

## **Certain Type of Mistakes Are Like Rocket Fuel Others Are More Like Toxic Waste**

“I err therefore I am” (Saint Augustine). In this statement the capacity to get things wrong is not only part of life but might even be proof of it.

How well does your firm learn from mistakes? Are they discussed and studied or swept under the rug? This is a critical question in a competitive environment. It is critical because the right answer is not always popular, easy or even obvious. We have been raised in an increasingly blame oriented culture and as a consequence, society does not support learning from mistakes. Yet when we can learn from them they can be rocket fuel for improvements.

Don't you know making mistakes is bad, and has been bad since grade school? In society, error is associated with shame and stupidity and also with ignorance, laziness, even in some cases with psychopathology and moral degeneracy (from a great book by Katherine Schultz called Being Wrong: Adventures in the Margin of Error). No wonder few people and fewer companies can tolerate mistakes! This views mistakes as toxic waste to be hidden away, buried, and gotten out of sight.

No one wants mistakes around them. Now is that even true? If you are like me, you want your doctors to have grey hair. You want them to have experience. That means they have seen enough that they won't be shaken by anything I present. Where did they get that experience? Did they, as formative physicians, ever make mistakes? What impact did those mistakes make on their medical judgment and on the way they practice medicine?

### **Mistakes and development**

We all recognize that young doctors will make mistakes (just watch medical TV shows). We hope they are well supervised. We just don't want those mistakes done to us! But what if they do? What do we want done with them, having made a mistake, having hurt someone? At the first sign of a mistake should we fire them, sentence them to some punishment or what?

The fact is that the memory of a mistake is essential in the process of making a great doctor, a great mechanic or a great anything. When a doctor misses something important, especially early in their career it changes them forever. Until that happens, the relationship between cause and effect is a theory and not a reality.

But once a serious mistake is made and processed the importance of following the protocol, doing all the steps, keeping your senses and mind open and really paying attention even if you are tired or unwell becomes clear. It is clear this is true in medicine and the fields like aviation

that intensively studies its own mistakes. The essential step is that the person who made the mistake be allowed to process the mistake and learn the lessons.

Is it true in business or more specifically in maintenance? It is clear that in any company hell-bent on having no mistakes, the employees will hide their mistakes. If you allow mistakes (and make a point of not firing people for honest mistakes) is that the same as encouraging them? While you probably don't want to encourage mistakes is there a space for people to make them and stick around long enough to learn from them?

More importantly is there a difference between a mistake (like a Doctor missing a symptom) and a mistake that is a consequence of intentional behavior (such as a Doctor missing a symptom while intoxicated on the job). You won't find much support here for covering up mistakes.

### **Are mistakes related to success?**

One leading consultant, Landmark Education's Helen Gilhooly, said if you want to increase your success rate just increase your failure (mistake) rate. In other words make more mistakes. Success comes from trying things and seeing what happens and learning. To be more successful, fail more often. Doing more things means you'll make more mistakes but you'll be learning more. Can you imagine how crazy you would sound if you went about solving a problem by making mistakes as your major strategy?

Where does this leave us? We need to build a process where mistakes are the rocket fuel of innovation. This clearly sounds strange. 3M is a company known for its high level of innovation. One popular product was based on a complete failure.

That product is called the Post-it Note®. The chemist was trying to formulate an adhesive. The adhesive he came up with failed the use he had in mind because it was too weak. It also had the unusual property of sticking weakly to things and then was able to re-stick several times after it was removed. Of course when he realized what it could be used for, and managed to sell it to his management; it was a home run product.

3M has an environment where mistakes are appreciated for what they are, stepping stones to home runs. But the whole culture is built upon trust and the acceptances that to make home runs you must also strike out. These are the Rocket Fuel mistakes.

Then there is the Toxic Waste. A popular book in safety circles is titled Why Accidents Happen and Why Companies Don't Learn From Them. In it Trevor Klentz makes a persuasive argument that companies can have horrible catastrophes, and promise to clean up their acts. But if you visit a few years later you'll likely find the same mistakes being made. Do these mistakes come from a different source than the rocket fuel ones?

## **The million dollar question**

Ignoring safety rules, assuming a gauge is broken (the operators at Bhopal assumed the gauge was defective when it showed the temperature of the MIC was rising rapidly), being drunk, tired, or otherwise compromised on the job, not knowing what to do, are all part of a mistakes culture; and not a “mistakes as rocket fuel” culture. When we investigate mistakes for the purpose of learning from them we have to decide if there was honest intent to not make a mistake. Once we have taken a position on that issue we are free to ferret out the lessons learned.

What are some of the reasons people make “honest” mistakes? One list from the past had most of the reasons we identify today (not a complete list):

1. Inattention
2. \*Fatigue
3. Distraction
4. \*Difficulty seeing or hearing
5. \*Forgetting steps
6. Lack of interest
7. Poor preparation
8. \*Improvisation
9. \*Pressure to complete
10. Genuine stupidity
11. \*Lack of aptitude (strength, flexibility, endurance, etc)
12. Timidity
13. Overconfidence
14. Emotional imbalance
15. Prejudices

\* Added

Of this list which ones can we detect, or manage? Clearly there are a bunch that are managed by planning the job. Others are caught by verifying skills and aptitude and training. Our supervisors can sometimes see someone not fit to work due to mental or physical condition. The rest are truly one-off events. In those cases we would want to design the underlying system to be more robust to be able to tolerate mistakes.

Finally there is a cultural shift that is sorely needed. Start a discussion of uncovering the attitudes toward mistakes. What do they mean to people or worse about the people? Find out what is already in your culture about mistakes.

Assignment: Brainstorm with your team about what they think about mistakes. Also ask them what does the company “think” about mistakes? Just about whatever someone says about mistakes is actually part of your culture.

After you gather people’s comments ask the question is this item consistent with an organization wanting to learn from mistakes and excel at their business. Is your firm where mistakes are like rocket fuel or are mistakes more like toxic waste?

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