



**Notes**

1. T. L. Stone, "Understanding Design Strategy," *HOW Magazine*, March 2013, p. 2.

**OR THE PAST FOUR YEARS, I HAVE BEEN**

teaching a course called "Design Strategy" at Indiana University's School of Informatics, Computing, and Engineering. I developed that course—which was aimed at graduate design students—based on the existing literature on the subject of strategic design, and then reflecting on students' feedback on the course, revising the course based on that feedback, reflecting on students' reactions to those revisions, and then bringing real-world clients into the class with projects requiring a strategic analysis of their respective organization. As part of this reflection, I asked my students to consider the distinction between *strategic design* and *design strategy*. My objective in doing this, given that I had not explicitly defined strategic design and design strategy through the course, was to see how fledgling professional designers would draw a distinction between the two as well as how they would interpret and make a case for the value of a professional designer as a strategist.

I also challenged the students to develop a plan for how they would go about positioning themselves as design strategists upon graduation, including articulating the unique value that a designer could provide as a strategist, as well as how they would go about delivering that value. In addition, I solicited feedback from the clients regarding their experience

working with designers rather than business professionals on a project focused on strategic considerations for their organization.

The reflections from the students proved consistent with those of the clients, in that both groups concluded that designers provide a distinct value as strategists relative to business professionals. That value, according to both the students and the clients, is that designers invest the upfront time to develop an understanding of those for which they are designing prior to endeavoring to design a solution, which I argue speaks to the continued relevance of designers doing as well as thinking. The results also reinforce the importance of designers emphasizing the return on investing in user research and developing user understanding, even when aspiring to attain strategic decision-making authority.

**INTRODUCTION**

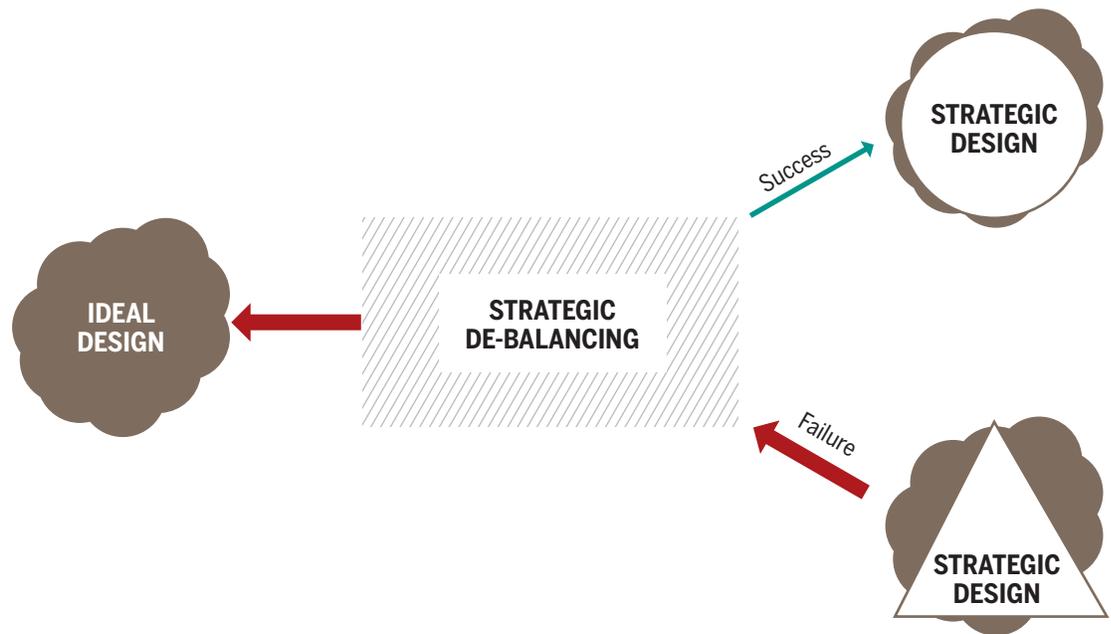
Teaching a design strategy course proved to be an interesting challenge largely because there really is no one definition of design strategy, but, as Stone 2013 has said, "The goal is to merge business and creative objectives in a meaningful way that moves design beyond just an aesthetic exercise."<sup>1</sup> In order to take a deep dive into the pedagogical considerations inherent in effectively teaching design strategy to fledgling professional design

