accurately traced to any element of marketing communications strategy, so he looked for subtle influences on the customer's thinking. "How often is the customer referring to an event?" he asked. "I know in

the conversations that followed CES that event kept getting mentioned. The customer kept coming up with, ‘You know how you had it in that one prototype?’ And so clearly there was an influence—it had become a frame of reference.”

An unanticipated benefit of the new tools that Bret saw was that they focused and accelerated internal development efforts. Lee saw the unifying effect as well: “The guy in the lab is in one building, and the business people are in another, and you have teams all around the world,” he observed. “And where is there a consistent thought about where this technology can go? On the new video we made. It could be shared so easily that internally it became viral. Online we’ve had something like 300,000 views.”

Bret Haldin had his own views of why design approaches added value, even in 3M’s highly technical world: “The design approach doesn’t compete with data—it *complements* it. It won’t replace a data-driven discussion, because at the end of the day customers have to see how we’re going to meet their specs and what the actual numbers show. This approach adds a front end that *jump-starts* getting into the data. It generates enthusiasm. It generates momentum. It gives you that initial engagement to be able to pull customers in so you can have that technical discussion with them.”

Ultimately, Lee believed that design’s value started with uncovering gaps, identifying what was missing, and then finding opportunities to fill those gaps: “My advice to design thinkers is to be vigilant about identifying gaps and opportunities. Don’t be afraid to go out and do something that’s outside of your job description. If you see an opportunity, take it! You might be the only person who sees that opportunity for a long time.”

This is what Lee does at 3M, and he sees a tremendous payoff when technology and design work together. “It’s really hard to take technology and make it meaningful for a lot of different constituents,” he observed. “Design is helping 3M make technology more humanistic. Scientists do it with quantitative tools. Designers do it with qualitative ones, and I think the beauty happens when both come together to meet the needs of the people in the market.”

#### What Do We Take Away from 3M’s Story?

Two things stand out for us:

1. *Use design thinking to help customers see the future you can create together:* Lee’s story reminds us of the wily Professor

Harold Hill, the spellbinding salesman of *The Music Man* who teaches the children of River City to play their instruments using the “think system”: by playing them in their minds, he tells them, they will learn to play in real life. Farfetched as it sounds to apply Professor Hill’s methods to the serious world of materials science breakthroughs at 3M, we see a strong parallel. Walt Disney famously asserted that the future is created first in the mind and then in the activity. In key areas of business, whether in new-product development, strategy, or any kind of change management, creating a new future requires us first to envision it in our mind’s eye. Lee Fain demonstrates how design approaches can be harnessed to create a much more vivid representation of this imagined new world and open the door for partners in a supply chain to work together with enthusiasm and urgency to make it real.

2. *Don’t be afraid to introduce design thinking to an organization that doesn’t know quite what to do with it:* If we unpack what Lee does to win over his colleagues, we see a master at work. What does he do?

- He doesn’t settle for merely asking his colleagues how he can help. Instead, he uses his own tool kit to observe them as they go about their business. In the process he develops a deep understanding of their needs, perspectives, and problems. Then he partners with them to help them accomplish their goals.
- He takes time to work with them and bring them along one by one.
- He enlists outsiders like Gaylon White who have credibility with his partners to describe how other firms are already implementing design approaches.
- He looks for high-value opportunities like the Consumer Electronics Show to gain visibility and impact, linking investments in design to business payoff.
- He finds champions among the senior management team and selects partners who share his optimism and sense of urgency and will put skin in the game.

Equally interesting is what Lee *doesn’t* do:

- He doesn’t preach the gospel of design thinking. Instead, he helps people solve problems.

- He avoids getting caught in wars between functions, which is especially important in a diversified organization.
- He refuses to waste his time in the wrong culture. Instead, he finds a home in an organization open to experimentation.

Lee himself left us with some thoughts on his philosophy for applying a design-based approach:

- Take yourself out of the situation. Be an observer—don't take it personally.
- Identify who is a protagonist or an antagonist and align yourself with like-minded individuals.
- Keep in mind that context enhances meaning for design and innovation.
- Reduce complexity, remove the noise, and focus on what's meaningful.
- Develop frameworks that help articulate opportunities and vision.

Great advice from a great design thinker!

## Rethinking Strategic Planning at SAP

### ***THE BUSINESS PROBLEM***

The classic strategy conundrum: how to translate market threats and opportunities into new business strategies that feel real to those who must implement them

### ***THE CONTEXT***

SAP, the world's largest vendor of enterprise software, as it confronts the potentially disruptive changes represented by Web 2.0

### ***DESIGN'S CONTRIBUTION***

Melding design thinking with traditional approaches to strategy in order to compose and communicate new strategies, making them shared, meaningful, and tangible for employees at all levels of the organization

THE TRACK RECORD of traditional strategic planning approaches for actually engaging managers is abysmal, despite untold hours spent completing templates, populating Excel spreadsheets, and creating PowerPoint slides. The infamous binders that sit on the shelves of organizations everywhere are a living (or dying) testimony to the widespread failures of strategy to engage. And that lack of engagement translates directly into a failure of strategy tools such as mission statements and SWOT analyses to make any discernible difference in an organization's ability to adapt to changing environments. Not so at SAP, where in a kind of "McKinsey meets IDEO" scenario, a group of strategists, drawn from both the business strategy and the design sides of the house, worked together to craft a new approach. The model they built incorporated the best of traditional business analytics but went beyond that to employ design tools—such as prototyping and storytelling—to create a process that was as compelling as the new future they envisioned.

As the brave new world of Web 2.0 dawned—with its flagship endeavors like Wikipedia and Facebook and its arsenal of collaborative technologies for working more flexibly and in more distributed and informal ways—executives at SAP worried. SAP, the world's largest producer of enterprise software solutions, was concerned about the implications for its business. The company provided integrated software that managed all aspects of an organization, from operations and marketing to human resources and finance. SAP executives knew they needed to transition from an applications software firm to a business process platform, but the

strategy team had run into a serious roadblock: an inability to help managers understand *why* Web 2.0 was different—and potentially dangerous—and to paint a detailed picture of what it meant for SAP's suite of products.

In the background was a troubling sense that the strategy team just didn't have managers' attention. They had created what all agreed to be an excellent white paper on the subject. The problem was that no one was reading it. The team was rolling out a strategic planning process, but it was meeting with resistance from managers who didn't see the point of filling out the forms. "We were really struggling to help people understand why Web 2.0 was so different," said Ryan Nichols, a member of the team and an ex-McKinsey consultant. "Lack of engagement was a big issue—it felt like we were forcing something on the business units. We certainly had tools we were using to manage the process: We had PowerPoint slides and Excel spreadsheets. But none of that was working. It just wasn't sticking."

#### Killing Two Birds with One Stone?

As the strategy team struggled, SAP's new design services group, led by Matthew Holloway—a veteran designer at several start-ups as well as at Apple—received its own assignment: look at next-generation solutions for HCM, SAP's human-capital-management tool. Having missed the Internet the first time around, SAP was concerned about missing new trends in areas like social networking.

## DESIGN TOOL

### *Reframing*

To better address your business challenges, first revisiting your definition of the *problem* may prove more productive than searching immediately for a solution. The framing of a question ultimately drives the nature of the answers. Narrow or conventional scoping of problems and opportunities may obscure or even prohibit the most creative solutions. The willingness of SAP's design services team to step back from their "assigned" question and ask a different, broader question paves the way for a more meaningful project.

As they started to look for patterns and opportunities, Matthew and his team began to realize that a larger social paradigm was evolving, involving not just HCM solutions but the entire enterprise resource



planning (ERP) suite. They stepped back to ask the very designerly question, “Are we solving the right problem?” and concluded that they wanted to approach their task more comprehensively. So they sought input from the corporate strategy team, and the two groups saw an opportunity to work together to address both their challenges. What SAP senior executives saw as two discrete and parallel issues, the strategy and design services teams believed could be combined into a more powerful framing of a single project: taking the hitherto *theoretical* examination of Web 2.0 and making it concrete by looking at how it might impact the internal challenge of cascading goals and objectives throughout SAP itself as a company. In other words, the two groups would work together to understand in detail how Web 2.0 was affecting their customers by using their own company as an example.

Thus was born Project Torrent and a commitment to bring together the best of business strategy and design to address the issue. “The idea was that a *cascading* of goals represented a neat orderly series of waterfalls moving down the organization,” explained Ryan. “A *torrent* was something that was inherently more chaotic, more powerful, and harder to predict. That better showed the spirit of what we wanted to capture in our collaboration.”

The SAP strategy group comprised traditional business strategists and ex-consultants like Ryan. The design services team had only recently been chartered. It was the brainchild of Hasso Plattner, one of SAP’s founders, who had become intrigued by the potential of design thinking while working with Tom Kelley of IDEO and was determined to establish it as a core competency throughout SAP. “Hasso felt that SAP used to have a much better design approach,” Matthew told us. “In the early days, the company didn’t have its own data center, so that required developers to sit at customers’ sites to actually build the products.” As a result, developers understood the user’s experience and were able to brainstorm solutions and use customer feedback to improve their products. “It was much more participatory and much more engaging,” Matthew explained. But as the company grew, it lost this vital connection to users. “Developers were both geographically and mentally isolated from the customer base,” he told us.

The composition of the design services team formed to address Hasso’s concern was deliberately diverse. Of the thirty-five people on the team, only about a fifth were traditional designers. Others came from a range of backgrounds: anthropology, computer programming, sales, and

even physics. What they had in common was an openness to design thinking and positive personality traits: optimism, high energy, and a willingness to get up from their desks to see what was and was not working. “People who’ve gone through formal design programs sometimes view their skills and tools as being almost bonded to them, their identity,” Matthew explained. “It’s hard for them to accept that while they may have better design skills in the classic sense of form and color, they don’t have the business context in which to make decisions or know what to explore. Design thinking is really more about the approach to the problem than it is about the solution.”

As team members were selected to join the Project Torrent team, finding MBAs from the strategy group who were enthusiastic about taking the journey of design thinking was not easy. Interestingly, finding designers proved even more challenging, for reasons Matthew described:

Two designers had joined the team who were more traditional “capital D” designers. They were into the aesthetics and the formality of design—the black turtleneck piece. They didn’t want to share design with other people. It was *their* profession. One guy explained that it would be like asking a physician to allow anyone to practice medicine. It was ethically wrong, in his mind. He chose to leave the team, and we brought on other designers who were more willing to share their approach. We looked for people who felt that everyone can design, who realized that everyone can be creative and everyone can have good ideas.

Successful team members from both the design and the strategy sides enjoyed learning from each other. The corporate strategy group held boot camps for the designers, and the designers shared their methods with the business strategists. Jointly, they looked at ways to merge the approaches.

### The Journey Begins

Project Torrent team members began by interviewing groups inside the company that contributed to the business planning of the ERP suite. They also conducted onsite interviews with fifteen of the top fifty SAP customers, but the results were not as rich as they had hoped, as Matthew explained: “We were looking at a very large solution, on the scale of an ERP. Individuals didn’t really see that part of it. It was like the six blind men and the elephant.” The team did, however, begin to develop a sense that companies wanted to tap social networks in order to connect people more informally and distribute information more broadly, but they

didn't have the tools to do it.

What also proved valuable during this initial research phase was looking at some of the emerging technologies, talking to SAP's experts in emerging best practices, and researching the millennial generation's interests and needs. The work with the millennials, undertaken in partnership with Steelcase, the office furniture company, revealed an insight that the team considered significant: For this group, transparency was very important. "Peer-based feedback and transparency around performance were emerging trends among millennials," Matthew noted. "If I'm totally transparent about performance, I want people giving me real-time feedback. Millennials all share information. They all get to be leader for a day." A generation that looked to Wikipedia as its information source and wanted to rate every transaction on eBay would likely bring different expectations about information availability into the workplace. Millennials would expect transparency in their organization's decision making as well, Matthew reasoned.

The team started to appreciate that the work flows within organizations could be seen as more than formal flows of information that moved through a corporate hierarchy. They could be seen as a different kind of *social* activity. The team realized that it could begin to leverage tools like social graphs, which charted personal relationships. As Matthew described it:

Over time as you mine a social graph, the *real* work flow of the organization becomes transparent as opposed to the formal work flow, that idealized work flow tied to roles and responsibilities. There's a gap between the way process is supposed to work and the way it really works. Most people know that. Those who can work the system find ways of working around the formal structure. But a company like SAP is all about structured work flows. For some of the old guard, it was hard to imagine that people don't follow process. But people were going through LinkedIn and *then* going through their ERP system to see what vendors worked with their company. So the onus was on the individual to figure it all out. But *what if* the ERP system actually helped you by giving you that transparency?

## DESIGN TOOL

*Social Graph*

The term *social graph* was popularized by Facebook to explain the ways in which social networking sites allow users to take advantage of the relationships between individuals. Social networking tools are increasingly prominent in the design thinking space and can greatly facilitate core activities such as customer co-creation and hypothesis testing.

These kinds of questions and insights drove the process. It was an intense experience—Matthew described it as “locking eight people in a room for six weeks.” The team took over a design services project room with floor-to-ceiling whiteboards and soon managed to fill them. To make their whiteboard drawings more consistent, they came up with cardboard templates.

## DESIGN CHALLENGE

### *Your Work Space*

The good news is that creating the kind of physical space conducive to design thinking is neither expensive nor complicated. Ideally, you need a fairly empty room with moveable furniture and big blank walls, like the one the Project Torrent team uses. The bad news is that most corporate conference rooms and offices are filled with big immovable furniture—such as a table in the center—and walls that are hidden behind art work and credenzas.

### Building the Prototype

Many thousands of Post-it Notes later, the team considered how to package what it was learning in a compelling way. They wanted to create a prototype that could be used to engage SAP colleagues in a conversation that brought all of the elements of the discussion together, in one place, to tell a compelling story about both the business case and the customer value proposition.

First, they needed to select a medium to work in. An important criterion for the prototype was the ability for everyone to work with it. “It was just us designers and businesspeople getting together and building this thing,” Ryan explained. As a result, the team selected the lowly PowerPoint program that all team members knew, rather than the more sophisticated designer-oriented software packages like Illustrator or InDesign, which businesspeople on the team would have struggled with. “Each slide of the deck represented a frame within this animation that

showed the story,” Matthew explained. “As we built out new stories and added pieces to it, we would just add new slides to the deck. PowerPoint also allowed people to check out slides. The slide deck was whiteboarded up on the walls, and we really did a deep dive in putting it together.”

What they ultimately produced was not your usual slide show. The final deliverable merged what would have been multiple presentations: a traditional business presentation with SWOT diagrams and two-by-two matrices and spreadsheets embedded in it; another on trends and emerging best practices from the internal world; a story that followed an SAP team through a series of challenges; and a design prototype presentation with screen shots. “This fifteen-minute presentation felt like a demo,” Matthew recalled, “something we were clicking through to demonstrate what we wanted it to *feel* like to make this transformational change happen for SAP. It was a prototype of a way of cascading our objectives into and throughout an organization. It represented what Enterprise 2.0 could mean to a company like us.” There was continual movement back and forth between macro and micro views of the unfolding story. One slide contained multiple stages of a story, from one user’s point of view. You could then zoom out to see twenty users’ points of view, connected to a social graph, which would then be overlaid on a work flow from the ERP system.

## DESIGN TOOL

### *Prototyping*

The term *prototyping* conjures up images of polished mock-ups of future products. Banish those from your mind. Design thinking prototypes are more often simple visualizations such as storyboards, flow charts, or even PowerPoint slides (not filled with bullet points!). Their job is not to look good—it is to make your ideas tangible and concrete to your key stakeholders so they can give you better, more realistic feedback. Storytelling, as used here by the Project Torrent team, is one form of prototyping. Think about a book you loved. What made it so engaging? Characters you cared about? A plot that kept you on the edge of your seat? Let your inner storyteller speak, and see how much more compelling others find your ideas.

The deck contained several stories, stitched together to illustrate one

major point. Though the characters had names, the team avoided calling them “personas.” SAP had used personas in the past, and they had flopped; the designers joked about “persona non grata.” One story in the slide show was of a fictional management team in South America struggling to meet its sales numbers because of a shortage of employees. The team was trying to get three new positions released from human resources and had to go through two or three different parts of the organization to get the approvals they needed. The second story followed the same team after the manpower addition, looking at the supply chain and the challenge of getting components to South America now that deals had closed. The story then took the supply chain a step further, looking at multiple organizations sharing parts of their social graph, which opened up questions about how to manage security. The next story focused on the topic of performance evaluation, part of the human-capital-management piece of ERP, and how the social graph could be used, now that the new business was under way, to solicit performance feedback on employees. People could post comments about employees’ performance and give them impromptu ratings. Consequently, the employees were able to receive real-time feedback.

The prototype allowed users to zoom out and see meta views and then to overlay dollars of revenue on top of the story. It also overlaid SAP’s business model to indicate the profitability of various products, such as supply chain solutions. It indicated who SAP competed against in that space and what their offerings were.

“I haven’t seen people gracefully merging multiple presentations into a single presentation this way before,” Matthew told us. “That was a bit of artistry and genius on the part of this project team. They found a clever way of imbedding material that would normally be in five or six different presentations, given by six different teams over the course of a month, with all of the background information in the proper place.”

The last step before finalizing the prototype and taking it on tour was to take a learning launch approach that used a technique borrowed from McKinsey called “syndication.” This involved vetting first the problem, and later the solution, with the executives most familiar with that part of the story, whether it was the head of the supply chain application or those working on the human resources solution. As Matthew described it: “We were making sure that they couldn’t punch holes in it. We didn’t want them to see too much of the final concept, but we wanted to make sure that we knew enough about what they would have questions about so

that we could answer all of them. So we knew where they were leaning, and the issues that they faced, and their hot buttons. We wanted to make sure that we knew where the landmines were. It was really an ethnographic study.”

Vetting the nascent prototype with the executive board yielded a completely different outcome than previous discussions of Web 2.0. Matthew described the members of the executive board as “some of the smartest people I have ever met,” yet in past conversations they had failed to grasp the full implications of emerging technologies. “When somebody talked to them about concepts like social networking or Web 2.0,” Matthew explained, “it was typically through a series of Gartner Reports or something like that—a very text-heavy slide deck. They had no idea what they were getting into when they said things like, ‘We are going to turn the suite into Web 2.0.’ That would be somebody’s tag line in a conversation and everyone would nod and say yes, but no one really knew what that meant. When you are doing strategic planning, it’s easy to throw around big words. We were able to show them what this was going to mean not only in terms of what the product was going to look like but also how we were going to have to build the product, maintain it, and sell it.” These revelations captured board members’ attention. The planned twenty-minute presentation turned into a three-hour discussion.

Once the prototype was ready, the team took it on a “world tour,” walking more than half of SAP’s most senior managers through the Project Torrent experience in a way that reflected its dual goals: exploring the business implications of Web 2.0 *and* proposing a new way to work together at SAP. “We thought that the prototype absolutely represented how we wanted to change the top-down cascading process into something that better reflected a real way of making the organizational change that we required,” Ryan noted. “And so that was half the conversation. In the other half we talked about what that meant for where we should be taking SAP’s product strategy.”

For Ryan one story in the prototype stood out as a key example of what needed to happen at SAP. In it an executive looked at his dashboard and realized that his team would need to be more aggressive on pricing to meet its quarterly goals. His team members then communicated this insight through the system to the sales force. This, for Ryan, was where the new process succeeded and the traditional cascade failed. As he explained:

When a salesperson gets an e-mail from a customer requesting a

price discount, how should that very micro decision be tied to the executive's realization that they're going to have to be more aggressive with pricing? The goal is taking that strategic insight, which started with a performance dashboard, and figuring out how that can make its way into the tools people use every day—literally into their inboxes. When a customer's e-mail comes in, the salesperson should get contextual information to determine whether this particular customer is a strategic one and therefore eligible for the new pricing program. And this would be reflected *back up* to the executive so that he could see whether this course correction, this shift in strategy, was actually being carried out on the ground.

In this scenario, the information moved from an executive's dashboard down to the salesperson's e-mail and then back up to the executive, who now saw his or her decision reflected in real change at the front line. In Ryan's view, "That was exactly what needed to happen at SAP. We're making shifts in strategy that need to be reflected in people's day-to-day decisions."

The prototype carried a sobering message: The shift from top-down unidirectional information flow to more-distributed approaches, while representing a big opportunity, was a marked departure from SAP's capability set.

#### What Did Design Thinking Contribute?

Ryan, speaking from the perspective of a traditional business strategist, believed that design thinking brought significant value to the strategy process in several ways. First was the push to prototype. "That felt very uncomfortable," he told us. "It didn't feel like we were ready. We still hadn't figured it all out." In a traditional strategy process, he noted, they would have spent much more time working with their ideas and frameworks before developing a prototype. But the results of that early prototyping turned Ryan into a believer. "Once I saw that even a rough prototype was really changing the conversations we were having with people," he told us, "it became very easy to get behind that. You have to see it to believe it. It's far more concrete and open than the traditional 'I'm going to walk you through my PowerPoint' approach. Once I started experiencing that, there was no going back."

Without a prototype it felt like corporate was imposing its will on managers. With a prototype managers participated enthusiastically. Ryan described these two very different kinds of conversations to us. The first



was business as usual: “A conversation without a prototype went like this: ‘We’re running a strategic planning process, and here are the forms that we’d like you to fill out, and you’re going to have to justify what you will need to meet these goals and objectives. Here’s the process; here’s the deadline.’ It’s the classic strategic planning process. You can imagine the reactions you get: ‘Where’s the value? What am I going to get out of it?’”

He contrasted this with the conversation involving the prototype: “This conversation was entirely different: ‘Let me tell you a story; let me walk you through an experience of how this could work. Imagine if we could work that way here at SAP. What do you think?’ That was such a different starting point. People got excited as we walked them through this experience, and they gave us good feedback. That took the classic process of filling out the forms and all the usual stuff that we still needed them to do and it put it into context.”

A second benefit came from making early conversations external as well as internal—another push from the partnership with the design services group. “It felt very uncomfortable to be talking to our customers,” Ryan told us, “because we hadn’t all agreed on an approach yet. But the design services team pushed us to go outside early, to be very customer-driven in our thinking.”

The third and perhaps most important contribution of design thinking Ryan noted was that, as he put it, “It gave us an excuse to work differently, to have different types of conversations. It gave us permission.”

Matthew, from the design side, also saw great value in merging the two approaches. “Imbedding a strategy into a prototype and making that prototype articulate the strategy—we have carried that forward,” he told us. “Once you see a prototype that articulates the strategy—so you don’t have to read that sixty-page report or sit through months of meetings with PowerPoint slides and try to formulate the solution in your head—it is hard to go back.”

### Measuring the Impact of Design

Project Torrent’s impact at SAP was dispersed across the organization and sometimes revealed itself in surprising ways. Trying to measure that impact, Ryan felt, could be a distraction. “If we had focused on ‘Here’s how we’re going to measure the impact,’ we would have missed the majority of it,” he told us. “We saw one of the product teams taking its product in a different direction that captured a lot of the ideas and the spirit of what we were doing. The people on this team were inspired by

the prototype, and unbeknownst to us they picked that up, and we saw this amazing demo a year and a half later. They took it and made it their own.”

The Project Torrent team hoped that its prototype would itself become a product, Ryan noted. Even though it did not, it still had a profound effect on the organization. “But the impact was hard to peg,” Ryan observed. “You could argue that it was only because that shift was under way already at SAP that Torrent found a receptive audience. You need an environment where people sense the fact that this stuff is changing and are therefore open. It was the right time and place to be having these conversations.”

Matthew believes that the impact of their work continues. As he told us:

Not all the teams necessarily call it design thinking, but the customer centricity, the rapid prototyping, the willingness to take risks and try stuff—that kind of mind-set is gaining a lot more traction in the organization. SAP is a very big company; it moves slowly. Eighty-five percent of the world’s business transactions go through an SAP system at some point. So they’re not going to replace it wholesale. It’s going to be a slow process to change out the entire product line. But slowly they are making progress in that direction.

### What Do We Take Away from SAP’s Story?

For those of us who have toiled long and hard trying to achieve strategic change in organizations, the lessons of the SAP story are heartening. Design thinking offers a path out of one of the core dilemmas confronting strategy: how to take abstract, high-level prescriptions and make them meaningful to the people who must change their behavior in order to implement them. But achieving that takes the courage to try something new and the tools to succeed when you do. Design thinking has many lessons to offer in this endeavor.

