



Business

Design

BUSINESS DESIGN: BECOMING A BILATERAL THINKER

by **Heather Fraser**

The emerging discipline of Business Design requires a particular combination of mindsets, methods and thinking skills that exercise the whole brain.

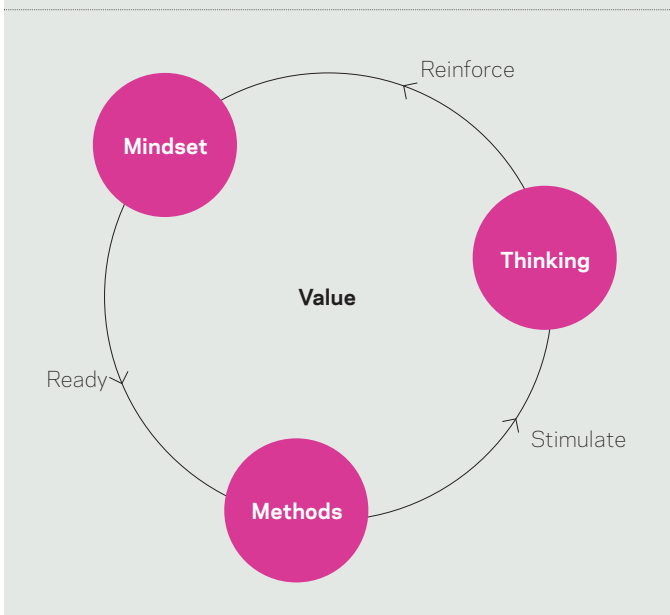
AS WE TEACH AND PRACTICE IT AT Rotman DesignWorks, 'Business Design' is a methods-based approach to innovation that helps teams get to bigger breakthroughs faster and define strategies for competitive advantage. In our work over the last six years with hundreds of students and executives around the world, my colleagues and I have seen some clear patterns emerge regarding the particular attributes required to excel in this emerging discipline.

What we are finding is that it takes a combination of the right mindset (*being*) and a rigorous methodology (*doing*) that unlocks a person's *thinking*, and that one must consider all three of these factors to fully realize the potential of Business Design as a platform for enterprise success. Let's examine each in turn.

Being: Design as a Mindset

A design mind is characterized by a collection of mindsets that determine one's 'design-readiness' and define *emotional agility*. These can come from the 'self', and can also be shaped by the enterprise environment or culture. Importantly, it is one's personal choice to cultivate self-awareness and decide how to harness, manage or develop these dimensions in working with others. Some of the important mindsets observed in great designers of include:

1. Openness. This entails being open to new ideas, new people and new ways of doing things. Elements of openness include



an active imagination, sensitivity, attentiveness to inner feelings, preference for variety, intellectual curiosity, and an ability to suspend judgment. People who are very open are willing to consider novel ideas and unconventional values. Without an open mind, one cannot fully realize the potential of the design approach to innovation.

2. Empathy. Human-centric design stems from a genuine sense of caring about people and being able to understand and appreciate their feelings, thoughts and needs. In designing something, we create value with and for other people. Whether understanding vital stakeholders or valuing team member emotions and perspectives, the ability to listen empathically and incorporate diverse perspectives into the design process lies at the heart of effective design.

3. Intrinsic Motivation. While extrinsic motivation such as raises, promotions and recognition is a natural part of the human psyche, intrinsic motivation has been identified as an important fuel for creativity. Individuals motivated intrinsically by purpose or passion have a genuine interest, excitement and engagement in their work. Whether it be the challenge of a 'wicked problem' or the pursuit of a purposeful ambition, these individuals become very involved in the development process of design. This is often evidenced in organizations like hospitals and schools, but is equally intrinsic in for-profit enter-

prises of all types that have a clear mission to create true value (economic and human) for stakeholders.

4. Mindfulness. Consciousness of one's thoughts, feelings and surroundings is critical to both maximizing inspiration and adaptability. In the design process, everything is relevant and can be a source of inspiration. Greater mindfulness of both the self and the world around you will serve to create an expanded repertoire of reference points and stimulation in solving complex problems. Mindfulness also positions you to capitalize on serendipity – an integral part of seizing design opportunities.

5. Adjustment. Adjustment captures the general tendency to be emotionally stable, calm, even-tempered and functional in the face of ups and downs. Given the nature of the design process (collaborating with others, participating in a 'mash up' of ideas, and soliciting feedback as part of the development process), those who have a high adjustment profile are able to face challenging situations without becoming upset. This also manifests itself in *comfort with ambiguity*, enabling people to find joy in the journey of tackling wicked problems.