**Notes**

2. P. Reason and H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice* (London: Sage Publications, 2001), p. 1.
3. M. Brydon-Miller, D. Greenwood, and P. Maguire, "Why Action Research?" *Action Research*, vol. 1, no. 1 (2003), pp. 9-28.

**FIGURE 1**

*This represents a process of analyzing strategic decisions that results in a "failed" strategic design.*



students, I chose to use action research, which is “a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview [...] It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.”<sup>2</sup> In addition, there has been a call for “adopting conscious pedagogies of action research.”<sup>3</sup> It is with this call in mind that I set out to develop my course.

**SOME REFLECTIONS**

The risk of merging design with business strategy is that students can equate business with profit maximization. In order to avoid such an association, I focused the course on goal achievement in the context of the competitive landscape by applying SWOT analysis, strategic analysis using the marketing 4P’s, and success metrics establishment using the Triple Bottom Line, which enabled the students to define success metrics outside of profit-maximization. In

considering the marketing of their designs, my students had to manipulate the variables of product design, price, public relations and distribution, all of which comprised their final design proposal.

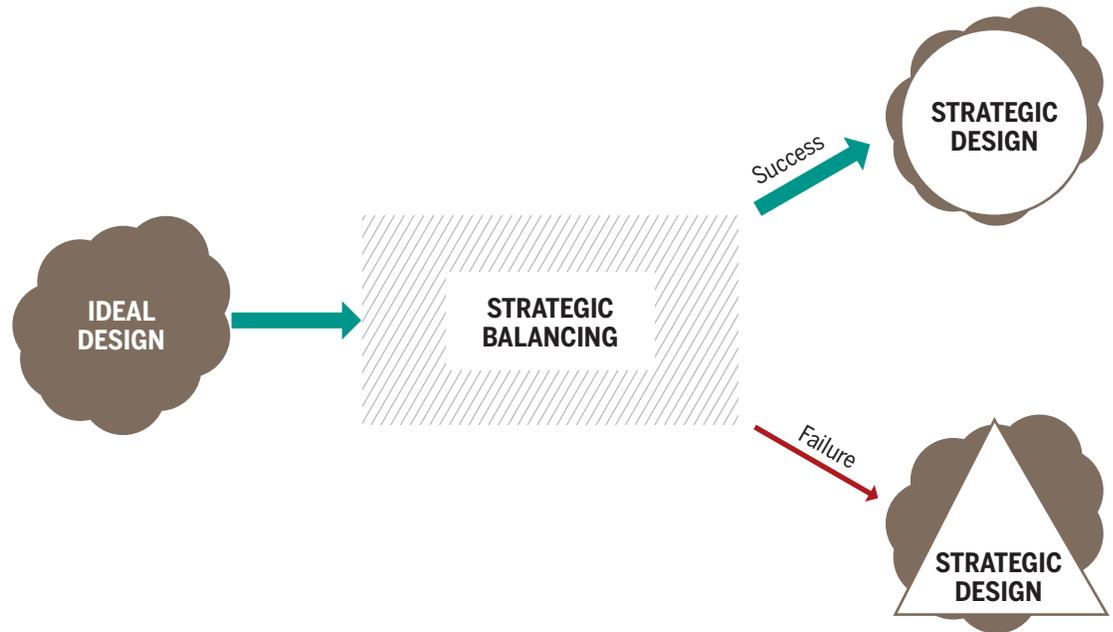
Although I have taught design thinking to business students and explored how it can inform teaching creativity, the fact that design thinking has been widely accepted as a process worthy of being learned certainly facilitated students’ acceptance of the concept. Strategic design, on the other hand, has not been widely accepted, and as demonstrated through my interviews of strategic designers, has yet to achieve a generally accepted definition. In response to the field’s general ambiguity and my own uncertainty regarding the distinction between design thinking, strategic design, and design strategy, I decided that I would develop a foundational understanding of the concepts with my students during my first semester of teaching the course by juxtaposing two of the seminal works in the practical and educational spaces shared by design thinking, strategic design, and design strategy.

