if managers thought like designers

Design has been proclaimed the 'secret weapon' for competition in the 21st century. Here's how managers can start thinking more like designers.

by Jeanne Liedtka

The problems with traditional approaches to planning have long been recognized. They include the attempt to make a 'science' of planning, with its subsequent loss of creativity; the excessive emphasis on numbers; the drive for administrative efficiency at the expense of substance; and the dominance of single techniques, inappropriately applied. Yet, decades later, strategists continue to struggle to propose clear alternatives to traditional processes.

Design offers a different approach and suggests processes that are more widely participative, more dialogue-based, issue-rather-than-calendar-driven, and conflict-*using* rather than conflict-avoiding, all aimed at invention and learning, rather than control.

But beneath all the hyperbole, we have to question what it would actually mean for business strategy if managers took the idea of design seriously. What if we tried to think the way designers do? Having studied how various kinds of designers work and create for the past decade, I offer the following ten suggestions as a starting point in the conversation.

If We Took the Design Metaphor Seriously

1. We would realize that designing business strategy is about invention.

For all their talk about the art and science of management, strategists, in the analytic search for 'the one right strategy', have mostly paid attention to the science. Taking the design metaphor seriously means acknowledging the difference between what scientists do and what designers do. Whereas scientists investigate *today* to discover explanations for what already is, designers invent *tomorrow* to create something that isn't.

We all care about strategy because we want the future to be different from the present. But powerful futures are rarely discovered primarily through analytics. They are, as **Walt Disney** said, "created first in the mind and next in the activity." This doesn't deny analysis an important role, but it does subordinate analysis to the process of invention.

As an example of the tension between invention and analysis, take the Sydney Opera House, whose designer, **Jørn**

Utzon, was awarded architecture's highest honor, the Pritzker Prize, in 2003. It's hard now to imagine Australia without the Sydney Opera House, but it's quite possible that it would never have been built if initial estimates for the project had been accurate. In 1957, when Utzon's proposal was selected, accountants estimated that the project would take five years to complete and cost $7 million. In reality, it took 14 years and cost more than $100 million. **John Lowe**, who chronicled the story, quotes **Ove Arup**, an engineer who collaborated with Utzon on the project: "If the magnitude of the task had been fully appreciated… the Opera House would never have been built. And the fact that it wasn't known…was one of the unusual circumstances that made the miracle possible." Thank goodness the accountants got the analysis wrong.

2. We'd recognize the primacy of persuasion.

If strategy is indeed an invention – just one story about the future among many – then it is always contestable. Leaders must therefore persuade others of the compelling wisdom and superiority of the story they have chosen. They must, in fact, make the story seductive; in selling their strategy, they must, to put it bluntly, treat employees like 'lovers' instead of 'prostitutes.'

It's not easy to entice people into sharing an image of the future. After all, strategies in most industries today call on people to commit to something new and different, to step away from the security of what has worked in the past. This is never an easy sell, even for the most seasoned leaders. Like venturing into a new relationship, persuading others to share your vision works best when you issue an invitation instead of a command.

Designers understand this. Successful architects, for instance, know that to get their great buildings built, they must persuade clients to pay for them, and that requires helping clients visualize the end result. In fact, the more inventive the architect, the more critical the ability to conjure the image for the client and for what may be a very skeptical public. When **Frank Gehry** began sketching what would become the Guggenheim Museum in Bilbao, he already had a profound feel for what would draw a very traditional Basque audience to his stunningly inventive creation. Gehry explains his approach: "You bring to the table certain things…the Basques, their desire to use culture, to bring the city to the river. And the industrial feeling."

Writing in *The Los Angeles Times,* architecture critic **Nicolai Ouroussoff** describes the result: "Gehry has achieved what not so long ago seemed impossible for most architects: the invention of radically new architectural forms that nonetheless speak to the man on the street. Bilbao has become a pilgrimage point for those who, until now, had little interest in architecture. Working-class Basque couples arrive toting children on weekends. The cultural elite veer off their regular flight paths so they can tell friends that they, too, have seen the building in the flesh." Gehry's Guggenheim persuades and seduces by connecting to the Basque's past and pointing toward a new future. That is how strategies become compelling and persuasive: they show an organization its future without discounting its past. They tell us what we get to keep as well as what we must lose.

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3. We'd value simplicity.

Think of an object you love. Chances are that it is complex enough to perform its function well, but no more complex than it needs to be. In other words, it's an elegant solution. No design is a better exemplar of simplicity and elegance than the little black dress, or 'LBD'. The most striking aspect of the LBD, designed by **Coco Chanel** in the 1920s, is its simplicity. The LBD does not overprescribe or adorn, but instead offers a black canvas, which its wearer tailors to the function at hand: add pearls and heels to dress up; a bright scarf and flats to dress down. The possibilities are endless, making the LBD one of the most functional items in a woman's wardrobe. But the LBD goes beyond mere functionality to achieve elegance: it lacks nothing essential and contains nothing extraneous.

