



DESIGN & BUSINESS: WHY CAN'T WE BE FRIENDS?

Why, when executives need designers to revitalize their businesses, & designers need executives to bring their ideas to market, is it so tough to cooperate for success?

BY ROGER MARTIN

In 1975 the soul band War released a song that pleaded “Why can't we be friends?” for 47 of the song's total 61 lines. It became a Grammy Award nominee and a timeless cult classic from a tumultuous era. Over three decades later, it feels like the right theme song for designers and business executives. Even as design has emerged as a key business theme, with executives broadly wishing for the type of design successes propagated by Apple, JetBlue and Herman Miller, the relationship between designers and business executives has remained distant—if not downright frosty.

Designers make executives nervous by combining what appears to be a lack of interest in rigorous, quantitative analysis with the inclination to propose—with apparently reckless abandon—radical departures from the past. Executives might love the promise of creativity, yet they find designers hard to take. Designers find executives inexplicably wedded to mediocre status quos and inclined to apply impossibly high standards of proof to design ideas ... thus ensuring those ideas go nowhere. Designers long for access to the purse strings executives control, but they find executives almost too conservative to tolerate. **Figure 1** (below) shows some of the clashes that occur and what they are derived from.

PROTOTYPICAL CLASHES

Analytical Thinking vs. Design Thinking

	Analytical Thinking	Design Thinking
Organizing Principle	Ongoing tasks	Projects
Mode of Reasoning	Declarative	Generative
Source of Status	Managing big budgets & large staffs	Solving wicked problems
Dominant Attitude	Constraints are the Enemy	Constraints add to the challenge/excitement

It is true that *some* designers and executives engage in love-fests that go far beyond the friendship War queried 47 times. Yet the dominant mode is a messy shotgun wedding. It's difficult because there is a fundamental tension between designers and executives, a separation ill-understood by both sides, driving all parties to engage in behaviors that make the other side nervous and worried. When designers and executives understand the sources and nature of the divide, they find each side can take five steps to overcome the tension and become productive friends.

THE FUNDAMENTAL SCHISM

The reliability orientation of business executives versus the validity orientation of designers creates a fundamental tension. Because the orientation of each is natural and utterly implicit, neither executives nor designers understand the nature of the gap; they only sense that the other side makes them nervous (see **fig. 2, below**).

THE FUNDAMENTAL TENSION

Reliability vs. Validity

Reliability

- Production of consistent, replicable outcomes
- Substantiation based on past data
- Use of limited number of objective variables
- Minimization of judgment
- Avoidance of the possibility of bias

Validity

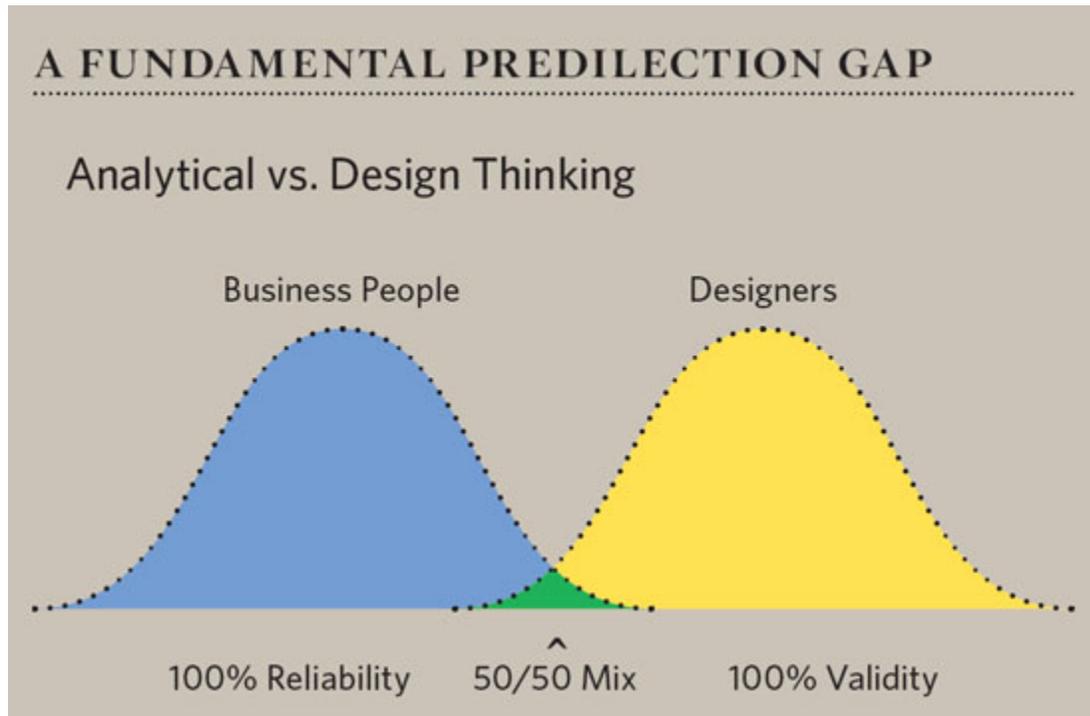
- Production of outcome that meets objective
- Substantiation based on future events
- Use of broad number of diverse variables
- Integration of judgment
- Acknowledgement of the reality of bias

