Jugaad Innovation

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A new book titled Jugaad Innovation looks at lessons from emerging markets in frugal innovation for multinational corporations.

Jugaad is a Hindi word meaning an innovative fix. It's an improvised solution using ingenuity and resourcefulness, often due to very limited resources

Jugaad innovation is frugal, flexible and inclusive. It's also called gambiarra in Brazil, zizhu chuangxin in China and is most like DIY in the US.

1 What is Jugaad Innovation?

Jugaad innovation goes far beyond simple de-featuring, but having a deep understanding of consumer needs and recognizing that certain features just don't provide value for money is a part of jugaad innovation.

It's interesting to think about whether removing bells and whistles is going backward, or is actually an advancement from the complexity we face today...too many software programs on your laptop, too many buttons on your remote control – it's overwhelming and counterproductive.

That's the beauty of many Apple products – in a way Steve Jobs created value by reducing bells and whistles – he took away the keyboard, the mouse, and gave us greater value.

Simplicity is a key principle of jugaad innovation, and one of my favorites. Simplicity requires a deep understanding of consumers, their needs and their habits. Simplicity and "good enough" products deliver higher value because they are designed to do one thing exceptionally well (functional specialization), rather than doing multiple things in a mediocre fashion.

MittiCool, the low cost, biodegradable refrigerator made out of clay is a great example of jugaad innovation – creating a product and a new industrial process with very limited education and capital, flexible thinking that allowed the innovator to use a millennia old material like clay to create a fridge out of it, and yes, simplicity that allowed his community to have refrigerated produce and dairy for the first time ever – and in an environmentally friendly fashion. Interestingly, many users of the MittiCool say that food actually tastes better when stored in it as compared to a regular fridge, because it provides moisture to the food rather than drying it out.

2 Large overhead costs- complex corporate structures, large staff, etc. to Frugal, Flexible and inclusive?

There is a huge trend emerging around frugal innovation – and companies are now understanding the urgency of why they must be more frugal, flexible and inclusive in order to succeed in today's volatile economy. This is a big shift from 3-4 years ago when we first started writing about jugaad innovation when there was a lot of pushback around making these kinds of changes. In our book, my co-authors and I share several examples of large companies like 3M, Google, Facebook, Renault-Nissan and GE are already using the principles of jugaad innovation to create sustainable growth in a very challenging economic climate..

3 Positive rationale of the Jugaad concept?

There are three main criticisms leveled against jugaad.

- 1. One is that it encourages or involves dubious practices, getting around the law in some cases. And that is probably true. But it's a tool that can be used for good in the right hands and for bad in the wrong hands.
- 2. The other criticism that is leveled against jugaad is that even if it's used for making things that people want, those things don't meet quality needs. There are examples of this happening but it's not intrinsic to the jugaad approach. In fact, you can marry the jugaad mindset with reasonably high quality standard that delivers something of value to consumers
- 3. The third criticism is that these innovations don't scale. Of course, there are lots of examples of companies that don't scale but there are many which do.

If you really look at why people view it as a negative concept, it's because jugaad is like trying to beat the system, right? That is true! But it is trying to beat the system because the system is not efficient. Therefore jugaad is in a way symptomatic of some issues within the system itself.

4 How do we make Jugaad happen in the US where there's an onslaught of regulations?

Absolutely regulations can add a challenging dimension to innovation, but the jugaad mindset can actually help address these.

Embrace, a low cost, portable infant warmer is one example. The creators of Embrace used all of these principles to find a solution that would address the needs of emerging markets. The device is now being tested at the Lucille Packard hospital at Stanford right here in the US where medical devices are highly regulated.

Another example is the Nano, the \$2,000 car created by Tata Group in India. The car was made first for Indian markets, but with some limited additional cost

is being adapted for Europe and even the US – markets with strict regulations, and setting new industry benchmarks.

Another example is GE Health's Mac 800 – a portable, low cost ECG unit first developed for emerging markets that has received FDA approval and will make a big impact on our highly strained healthcare system right here in the US. All of these products utilized several principles of jugaad innovation – and all of them are finding a place in highly regulated markets like the US and Europe.

Take the example of Siemens. It has come up with a foetal heart monitor which essentially measures the heartbeats of an unborn baby, something that relies on ultrasound technology, which is very expensive. So it ended up using microphone technology. Suddenly, it dramatically reduced the cost of the product, making it more accessible to a lot more people, especially in the emerging markets. Now it's a good enough solution in the sense that it may not have all the bells and whistles of a high-end product but it gets the job done. So, rather than thinking in terms of quality, which is a very western concept, we are saying that increasingly the notional value becomes more important. So, for Siemens, this is a whole new product line which is a good enough product, but it estimates that this is going to be a multi-million dollar business, not only in emerging markets but also in the West, in the coming decade.

5 There's been some debate about how successful are some of these low-cost products. Tata Nano is a low-cost product but had trouble with quality control and didn't really reach as many consumers as they had hoped. Can you address the "success" element here?

I think the Tata Nano is a huge success. While they've had some challenges with safety and sales have been disappointing, the Nano has created a whole new benchmark in the global auto industry. Every car company today wants to create their own version of the Nano. The car isn't just stripped down, there were many new innovations that were developed resulting in tens of technology and design patents. It also provides an alternative to families who previously could only travel on a motorcycle – sometimes with 4-5 passengers. The Nano provides a much better option. They've also demonstrated tremendous flexibility in their sales models and even the location of their factories quickly – no easy feat for a large corporation.

6 Is jugaad practiced predominantly by small companies or are large companies also relying on jugaad?

Jugaad is predominantly practiced by small enterprises because of the lack of resources they have as well as grassroots entrepreneurs who are trying to deal with

various socio-economic problems. Young innovators and small entrepreneurs actually use jugaad as a way of surviving. Large companies may feel they don't need jugaad because they have all the resources in the world, but with the slowdown of the economy, we are telling the large companies that the jugaad mindset is becoming relevant even for you.

We are increasingly seeing that large corporations are interested in the jugaad mindset though they are not throwing out their old structured processes.

For example, the Tata Nano project is an example of a big company doing jugaad and structured innovation in a complementary fashion at various stages of the process. The Nano has the aspect of inclusiveness in terms of the cost of designing, manufacturing and R&D practices. Then there is also a frugal aspect to it. There was flexibility displayed by the team when they had to move the site from West Bengal to Gujarat at the last minute.

Another company is HCL. Vineet Nayar is trying to do an 'employee first' kind of philosophy; which is to say that rather than doing innovation in a top-down fashion, Vineet is actually saying let's do a bottom-up innovation by actually allowing employees to come up with interesting ideas.

And one more example is YES Bank in the financial sector. They take a frugal, flexible and inclusive approach to addressing the financial needs of micro-entrepreneurs, for example. Also, the bank is doing well by doing good. Something like 46 percent of their market has under-served clients yet their profit margins in the bank are actually 2-3 times higher than that of a traditional bank.