

JUGAAD

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In India, a large population is obsessed by the buzzword “Jugaad”. And it's not only in India, but in the west also that nowadays “Jugaad” is talked about very frequently. “Jugaad” is a word loosely used in the daily conversation of people across the Indian subcontinent. It is essentially a colloquial word of Indian origin derived from the dialect ‘Jugat’(Shakespeare, 1834) having one of the meanings as contrivance which can further be traced back to its Sanskrit form ‘Yukti’, a comprehensive term meaning union, connection, combination, also means, contrivance or to contrive something, expedient, artifice, trick, etc. (Monier-Williams, 2005).

But, Jugaad as an “expedient contrivance” is termed by various authors and researchers as 'creative improvisation'(Krishnan, 2010) or 'making do' (Tully, 2011) with the things you have and mostly 'makeshift arrangement' (Gupta, 2013). In their seminal work, Radjou, Prabhu, & Ahuja, (2012) term Jugaad roughly as “the gutsy art of overcoming harsh constraints by improvising an effective solution using limited resources.” It is also termed as an “improvisational approach of solving problems of self or others' in a creative way, at a low cost, in a short amount of time, and without serious taxonomy or discipline” (Brem & Wolfram, 2014). There is malleability in the word Jugaad and its usage. As a concept it can be “reconfiguring materialities to overcome obstacles and find solutions”(Sekhsaria, 2013). Prahalad & Mashelkar (2010) describe this phenomenon as the one of “developing alternatives, improvisations, and makedos to overcome a lack of resources and solve seemingly insoluble problems”. They however, completely dismiss the term “Jugaad” for what they call “Gandhian Innovation” (C. Prahalad & Mashelkar, 2010) due to the connotation of low quality.

However, Vijay Mahajan, of Basix, an Indian

social entrepreneur provides an explanation of the power of Jugaad as an ability “to manage somehow, in spite of lack of resources” and argued that “the spirit of Jugaad has enabled the Indian Businessman to survive and get by” in an economy primarily beleaguered by numerous controls and thwarted by lack of larger purchasing power (Cappelli, Singh, Singh, & Useem, 2010; Mello, 2014). To this is the contradiction where Birtchnell (2011), “questions the intentions behind Jugaad” by highlighting the impact of Jugaad as “negative” and of “undesirable ways” on the society. He (Birtchnell, 2011) further highlights that “it is wholly unsuitable both as a development tool and as a business asset”.

Jugaad an “innovative workaround for complex problems” (Govindrajan, 2011) has been termed as the model of low cost or “Frugal Engineering” a term coined by Carlos Ghosen, CEO of Renault-Nissan Alliance, 2006, construed as doing more with less, is the low cost. The inspiration came to Ghosen from visiting the shop floor workers/engineers and observing their capability to come up with solutions in resource constrained environment. According to Ghosen, “In the West, when we face huge problems and we lack resources, we tend to give up (too) easily. Jugaad is about never giving up!” (Radjou & Prabhu, 2013) hinting at the optimism of making it happen the belief of Indian people.

Another perspective comes from the concept where in the west years of R&D leads to creating new technology, product or service, which is by and large associated with some form of innovation in a systematic manner. But an innovation that involves thinking from the perspective of the constraints is better referred to as “constraint based innovation” (Saraf, 2009) an approach that highlights concerns about making the lives of millions of people who are at the “bottom of the pyramid – those 4

billion people who live on less than US\$2 a day" (C. K. Prahalad, 2009), much easier with solutions to address to their basic needs.

All these perspectives label the term Jugaad in isolation and fail to recognize that frugality is ingrained in the practices of Jugaad, right from finding new uses for everyday objects like that of the Indian household where empty mineral water or carbonated drink bottles are reused as ad hoc containers, and to examples like the makeshift truck cobbled together with an old diesel engine placed onto a wooden platform of a cart (Radjou et al., 2012). However, Jugaad is much more than frugal innovation or simply a "quick problem solving approach" (Bachani, 2013). It is characterized by the following distinctive aspects:

1. Jugaad is or may be termed as a "third way of seeking solutions", unconventional, different from normal/usual/standard practice and being just a substitute
2. It is directed, targeted, with an end in mind.
3. The resources usually used are not the same as used in "standard" solutions. They are picked up to justify the end.
4. The process is also not the same as used in "standard" solutions.
5. Finally, Jugaad is somehow bringing things together to meet the end.

Global Practices Analogous With Jugaad

Across the world, there are various practices which share the characteristics of "Jugaad".