Reliability is the result of a process that produces a dependable, consistent, replicable outcome. If I were to take a vial of your blood, split it into 100 sub-samples, and run each through a testing process for, say, hepatitis, it would be a fully reliable process if it gave the same answer all 100 times. Validity, by contrast, is the result of a process that produces a desired outcome. If instead I took the entire vial of blood, ran it through a single test, and the test was negative (positive) and you never developed hepatitis, it would be a valid test—i.e., it provided the outcome desired, the identification of whether or not you have hepatitis.

Reliability is demonstrated by past events: We ran the same hepatitis test 10,000 times and got the same result each time, hence we know the process is reliable. Validity can only be demonstrated by future events through the passage of time: We need to watch you to see whether you develop hepatitis in the future to assess the validity of the test. Clearly, you would like both perfect reliability and validity. You want the test to give the same answer every time you ask if you have hepatitis, and you want the answer to correctly identify whether or not you have the condition. Therein lays the fundamental problem: After a point, it is not possible to increase reliability without sacrificing validity, or vice versa.

The conflict between reliability and validity plays out in the relationship between business executives and designers: The former are more reliability-oriented on average, and the latter are more validity-oriented. At a conceptual level, the world of business people and the world of designers can be represented by the

two curves in **fig. 3**. The business curve emphasizes reliability, while the designer curve emphasizes validity.



Business executives live in an environment that rewards meeting budgets, hitting earnings targets and “proving” in advance that their initiatives will succeed. Their number one analytical tool is linear regression, because it helps them substantiate reliability on the basis of past results—if it has always happened in the past, it will also happen in the future. That’s the primary substantiation for reliability, so the average business executive has the incentive to be more reliability-oriented and will be trained in methodologies that produce reliability.

Designers possess an inherent bias toward validity. Great designers seek deep understanding of the user and the context, entailing the consideration of many variables. They don’t limit considerations to aspects that can be thoroughly quantified. They worry less about whether they can replicate a particular process and more about producing a valid solution to the problem before them. The only proof they tend to accept is future-oriented—i.e., a design solution shown to work with the passage of time.

Reliability orientation causes business executives to say to designers, “You’ve got to quantify it; you’ve got to prove it.” The designer says in response, “Prove it? How can you prove something that can only be substantiated by future events? You can’t! If you insist on proof, you’ll never do anything impressive.”

Back to figure 3: While the means of the distributions are apart, the curves are overlapping, because some designers are highly reliability-oriented and some executives are highly validity-oriented. By and large, all designers long to work with business executives who are on the right side of their curve, and business executives like to work with designers on the left end of the designer curve. Such situations, however, are by definition not the norm in this dynamic; they are statistical outliers. So how do business executives and designers need to think, and what do they need to do, in order to overcome the fundamental schism and be the most productive friends they can be?

ADVICE FOR DESIGNERS & EXECUTIVES

I have five pieces of parallel advice for each side:

DESIGNER ADVICE #1: TAKE INATTENTION TO VALIDITY AS A DESIGN CHALLENGE.

Designers generally love nothing more than a tricky and complicated design challenge so they can create a marvelous solution where one doesn't currently exist. But their reaction to the organizational challenge of dealing with inattention to validity by corporate executives is often quite unproductive. Rather than taking this organizational issue as a design challenge and putting their design hats on to create a process to solve this problem, they are inclined to simply complain about reliability-oriented executives and dismiss them as philistines who can't appreciate what needs to be done. In a sense, they define the reliability-orientation of executives as "not their problem"—just an immovable constraint.

If, instead, they treated the actual existence of "design unfriendliness" (inattention to validity) as being as important and legitimate a design challenge as their normal job of designing an artifact—product, website, corporate identity, user interface—they could be more productive and effective in working with executives. Inattention to validity is and should be treated as just another design challenge for the designer, to be tackled with the same gusto and enthusiasm they apply to traditional design challenges.

EXECUTIVE ADVICE #1: TAKE INATTENTION TO RELIABILITY AS A MANAGEMENT CHALLENGE.

Executives generally love nothing more than taking the confusing and ambiguous world in which they operate and organizing it into a reliable operation. But their reaction to the challenge of dealing with designers' inattention to reliability is often quite unproductive. Rather than taking this as a management challenge and putting their managerial hats on, they are inclined to complain about flighty and impractical designers and marginalize their work so it doesn't threaten organizational order. Executives see the validity orientation of designers not as a legitimate management concern—just a threat to security and stability that ought to be extinguished.

