A response to the May 23rd Wall Street Journal article entitled, “You Call That Innovation?”

What innovation really is

I had not originally intended to use this essay to address the May 23rd Wall Street Journal article by Leslie Kwoh entitled, “You Call That Innovation?” in which she raised important and provocative questions about innovation. However, a few people asked for my opinion about it, including my colleague Raj Echambadi, a faculty member in our campus’ College of Business. Raj questioned the critique and tone of the article, and on that basis he asked me to prepare a contribution for a blog that he moderates. I offer here a somewhat expanded version of what I provided him.

Covering the topic variously – from considering its etymology, to counting its appearance in recent annual reports, to seeking the insight of innovation experts, to citing the advent of “chief innovation officers” – Ms. Kwoh’s case for the elusive nature of innovation’s meaning and its potential for use as deception was summed up by one of the experts interviewed as, “a chameleon-like word to hide the lack of substance.”

Interestingly, as she wrestled with its meaning, she did not address an important aspect of innovation when it comes to business – that innovation only is validated by its acceptance in the marketplace with significant financial return. It is the surprise, the unexpectedness associated with such acceptance and financial return that leads us to describe a product as a “breakthrough innovation” in contrast with it being only “incremental.” Ms. Kwoh cited that “More than 250 books with ‘innovation’ in the title have been published in the last three months,” which suggests that no widely accepted view has emerged as to what must be done in order to secure breakthrough innovation success. In fact, no precise formula or recipe is possible; otherwise there could be no surprise.

Should this trouble us? Yes. But it should not lead us to discard breakthrough innovation as a means to advance the firm. Instead, it provides an opportunity to gain deeper insight into what innovation really is and how we might appropriately approach it to serve customers, colleagues and shareholders – and to secure competitive advantage.

As many of you know, over the past decade, with colleagues Ray Price and Abbie Griffin, I have had the privilege to interview, study, and collaborate with a set of powerful and capable individuals we call Serial Innovators. These are people who, embedded in their firms, have been credited by managers and colleagues alike for creating and bringing to market multiple breakthrough innovative products and processes, not merely incremental advances. By hearing their stories across many companies and industries, we have come to understand more clearly breakthrough innovation.

Focusing our attention on people, in contrast to processes, we noticed recurring patterns of behavior that reappeared similarly but not identically over time, paths that often were retraced by an individual as he or she discovered what would constitute breakthrough innovation. Further, while the stops along the way to success were similar, no two stories followed the same trajectory.

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We learned that successful breakthrough innovators become deeply, personally immersed in addressing the needs of customer, colleague and shareholder, and that breakthrough innovation can be represented as a non-linear system and, thus, is mathematically chaotic.

This deep, personal immersion – directed at solving problems of real value – should not be surprising. In most aspects of life we expect good things from those who are gifted and dedicated, as exemplified in the innovators we observed.

Mathematically chaotic behavior, on the other hand, is less familiar yet equally powerful. Non-linear systems abound in nature, ranging from storms to earthquakes.

That breakthrough innovation exhibits patterns that are both personal and mathematically chaotic implies that, like forecasting the weather, one can secure at best a limited
forecast or prediction horizon. The behavior of such systems are said to be deterministic but not predictable, or at least not predictable with confidence beyond a horizon. **As such, humility is necessary – boasting about specifics of what will come from investing in breakthrough innovation is dangerous.**

Yet, mathematically chaotic is not the same as random. We are not merely closing our eyes and rolling the dice when breakthrough innovation is approached properly. This is a powerful distinction that offers hope to innovator and manager alike. By immersing one's self in the problem, innovators can extend their predication horizon, at least enough to provide a competitive advantage, which ultimately is what matters. Breakthrough innovators who have repeatedly demonstrated such skill can be counted on by managers to have a pretty good idea as how to pursue the best solutions to the most important problems. **As such, managerial confidence is necessary – managers need to accept uncertainty while expecting serendipity.**

Finally, that mathematically chaotic behavior is observed means that managers who immerse themselves in understanding breakthrough innovation and innovators will gain competitive advantage in identifying who to invest in when it comes to assuming the long-term risk associated with pursuing breakthrough innovation. **As such, managerial insight is necessary – managers need to immerse themselves in knowing, and relating on a personal level with, those who have the skill and motivation to contribute to breakthrough innovation.**

So, does Leslie Kwoh raise important and provocative questions about innovation? Absolutely. Yet, her piece leaves the reader with despair. I suggest that, when we re-consider the meaning of innovation with appropriate nuance and insight, we should expect to experience hope grounded in the reality that true breakthrough innovation is the fruit of invested, immersed, and highly skilled people rather than the deception of superficial, chameleon-like charlatans. ■

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1 http://www.business.illinois.edu/facultyprofile/faculty_profile.aspx?ID=12869
2 http://illinois.edu/blog/view/1262

“On the Epistemology of Innovation: How Breakthrough Innovators Connect the Dots” is a series of brief, occasional essays addressed to executives, managers, and technologists responsible for innovation in industry. Its purpose is to challenge readers to reflect broadly and deeply on the practice of innovation – in particular on how innovators come to know what to do today – in order to succeed commercially in the future. Essays are available without charge at the University of Illinois’ digital archive at https://www.ideals.illinois.edu/handle/2142/27667. The discussion group at http://epistemology-of-innovation.com is a place to provide feedback and dialog with the author and others regarding these essays, as well as to register to receive notice of new essays as they are issued.

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