What if we used the LBD as a model for business strategy? We would end up with strategies that would be neither incomprehensible to all save their creators, nor banal and self-evident. They would eschew the faddish and focus on enduring elements, incorporating a versatility and openness that invited their 'wearers' to add adornments to fit the occasion at hand. Perhaps most importantly, they would emphasize our positives while acknowledging our flaws – all in the service of offering us hope for a better (thinner) tomorrow.

4. We'd aim to inspire.

One of the saddest facts about the state of business design is the extent to which we settle for mediocrity. We don't even attempt to engage our audience at an emotional level, let alone to inspire. Yet the difference between great designs and those that are only 'okay' is the way the former call us to something greater.

Consider the differences between the San Francisco Bay Bridge and the Golden Gate Bridge. The Bay Bridge offers a route across the water. The Golden Gate Bridge does that, too, but it also sweeps, symbolizes, and enthralls. It has, like the Sydney Opera House, become an icon of the land it occupies. How many of our business strategies are like the Golden Gate Bridge? Too few, I'm afraid.

5. We'd master the core skills first.

Each of the designs we've looked at so far is inventive, persuasive, elegant, and inspiring. Yet all of them succeed because they also work well, and they do this because of the mastery of technical elements. The Sydney Opera House's sail-shaped roof vaults required expert engineering. The Guggenheim Bilbao's undulating titanium-clad exterior was possible only with the help of

sophisticated computer modeling. And the little black dress worked because Chanel pioneered a synthetic fabric – jersey – that flowed instead of clinging.

If you examine the 1895 painting *First Communion,* you'll see evidence of extraordinary technique; the layers of white in the young girl's dress, in particular, are astonishing. Who was the artist? **Pablo Picasso**, who, at age 14, had clearly mastered conventional art. Now consider *Guernica,* which Picasso painted in 1937 to memorialize the Nazi bombing of the Basque village. There is little that is conventional about this painting, considered one of modern art's most powerful antiwar statements. Picasso, who by this time was recognized as one of the most influential artists of the 20th century, had moved beyond conventional technique, using his mastery to push the frontiers of art.

6. We'd learn to experiment.

How does one move from mastery to brilliance? From technical competence to true innovation? By experimenting. Some design experiments take place in the mind – think of the strategic planning process, in which strategists imagine and test new futures – and some find their expression in physical prototypes. Some experiments are even conducted in the real world, and here I offer my only design story from the business world: **IKEA**. When the company's visionary founder, **Ingvar Kamprad**, started out, he had only a general sense of what would become IKEA's revolutionary approach to the furniture business. Nearly every element of its now-legendary business model – showrooms and catalogs in tandem, knockdown furniture in flat parcels, and customer pickup and assembly – emerged over time from experimental responses to urgent problems. Customer pickup, for instance, became a central element of IKEA's strategy almost by chance, when frustrated customers rushed into the warehouse because there weren't enough employees to help them. The store manager realized the advantages of the customers' initiative and suggested that the idea become permanent.

7. We'd be more inclusive in our strategic conversations.

The image of the solitary genius at work in his atelier is as much a myth in art, architecture, and science as it is in business. Design teaches us about the value of including multiple perspectives in the design process – turning the process into a conversation. The more complex the design challenge, the greater the benefits of multiple voices and perspectives.

Consider, for instance, the complex and political process of urban planning – in particular, the New Urbanism movement, which emerged from the experiences of the developers and architects of the innovative **Seaside** community in Florida. What distinguishes New Urbanism from other architectural movements is its emphasis on wide participation, which takes the form of 'charettes' – interactive design conversations with a long tradition in art and architecture. Derived from the French word meaning 'little cart', charrettes were used at the first formal school of architecture, the Ecole des Beaux Arts in Paris, in the 19th century. As students progressed from one level to the next, their projects were placed on small carts, onto which students would leap to make their frantic finishing touches.

The charette process used in New Urbanism projects is based on four principles: involve everyone from the start who might build, use, sell, approve, or block the project; work concurrently and cross-functionally (architects, planners, engineers, economists, market experts, citizens, public officials); work in short feedback loops; and work in detail. The charette, I believe, offers a powerful alternative to the traditional strategic planning process by inviting the whole system to participate and by including local knowledge in the conversation.

8. We'd learn to talk differently.

Of course, simply putting a variety of people in a room together is not enough. To produce superior designs, we must change the way we talk to one another. Most of us have learned to talk in business settings as if we are in a debate, advocating a position. But within a diverse group, debate is more likely to lead to stalemate than to breakthroughs: breakthroughs come from asking new questions, not debating existing solutions; they come from reexamining what we take as given.

As a case in point, consider the design of Manhattan's Central Park. In 1857, the country's first public landscape design competition was held to select the plan for this park. Of all the submissions, only one – prepared by **Frederick Law Olmsted** and **Calvert Vaux** – fulfilled all of the design requirements. The most challenging requirement? That cross-town traffic be permitted without marring the pastoral feel of the park – had been considered impossible to meet by all the other designers. Olmsted and Vaux succeeded by eliminating the assumption that the park was a two-dimensional space. Instead, they imagined it in three dimensions, and sank four roads eight feet below its surface.

