

Lessons I've Learned About Successful Innovation

By Tom Coyne

Rather than “innovation” per se, it has been my experience that nothing is as important to the medium and long-term survival and success of a company than the health of its evolutionary processes – i.e., those that generate variation, selection, and retention. In my view, this is as important to risk management as it is to corporate growth (see the attached article on this that I've submitted to HBR). Unfortunately, and as evidenced by corporate survival rates, in most organizations there is no shortage of organizational challenges to the health of these processes. Beyond process and organizational design issues, I have found that complex adaptive systems (CAS) theory provides one of the most useful guides to managing this issue. More specifically, I have found that both levels of internal and external connectivity, and levels of adaptive tension are both critical to evolutionary success.

CAS also provides a useful perspective on the approaches to innovation that are likely to prove most successful. Re-use of existing approaches – i.e., copying – is often denigrated despite its demonstrated results over time in many different contexts. Granted, complexity can also cause mistakes to be made when copying another organization's innovation; yet with sufficiently health evolutionary processes, those mistakes can be overcome in an acceptable time frame. More challenging are novel recombinations of existing technologies, yet these are less rare than true inventions (and even in the latter case, protection of IP is often a real challenge).

Another framework I've found very useful over the years is based on the nature of the benefit delivered by a proposed innovation. In my experience, these range from performing an existing function at lower cost, performing it better, performing it more conveniently, or, at the most valuable levels, using a different form to perform it or delivering entirely new functionality. Yet with respect to the latter, I am also keenly

sensitive to the difficulty of going beyond a company's "organizational DNA", particularly with respect to its overall positioning in a market.

I'm sure that by now the careful reader has noted that these different frameworks lend themselves to the construction of potentially useful matrices. The larger point, however, is that I have found that one of the great challenges when managing innovation is how best to categorize and manage the portfolio of different "innovation options" that you confront, in light of a variety of constraints, including scarce time and resources, and demands various internal and external stakeholders. In terms of the evolutionary selection processes, this option portfolio aspect of the problem is critical.

On a practical level, I have also found ways to relax some of the constraints on this optimization problem. For example, I have learned over the years that low cost pilots are often more valuable than more sophisticated analytics, in that they force you to actually develop customers who will pay for your innovation – and/or to modify your innovation so that they will pay for it.

With respect to analytics, I have found that there is usually a Pareto principle at work, and that asking proponents of all new ideas to provide preliminary answers to four simple questions provides an excellent basis for preliminary screening. I call them the "4 Ms", which you can also see as key elements in a convincing narrative about the new idea.

- 1. What's the Macro story? How big is the current and potential market? How fast is it/will it grow, over what time frame?*
- 2. What's the Micro story? What is our offering, who is the target client, why will they buy from us, and why will our product or service be hard for others to copy?*

3. *What is the Business Model? How will we make money? If we are to earn returns above our cost of capital, some assumptions in that model will have to depart from industry norms. What are they? And how long will it take before competition substantially reduces the returns from this idea? In my experience, the real answer is usually “a lot faster than you first expect.”*

4. *Last but not least, what Management Team will we need to turn this story and this model into real money? What will it take to successfully execute on this idea? Do we have what it takes? If not, what will we have to do to attract the talent we need?*

Finally, I'll add a quick point about idea generation. The most useful technique I've learned over the years is to force people to recategorize the problem. Neuroscience research has shown that, because of the efficiencies involved, we naturally think in terms of categories. However, that is also why opinions once formed are difficult to change, why we often struggle with challenges that demand creative solutions, and why the most effective problem solving teams contain a mix of people with and without deep industry experience. In short, recategorization is usually critical to breakthrough thinking.