If, instead, they treated inattention to reliability as being as important and legitimate a management challenge as their normal job of managing an organization, they would be more productive and effective in working with designers. Inattention to reliability is and should be treated as just another managerial challenge for the executive, to be tackled with the same fervor and enthusiasm they apply to traditional management challenges.

DESIGNER ADVICE #2: EMPATHIZE WITH THE “DESIGN-UNFRIENDLY ELEMENTS.”

The only way to design a compelling solution for a user is to understand the user in a positive way. It's almost impossibly hard to design something compelling for a person the designer doesn't respect or attempt to understand. The filing cabinets full of unbuilt houses designed for clients that architects saw as “philistines” are testaments to the limitation of disrespecting your user. The architect consoles himself with the brilliance of his design without having any better explanation of its stillborn fate than “the client had no appreciation of architecture.”

In contrast, the effective designer attempts to achieve deep understanding of the user to uncover the greatest range of options for creating a compelling solution. What are the user's greatest hopes? What keeps the user up nights worrying? What are the minimum acceptable conditions for the user to embrace a design solution? How much risk is the user willing to absorb?

The designer can answer these questions with either empathy or disdain. The ineffective designer sees that what keeps the user up at night is the desire to keep his or her proverbial ass covered. The effective designer sees that what keeps the user up at night is a desire to protect assets and employees from the consequences of a reckless decision. In the case of the schism between the worldview of the designer and the executive, a better understanding of, and empathy for, the executive's point of view enables the designer to probe what constitutes a reckless decision versus a sensibly aggressive decision ... from the executive's viewpoint. Only with such empathy can the designer forge a solution that meets the executive's needs in a productive way.

EXECUTIVE ADVICE #2: EMPATHIZE WITH THE “RELIABILITY-UNFRIENDLY ELEMENTS.”

Likewise, the only way the executive can create an organizational context in which designers can work productively is to empathize with them. They are not being purposely dangerous and worrisome; they are attempting to tackle the problem of having to make sense of fuzzy data, qualitative insights and judgments. Designers see things executives don't see and are doing their best to deal with complexity. Only by empathizing with designers and really understanding their concerns and ways of operating can the executive devise managerial structures that take into account both the needs of the organization and needs of the designers.

DESIGNER ADVICE #3: LEARN & SPEAK THE LANGUAGE OF RELIABILITY.

To empathize, one needs to communicate. But executives and designers speak different languages. Executives speak the language of reliability because they put a high priority on producing consistent, predictable outcomes. They use words like proof, regression analysis, best practices, deployment. Designers speak the language of validity; they put the priority on producing outcomes that delight, whether those outcomes are consistent and predictable or not. Designers use words like visualization, prototyping, beta-testing, novelty.

To executives, these latter words connote danger, uncertainty and guesswork—things that encourage, if not compel, them to say, “No!” It is incumbent on the designer to learn the language of the executive—the language of reliability. Just like anybody who takes a job in another country and needs to learn the local language in order to function, designers need to learn the language of reliability to be successful in communicating with executives.

I know how critical this is. I vividly remember working as a relatively young consultant for a big bank on a private-banking strategy for high net-worth customers. My team came up with a breakthrough idea, and in due course we were given an audience to present our strategy with the bank's chief executive officer and his six direct reports.

They listened attentively. At the end the chief operating officer asked one question: “Have any of our competitors done anything like this?” Reveling in the unique brilliance of our solution, I enthusiastically responded, “No, not even close!” I was too young, foolish and design-insensitive to realize my answer put the final nail in the coffin of our idea. That was 1988. It's small consolation that I have observed several banks only recently employing the approach we laid out almost two decades ago.

EXECUTIVE ADVICE #3: LEARN & SPEAK THE LANGUAGE OF VALIDITY.

Again, both sides need to engage in the same discipline—learning one another's language. The executive needs to learn and speak the language of validity. Executives will not get productive innovation from designers if they force them to exclusively speak the language of reliability. It is incumbent on executives to learn the language of validity so they can actually communicate with designers.

DESIGNER ADVICE #4: USE ANALOGIES & STORIES.

What tools help bridge the language gap? It's difficult to provide proof or certainty, even when designers appreciate that those words loom large in the executive's reliability lexicon. When executives care primarily about substantiation based on past events and designers care only about substantiation based on future events, designers have a challenge

communicating ideas compellingly. The best tool available is analogy: crafting a story that takes an existing idea in operation elsewhere and shows how it's similar to the novel idea being proposed ... not necessarily exactly the same, but close enough.