#### *Be Willing to Reexamine Your Definition of the Problem*

Design thinking insists that we be willing to revisit, throughout the process, the boundaries of our pursuit. This is especially powerful in the context of strategy formation, where asking the wrong question carries more strategic risk than coming up with the wrong answer. The path to SAP’s dramatically improved strategic process begins with the willingness of both partners—corporate strategy and design services—to step back and consider if they are asking the right questions. For the

designers, the realization that they are dealing with an issue broader than their assigned focus sends them to the strategists. From that conversation, and from the strategists' frustration with their traditional planning process, comes the idea that they can work together to explore and explain Web 2.0 by modeling an alternative strategy for cascading goals and objectives, using their own company as the subject.

*Focus on Helping People Experience a Strategy*

To succeed, new strategies must be *experienced* rather than merely *discussed*. In other words, they must be more than cognitive; they must be vivid, personally meaningful, and compelling to the people who must execute them. Nobody experiences anything by being told about it. Making a fuzzy future real requires people not only to understand the strategy's content but also to *care* about whether it gets implemented. Design's emphasis on prototyping and storytelling makes that much more likely.

*Move Continuously Back and Forth Between the Abstract and the Particular to Make Strategy Real*

One of the primary roles of the strategy-making process is to give form to ideas, to render the abstract concrete. While strategy gains its power from abstract ideas, these must be translated into something concrete if people are to experience it. By making the abstract concrete in a believable way, strategic intention is linked to the details of daily practice. SAP's carefully constructed prototype tells many stories, at varying levels of detail: from the high-level warning of the potential obsolescence of SAP's core capabilities to the plight of a salesperson responding to a customer's pricing request. From executive dashboard to salesperson's inbox, the connections are made.

*Take the Best from Both Worlds*

Design thinking is not a *substitute* for traditional analytic processes, it is a *complement* to them. The people at SAP do not ignore financials or competitive analysis; instead, they blend them into their stories. Even in composing the Project Torrent team, they look for employees who want to share their own knowledge base and learn from others.

*Expect to Be Uncomfortable*

For those trained in traditional business methods, design thinking does not necessarily feel like a natural act. Note how often Ryan describes himself as uncomfortable with what the design services group is pushing the business strategists to do. Our deeply ingrained habits and beliefs about when we talk to customers and even colleagues, about the efficacy

of telling people things versus showing them, even about the idea of “playing” with a prototype, really get in our way. Get ready to be nervous, and then (as Ryan advises) go do it anyway.

*Let Everybody Touch the Tools*

If you want the kind of engagement that produces results, you have to be willing to invite people into the game. The decision of the SAP team to use PowerPoint rather than more powerful software programs offers a case in point. You must democratize design and put it in the hands of people, not just designers with a “capital D,” as Matthew calls them. They need to be able to participate in creating and telling the story, rather than passing the “soft stuff” on to the hired guns to make it pretty—or compelling.

Recall the advice from Ryan that we shared in [chapter 1](#): just take bits and pieces of design thinking, rather than being intimidated by the need to use the whole process end to end. He had more to say about how to get started on bringing the design thinking tool kit into your work: “My one piece of advice would be just to start. And have fun with it—especially for people who spent most of their careers using more-structured analytical approaches to problem solving, this is a huge breath of fresh air. Embrace the quirkiness of it and use that as an excuse to break people out their shells. If you’re having fun, it leads to successful outcomes.”

All that from an ex-McKinsey guy. What more can we say?

## Redesigning the Customer Contact Center at Toyota

### **THE BUSINESS PROBLEM**

Providing high-quality and efficient answers to customers' complex questions

#### THE CONTEXT

Toyota Motor Sales' Customer Contact Center for the Toyota, Lexus, and Scion brands

#### DESIGN'S CONTRIBUTION

Engaging a cross-functional team of call reps, software engineers, business leaders, and change agents in a design process that transformed the service center experience for both customers and frontline employees

WHEN WE HEAR “customer contact center,” the words that come to mind are generally not “fun” or, unfortunately, “great customer service.” However, with the help of design thinking, that is exactly what Toyota was able to provide for both its customers and its employees. This chapter takes us to Toyota’s Customer Contact Center for Toyota, Lexus, and Scion in Torrance, California, where Gayle Darby from the University of Toyota and Diane Jacobsen from Hitachi Consulting invited a wide-ranging team of colleagues into a collaborative process that combined empathy with Contact Center associates, rapid prototyping, and the creation of a “sandbox” to address a stubborn challenge: giving great customer service in a complex Contact Center situation. Using “fun and done” as its mantra, the team produced a set of impressive business results.

Our Toyota story begins, as do so many of our stories, with a new leader whose curiosity about the present and belief in a better future led her to ask a different kind of question. That leader was Elaine Matsuda. “I am a fix-it person,” she explained to us, “and I was asked to take over customer relations for Toyota and Scion. It was taking twenty to forty minutes to get a phone call answered. The Lexus side was separate but was having similar issues. Customer satisfaction was down. One of the key ways to improve that was to be able to reach someone when you called.”

Elaine believed that the best people to help solve this problem were the customer service reps themselves, and so she gathered them together, bought them breakfast burritos, and posed an interesting question: “If you were king or queen for the day, what would you say you need in order to do your job the ideal way?” What Elaine heard in their answers was that the reps were most frustrated by the challenges of answering customers’ questions in a timely manner. She passed that

information to Lexus, which agreed to collaborate with Toyota and Scion on a new system for handling customers' queries.

## DESIGN TOOL

### *The Possibilities Question*

At the heart of design thinking lies a powerful question: "What if anything were possible?" So many of our innovation efforts begin by accepting constraints. Without the courage to set aside today's obstacles long enough to envision what would be ideal, as Elaine does here, we relegate ourselves to stunted ambitions and incremental change.

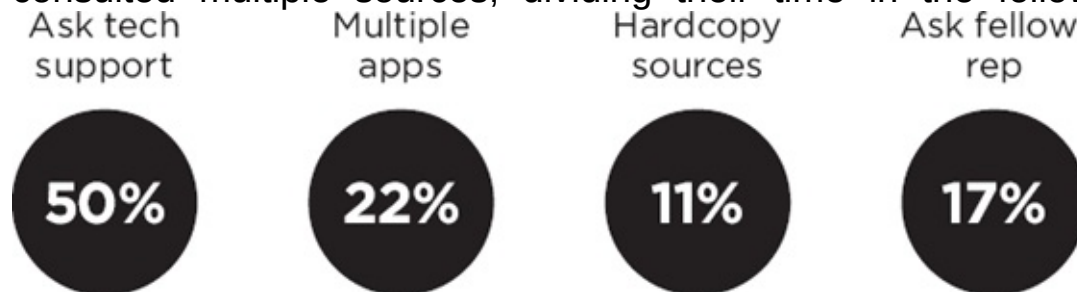
Elaine knew that the project would require a change management process. Ideally she wanted to develop a tool kit that could be used over and over again in multiple projects, becoming a part of the culture. Change management at Toyota included identifying all stakeholders and what they needed to know, do, or own; communicating; training; and testing. Toyota's past experiences had demonstrated that this approach to change management, though a significant effort, gave projects a chance to succeed. Without it, they tended to fail because people didn't feel a sense of ownership, and, therefore, did not adopt the change. Elaine knew of these successes and wanted to improve even further.

Enter Gayle Darby, a change expert at the University of Toyota (the company's in-house training center), to lead the charge from a change management perspective, working with two managers from the business and the information systems groups. The three managers worked closely together to ensure continuity, while coming at the project from different angles. Elaine remained involved, removing obstacles for the team and providing counsel when unforeseen issues arose.

Gayle had come to Toyota as a body and paint engineer, with an undergraduate degree in automotive technology and a graduate degree in management with an emphasis in international business. She was promoted and moved to the University of Toyota, where she built her repertoire as a change expert. Having been involved in other change processes, she began to see opportunities for improvement. Diane Jacobsen joined Gayle's team as an external consultant with Hitachi Consulting, a global IT consulting firm. After studying human-centered design at Chicago's Institute of Design, she worked as an architect

(focusing on creating experiences more than structures), taught design, and worked with top international consultancies.

As the team investigated the situation at the Contact Center, the opportunity for improvement became apparent. To answer customers' questions, reps were physically walking from their desks to filing cabinets for hard copy information or to a technology support person. This was all happening while the customers were on hold. Customers made three calls, on average, to resolve a problem. During these calls, reps consulted multiple sources, dividing their time in the following way:



The software side of the equation was equally challenging. Reps regularly had up to thirteen applications open on their computer screens as they searched for content to answer. Customers' questions. This added needless complexity and potential confusion.

Initially, the solution seemed as straightforward as the problem: Create a new database for the reps. But in the end, what Gayle and her team created was something more transformational: a revision of the entire process, both human and technical.

Learning from Past Mistakes Gayle had previously conducted a series of executive interviews at Toyota aimed at understanding why big projects fell short or failed altogether, and she took the learning from that project into this one. The cause she had pinpointed was that relevant stakeholders were often not engaged early in the process. Gayle was determined to avoid that mistake in the Contact Center project. She would take a holistic approach that encompassed people, process, and technology. It would not just be about bringing in software engineers to fix the problem. Instead, she would involve key stakeholders from the beginning, including the Contact Center reps and business executives, as well as software engineers.

The first thing Gayle did to understand the depth of the process was to go through the Contact Center training herself to get a firsthand understanding of what a rep's life was like.

She explained: "That's how the whole thing made sense for me,

because I understood what they were up against. It's really a tough job. And they have so much pressure to answer questions and provide excellent customer service.”

## DESIGN PRINCIPLE

### *Ethnography Isn't Only for Customers*

The idea of diving deep into customers' perspectives seems obvious to most businesspeople. We often fail, however, to apply ethnographic tools to our internal partners and stakeholders. Their support is essential to the success of our innovation efforts, and understanding their problems and needs can often be as valuable as understanding customers'. Gayle's efforts to understand the reps' daily lives provides a strong foundation for the redesign of the Contact Center process.

Software and Soft Power Gayle and Diane used the rich information they gathered from observing the Contact Center employees in action to build a process flow diagram and to map their journeys. Gayle explained how those activities led to insights: “As we watched the reps, we realized that some of the websites they were using weren't necessarily the sites that were built for them. That was really an ‘aha!’ moment. What they needed was quicker access to these other sites. Because we were able to map where they were *actually* going for information, we saw that we could work with the vendors in charge of those sites to link them to ours, so that reps wouldn't need thirteen screens open. It would be much easier for them to find the information they needed.”

## DESIGN TOOL

### *Journey Mapping*

Journey mapping is one of the most powerful weapons in the designer's arsenal. It traces a stakeholder's “journey” as he or she performs a series of steps involved in an experience, with special attention to the emotional highs and lows. It is most often used to map a customer's journey, but when used in the redesign of internal processes to gain a deeper understanding of employees' work routines, as Toyota does, it can yield important insights as well.

The journey map helped Gayle and Diane quickly zero in on areas in



the process that could be more efficient and effective, particularly the software interface. They now understood how to reduce customer call wait time, which would result in more calls serviced in shorter periods of time, leading to happier customers and significant projected cost savings.

**From Contact Center Reps to Change Agents: Top-Down Meets Bottom-**

**Up** The team was aware that the project would succeed only if the solution worked for the people who would have to use the new software.

That is, the solution actually had to solve the reps' problems. In Gayle's view, this meant making sure that the software developers were hearing the users' perspectives. "There were a lot of people with a lot of knowledge in the Contact Center," she explained, and the solution needed to reflect that important knowledge base.

Gayle also knew that there would be people who were rooted in the old system and wouldn't want to change. The team would need not only to create a new software product but also to sell the new system to reps and train them to use it. This, Gayle realized, would require a large change management effort; embedding the design thinking process in it would help this effort's success. She started by identifying training leads and facilitators among the reps who could help spearhead the effort by becoming change agents. In selecting these people, Gayle worked with their managers and focused on the right mix of reps. They also onboarded a few key people who were influential because of their deep knowledge and were thus capable of stymieing the progress of the project.

These change agents played several roles: They reviewed training materials to improve the way they engaged the reps, provided facilitation support when the process wasn't clear to the reps, and attended pilot training classes to head off confusion. They also acted as liaisons among their peer reps, helping to communicate and coordinate all training activities and serving as tutors and mentors to their colleagues.

"We helped them understand what change management was and to better understand what we were trying to accomplish," Gayle explained. "We shared with them how the new system would make their lives a lot easier, so that they would endorse our efforts and spread the word."

To involve and gain buy-in from the larger group of reps, the team communicated that it was listening to their desires to be able to access information more quickly and reduce customer hold times. Team members told the reps about the steps being taken to meet their needs while emphasizing that they also wanted to hear feedback from them.

And so Gayle's team incorporated opportunities for input throughout the design process. As a result reps made suggestions and raised issues related to the user's experience, and the engineers worked to resolve them. According to Gayle, "That's how we ended up with such a great product. It was by far one of the best experiences that all of us had as a team."

"The end user was completely committed and involved in the process from the beginning," Diane noted. "It was really important. It doesn't happen on all projects. So even though the executives developed the vision, the ideas were coming from the bottom."

She observed that "one of the key factors was that people from the business had different backgrounds. We had technical people, people from an organizational change management background, and user experience people. There were a lot of different roles that played out across the project and played *together* on the project." She elaborated on the importance of gaining user buy-in, explaining that the design of the software user interface "was very much a collaborative effort, like a puzzle being put together. The employees were designing components and were able to assemble them in a way that would feel valuable." This approach kept everyone on the team centered on the people, not just the technology.

**Including Engineers and Designers: The Importance of Context and Integration** Gayle's focus on creating an inclusive team extended beyond the end users of the software product to include engineers and designers as well. She explained that "in any other project, those engineers and designers would complete their piece and leave." Diane described the typical development of software when engineers are in silos: They are only told what to do and not *why*: They don't understand what behaviors they are encouraging or discouraging or interrupting or disrupting with every piece of code they write. They are interpreting completely out of context. Design thinking is very much about understanding the context you are operating within. If you don't have that, people are being set up for failure. We weren't willing to set anyone up for failure in our project. This project would be different. Gayle and her team put the engineers through a change management training class, insisting that they sit through a half-day session to understand what the team was attempting to do and why, and what the results needed to look like for customers. Initially, the engineers thought that Gayle and Diane were crazy. "They usually come and go throughout the project depending on their

expertise,” Gayle explained. This time their involvement paid off: “They warmed up to the idea of what we were doing; they saw that we were arming them with more information and that we celebrated their successes, which typically doesn’t happen. We really wanted to put those engineers in there, so they clearly understood, at any stage, what we were trying to accomplish in the end and be a part of something much bigger.” This provided the context that had been missing for the engineers.

Gayle found that including engineers and designers throughout the process had other important benefits: “They would meet everybody on the team, and *that* was the piece that really helped to engage, build relationships, and ultimately motivate them to be more creative. In the end, everybody on the project was extremely engaged. People felt like they were really included. They told us, ‘No one has ever involved us to this extent. We just come in, do our piece, and don’t really ever have the opportunity to see the final product.’ I think they found a new sense of ownership.”

Diane also emphasized the importance of the user interface (UI) to the user’s experience. She explained that often in companies UI is “nothing more than picking out colors and deciding where the branding should go.” However, in this project, the team fought for a much more prominent role for the UI designer. She explained that “we were much more involved at the center of the people, process, and technology, because we had to understand everything that was going on.”

Co-Creation: Playing Together Improving the Contact Center operations was a serious endeavor, but it included an element of fun. “We had ice cream socials, newsletters, contests,” Gayle told us. “We made it exciting.” Many of these activities were spearheaded by the change agents, because they knew better than anyone what would resonate best with the reps. They also responded to the reps’ requests for a space devoted to training by converting a conference room into a library environment with computers, whiteboards, and a television. We think of this space as a “sandbox,” where people can play with new ideas and approaches, removed from the demands of their jobs. Creating this dedicated space was novel for Toyota and was a crucial step. Reps who wanted more personal and professional development could go there to take online courses without interruption, watch technical videos, learn about vehicles, and acquire other information that would help them better answer customers’ questions. It was a safe space where people could

learn together without the pressures of customer demands.

Again, team members brought a spirit of fun to the training by incorporating games and competitions. After training the reps on how to enter the new system, they offered a prize to the first person who found the answer to a typical customer question. That atmosphere of play helped users uncover the system's strengths and weaknesses in a way that more rigid approaches might not have. It also tapped into emotions more deeply, which not only improved the reps' ability to provide top-notch solutions to customers but also deepened their attachment to the project and to its success.

## DESIGN PRINCIPLE

### *The Power of Play*

Playing allows us to break free of our often linear mind-sets. The concept of a sandbox is a powerful innovation tool because it delineates a place devoted to play. At Toyota, the sandbox combines a physical space with a prototype of the new system that allows users to build new pathways and structures in a fun, relaxed way. Add just a bit of competition, and the sandbox helps reveal things that more serious trials may miss.

Gayle was enthusiastic about the resulting co-creation process and how it engaged the reps in an iterative cycle of designing and improving the new system: "People used these training sessions to tell us what was working or not, as the system was being built. Usually a technical associate would sit next to the rep and take notes of each exception and suggestion that arose. Then that night, the engineers would work on them, so users were keenly aware that updates were actually being made and that they were being listened to."

Gayle's team involved the engineers in their celebrations as well. She told us, "We involved them in fun activities, so it wasn't just about setting up another training. There were bowling parties, pizza, and fun activities." All this strengthened communication and morale.

**Creating a Team Culture** As the size of the project team grew—to close to a hundred people at its peak—its leaders felt the need to describe "who we are and what we're about." So they created three rules: "fun and done," "nine times," and "plan for success." "Fun and done" was the attitude that they could have fun *and* get their work done. It invoked

design's sense of play. "Nine times" was created to minimize complaining and miscommunication: You had to tell someone something nine times in nine different ways before you were allowed to complain about not being understood. "Plan for success" was about visualizing the end state you wanted to achieve (another principle of design thinking) and then doing whatever it took to reach it. These rules became mantras that everyone on the team owned. In many ways, they came to define the project.

The team also saw Toyota's culture, particularly the "Toyota Way," as key to the successful integration of design thinking into the project. The Toyota Way, an approach that involves deep respect for the individual and the alignment of employees at all levels around the goal of continuous improvement and *genchi genbutsu* ("go look, go see"), has achieved almost mythical status in management circles and has attracted many followers across industries. Diane explained: "One thing I've seen with Toyota that I haven't seen in many other companies is that it is founded on the principles of innovation. People like Gayle have the opportunity to introduce something that they feel is really important, and the company will support that."

#### Results!

The new system worked. As Gayle declared, "The greatest success was that customers were able to get their questions answered in a timely fashion." Metrics showed that reps were able to solve customers' problems with an average of two fewer calls, decrease hold time by well over a minute, and generate cost savings of millions of dollars from saving time and empowering reps to solve more queries. This led to happier reps and more satisfied customers. In fact, as Diane explained, "When we showed the new system to one of the former reps, she actually started crying because she was so happy with what we were showing her."

The project also turned Toyota reps and managers on the team into advocates for rolling out similar processes throughout the company. Today, this project is a model for others. Gayle consults with those starting new projects to walk them through the process and has even created an organizational change management class at the University of Toyota on the use of design thinking tools: "Every class we offered has been filled. We also developed a book and structured all of the materials so that anyone can use them and have since added this to our online site. We took a lot of the resources and expanded on them and used them in ways that would help the rest of the organization."

To Gayle and Diane, the distinctive elements of their process were key: creating a shared goal with multiple stakeholders, involving end users, understanding their current context, and then working toward their goal in a way that respected both rigid engineering necessities and the nuanced ways that human beings think. Creating this kind of left brain/right brain partnership, they believed, was crucial for their success.

#### What Do We Take Away from Toyota's Story?

Design thinking, we see here, is a flexible approach. Toyota deployed it to improve internal processes. In terms of this project, the “customers” weren’t car buyers; they were Contact Center reps and software engineers.

*Respect Employees' Perspectives Most organizations are hierarchies, and hierarchies have their advantages. Strong leaders can act decisively and drive change. But the view from the top is often obstructed. Well-intentioned solutions based on superficial knowledge of what goes on at the front line rarely produce optimal results, and they often come with unintended consequences that create more problems. Local knowledge can be every bit as critical as strategic vision to finding good solutions.*

*When situations are complex and changing, engaging all levels of the organization is far more likely to get you where you want to be. The Toyota team's commitment to creating an inclusive conversation among all parties, especially the Contact Center reps at the front line, paid off handsomely. One of our favorite bits of wisdom comes from Max De Pree, the former CEO of Herman Miller, who noted that business organizations are not democracies that make decisions through the ballot box. What employees deserve, he observed, was not a vote but a voice.*

*Don't Expect Multifunctional Teamwork to Be Easy Multifunctional teams have many stakeholders pulling in different directions. When members are used to working within their respective silos, working outside them can be frustrating. Focusing on the larger goal and on clear communication can keep members moving in the same direction. The iteration that's a crucial part of design thinking helps engage multiple functions by allowing many points of interaction, and a spirit of play can diffuse tensions when they arise.*

*Think of Change Management and Design Thinking as Great Bedfellows If we want to move beyond ideas and into action, design thinking involves change. In all innovation initiatives, there's a transition from the present to a very different future. This is rarely painless, and we ignore the lessons taught by change management at our peril. On the flip side,*

*design thinking can compensate for some of the common shortfalls of change management approaches. At the outset design thinking uncovers the whys and wherefores of adjusting to new methods, processes, or systems through deep interaction with stakeholders. Involving everyone in the process builds alignment and helps people learn and adapt as they go. Both approaches are built on the idea that the more we know about the people we're trying to create value for or innovate for, and the more involved they are in the process, the better off everyone will be.*

*Remember That People + Process + Technology = Success We have Apple to thank for establishing once and for all that the human part matters, even where technology is concerned. At Toyota we saw a problem that looked like it needed a classic technology solution: better software. But paying attention to the human beings involved produced the insights that led to the right kind of technology solution—one that was embraced by those who needed to make it work. Remembering the human factor in solving problems helps focus attention on processes and technologies as facilitators rather than as answers in and of themselves.*

*Tempering the application of processes and technology with the understanding of how and whether people will want to interact with them produces more robust solutions.*

## Social Networking at MeYou Health

### ***THE BUSINESS PROBLEM***

Helping large employers and insurers reduce employees' health care costs by creating a business model based on the notion that social networks can improve well-being and help people help themselves

### ***THE CONTEXT***

MeYou Health, a subsidiary of Healthways, a global company offering comprehensive solutions to improve well-being and decrease health care costs

### ***DESIGN'S CONTRIBUTION***

Bringing qualitative approaches to a quantitative corporate environment

WE'VE ALL HEARD about how social networks are changing the way we behave and interact. The superficial effects are easy to spot as we chuckle along with shared jokes on Facebook, but the possibilities for deeper societal change are less obvious to most of us. But not to Chris Cartter, the founder of MeYou Health, who teamed up with Bill Hartman at Essential Design to leverage design thinking in order to navigate the opportunities of this digital phenomenon. Chris and Bill worked together to research, prototype, and scale the foundations for MeYou Health, which has grasped the power of virtual networks to help people improve their personal health and create lasting and positive behavioral changes. It was a long journey to MeYou Health for Chris Cartter. He spent a decade doing international development work, mostly in conflict areas in the Horn of Africa. From the start, using networks to achieve change was compelling to him: During the famine in Ethiopia in the mid-1980s, he explored how to use information technology and networking to disseminate information more quickly and more widely in the region. He then became a father and, as he described it, "stopped doing dangerous things." Instead, he went to the Boston University School of Public Health, where he ran a series of early networking projects funded by the Robert Wood Johnson Foundation, and made the transition from development to health care. He helped develop the world's largest smoking cessation program as the CEO of the small start-up QuitNet.com, until its acquisition by Healthways, by way of Axia Health Management.

Those experiences left Chris with the insight that big entrepreneurial



opportunities lay in improving people's health using online networks. Healthways, on the corporate side of the fence, was seeing similar potential in the Internet. A \$720 million company headquartered in Nashville, Tennessee, Healthways was in the business of well-being. The global company helped employers improve their employees' health, and thereby decrease their health care costs, through a portfolio of tools and interventions designed to educate people on how best to use available health care services and care for themselves more effectively. By mid-2007 Chris had passed off his QuitNet responsibilities and was asked by the Healthways CEO to think about the company's Internet strategy. This led to a long internal discussion about how to create a team to implement social Web and mobile applications capable of solving big behavioral health problems.

This was an open-ended challenge, the kind toward which Chris had always been drawn: "I've always tried to figure out how to solve various problems through a design-thinking process, though I never called it that. But the challenges I found myself getting involved in never had clear solutions, and it was always the process that we tried to bring to solving them that was important."

