QUANTIFYING INNOVATION IN THE MODERN WORKPLACE

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When I talk about quantifying innovation, listeners sometimes look at me as though I've asked them to capture smoke with their arms.

People tend to conflate innovation with genius — you're either born with it or you're not. People think innovation is illusory, one of those 'know-it-when-you-see-it' concepts that are hard to adequately define, let alone quantify.

But in my decades of experience in industry and academia, I can say without a doubt that innovation can be measured. And, perhaps more importantly (at least for organizations looking to create more value, more quickly than their competitors): It can be taught.

What Is Innovation?

Let’s start by getting our terms straight. Innovation is not invention. Invention is the creation of something new. Innovation is the creation of value from that invention.

If you want proof the two aren't equal, just remember Joseph Swan.

Who?

Exactly.

Swan, a British physicist and chemist, demonstrated a working lightbulb by 1860, two decades before Thomas Edison’s first incandescent electric lamp became commercially available. A strong argument can be made that Swan invented the lightbulb, yet it's Edison’s name that we remember. The reason is that, while Swan created something new, Edison found a way to package and sell that invention in a way that truly changed the world.

Not all examples of innovation are as splashy as the light bulb (or the printing press, or penicillin, or the iPhone). Focusing solely on these landmark innovations can play into the trap of thinking innovation is solely the domain of the world-historically brilliant. In fact, innovation can come from anywhere within an organization, including unexpected departments like legal and human resources. Everyone can't be Thomas Edison, but with the right skill set and company culture, anybody can discover a change that will help their

company cut costs, increase revenue or become more sustainable.

What Makes a Person Innovative?

In one well-known model, experts say innovation exists at the intersection of business, people and technology. While basically correct, I think this model misses a key component: culture. The culture of an organization changes each of the other three components. It changes the way that businesses operate, it changes the things that people want, and it changes the technologies that companies adopt.

Although people tend think to of innovation as a holistic (or even enigmatic) skill set, it is really the combination of two distinct capabilities. The first is invention — the ability to understand a problem in a way that others haven't yet seen, combined with the ability to create something new to solve it. You could think of this as the "Swan" axis of innovation. The second is leadership — the ability to galvanize others around helping to reify a new solution — which we might call the "Edison" axis.

Both are critically important, so much so that when someone scores extremely high in one and low in the other, I call this the "Danger Zone of Innovation." Strong leaders who lack invention skills might be effective at executing an agreed-upon set of objectives, but these people risk championing the wrong solutions because they can't model the risk and value of a new/different solution. By contrast, incredible inventors who lack leadership skills, such as advocacy, will often watch in

frustration as their brilliant ideas die on the vine simply because they couldn't share their ideas in ways the other people understand and value.

These innovation skills can be assessed and improved through training, but alone they are not enough to create an effective cross-organizational culture of innovation. That requires two more qualities:

A high degree of self-efficacy. Time and again, research has shown that high confidence has a causal relationship with success in areas of innovation, invention and entrepreneurship. This is especially important when people are trying a never before tried approach.

Psychological safety. By this, I don't mean that managers give their employees hugs. Rather I prefer Amy Edmondson's rigorous definition: that there is a shared belief that asking questions, challenging results, seeking feedback and iterating to a solution is expected, without fear of negative consequences when things aren't successful.

Measuring Innovation

Once you've broken innovation down into its component parts, it is no longer so difficult to assess, monitor and improve it.

Start by leading all stakeholders through a 20-minute individual assessment. During this initial assessment, ask people about their attitudes and behavior around six different

areas of innovation: innovation process, concept generation, flexibility and adaptation, managing uncertainty, adapting leadership style, and advocacy, inquiring, and dialogue. Each person's results can then be mapped on a spider graph that instantly communicates areas of strength and opportunities for growth. Additionally, the assessment rates each organization for employees' confidence in their ability to perform key activities that enable innovative outcomes, as well as the psychological safety of teams.

The assessments provide leaders and stakeholders with a comprehensive understanding of the innovation abilities of everyone within a group. Organizations can use this understanding to explore training programs that transforms employees into innovative talent. Rather than abstract, impractical concepts, they gain concrete, measurable skills, including: the ability to study a new technology and find the best way to use it for a new product or system; the ability to create the simplest possible design that meets the requirements to solve a problem; and the ability to help team members arguing for very different strategies to arrive at a choice they can all support and others.

Finally, organizations can leverage an executive innovation dashboard that allows leaders to continuously monitor improvements and gain actionable insights.

Real-World Results

I've seen organizations go through this process and the improvements show up in a number of surprising ways. For

example, in a project with the Air Force, we spoke with a woman who runs an equipment warehouse. The warehouse was running too slowly to adequately equip the 3,000 warfighters it serves — not through any fault of the warehouse director, but because it was designed to serve only 1,000 warfighters. Although most people don't immediately think of a warehouse director when they hear the word "innovation," within a few hours after learning an innovation methodology she came up with several implementable, testable concepts to enable the warehouse to get equipment to warfighters significantly more quickly.

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