The two books I used were Hartmut Esslinger’s *A Fine Line: How Design Strategies are Shaping the*

4. H. Esslinger, H., *A Fine Line: How Design Strategies are Shaping the Future of Business* (San Francisco: Jossey-Bass, 2009), p. 19.
5. Roger Martin, *The Design of Business: Why Design Thinking is the Next Competitive Advantage* (Boston: Harvard Business Press, 2009), p. 6.

**FIGURE 2**

*This represents the process of strategic-balancing a design you had deemed ideal as a designer—but which, as a strategic designer, you realize requires strategic balancing to improve its chances for success.*



*Future of Business* and *The Design of Business: Why Design Thinking is the Next Competitive Advantage* by Roger Martin (2009). Hartmut Esslinger is a world-famous designer who espouses the view that “[d]esigners become masters of their own fate when they master the workings of business and learn to appreciate the rational thinking, vision, ethics, and creativity it takes to run a successful organization,”<sup>4</sup> while Roger Martin is a renowned business strategy scholar who suggests that “[t]he most successful businesses in the years to come will balance analytical mastery and intuitive originality in a dynamic interplay that [he] call[s] design thinking.”<sup>5</sup> Although I had originally imagined taking the entire semester to develop a consensus amongst my students regarding the definitions of and the relationships among design thinking, strategic design, and design strategy, I was surprised to discover that my students adopted my presentation of the concepts—which, at the time, treated strategic design and design strategy as being one and the same. The definition I now use for strategic design is “a design process that includes business considerations such as competitive positioning, pricing strategy, distribution strategy,

and advertising strategy”; and I define design strategy as “the process of designing for the purpose of strategic analysis and formulation.”

Once I had established these definitions with my students, I determined that I needed to draw a distinction between the design process and the *strategic* design process. Bringing in real-world clients at the stage I was at in the development of the course would have been premature, so I opted to instead focus on case studies and created a set of figures to visualize the steps in the strategic design process. I developed the figures to convey the compromises which are typically required from the time the design leaves the designer’s hands and is placed in the hands of the end user. Within an organization, this process involves a myriad of strategic decisions, many of which are based on the organization’s brand identity in the minds of its constituents, the organization’s competitive landscape, and the organization’s culture, history, and existing strategy. The “Ideal Design” in figures 1 and 2 represents the design with its full nuance as envisioned by the designer and true to the designer’s intent. “Strategic Balancing” represents the strategic considerations (current strategy and

## Notes

6. J. Hamblin, J., "A Brewing Problem," *The Atlantic*, March 2, 2015.

7. D. Smith, "Microsoft Zune Discontinued (2006-2011)," *International Business Times*, Oct. 4, 2011.

8. D. Holston, *The Strategic Designer: Tools & Techniques for Managing the Design Process* (Cincinnati, OH: How Books, 2011), p. 5.

competitive positioning) that need to be taken into account by a strategic designer when transitioning the design to its final "Strategic Design" form. The paths to "Success" or "Failure" are subjective and determined by the success metrics defined by the strategic designer, which may or may not include profit maximization. I represented the "failed" strategic design with a triangle over the "ideal design" cloud to symbolize a greater loss. In order to emphasize that more effective "Strategic Balancing" can result in a successful strategic design, I symbolized "success" with a circle over the Ideal Design cloud, which indicated keeping more of the designer's intent.

As previously mentioned, I empowered my students to define success based on the impact of the design in respect to a balance between the impact on people, profit, and the planet, which is commonly referred to as the Triple Bottom Line. As an example, the Keurig® Coffee Maker has been quite successful in respect to its positive generation of profit; yet, it has been significantly less successful considering its negative impact on the planet due to the level of waste produced by its disposable K-Cup® Pods.<sup>6</sup> Therefore, in my class, I enabled students to declare the Keurig® Coffee Maker a "failed" strategic design—in spite of its commercial success.