Chris had a big idea: a new platform that would help people improve their well-being. But initially he didn't have a game plan or even a clear product in mind. "I didn't want to enter with a product idea," he told us. He looked instead for "people who lusted after a blank canvas."

#### Building Partnerships

Big ideas need big partners, and Chris found a powerful and supportive partner in Healthways. It seemed like a perfect fit for this new venture. Chris recalled, "They believed in us to make this happen. And they placed the bet."

That bet took the form of creating a wholly owned subsidiary, called MeYou Health (MYH), with Chris at the helm. This arrangement was ideal, giving Chris access to corporate resources, top-shelf talent, and the flexibility to develop products without getting bogged down in corporate process. And it seemed like a good fit for Healthways, too. "Healthways' strategy was to continue to drive innovation by developing engaging, consumer-based Web and mobile applications," Chris explained. "But this was not something they found easy. Often, in bigger companies—and this is the innovator's dilemma—the processes that sustain growth and operational capabilities are at odds with the kind of thing we're trying to do. So it really needs to emerge in a conscious way

from the culture of the organization.”

Headquartered in Boston, home to a thriving technology talent pool, MeYou Health was 1,500 miles away from the corporate office in Nashville. But senior managers at Healthways, and the CEO in particular, were extremely supportive. They realized from the get-go that MYH’s independence was critical. “They would rather own disruptive technologies and products and disrupt themselves than be disrupted by a competitor,” Chris explained.

MYH and Healthways approached the problem of improving health and well-being from different directions. Healthways had been very successful in using large amounts of data to develop sophisticated algorithms for predicting risk in disease and health management. The company approached well-being with that same mind-set. In 2008 Healthways had announced a twenty-five-year partnership with Gallup to quantify and monitor changes in the state of the country’s well-being. The output of that partnership, the “Well-Being Index,” involved completing 1,000 telephone surveys *every night*. Healthways also developed a well-being assessment for individuals. This research helped Chris and his team understand the definition of well-being across six parameters: emotional, physical, behavioral, work environment, access to health resources, and overall life outlook.

While this approach quantified well-being, it didn’t explore it as a human phenomenon. “We’re product designers,” Chris told us, “and all of the predictive intelligence in the world may tell me that you’re a diabetic who’s not taking care of yourself, but it doesn’t tell me how to help you or connect you with people in your social network who want to support you.”

Understanding well-being deeply enough to change it, Chris knew, would take something other than a telephone survey. He and his team at MYH needed a deep sense of the journey people were on as they let their health deteriorate. More important, they wanted to map the path from a state of poor health back to good health. They needed to understand well-being at a deeper level than the Well-Being Index could provide. “Our biggest challenge,” he recalled, “was simply figuring out how to engage people in anything to do with their well-being. How should we approach that? Unless we can answer that, we’re not going to generate any ROI for anybody.”

#### Bringing Design Thinking to Health

Enter Essential, a Boston-based design firm. Chris happened to be on a panel with Bill Hartman, the head of Essential’s research practice, at a

health care conference. The timing was right: Chris was looking for ways to deepen the skills of his small team and was searching for innovation capabilities. He was impressed with Essential's approach to his problem space. Bill was intrigued by the challenge Chris posed. "It wasn't so much about an outcome like a new product or a service," Bill recalled. "It was more about a *way of thinking*, helping them develop a proprietary point of view, a new sense of competitive intelligence or even intellectual property that could lead not just to single products or services but to entire platforms and generations of products and services."

Bill brought in a cross-functional team that included Zarla Ludin, Gillian Langor, and Scott Stropkay to help MYH build a unique perspective in this new market space. The research plan Bill's team put together for MYH was unconventional. In Bill's view there were three stages of research needed for developing novel ideas: *exploratory*, which focused on developing empathy for users through such techniques as ethnography and shadowing; *co-creation*, which gave people an opportunity to create something in a hands-on activity, using, as a starting point, some hypotheses about what users value; and *evaluative*, which tested hypotheses as one moved from low-to high-fidelity prototypes and minimum viable products. Bill chose an approach from those three on the basis of where a client was in the development pipeline.

The MYH project presented special research challenges. Potential customers for this service were so diverse—ranging in age from twenty to seventy and with a mixture of family situations, motivation levels, and technological savvy—that the project required an interview pool larger than was traditional for ethnographic research. Additionally, Bill had to consider that MYH had a hypothesis that social networking could help people improve their health and well-being, and so gathering data on that would be crucial. Knowing that social networking could take many forms, Bill recognized that he would need to engage the interviewees' creativity directly, and so he decided to use co-creation heavily. "We really wanted to focus on the *creative mind-set* that people could offer to the conversation if they were given the right tools and stimuli," he said.

The Essential team chose to conduct interactive interviews with three dozen candidates representing diverse demographics. Each was given several homework assignments to complete before the interview. The first was to capture the rhythms of their daily lives for a week, noting specific experiences that affected their well-being, from skipping

breakfast to talking with a spouse about financial matters. They were given journals to use for this assignment.

## DESIGN TOOL

### *Journaling*

Asking people to keep a journal, as MeYou Health does, is an ethnographic technique that is often an efficient way of gathering quasi-longitudinal data. Where you lack the time or budget to observe people in their homes or workplaces, journals can quickly and economically give you a feel for the rhythms of their lives. People are often asked to keep photo journals, as well as written ones—an easy task in this day of camera-equipped smartphones!

They were also asked to create a collage that symbolized their perception of well-being and their five-year projections for themselves. “People used a lot of images in these collages,” Bill recalled. “That was a wonderful launching pad for them to tell the story of their own physical well-being and how activity could play a role in that: things like being able to get back to horseback riding or playing golf. So their activity wasn’t just about the number of times they made it to the gym this month; it was about being more physically fit in order to be able to pursue other lifestyle interests or keep up with grandchildren or what have you.”

Two-hour interviews with each participant were conducted at Essential’s office by Bill and his staff, with the MYH team looking on via remote video monitor. The interactions were videotaped from multiple angles to capture more than just the interviewees’ faces. The interviews, intended to facilitate co-creation, used what are known as *projective techniques*. Interviewees, for instance, were given a pinwheel and asked to draw themselves in the center and their friends and family members on the petals. They then rated how the petals affected their well-being, allowing them to create a social graph almost intuitively. During the early part of the interviews, a researcher in the other room created sticky labels that captured some of the well-being goals interviewees mentioned. During the second half of the interview, participants were asked to position these on a two-by-two matrix that captured how difficult these goals seemed and how much help they wanted in achieving them.

## DESIGN TOOL

### *Projective Techniques*

We are often unable to articulate our deepest beliefs and emotions, but when we do something like select images for a collage, we might reveal more than we know. These sorts of activities are known as *projective techniques*. They have ambitions beyond asking people what they think. They use open-ended ambiguous stimuli, often visuals, to attempt to get at hidden or deeper thoughts. The Rorschach is the most familiar example of a projective psychological test.

“These hands-on activities,” Bill explained, “gave us a deeper understanding of how to make the design meaningful relative to other, more conventional research methods.” They also helped the team begin to get a sense of the aspects of well-being most amenable to influence through social networks. Moreover, interviewees’ deep engagement underscored that MYH was on to something worthwhile.

#### Finding the Patterns

The interviews helped the team create a segmentation scheme that captured the differences in how people thought about well-being. This led to the creation of seven personas, which still hang on the wall at MeYou Health as a reminder of the company’s purpose. The differences of the personas are significant. “The me-time impoverished, for instance,” often have significant caretaker roles, such as mothers of small children. “Validation seekers” want to count their progress in some tangible way, such as steps walked or calories consumed; for them it is all about checking off items on a to-do list. In contrast, the “enlightened” have a very holistic view of well-being, which incorporates mind, body, and spirit. They are much more interested in the journey than the destination. The “idle” depend on extrinsic motivation and need easy challenges, social in nature, because they are so easily discouraged. The “excuse makers” tend to use a lot of humor and are concerned about being shamed for not meeting their goals.

## DESIGN TOOL

### *Personas*

Personas are made-up people, standing in for real ones. Instead of being conjured up in your imagination, however, they are created out of bits and pieces of data gathered from actual people during ethnographic research. As such, they are archetypes representing different clusters of characteristics. They are often an important tool

for uncovering unarticulated needs and for inspiring the generation of innovative ideas.

Each persona needed its own approach to improving well-being. For the idle, challenges needed to be simple and extrinsically based, like a text message; ideally, they would involve a partner or group. The me-time impoverished, who are focused on the needs of others, might respond better to a challenge to prepare a healthy family meal than to a more individually focused activity. As Bill explained, “Doing healthy new activities can actually create a sense of guilt—‘I’m taking time away from my family by focusing on myself.’”

## 7 Distinct Personas and What Motivates Them

### **Aware and Achieving**

- fresh, diverse, content
- new challenges, self-assigned goals (more rigorous)
- options to coach others

### **Me-Time Impoverished**

- social outlet
- guilt free
- valuable use of time
- provide benefits for dependents

### **Validation Seeker**

- numbers, metrics
- standards for personal comparison
- reason for challenges

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### **Enlightened and Discovering**

- knowledge and inspiration
- not interested in points (intrinsically motivated)
- challenges they don’t do already

### **Idle**

- challenges must be fail-proof
- extrinsic motivation to return
- do with partner or group

### **Excuse Maker**

- anonymity and privacy—to eliminate shame
  - social groups based on same life situation
  - light-hearted approach
-

## Enabled

- goals are “wants”
- fast results
- ability to have a personal coach or sponsor keep tabs on them

### Reporting to Healthways

To sway the corporate audience at Healthways, the dataset of thirty-six interviews needed to stand up to decades of population-level data. To help Chris wring as much value from the interviews as possible—and to help those with a numerical bent better understand the opportunities hiding in this qualitative data—Bill highlighted video clips that supported higher-level findings and created visuals of the personas, which made them feel more real than lists of characteristics on a PowerPoint slide. Chris invited Bill to Nashville to be present when he shared the findings with Healthways’ senior staff, including the CEO, CFO, chief medical officer, and head of marketing.

To everyone’s relief, the response was an enthusiastic endorsement of the direction MYH was pursuing as it sought to bring a social well-being intervention to market. “Seeing the visual and the interpersonal data immersed them in the information and helped these qualitative findings feel much more concrete to this numerically oriented audience,” Bill said. “They saw the impact, and they saw the potential meaning. They were surprised by how candid people were in their remarks, talking about their employer or their spouse or the way they were feeling about their own mental outlook or why they didn’t show up at the gym for their spin class after they paid for it. And they attributed that to the research plan that we created and the dynamic in the one-on-one interviews. Some of the material they found so compelling that Healthways asked us to create a series of video vignettes that they could use for a viral marketing campaign.”

The discussion demonstrated the power of combining qualitative and quantitative data for a more complete picture. “They realized they needed to look at the qualitative as well as the quantitative. They were only *half* right with either approach,” Bill told us. “By combining them, you get a whole that’s greater than the sum of the parts.”

This response was one that Bill had seen often: “It’s so common to hear clients say things like, ‘We should have done this years ago!’ after they hear that voice of the customer for the first time and see that many of their assumptions don’t make a lot of sense. They see that the more

they can learn about the perspectives and attitudes and behavioral underpinnings of their customers, the more opportunities they will be able to identify.” Not surprisingly, after its presentation for MYH, Essential was invited back to work with two other divisions of Healthways.

### Getting to Game

Within eighteen months, the MYH team had created and launched a dozen different products: websites, mobile applications, and Facebook and Twitter apps. From the outset, Chris believed that games could play an important role in behavior change, especially as a vehicle for jump-starting social connections. “We believed that game design and specific game mechanics that had been successful in engaging people in online applications could be applied in a tasteful way in a well-being context,” he explained. So MYH hired talented game designers and engineers, who started developing small applications in order to have minimum viable products ready for launch as quickly as possible. Rather than giving the product team a traditional specifications list, however, Chris immersed them in the research data so that their early designs could be deployed and refined in the context of real user interactions. “This is the most important distinction between how we operate and how larger companies in the health care space typically develop products,” he observed. “They have a big idea and a long list of specifications and features, and often build the product over nine to twelve months before a single person uses it. Often the product is over budget and misses its deadline, and when it launches and nobody uses it, people are scratching their heads wondering why.”

### DESIGN TOOL

#### *Minimum Viable Product*

We have already talked a lot about prototyping. An MVP takes us one step further. It is a high-fidelity prototype that has the minimum level of acceptable functionality built into it. A prototype might be a nonfunctional representation of a website or a wooden sculpture of a car. An MVP is a beta (or even alpha) website that we can click through or a version of the wooden car that we could drive around a parking lot.

One crucial theme emerged from the interviews: that tiny, incremental changes can lead to bigger changes. “Most people who set a big goal—for example, ‘I’m going to lose twenty pounds and run a marathon,’—



typically fail,” Chris noted. “So our mission is not a goal-driven one; it’s about a *journey*. We want to help people in their journey to improve their well-being by making it fun, by making it social—not knowing necessarily where they’re going to end up, but ultimately we hope they’ll be feeling a greater sense of well-being.” This idea lay at the heart of their central hypothesis that online networks of people supporting one another can motivate the behaviors that increase well-being.

Moving away from big, overwhelming goals and focusing on smaller, easily achieved goals helped the team rapidly build simple prototypes and develop a number of networking platforms simultaneously, creating an impressive array of applications. These included online experiences such as Monumental, a mobile app that sets a tangible goal of getting people to take stairs instead of elevators. It physically tracks the number of vertical steps a person takes and then maps that progress against what it would take to climb a well-known monument such as the Eiffel Tower or the Empire State Building. This allows people like the validation seeker to calibrate and then celebrate smaller successes and work toward greater, long-term goals.

MYH launched what has become its flagship application—Daily Challenge, which helps users take small steps to improve their health—as a closed beta test with several thousand people, again using a co-creation process with that customer base. The development team iterated constantly using the feedback it was collecting from users. During the early stage, Chris explained, “every week or two we were launching new features and making those decisions on the fly, on the basis of how people were interacting with the product.” Combining the design process’s reliance on rapid prototyping and the ease of iterating new software versions, the team was able to gain both high-quality data and experience building viable products. “We were not trying to predict what this product should look like and working on it for a year and then launching it,” Chris told us. “We were doing it entirely in the context of a direct-to-consumer audience. And now we’re adding in a more rigorous research component around usage data so that we have more information.” The MeYou Health team confirmed its hypothesis that online social interaction could have a positive effect on individuals. To date, Daily Challenge has enrolled 250,000 members who have completed more than 6 million small health-improving actions.

Chris explained that the principal metric was return engagement: the percentage of people who have used the product for a length of time and

continue to use it. “About two-thirds of Daily Challenge users are still active after ninety days,” he noted. “Most websites are feeling great if they get 20 percent to 30 percent engagement at thirty days. After one year, 34 percent of our users are still using the product, which is much higher than rates for any other wellness product we know about. That’s huge.” And it’s easy to see the networking effects as people form challenge groups and support groups in the application.

Bill attributed this venture’s multiple layers of success to engagement with customers at every stage of the process. “Co-creation was the secret sauce in this project,” he said. “It is so satisfying that people not only want to use these applications themselves but also want to spread them virally through social networks. That affects well-being not just among individuals but among an entire social graph or perhaps even an extended community.”

#### Integrating Design and Business

It’s generally a tall order, Bill reports, to persuade quantitatively oriented managers to accept qualitative findings. Yet in this case, he and the MeYou Health team prevailed by offering compelling evidence and were ultimately able to provide hard proof of how much these products had spread throughout online communities.

To Bill, the potential conflicts between these two conceptual camps are rooted in the nature of information that each values. The business world is often wedded to certainty and to repeatable, *reliable* data. Design is more interested in what is *valid*. Both play important roles. “The things people said about how they felt about their weight or well-being management generated a lot of empathy on the part of the design team,” Bill observed. “That’s got a really high degree of validity to it. The number that comes out of the Well-Being Index is really reliable. But it won’t tell you how to move forward or how to engage people in a way that they find satisfying, so the two need to work hand in hand.”

#### Next Steps

Having established the foundation of the business, Chris has now taken on the next challenge: demonstrating health outcomes. “If we can prove that participation in Daily Challenge improves well-being in a measurable way, we can position the product in the marketplace as a genuinely effective intervention. The only way to answer that question definitively is with a randomized controlled trial. That’s a really high bar!” Working with leading research scientists, MYH designed and executed a trial involving 1,503 adults. The primary success measure was well-being

improvement, as measured by the Well-Being Index developed by Healthways. At 90 days, participants using Daily Challenge had improved their well-being 2.35 points more than those in the control group—a significant finding given research demonstrating that a one-point increase in well-being translates into a 1 percent decrease in health care costs. “These findings demonstrate not just that Daily Challenge is effective in a real-world setting but that well-being and health are social phenomena, and so interventions need to leverage social networks,” Chris told us.

MYH’s on-going research continues to point to the importance of social influence and connection, Chris noted, but it has also challenged them to broaden what they consider to be the target of their efforts. “Social connection seems to drive the sustained engagement with our products,” he said. “The ways in which we’ve been able to make good on the social network analysis side of the value proposition has exceeded my expectations. I think there’s tremendous opportunity to think about what we’re doing much more as a *network* intervention than as an individual one. That wasn’t evident until we got into the process.”

Chris is enthusiastic about MYH’s ability to continue to use design thinking: “We’re entering adolescence here,” he told us. “When we met Bill, we were infants, and now we’ve got a much better sense of our own process and how to approach opportunities using this kind of design research. I think that we have a good shot at institutionalizing the design thinking process and melding it with an agile engineering capacity to move much more quickly from ideation to proven product in the market.”

#### What Do We Take Away from the MeYou Health Story?

Chris and Bill used design thinking to uncover deep insights into people’s approach to well-being. In the process they also succeeded at combining seemingly opposed data sources. Their story at MeYou Health showed us methods for connecting people deeply, even viscerally, with their social networks around an essentially private topic. And making that connection helped MYH’s quantitatively oriented partners understand the power of emotionally based, qualitative research. Our takeaways flow directly from these dual accomplishments:

*Don’t Choose Sides—Work with Both Quantitative and Qualitative Data*  
Each has its place in the innovation journey. The Well-Being Index data allowed MeYou Health to develop a clear and accurate description of the state of the country’s well-being over time. But it didn’t offer enough insight into *why* the behaviors emerged as they did or *how* to change them. Design thinking’s more qualitative approach helped Chris and Bill

dig down to this deeper level. Instead of providing a statistically significant description of the behavior of the whole population, it zeroed in on understanding just thirty-six people deeply enough to inspire more creative thinking about how to engage them.

In the initial design thinking stages, exploratory research inspires us to think more creatively. It does not purport to tell us what percentage of the population is “idle” versus “me-time impoverished” or to “prove” that any of our new creative ideas will in fact work. The former requires quantitative methods (like sizing target markets), and the latter comes later in the design thinking process, when we test hypotheses. This is the progression we see in MYH: using quantitative data to identify a fertile area of opportunity, moving to qualitative methods to deeply understand the human beings who are potential targets, and then turning to evaluative research for rigorous testing.

#### *Exploit the Power of Social Networking for Research, Co-Creation, and Evaluation*

We believe that the simultaneous ascent of design thinking and social networking is not a coincidence. They are made for each other. They have synergistic effects, accomplishing together what neither could on its own. Design thinking benefits from attention to social networks in many ways. Social networks help us identify and reach out to people dispersed around the globe who would otherwise be difficult to study. They allow us to crowdsource ideas and pursue open innovation approaches. And they facilitate quick, cheap experiments that let us start with a small but targeted group of co-creators and build from there. Social networking may soon outdo the Post-it Note for innovation enabler of the century. But the benefits run both ways: MYH demonstrates that we can introduce all the new apps we want, but to fully leverage the potential of social networks we need to understand the human being at the other end of the smartphone. Design thinking’s tool kit is perfect for that.

#### *Capture the Richness of Emotions*

Design thinking encourages us to understand users at a level that they themselves might not understand. Grappling with that complexity during observations and interviews can be overwhelming. Bill and Chris used video to make sure that they captured everything when they were given the opportunity. Notes, voice recordings, and transcripts are good, but getting to look—over and over—into the eyes of customers while they’re talking about difficult ideas helps unpack layers of information and insights. Not only do videos help in the generation of new-product ideas,

but also they engage those not directly involved in the process by capturing layers of nuance in human behavior. We saw this in the 3M story with Lee Fain's future-use-case video, we see it here with MYH, and we will see it again with FiDJI in our next chapter. Video is a powerful tool for conveying the human nature of stakeholders. Done well, it is difficult for even the most hard-bitten “numbers” people to ignore.

### *Build a Minimum Viable Product*

This involves more than just prototyping a concept to see if it holds together. The simplest versions of a product, combined with user research, can reveal whether the idea has traction long before you sink money into a concept destined to be a loser. Prototypes exist to see if the original concept can function in the real world. Minimum viable products go one step further to engage early adopters. These brave users tend to have a slightly more forgiving outlook on new products and are valuable resources for identifying opportunities to improve your concept and for getting the word out to other users.

### *Don't Underestimate the Power of Small, Incremental Steps*

The notion of “radical innovation” tends to reject anything that is not sufficiently big and novel. We believe that this view is badly misinformed—and dangerous to the health of innovation. MYH discovered that when it comes to improving their well-being, people need tiny, repetitive pushes toward good decisions. Many of the online tools feature daily challenges: bite-sized goals that move toward big outcomes. We believe the same thing can be true for innovation. Thinking smaller—placing small bets and learning fast—is an undervalued innovation strategy.

Having gone through the design process, Chris had a few ideas to impart to others getting ready to embark on the same adventure: “There's a culture that I think that you need to explicitly foster, and you need to hire people who are really comfortable with that. Not everybody is, and in many ways that's why we were established as a separate entity connected to a larger company. We were given the latitude and the independence to create a team of people who love that way of thinking and working.”

## Industry Collaboration in Financial Services with the FiDJI Project

### ***THE BUSINESS PROBLEM***

Developing a deeper understanding of consumer issues in the financial services sector and fresh perspectives for addressing them

### ***THE CONTEXT***

A French consortium of financial services institutions

### ***DESIGN'S CONTRIBUTION***

Using the traditional tools of design—with an emphasis on ethnography, personas, and co-creation—to pioneer a new approach to innovation and create a collaborative spirit among industry competitors

HEAD-TO-HEAD competitors working collaboratively to explore new pathways to innovation? While using words such as finance, design, and joy? Unlikely! But deepening concern over the erosion of trust in the financial services industry following the global economic meltdown led such a group of financial services executives to search for a new way to gain an understanding of customers in their industry. They found it in design thinking. They called their project FiDJI (Finance, Design, and the Joy of Innovation) in order to bring together their world of finance, their enthusiasm for design, and the thrill of innovating together. In this story, we travel to Paris and put design thinking to a strenuous test as three professors from Ecole Parsons à Paris team up with a design consultant to guide a consortium of top-tier French financial institutions on an innovation journey to regain customers' trust.

The FiDJI story begins with the creation of Le Club Innovation Banque Finance Assurance, organized by Altran, a leading European consulting firm, which brought together corporate innovation directors from thirty-five leading retail banks and insurance companies in France. Led by Jean-Luc Strauss, Altran's head of financial services innovation, the group gathered to share ideas and explore new paths to innovation. At a conference in late 2009, Jean-Pierre Legrand from BNP Paribas (a consortium member) became interested in the possibilities offered by a design thinking approach and wanted to learn more. Professor Brigitte Borja de Mozota's pioneering work bridging the fields of business and design and her high-profile positions at Université Paris Ouest and Ecole Parsons à Paris (now the Paris College of Art) put her on Legrand's radar. He sent her an e-mail asking a single question: Could design

thinking help the financial services industry? Her enthusiastic “yes” led to an invitation to attend one of the consortium’s meetings.

While pleased that such an elite group of managers was interested in design thinking, Brigitte was skeptical. She knew that the financial services industry faced unique obstacles to innovation, such as regulation and the lack of patent protection. As she described it: “I arrived there with my books under my arm and explained a little bit about what design was. It was just about a ten-minute conversation. I gave them some papers I had written on the subject. In my mind, I really thought that nothing would happen because of the context—and because they were all math experts. What they knew about innovation involved algorithms. This was really introducing them to the human side, the social sciences, which they knew little about.”

To her surprise, she was invited back. Five of the thirty-five institutions indicated an interest in learning more about design thinking and wanted to push forward with a “proof of concept” for this different approach to innovating. The interested group of executives was drawn from both banking (BNP Paribas, Société Générale, Crédit Agricole) and insurance (Groupama, Generali France).

