The Knowledge Notebook

Big Data—The Latest Organizational Idea-Movement

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Since the Second World War, something like forty-five major idea-movements have swept through both public and private organizations. They include early time-and-motion studies, the quality movement, reengineering, human potential, and many, many others. Some of these movements promulgate genuinely new ideas; some recycle old approaches under new names. I am quite certain every reader of this column who has spent more than a few years in an organization has been the beneficiary—or the victim—of at least one or two of them.

What accounts for the often disruptive change that seems to erupt every few years (the new ideas then either becoming embedded in the way we work or forgotten forever)? Well, for one thing there is money to be made from selling new ways to make organizations more efficient, innovative, or profitable. Consultants, technology vendors, motivational speakers, and the like all need new ideas to gain audiences and keep them interested. The same is true of the business press. It isn't always possible to fill a journal with compelling stories every month or even every quarter unless there are new ideas to discuss or develop.

Some other factors contribute to the phenomenon. The boredom experienced by many managers who yearn for something new to try is one that reinforces their genuine desire to actually produce useful results for their organizations. There is also the pure uncertainty faced by all who try to improve the performance in their work life—and increasingly their home life as well. There is little real science to guide organizational behaviors; the "science" of organizations lacks the clarity and testability of engineering or biology. Therefore, one

can make a substantial case for an organizational improvement idea on more specious grounds than the purer sciences allow. Cases, logic, and rhetoric all play their roles in persuading people to follow the latest idea. Because those things are easier and less costly to develop than the findings of real science, there are virtually no barriers to entry. Finally, the fact that so many of the movements that promise so much in principle deliver so little in practice (except disappointment) drives people to latch on to the next great new idea and hope that this one will live up to the hype.

Now we have big data, or "business analytics" as it is sometimes called. It addresses issues of capturing, storing, organizing, and interpreting large quantities of data and extols the benefits of those efforts. This movement is just about at the height of its influence, in my opinion. It is more global in scope than some of the others I have mentioned, due to the increasing globalization of the market for business ideas as well as the almost total dissemination of information technology know-how across the developed and most of the developing world.

Like the quality movement, big data has much to recommend it. Analytic software has been used to do everything from studying baseball dynamics to predicting customer preferences. You can read and hear many stories of how those analyses uncovered new opportunities and supported good decisions. New applications for data combing, analytics, and gaming are being developed every day.

There is still the question, though, of what one does with all this analyzed data. Some of the proponents of big data suggest that the software itself can tell you what to do, but in fact the results of these analyses are almost never self-evident. Human judgment and experience-based knowledge are still called for to understand and give meaning to the data and decide what to do with it.

If this were not the case, we would barely need human managers at all—just let the machines run our organizations. In fact, the plethora of data being produced by all the new monitoring and social-media usage require more—not less—human intervention in running any organization. Without human reflection and interpretation, the data remain inert and ambiguous. Doing what the data itself "tells" you to do—or seems to tell you—can actually cause harm.

The dream of self-running organizations, organizations where little human intervention is needed and so-called objective data itself continuously optimizes performance, is a long-standing fantasy that should be limited to sci-fi literature but can be found in business magazines, books, and schools.

So, like some other movements, big data seems to have some real potential but also the potential to be misused and overpraised. Maybe it is not possible at this point to determine the proportion of good to bad. The one thing we do know for sure is that some other movement will come along to replace it within a few years. •

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