

The art of innovation



Dr William Ouchi, the management guru known for the path-breaking Theory Z, is now exploring the fundamental potential of universities as fountainheads of innovation. In Mumbai recently for a workshop with senior Tata leaders, Dr Ouchi took time off to talk to *Christabelle Noronha* about what makes some companies more innovative than others, and the patterns that distinguish creative, innovative people from the also-rans.

What were the highlights of the Tata workshop? What were the objectives and to what extent were they achieved?

The first day was spent on the topic of leading innovation and it was based largely on research done by Prof Jeffrey Dyer at Brigham Young University along with his colleagues. ▶▶

He has found that people who have very successfully led innovative companies, tend to have some patterns; for instance, they have networks of people that are different from most of us. Most of us have networks of people who think like we do or are in the same business, but innovative people have networks of people who are completely different from them, who might be musicians, employees of non-profit organisations and so on. Innovative people tend to expose themselves to settings in which there isn't an obvious business game in the short run, but at some point, an association of ideas takes place in the innovator's mind, and then there is a new product, process or direction for the company. These are discovery-driven people.

The second day was spent on organisation design, the architecture of an organisation. It's a technical, inherently abstract subject but people who successfully run a large organisation have to have the ability to think in abstraction about their organisation. You have to alter the organisation in some way to make it comfortable, easy and possible for people to do things that are different from what they did yesterday — for instance, by having people from Titan and Tata Steel working together.

The whole point of being able to think innovatively is having a network of people who are different from you, who work in a different setting, and exposing yourself to different ways of thinking.

In a technology-driven world, with large organisations spread across countries and geographies, how can a leader bring a whole organisation together to think innovatively?

Typically, when there is an innovator at the head of a company, the whole company tends to become innovative. If the leader is working at innovation, then others will also try. Generally speaking, companies that have a flat organisation structure with fewer levels of hierarchy, that encourage people to work together in multi-functional teams with more diversity, that have more

autonomous sub-business units or divisions, are going to be more innovative.

In an era driven by bottom lines and revenues, where do you draw the line between being discovery-driven and delivery-driven?

You have to have both types. All of us have a bit of both characteristics inside us; sometimes we are more discovery-driven, sometimes more delivery-oriented. The true discovery-oriented person is more rare.

When it comes to organisational design, how do you create a culture of innovation in an organisation? Can you give examples of very successful companies?

A classic example is Apple and Steve Jobs. Mr Jobs was a great innovator-leader, but he probably never was a text-book manager. But no one cared, because it's a new product business and he was the greatest in understanding what a product had to be and do.

Another such person is Akio Morita at Sony. Most people think he was a marketing guy and he was, but he was an inventor too, a tinkerer. He had converted his entire living room ceiling, about 20x30ft, into a loudspeaker, just to see if he could do it. He also invented the automatic swimming pool cover before it became a product.

Hewlett Packard in its heyday was a very innovative company. The way they did it was that if you were an engineer and you came up with a new product idea, developed it and showed that it would work, they would probably let you have your own division to make it. So everybody was trying to do that. There's a publishing company in New York City that does the same thing.

So it's pretty clear, you don't tell people to be innovative, that doesn't work; all you need to do is create an entrepreneur-friendly ecosystem within the company that makes it easy and attractive for people to create and gives them a soft landing when they fail, so that they don't get punished. Instead, they get to try again.

Is it easier to be innovative in some industries as compared to others?

It's a question of the time and place making a difference. For example, the US government poured billions of dollars into research on the human genome and that research spawned probably a thousand start-up companies because there was this huge stream of basic science research coming out of the universities that was paid for by the federal government. The concept of the modern business school started in the mid-1950s and for 20 years or so, we had a gigantic outpouring of new knowledge of financial markets and how they work. That led to the formation of hedge funds, private equity firms, etc. Right now, it's applied math, computer graphics and 3D movie animation. So when you trace the history of new businesses and new products, nine times out of 10 the flow of ideas came from the universities, at least in the US. Other countries have not tended to make the same kind of investment in university research.

Do you subscribe to the concept of left- and right-brained? Is it possible to convert somebody who is left-brained to think out of the box?

Well, Jeff Dyers' point is that it's not about left or right brain at all, it's about behavioural habits, ie, training and environment. In business, we talk about how to get people to think out of the box. But if you consider say, a group of artists, they are so far out of the box, they don't even know there is a box. They look at the world in a very, very different way, they notice different things, they never do the same thing twice. Every time they start, it's with blank space, and then they innovate and create something that is brand new. It is emotionally and intellectually very demanding. You have to put so much of your ego aside and be willing to take a chance. That's really hard to do. And when you see that process in an artist, you begin to understand why innovation is so difficult.

What are you working on now?

Although I am a professor, I work full time

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with the University of California, Los Angeles (UCLA) chancellor's office. My assignment is to figure out ways to improve the flow of our professors' inventions into commercial products and start-up companies. UCLA has the biggest budget of any university and probably more faculty inventors, but we don't have a good record of turning all these inventions into companies and licences. My job is to figure out how to do that.

There are a lot of different ways to think about innovation. One is having a new perspective on old problems and existing work, another is tapping into the world of invention, which, in the US, could mean having close ties to several universities. More than 90 per cent of the research that takes place at US universities is funded by the federal government. We have a tremendously productive stream — the semi-conductor industry, telecommunications, computer software, new media, social media, all came out of universities.

The difference between universities and companies is that universities don't do as well on the development side of R&D as they do in research. A company is constantly making improvements in its products, making them more affordable, useful, durable, whatever. Whereas university researchers are after the next amazing breakthrough. What we produce is a thousand new ideas that may turn out to have no commercial value but are exciting ideas, and then one huge breakthrough which is worth a lot of money. In fact, if you want to get a paper published in a journal, you have to show that you have done it completely differently from what everybody else has done. So our whole system is aimed at going for the blockbuster; but in industry, most people are not going for a blockbuster, because the odds are too low, one in a thousand. □