

Why Decisions Need Design

By Roger L. Martin | August 31, 2005

The Paradigm Problem

Of course, there's great variance across corporations and across decisions. Not all decisions are ill-designed. Some companies are skilled when it comes to user understanding, visualization, prototyping, and continuous improvement. And indeed, Six Sigma doctrine purports to embody much or all of the above (click here to read Part 1 of the article). Nevertheless, I think it's undeniable that the mean quality of corporate decision-making models is dreadfully low.

Why would this be the case when corporations have a strong economic incentive to have high-quality decision design? I believe that the root cause is a fundamentally flawed paradigm with respect to the conceptualization of the corporation. Paradigms become the standard way to think about a given context -- eventually becoming the "unthinking" way of thinking about a context because no other way is imaginable.

For U.S. airlines, "hub-and-spoke" was the only way to think about designing flight schedules because it was the only model in operation -- that is, until Southwest Airlines (LUV) arrived on the scene and ate all of their lunches using a "point-to-point" route structure with no hubs and no spokes. Now, the paradigm has switched -- too late for the carriers rapidly going bankrupt.

BROKEN BODY. The fundamental paradigm of the corporation is based implicitly on a metaphor of the human body. The corporation is made up of two basic parts: the brain, which is corporate leadership, and the arms and legs, which is the corporate rank and file. As with the body, the brain is in charge and the arms and legs follow orders. As with the body, the brain formulates decisions and the arms and legs carry them out. And as with the body, the brain is in charge of control procedures and the arms and legs get controlled.

This paradigm worked much better in early 20th century physical corporations. Corporate leadership at Ford Motor (F) designed the assembly line, and its rank-and-file workers

were "choiceless doers" performing a standard spot-weld or tightening a particular bolt. In this paradigm, deep user understanding, creative visualization, collaborative prototyping, and ongoing enhancements weren't clear decision-design imperatives.

However, as corporations became more complex decision factories, this formulation-implementation schism featuring two distinct classes of employees -- "choosers" and "choiceless-doers" -- became more problematic.

NO CHOICELESS DOERS. Are numerous levels of middle managers and even front-line employees simply "implementing" reflexively, like an arm told by the brain to pick up a salt shaker? When a leader at corporate headquarters formulates a decision to "win on the basis of superior customer service," do each of the division presidents open up the comprehensive "how to win on the basis of superior customer service" manual and simply, mindlessly start "implementing" steps 1 through 10,000 as a choiceless doer? No, if he was only good at reading manuals and mindlessly following instructions, he would never have made it to division president.

In fact, his job is to take the relatively abstract decision mandated by the corporate office and make a set of decisions within his division consistent with that corporate decision. Lo and behold, he, too, is a brain, not simply arms and legs.

And is his EVP of service operations just arms and legs, a choiceless doer? No, she is not. She needs to take the division president's decisions and make choices on a consistent and reinforcing basis. So where are the arms and legs? Where are the employees that are mere choiceless doers?

DEFECTIVE MODEL. What about the customer-service representative at the very bottom of the hierarchy? We all know what happens when we get a voice at other end of the line who is clearly following the manual and making no decisions -- "I'm sorry, sir, the policy doesn't allow me to do that." That is, for us, the absolute definition of dreadful service -- we loathe that experience. We know from experience that the customer-service representative must be a choice-making brain as well.

So every single person in the corporation, from the CEO at the top of the hierarchy to the customer-service representative at the bottom, is a choice-making brain. The distinction between formulation and implementation is false. Most importantly, the dominant design

metaphor for the decision factory is deeply, deeply flawed -- and a flawed design metaphor will produce flawed designs.

A Better Design Paradigm

A superior metaphor for the modern decision-factory corporation is a white-water river. In this conceptualization, choices cascade from the top of the corporation (the source in the mountains) to the bottom (the mouth of the river). Each set of rapids is a choice point, with each "upstream" choice setting a context in which the choice immediately "downstream" is made. As decisions cascade downward, the choice-maker above must set the context for the choice-maker below by:

- 1) specifying her choice and the rationale for the choice;
- 2) describing the resultant next-level choice that her decision begets;
- 3) offering to assist in making the resultant choice, to the extent that the next choice-maker needs the assistance; and
- 4) offering to revisit and modify her decision if the user finds it impossible to make a productive next-level choice in the context of her decision.

HUMAN UNDERSTANDING. Within this cascade of choices, executives at the top of the corporation make the broader, more abstract choices involving larger, long-term investments, while the employees toward the bottom make more concrete, day-to-day decisions that directly influence customer service and satisfaction.

All the choices must integrate with each other to create a seamless cascade. Hence, all the choice-makers feel they're in a joint venture, even though there's a clear hierarchy from top to bottom. Importantly, in this conceptualization, every employee is both brains and arms and legs, chooser and doer -- just like a real human being!

This conceptualization is also much more conducive to decision-design excellence. When the corporation is understood as a choice cascade, it's clear to each decision-maker exactly who the users of their choices are and what types of choices those users will need to make subsequently. Since they're all in the choice cascade together, each decision-maker is more

inclined to gain deep user understanding rather than "throwing the choice over the wall" for "implementation". Deep user understanding provides more raw materials for the visualization of creative solutions.

POSSIBILITY KNOCKS. The cascade also creates a more conducive context for collaborative prototyping. Feedback from the downstream users who are more clearly linked together in a collaborative venture encourages the revisiting and the refinement of upstream decisions over time. The result is a more robustly designed loop of data, insights, and choices that flows from the customer to the top of the corporation and back down again in a productive circle.

A better design metaphor doesn't guarantee better design. But abandoning the brain vs. arms and legs for the cascading river opens up the possibility for better decision design, leading to creative customer solutions and a healthier, more authentic corporate culture.