

The Complexity of Complexity

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by



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We've all heard the KISS talk: Keep It Simple, Stupid. And it's good advice if you're preparing an argument or making a presentation. There are rafts of management tools—from spreadsheets to process flow diagrams, slideware, and organizational charts—to help codify this commitment to a worldview that is linear, orderly, and rooted in simplicity: Cause and effect are clear; relationships are precisely delineated; messy variables are discounted. Plans lay out a step-by-step march toward a predetermined end.

But while a "plan the work, work the plan, the plan will work" philosophy looks good on paper, the real world (and real work) is often nonlinear, disorderly, and unpredictable. Simplicity has its place, but leaders must embrace and understand complexity if

they wish to be effective.

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Why has it been so hard for other companies to duplicate Apple's success? Why does the global economic recovery continue to lag? Why is it so hard to halt the Ebola outbreak in Africa? The answers lie in the interplay of multiple variables, some of which can be controlled and some of which

cannot. Put simply, they are complex.

Look, for example, at the case of former [Apple](#) executive [Ron Johnson and his troubled tenure as CEO of JC Penney](#). The retail magic he worked at Apple was not transferable because the challenge was less about applying the Apple formula than it was about discerning the complexities of the relationships between customer expectations, products, services, brand, company culture, and other factors at JC Penney. There was something at JC Penney to be fixed, for sure, but not by looking for all the answers from a savior CEO.

Complexity is a topic that's not covered in depth in most traditional leadership literature. Relatively few thinkers like [Meg Wheatley](#), [Peter Senge](#), and [Donella Meadows](#) have focused on a systems-based worldview that brings complexity to the fore and offers important leadership insights.

How do you make sense of it all? One approach to complexity that I have found particularly useful was developed in the 1950s by [Dr. Warren Weaver](#). In Weaver's framework, *simplicity* is a designation given to challenges with between one and four variables. *Disorganized complexity* refers to challenges with many more independent variables that require sophisticated statistical analysis to understand. As organizations become more adept at using big data analytics, they become more comfortable with disorganized complexity.

But there is also a third designation, in between the two, and often overlooked. It's *organized complexity*—situations with more variables than found in simplicity yet fewer than disorganized complexity and, more important, with interdependencies between the variables.

Senge, in his seminal book [The Fifth Discipline](#), made a similar distinction between *detail* complexity (arising from a large number of variables) and *dynamic* complexity (arising from the relationships between the components where cause and effect may not be clear and may vary over time).

Direct marketing, to return to retail for an example, is an exercise in disorganized complexity. Offers are sent to thousands or perhaps millions of people. Each person responds or does not respond, independent of any others who have received the offer. The complexity is mastered through averages (response rate, order size, etc.) derived through statistical analysis. Success is achieved when those autonomous responses conform to or

exceed the predicted average response.

Large organizations, by contrast, represent organized complexity. Success comes with understanding the interdependencies and relationships between the components and the emergent properties of the system—those characteristics of the system that are not present in any of the components. You can't duplicate the Apple retail experience simply by copying its spare aesthetic and providing a Genius Bar. Several years ago, a number of legacy airlines tried to launch low-cost brands that offered the fun attitude found on Southwest. These were valiant efforts but they failed. Anyone remember [Ted](#) or [Song](#)?

It is not uncommon for people in organizations, or their external constituencies, to complain that “the left hand doesn't know what the right hand is doing.” In my experience, things are often arrayed so that they make sense on paper—a simplicity-based view—but are derailed by sour personal relationships, misaligned or conflicting incentives, or a failure to discern hard-to-see interdependencies. The challenges of leading through organized complexity arise from the human factors where relationships are most critical. What are the mindsets of the various stakeholders? What are their motivations? What emotional factors are in play? Is there an understanding of the fundamental customer need and unity of effort to satisfy it?

Rather than settling for simplistic representations of reality, leaders must continually work to provide clarity on the complexity, particularly along three lines: purpose, values, and performance. Purpose means understanding the job that the customer is hiring you to do. (For instance, it turned out that Apple and JC Penney customers seek fundamentally different experiences and have wildly divergent reasons and expectations as they visit each store.) Values are the bedrock principles by which you operate. (Southwest and Apple, for example, are both quite careful and intentional about hiring outgoing, happy people for the frontlines because that is the only way to deliver the brand promise.) Performance is the business model: how the organization remains financially viable and how my particular job is essential to achieving overall objectives.

With clarity on these fundamentals, people can make smart decisions and take appropriate action at the speed, scale, and scope necessary to thrive amid the complexity of a fast-paced global marketplace.

But clarity isn't a one-time exercise. The dynamic nature of complex systems means that

clarity is always threatened: People come and go, assume new roles, and acquire new experiences; market conditions shift; competitors act. Leading through complexity means trying to see the whole and help those they lead see it as well. Embrace complexity and give others clarity. Then people will begin to act as integral parts of the larger enterprise and more accurately perceive their impact on the rest of the system.

Try exercising a framework for understanding complexity. Whether you adopt Weaver's, Senge's, or another approach, practice mapping the formal and informal relationships between elements rather than just the elements themselves as you seek to resolve critical issues. Unlike a spreadsheet, it will be a bit messy. So is life. If you want to lead, you have to be ready to deal with it.



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