In order to illustrate the process that I used in the class, I also used the example of Microsoft's Zune digital media line of products. While the failure of the Zune has been attributed to its lackluster design,<sup>7</sup> at least relative to the Apple iPod, I suggest that it was a "failed" strategic design, which resulted in its failure in the market. Although the design of the Zune resembled the design of the iPod, I asked my students to consider why Microsoft, best known for its office productivity software, would endeavor to produce a digital music player that resembled one being produced by Apple, best known for its aesthetic sensibility and appeal to creative professionals. In the case of the Zune, I consider a "successful" strategic design to be one which is successful in the market and true to Microsoft's existing brand identity, and I believe the Zune "failed" due to

poor strategic decisions being made in respect to how it was promoted as well as the product's aesthetics, which I believe to be a direct reflection of Microsoft's attempt to mimic iPod's design.

Through this analysis, my objective was never to convince students that my proposed "successful" strategic design would have fared better in the market than the "failed" strategic design; instead, it was to demonstrate to the students that the "goodness" of a design, meaning that it reflects a thoughtful design process which is considerate of the problem space as well as the users' needs, does not necessarily translate into the "success" of a design. Forces external and internal to an organization play a significant role in determining success, and the "strategic balancing" process involves accounting for those forces when designing—which is, in fact, part of strategic design. Although I only intended to use the figures when teaching, the students reported finding the figures particularly helpful when thinking through the strategic design process, and I witnessed them not only recreating the figures in their assignments but also using the framework when presenting their solutions.

The definitions I use for strategic design and for design strategy actually suggest that my course would be more appropriately titled "Strategic Design" rather than "Design Strategy." I do not, however, present that distinction to the students until the end of the semester to avoid imposing my sense of the concepts on them and, in turn, biasing their opinion. When revamping the course for the second year, I decided that it was appropriate, having determined that I was actually teaching a strategic design course, to find a book which would introduce students to more business strategy in the context of design. The book that I discovered and opted to use for this purpose was *The Strategic Designer: Tools & Techniques for Managing the Design Process*, by Dave Holston. Holston makes the case that "[b]usiness tools, like competitive and situational analysis, help designers understand the business environment, allowing them to develop design solutions that are strategic,"<sup>8</sup> which is consistent with my understanding of strategic design as a marriage of design and

## Although strategic designers could arguably provide as much, if not more, value when practicing strategic design or design thinking for business, without a theoretical approach to being a strategist as a designer, there appears to be increasing pressure on designers to distance themselves from design *doing*.

business tools, methods, and theories. The specific methods I applied in the class were the SWOT analysis, which required students to consider the strengths, weaknesses, opportunities, and threats of the organization in question when strategically balancing their strategic design, and the marketing 4P's, which required students to define the "failed" strategic design relative to their "successful" strategic design in respect to pricing, promotion, placement, and product decisions made.

While I found this approach to teaching strategic design effective, I became increasingly convinced by the end of the semester that strategic design as a profession would be untenable for strategic designers, given that the same methods were being taught to design thinking business strategists. Although strategic designers could arguably provide as much, if not more, value when practicing strategic design or design thinking for business, without a theoretical approach to being a strategist as a designer, there appears to be increasing pressure on designers to distance themselves from design *doing* (i.e., being concerned with aesthetic considerations, visual articulation, and artifact creation). At the end of the second year teaching my "Design Strategy" course, I challenged my students to distinguish strategic design and design strategy as well as to reflect on what a designer would offer as a strategist that would be unique relative to what a business strategist would offer. The next section presents my analysis of my students' reflections.

