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## WE CANNOT SOLVE OUR PROBLEMS WITH THE SAME THINKING WE USED WHEN WE CREATED THEM. – ALBERT EINSTEIN

At our previous house, we had a rather weird laundry room door. My wife had had many minor touch-and-go incidents and a very large number of close calls with the door. She would point the door out to me for me to fix it. I was lazily procrastinating until one day, there was a bad hit resulting in a fractured toe. That just proved the Heinrich's safety triangle model –in a workplace, for every accident that causes a major injury, there are 29 accidents that cause minor injuries and 300 accidents that cause no injuries. His theory was an empirical finding based on actual data from the 1920s. Today the numbers may be different, but the concept of the triangle or pyramid is still valid.

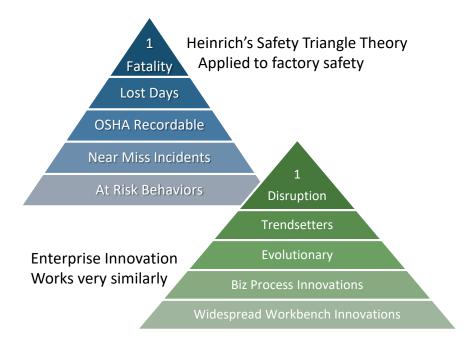
### The Innovation Triangle

I believe the same triangle law applies to innovation. For us to get one disruptive innovation, we need to get a few breakthroughs and trendsetters, many evolutionary innovations, and a continuous improvement in business processes, all supported by widespread workbench innovation.

In some sense, companies like 3M and Google are where they are today because of this very fundamental cultural aspect. They encourage a widespread innovation mindset. Almost everybody is encouraged to engage in novel value creation most of the time. Multiple things go into building a mindset. It all begins with questioning the well-known wisdom around the business (status quo).

#### Inspiring Next

Strategy, roadmap, capital, tools, and processes discussed so far are necessary, but not sufficient, to be a consistent innovator. Having the right mindset is what brings success. How much will it cost you, if a competitor launches a product or service before you do and you are now forced to respond, rather than forcing your competitors to respond to your great ideas?



The 'Innovation Triangle' needs an innovation mindset at the bottom, similar to safety mindset in the industry built over the years. This requires some unlearning and reprogramming at the leadership level, which ignites creativity, encourages exploration, and accepts failure while exploring.



In the next few chapters, we will look at each of these steps, with guidance taken from the ISO definition of innovation culture as:

**Statement**: 'Shared values, beliefs, and behaviors, supporting openness to change, risk taking, and collaboration, are factors which enable the coexistence of creativity and effective execution' (ISO 56000:2020 Clause 4.3.4.1)

**Rationale**: Traditional management practices focus on efficient execution. For innovation management, it is also necessary to develop values, beliefs, and behaviors supportive of the creation and execution of new ideas. To achieve innovation, the culture shall enable the coexistence of the behaviors of creativity and execution. (ISO 56000:2020 Clause 4.3.4.2)

But let's first look at why we struggle so much with innovation.

## 2. Innovation Struggle

THE INNOVATION KILLERS ARE ALMOST ALWAYS NEATLY DISGUISED AS PROTECTORS OF THE ORGANIZATION. – THOMAS KOULOPOULOS?

I once worked with and coached a company that had been highly focused on operations for a long time, with innovation being sidelined even in the engineering department. I was a little surprised. I wondered if it is even possible to have a large number of engineers and yet very little innovation? Deeper discovery revealed that some creative employees were doing high-tech activities in their basements or at local incubators on projects completely unrelated to their jobs. No conflict of interest; nothing illegal; they just needed to flex their innovation muscles. But why couldn't they do that at the workplace, which even had a business need to do so!

And then I recollected this funny, albeit apocryphal, SlideShare story on how paradigms are formed.<sup>13</sup> – A group of scientists placed 5 monkeys in a cage with a ladder in the middle and a bunch of bananas on the top. Every time a monkey tried to go up the ladder, the scientists soaked the rest of the monkeys with cold water. After a while, every time a monkey tried to go up the ladder, the others beat it up! After some time, none of the monkeys dared to go up the ladder regardless of the temptation. Scientists then decided to substitute one of the monkeys. The 1<sup>st</sup> thing this new monkey did was to go up the ladder. Immediately the other monkeys beat him up. After several beatings, the new member learnt not to climb the ladder even though it never knew why. A 2<sup>nd</sup> monkey was substituted and the same occurred. The 1<sup>st</sup> monkey participated in the beatings for the 2<sup>nd</sup> monkey. A 3<sup>rd</sup> monkey was changed and the same was repeated (beating).

