Jugaad Phone

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Abstract

The use of technology and smart phones in particular, is rapidly growing. With an increase in smart phone usage there is also an increasing dependence on apps and app based services. These apps have become an everyday necessity for efficiency and often bridge the gap between the buyer and the seller. In this paper we will be examining a popular app, Uber, to explore their pervasive presence, the origin of this innovation and technology, its impact on the market, labour and the consumer, and explore what is so Jugaad about it. This app has become essential in providing the basic and important service of transportation to the consumer but on the other hand it also surpasses state norms with a subversive informality. There is a new form of technological Jugaad being produced and we examine its nature and implications in this paper.

Key Words: Jugaad, Informality, Creative Destruction, Sharing Economy, Innovation

Introduction

The term Jugaad has its roots in Punjabi and Hindi lexicon. It has a long list of adjectives that work as its definition. It could be a quick fix, a temporary-fix, ingenuity, a kludge, a tactic, a shortcut, an adjustment, a hack, an innovation, and finally as oft quoted a means of survival. The term held a special interest to us as it not only embodies the above terms but most importantly refers to informality. The informality manifests from the very act of Jugaad. To do or perform Jugaad is to find a solution that might not necessarily be available within the formal. This paper attempts to understand this concept of Jugaad in relation to the production and utilisation of contemporary technology.

The ideology of Jugaad and Disruption

Most often, the literature around Jugaad describes it as a strategy seen in rural India, utilised by the 'poor and illiterate' masses which can now be deployed in the world of corporate management. The curiosity towards Jugaad stems from the fact that it is seen as an act of survival which is also a stroke of ingenuity and the spark that is needed for innovation. We seek to frame it as an ideology as there has been a fervent peddling of Jugaad as a solution for technological innovation/invention. We will elucidate how a discourse has been built, particularly in the fields of management and business, on the revolutionary potential of Jugaad. This is however within the framework of capitalist globalisation where Jugaad seems to be theorised as a replicable ideology for profit creation through innovation.

One such paper mentions 'Jugaad' (a word taken from Hindi which captures the meaning of finding a low cost solution to any problem in an intelligent way) is a new way to think constructively about innovation and strategy... Jugaad is about extending our (Western) understanding of entrepreneurial spirit (in the traditional Schumpeterian style) (Bobel, 2012).

Another paper titled Jugaad - From 'Making Do' and 'Quick Fix' to an Innovative, Sustainable and Low-Cost Survival Strategy at the Bottom of the Pyramid defines it as an experience that an ambiguous 'bottom of the pyramid' goes through (Singh, Gupta & Mondal, 2012). The paper exclaims at the genius of the 'poor and illiterate' to come up with solutions for survival. It looks at Jugaad as a 'strategy to sustain a livelihood in society'. The authors examine it as a manifestation in the multiple spheres of existence of a 'bottom-of-pyramid' person's life. The term 'bottom of pyramid' has been borrowed from the works of C.K. Prahlad and Stuart L. Hart titled *The Fortune at the Bottom of the Pyramid* (2002). The term refers particularly to the economically poor, based on purchasing power parity. It does not examine other critical systems of discrimination that create and compound with the economic one such as caste or gender. Our discomfort in the universal monolithic usage of the term Jugaad also stems from this fact, that oppression and discrimination are thought to be only on the basis of class.

The authors also mention how the rural poor, especially those who perform the jobs of construction work, hawking and house cleaning are the ones to use Jugaad in their everyday lives. A miniscule observation of their everyday life has been done to corroborate this by categorising every act of survival as Jugaad. Even acts such as storing water in earthenware as a reserve and to keep it cold is looked at as Jugaad. They inevitably end up exoticising the struggle against oppression and discrimination. There is a clear and vulgar appropriation of these struggles by

renaming them as a new approach to innovation. By looking at it as a new phenomenon rather than as a response to structural violence, it negates and silences these oppressions. As with any appropriation it takes on the good bits, the 'innovation', while conveniently ignoring caste and gender based biases. The authors of the paper go on to say "however, in business and management, such practices are evolving as innate, grass-root level innovations aroused due to limited access to capital, resources and infrastructure. Considering the overall concept, Jugaad can be broadly regarded as a low-cost innovation, a coping mechanism, a quick-fix solution and sometimes an unethical way of getting anything done" (ibid). The skeleton of centuries of oppression and dehumanisation remains hidden in this reinvention of struggles as Jugaad, or alternately named radical innovation. The danger here is that of romanticising poverty and thereby the caste, gender and sexuality based oppression causing it. This is not a reduction of the intent but a remark on the habit to automatically romanticise certain practices of survival as nouveau technology.