## **DESIGN DELIVERABLE**

### *Proof of Concept*

In design thinking, “proof of concept” is a prototype that demonstrates the feasibility of a new idea. The FiDJI project demonstrates that design thinking can bring value to financial services. It proves that this idea is feasible in reality, not just in theory. This is a very different type of “proof” than the a priori analytical demonstration of a project’s ROI.

Thrilled with such an opportunity, Brigitte accepted, knowing that it would be a tough project to manage given the challenges of her clientele. She began by building her multidisciplinary dream team, which included an experienced design consultant (Juliette Damoiseil from BETC Design) and two of her Parsons colleagues (Alice Peinado, an anthropologist and chair of the design management department; and Magdalena Jarvin, an anthropologist), who would help Brigitte, Jean-Luc, and the five executives understand the roots of the mistrust and souring relationships between the big institutions and their customers. The group of ten began

its work.

### Changing Views of Design

The group's brief was wide open, though from the start the goal was clearly twofold: to explore the specifics of applying design thinking to the challenges of the financial services industry and to equip the executives to build a core competency in design in their institutions. As a result, there was a strong emphasis on co-creation, with the design professionals involving the executives at every stage of the project, as well as on thorough documentation of the design process itself.

From the beginning, the executives were able to rise above competitive concerns as they worked together, with Brigitte's university affiliation at Université Paris Ouest providing a kind of research lab where they could set aside their own brands and explore industry-level issues. But the design approach was challenging for them. Initially, they had a traditional view of design's usefulness: "They wanted to make it nicer to go the bank," Brigitte told us. "They had this attitude that it was about decoration or something like that." Brigitte and others on the team had grander ambitions; they knew that design thinking could offer insights into the organizations' strategies and the business model of retail banking.

The executives were also uncomfortable with the seeming vagueness of design thinking's front end and research methodology. They were used to embarking on an innovation project with a clear end in mind—and having an answer in their pocket when they started. The open-endedness of the design brief and its emphasis on exploration versus idea generation was both perplexing and unnerving to them. Valerie Dray, the director of marketing and innovation at Generali France, commented: "The 'not knowing' part was very hard for us—not being able to see where the research was headed." They were also highly skeptical of the qualitative nature of design research. To them, it wasn't "real" data; it was "soft" and dependent on intuition. It lacked the scientific rigor of the quantitative methods they were familiar with.

## DESIGN CHALLENGE

### *Fighting Statistical Significance*

Design's methods involve going deep on small samples rather than wide to many users through surveys and other similar market-research methods. Numbers calculated to four decimal places may *look* rigorous and precise, but that is often, in our experience, a false



precision. Any calculation is true only to the extent to which its assumptions actually mirror reality. Design's deeper dive is aimed at understanding core behavioral issues that more shallow approaches often assume away. It's wise to remember GIGO (garbage in, garbage out). Generalizability" is not a key concern at this stage, because exploratory research is meant to inspire innovation, not size markets or "prove" the value of a given solution.

Despite these concerns, the executives were committed, and Brigitte wanted to build up the team's spirit. Team members rallied around a name, FiDJI, which stood for Finance, Design, and the Joy of Innovation, and a logo, the symbol of a diamond. The diamond's shape was a reminder that any problem had multiple facets and should be viewed from different angles.

The team began a pattern of meeting on a monthly basis. At each meeting Brigitte would spend an hour providing some theoretical and scholarly background for the design thinking approach. At various points in the project, when the executives became uneasy or impatient, she would return to her strategy of providing them with the theoretical background of the work they were doing.<sup>1</sup>

The first hurdle the executives faced was within their own organizations: Crafting the legal agreement that gave them permission to work together took a full six months. Out of that frustrating experience, the team bonded. "We had a common enemy," Brigitte explained. "The lawyers!"

#### Field Work Begins

The next step was to begin data gathering. In addition to restoring consumers' trust, the team wanted to investigate other issues. As Alice described:

We were asked to investigate how lengthening life spans were affecting people, specifically with respect to banks and insurance products and services. Money became the entry point for addressing these issues. We wanted to explore how people related to money: what it represented for them, how they used it, and so on.

The team conducted eighteen in-depth, at-home interviews with people representing various situations: adolescents, young professionals, couples with children, divorced parents, retirees, and people of different socioeconomic backgrounds. The interviews probed the journeys that the

customers embarked on when interacting with their banks or insurance companies. In the spirit of co-creation, the team members conducting the interviews videotaped them so that the executives could experience the conversations for themselves.

As a next step the researchers wanted to observe customers as they conducted business at bank and insurance offices. Initially, the executives balked, concerned that this would entail explaining the project to their organizations in more depth. But eventually, several agreed, and observations took place in three banks and one insurance agency. Twelve bank and insurance employees who were relationship managers and counselors were also interviewed.

The findings of this initial fieldwork challenged much of what the financial services executives believed to be true and contradicted the results of some of the institutions' own quantitative survey-based research. Frequently used segmentation categories like age and socioeconomic standing were found *not* to correlate with interviewees' behavior. Even the issue of key life events, a central preoccupation of the executives early in the study, turned out to be less significant than the availability of and trust in the advice of bank employees who acted as counselors. The significant relationship was to money itself rather than to the financial institutions and their products, and that relationship was complex. Six families of variables were identified as central to the relationship with money: past experiences, current situation, daily management of money, views on bank and insurance institutions, relationship to parallel systems, and vision for the future. The researchers concluded that "no one variable was determinant with respect to the interviewees' perception of money or their relationships to bank and insurance companies" and that they all needed to be attended to. They offered as an example that "an individual might feel confident about his relation to money and be turned to the future irrespectively of his or her concrete financial situation, while another might feel vulnerable and retrenched in the past in spite of a better position or a more consequent bank account."<sup>2</sup>

They reached the following conclusion: "Products should be targeted finely to customers on the basis of deep and extended knowledge not simply of their financial situation but their attitude with respect to savings, placements, or indeed any of the several products available to them. Offering the wrong product to a client could ruin the client-counselor relationship forever and even result in a client's abandoning the institution

altogether.”<sup>3</sup>

The team produced a short video that captured the clients’ voices for the executives. Despite the tough message the presentation delivered about how their customers viewed them, the executives’ response was positive. Seeing and hearing their clients made the findings both more human and more meaningful to them. Brigitte recalled their reactions: “At the end of the presentation there was a lot of smiling and agreeing. They were smiling because the presentation showed the crucial human side of customers’ interactions with banks. The executives were still smiling despite the fact that many of the points were negative because of the crisis and people’s general stress about financial matters. The presentation had given them a snapshot showing the human elements of their industry that they had not investigated before.”

The next step was to use all the information gathered to create a set of personas to use in a workshop. The anthropologists and designers continued to work closely together in this phase of the project, creating ten personas, each a mixture of the real people they had interviewed, and developing scenarios based on real-life situations, such as buying a house. They captured the personas and the scenarios in a deck of cards, which they called the “FiDJI game.” “We had a lot of fun inventing the personas,” Brigitte told us. “It was a meeting with a lot of joy, asking ‘What does she look like?’ and things like that. We wanted to make these personas tangible, not abstract, and we did this by inventing the scenarios. Those helped people understand more about the creative process.”

The full team of ten met to test the game, using it to play out scenarios with the personas in order to get a deeper understanding of the customer experience and what that might mean for financial services institutions. This was an important phase; it helped all team members understand the nature of the design process by grappling with abstract ideas in a tactile way.

### Broadening the Conversation

The first workshop, held with a larger group of invitees—including some of the people who had been interviewed as well as other customers and the executives themselves—was a great success. The card game worked beautifully in encouraging people to generate creative ideas in a spirit of fun and play. Participants took a card with a life issue and came up with a response based on the different personas. The game focused on generating ideas around how the ten personas would react to the

different scenarios and what this might mean for the financial services institutions. The goal at this stage, as Brigitte described it, was divergent thinking, which provided more input for the designers to work with.

The second workshop was meant to go deeper into a single issue, to begin the process of converging. But with only three weeks between the two workshops, designers did not have enough time to digest the output of the first. In the second workshop participants identified forty-four ideas that the executives could grapple with both conceptually and functionally. This was too many. Brigitte recalled, “We had a difficult time, even though people were very pleased with the workshop. The worst part of the project was that there were so many ideas. How were we going to build some kind of consensus?” The divergent thinking had to converge toward a limited number of outputs. The executives were becoming impatient: They wanted to create something they felt good about taking back to their companies. Brigitte again countered their hastiness by recalling the theories of design thinking.

## **DESIGN CHALLENGE**

### *Drowning in Data*

It happens sooner or later in every design project we see—the tidal wave of data we’ve collected or ideas we’ve spawned threatens to wash us out to sea. Our advice: Stay calm! And remember that this is not about achieving “truth” or comprehensiveness. The focus here is on divergent thinking early on and using data to inspire us. The convergence part, with its whittling down, will come later. As managers, we know how to whittle! And the business case comes back to help us make our choices.

Sensing that the executives were losing faith in the process, Juliette met with each of them individually to gain some clarity on their differing expectations for the project and to build some alignment among them. She came away from those conversations with the decision to focus on just one of the six families of variables that had emerged from the earlier ethnographic work: the way customers preferred to work with a bank and manage their money, contrasting the “do-it-yourself” customers who wanted twenty-four-hour service and no human contact with the “high-touch” clients who wanted a “concierge” to answer their questions and solve their problems face-to-face.

Working closely with the Parsons team, Juliette made a short video based on a scenario of an architect who had broken both his legs and had a host of other problems, including an elderly father. The video was masterful in its condensation of six months of effort. As Brigitte recalled, “It lasted two minutes, but everything was there.”

Juliette drew on the thousand pages of ethnographic data collected during the weeks of interviewing and enriched the scenario to include many aspects of the financial needs of people who had fallen out of the mainstream. In the end, the executives found the architect’s story extremely compelling, plausible, and insightful. Now they could appreciate the human needs, wants, proclivities, and behaviors that their quantitative market research had not captured.

At the conclusion of the process, the team produced a prototype that fulfilled the “proof of concept.” It took the form of an Internet-based interface that allowed clients to personalize their financial information, assess their overall financial condition, and simulate future actions. It allowed do-it-yourself clients to handle their own transactions whenever they wanted and those interested in a more personal touch to customize their experience with the bank. The team affectionately named the interface “My Pig” (as in the animal).

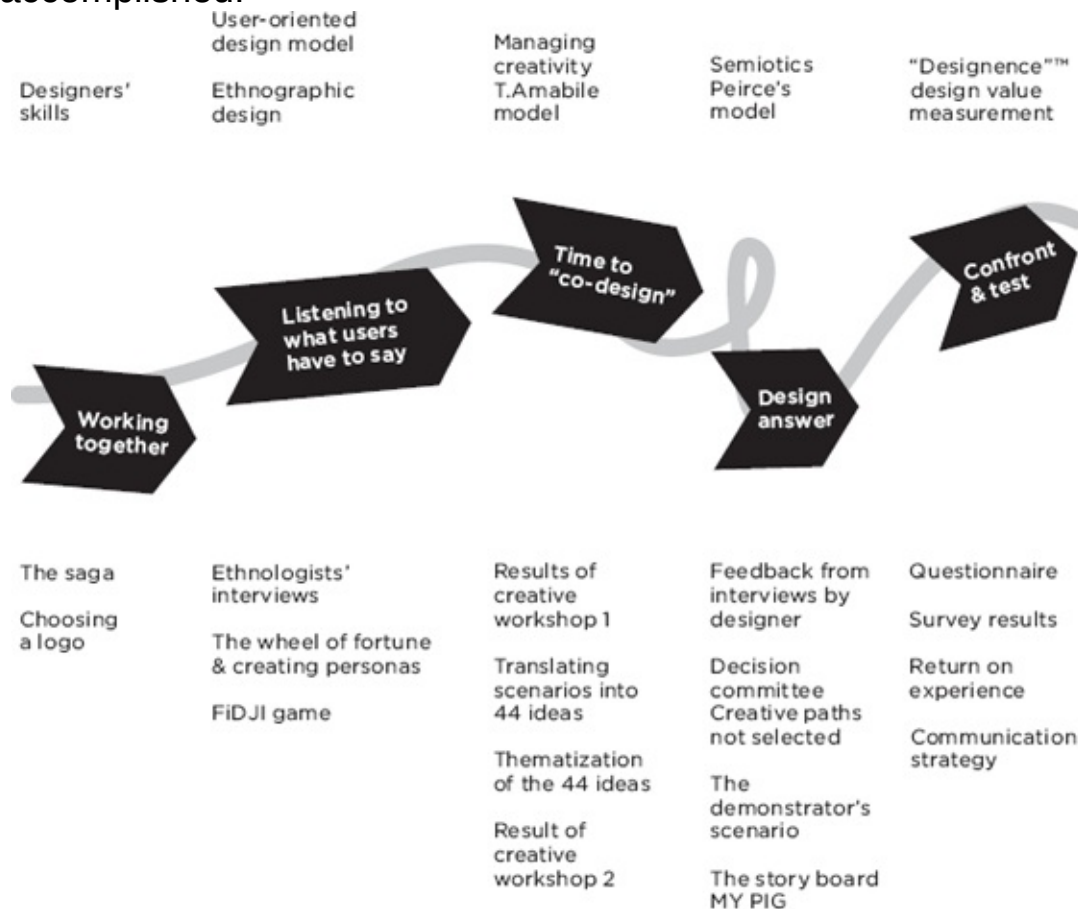
Each executive then returned to his or her own firm to work with the ideas. Each presented the interface and developed different ways to share it with their staff. Some firms encountered more difficulty in integrating the learning into organizational activities than others. Some continued to work with the Parsons ethnographers to explore new research questions using design thinking methods. Others, which had internal design departments, reengaged with them. Still others forged new corporate communications campaigns as a result of what they had learned.

In the interest of creating a path that could be followed by the individual firms in future projects, the academic team captured the journey that the ten had traveled together in the form of a history of FiDJI, showing each step in the movement from “working together,” to “listening to what users have to say,” to co-designing and coming up with design answers, to the final testing stage. (Please see the figure on the following page.)

#### FiDJI’s Success

FiDJI succeeded along many dimensions. At the project’s conclusion, in November 2010, three of the executives involved reflected on what they

had accomplished:



- "After a phase that could be characterized as 'terra incognita' due to the fact that I was not well acquainted with design theory, moving on to practical work was very useful and instructive. The richness of the interdisciplinary approach, the contact with the social sciences and creative people, and having recourse to fieldwork and 'real people' if not a complete discovery for me, at least reinforced my convictions."
- "This experience has equipped us bankers and insurers with a new pair of glasses through which to see the world, our society, our clients, and our jobs differently and without prejudices. FiDJI is the pair of glasses that enabled a multidisciplinary team to see/identify, work/conceive, and imagine/realize together."
- "Together we have demonstrated that the largest bank and insurance groups were capable of innovating and creating new work methods that open a real path for innovation within the increasingly intensifying international competition in this field."<sup>4</sup>

The project generated a rich set of insights and outcomes that each



participant used to foster innovation in his or her own institution. It demonstrated the power of the design thinking approach to an initially skeptical audience. And, perhaps most significantly, it changed the mind-sets of the executives who participated in it, helping them to appreciate the humanity of the clients they served and the power of a research methodology that they had initially seen as “unscientific” and “soft” to uncover valuable insights that their own “hard” methods missed. As Alice pointed out, she watched the notion of anthropology as a “soft science” transform from a pejorative into a positive.

FiDJI's recognition went beyond that of the participating institutions. In France, innovation is recognized by the French government in geographic clusters known as *les pôles de compétitivité*. The enthusiastic executives who participated in FiDJI nominated the project for an award in the Paris region recognizing extraordinary innovation in finance. FiDJI received the award in its category in 2010.

#### Reflections on the Process

One of the significant accomplishments of the final product, in Brigitte's view, was that it found a higher-order solution to seemingly opposite customer preferences. “The marketing mind-set would have created two services, two interfaces, two market segments: the ‘do-it-yourself client’ and the ‘concierge client,’” Brigitte explained, “not understanding that a client can actually be *both* on the same day. This is an example of the difference between holistic design thinking and analytical management and marketing thinking.”

## DESIGN PRINCIPLE

### *The Opposable Mind*

As F. Scott Fitzgerald famously said, “The test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time and still retain the ability to function.” The test of a first-rate design solution is the ability to find a higher-order idea that reconciles what seems like an inevitable trade-off, as Roger Martin has described in his book *The Opposable Mind*.

As team members explored the implications of the project findings for the individual firms, they saw that some of the outcomes produced by the study disrupted the existing organizational order at the firm level. “A strategic design project always challenges organizational design,” Brigitte

told us. “When presenting at a consortium member’s ‘innovation day,’ we clearly experienced resistance to change. Nobody could see how to implement My Pig in the organizational chart, and the project was understood as a threat to marketing’s power.” The findings also pointed to new possibilities for coordination at the industry level, in Brigitte’s view: “My Pig clearly showed that we think about our money globally. If the finance and insurance industries really wanted to implement My Pig, they could only do so by bringing the project to new stakeholders at the macro level. They needed banking coordination bodies (such as VISA’s system). Each member of the consortium could only implement part of My Pig. And so, FiDJI is a very good example of how design integrates ‘open innovation’ at the ecosystem level and of the managerial challenges this presents.”

One of Brigitte’s hopes was that clients would reflect on and attempt to calculate an actual ROI in the design project—at the outset of the process, all had agreed to do this. But at the project’s end, no one was interested in doing so. In Brigitte’s view, this was both disappointing and a testimony to the power of the approach. “The executives and their CEOs liked My Pig,” she told us, “and that was sufficient to prove that the designer had answered the brief. This is the power of design, this emotional value. In the face of this emotional value, actors don’t act rationally anymore!”

#### What Do We Take Away from FiDJI’s Story?

The scope of FiDJI’s story is not limited to the financial sector. In demonstrating how a diverse group—rival companies, designers, and social scientists—can work together to uncover hidden aspects of customers’ needs and behaviors, it offers a compelling vision for both organizations and ecosystems.

Brigitte and her team gave managers a solid grounding in the theories behind design thinking—to great effect. As a result of this investment of time and effort, managers bought into the process and walked through the many steps—albeit not always patiently—to build a deep understanding of their circumstances and to develop solutions. In doing so they conducted a robust experiment for the design thinking methodology, demonstrating that the tools that designers rely on really do translate to financial services. The FiDJI story also offers some concrete advice:

#### *Help Managers Curb Their Impatience for Results*

We have met the enemy, and he is us! As managers we are often truly



our own worst enemies when it comes to implementing design thinking. The approach summons a host of demons: our impatience for “results,” our discomfort with ambiguity and messiness, and our fear of stepping into the unknown. Brigitte uses academic theory and education to allay these fears. Other managers might be turned off by scholarly research, but in this case the French financial services executives responded enthusiastically. Publication in research journals gave this unfamiliar approach the credibility it needed to survive the challenging moments that surfaced throughout the process.

#### *Use Design Tools to Drive Collaboration, Even Among Competitors*

Why do the design tools work in such challenging environments? Our hypothesis is that it’s because they represent no competitive threat. We find it fascinating that the same tools managers often find so personally intimidating (see above!) can create so “safe” a conversation for them. The lack of quantitative specificity that makes us nervous also makes us more willing to share. It helps us to be open-minded—the very “softness” of the ethnographic data allows us to talk about it without worrying about being right or wrong or about revealing too much company strategy. We’re all human, right? It seems there is less anxiety about keeping proprietary what we find out about the other human beings we want to create value for.

#### *Pay Attention to the Medium, Because It Matters*

We say this with apologies to Marshall McLuhan. Although we don’t see the medium as the message here, we certainly see the choices around it as central to accomplishing design thinking’s objective of developing empathy for users. In this case we see the skillful use of video. Video played a crucial role in the MeYou Health story, and two short videos play a similar role here. The first is the video that Alice and Magdalena, the ethnographers, create of the customers they interview. The second is created by Juliette, the designer, to tell the story of the architect. It is interesting to note that these videos make no attempt to be exhaustive documentaries: The first video is short; the second, at two minutes, is even shorter. Their role is not to *summarize* what has been learned but to distill and synthesize and personalize what we know—to make it real and compelling as the basis for action. And two minutes was all it took to accomplish that for FiDJI. This is the curatorial role that design can play. In a world with too much information, much of it badly communicated, we are drowning in data. Design’s ability to cut through the clutter, to distill the essence of what is important, and to communicate that vividly and

with a human face—what could be more valuable than that?

*Expect Design Thinking Solutions to Challenge the Existing  
Organizational Structure*

We see two major challenges related to this. One concerns ownership. We talked in [chapter 1](#) about the political battles around who owns design. Perhaps even more contentious is the question, “Who owns the customer?” The customer has long been the province of marketing professionals, who might not think it’s such a great idea to give a motley cross-functional band of managers and wannabe design thinkers access to customers. But without that direct access, the core tenets of design thinking—developing deep user insights and experimenting in the marketplace—are dead in the water. Game over. The second challenge relates to the implementation of promising concepts that emerge from the experimentation process. Who has the power to do this, to compel movement across the silos that must cooperate? Often only the person at the very top of the organization, and that is not a prescription for fast action. These dilemmas must be acknowledged and addressed if our new approach is ever to influence an organization’s operations.

But, then again, if design thinking can unite a quantitatively oriented group of competing French bankers in the hope of more fully understanding the people they serve, without any need for an ROI to justify their investment, almost anything seems possible!

<sup>1</sup>Brigitte’s paper, “The Impact of User-Oriented Design on New Product Development: An Examination of Fundamental Relationships,” coauthored with R. Veryzer and published in the *Journal of Product Innovation Management* 22 (March 2005): 128–143, was especially helpful to the executives.

<sup>2</sup>For further details, see Alice Peinado, Magdalena Jarvin, and Juliette Damoisel, “What Happens When You Mix Bankers, Insurers, Consultants, Anthropologists and Designers: The Saga of Project FiDJI in France,” a paper presented at the EPIC (Ethnographic Praxis in Industry) conference, Boulder, Colorado, September 18–21, 2011, pp. 256–276, p. 260.

<sup>3</sup>*Ibid.*, p. 263.

<sup>4</sup>*Ibid.*, p. 271.

## Rethinking Subsidized Meals for the Elderly at The Good Kitchen

### ***THE SOCIAL PROBLEM***

Improving the nutrition of the elderly

### ***THE CONTEXT***

A program in Denmark's Municipality of Holstebro for delivering subsidized meals

### ***DESIGN'S CONTRIBUTION***

Using the tools of design thinking to develop deep insights into both customers and employees to reframe the possibilities for improving the nutrition and health of the elderly by creating a more appealing meal service

THUS FAR WE HAVE looked at the power of design thinking in a variety of business contexts. But we believe that the approach has as much—and maybe more—to contribute to solving “wicked” problems in the social sector. This chapter focuses on a success story from Denmark, a country so well known for its product design prowess that perhaps it should not be surprising that the Danes are also leaders in using design thinking to drive innovation in public-sector-service delivery. In this story the Municipality of Holstebro and the Danish idea and design agency Hatch & Bloom team up to work with stakeholders to use a comprehensive set of design thinking tools—from ethnographic research and mind mapping to analogies, trigger questions, and co-creation—with dramatic results.

The Danes, like citizens in most developed countries, recognize that the aging of their population presents many challenges. One of these is serving the more than 125,000 senior citizens who rely on government-sponsored meals. Danish municipalities deliver subsidized meals to people who suffer from a reduced ability to function due to illness, age, or other conditions. Many of the seniors have nutritional challenges and a poor quality of life because they simply do not eat enough. In fact, it is estimated that 60 percent of Denmark's seniors in assisted living facilities and residential care units have poor nutrition, and 20 percent are actually malnourished. The result is a higher risk of health problems and a low quality of life for the elderly and a greater economic burden on the government. The problem only looks to intensify as the number of senior citizens grows and future generations of seniors expect greater choice and better service.

In response to this growing social problem, the Municipality of Holstebro applied for an innovative program, offered through the Danish

Enterprise and Construction Authority, that provides funding to municipalities and facilitates partnerships between them and Danish design firms. The firm Hatch & Bloom signed on to be part of the effort to improve meal service for seniors. Innovation director Lotte Lyngsted Jepsen led the six-month project.