<sup>13</sup> https://www.slideshare.net/yaswanth/how-paradigms-are-formed.

The 4<sup>th</sup> was substituted and the beating was repeated and finally, the 5<sup>th</sup> monkey was replaced. What was left was a group of 5 monkeys that even though never having received a cold shower ever, continued to beat up any monkey who attempted to climb the ladder. If it was possible to ask the monkeys why they would beat up all those who attempted to go up the ladder.... I bet you the answer would be.... "*I don't know – that's how things are done around here.*"

Prof Donella Meadows of Dartmouth College and founder of sustainability Institute said, "Your Paradigm is so intrinsic to your mental process that you are hardly aware of its existence until you try to communicate with someone with a different paradigm." Coming back to the company with the "not innovating at the workplace engineers", that is probably the story. My contract did not last very long.

Does it need a paradigm shift to become innovative? By now, I have probably heard every excuse why companies are not able to innovate. Every time, I hear a "genuine" concern or a "legitimate" reason, the quote of this chapter on 'innovation killers in disguise' rings in my ear.

### Innovation Leadership Mindset

Innovation appears to be a priority, yet even the successful leaders struggle to innovate consistently. Are they trapped in the very system they created to help them grow? This is the hypothesis behind Innovator's Dilemma<sup>14</sup>. Some companies have added the word 'innovation' to their mission, vision, or value statements without making it clear to the organization exactly what it means to them. Perhaps, there is a need for such a statement to start with, followed up with a program and an action plan, that is often missing. It often sounds like the weight-loss resolution at the start of every year.

<sup>&</sup>lt;sup>14</sup> The Innovators' Dilemma; Clayton M. Christensen; Book; May 2002.

There are several notions holding executives back from creating an innovation-driven destiny. My personal experience matches very closely with Bill Fischer's<sup>15</sup> summary of top reasons (or excuses). I will blend the two and share below, and also urge you to pick the ones that you might have espoused, inadvertently.

- 1. 'We know the market well'. 'We'll know when customers want something new'. 'Our customers are not ready for this shiny new object'. That may be a symptom of insufficient customer insight. Most of the time companies believe that the VOC is all about listening to the complaints and responding to customer issues. If you have not done an exercise of aligning your multi-year roadmap with that of your business customer or consumer trends; you don't know where they are going. And when they move, they will pick an alternate product/supplier ready to deliver.
- 2. 'The future is forever, but the present is this quarter.' 'We have to keep the lights on tonight to open the door tomorrow morning'. We all hear this frequently. Often, we are so driven by short-term results that we are forced to put off the future good ideas, whose time has come. Urgent is continuously pushing the important out of the calendar and conference rooms, until it becomes a crisis.
- 3. **'I'm not in the innovation group'.** *'This is 'their' job!'* Too many organizations are so siloed and tied-up in their organizational reporting structures, processes, and ownerships (turfs) that they fail to recognize and harness the innate creativity that resides within each. I have seen way too many lost opportunities from lack of cross-communication and "not invented here" syndrome. Personal workbench innovation indicates competency, but with very little impact on the company. Product Innovation is a team sport and long-term play.
- 4. 'We are too process-oriented to be wild and crazy.' 'We have never done this before. That is not how things are done here.' Discipline is an

<sup>&</sup>lt;sup>15</sup> Why We Can't Innovate; Bill Fischer; Forbes; May 06, 2018; https://www.forbes.com/sites/billfischer/2018/05/06/why-we-cant-innovate/

excuse. Innovation does benefit from a process, you just need to stop killing creativity in the name of the process. My VP on complex product engineering used to say, *"Follow the standard process to get first cut design, ensuring you do not repeat the mistakes. Now add innovation to it to be world-class."* We successfully delivered many breakthrough technologies during his leadership.

5. **'Our margins are too thin to innovate.'** Think about it, you got here because you are competing on price, for offerings that others can also make. As long as innovation is viewed as spending, the mindset will be to minimize it. Compare and contrast against investment, for which maximizing returns is the game. Another aspect is the cost of doing something innovative is visible. But what about the cost of not doing it?

Greg Satell reviewed the innovation experiences of several companies, and found, among other things, that a failure to be on top of market trends, an inability to give up traditional metrics when the reality of the market is changing profoundly, and a failure to seek-out grand challenges for the future are all a part of the reason that so many firms cannot innovate.