6. Optimism. Just as adjustment can be critical in dealing with the present, optimism can help drive people forward toward creative and productive resolutions. Optimism also fuels resiliency and perseverance. The design process is a dynamic one, filled with many twists and turns in the quest to iterate through to a breakthrough solution. A hopeful view of the future will fortify one's ability to see a project through to successful completion.

Taking a personal stance on the above dimensions is the first step towards being 'ready' to design.

Doing: Bringing Methods to the Madness

Business Design combines thinking and doing through a rigorous methodology and thrives on *tactical agility*. Methods, frameworks and tools are learnable, skill-based 'exercises' that help to shape behaviour, shift mindsets, enhance thinking capacities, and ultimately boost both individual and team performance. There is no pre-set process or 'formula' for *doing*, but rather a repertoire of tools that help to harness the wisdom and ingenuity of teams. Most of the 'ways of doing' that can be used throughout the design process, including the design of business strategies and models, fall into one of the following 'buckets':

1. Multi-Disciplinary Collaboration. Designers find value and inspiration in diverse perspectives and skills. Not only does this enable them to harness the wisdom of the team across functions and disciplines, it will accelerate progress by tapping into the team's intuition and creative energy and establish a broad base of ownership that will give the outcomes traction. Important mindsets for collaboration include openness, empathy, and adjustment. Intrinsic motivation and

optimism will also help you get past the rough patches in the collaboration process.

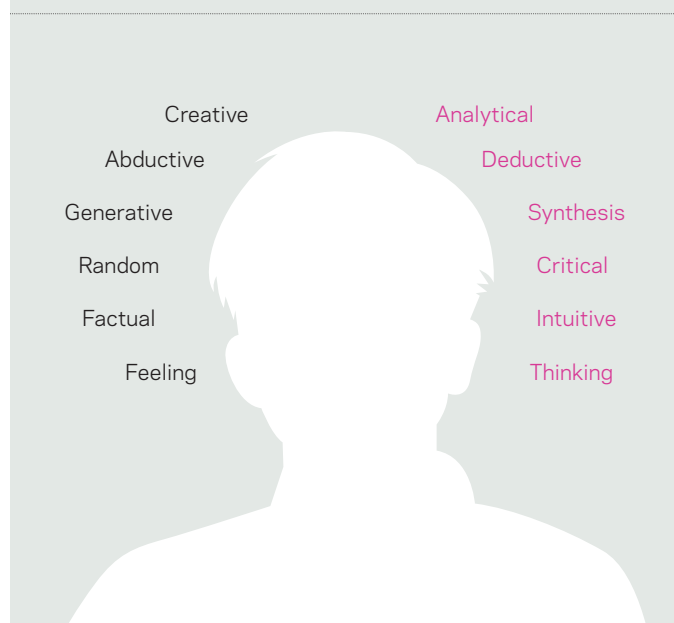
2. Understanding and Need-Finding. This is all about seeking to understand people’s motivations on a deeper level, both inside and outside the enterprise, leading to the discovery of unmet needs and new opportunities to create greater value. There are many examples where companies have leveraged user insights not considered by the competition. For example, Nike’s deep understanding of the runner’s need to push her personal athletic performance to a higher level has driven an ongoing stream of innovation in products, services, events and community development. To get to this kind of understanding, one must draw from many of the mindsets noted earlier, including empathy, openness, mindfulness and intrinsic motivation.

3. Iterative Prototyping and Experimentation. Prototyping entails building out ideas in order to make the abstract and the conceptual concrete, as a tool for thinking, communicating and advancing development. This is valuable in the broadest sense: creating physical prototypes or ‘experiences’ during the development process, enables a team to explore multiple strategies and business models to deliver value. Even ‘in-market prototyping’ serves as an important experiment to test out new ideas, leading to important learning and quick wins. For example, Four Seasons Hotels and Resorts tried many different hospitality formats and business models on their path to number-one hotel status in the world, and Procter & Gamble has gained new insights into consumer needs by experimenting in pop-up concept stores. All of the dimensions of a design mindset are critical here, with the most essential being empathy, intrinsic motivation, adjustment (for when your great ideas get trashed by consumers!) and optimism, especially when you have a breakthrough concept but are challenged in making it viable from a business standpoint.