As Lotte recalled it, both Holstebro officials and the leaders of the Hospitable Food Service (the municipality's meal preparation and delivery organization) saw the project as straightforward at its outset: The current menu just needed some updating. In their view they already offered high-quality food and service, so Hatch & Bloom would just need to ask elderly clients about their menu preferences. As the project progressed, however, this view shifted. The result was the design of a wholly new meal service that offered higher quality, more flexibility, and increased choice. This dramatic reframing of the opportunity emerged from the user-centered design approach that Hatch & Bloom brought to the process.

### Learning to See *What Is?*

The Hatch & Bloom team began by digging deep into seniors' behaviors, needs, and wishes, using a comprehensive ethnographic-based research process that focused on identifying their current situation and unarticulated needs. Team members rode with food service employees who delivered the meals to the elderly clients, accompanied them into the homes, and watched as clients prepared the food, added ingredients, set the table, and ate the meal. In addition to observing current customers, they studied those who had discontinued the service and people close to retirement age who might soon qualify for the subsidized meals.

## DESIGN TOOL

### *Ethnography in Social Services*

We find the ethnographic focus of design thinking to be especially powerful in the social services sector. Despite the best intentions, when leaders of agencies that serve the indigent or the elderly base solutions on their *own* views of the needs and wants of those clients, the quality of the solutions suffers. We simply cannot be sure that we understand the details of their lives when we don't *observe* and *ask*, as Hatch & Bloom does here.

They also interviewed the supervisor of the food preparation process

in her workplace. What they saw in the kitchen surprised them. “The people who worked in the kitchen were a major factor that needed to be addressed,” Lotte told us. “We realized only by being there that the atmosphere was not what we would expect to find if the food service was as good as they said it was.”

Working in a public-service kitchen was a low-status job in Denmark. In addition, there had recently been negative press about poor or even old food being served in these kitchens. “There was a general perception that the people who worked in public kitchens didn’t know how to cook and were sloppy, and that the kitchens were dirty and so on,” Lotte explained. “We found that the kitchen staff was sick and tired of being *told* that they should do something differently. But nobody ever *asked* them how they would like to do things differently.”

It was not going to be enough to focus on the needs of the consumers, team members realized; they would need to address the problems of the employees producing the meals as well. The team decided to broaden the scope of the project beyond just improving menus and helped the government clients understand why this was necessary. As a result, the Hatch & Bloom researchers also conducted interviews with and observed the kitchen workers to understand their needs and work processes. From this dual focus—on the people preparing the meals and on the seniors receiving them—a set of interesting findings began to emerge.

## DESIGN CHALLENGE

### *Changing Scope*

When we set out to explore an opportunity, we often find that our initial scoping of the issue was flawed. Here, as in our Toyota story, a problem that we thought had an obvious solution—an updated menu or better search software—actually requires the redesign of an entire experience. It’s not easy to reframe an issue or problem. But it can help to think of the initial scope of the project as a hypothesis that you must revisit and refine along the way. This does not indicate a *mistake* in our early scoping; it is a sign of important *learning*.

### Understanding Kitchen Employees

As team members observed kitchen employees and interviewed them about their jobs, they were surprised to find that one of the workers’ major frustrations was that they were not empowered to do what they loved.

They had chosen to work with food because they enjoyed creating things out of food, but they were forced to prepare the same meals from the same menu month after month. The decision to use one menu for three months made sense from an operational logistics point of view, but it was terribly corrosive to the morale, motivation, and commitment of the kitchen employees, and, the team learned, it wasn't good for customers, either.

During the interviews, another important thing happened: The kitchen employees realized that someone was listening and trying to help. Catering officer Birgit Jespersen noted that this generated tremendous goodwill for the project. "At first, we were a little skeptical, but the project was handled in a good way," she said. "The designers and management listened to us, and everyone's opinions and ideas carried equal weight."

The more the team from Hatch & Bloom got to know the kitchen employees, the more it became apparent that this was a skilled workforce. Public perception and reality were quite different. The workers were making boring, low-cost meals because of perceived economic and logistical constraints, not because they faced a skills gap.

#### Understanding Seniors

The seniors receiving meals also suffered from feelings of disconnection and stigma, the Hatch & Bloom team learned in interviews with them. The social stigma of even having to receive such assistance weighed heavily: Help for cleaning was considered acceptable in Danish culture, but help for more personal needs was much less so. It also mattered who was providing the help. In Denmark a senior hoped to receive it from a relative or a friend. If that was not possible, one would perhaps hire someone. The last resort was government assistance.

Also very painful to seniors was the loss of control over their food choices. "We discovered that deciding what kind of food they put in their mouths was the second most important thing for the elderly, after taking care of their own personal hygiene," Lotte explained. Furthermore, they often disliked eating alone because it reminded them that their families were no longer around. All these factors, Lotte pointed out, were linked to the underlying problem: "The less you enjoy the situation, the smaller your appetite."

On a more positive note, the team also discovered that this generation of seniors was very responsible and capable in the kitchen and had a keen sense of the seasons and positive associations with seasonal food, such as apples in the fall and strawberries in summer. They also often

tried to customize their meals by adding spices or using their own potatoes or vegetables.

As Hatch & Bloom began integrating what it had learned from both seniors and kitchen employees, the news was good. Lotte explained: “A lot of the findings in the kitchen actually worked very well with the findings from the users. So, for instance, the fact that it’s incredibly boring to choose from the same menu three months in a row: That is a typical leader’s decision because it makes logistics easier. You can buy more of the same food at one time, and so forth. But it’s not a chef’s decision, *and* it’s not a user’s decision, either.”

#### Stakeholder Workshops: Hatching & Blooming

Once team members had finished their ethnographic research, they enlisted a broader group of stakeholders in understanding the nature of the challenges and participating in creating solutions. The goal was to solicit a wide range of ideas for developing a new and better meal service. To accomplish this, they held a series of three workshops.

## DESIGN TOOL

### *Co-Creation in Social Services*

As with ethnography (and for many of the same reasons), co-creation is especially powerful in social services. This has to do in large part with the complexity of the stakeholder network. Unlike business initiatives, where we often find a single decision maker, social services projects generally involve multiple decision makers, each of whom must support a proposed solution. Enlisting them in the design of solutions is both effective and efficient.

#### *Workshop 1*

The first workshop brought together municipality officials, volunteers, experts in elderly issues, kitchen workers, and employees of residential care centers. This group of roughly twenty-five people gathered for the first daylong workshop to review the ethnographic research and develop insights that would later facilitate the creation of innovative ideas when they transitioned from *What is?* to *What if?*

The Hatch & Bloom facilitators began by serving food from the actual kitchen to give participants an experience similar to that of the customers. As Lotte noted, “A lot of the politicians who talked about this food had never eaten it themselves.” The researchers also presented their



findings. The purpose of the workshop was strategic: to build awareness of the issue and a shared vantage point as the group proceeded to address it. No solutions were discussed yet.

### *Workshop 2*

During the second workshop, facilitators and participants used a mind-mapping approach, first grouping the key findings and observations gathered during the *What is?* process into categories—for instance, the delivery of the food or the composition of the menu. They then delved further, exploring the insights that flowed from each category and what these might indicate about the design criteria of an ideal solution. They then moved into *What if?* and began generating ideas. Facilitators used analogies as trigger questions to help shift participants' mental models of food service. They asked participants to think of the kitchen as a restaurant, an analogy that triggered a creative rush. "Just thinking about themselves as a restaurant instead of a public kitchen changed their perceptions completely," Lotte explained. "Because they said, 'Okay, so we must be chefs. And if we're the chefs, who are the waiters?'"

## **DESIGN TOOL**

### *Trigger Questions*

Trigger questions provide structure and inspiration for the brainstorming process. The in-famous "What are ten uses for a safety pin?" type of trigger question has done much to give brainstorming a bad name among managers. Truly useful trigger questions help people think more creatively about future possibilities by giving them something specific to work with. Questions often involve the use of analogies, as with our example in this chapter: "What if this public-service food-delivery organization were a restaurant?"

Hatch & Bloom had invited a well-known chef to observe the kitchen in action and then to attend the workshop. He was surprised, he told the participants, by the kitchen workers' skills, which were almost at the level of professional chefs. But they had different results, and that, he argued, was because of their different focus, not a lack of skill. As they prepared meals, the kitchen employees concentrated on maximizing economy rather than food styling or seasoning or other details that professional chefs would focus on. Being compared with chefs shocked the people



who worked in the kitchens. It also boosted their confidence and sparked an increased passion for the project because they were being told that they were actually good at something.

The workshop participants continued exploring the restaurant analogy as they considered the menus. Until that point the menus had been minimalist factual descriptions of the food, perhaps detailing how it was prepared. For example, one item read, “liver, potatoes, and sauce.” “That is not exactly a description that will make your mouth water,” Lotte pointed out. “They just printed these menus and never gave a thought to how they should look. But now they wondered, ‘Maybe they should look like actual menus; maybe we should describe our meals in a completely different way.’”

The group also began to focus on the fact that many of the vehicles used for meal delivery were in poor condition. “Some customers asked drivers to go down the street a bit because they were so embarrassed by the car,” Lotte told us. “They really thought the neighbors would think, ‘Oh, now she’s having a funeral’ or something like that because the vehicle was really, really sad.”

### *Workshop 3*

The third workshop, which was much more hands-on, moved into the *What wows?* phase, prototyping and beginning to test the co-created solutions. For example, Hatch & Bloom worked with participants on three different versions of the menu and asked them which they liked and how they felt about various aspects, such as which colors they favored and whether they preferred photos or illustrations.

### *Prototyping with Customers*

Hatch & Bloom took the results from the workshops and moved into *What works?*, testing prototypes with different combinations and ways of presenting food with the customers they had been observing since the beginning of the project. Again, they tested the prototypes not only with current customers but also with people who had stopped using the service and with those nearing retirement age.

The learning from this initial set of experiments resulted in a second project with some quick design changes that allowed for meals in which the components were packaged separately. Lotte explained: “Instead of having a tray where there’s potatoes or rice or pasta, some meat and some sauce, and then some vegetables, we implemented a solution where you pack these things separately if you prefer to do your own potatoes or if you prefer some kind of specific pasta or if you have some

of your own vegetables. So you can order potatoes and vegetables on the side, but then you can add what you prefer instead of having someone else decide that for you.”

From Public-Sector Food-Service Employees to Restaurant Chefs  
In order to change the negative kitchen culture at Hospitable Food Service, the gourmet chef Hatch & Bloom had involved earlier came in to work with employees. This generated more than a little nervousness among them. “Here was this really competent chef, and we were concerned that he might criticize us,” catering officer Birgit Jespersen recounted. “But he praised our food and said that we had a very high technical level. That was a real boost, and today we feel like chefs ourselves.”

The chef inspired the kitchen employees to introduce seasonal ingredients and offered ideas for improving presentation. This has made a real difference. “Now we take the time to make an appealing presentation,” Birgit said. “We also are thinking more about colors. For example, we toss carrots with parsley to add some color to the tray. And we are putting an emphasis on seasoning the food well.”

Kitchen employees also received new uniforms that were much more “chef-like.” This was a symbol of their dignity and status, and it signaled a sense of pride and care to their customers as well. “The old uniforms were like nightgowns,” Lotte recalled. “They were very sad to look at, not aesthetically pleasing. Just by having these new uniforms, we gave them a level of authority they were not used to.”

#### From Hospitable Food Service to The Good Kitchen

The process of ethnographic observation, mind mapping, co-creating with stakeholders, and iterative prototyping and experimentation yielded a host of dramatic changes: a new menu, new uniforms for staff, a new feedback mechanism (we’ll get to that in a bit)—an overall new experience for both customers and employees. Employees’ images of themselves and the services they provided changed, and this itself seemed to improve customer satisfaction levels.

The process also yielded a new name: Hospitable Food Service became The Good Kitchen. “We wanted a name that internally and externally showed that the employees were committed to their work,” Lotte explained. “They were doing exactly what you would in your own kitchen, just on a bigger scale. So we changed the name; we changed the identity.” As Paula Sangill, the head of office in Holstebro’s Department of Health and Social Services, observed, “It’s an ambitious

name, which was exactly what we wanted, and we are working hard to live up to the expectations.”

The new menu looked like a real restaurant menu. Instead of a list of dishes, it presented categories such as entrees, desserts, and so on. Items were also explained in greater detail. Paula described the new experience: “We write about the ingredients in a way that gives the senior citizens a sense of tasting the food. Before we would write ‘fried liver with gravy, potatoes, and vegetables.’ Now we write ‘pan-fried calf’s liver with onions and gravy, potatoes tossed with thyme, and butter-roasted vegetables.’ We now have about eighty people a week choosing liver, when we used to have ten.”

The Good Kitchen employees also made changes to the menu based on what they heard from seniors. For example, they learned that a lot of their clients were still very social, so they added a two-course guest menu. They also introduced individual snacks, such as pastries and chocolate, to enable seniors to adapt their meals to their lifestyles and behaviors.

In addition, at the request of customers and with the assistance of a consulting chef, The Good Kitchen began to offer high-quality additions. Some of these were inspired by the finding that the elderly clients had positive associations with foods that had been available, in their past, only at certain times of the year. The menu emphasized traditional dishes with familiar taste experiences but now included dishes such as “lemon spaghetti with mushrooms and parsley” and “soup with Jerusalem artichokes and grilled cockerel.” There was also a “weekly surprise,” which allowed for more creativity by The Good Kitchen employees and greater variety for customers.

#### The Good Kitchen Becomes Part of the Family

Employees in the kitchen had not been accustomed to communicating with the people they served (this gets back to the “Who are the waiters?” question). The drivers who delivered the meals, who were all kitchen employees, would enter the seniors’ homes and leave without reflecting on what they saw. So the team developed simple comment cards that drivers began to carry with them and hand to customers, who wrote reviews of their meals and suggestions for how to prepare them. This immediate feedback enabled the staff to gain insights into the seniors’ thoughts and reactions to their food. The comments were read aloud at staff meetings and pinned up in a central kitchen location. The cards motivated employees and gave seniors the ability to influence their

meals. Both groups loved them.

This direct contact was reinforced with indirect contact. For example, large photos from home visits were hung on the walls of the kitchen, bringing employees closer to their customers. The Good Kitchen also began publishing a newsletter that included posts from kitchen employees, information about and pictures of new hires, and other important events such as employees' birthdays and the birth of a grandchild. This gave the elderly a better understanding of what happened in the kitchen and communicated that there were real people standing in front of the stove who took pride in what they did.

Today, Holstebro's seniors "know who is shaping the meatballs and preparing the gravy in the municipal kitchen," as Lotte described it. The relationship between the kitchen staff and the customers, which is both personal and professional, has increased the satisfaction of both. Lotte explained the benefit of this improved communication: "It's great that we're in touch with the customers every week through the drivers who deliver the food. Many private companies would pay good money for that degree of customer contact, because it offers a unique opportunity to keep tabs on what's important."

#### Results: The Proof Is in the Pudding

Once the transformation from Hospitable Food Service to The Good Kitchen was complete, the results spoke for themselves. Reorganizing the menu and improving the descriptions of the meals drove a 500 percent increase in certain meal orders in the first week alone. Within three months, the number of customers had increased substantially.

One of the most important elements of the transformation has been the shift in employees' perceptions of themselves and their work. Kitchen workers are now much more satisfied and motivated. As a result, customers are happier with their food. "If you have professional pride, you'll also cook good food," Anne Marie Nielsen, the director of The Good Kitchen, told us. "Good food has to come from the heart! This experience generated so much positive energy. We have received positive reactions from everywhere—from users and partners and colleagues in other municipalities." Moreover, The Good Kitchen now receives many more unsolicited job applications as word of the improved reputation has spread.

The changes in mind-set were the most significant indicators of success to Lotte but were difficult to pinpoint precisely: "When you do this kind of culture-changing redesign of services, it is very challenging—are

the results about our *solutions*? Or about me looking somebody in the eye and showing interest in their work?”

The Good Kitchen’s success was noticed outside of Holstebro as well. The Good Kitchen and Hatch & Bloom shared the Danish Design Prize for Service Design as well as the Local Government Denmark Prize for Innovation in 2009.

#### What Do We Take Away from The Good Kitchen’s Story?

By identifying a public challenge to the health of seniors and a fiscal challenge to the state, and using an arsenal of design tools to address both, the Municipality of Holstebro dramatically improved the service experience and quality of life for both customers and employees. This project comes as close to providing a truly win-win solution as we are likely to find, transforming a vicious cycle of malnourished seniors, unhappy employees, and increased health care costs into a virtuous one with healthier, happier seniors (and employees) and lower costs for the state.

The ideas and actions discussed in this chapter are especially near and dear to us because they highlight design thinking’s ability to produce not just better business results but a better world for all of us. They are so simple, so powerful, so inspiring—using design to change the world, not just make it pretty. But accomplishing this requires us to act in new ways:

#### *Be Willing to Engage the Entire System*

It is worth noting that this chapter is as much about *system* design as it is about *service* design. It reminds us of a lesson that Peter Senge taught us long ago in *The Fifth Discipline*: Put the whole system in the room. In business, we have gotten much better about the customer part, but we still often neglect employees and communities. Design thinking gives us a detailed suggestion about what to *do* with the system once all parts of it are in the room: share the findings from the deep ethnographic exploration of the stakeholders we want to serve, build an aligned intent around making their lives better, and then invite everyone to derive insights, generate design criteria, and co-create solutions.

#### *Be Willing to Redefine the Problem*

Even with the problem definition (much less the solution!), where you *start* is not where you should expect to end up. And that’s good news. You didn’t get it wrong—you *learned*. So many of our flawed solutions can be traced to having stuck with a limiting question. One of the most significant contributions of design is to help us live longer in the question. It is our willingness to revisit the question we asked at the outset that

allows us to reframe the way we see the world and discover new possibilities. It allows us to go places that we never suspected we'd visit at the beginning of the process. But doing this requires bravery, as Lotte reminded us:

If you use design thinking, you must realize that it might lead you to places you didn't expect to end up. And if you have the courage to embrace that, you can go tremendously far, and you can try out different methods, and you can ask, "Do they work for me? Do they work for my organization?" But that requires a certain level of courage and a willingness to change. If you're not brave enough to face these consequences, and if you don't have the mandate from your leaders, then it's very difficult to do innovation. Innovation requires space—mental space and financial space and organizational space.

*Design Feedback Into the Solution So You Won't Have to Fix Big Problems So Often*

Why do we spend so much time trying to create dramatic, wrenching change? Usually because we ignored the signals that would have allowed us to adapt more gradually. If we build those signals into our design of the offering or service, the odds that we'll see them before the crisis go way up. That is what those simple feedback cards do for The Good Kitchen. They create a seemingly mundane but very valuable ongoing conversation about daily hits and misses that helps employees get to know their stakeholders better along the way and greatly reduces the need for cataclysmic change later on.

*Appreciate the Awesome Power of Ethnography*

We sound like a broken record by this point. But if you take only *one* thing from this book, this should be it. The story of The Good Kitchen reveals more powerfully than any other why this is true. Most of us reading this chapter are not now elderly (despite what our children think). Most of us can't recall the sweet pleasure of having strawberries only in summer. We cannot really know what it means to lose, one by one, the freedoms the young and healthy take for granted: to choose our food, to control our personal hygiene, to be able to have dinner with those we care about. Without ethnography, we will not know these things until it is too late to improve the lives of the elderly. We'll throw strawberries on everything all year long, wasting their ability to conjure up memories of summers past. We will dictate meal choices that are economical or that make sense to us and package them in servings of one so that they can

only be eaten alone. Without the deep insights produced by ethnography, how many opportunities to do something truly special for an elderly person—something that probably costs little or no additional money—will we fail to see?

We recall a legal aid attorney's comments to us about the challenges that she and her colleagues faced in providing truly useful legal services to the poor: "We are, and I will make a broad generalization here, ivory tower babies. We're very privileged. We have telephones and good incomes. And we have transportation. We don't face a lot of the problems that these clients are facing every day. And so we don't understand what they go through."

But at least design thinking gives us tools to help us try.

## Engaging the Citizens of Dublin

**THE SOCIAL PROBLEM**

Helping public administrations engage members of the general public in revitalizing their own community **THE CONTEXT**

The city of Dublin in the aftermath of the “Celtic Tiger”

**DESIGN'S CONTRIBUTION**

Helping innovation-averse bureaucracies generate new opportunities by marshaling residents' energy and ideas and turning them into tangible prototypes and, in the process, equipping citizens with the tools to create their own future

WE'VE READ THAT design thinking is good for all sorts of problems, from generating competitive advantage in the B2B marketplace to helping the elderly eat better. Here we'll see that even bureaucratic governments can benefit from using the principles of design. The city council and manager in Dublin, Ireland, knew that to prosper in the next century they had to engage with citizens in new ways and challenge existing mind-sets. The need for change was palpable as the Celtic Tiger lost momentum, but efforts to enact that change needed a new direction and energy. In the end, the energy emerged from the community itself. The journey toward rejuvenation was assisted by several professionals who knew a thing or two about design and how to use it to motivate large organizations—even bureaucracies.

This story begins with Jean Byrne, an economics graduate from Trinity College Dublin, who at age twenty-seven developed an international women's wear company. Nine years later she sold the business and joined a nonprofit focused on community education. This experience awakened in her a passion to share her insights and use them to influence community and entrepreneurial education in Ireland. She was appointed a director of the Craft Council of Ireland, a government-funded body for fostering growth in the crafts industry. It was there that she met Jim Dunne, a founding director. Jim had a graphic design background, having cofounded a leading design and branding agency. He also led a public initiative to promote the use of design in industry.

Jean and Jim shared a concern that Ireland's economic boom was unsustainable and a desire to do something to enable Ireland to become a better place to live, work, and play. The Celtic Tiger, in their view, wouldn't bring long-term prosperity to Ireland. They combined their ideas and energy to found Design TwentyFirst Century (Design21C) and began



working to help Ireland through the power of design thinking. Design21C was set up as a nonprofit dedicated to the belief that Ireland could be prosperous, innovative, and happier if it tapped the creativity that runs deep in the Irish people.

Jean traced her motivation to cofound Design21C to her belief that the Irish educational system did not do enough to foster a culture of entrepreneurship. Creativity, empathy, teamwork, risk taking, the ability to learn from failure, confidence, listening skills, and hands-on activities were not prioritized in educational curricula. Jean experienced how to both learn and teach those skills in a graduate program in applied learning: a field that bridges the gap between classroom education and real-world problem solving. “This changed my way of looking at education and gave me insights when I became a social entrepreneur,” she told us. “If I had had such experiences during my formal education, I believe my life as a business entrepreneur would have been so much easier and more enjoyable.”

Her experiences helped her see qualities in people that they themselves had overlooked: “I feel that there is entrepreneurial capacity within a lot more people than actually know it themselves. So my interest and passion were seeing how we could develop something that would allow people to gain more confidence and engage in entrepreneurial activity—and not necessarily just in the business world.”

The new organization gave Jim and Jean a platform to attract talented people from around the globe, and so they invited Vannesa Ahuactzin, a Canadian design thinker with an architecture background, to provide deeper expertise. Vannesa’s experience with Massive Change, an exhibition highlighting design’s ability to improve the human condition, captured Jim and Jean’s attention. They convinced her that Ireland was an excellent candidate for applying that idea to generate exciting community-wide changes through the design process.

The colleagues spent the better part of a year talking with Ireland’s movers and shakers about their vision for improving the country’s potential. These business leaders, politicians, and cultural figures were invariably impressed with Design21C’s noble aspirations, but no one seemed particularly interested in joining a movement with such a nebulous target.

So they shifted their focus to the local level. Jean approached Dublin’s city manager, John Tierney, about participating in a project with Design21C. John quickly saw design thinking’s potential to change the

mind-set within the city's management. Jean had identified a friend who would provide some funding for the project if the city manager agreed to match those funds. At first the council was skeptical about spending tax revenues on a project without a clearly defined outcome. But Design21C explained to the councilors the potential power of the design process and the intrinsic value of the deep learning it could yield. This resonated with the city manager, who saw the project as a chance to introduce dynamism to service delivery.

#### Focusing on Dublin

Thus Design21C landed its first client, though no one knew where the project, dubbed "Designing Dublin: Learning to Learn," would go. It was based on a simple concept—in the words of the organization's founders, "to connect Dublin's challenges with the capacity and willingness of its citizens to improve their city, so that everyone can experience a more prosperous, enjoyable, and sustainable city."

The start of the project, which the Design21C team members called "Growing Awareness of the City," focused on research. For this discovery phase, they enlisted students from the UCD Michael Smurfit Graduate Business School to spend two weeks doing "on-the-spot" interviews throughout the city with Dubliners of all ages. "We used an iterative and very intuitive process," Jean explained. "We didn't begin with a clear brief." The initial goal was to solicit citizens' wishes for their city.