It is also pertinent to understand the background to the term 'bottom of pyramid'. C.K. Prahalad and Stuart L. Hart have used this term to elucidate how to fight poverty by creating profits. They suggest that an ideal solution for the eradication of poverty lies in producing for the poor and not the 'best customers'. They write, "the real source of market promise is not the wealthy few in the developing world, or even the emerging middle-income consumers: It is the billions of aspiring poor who are joining the market economy for the first time" (2002). They not only seek to eradicate poverty but make a profit, a fortune, while doing so. The important tool to achieve this is innovation. This innovation has a couple of prefixes attached to it. It is touted to be radical and disruptive.

Both the papers conflate the idea of poverty and innovation and the Frankenstein born out of this wedding is Jugaad. The claims of poverty alleviation are made by these theoreticians, however the onus of this is put on those at the 'bottom of the pyramid'. Those who are expected to eradicate poverty are the entrepreneurs and innovators from that location. However the marketability and the mass consumption of this idea will and has been performed by these very theoreticians whose locations are clearly not at the bottom of anything. An article in the *Economist* on disruptive innovation reiterates this contradiction as it tries to argue for this method while placing any emancipatory act on the shoulders of those who are performing this Jugaad. It says "but perhaps the most surprising disruptive innovations will come from 'bottom-of-the-pyramid' entrepreneurs who are inventing new ways of delivering education and health-care for a fraction of the cost of current market leaders" (The Economist, 2015).

Creative destruction and disruptive innovation

The popular proponent of the idea of disruptive innovation is Clayton M Christensen. In his book *The Innovator's Dilemma*, he introduces the idea of disruptive innovation as opposed to sustaining technology where there is constant evolution of a commodity so as to feed the customer with newer and better innovations constantly (1997). He observes this trend in various industries and has pointed out that the ability of a new entrant to the market to innovate is the reason for unimaginable success and profits. He writes, "disruptive technologies bring to a market a very different value proposition than had been available previously. Generally, disruptive technologies underperform established products in mainstream markets. But they have other features that a few fringe (and generally new) customers value. Products based on disruptive technologies are typically cheaper, simpler, smaller, and, frequently, more convenient to use" (ibid).

This idea of disruptive innovation that drastically alters existing systems borrows from the work done by Joseph Schumpeter on creative destruction. Schumpeter fashioned innovation as a chronological process of changes to the existing economic structure which could bring about creative destruction. He wrote that innovation is key to those who seek to make a profit. Karol Śledzik quotes Schumpeter to explain it as a "process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one" (2013). To achieve this, five types of innovation have been laid down by Schumpeter. The first innovation is to introduce a new product or a new version of an already existing commodity; next, to come up with new ways to produce and sell the commodity. This is followed by the creation and opening of new markets for the sales of these newly created products. The fourth step is the exploitation of newer sources of raw material. The final step is the creation of a new organisational structure by either the creation or the destruction of a monopoly (ibid).

These five steps take us to two related and critical paths. The first route will take us to the origin of the term 'creative destruction'. The other will take us to the contemporary moment of globalisation and Jugaad.

Karl Marx in his work on capitalism and industrialisation wrote about this very process of creative destruction. He deployed the term to describe the perverse manner by which capitalism grows and sustains by the act of destruction. He says,

When speaking of the destruction of capital through crises, one must distinguish between two factors. In so far as the reproduction process is checked and the labour-process is restricted or in some instances is completely stopped, real capital is destroyed... Secondly, however, the destruction of capital through crises means the depreciation of values which prevents them from later renewing their reproduction process as capital on the same scale. This is the ruinous effect of the fall in the prices of commodities. It does not cause the destruction of any use-values. What one loses, the other gains. Values used as capital are prevented from acting again as capital in the hands of the same person. The old capitalists go bankrupt...A large part of the nominal capital of the society, i.e., of the exchange-value of the existing capital, is once for all destroyed, although this very destruction, since it does not affect the use-value, may very much expedite the new reproduction. This is also the period during which moneyed interest enriches itself at the cost of industrial interest. (Marxists Internet Archive, 2015[1863])

Marx also writes, "in these crises, a great part not only of the existing products, but also of the previously created productive forces, are periodically destroyed. In these crises, there breaks out an epidemic that, in all earlier epochs, would have seemed an absurdity — the epidemic of over-production" (Marxists Internet Archive, 2015[1848]). However the contemporary usage of creative destruction has been rearticulated as disruptive innovation, which is a very strategic move that erases the history of the term. Just as with Jugaad, creative destruction is taken out of its context and used to the benefit of the wealthy.