4. Systems Mapping. In the discipline of Business Design, everything is part of a system comprised of stakeholders, solutions, and business strategies and activities. The more one can map the connections between them, the more one will see that business is like a rain forest, with a myriad of connections and interdependencies. In order to spot those connections, you can employ a number of systems-mapping methods – from mapping ‘the mess’ (the core challenge to be solved) to mapping stakeholders (who matters and how they relate to one another) to solutions (how the parts work together) to the business system itself (flow of value, strategies and activities). For example, the mapping of health care challenges captures the complexity of the system and helps identify the leverage points where the most value can be created. In mapping Apple’s business system, one sees that its true competitive advantage lies in its unique and seamlessly-integrated business model. In creating new models, as in the development of new solutions, openness, adjustment and optimism are key mindsets.

Bilateral Thinkers

Figure Two



5. Storytelling. Like systems mapping, this technique can be powerful at any time during the design process. Customer stories are an immensely valuable source of ‘unfiltered insights’ that can often reveal unmet needs. Creating your own stories around ‘personas’ can be valuable in bringing your consumers or other stakeholders to life. Expressing your envisioned idea and creating a story around your strategy and business evolution will also inspire and motivate others. The mindsets of empathy, mindfulness, intrinsic motivation and optimism will all contribute to a compelling story.

6. Co-creation. Co-creation is a vital ‘feedback loop’ for the development team in the prototyping and experimentation process. It is about welcoming input and feedback from others, particularly users, but also from those outside the development team – enterprise partners, decision-makers and outside partners (in both the solution development and strategic business design phases). Inviting others into the development process helps to create more robust and relevant solutions, fortify your concepts and increase your chances of breakthrough success. For example, Google Labs allows developers to gather critical user feedback on beta applications from key testers. Empathy, adjustment and optimism are important in successfully harnessing the power of co-creation in the design process.

A masterful Business Designer considers the uniqueness of the challenge at hand and designs the process, frameworks and tools to

most effectively and efficiently yield results. That means being able to see the bigger picture of the challenge ahead, having a clear 'plan for doing' in mind to keep the team productive and progressing, and having a good grasp of how frameworks and tools can help draw the most out of the team and shape solutions during the development process. Ultimately, however, the purpose of the entire process is to draw the best *thinking* out of the group.

Thinking: Developing a Well-Rounded Mental Capacity

The value of Business Design methodologies lies in their ability to stimulate breakthrough thinking in a structured and productive manner, thereby fostering *intellectual agility*. Through the practice of these methodologies, all forms of intelligence can be more fully developed and make the brain more 'whole' on an individual

level and more synergistic on a team or enterprise level. Following are six thinking skills that serve as important 'boosters' in the value creation process.

1. Emotional Intelligence. Building on the empathy mindset, this entails more than just an attitude toward others and appreciation for their thoughts and feelings; it's about knowing how to fully *leverage* the power of emotions throughout the entire design process. It is a thinking skill focused on identifying, assessing, and controlling the emotions of one's self, of others, and of groups. A masterful Business Designer applies emotional intelligence to every step of development and execution, to one's self (in terms of awareness and management of one's own emotions), the

How Business People Can Become Business Designers

By David Aycan and Arvind Gupta

1. Look beyond your industry. Creativity almost never occurs in a vacuum – it builds off the ideas of others. When putting together a portfolio of possibilities to explore, looking at other organizations, experiences and industries can be enlightening. For the best results, carefully define the vectors of your search. IDEO's business designers usually take a three-step approach: first, define the challenges and hypothetical opportunities; second, find examples of where similar challenges have been effectively addressed and opportunities seized, and third, study the success stories and imagine how you might apply their principles in your work. For example, a team working on a project for **Florida Horse Park** speculated that, although equestrian sports attract mostly women, there could be a broader tourism opportunity that appealed to the whole family. The team drew inspiration from **Nascar**, which had managed to boost its female fan base to nearly rival that of their male counterparts, and myriad ski and golf resorts, which had leveraged adjacent properties to introduce adventure tours.

2. Apply rich constraints. Searching for innovative business opportunities can be overwhelming. Business designers believe that the ideal development process starts by quickly establishing rough parameters for the initial challenge, and then investing more time developing creative solutions within those boundaries. For instance, in the first few days of a project for a scrapbooking hardware manufacturer, we commissioned a study to identify consumer behaviour and market sizes of several adjacent crafting markets. The design team discovered substantial behavioural overlap among scrapbookers and hobbyists who enjoyed home decorating and woodworking, which were the largest untapped crafting markets for our client. Within a week, we were able to focus our effort on exploring opportunities in these markets. We didn't presume that we knew all the answers yet, but we knew we were digging in rich soil.