Had I had more empathy with my banker clients, and if I had understood the language of reliability, I might have responded to the CEO's query this way: "None of our domestic competitors has done this. But a variant of this approach has been used by some of the best-performing European private banks for some time now. And keep in mind, our bank has succeeded in the past by taking an idea from outside our home market and introducing it here."

This doesn't eliminate the risk of an idea, but it presents the risk in a reliability-oriented framework. An analogy or story helps the business executive see this is not a case of substantiation based exclusively on future events, because the solution is also based in part on past events. In the end, executives will need to convince themselves that the idea falls into an acceptable range of reliability if they are to adopt it.

EXECUTIVE ADVICE #4: SHARE DATA & REASONING, NOT CONCLUSIONS.

The inclination of reliability-oriented executives is to crunch all the data they see as relevant, come to a firm conclusion on the analysis, then impose that conclusion on everyone else (including designers). Listening to this, designers think that what the executive sees as all of the data is only a small fraction of the relevant evidence, and that the executive is overlooking or consciously ignoring other evidence that is hard to measure and quantify. When executives try to impose their conclusions on designers, they cause designers to feel that it is impossible to develop a truly innovative and superior solution—too many of the important features are being ignored.

But if executives don't share their data and reasoning with designers, the designers won't understand what executives are thinking, and that will make it harder to create a design solution executives will find acceptable. For executives, sharing data and reasoning but stopping before imposing conclusions helps designers come up with a solution that can elicit a "Yes!" The solution designers come up with may make executives nervous on the margin. But it is less likely to be a design that executives feel compelled to reject out of hand as too scary and dangerous.

DESIGNER ADVICE #5: BITE OFF AS LITTLE A PIECE AS POSSIBLE TO GENERATE PROOF.

Even with careful use of language and employment of analogies, proof is the biggest hurdle for designers. They don't traffic in proof of the sort reliability-

oriented executives want—substantiation based on past events. Designers can't simply prove in advance that their ideas will work.

But there is both good news and bad news about the future. The bad news is a year from now is now in the future. From a proof standpoint, what happens in the future is not relevant. The good news is that a year from now, this year will be in the past. This nuance is critical to reliability-oriented executives. Designers can convince executives to bite off a piece of what they would like to do, saying, "Here is my prediction of what will happen. Let's watch next year to see what did happen." If the executives agree to bite off that chunk, and the designer's predicted results happen, it builds confidence. The key for designers is to turn the future into the past ... because "future" is the enemy to a reliability-oriented executive and "past" is a friend.

Designers don't love the notion of biting off a little piece, because it feels to them like any parsing or phasing of the solution will destroy its integrity. Most designers would rather have everything done in one swoop and not look back. But designers need to develop skills in biting off as little a piece as possible to give themselves a chance to turn the future into the past.

EXECUTIVE ADVICE #5: BITE OFF AS BIG A PIECE AS POSSIBLE TO GIVE INNOVATION A CHANCE.

Executives have to listen to designers when they say, "We will have to do 'this much' of this idea or we won't really know whether it will work." Doing "this much" may be a frightening notion when not much reliability-oriented proof is available. But just as the designer has to stretch to bite off as little a piece as possible, the executive needs to stretch to bite off the biggest piece possible ... without feeling she is being irresponsible.

CAN'T WE JUST GET ALONG?

Advice for improving relationships is always generic: appreciate that there are legitimate differences, empathize, seek to communicate on others' terms, use tools with which they are familiar, stretch out of your comfort zone toward the comfort zone of others. Getting along has never been and will never be rocket science. That doesn't prevent the world from being full of conflicts, though, like in the uneasy relationships between designers and business executives. Yet these relationships can and should be highly productive. And they can be when both sides reach out and make friends.

RESOURCES IN PRINT

- *Sketching User Experiences: Getting the Design Right and the Right Design* by Bill Buxton, published by Morgan Kaufmann
- *The Enlightened Eye: Qualitative Inquiry and the Enhancement of Educational*

Practice by Elliot W. Eisner, published by Prentice Hall

- *The Act of Creation* by Arthur Koestler (this insightful and influential book is out of print but widely available used and in libraries)

- *Designing Interactions* by Bill Moggridge, published by MIT Press

- *A Whole New Mind: Why Right-Brainers Will Rule the Future* by Daniel H. Pink, published by Riverhead

- *The Sciences of the Artificial* by Herbert A. Simon, published by MIT Press online

- Special issue of the Journal of Business Strategy on Design,

<http://www.emeraldinsight.com/Insight/viewContainer.do;jsessionid=763691D2750F4076A5069BE3E5EF5F0D?containerType=Issue&containerId=25248>

- *BusinessWeek* Innovation & Design, www.businessweek.com/innovate

- "This Is My Process," by Michael Bierut,

www.designobserver.com/archives/017485.html

- Core77 Design Blog, www.core77.com/blog