The list they created as a result was long, ranging from the fanciful ("I wish for more colors in the city to brighten and lighten the mood") to the more concrete ("I wish Dublin had more spaces in the city centre to relax where you didn't have to pay"). People also cited litter as a problem, wishing that "litter louts were made to do community work picking up the litter." And many wished for improved access to high-quality drinking water. The team synthesized the hundreds of wishes into three themes: water, waste, and community in the city.

Design21C in conjunction with the city council then sent out invitations to a diverse group of Dubliners—city council staffers, university faculty, business leaders, and general citizens—to attend a series of three "world cafés," events intended to generate collective solutions to shared problems. The events addressed three questions, which reflected the three themes: 1. How might you develop a different relationship with water in the city?

2. Where does your waste come from, and where does it go?
3. How do you realize the potential of "open cities"—cities that

deeply engage and entice residents from the wider region?

## DESIGN TOOL

### *World Café*

The world café is a method for holding a conversation among a diverse group of people, aimed at creating collective solutions to shared problems. It is based on a set of design principles for assembling constituents, hosting a dialogue, and harvesting outcomes from it.

### Finding the Right Project

The discussions, particularly around the issue of waste, went in some unexpected directions. Instead of sticking to the topic of litter on the city's streets, the conversation shifted to the idea of waste in a more general sense—in particular, to the notion of *wasted space* and how to reclaim it. Underdeveloped parts of the city, people commented, were wasted opportunities. This became the first discrete phase of Designing Dublin, called “Finding the Hidden Potential of Place.”

One such place with hidden potential was Clongriffin, a development on the outskirts of Dublin close to the sea. Local planners had carved new housing tracts from farm fields as the region's population surged in the late 1990s, but the economic boom didn't last long enough to fill the tracts with all the homes and shops that the original plan envisioned. After ten years, the area had filled to only a third of the expected capacity. While the residents weren't suffering from overcrowding, they were lacking a vibrant neighborhood with shops, camaraderie, and other necessary services. Neighbors were spread far apart, and everything worth visiting was a car ride away. The area seemed to be on life support, barely surviving and certainly not thriving. Clongriffin was well known as a ghost town and as a poster child for the consequences of the lack of suitable planning, making it an ideal candidate for the Design21C team's attention.

The local council had already tried an obvious solution: building a park. It was lovely, but it failed to become the catalyst for neighborhood rejuvenation that the council had hoped for. The park emerged from a small committee that didn't put much effort into incorporating residents' ideas or marketing the park's attributes. Fortunately for the residents, the council was willing to see this less-than-stellar planning success as

grounds for introducing more creativity into the regional development process.

The Dublin city council, beginning to sense design thinking's power after experiencing the world café events, was eager to let the residents of Clongriffin figure out what they needed on their own. It was willing to let an experimental process unfold.

### Fixing Clongriffin

From its outset the project to improve Clongriffin—led by Vannesa and her colleague Deirdre Murphy—had two major aspirations. The obvious one was to revitalize this development. The less-obvious one, but just as crucial, was to create a prototype of a process for implementing effective public-private partnerships. As Jean described it, “We were trying to see if, in fact, this idea of bringing together people with very different perspectives of the city would work.” The first step was to form an interdisciplinary team. During a rigorous four-day interview process that tested creative problem-solving and teamwork abilities, Design21C narrowed down a pool of eighty applicants to seventeen. Half of these new team members were from the local or city councils. The other half were volunteers, including engineers, architects, librarians, artists, historians, and accountants.

## DESIGN PRINCIPLE

### *The Power of Diversity*

No matter how often we hear that we need to “get out of the box,” the truth is that it is the only one we’ve got, and very few of us can escape it. But what we can do is peek into other people’s boxes and see what they are thinking in there. The diversity of backgrounds and perspectives on the Clongriffin team help everyone on it see the world a bit differently.

The intention was to run the project using an open design process that did not make assumptions about Clongriffin’s needs but instead defined them as the project developed. So instead of starting with a brief that spelled out the expected outcome of the project and a road map for getting there, team members were given themes around waste.

“The idea is that as we go through the process we actually discover the brief along with the team,” Jean explained. “There’s a transformation that happens in the team members’ thinking about how they approach

the question, how they get the answer, and how they apply those ideas. And then we'll keep hopping between discovery and iteration."

The discovery and concept-generation phase of the project had clear timelines based on twelve weeks' worth of deliverables. Because most team members had no prior exposure to the design thinking process, they needed instruction. Vannesa explained the nature of design thinking and how and why it worked at each stage. She made sure the local team understood how its extensive *What is?* research resulted in the focus on Clongriffin. The explicit instruction in this problem-solving approach bolstered a sense of trust among team members and gave them the freedom to experiment. The whole team was ready to ideate, experiment, fail, and try new things again and again, without the fear of rejection.

*Week 1: Conversation and Investigation The process started with a deep investigation of Clongriffin, including recording the feelings, thoughts, and ideas of city planners, researching historical records, and talking with current residents. Team members formed pairs to capture findings and were encouraged to present their insights to other team members using visual data.*

*Week 2: Research, Define, and Deliver Ideas Vannesa and Deirdre pushed team members to search all available sources for inspirational ideas, particularly from fields that were unfamiliar to them. Engineers, for example, were encouraged to think about abstract concepts instead of things. Everyone individually was responsible for posting at least 100 ideas on a large display.*

#### *Week 3: Nine Questions*

Collaborating with the KaosPilots, a progressive Danish school whose mission is to create positive social change through personal development and enterprise, the team developed nine specific questions to use as tools to engage local residents. These questions, derived from the 1,700 ideas generated during week 2, were strategically developed to help Clongriffin residents explore options for maximizing their wasted space. Examples included: How do we reinvent spaces into places? How do we transform the passion of disputes into passions for the future? How can Clongriffin invent and utilize new economic opportunities? Armed with the nine questions, the team approached Clongriffin residents for informal interviews. Answers from them were posted on the wall for the whole team to read.

*Week 4: Project Opportunities Now the team had to digest the findings from the nine questions and develop potential projects from them.*

*Working with an ethnographer, the team learned how to unpack residents' ideas and find themes in them. Team members also visited an urban design firm to help build up a portfolio of possibilities, each addressing the needs of Clongriffin residents.*

#### *Week 5: Concept Creation*

The team broke into six groups to drill down on the previous week's possibilities, each tasked with producing three ideas malleable enough to spawn multiple, discrete projects.

#### *Week 6: Concept Sharing*

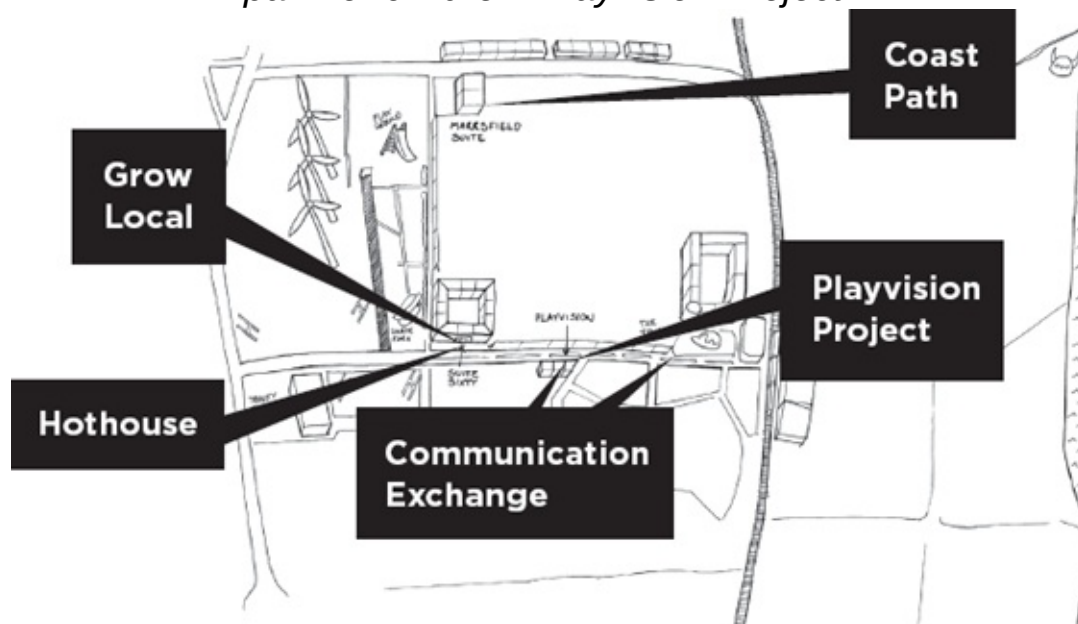
The subteams developed visually engaging presentations of their eighteen project concepts and located an empty store to display in them. That environment helped everyone deepen their understanding of the possibilities and discuss them. The space was featured during that year's Innovating Dublin Festival, which gave the public a chance to see what ideas the Designing Dublin initiative was developing and to provide feedback.

*Week 7: Turning Concepts Into Projects Armed with feedback, team members began refining their ideas and moving into tangible development. Some teams even traded projects if they were losing momentum on their original one. The projects included getting the community to build its own communal spaces, enhancing linkages between spaces, and making the community engagement in these projects more inviting.*

*Week 8: Testing Project Ideas Team members needed reassurance from residents that their ideas were reasonable. So they displayed the eighteen ideas in two vacant lots and encouraged as many residents to visit as possible. They enticed locals with chocolate bars and posted billboards to build participation, and they recorded the comments and reactions.*

*Week 9: Converging on Five Ideas The team settled on five ideas that were candidates for prototyping on the basis of their practicality, scalability, and feasibility. The city council steering committee also gave input during this part of the process on how to best move the leading ideas forward. The five ideas covered many aspects of community life: (see figure on following page) 1. Providing structures for growing local business: Grow Local 2. Providing community activity space: Hothouse 3. Creating an information system for connecting residents and creating a sense of community: Communication Exchange 4. Building a path to the nearby yet inaccessible Irish Sea coast line: Coast Path 5. Building a*

### *park for children: Playvision Project*



*Weeks 10 and 11: Broadcasting the Five Ideas* The teams built mini-prototypes that reflected how the community could act on the ideas and shared these prototypes with the public. They included a full-scale cardboard office space to simulate places where residents could meet and a small section of a potentially longer walkway to the coast. The public displays helped identify resident champions—those who could take a project concept and make it real—by communicating an exciting vision of the future. The prototypes were refined further on the basis of feedback, and the team continued engaging with potential local champions while trying to build city council support.

*Week 12: The Big Celebration* Now that the five prototypes were well developed, the teams organized a one-day event—a *Prototype Extravaganza*—to attract as many residents as possible. They were presented with pertinent details about the project, including available resources and future possibilities. The energy of the extravaganza helped secure champions for the best project ideas.

## **DESIGN TOOL**

### *Prototype Extravaganza*

We've already talked about prototypes. But Dublin has taken this idea a step further, gathering them together in a kind of country fair, giving those who attend the opportunity to look across the entire set of prototypes and, in this case, decide if they want to champion any

of them. Remember Suncorp and the market fair in which each business unit presented its neighborhood to the other units? Same principle. People often have a better sense of what they like when they experience it and help to create or refine it.

Each prototype asked a question designed to get buy-in from residents: 1. Grow Local: Can we amass our knowledge, skills, and resources to build a local economy?

2. Hothouse: Can we design, build, and run a community center that can bind and multiply the community's latent energy?

3. Communication Exchange: Can we share local information on events, happenings, meetings, services, opportunities, and culture in an exciting, easy, and stimulating way?

4. Coast Path: Can we cluster people's energy to create a path of possibilities to the coast?

5. Playvision Project: Can we draw on children's creativity to inspire us to imagine what life in Clongriffin might be?

#### Maintaining Momentum

Each initiative's viability was contingent on its ability to attract volunteers interested in carrying the project through to fruition. Only project champions would have the energy to carry on. Three of the five projects—The Coast Path, Hothouse, and Grow Local—found champions, both local residents and people associated with the city council. “At the end of the day, it's not about our team owning the ideas,” Jean noted. “It's about the ideas being owned by the people who have been involved and shown interest. That way, once Designing Dublin finishes its work, these projects will continue to live.”

The Path was engaging because residents could easily walk the prototype path during the Prototype Extravaganza. Residents figured out that they could complete the project in stages, and it would not require intensive maintenance once it was in place. The Hothouse inspired locals because Clongriffin had no bars or coffee shops where people could gather. Residents collaborated with the city council to build a beta space to test the idea for a year. After that period, plans were put in place to establish a permanent space. Two other projects, Playvision and Communication Exchange, failed to gain enough momentum from the community to survive. While the prototypes for both earned residents' appreciation, available volunteers moved to the other projects within weeks.



The “Finding the Hidden Potential of Space” initiative shows the design thinking process working toward two distinct yet related goals: rejuvenating Clongriffin and generating a group of design thinkers who can use what they’ve learned to fix other parts of their city—or even their own lives. Jean was enthusiastic about how well the residents embraced their new roles: “We believe that if you listen to people’s needs, you can come up with new models and leapfrog into new things for the city, making people on the team and in the city feel empowered to contribute in ways that they hadn’t thought about. This process is about awakening people, building their confidence, and making them believe that they really have the power to effect change in their city, that they have the power to generate excitement and diversity in different areas.”

### Repeating the Process

Once Dublin’s city management became aware of the success of the Clongriffin project, it was eager for Designing Dublin to get started on a second initiative. So the Design21C team circled back to its original research, both the interviews with Dubliners and the content from the world cafés. In collaboration with the city council, the team chose to focus next on why pedestrian visits to the center of Dublin were shrinking and how to get people coming back. Empowered by the success of the first project, Vannesa started the discovery phase with the same team members on a new project called “Love the City.” The goal was again to create prototypes that could serve as replicable models that would inspire champions to carry them out without the involvement of the Designing Dublin team. To achieve this, the team realized, it was best to generate mini-prototypes that could engage potential champions even earlier than in the previous project. One example was a billboard that displayed interesting and inspiring facts about Dublin. As the team worked through nine discovery phases, it recruited a new group of residents and city council employees who collectively refined ideas until they had determined the best ones.

The Designing Dublin team found that getting the word out about all the ways citizens could participate in rejuvenating their city was still a challenge. The solution was again a Prototype Extravaganza showcasing various projects to city council employees and local residents. That event generated champions for several projects that have since achieved self-sufficiency, including bench-building parties and networks of gardeners who spruce up neglected areas in the city.

Documenting the Experience The Designing Dublin team members

realized that they had successfully applied powerful tools and generated a methodology for future initiatives. To capture the lessons learned from their experiences and to record the design process that they had developed, they put together a book that tells the story—through photographs, timelines, and other artifacts—of the hundreds of steps, the countless hours, the experiments, the failures, the iterations, and the successes. The book, called *The Compendium Designing Dublin: Learning to Learn*, is a compilation of the team’s many insights—intended to guide Design21C’s future initiatives and those of others who would follow the same path. It’s not necessarily a how-to book; it is a visual map for how good intentions evolve into valuable outcomes.

### Learnings

The process provided powerful insights for the city council. Staff members realized that their professional experiences sometimes biased them to go after the “least-bad” options rather than aim for the best possible outcomes. Witnessing the design thinking process helped the city staff see how success could emerge from failures—at least what could be deemed a failure to someone captive to the traditional bureaucratic mind-set. Facilitated partnerships with community volunteers, the Designing Dublin team discovered, helped break that mode of thinking. Residents really did have the energy to improve their surroundings, and working in an open, public, and collaborative way maintained good communication between teams and allowed many points of view to influence projects’ trajectories—especially when community members were engaged early on.

Team members also learned that tight deadlines stirred up energy and got the community to commit real effort to projects. And that strict hierarchies stifled lower-ranked individuals from promoting good ideas. Learning from users at every stage was vital for success. Diversity was key. Otherwise, people with similar personal and professional backgrounds developed common belief systems that could shape their assumptions. Finally, they learned that presenting projects with passion and knowledge while giving the audience a chance to be inspired and have fun broke down the barriers that impede rich conversations and collaboration.

The design thinking process runs in multiple cycles throughout the Designing Dublin project. The process kept the team rooted in the question rather than rushing to answers. It was instrumental for generating useful and replicable solutions. Moreover, it demanded

actions and results that were the antithesis of commissioned reports that sit on shelves. Jean touts the need for action over cerebration: “An awful lot of research, academic research even, sits in libraries. But in a doing mode you’re acting to get to the next phase. So acting in and acting out and acting in and acting out, you get solutions.”

The Designing Dublin team’s desired solutions weren’t necessarily specific project outcomes; team members wanted to learn how the city could best learn to improve itself. That was a hard point to get across to stakeholders, many of whom had lofty expectations of tangible solutions. Convincing them that learning was also an important outcome wasn’t always simple. It took time and patience.

Given her focus on people’s development as well as project outcomes, Jean was thrilled with how everyone involved experienced personal growth. Learning this novel process led to confidence, too, supporting Jean’s belief in design thinking as a tool to unlock human potential: “The evolution that new team members have had in building their confidence, being aware of what they want, and being clear about what they can do with the tools that they’ve learned is pretty astounding.”

The city councilors also embraced their new learning. Jean explained that “the senior managers of Dublin’s city council were exposed to design thinking, a concept most of them wouldn’t have understood, but they say that it has changed the way they work and that they have become much more open.”

The Designing Dublin project provides an example of how embracing the design process can unlock hidden talent and resources. The Dublin city council moved from a hierarchical process of determining projects to a more democratic approach in which the city’s residents not only figured out what projects were the most valuable but also brought them to fruition. The learning gained from the original pilot project has rippled through the city and spawned many new initiatives, including an innovation lab for collaboration between Designing Dublin alumni and the city’s management, and a master’s degree in design practice at the Dublin Institute of Technology, the first degree of its kind in Ireland.

Bringing citizens and city employees along on an adventure of joint creation using design thinking was not a small feat. Design21C CEO Barry MacDevitt shared his insights about keeping team members on target without confusing them: “What we were trying to do through Designing Dublin was change mind-sets. It was about getting people to come together from different backgrounds, different age groups, and

giving them a really challenging project to work through together, making it very public and tough for them. It builds confidence; it creates a sense of ownership, a sense of wanting to do things. But it has a lot to do with how you stay in that moment of the question, being open, asking questions, but then taking action and doing it.”

#### What Do We Take Away from Dublin’s Story?

Government administrators rarely spring to mind as examples of design thinkers in action. The city of Dublin and Design21C’s collaboration offers a striking example of how design can empower such organizations and their constituents to generate and realize new possibilities. It teaches us a set of new lessons: Don’t Give Up—Bureaucracies Can Foster Innovation Design thinking breaks the old habit of seeing the world as a tangled mass of constraints. The city council had a difficult time demonstrating value to its citizens and engaging them in meaningful ways. When Design21C introduced design thinking as a potential solution, the city manager understood the value and was willing to contribute staff for the pilot projects. The citizens were engaged because they knew the council supported their efforts.

*Empower Citizens with Design Tools The process in Dublin gave citizens the chance to develop and experience their own ideas as prototypes. That empowered them to dedicate more energy to the projects and freed up city employees for other roles. Prototyping ideas made potential futures real for residents and helped them realize that their efforts could produce community-wide benefits. Ultimately, the city council could get no better research about what its citizens wanted than by letting them do what they wanted.*

*Avoid “Least-Bad” Thinking Prototyping community-sourced ideas on a small scale helped city administrators break their traditional style of problem solving. That shift redirected resources toward the best possible projects and away from those that were ideal only because of their low probability of failure.*

*Use Self-Selection to Ensure Viability The projects that engendered the most buy-in from volunteers were the ones that survived. Giving energetic citizens the chance to support a favorite project allowed them to see their efforts last long into the future.*

## Scaling a Design Thinking Competency at Intuit

**THE BUSINESS PROBLEM**

Maintaining leadership in creating customer value through innovation

**THE CONTEXT**

Intuit, a leading developer of personal and small-business software and one of *Fortune's* most admired companies, commits to expand its deep customer value by moving beyond “designing for ease of use” to “designing for delight”

**DESIGN'S CONTRIBUTION**

Providing a set of principles and tools for engaging employees across the organization to think more creatively about enhancing value for customers

WHEN WE LOOK AT companies that are out ahead in the design thinking space, we see Intuit setting the pace. Scott Cook founded Intuit with a strong emphasis on creating products that were easy for customers to use, and the company has leveraged that core value to drive design thinking into the company's DNA. For the past five years, Kaaren Hanson, the head of design innovation at Intuit, led Design for Delight, an ambitious initiative aimed at moving beyond using design thinking as a problem-solving tool to making it a core competency of employees throughout the organization. Her team's experiences and insights along the way offer surprising findings and solid benchmarks the rest of us can learn from.

Kaaren Hanson arrived at Intuit in 2002, bringing with her a PhD in social psychology that stood her in good stead as she worked to improve Intuit's design capabilities. In 2007, in response to a concern about a narrowing gap between competitors' and Intuit's product performance, the company launched a design thinking initiative. Though Intuit had continued to improve ease of use, its Net Promoter Scores (a widely used metric to assess the likelihood that a customer will recommend the firm to a friend) were not increasing as much as executives had hoped. CEO Steve Bennett pulled together a small team, including Kaaren, several senior operating managers, and the chief strategy officer, to address what was next. What lay beyond ease? The team's answer was *delight*, and it identified design thinking as one of the important paths to get there.

This support from the strategy and operating teams provided a powerful impetus. “At Intuit, we believe that you learn by doing,” Kaaren noted. “It wouldn't have worked to have me as the design leader go out

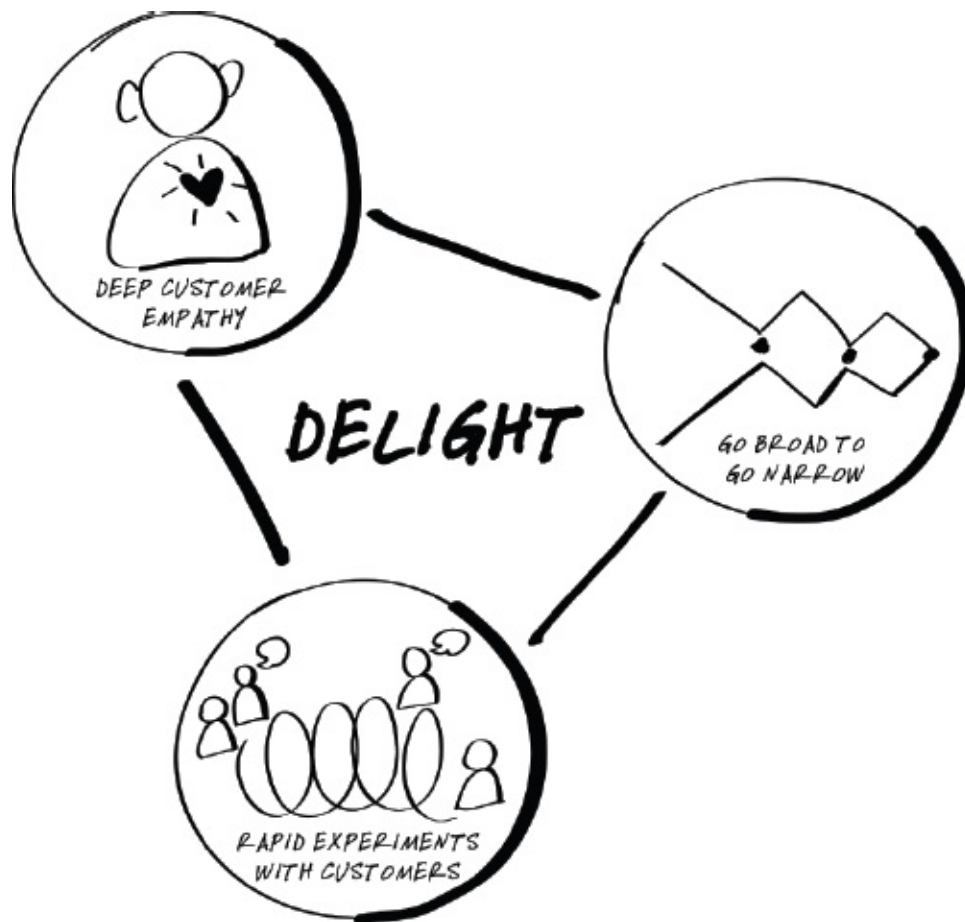
and do that on my own. That just would have reinforced what I already believe. But by sending out the chief strategy officer and a couple of general managers with me, that changed their mind-sets as well.”

The team called its vision Design for Delight (D4D) because, as Kaaren explained, “we care about delighting our customers, and design is how we’re getting there. But design thinking itself doesn’t mean much.”