9. We'd work backwards.

Most managers are taught a straightforward problem-solving methodology: define a problem, identify various solutions, analyze each, and choose one. Designers begin at the end of this process, as **Stephen Covey** has famously admonished, by achieving clarity about the desired outcomes of the design and then working backwards.

Thomas Jefferson devoted the last decade of his life to founding the University of Virginia. For Jefferson, the link between democracy and education was clear: without an educated populace, there was no hope of protecting the fledgling democracy that he and the other founding fathers had worked so hard to create. Jefferson's university

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would produce free-minded graduates, and therefore it would need to differ from prevailing educational institutions in many ways: it would be a *community* where faculty and students work as partners to create a dialogue that produces the kind of learning that democracy requires; the typical large central building would be replaced with a collection of smaller buildings. This garden-encircled 'academic village' would be a community of learning where students would have unprecedented freedom in both the choice of curriculum and in governing their own behaviours.

To the modern observer, Jefferson's genius may appear to lie in the beauty of the architecture he created. In reality, he took much of his architectural inspiration rather directly from the sixteenth-century Italian architect **Palladio**. Jefferson's true genius lies in the power of the space that he created and its ability to evoke so vividly the purpose for which it was designed.

10. We'd start the conversation with possibilities.

Great design, it has been said, occurs at the intersection of constraint, contingency, and possibility – elements that are central to creating innovative, elegant, and functional designs. But it matters greatly where you start. In business, we have tended to start strategic conversation with constraints: the constraints of budgets, of ease of implementation, of the quarterly earnings focus that Wall Street dictates. As a result, we get designs for tomorrow that merely tweak today's. Great design inevitably starts with the question "What if *anything* were possible?" After all, if strategy is an invention, a product of our imaginations, and our assumptions are bound only by what we can imagine, then removing the assumptions that arise from the belief in constraints is job number one.

For my final example, we will turn to one of my favorite cities, Barcelona, and the story of its great unfinished cathedral, Sagrada Familia, designed by **Antoni Gaudi**. Gaudi was just 32 in 1884 when he was named principal architect of the church known as the 'Cathedral of the Poor', which would be built entirely through donations. From the outset, Gaudi envisioned the cathedral he wanted to create – a 'Bible in stone', a soaring interior that evoked a forest and an exterior with towers that reached for the heavens. Gaudi chose to disregard the usual constraints of time and money. "My client is in no hurry," was his response to skeptics who doubted that the church would ever be completed. When funds became too scarce to continue construction, he went back to designing, building increasingly detailed plaster models and stepping out of his architect-builder role to raise funds personally.

The very real constraints imposed by the construction materials and techniques available at the time were impossible for Gaudi to ignore. Because the natural world served as a primary source of inspiration in all of his designs, he aspired to create soaring spaces with natural light and found himself profoundly encumbered by the need for straight internal load-bearing walls and beams. Without the mathematical knowledge and modeling techniques available today, the physics of the cathedral's construction were also a challenge, as Gaudi sought to avoid the massive arches and buttresses common to the great medieval cathedrals.

In order to work around these constraints, Gaudi sought out new tools and techniques. He found two tools, little-used in Barcelona at the time, that would become the foundation of his work. The first was the 'catenary arch', a simple arch whose shape could be simulated by suspending a chain upside down. Gaudi was able to calculate the load-bearing demands placed on the massive cathedral towers by suspending small bags of sand from the inverted chain to mimic the weight that the towers would need to bear. This created a perfect model (albeit upside down!) of the possible shapes and dimensions that a real tower could take on. Computer models run on Gaudi's towers demonstrate the surprising accuracy of his method.

The second tool that he discovered was a new material: cement. Combined with iron beams, brick or stone pillars, and a new roofing approach, cement allowed the exterior walls to bear most of the roof's weight, giving Gaudi the freedom of interior design that he craved.

Gaudi died at the age of 74 (ironically, run over by a streetcar on his way to church) with his cathedral only partially completed. Ten years later, the Spanish civil war came to the city, bringing construction to a halt. Rioters burned his workshop, destroying all of his plans and archives. Fortunately, the plaster models survived and are being used today to guide the final phase of the cathedral's construction, which is expected within the next 20 years.

All of the design stories told here are about possibilities made real, some of them against great odds. In order to achieve such designs, we must first *aspire* to achieve them, challenging the mediocrity of much of today's design. We must also learn new skills, including the mastery of core technologies and the ability to persuade, to talk differently, to experiment. Finally, we must embrace new processes – processes that invite a more diverse set of perspectives into the strategic conversation, that work backwards from a clear sense of the outcomes that we want to create. And we must start our conversations with possibilities. The kind of exemplary designs discussed here are rarely achieved even in design – let alone in business. But as we all know, it is that which is hard to do that is most worth doing.

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