### STUDENT REFLECTIONS

The graduate design students in my class were beginning their second and final year of their studies, generally following an internship during which they were able to apply the design tools, methods, and theories they had learned during their first year in their graduate Human-Computer Interaction Design program. I challenged my students to first use Porter Five Forces analysis to complete a strategic analysis of an industry of their choosing. I then asked them to translate at least one element of the Porter Five Forces model into a design strategy method/framework, which entailed

them attempting to complete a strategic analysis through the use of design, as they interpreted that process. In order to determine whether I could identify themes which would inform my understanding of my students' perspectives regarding the relationship between strategic design and design strategy, as well as the role of the designer as a strategist in general, I completed a qualitative content analysis on my students' reflections. Following are the themes which I generated through my analysis:

- There is a distinction between strategic design and design strategy, in that one is about considering business goals when designing, and the other is about applying design methods when constructing strategy, as well as developing a strategy for a design.
- The unique value that designers bring to an organization relative to business professionals is that they are broader thinkers, they are more empathetic and user-centered, they are inclined to iterate their solutions, they are trained problem-framers, and they are able to present their solutions visually as prototypes.
- The essence of design is developing insightful questions and visual solutions based on a deep understanding of the problem space achieved through user research.
- A design strategy method relative to a business strategy method should visualize data for easier digestion and interpretation, be more qualitative, require iteration, be focused on user experience, and be holistic in the consideration of all constituents.

Following are the insights I gleaned through this process:

- Students did come to draw a distinction between the process of considering business objectives and competitive constraints when designing and applying design-related methods for strategic analysis and formulation; however, they varied in how they used the terms *strategic design* and *design strategy* as they relate to those processes.
- Some students came to define design strategy solely as a strategy for a design, meaning the plan that a designer would follow in order to achieve her design goals.

- Students are able to articulate what distinguishes a professional designer from a business professional, and the distinguishing characteristics of a designer that they cite are empathy, visual articulation, user-centeredness, iteration, broad thinking, and problem-framing.
- According to students, design strategy methods should require the visual articulation of data gathered and insights gleaned, as well as be qualitative.

While the design strategy methods my students constructed ranged from placing a greater emphasis on the visualization of the data generated through the application of the Porter Five Forces method to more directly engaging members of the industry being analyzed using design thinking, none of them proposed that design could generate novel concepts, visually articulate them, and even prototype them for the purpose of keeping design doing at the core of design strategy. In all cases, their projects reflected a strategic designer's approach to their strategic analysis of their industry as a designer, and the majority of their arguments had at their core that the distinct value that a designer as a strategist offers relative to that of a business professional is primarily that she is a designer. However, without design *doing*, the professional designer has become a design thinker, which would not be problematic if not for the fact that non-designers are being trained as design thinkers. In my opinion, that is why design doing is so important for a designer, particularly when aspiring to take on a more strategic role.

### Reflections from project clients

I had three project clients join my class—a startup founder considering a restructuring of his launch strategy, a UX researcher in an established company planning a new onboarding process, and a university administrator contemplating the allocation of resources to various initiatives being considered in his department. All of them had worked with business strategists prior to working with my design students on their strategy projects. Following are their reflections on their relative experiences working with each group, specifically in respect to

what differences they witnessed when working with designers relative to business professionals:

- **From a startup founder reflecting on students' proposals for the restructuring of his launch strategy:** Yeah, I think there is a difference. It's hard to quantify, I suppose, but business students do an outstanding job of thinking like a business and considering revenue and target market and market strategy and rollout phases and all that. I think your students in particular did better than most design students I've talked to. [...] [C]ircling back to my other point, it's understanding what we could do. If there is a list of ten things we could do to improve a piece of software or a design of something, what takes the least amount of effort and has the biggest return and how can we prioritize things around that, and that's something your students could do really well.
- **From a UX researcher in established company reflecting on students' proposals for a new onboarding process:** I think there were certainly teams of yours which really did impress me with the way they thought through the user's experience going through something. From what I know working with people that are more on the MBA side of things, that user concern might not be as much in the forefront when developing products and thinking up solutions. I honestly can't say for sure though. But working with your teams and having them present things, there were some teams that talked about push notifications and the way they need to be used. There needs to be information, have a call to action, and there was just a lot of thought put into the way that users react to different methodologies. It wasn't just "Oh, we will send them a push notification because it's on their phone." No, it was, "Here's what you actually need to say and how you engage to convert a behavior," so there was some thoughtfulness on that front, I think.
- **From a university administrator reflecting on students' proposals for the allocation of resources to initiatives in his department:** Well, it's not uniform, but both classes had multiple groups tackling a challenge. I would say the percentage of solutions of ideas that came from

