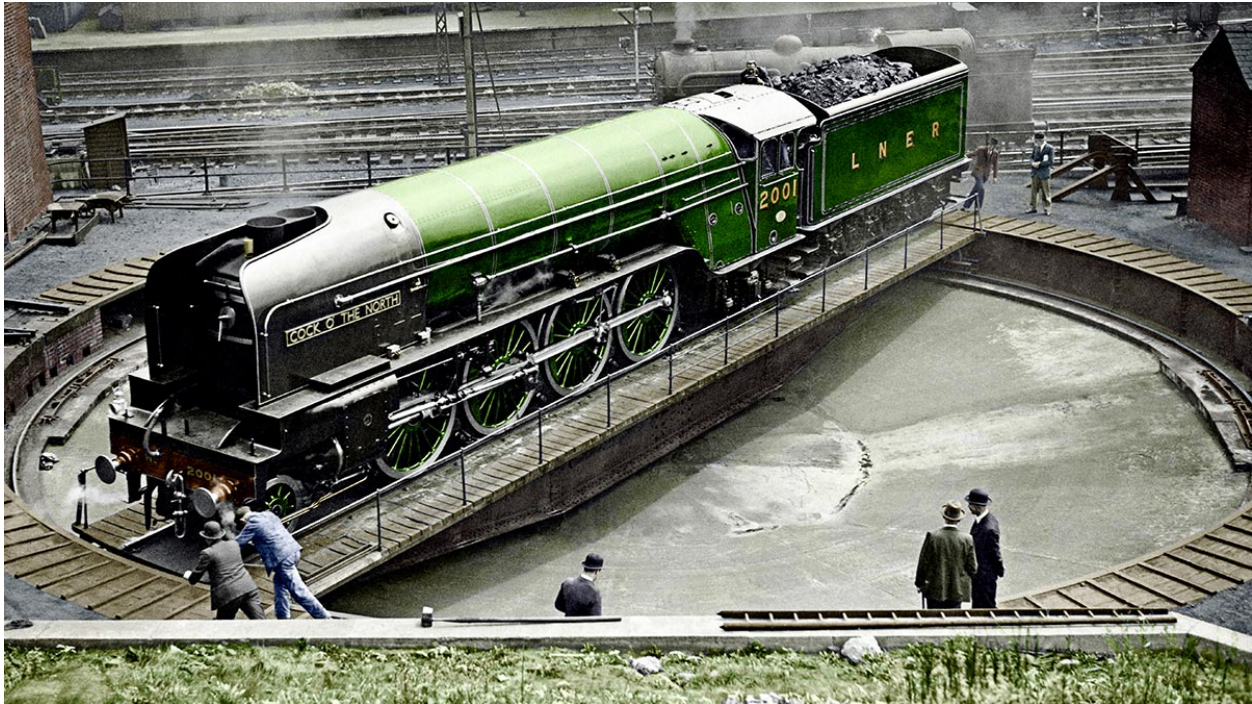


Your Innovation Team Shouldn't Run Like a Well-Oiled Machine

By Ron Ashkenas and Markus Spiegel
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Most innovation teams inside large companies are set up to operate like well-oiled machines. They move in a specified direction at a predictable speed. Since the early 1900s, this model has been the prevailing paradigm for how organizations are designed and run.

The problem is that while this approach enables large-scale production, it doesn't seem to work for innovation. Over the past several years, we have compared successful and unsuccessful innovation teams in a dozen global organizations. One of our key findings was that teams functioning more like machines – blindly following highly defined processes and execution plans – were the least effective at achieving their goals and coming up with innovations. The most successful teams, on the other hand, operated less like highly efficient machines and more like [ant colonies](#). These teams were able to quickly adapt to changes in their environment, because they had a set of

simple rules and a clear goal, allowing them more flexibility and ability to learn along the way.

It wasn't just random chance that led innovation teams to adopt a certain approach; leaders played a big role in setting those working cultures. Managers of the most effective teams encouraged adaptive ant colony behavior, while those of less effective innovation teams expected members to abide by rigid plans and rules.