3. Use tangible provocations. Working on a creative project means that no single individual involved knows everything that he or she needs to know. Conversations with other business units, experts and consumers can spark ideas. That said, beware of asking only open-ended questions, such as asking consumers what they want or the

head of a business unit what the division's strategy is; the answers tend to be general, incremental, and repetitious rather than revolutionary. To get more value out of conversations, express early ideas more concretely, explaining the offerings, systems and other changes that your project could create. Simple is best – express the core nugget of your thinking and let others imagine and articulate the rest. For example, if you believe that 'radical customization' may be relevant to consumers in the future, draw or write down a basic scenario of how that experience might play out. Ask others to articulate the challenges and new opportunities that they anticipate in making a scenario a reality and to provide their take on the overall appeal and viability of the solution. It can be tempting to demonstrate how much you know by spelling out all of the details, but you'll limit the responses you get.

4. Use letters and numbers. Conversations with experts and customers can yield a lot of information and ideas; sometimes too many. When your mind and project walls are overwhelmed, how do you know what to zero in on? In these moments, we find 'hybrid' (i.e. both qualitative and quantitative) studies to be extremely useful in finding the true signals amid the noise. We take the hypotheses that we form from our *qualitative* research and ask *quantitative* follow-up questions. We use these studies to identify customer segments based on novel insights and the result can often form the basis for new innovation strategies. For example, on a project to redesign local news, some new designs were viscerally expressed by experience designers and provided merchants with believable scenarios within which they could imagine themselves and their business. The team had identified unmet merchant needs from interviews, but it wasn't until the hybrid study had been analyzed and small business owners clustered that we identified some interesting new needs that happened to be predominant only with merchants who were highly resistant to engage with new marketing channels. Instead, we recognized that a formerly overlooked insight – that some merchants highly desired to piggyback on their 'hero merchants' – was sizeable and predominant amongst merchants that were keen to find and pay for new ways to reach new customers. The team was then able to adapt designs and shift the strategy towards a deeper understanding of the market.

team (in understanding and managing the dynamics of productive teams), and the market place at large (in terms of 'social intelligence' – the awareness of and consideration of contextual human dynamics).

2. Systems Thinking. In Business Design, it is important to recognize virtually everything as part of a broader 'ecosystem' of human systems, solution systems and business systems. Enhanced through the process of mapping (noted earlier), a competent Business Designer has the capacity to think holistically and integratively, and understand how people, solutions components and activities relate to and influence one another within a broader context.

5. Speak to your crowd. The most productive design teams are deliberate and fluid in the way that they share ideas. Team members frequently communicate insights from within their disciplines in ways that welcome input, conversation and debate. Ideally, business designers are also visual people who can present information in a way that is easily digested by others. This can be difficult, because much of the standard toolset is not readily accessible, such as spreadsheets with 8-point type. Even small changes can help you here: make the fonts bigger; put the basic assumptions and outputs near one another and have a graphic designer format them nicely. If you really want to win over your team, take their input, plug it into your model, and show how it changes on the spot; you'll see the creative ideas flow, and they'll start to think about the business impact of their creative input. On the Florida Horse Park project, the IDEO business designer built a financial model that dynamically compared the park's site design to its business model. Green numbers meant they were aligned, and red numbers meant that they were out of sync – prompting productive conversations.

6. Deliver stories, not data. Tackling a new challenge generates a lot of stories, tidbits and data. To sell any concept, the innovation team needs to tell a concise, compelling story that brings together customer needs, market realities, overall context and the strategic nature of the product. Crafting a single narrative out of all that raw information can be tough, but often makes all the difference in getting other people as excited about an idea as you are. Focus on a few key points and use only the most poignant stories and data points to tell the story. For example, while working on some collaborative tools for a cloud-based offering, we parlayed both the experiential and business value into a five-minute video. Each team member identified the strongest points in their area of expertise, and we worked together to craft an engaging, effective story. Whittling all those detail down to a 'story' about what's most important gives your team a clearer focus for moving forward.

