INNOVATION ENLIGHTENMENT

Innovation: We all know we need it. It helps our companies compete, helps our countries thrive and helps mankind forge a brighter future. Yet the pathway to innovation remains a mystery. Innovation at larger companies is declining globally, and no one seems to have an answer. As a serial innovator, I'd like to share new insights on the problems and solutions, all backed up by the latest research.

SELF-IMPOSED BARRIERS

Having spent much of my career inside large corporations like BASF and Electrolux/Frigidaire, I have firsthand experience of the frustration that one encounters when trying to deliver innovation from within a corporate behemoth. It turns out that when you check the scientific studies, many of the practices favored today simply do not work. Six Sigma can make companies uncompetitive. Stage-Gate[®] slows companies down. Open plan offices are proven to reduce effectiveness. Brainstorming doesn't work. ISO 9000 takes time and resources, but fails to deliver any competitive advantage. The list goes on.

STEP ONE – REMOVE BARRIERS

As we discover that our favorite tools are broken, we need to ditch them. Let's abandon any tool that has been proven ineffective. In fact, every process and rule that we implement are like a tax on our innovation efforts. They sap our energy, steal our resources and slow us down, until we become uncompetitive. That is what has happened to almost every large company.

STEP TWO – NURTURE INNOVATION

There are plenty of articles about encouraging a culture of innovation. It sounds nice, but no one seems to know how to actually do it. I was asked to give my views, so here they are.

According to Sidney Yoshida and his work known as the "The iceberg of ignorance," only 4% of an organization's front-line problems are known by top management, 9% by middle management, 74% by supervisors and 100% by employees. In creating a culture of innovation. we should make sure that management and your company problem solvers (R&D) see these problems and are put to work solving them.

World-class innovators are extremely rare. You need to take care of them, because they deliver tremendous value. One study showed that each one can deliver millions of dollars in new products and profits, and yet only one person in several thousand actually does it. Clearly such rare and valuable people deserve recognition and reward for their work. The people who invented billion-dollar products like the post-it® note and Kevlar® brand received nothing at all. Think about the message that you are sending if you don't reward those who take the career risk to push a new product through the system. The creatives will become frustrated and leave the company. Others will see that you are not serious about innovation and give up on it.

In what other ways can companies and managers reward and encourage creatives?

- Extra vacation earned, plus access to unpaid vacation
- Permission to consult externally (in areas that do not overlap with the company's interests)
- Royalties from their patents
- Ability to attend conferences (which increases creativity)
- Tenure (so they can take risk without fear)

That addresses the creatives who have the initial idea and are able to bring the "fuzzy front end" into focus. They are comfortable handling the uncertainty in the initial stages of bringing an innovation to market, but they are not good at following rules or following through with tasks.

It has been shown that as the innovation proceeds out of research and development (R&D) to product development and then on to production, we need to use people with progressively less creativity

and more persistence, reliability and focus. These are the people who can successfully transfer a prototype through product development and then on to production.

Detailed long-term investigations have shown that using this alignment of personalities and job task creates far better success; but just as important, it leads to better happiness and job satisfaction. Dow found this approach to be stunningly effective and published the method for all to see. Sadly the company ended up firing the creatives who made it huge profits. Why? Because people fighting for change are rocking the boat. Big companies don't like change, so they fire all of the difference makers and ruin their innovation pipeline in the process. the measurement of integrity. These tests are tremendously useful in making sure you hire the best employees. Renowned investor Warren Buffett commented, "Somebody once said that in looking for people to hire, you look for three qualities: integrity, intelligence and energy. And if you don't have the first, the other two will kill you."

It turns out that his advice is backed by science. The top three qualities you need are intelligence, to be hardworking and to have integrity. That translates to high IQ, high conscientiousness (from the Big Five test) and integrity (from the HEXACO test). Screening for these traits will give you a consistent and substantial edge over your competitors.

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My advice is to implement this simple change, in which the people are in the right positions, and make sure to maintain it. You will see an upward spiral in your success, which will feed on itself. People see success and are energized to repeat it. Furthermore, creating a stable environment means that the teams formed are able to continue operating effectively. Most organizations today suffer from the reverse. Turnover is so high that projects are continually disrupted and delayed, as members come and go.

I can imagine that some of you are wondering how to identify creative and consistent people. How can we be sure that we're putting people into their ideal roles? Luckily experts have spent decades measuring people's personalities, so they can tell you how smart, hardworking, honest and, yes, creative they are. One test that many Americans have heard of is the Myers-Briggs Type Indicator® (MBTI®) assessment; but psychologists prefer to use the Big Five personality test or the HEXACO Personality Inventory – Revised, which adds

It is well-known that top management only sees the tip of the iceberg. A famous study revealed that this segment is exposed to just 4% of the company's problems. There are executives who would like to help, but just can't see the way forward. That's what this article is about. It turns out that the path is known; and now you can form an action plan that is proven to deliver stunning results. Dow did it, and so can you.

CONCLUSION

Companies struggle to innovate and have made no progress because all of the advice is wrong. They've been turning to "experts" who aren't. I wrote my book Innovation Abyss because, as a serial innovator, I was tired of seeing them mislead you. The answers are known, proven and published. Now that you are aware of them, I hope you feel inspired. You can make a more fulfilling career for yourself, while delivering breakthrough innovations that give you a competitive edge.

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MBTI: FOUR PREFERENCES			
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SENSING			INTUITION
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The Mvers-Bridge Type Indicator® (MBTI®) assessment has proven to be an excellent indicator of innovation success. The "NT" type personality has created \$6M in profit, versus only \$0.7M for all other types combined (NF, SJ, SP). When you consider that only about 12% of the population has an NT personality type, it starts to become clear why innovation struggles and why companies need to have the right people in the right roles for individual and corporate success.

As a refresher. "NT" stands for iNtuition (What could be. What if. Patterns. Looking ahead.) and Thinking (Objective analysis. Logical.).



ABOUT THE AUTHOR Chris DeArmitt, PhD. FRSC President, Phanton Plastics LLC

Chris DeArmitt is considered one of the top plastic materials experts and problem solvers in the world, which is why companies like Apple, Disney, Eaton, Exxon, HP, iRobot, P&G and Total come to him for help.

A deep understanding of materials, combined with high creativity, allows him to quickly solve even the toughest challenges. In 2016, he published the book Innovation Abyss. which reveals the true reasons for innovation failure and the proven path to success.

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