There is more to this. Some highly visible management aspects hold companies back from innovation focus.

**Management Incentives:** Annual bonus programs promote data-driven incremental improvements. Initiatives such as six-sigma and lean, which help with productivity and quality, have stifled creativity for many companies. An article published in Fortune magazine<sup>16</sup> stated that out of 58 large companies that announced six-sigma programs, 91% had trailed the S&P 500. Research showed how the top innovators outperformed the S&P 500 through integration<sup>17</sup>. The promise of predictable near-term profit is a trap that so many managers still fall in, trading off larger intangible gains in the 'future' for marginal visible gains in the 'here and now'.

<sup>&</sup>lt;sup>16</sup> New Rule: Look Out, Not In; Betsy Morris; Fortune; July 11, 2006.

<sup>&</sup>lt;sup>17</sup> Ten Types of Innovation: The Discipline of Building Breakthroughs; L Keeley, Helen Walters, R Pikkel, and B Quinn; Book, Wiley; 2013.

#### Inspiring Next

**Risk Capacity:** Improvements in production (exploitation) will bring results. Innovation (exploration) is risky. Companies tend to be excessively risk-averse, rightly so. They focus a lot of energy on 'what' (metrics) and 'how' (process), and more recently, 'why' (purpose). Organizational consultant and writer Simon Sinek put these in the so-called Golden Circle.<sup>18</sup> However, innovation requires a little different twist to the golden circle. Innovators start with 'Why not?' and then go on to 'How about?' and 'What if?' Once again, the risk of exploring is visible, whereas the risk of not exploring is hidden.

Abraham Maslow stated that an individual would engage in learning only 'to the extent he is not crippled by fear and to the extent he feels safe enough to dare.'

Leadership Development Programs: Management consultants who lead change initiatives and business school professors who publish bestsellers based on large amounts of data analytics generally provide valuable insight into successful companies; unfortunately, all in hindsight. The book *Good to Great* became very popular in the early 2000s. Yet the growth model in the 21<sup>st</sup> century has been very different, which is now captured in the book *The Four*<sup>19</sup>. Even this cannot assure success in the post-pandemic era. Perhaps, management books should have an expiration date or carry a statutory warning label about their side effects, such as '*Past performance is no guarantee of future results.*'

All this is very visible and often discussed. The question is why and what should we do about it.

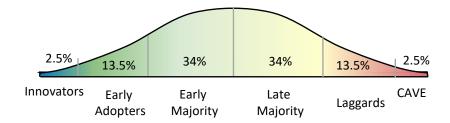
<sup>&</sup>lt;sup>18</sup> Start with Why: How Great Leaders Inspire Everyone to Take Action; Sinek, Simon; Book; 2009.

<sup>&</sup>lt;sup>19</sup> The Four: The Hidden DNA of Amazon, Apple, Facebook, & Google; Scott Galloway; Book; 2017.

Innovation Mindset

### The Human Mind

In 1962, Rogers<sup>20</sup> proposed that adopters of any innovation or idea can be categorized as innovators (2.5%), early adopters (13.5%), early majority (34%), late majority (34%) and laggards (16%), based on the Bell curve. These categories, based on the number of standard deviations from the mean of the bell curve, provide a common language for innovation researchers. Each prospect's willingness and ability to embrace an innovation depends on their awareness, interest, evaluation, trial, and adoption. It is in some sense a mindset thing. In his original work and all of the subsequent use, nobody has touched the other end of the  $3\sigma$ , or the 2.5% exactly opposite of innovators. I would like to bring the term CAVE<sup>21</sup> people (Citizens Against Virtually Everything) who seem to oppose all development or change. The term originally came from people opposing real estate or commercial development. I heard it for the first time from Darden Professor Jack Weber in his training on 'Possibility Thinking' (Innovation) in 2005.



If this is coming from a normal distribution of how people think, then it ought to apply to an organization, larger than a few employees, of course, with some skew depending upon the business. Professional firms (Engineering, Architecture, medicine, legal) probably have a higher percentage of innovators and early adopters. I can say that whenever, I have worked with departments larger than  $\sim 25$ , I see one out of every 5 or 6 as very creative, listening, engaging, always questioning, and coming up with

<sup>&</sup>lt;sup>20</sup> Diffusion of Innovations; Everett Rogers; Book; 1962.

<sup>&</sup>lt;sup>21</sup> CAVE People pp. 76–77 in The Oxford Dictionary of American Political Slang. Grant Barrett; 2006.