**Notes**

- 9. Norman, D.A. (2005). Emotional design: Why we love (or hate) everyday things. Basic books., epilogue.
- 10. Buxton, B. (2007). Sketching user experiences: Getting the design right and the right design. Morgan Kaufmann, p. 95.
- 11. Ibid, p.102.
- 12. Ibid, p. 96.



**Travis J. Brown** is the senior executive assistant dean at Indiana University's School of Informatics, Computing & Engineering. He holds an MBA in Entrepreneurship & Corporate Innovation as well as a B.S. in Computer Information Systems and a PhD in human-computer interaction/design, all from Indiana University.

your class that are actually feasible and make some sense within our context is actually much higher than in the business school. Students in business, I came in later in the semester, and they weren't emailing me and asking questions, and they weren't emailing our staff and asking questions to understand things, whereas some of your groups really did that and you could see it reflected in their final projects.

**Summary**

Based on my experiences as an educator asked to teach a course titled "Design Strategy" as well as the reflections of my students taking that course, I have gained an appreciation for the value of teaching both strategic design and design strategy, as I have defined them herein. While there still is not consensus regarding how to teach strategic design, or practice it, for that matter, being able to select methods from business and design for the purpose of constructing strategic design curriculum is relatively simple compared to doing the same for design strategy. The fact that my students struggled to draw a distinction between strategic design and design strategy is not surprising to me given that I did not arrive at my current theoretical approach to design strategy and my definitional distinction between strategic design and design strategy until I was teaching the course for the second time.

What my research has suggested to me is that there is room for the development of tools, methods, and theories which would enable designers to analyze and formulate strategy through design doing, which I think is best captured through the visual articulation of concepts, as suggested by Bill Buxton in his *Sketching User Experiences*, as well as the creation of artifacts. In response to Don Norman's 2005 declaration that "[w]e're all designers,"<sup>9</sup> Buxton responded with the following:

"I have the highest degree of respect for Don, but in my opinion, this is nonsense! Yes, we all choose colours for our walls, or the layout of the furniture in our living rooms. But this no more makes us all designers than our ability to count

our change at the grocery store makes us all mathematicians. Of course there is a way that both are true, but only in the most banal sense. Reducing things to such a level trivializes the hard-won and highly developed skills of the professional designer (and mathematician)."<sup>10</sup>

Buxton notes later in the book, "Or, more succinctly, "We are NOT all designers."<sup>11</sup> Of course, this declaration begs the question: What makes a designer a designer? Here to I concur with Buxton. He proposes, citing Henryk Gedenryd's work in cognitive science, that, in addition to concept generation, "sketching is fundamental to the design process."<sup>12</sup> It is this ability to visually articulate concepts as well as create artifacts based on those concepts while being considerate of aesthetics in a manner which effectively serves a defined goal that distinguishes designers from non-designers (i.e., design doing). Of course, in order to do that, designers need to be able to empathize in order to ascertain what they need to visually articulate for the purpose of addressing their intended audience (i.e., design thinking).

As reflected in the responses from the project clients with whom I worked through my course, empathy, both with the client as well as with the intended recipient of the designed solution, is what sets the designer apart from the business professional as a strategist. While the doing of design is frequently cited as being at risk of commoditization, design doing grounded in an empathic understanding of the intended recipient of the design continues to be the core value proposition of the designer, and, as demonstrated, the design strategist. ■

**Acknowledgement**

I would like to acknowledge the assistance of my research assistant Zachary Chambers, without whose support I could not have completed this study.