7. Aim, ideate, repeat. "Grow margin! Our net promoter score needs to be higher! Deliver unprecedented quality. Go!" These mandates

3. Visualization. This form of thinking involves envisioning and communicating at every step of the design process. This includes the ability to 'see' the end result as a concrete and complete picture: to 'see' the complete solution played out in its most robust form, to 'see' the way the business will work with all of the necessary partners and enterprise systems' and even to 'see' success in the market and the potential paradigm shift that a breakthrough can trigger. The methodologies described in the *doing* section help stimulate this type of thinking through persona development, rapid prototyping, business model design and storytelling. All of these bring ideas to life and lead to a more natural inclination to envision new possibilities. This kind of 'destination thinking' can also help bring teams into alignment ("I know what we're heading for") and pull people

make fine end goals, but they are not actionable strategies. Strategies are important, because they fuel the thinking of everyone who's supporting your organization or business unit. Want to know if your strategy is actionable? Try this test: sit down with your team and ask each person to draw a bunch of concepts that fit within your framework. If you can do this, you have an actionable strategy. At IDEO, we often draw the larger project process as an arc that goes from concrete (real-world problems) to abstract (strategy and cognitive frameworks) and back to concrete (offerings in the world). In reality, the cycle needs to happen almost continuously and on many scales.

8. Let go of 'right.' Business people are taught to be right. We feel as if we should have an answer to every question that could get thrown at us. That can be scary – so scary that you can't move or act. In the absence of real knowledge or rigor, we fool ourselves into thinking that the right answer is there. We use answers to an abstract question in a survey to plug in a penetration number in our financial model, or we wait until we can create scientific evidence before we advocate for ideas that we intuitively believe in. Business Design is about realizing that innovation is a process of discovery that continues even after a product is released. So, turn your fear of *what you don't know* into an exciting opportunity to learn something essential to the business. Start modeling opportunities without knowing much of anything – then use the model to have conversations that will get you to better assumptions. Share work in progress, and admit what you don't know – in fact, highlight the things you don't know. The irony of this approach of building things that aren't yet 'right' is that your answers will become *right* a lot faster, and your challenges will evolve from scary moments into exciting possibilities to wake up to every morning.

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Creating new solutions may draw
upon a number of 'existing elements'
reconfigured in a new way.

forward (“This is a dream worth pursuing”). Many paradigm-shifting innovations trace back to a combination of visualization and abductive reasoning; for example, **Medtronic** founder **Earl Bakken**’s inspiration from *Frankenstein* that electricity could extend and improve the life of mankind. Again, without the right mindset, new possibilities will never materialize into new realities.

4. Abductive Reasoning. Tapping into one’s imagination and believing that the seemingly impossible is actually quite possible requires a form of logic called ‘abductive reasoning’. New-to-the-world ideas are difficult, if not impossible, to prove. The ability to believe in possibilities requires a combination of thinking skills, one of which is the ability to process many points of reference and make an intelligent ‘leap of logic’ in making the case that there’s a great chance that an original idea *could* prove to be successful. There are a number of examples in game-changing successes in which the organization didn’t constrain itself to existing solution sets or models, but instead pursued *what could be*. From a business perspective, they may have moved vertically or horizontally, exited old categories and created/entered new businesses. For example, **FedEx**, **eBay**, **Google**, **Southwest**, **Tata** and **Grameen Bank** are all examples of new-to-the-world ideas that made a breakthrough impact on culture and enterprise value creation. Not only did these initiatives require a keen sense of imagination and abductive reasoning, they took a healthy design mindset to persevere and see the innovations through to success.

5. Synthesis. Throughout the design process, taking many disparate bits and pieces and transforming them into a new thought or solution is critical to new value creation. In my advertising and design experience, we used to differentiate between those who ‘transmitted’ (i.e., just passed on ‘information’) and those who ‘transformed’ (and identified the ‘insight’ that could catalyze the creative process). This is an essential notion in Business Design – the identification of an unmet (and often unarticulated) need. It is also essential in creating new

solutions which may draw upon a number of existing elements reconfigured in a new way or the design of new strategic models inspired by many different existing models in the pursuit to create an entirely new configuration.

6. Intuition. This entails more than just using ‘gut feel’ to guide development. Rather, it is a very important and developable thinking skill that involves gathering, articulating and evaluating one’s own intuition and that of others. By recognizing the value of intuition, being able to effectively ‘deconstruct’ it and extract valuable ‘data’, one can capitalize on the wealth of wisdom within a team. Leveraging intuition also requires elements of the design mindset, most notably openness, empathy and mindfulness.

In closing

Ultimately, the practice of Business Design entails much more than ‘design thinking’. Different types of thinking are activated throughout the process on both an individual and a group basis. As described herein, Business Design calls for bilateral thinking and adaptive doing, enabling a constant toggling between a variety of ways of thinking and doing. Such agility is essential for innovation and becomes even more powerful if you are able to rewire your brain to be bilateral throughout the process. **R**



Heather Fraser is the director of Rotman DesignWorks™ and the Business Design Initiative at the Rotman School of Management. Rotman faculty research is ranked #11 in the world by the *Financial Times*.