#### Can We Talk?

Kaaren worked closely with Scott Cook, Intuit’s founder, who provided strong top-down support for the D4D initiative. Their first step was creating the Delight Forums, which brought in leaders from companies known for delighting customers to address the troops at Intuit. The talks, though engaging and well attended, did not produce the results Kaaren had hoped for. “We realized after about a year that while people were talking, they were not changing their behaviors,” she explained. “It turns out there was a big chasm between *saying* you want to do something and actually *doing* it.”

So Kaaren’s design innovation team decided to shift its focus. Though it had developed a comprehensive and thoughtful process to guide innovation efforts, it elected to emphasize just three simple principles instead. “A long process is almost cognitive overload,” Kaaren observed. “How do you juxtapose that with lean start-up, or agile, or waterfall, or total production systems, or whatever your favorite process is? It was simply too much. By looking at the principles instead, it was easier to say, ‘OK, how can you get deep customer empathy regardless of the process you’re using?’” The team identified three core principles: customer empathy, go broad before narrow, and rapid experimentation.



Kim McNealy, the director of marketing for Intuit's consumer group, described to us how the three design principles play out in his work with TurboTax, Intuit's premier tax product. Not surprisingly, the rhythm of Kim's business is determined by the fifteen-week tax season, which produces \$1.5 billion in revenues. In the off-season, he and his team prepare for the blitz, using customer ethnography to go deep, developing personas and segments. They then go broad, generating as many potential solutions to customer pain points as possible. Last year team members generated about five years' worth of work, he estimates. As tax season nears, they translate the most-promising ideas into hypotheses —“recipes,” as he calls them. Come tax time, recipes go “live,” and they move into rapid experimentation, siphoning off a percentage of traffic to different recipes. On a weekly basis, they ready the latest recipes, launch tests, and read results. Winning recipes become the controls for the following week. They repeat the cycle for the fifteen weeks of tax season. Rather than a side activity, developing deep customer empathy, going broad before narrow, and conducting experiments, it seems, are what Kim does for a living!

Creating Innovation Catalysts Kaaren's next step was to pull together a group of ten people with strong design thinking capabilities to act as Innovation Catalysts within Intuit. Two were from her staff: Joseph O'Sullivan and Wendy Castleman. This group began piloting sessions for teams on how to do design thinking, borrowing the model P&G had used. The Catalysts' job was not to *do* design thinking; it was to *facilitate* great design thinking in others. Finding the right kind of person for this role was about attitude as well as design talent. "One of our learnings was that not all ten design thinkers we chose were effective at getting others to do design thinking," Kaaren explained. "There were some who wanted to be the brilliant person who comes down from the mountain with the solution. They weren't actually useful to helping us scale." Joseph O'Sullivan agreed: "If you have a bunch of people who know this stuff and don't want to give it away, you can't scale it. So you have to be as much a facilitator of this as a tactician or a craftsman of it."

After a year of piloting the Innovation Catalyst program with ten people, the demand for the Catalysts was so great that the team realized it needed to scale. Suzanne Pellican joined Kaaren's team to create a scalable Innovation Catalyst training program and was recently promoted to D4D director. Suzanne grew the Catalysts to sixty in one year and then expanded the group to nearly two hundred. The Catalysts came from every business unit and were expected to help people not just in their own units but in others as well. The team trained about thirty-five people per class and ran two classes each fiscal year, including two at Intuit's location in Bangalore, India.

With two hundred nominees for each class, team members could afford to be selective. They looked for three criteria: demonstrated involvement in D4D activities, a supportive boss, and an accessible network of other Catalysts. Wendy explained that they had found the existence of such a "posse" an important factor: "Innovation Catalysts are more successful if they have other Catalysts to lean on, so they either need to be joining existing ICs or be trained with their posse-mates."

Initially, bosses were asked to give Catalysts who reported to them two days each month to focus on innovation work. Over time, Suzanne came to believe that this was not the way to go and began encouraging Catalysts to blend what they were learning *into* their day-to-day work. Kaaren talked about the reason behind this dawning realization as she and her team worked to embed design thinking in Intuit's DNA: It used to be that we thought about doing design sessions for large-scale or



strategic projects. But once we decided that our goal was really to get D4D into the company's DNA, the Catalysts began to spend 90 percent of their time doing D4D in their *daily* work and 10 percent helping others outside of their core group to do design thinking. This was a very important shift, because when it was about the sessions, people thought that design thinking is what you do in a one-or two-day period while someone holds your hand. But that's not really the big win. The big win is doing it in every meeting you're in.

Wendy, now the leader of the Innovation Catalyst community, offered a few examples of work the Catalysts were doing. One was the story of Lean StartIn, started by two Catalysts, Ben Blank and Aaron Eden, who wanted people to understand rapid experimentation and lean start-ups: a business approach to the development of new products that emphasizes scientific experimentation, quick iteration and product releases, and minimal funding. So they created a two-day competition in which teams work on their own projects, going through at least three experimental cycles to test their key assumptions. "It's been a fantastic success," Wendy explained, "with hundreds of employees running hundreds of experiments, including one team that was able to make a change worth millions of dollars based on a simple experiment. The great thing, of course, is that these two Catalysts are embodying the goal of the program: getting others to apply D4D to delight customers on their own projects." They've now run Lean StartIn competitions not only in Mountain View but also in Waltham, Bangalore, San Diego, and Tucson, with more scheduled.

As the Innovation Catalyst program gathered steam, the waiting list grew. Team members realized that they needed to harness the enthusiasm of a larger group to have more impact. They decided on a twofold focus: creating access to tools and building mastery using them. "Under mastery," Kaaren explained, "we realized that we needed to get more people to be very competent at the core methods underlying the three principles. The other part, access, was getting five hundred-plus people to actively apply design thinking in their everyday work. We don't want people who are passionate to lose their passion because they are not able to get into the Catalyst program—we don't want it to be exclusive. We're going to make sure all of those people are capable of using these methods regularly."

Wendy Castleman took on the job of creating a series of workshops to develop mastery. These were held with teams across the company and

spanned a variety of topics related to the core principles. One focused on deep customer empathy and looked at how to use an empathy map. It included a “starter kit”: a card that told you specifically what you needed to do to use the tool, an estimate of how long it might take you to do so, a template for doing so, and a video showing others using it. The team also established design thinking “office hours” to handle common questions and problems and staffed them with people with the most expertise on the topic—all with the aim of helping people feel comfortable and confident using design thinking techniques.

To develop mastery of the third principle, rapid experimentation with customers, Kaaren and Suzanne decided to work with consultant and author Eric Ries, an expert on lean start-ups. Eric had participated in a Delight Forum approximately three years before, “but not a lot happened,” Kaaren recalled. “We brought him back this past January, feeling like we really needed to push and deepen rapid experiments with customers.” Instead of giving a talk, Eric focused on doing and coaching. First, two thousand or so employees, about three hundred of whom were in the room, watched Eric outline his approach. Then, four teams, chosen in advance, presented their problems for about five minutes each. Eric then spent about fifteen minutes coaching each team. He was asked back in May. Again, he coached four teams and then spent two and a half hours with the Innovation Catalysts trained in rapid experimentation, coaching them on how to coach others. Joseph O’Sullivan, meanwhile, spearheaded the work to integrate design thinking into Intuit’s leadership and development training programs and succeeded in getting HR support for establishing design thinking as a core component. Again, Innovation Catalysts were coaches in these efforts.

**Jumping on Bandwagons** The team was especially vigilant in the ongoing search for other initiatives under way at Intuit that might benefit from a design thinking approach. The goal was to “pull design thinking into everything,” as Kaaren described it. She and her team considered what was most important to Intuit’s strategy and jumped in, looking for partners who were open and friendly.

Commercial innovation, they noticed early on, was taking off within the marketing group. This was a prime candidate for the use of design thinking, so they jumped on that bandwagon. More recently, mobile became a key corporate focus that they were able to contribute to significantly. They continually emphasized using design thinking to accelerate the progress of other initiatives as opposed to presenting it as

a standalone endeavor. “You might say we swam downstream, which is how we ended up at a CEO offsite talking about commercial innovation but also having a conversation around design,” Joseph explained. “That was a deliberate decision we made that we were going to work to make things better, because this is a set of tools that helps you achieve better outcomes. And we’re not going to do this *instead* of something else. This is about inclusion, any type of inclusion.”

Creating Infrastructure Throughout the process, the goal for Kaaren and her team was to set Intuit employees up for success. Practicing what they preached, they used the principle of deep empathy to understand in more detail the obstacles that were keeping employees from using design thinking. “Sometimes they’re thinking, ‘I can’t get deep customer empathy because it’s too hard,’” Kaaren reported. “Why is it too hard? Because it takes two weeks to get in touch with customers. So now part of my team, led by Kathy Schlamp, has kicked off an initiative that reduces the time it takes people to get in touch with customers from eleven days on average to five. We also have office hours every week with customers that have characteristics many people want to see. A note goes out to everyone saying, ‘Here are the ten customers coming in this week. If you want to spend some time with them, let us know.’”

The team also held office hours to help employees with the rapid experimentation principle. Coaches were present from 9:30 A.M. to 11:30 A.M. in the headquarters café to work with anyone who showed up.

Equipping Intuit leaders to model, coach, and create appropriate expectations for the new behaviors was a top priority; it was not enough for work teams to be practicing design thinking in isolation. For example, prior to a leadership conference, Lionel Mohri, a rapid experimentation expert on Suzanne’s team, sent out a note asking employees what barriers they were running into as they attempted to do rapid experimentation. Those issues would be addressed at the upcoming conference. The goal was to help executives develop deep empathy for employees. In Kaaren’s words: We need our leaders to endorse this not just with their words but with their actions. If our leaders haven’t experienced how to do this themselves, they can’t really support it. Our belief is if we get our leaders to *experience* rapid experiments, if we make sure that they are getting deep customer empathy with the employees who are struggling to do this, that’s going to help them see the barriers that they personally can remove. If we stand up at the conference and tell them to do a, b, and c, that’s not going to make a lot of difference. But

when they watch their people struggle, they are going to want to remove those barriers themselves.

In subsequent offsites, Intuit's leaders had an opportunity to develop empathy for employees by doing some rapid experimentation themselves. The team sent more than five hundred leaders to spend an hour and a half with customers, working through a rapid experimentation example: coming up with a vision, identifying the leap of faith and the hypotheses, and then running an experiment. In each situation the leaders had coaches: Lionel Mohri and Innovation Catalysts who were using rapid experiments regularly. "We don't send out a group of people who have never done this to do it alone," Kaaren told us. "That's not going to work. You need a couple of people who are there doing it with them, thinking about their situation and how to help them be most open to the change in behavior."

The close attention to employees' experiences as they learned to use the new tools revealed other obstacles to success. Kaaren recalled that Eric Ries was pushing one of the teams he was coaching to launch its product very quickly. The problem was that code needed to be written, and the team lacked an engineer. "That is a classic problem," Kaaren noted. "Or we find that the operating mechanisms we're using just don't support rapid experiments. Or we're so used to surveys where you need three hundred people that no one is comfortable when they only have fifteen."

The design innovation team also discovered that having too many projects at once made it hard to focus and actually get anything done quickly. And groups that were not co-located found it difficult to move fast. All of this information about the current reality of Intuit employees, this deep understanding generated by attention to *What is?*, helped the team create a more supportive environment for them.

**Creativity Through Structure** In Kaaren's view, helping employees become comfortable with design thinking required providing structure. Though it seems paradoxical, structure makes it safe to try something new. As Kaaren explained it: "Anytime you're trying to change people's behavior, you need to start them off with a lot of structure so they don't have to think. A lot of what we do is habit, and it's hard to change those habits. So by having very clear guardrails, we help people change their habits. And then once they've done it twenty or thirty times, *then* they can start to play jazz as opposed to learning how to play scales."

Templates provided an important kind of structure. For instance, in

order to increase employees' comfort with rapid experimentation, Lionel Mohri created a tool called NEXT. "There was nothing surprising about this," Kaaren recalled. "Experimentalists would do all this with their eyes closed. But it's hard for people who are just starting."

To make it even easier for leaders to teach their own people the design thinking tools, the team provided scripts that detailed how to work with a group on a new activity, down to the minutes required for each step and what the leader should say between steps.

Practicing the behaviors could be more valuable than learning the theory behind them. "Sometimes you focus on changing the attitude and hope the behavior comes along," Kaaren noted, "but sometimes you have people do the behavior and that helps change their attitude."

Finally, the team took pains to give people a realistic sense early on of the challenges of using these unfamiliar tools. This forewarning of the emotional ups and downs helped novices persevere. "One of the ways we reduce fear is by talking about how it's really stressful because it's not clear if anything good is really going to happen," Kaaren explained. "We normalize it. And I think that by normalizing it, it starts to feel OK. It doesn't seem as much like something you should run away from."

**The Ever-Elusive Issue of Measurement** Just like the leaders in so many of our other stories, even the design-savvy folks at Intuit found it challenging to measure the impact of design thinking. "One of the things we had to do at first was to track activity—were people doing the stuff they said they were going to do?" Joseph told us. "We do have a database for that. And periodically we ask, 'What are you most proud of? What impact has it had?' But you can start a project, and it might be a year to two years in development. So tracking can take some time. If there's a lesson to be learned out of this, it's patience."

Especially gratifying to Kaaren has been observing the artifacts of design thinking throughout the company. "We are seeing Post-its everywhere," she said. The team has been tracking interactions with customers. Since reducing the time to get to customers, they are seeing twice as many a year. "All of this is evidence that this is starting to get into our DNA," she said with pride. "Now when I work with the general managers, they'll pull out the Post-its and say, 'Let's go broad.' They are using the language."

Impact was something that Kaaren, and senior leadership at Intuit, were willing to take on faith: "We put the customer first. And the reason we're doing design thinking is because it helps us put the customer first

in a much more innovative way. Our vision is that we're a premier innovative growth company. And so it's tightly aligned to our vision and to our values around customers. If you are spending your time trying to do a lot of justification, you probably don't have the right mind-set."

Kim McNealy, the marketing director we met earlier, was not fazed by the measurement question. For him, trying to imagine what life would be like without design thinking and the three principles said it all: Without deep customer empathy, you'd lose sight of who you were designing *for*. As you are selling internally, it is easy to end up in a bad place, pleasing "hippos" (the highest paid opinions) instead of customers. Without going broad before narrow, it's easy to fall in love with your first idea. People are naturally passionate, but that's like deciding your first date is the only person for you. And it also lets everybody get heard. We all put our ideas on the table. Even if my idea doesn't move forward, I've been heard. And without rapid experimentation, I'd be waiting to "perfect" my ideas before trying them out. In my business, I can't waste time. I can get more of almost anything else, but not time.

**The Role of Culture** The team felt strongly that connecting its approach to Intuit's unique culture and values was an important factor for success.

"You figure out what's important to the culture and you lean into that," Kaaren told us. "At Intuit, the customer is important, so two of our three design principles are about the customer. There are other aspects of design thinking we could have chosen to home in on, but those two really resonated with the culture. And it's easier to move a culture ten or fifteen degrees than to move it forty-five or fifty."

Other firms would need a different approach. "When you're in an engineering-focused culture," Kaaren explained, "then you really have to focus on rapid experimentation. You're going to be looking at metrics so that you give comfort to the engineers and respect the values of that culture." And in a firm focused squarely on the bottom line, she told us you'd work first on areas such as marketing, where you can get clear returns on investment very quickly. "At any company you give me, there will be at least seven ways that we can figure out how to get design thinking started and get enough wins that we can make it happen," Kaaren said. "It's just a question of how long it is going to take and how far it will get. At Intuit, it's taken us five years to get to this point. At another company, frankly, it might have taken fifteen years. But that doesn't mean you're not going to be making progress."

And it wasn't just companies that benefitted from design thinking, Kim

McNealy explained. He began to see ways in which he had practiced the principles of design thinking in his previous job as a Navy submarine officer. “It sounds weird to say that we wanted to develop empathy for those hostile to the United States,” he told us, “but we needed to know our enemies better than they knew themselves. We needed to understand the context in which they acted so that we never, for instance, sent them an unintended signal that escalated conflict. And when I trained captains and crews on the latest wartime scenarios, it was all about rapid experimentation. We’d throw the worst at them and ask, ‘What did we learn from that?’”

Kaaren wondered whether the success of design thinking might in fact be signaled by its disappearance. “When I think about Intuit, design thinking is going to be a part of our DNA,” she noted. “We’re not going to think that we’re doing design thinking. It’s just going to be how we do things. We may not even need to call it out.”

#### What Do We Take Away from Intuit’s Story?

The Intuit story has many powerful lessons for those looking to embed design thinking as a core competency rather than treating it as a “flavor of the month”: Practice What You Preach Instead of just talking about principles such as empathy, Kaaren and her team put them into play to understand their own customers and remove the obstacles that keep them from using design thinking. They learn, respond, and adapt as they go, on the basis of what they observe and experience. They treat everything as a hypothesis. They listen as the situation talks back and iterate their way to success. Much of what they learn seems surprising: Design talent doesn’t necessarily make you a good Innovation Catalyst—you need to want to give it away; a great design process may not be as helpful to novices as a small set of key principles; applying design to your day-to-day work may get you further than running sessions on strategic problems. Who knew?

*Set People Up to Succeed We think that one of the most distinctive aspects of the Intuit story is the comprehensiveness of the supports they put in place to help employees succeed at using design thinking. Elements of infrastructure work together to disseminate and embed the new competency. They offer office hours, run workshops, provide coaching. They foster networks of like-minded individuals—every Catalyst rides with his or her posse. Perhaps most significant, they don’t just ask leaders to model the new behaviors; they insist on it and then provide the support for them to do it well.*

*Use the Left Brain to Unleash the Right Brain* We are also impressed with the way Kaaren's team members used people's left brains to unleash their right brains. The structure they introduced—templates, scripts, realistic preview—made it simple and comfortable for people to take on the sometimes scary unknown of design thinking. We've come to believe that one of the most serious impediments to managers' use of design thinking is plain old fear: fear of getting it wrong, of looking stupid, even of wasting time. To borrow Deming's famous phrase, we've got to "drive fear out of the workforce" to democratize design.

We've seen this before. One of our favorite innovation stories comes from Kelvingrove, Glasgow's premier museum, where director Mark O'Neill asked his curators to fill out a form when he wanted to get them to try new behaviors. "People working in bureaucracies respond to forms," he observed. "People can obstruct or even sabotage new developments, but most people will feel they have to make some effort to comply with an instruction to fill in a form related to their discipline, occasionally even close to the deadline. The filled-in form gives you a basis for engagement, for development of the idea."

We know that making design look linear and straightforward (which we all know it isn't) drives designers crazy. They worry that we are devaluing their unique and valuable expertise. But Kaaren is trying to follow the cardinal rule of successful teachers: Meet your students where they are, not where you want them to be. So maybe what we need is a few less stories about Steve Jobs's brilliance and a few more paint-by-numbers kits.

*Look for Bandwagons to Jump On* You have got to love the decidedly easy virtue of the Intuit team—it doesn't take much of a come-hither look to attract its attention. Before you know it, team members are sidling up to whatever initiative they believe can benefit from a roll in the hay with design thinking. With such a sunny view of the possibilities (doesn't almost everybody need design?), it is no wonder that Post-it Notes are popping up everywhere. They truly want to give the approach away to anyone who can benefit from it. And rather than exhorting from on high about the superiority of all they have to offer, they just roll up their sleeves and get to work helping people.

We saved the Intuit story for last because Kaaren and her team are taking design thinking to a new level, even beyond that of the other nine stories we've already looked at. Those stories demonstrate the use of design thinking as an innovation driver across a diverse set of problems,



but the people at Intuit hope to accomplish something even more ambitious. For them design thinking isn't just a tool kit for management—it *is* management.

## Where Do We Go from Here?

SO WE'VE LOOKED AT TEN stories in which design thinking worked to solve organizational problems in innovative ways. What makes each story so inspiring to us is not the *presence* of miracle making but its *absence*. The outcomes our design thinkers produce are often unexpected and even magical, but the way they produce them is not. In each case, we can follow the path they took and the tools they used along the way. No parting of the waters is anywhere in sight—just a lot of bridge building.

We aren't claiming that what they did was easy—far from it. There is impressive effort and skill involved in the researching, planning, idea generation, and testing evident in each story. Unlike parting the waters, building bridges takes discipline and knowledge and hard work. You have noticed, of course, the prominent role that design experts play. These are not stories of managers going it alone but of partnerships between professionals trained in the design space and managers in the business space. This is a powerful combination.

But few managers we work with have access to designers. Managers who aren't in R&D or marketing or who aren't working for companies like those featured here—where real designers are part of the landscape—don't have Lee Fains or Matthew Holloways or Kaaren Hansons to turn to. If they want to take advantage of what design thinking has to offer, they will most likely have to go it alone. They will need to build their own skills and create their own posses. We hope that our stories have provided the incentive for taking that journey by demystifying the design thinking process and demonstrating the value of practicing it.

We believe that inside the “black box” of design thinking is a process that managers can be taught. And that's because we are not talking about turning managers into designers but about helping them to become better design *thinkers*, literate in the tools and process that designers use and able to use that process not to *design their products* but to *solve their business problems*.

The design thinkers in our stories have used the design approach to solve many different kinds of problems in different ways. Some, like those at IBM, The Good Kitchen, and Toyota, followed the entire process, beginning with reframing the problem, then moving to understand *What is?* through ethnography on both users and employees, generating *What if?* ideas in co-creation sessions with a broad group of stakeholders, and then finally figuring out *What wows?* and *What works?* in real tests with

the users of their services. Others, like those at Suncorp and SAP, zeroed in on a specific aspect of design thinking. And at Intuit we got a glimpse of what lies beyond using design thinking to help solve problems: embedding it as a core management practice.

In our final chapter we'll look *across* the stories for larger themes about design's potential contributions when it is deployed throughout an organization to solve business problems at every level and in every function. And in our postscript we'll consider how to educate managers in design thinking—how to make the choice of a design thinking approach a safe one for them.

**Lessons Learned** Each story has offered its own lessons and insights. Here we want to step back and look at insights that emerge across the stories in two key areas: the distinguishing contributions of the process and tools, and the challenges of measuring their impact.

*Design's Distinctive Contributions* We think that five aspects of design thinking truly distinguish its contributions for managerial problem solving.

*These involve the ways in which design thinking helps us reframe, collaborate, engage, curate, and accelerate innovation.*

## FIVE CONTRIBUTIONS

1. *Reframing* to ask better questions
2. *Collaborating* to leverage difference
3. *Allowing emptiness* to invite engagement
4. *Curating* to distill the essence
5. *Accelerating speed* to cut through inertia and bureaucracy

**The power of reframing** is foremost among the contributions of design thinking. Dramatic reframings occur in most of our stories and set the stage for innovative results:

- At IBM, making trade shows smarter evolves into understanding how human beings communicate and learn.

- At Suncorp, problems of postmerger integration instead become challenges of engagement and alignment around strategy.
- At 3M, talking to customers' designers morphs into reimagining the kinds of conversations salespeople need to have and how to empower those.
- At SAP, designers and strategists join forces to take two seemingly distinct problems related to the arrival of Web 2.0 and blend them into one powerful challenge.
- At Toyota, it turns out that the customer service reps need more

than a new database—they need a redesigned system for it to reside in.

- At The Good Kitchen, “fixing” the menu gives way to understanding the alienation of both the elderly and the food service staff and, ultimately, to solving both their frustrations.

In each case design thinking helps those involved ask better, deeper questions that expand the boundaries of the search itself. To the extent that the path to innovative solutions begins with asking innovative questions, the contribution here is significant. As we have said time and again (sorry if we sound like a broken record), one of the most serious challenges we face in our quest for innovation is our own impatience, which makes us rush to *solve* instead of taking time to *understand*. It is design’s insistence that we stay in the question that is so valuable, as Design 21C’s Barry MacDevitt reminded us: “The design thinking approach forces you to stay in the question and not define exactly what the problem is. We all have a tendency to jump to solution mode far too quickly, so the design thinking approach forces you to live in this unclear, sometimes very muddy place. This ends up producing a much better understanding of the problem you’re trying to solve.”

The lesson here is clear: Spending time at the front end of the process to explore the question and its context can pay big dividends in producing more effective solutions.

Another factor that jumps out across our stories is the power of design as a **collaboration** tool. Not a single story features a lone actor, a Steve Jobs driving innovation by dint of personal genius. Our stories are full of people who are *different from* one another *co-creating with* one another:

- Sometimes that difference is about functional homes, and co-creation is primarily within or across teams, as when the ex-strategy consultants in corporate planning team up with designers at SAP or when change consultants, IT engineers, and contact center managers figure out how to work together at Toyota.