"*Système D*" (Freeling, 1970; Neuwirth, 2011), meaning resourcefulness is a shorthand term derived from the French word *débrouillard* (Orwell, 2001) meaning "an individual who does the impossible somehow", "*sedébrouiller*" (Orwell, 2001) or to get it done somehow relates to an approach of countering impediments that calls for one to have resourcefulness and ability to think quickly, acclimatize, and contrive to get the job done. Similarly, "*Gambiarra*" (Muniz, 2008; Regine, 2011) in Brazil associates with the way

of resorting to peculiar and uncluttered ad-libbing to mend what doesn't work or to craft what you need with what you have at your disposal. Also, there is "*Gambiologia - the science*" (Regine, 2011) that studies the form of inventive improvisation coalesced with electronic-digital *modus operandi*. This is analogous to the German word *Kludge* (Granholm, 1962) referring to "smart" or "witty" but over the years as the language evolution happened it was given a new definition. According to the Oxford English Dictionary 2nd ed., 1989, the meaning provided, explains it as "an ill-assorted collection of parts assembled to fulfill a particular purpose" with special reference to computing.

In China, "*Zizhuchuangxin*" (Chen, 1994) simply means "endogenous or indigenous innovation", *Zizhu* in Chinese mean "self-governed" or "self-determined" and *Chuangxin* means "innovation" (noun) or "innovate" (verb) separately, the word came in wide usage after the Chairman of China Communist Party and People's Republic of China, Hu Jintao, came out with a report of "*Long-term Scientific and Technological Development Plan (2006-2020 year) of the State Council*" in early February 2006, which was published by the Xinhua News Agency, Beijing.

All these phenomena, of course, do not exactly replicate Jugaad. However, these including Jugaad with their subtle differences represent the worldwide seeking of improvised solutions under constraints and bounded situations.

Let us take a look at some illustrative examples of Jugaad.

Example of Jugaad

"Jugaad – the automobile"

Probably the first example of Jugaad, according to Mitra (1995) "Jugaad" – "the epitome of simplicity", a "modest contraption" (Mitra, 1995) is an automobile also called "Jugaad",

commonly found on the roads of Northern India and in some parts of west and Central India too. It is the farmer, in a typical socio economic condition of poor facilities of education, poor health care centers, lack of electricity, and very less employment opportunities in rural India tries to address the recognized need or in this case necessity of transporting the farm goods to market in time and that too for a low cost. It is the crisis which triggers the farmer to get this contraption developed with the help of semiskilled and semiliterate small repair shop or garage mechanic when faced with a constraint. The farmer due to the financial constraint opts for a wooden body instead of steel, mounts an old jeep engine having eight horsepower, buys four used tyres, a chassis, and a gear box, no electrical fittings or battery are fixed with no cabin too (Mitra, 1995). The farmer goes in for only two plastic seats and rest remains open and free for the goods to be kept. Even no headlights are installed, primary reason, the rural India villagers prefer rising and retiring with the sun (Mitra, 1995). The farmer spent \$600 to get the piece of machinery built (Mitra, 1995). Here we make assumption that the farmer and the semiskilled mechanic may be treated as one entity "Jugaadu" or Jugaad Innovator, since it is the demand of the farmer to which the supply is being done by the semiskilled mechanic, but to exactly know what idea sharing has happened between the two towards the making of this contraption is difficult to figure out. Similar situations are possible where one individual initiates the idea and the other improvises it or both together improvise it. In such a situation, it is better to treat them as one entity and proceed.

Soon, such a piece of contraption became a popular mode of mass transportation in the large countryside of north India. Even today, many assemble these vehicles across the country. The reason why such contraptions are emerging day in and day out based on the "Jugaad – the automobile" philosophy is because of the price-performance trade-off (Mitra, 1995). This matrix fits well with the socio-economic conditions existing in large

parts of rural India, even today. This reminds of the famous example of "reassembled cars" in the country of Taiwan (Lin, 2009) also known as "iron cattle", "siqazi" or "laqizai" (Lin, 2009), basically reassembled cars that use either single, four, or six- cylinder engines to power such vehicles.

An interesting point emerges out of this is which has been mentioned by many that "Jugaad- the automobile" or say the "iron cattle" is usually unsafe and low on quality. Lin (2009) provides a perceptive where the claim is that "quality parameters cannot be universalized and have to be looked at in a specific context" (Sekhsaria, 2013). The accident figures are compared between commercially manufactured vehicles and that of "reassembled cars" by Lin (2009), leading to a question that when not all commercially manufactured city riding automobiles are considered unstable but they tend to be unsafe in mountain terrain are they low in quality? Similarly, in case of Jugaad, may it be an automobile or as a concept the quality parameters are context specific and a generalized statement may be inappropriate (Sekhsaria, 2013). However, this argument does not completely justify the inference that all Jugaad is of low quality but it does refer to the notion that "something cannot be dismissed as bad quality or unsafe just because it is Jugaad" (Sekhsaria, 2013)

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