
Embracing Uncertainty for Innovation



By Nathan Furr , INSEAD Assistant Professor of Strategy

It has been said that the purpose of organisation is to eliminate uncertainty. Is this stifling the ability to innovate?

I recently spoke with the innovation leaders at a major biopharmaceutical firm. They were lamenting the challenges of designing an innovation program that seemed overwhelming. No matter what they did, the organisation just kept focusing on execution and narrow thinking rather than innovation and big thinking. I reminded them that big companies are like slowly sinking ships (sinking under the weight of their own execution orientation); efforts to innovate will never be ideal, rather it's a matter of pumping water out of the hull to keep the ship afloat.

The analogy resonates because it reminds us that our efforts to innovate will never be, and can never be, perfect. Nor can they be optimal. This is due to a fundamental principle which underpins all innovation – the uncertainty principle. This idiom doesn't refer to the quantum behaviour of particles (although I do find it ironic that the one discipline that deals the most with physical reality is the only discipline to have an uncertainty principle), rather the simple fact that all innovation involves fundamental uncertainty, the kind

we often cannot foresee or predict. It is the type of uncertainty that drives people and organisations crazy and, thus, leads us to try and stamp it out. In fact, Herb Simon, an organisation theorist who won the Nobel Prize in economics, once observed that the purpose of organisation is to eliminate uncertainty.

Managing uncertainty

If you look around you, most organisations, including those that educated us and those in which we work, try very hard to eliminate uncertainty because it is inefficient and unpredictable. Indeed, all our lives we have been told to plan for the unplannable and, in our organisations, to foresee the unforeseeable.

Which leads me to the aforementioned uncertainty principle; where there's no uncertainty, there's no innovation. Uncertainty is the soil out of which innovation grows; it is the spark that can lead us to a future better than the one we imagine for ourselves. For this reason, we need to embrace as well as respect it. When I say embrace, I mean find the ways to allow uncertainty into our lives and organisations. By respect, I mean look at how we manage the uncertainty so it doesn't overwhelm us or derail us.

No free rides

Obviously there is much more to managing uncertainty than this simple principle, which is one of my quests: to understand the personal, professional and organisational tools that allow us to turn uncertainty into something beautiful, something that solves real problems. Although I cannot share it all here, let me share one observation. As soon as you engage uncertainty, you start to feel anxiety. But anxiety does not mean you are failing. If you are pursuing a new idea, new career, new business, new approach, whatever it may be, you will experience this anxiety. Don't let it derail you. I'm not speaking about data – if the data says something different, then take it into account and perhaps change course (see my work in [The Innovator's Method](#) for this). I'm talking about how it feels. And when it comes to how it feels, remember, uncertainty feels crummy while you are in it and beautiful when you cross to the other side, even if that other side is different to what you expected. And it almost certainly will be!

In closing, I'm reminded of Ursula Le Guin who wrote, “Great artists make the roads; good teachers and good companions can point them out. But there

ain't no free rides, baby. No hitchhiking. And if you want to strike out in any new direction – you go alone. With a machete in your hand and the fear of God in your heart.”

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