- Sometimes that difference is about corporate culture, and co-creation occurs between companies, as when Suncorp and Promina come together for a merger and French bankers share insights at FiDJl.
- Sometimes it is a difference in fundamental ways of “knowing,” as when entrepreneurs and corporate types work together at MeYou Health to reap the best of both qualitative and quantitative methods of understanding customers.

The managers and designers in our stories successfully surmount—and actually *leverage as a positive force*—the kinds of differences that often stymie more creative approaches to decision making in organizations. How many of us have been trapped in seemingly endless debates between the “quant jocks” and the “intuitives” or between those advocating the “customer case” versus those insisting on the “business case”? How often have we been caught between those wanting to exercise control over resources and outcomes and those wanting to give people the freedom to innovate? Design thinking succeeds in part because it refuses to get caught up in debates and either/or thinking. Instead, it insists that we develop shared insights and ambitions before generating ideas and that we use data from experiments (rather than theoretical debates) to determine the most effective course of action.

Design’s emphasis on collaboration is also, in part, due to the fact that the boundaries around the area of opportunity that design uses—and the solutions it creates—often turn out to be at the level of the larger system rather than an individual piece of it. Embedding design in the DNA at Intuit is not just about having the principles, or the Innovation Catalyst program, or workshops; it is about all of these things coming together to create a system in which design thinking can thrive. At IBM, it is not just taking down the banners at trade shows and replacing them with calming décor and padded carpets and tables shaped like puzzle pieces. It is the physical, yes, but it is also having concierges welcome visitors to the space and training experts to be storytellers. At The Good Kitchen, it is new menus, cook staff uniforms, feedback cards, and, perhaps most of all, a new mind-set that provides the uniting logic.

#### FOR THE NON-GOLFERS AMONG US

There are a variety of team-based approaches to golf (Best Ball, Captain’s Choice, Florida Scramble) that put a different spin on the game. In these versions each player doesn’t just hit the ball and tally an individual score. Instead, a team of four plays off of the group’s best shot and ends up with a single shared score. As a result, Best Ball leverages each player’s strengths and compensates for his or her weaknesses. Competitive advantage lies in combining diverse skills (putting, driving, etc.) in complementary ways.

In our stories design thinking tends to provide *bundles of solutions*, held together and inspired by deep insights about users. Of course, this

is something we already know about innovation: It is more often the recasting and recombination of myriad elements rather than one big “new to the world” idea. Our stories merely offer more evidence for this. But getting to systems-level solutions usually requires cajoling reluctant participants to work across organizational boundaries in ways sometimes at odds with functional self-interest. Design thinking offers tools that can foster such collaboration by making us less selfish, building our commitment to a set of desired outcomes based on human needs that we all share.

And so, every story in this book brings home the message that innovation is a team sport. But design’s impact is more significant than that: It’s a team sport that *better*s everyone’s game. It’s like playing Best Ball rather than traditional golf. Instead of hurting our score, individual differences hold the key to higher performance.

Another interesting, and less discussed, contribution of design thinking is that it helps us to **curate**, to drill down to the essence of an issue and see what matters. This is an increasingly important role in today’s environment. Think about FiDJI and the astonishing ability to turn a thousand pages of transcript into a two-minute video that says it all. At SAP, a sixty-page working paper that no one reads becomes a fifteen-minute slide show that fascinates. Think of the Suncorp posters that capture each task force’s analysis of *What is?*—each on just a single poster that everyone can study and discuss. Or Lee Fain’s video of the future that 3M Patterned Transparent Conductor film makes possible—a video so compelling that the engineers want to show it to their kids to help them understand what Dad does for a living. We hear a lot about curation these days. *Wired* magazine even announced recently that we have entered the “age of curation.” Why? According to *Wired*, “We’re surrounded by too much music, too much software, too many websites, too many feeds, too many people, too many of their opinions and so on...”<sup>1</sup> We know that too much of a good thing can be bad for us, and research demonstrates that too much information actually degrades the quality of our decisions. But it is not likely that this information bombardment is going to let up, so we predict that the future will place even more value on the ability of the design process to cut through complexity to find the nuggets of wisdom.

Yet another contribution of the design process (and perhaps the fuzziest) is design’s comfort with **emptiness**, with leaving space in the emergence of a solution so that many can contribute to it. As we

discussed in the Suncorp story, managers are often taught the importance of finishing something, making it complete. But artists and philosophers know better. “To finish a work?” Picasso said. “To finish a picture? What nonsense! To finish it means to be through with it, to kill it, to rid it of its soul...” German philosopher Martin Heidegger talked about accessing the “withheld”: the better self within each of us who waits to be made present, but only if the space and the invitation are provided. In organizations, employees want to be part of works in progress, too, to feel the sense of discovery as they unfold. Why do we love game shows and sporting events and even, sometimes mystifyingly, reality TV? Because we don’t know the outcome. And design thinking builds a sense of possibilities into every step of the process, if only we can reduce our own discomfort enough to allow the intrigue of *discovering* to take over.

In a wonderful paradox, that same ambiguity that makes us so uncomfortable, it turns out, also has the potential to unleash a level of energy we rarely experience when presented with a fait accompli. Leaving space for stakeholders to be part of the discovery of new ideas, to be part of the emergence of innovation, gives meaning to their efforts and has tremendous power. Involvement also confers a sense of ownership. Rather than feeling coerced into accepting someone else’s answer, I am part of the journey. Along the way, design thinking techniques like mind mapping and the use of posters and cards invite me to choose the information that I believe to be important and to build a shared mind-set with others, each of us starting with our own choices.

The final contribution we want to note is an outcome of the previous three: When you combine skilled curation and the engagement and alignment made possible by design’s affinity for collaboration and emptiness, you get another invaluable asset for any organization trying to move innovative ideas through bureaucracies: speed. In most organizations we work with, the highest payoff is not in innovating the solution but in innovating *how* people work together to implement the new possibilities they see amid organizational inertia, bureaucracy, and risk aversion. Design’s ability to deliver engagement and alignment and curation greatly increases speed by removing the friction and subsequent drag created by trying to unite people with different views of the world around a new idea. By drilling down to core insights, building a shared mind map of the current state, and then translating that into design criteria, the debates so common over new ideas tend to fade. The question becomes whether or not the idea meets the design criteria with

sufficient vigor to be moved into experimentation. And that is a far more straightforward and fact-based discussion than the kind we get when people evaluate a new idea without a shared view grounded in stakeholders' needs and desires.

We see these five contributions of design—reframing, collaborating, curating, allowing emptiness, and accelerating speed—play out throughout our stories. The results they produce—asking better questions, leveraging difference, distilling wisdom from data overload, and encouraging engagement and alignment—will only become *more* valuable in an increasingly global, unpredictable, and complex world.

Evaluating Design Thinking's Impact If there is one issue that one might have hoped to hear more about in our stories, it is the area of metrics. In an ideal world each story would have demonstrated a concrete set of measurable outcomes of the kind that today's quantitative culture demands. Perhaps naively, we embarked on this project with high hopes that our conversations with managers and designers would resolve some of the challenges involved in demonstrating design's impact—that we would uncover some hitherto hidden set of metrics that would solve one of design's trickiest problems.

We certainly tried. We broached the issue in every one of our interviews. Yet this search for what Lee Fain called the “Holy Grail” of design thinking seems, on the surface, to have produced about the same outcome as the search for the real Holy Grail—the mystery of its whereabouts remains unsolved.

There were some impressive numbers to talk about: the number of qualified leads at IBM, substantial cost savings at Toyota, market share growth at Suncorp, growth in client base and meals ordered at The Good Kitchen, the building of a new business at MeYou Health. But the picture these numbers paint seems incomplete. Virtually everyone we spoke with—on both the management and design sides—experiences the work as *extremely* successful. Why do our metrics often fail to reflect this enthusiasm?

Could it be that we have been asking the wrong question? Perhaps we should take our own advice and reframe: What problem are we trying to solve?

We aren't looking for innovation for its own sake; we are looking for evidence that it is providing better solutions. But what does “better” mean? In organizations, the outcomes that demonstrate “better” are usually more satisfied and loyal customers or clients, more motivated



employees, and better financial results—all pretty obvious. What is not usually obvious, however, is *how* to accomplish these, for they are just *outcomes* of doing other things well. What we need to understand (and measure) is what produces those results. As managers, we don't want to manage *profits* per se but the *behaviors* that systematically lead to profitability. And so the questions that matter are what behaviors are associated with better outcomes and how we can encourage and ultimately measure them.

The outcomes produced by design thinking that are easy to measure offer few clues about *how* to create better solutions—they offer just the final evidence that we have succeeded. As such, they represent only the tip of the iceberg of what matters to us in our search for the demonstration of design's impacts. Only the most obvious outcomes of design thinking are clearly visible above the surface. They are concrete things that can be easily *counted*:

- Cost savings at 3M from producing a low-fidelity prototype instead of a high-fidelity prototype
- Increased number of meals ordered and customers served by The Good Kitchen

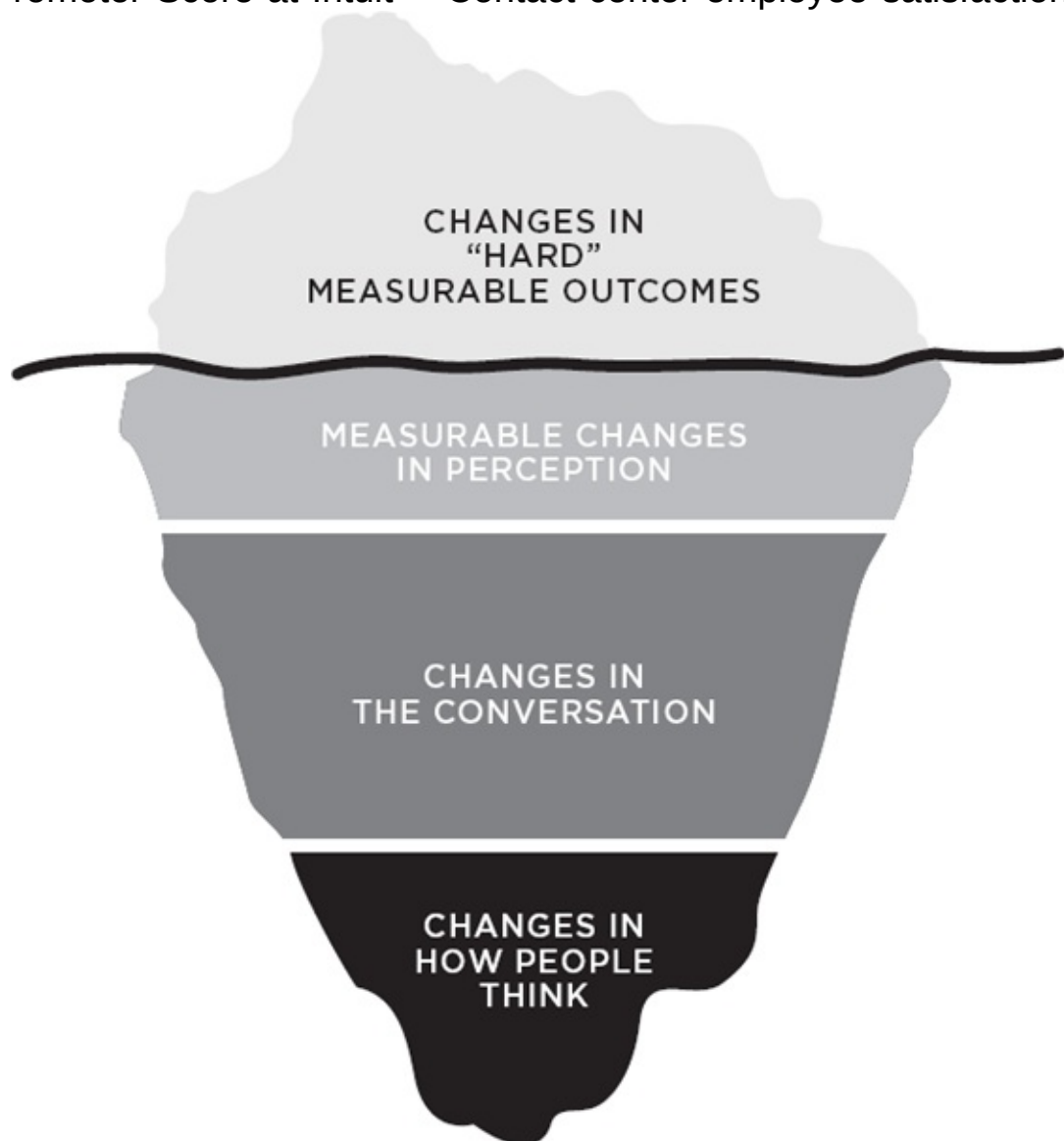
- Increased hot leads at IBM

- Decreased call-waiting time at Toyota
  - Hits on the URL of the future-use-case video at 3M
  - Increased number of customer interactions and experiments at Intuit
- Even when we stick with what we can count, the ability to tie these outcomes to financial measures gets trickier as we go down the list. Direct decreases in cost at 3M and increases in revenue at The Good Kitchen—check! From hot leads to more revenue at IBM? OK. From decreased call-waiting time to lower costs at Toyota? Ditto. But what about hits on the URL at 3M? Depends on whether we are interested in visibility or profitability as the key metric. And increases in customer interactions and experiments at Intuit ultimately leading to higher customer satisfaction and maybe even increased profitability? More of a leap, for sure, but one with evidence to support it. And this finally begins to hint at the kinds of new *behaviors* we are looking for.

If it is the behaviors themselves that we need to identify—so that we can manage them—it becomes more challenging as we try to assess what is going on *beneath* the water line.

What is going on below the surface are changes in people's perceptions, conversations, and even ways of thinking. These changes are more subtle. Any measurement we take of them is perceptual and

subjective: • Percentage of people at Suncorp who say they understand the strategy and find it compelling • Measures of customer satisfaction like Net Promoter Score at Intuit • Contact-center-employee satisfaction



at Toyota

Again, these are themselves outcomes, and their direct link to objective financial metrics like revenues and profits is difficult to demonstrate. But increasing the number of people who think they understand the strategy, or would recommend your product to a friend, or enjoy their work seems valuable in and of itself, doesn't it? And those accomplishments both reflect and encourage more effective behaviors.

As we go deeper beneath the waterline, we find another significant set of changes related even more directly to behaviors. They are hard to measure because they are changes in the *conversation* itself: • The 3M

customers' shifting frame of reference that Bret Haldin hears in their referencing of the CES event • The Post-it Notes that Kaaren Hanson sees at Intuit and the "let's go broad" language that she starts to hear among managers • The conversational shift Mark Milliner hears at Suncorp from glass half empty to glass half full • The animation that Ben Roth sees in the IBM expert who starts to relate his passion for fishing to his work • The board conversation at SAP that goes on for three hours instead of the allotted twenty minutes It is amazing to think that, even in this virtual age, management still happens largely through conversations between leaders and their people. They may be occurring increasingly in teleconferences, through e-mail, or even on Twitter, but changing the conversation is still *the* crucial path to changing behaviors and, ultimately, outcomes. And so we can begin to look for some of the specific changes in conversation that design thinking processes are meant to produce:

- Are people talking about envisioning new possibilities together or are they still debating their individual recommendations?
  - Are they listening to understand other people's perspectives and to build on them or are they listening for weaknesses in their arguments?
  - Are they actively searching for disconfirming data or instead latching onto whatever supports their viewpoint?
  - Are they talking about designing marketplace experiments or just arguing theory in conference rooms?
  - Are they spending time in meetings figuring out how to start small and learn as they go, or are they trying instead to create the perfect plan before any action can be taken?
  - Are they sharing deep primary data gathered from those they wish to serve and mining this for new insights together, or are they still compiling Web-based surveys that reveal only superficial attitudes and opinions?

All of these behaviors can be observed and monitored. They can be encouraged—and perhaps even managed.

But we can go even deeper. Some of the most significant conversations we have are with ourselves. Buried well beneath the waterline, but potentially most significant of all, are the changes not in what people say or do but in how they *think* and what they *believe*:

- How the FiDJI financial services execs begin to think of customers in more empathetic ways • How the engineers and change consultants come to see each other differently at Toyota There may even be changes

in how people think about *themselves*: • The food service workers at The Good Kitchen who come to think of themselves as chefs • The finance professionals at Suncorp who see themselves as lifesavers rather than police officers • The citizens of Dublin who come to believe that they are capable of making a difference in their city These are changes in mind-set. Andre Martin, the chief learning officer at Mars Incorporated, explained to us the ripple effects of such changes: “I believe you start with mind-set—expose people to a different way of being in the world. By changing mind-set, you change the words that people say. By changing the words they say, you change how they behave. By changing how a group of people behaves, you change the culture.”

If you shift people’s mind-sets, you set in motion a series of behavioral changes—in the conversations they have, in how they see the world, and, ultimately, in the “hard” outcomes they produce. How and when do the subtle changes far below the surface bubble up into positive outcomes that can be easily counted? Hard to say. How many of those outcomes will never be directly traceable to design thinking? Most of them, we suspect. Are they any less significant because of that? No. Not if we are asking the right questions.

As teachers who work with managers, the most gratifying outcome we see is the shift in our students as they gain confidence in their problem-solving abilities and come to see themselves not as uncreative “management types” but instead as inhabitants of a world filled with possibilities that they can make real. We hope this book has helped to make that shift happen for you.

<sup>1</sup>Eliot Van Buskirk, “Overwhelmed? Welcome the Age of Curation,” *Wired* (May 14, 2010). Retrieved November 11, 2012 from [www.wired.com](http://www.wired.com).

## POSTSCRIPT

### Educating Managers for Design

DESIGN INVOLVES NEW BEHAVIORS, and that means it doesn't come naturally to most managers. They must *learn* it in order to choose it. How do we prepare them to make that choice? As educators, that is a topic near and dear to our hearts, and we would feel remiss if we ended our conversation without addressing this issue.

Organizations such as Intuit are building supportive systems, processes, and culture to help turn design thinking into a natural act. But because design relies on behaviors and mind-sets that feel uncomfortable to many people raised in traditional organizations, education must be an important component of any strategy for creating both individual and larger organizational competencies in design thinking. And so we want to share with you just a few more stories. They are stories of organizations—and in one case, an entire country—partnering with educators to accelerate the learning and deployment of design thinking. Educational institutions such as the Institute of Design at the Illinois Institute of Technology, the Rotman School of Management at the University of Toronto, the design schools at Stanford and Potsdam, and our own Darden School of Business here at the University of Virginia, among others, are working with a variety of individuals and organizations to spread the gospel of design thinking to practicing managers.

At Darden our closest partner in this endeavor has been Mars Incorporated, a global leader in the food industry. Andre Martin, the chief learning officer, and his staff have integrated design thinking into the core of the company's leadership development programs at both senior and middle manager levels. Andre described to us his own personal journey, as a leadership expert, into design thinking:

We're living in unprecedented times, the most dynamic environment we've ever faced into. There's more chaos in the world and a greater sense of competition due to the democratizing of information. I went from practicing organization development for development's sake to instead focusing on helping leaders solve very complex strategic problems when there's really no sense of the right way to go. That sets the stage for design thinking. It's about how you face into and solve wicked problems in a way that's going to allow you to create the right solution at the right time for the right consumers.

Mars practices what it calls "challenge-centered learning": The

purpose of the company's leadership programs is not only to reach the manager sitting in the seat but also to ensure that leadership development efforts add specific value to the company. "Our target is the challenge they're bringing in on behalf of their business," Andre explained to us. "Teaching the tools is a large part of this. It connects the work we do in the program to something that's going to grab people, that will wake them up and demand their attention at a different level."

Continuing to build on this approach, Mars has partnered with Darden to design and deliver an ambitious program to develop design thinking competencies focused on navigating complex challenges and producing breakthrough thinking in its mid-level management ranks around the world. The program has three modules. The first lasts approximately three months and is self-directed: Through e-learning materials, managers begin to learn about and practice ethnography tools and assess their leadership skills and personal networks. With input from their line managers and in consultation with program facilitators, participants identify a challenge to which they'll apply what they are learning. The second module is classroom based: In an intensive weeklong session using a workshop format, managers are introduced through a case study to a portfolio of design tools, while continuing to work on their leadership skills and personal networks. During this module they begin to plan how they will apply each of the four design questions—*What is?* *What if?* *What wows?* and *What works?*—and the related tools to their own individual challenges. When they return to work, module three commences: Supported by coaching, they apply their newly learned design process skills to the project identified in the first module, culminating in a learning launch presentation ninety days later.

In assessing the success of the endeavor, Andre's aim is to achieve the kinds of changes in mind-set we talked about earlier:

Early on, in what we hope will become a huge cultural shift at Mars, I look for whether the words are changing, and I see more design thinking language in the way our leaders talk now than I ever would have expected. I hear my people talk about emotions and tell compelling stories. We are seeing more story-based business cases, profiles of consumers and their needs, and overall empathy. Equally important, we are seeing the tools being utilized and adapted by peers and direct reports of these leaders, which tells us coaching around design is occurring as well.

Other organizations have chosen different ways to build their

managers' design thinking competencies. In addition to creating its own classes, Citrix, a Silicon Valley leader in cloud computing technology, which aspires to reshape the mobile work style, has created a corps of internal "design catalysts" much like Intuit's. To create this group, the company has made extensive use of Stanford Design School's "boot camp," an immersive three-day executive education workshop that puts managers into project teams to apply design thinking tools to challenges such as redesigning the curb-to-plane experience at San Francisco International Airport. Perry Klebahn, who runs executive education programs at Stanford, talked to us about their approach:

We're here in Silicon Valley, so we name our approach like software: versions 1.0, 2.0, and 3.0. The goal in 1.0 is for managers to begin to internalize design thinking in their lives, both professional and personal. In 2.0, we put executives in a position to facilitate small groups, to take their design thinking training to a small team and smaller projects to develop their leadership skills. And then 3.0 is about organizational change—how do you get larger organizations to change? From a senior executive standpoint, how do you foster the kind of cultural attributes needed for design thinking to be successful?

"The boot camp has been a great way for our senior VPs and general managers to learn the language, to use that language in conversations, to talk about design thinking, empathy, iteration, prototyping," Catherine Courage, the senior vice president for customer experience at Citrix, told us. Citrix has now started to send middle managers to the boot camp as well. Alumni return from the class to become designated design catalysts, whose role, as Uday Gajendar, a principal product designer at Citrix, described it, is to be "ambassadors for design thinking and principles."

Even entire countries have discovered the value of design thinking and are working to develop the skill among their citizens. One of the most impressive stories comes from Singapore, which has worked with both Darden and Rotman. Heather Fraser, the former director of Rotman's DesignWorks, a center for design-based innovation and education, described an ambitious program developed in partnership among Rotman, the Singapore government, and Singapore Polytechnic, which dedicated twenty-five faculty to an in-depth, yearlong certification program involving 300 class hours. The program had two goals: first, to transform Singapore Polytechnic and second, by doing so, to bring qualified training to Singapore's small-and medium-sized enterprises.

The transformation of the school was systemic, as Heather described it: “In addition to training significant numbers of faculty, the school examined every class through a design lens, right down to doing personas on the different types of students. They overhauled their space in a major way to be more ‘design-like’ and radically boosted their student experience and programs.” The school also recently introduced a diploma in business design and innovation, with the aim of developing the capability to work with industry and use design tools to inspire and support innovation.

In each of these teaching endeavors and in our own work with managers and MBAs here at Darden we observe an interesting phenomenon that echoes Kaaren Hanson’s admonition to teach people how to play scales before setting them loose on jazz. Teaching people to think more creatively involves the discipline of what looks like the tools of bureaucracy: forms, scripts, and process. But perhaps this should not surprise us. Advances in neuroscience have demonstrated that our beliefs about the physical right brain/left brain divide are flawed, that in fact the various parts of our brain are interconnected and are in almost constant communication with each other. It is interesting that we find that same kind of continuous movement back and forth as we look at how the organizations in this book successfully introduce design thinking. What seems at first like a paradox—using process, systems, and structure to encourage creative thinking—turns out to work.

But it requires patience. Reflecting on teaching design thinking at Stanford, Perry observed: “Originally, we viewed it as being all about organizational change: If we could get everybody in the room and explain it to them, then innovation could thrive. What we’ve learned is that you have to be more patient. You need to give individuals a chance to internalize the tools and make them their own.”

Learning how to manufacture miracles, it turns out, takes time.