Based on our research, there are four conditions that leaders need to put in place if they want their teams to have the same kind of resilience as ant colonies (they do manage to thrive in some of the harshest areas of the planet). These are:

1. A powerful central mission and a loose central structure. Ants have no central control, no single “master ant,” yet the entire colony works together as one organism. They're able to [align their individual activities](#) to the powerful common purpose that each ant shares – the survival of the nest. Thus when the environment shifts, individual ants adapt their roles, and even sacrifice their personal survival, for the collective good. Like with other social insects, it is astonishing how the genetic imperatives to seek food, fight intruders, and respond to chemical signals allows these relatively simple creatures to form such complex units.

Organizations, of course, are not composed of ants. Leaders of effective innovation teams, however, imbue their members with a passionate commitment to their mission while also giving them the freedom to achieve it in whatever way is necessary. This lack of central control, combined with the common mission, allows innovation teams to adapt when they hit dead ends or uncover erroneous assumptions. As one of the successful team members in our study noted, “The overarching, broad goal might stay the same, but how you get there is very dynamic throughout the process.” This is also why companies like Google align their people through transparent yearly and quarterly [organizational key results](#), while giving them a high degree of empowerment to work toward these results in multiple ways.

2. Frequent interaction to maximize learning. When an ant finds a food source, it leaves a [pheromone trail](#) so others are pointed toward that same direction. If the source is particularly good, the trail intensifies and more ants follow it. It's a time- and energy-saving way to communicate.

Rich, frequent, and candid communication is also important for organizational teams to find innovations as quickly as possible. People need to bounce around ideas, share serendipitous insights, and challenge each other's assumptions, both physically and virtually. So leaders need to make sure that their teams have the time, space, and tools to make this happen. A number of the successful teams, for example, were either co-located, to make interaction easy, or came together on a regular basis for both professional and social activities. Most of them also had comfortable, open meeting spaces and "water holes" for food and drink, as well as a range of instant messaging, file sharing, and other virtual tools to make communication easy and ubiquitous.

3. Constant experimentation. Another relevant characteristic of ant colonies is that ants constantly take [random walks](#) in different directions to identify potential threats, find new places for nests, and create new pathways to food sources. In other words, they are constantly probing their environment and testing new ways to adapt to it.

This is the basis behind Intuit's practice of putting new product ideas on the Internet before they are developed, as a way to test whether there is a market. If there's interest, they proceed with development; if not, they modify the idea or quietly withdraw it. The effective innovation teams that we looked at were similarly encouraged by their leaders to test ideas through action instead of just through studies, debates, and analyses, which is what the struggling innovation teams often relied on. To do this, leaders provided budget and resources to build prototypes and mock-ups early in the discovery process and to engage directly with customers to get rapid feedback and test assumptions. They also supported, and even celebrated, failures, particularly if they occurred early on and generated learning about better alternatives.

4. Freedom to look for the next horizon. Although ants spend most of their energy dealing with the challenges of their current environment, they always allocate some resources to securing the future. To do this, ant colonies instinctually send out [scouts](#) to look for future food sources, well before the current food sources run out. (This led us to recall Google's investing in glasses and self-driving cars, as it eyes the future.)

Similarly, effective innovation teams invest in a portfolio of ideas with different time horizons so that they won't be caught without a plan B when plan A doesn't pan out. Leaders are adamant about this resource allocation, even though it adds up to some extra cost. And they keep the fear of uncertainty at bay by encouraging team members to play with ideas that

aren't in the scope of their actual work (similar to how 3M and Google give people time to delve into areas of personal interest). Others also insist on contingency strategies that assume that things won't go as planned.

Given the struggles that most mature companies face in regard to innovation, it's clearly not that easy to create organizational ant colonies. For most managers, the highly efficient machine approach is more comfortable, less messy, and much easier to manage. Our research, however, suggests that creating the conditions in which adaptive ant colony behavior can flourish might be a key to unlocking potential, and making your innovation teams more successful.

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