This ahistorical usage of terms provides it a shine, a gleam that hides all the travesty it is newly built upon. It takes out the person from the equation. There is only the innovator and the consumer ('bottom of pyramid' or otherwise). It does not account for the labourer from 'Third World Countries' who is bound within caste, race, gender and class structures. These brown, blue collared, lower caste, class and gendered bodies become the site of exploitation once again. They are both the exploitable resource and the all-consuming market. Moreover the means by which this exploitation is arrayed is through the technological innovation. Technology becomes the new coloniser which takes this new system of capitalist exploitation to newer terrains. The curiosity and desire for this technology is maintained through constant over-production of the new. Marx writes, "The instrument of labour strikes down the labourer. This direct antagonism between the two comes out most strongly, whenever newly introduced machinery competes with handicrafts or manufactures, handed down from former times. But even in modern industry the continual improvement of machinery, and the development of the automatic system, has an analogous effect" (Marxists Internet Archive, 2015[1867]).

In the current era we are witnessing many such capitalist exploitations through constant overproduction e.g. Uber. We are using Uber as it's assumed to be the next big thing in terms of innovation and has also had its fair share of criticism. There is some critical work done on third party providers such as Uber which work within the paradigm of disruptive innovation. One such blogger writes, "...but we must also take a critical view. The new social operating systems are demolishing established industries, and destroying jobs and lives in the process. While they create new jobs, these are not the same jobs in the same industries. Blue collar bodies litter the scenes of these acts of creative destruction" (Rayner, 2014). The next section of the paper will engage with the technology of apps and what their incursion through disruptive innovation into the market has led to.

The Third Party Providers

Uber started in 2009 as a small transportation start-up company in San Francisco, California, intended to connect the buyers to the sellers directly. Its tag-line "your ride on demand" signifies it. It uses a mobile app to connect cab drivers directly to consumers who request a trip using the Uber App. The customers pay directly to Uber by connecting his/her credit/debit card with the Uber account and Uber then transfers the money to the drivers account after deducting its commission. In India they have a different model. The rider has an option of paying by cash. In India the driver gets paid in two ways: one is to complete minimum number of rides per day irrespective of the distance and if a driver fails to complete the minimum number of rides then they get paid by the distance they have travelled. The payment system is very dynamic and it keeps changing. Sometimes the number of ride changes, some days there are incentives like complete four rides in next four hours and get Rs 1600. Since then it has grown leaps and bounds and spread across 66 countries and more than 632 cities. It has a large number of investors and has been projected as the next big thing. But it has its own share of controversies wherever it has introduced its app services. The major protests have been against its model of regulation. It has been banned from London in the UK and France and facing legality issues in many countries. In order to drive for Uber one has to register themselves with the company. The driver doesn't need a taxi permit or any kind of permit from the state. Based on their criteria they do a background check of the driver. The only two conditions that are applicable to be a registered driver at Uber are to own a vehicle with a driving license and a car which is insured. Once the driver is registered, Uber will provide a mobile device which has an Uber app and will help the driver locate customers and their destination. Uber regulates the fare which is not

decided by the cab driver, the union or the concerned government. The fare for the regular cab is regulated by the union of cab driver along with the government regulating body. Uber has formed its own governing mechanism and process. It doesn't own any of the vehicles and is not directly employing the cab drivers. It just remains a third party service provider.

Uber and other such apps which use the concept of shared economy are flaunted to be the next big thing and both were launched at the time of recession and high unemployment in USA. The supporters of such platforms have claimed that they have utopian outcomes such as empowerment of ordinary people, efficiency, and even lower carbon footprints (Schor, 2014). Lisa Gansky has argued that sharing economy is creating value through lesser waste (Gansky, 2015). There have been a range of products and services launched in the market which have used the concept of sharing economy to promote the products and services along with the idea of sustainability. The concept of sharing economy is defined as "a socio-economic ecosystem built around the sharing of human and physical resources. It includes the shared creation, production, distribution, trade and consumption of goods and services by different people and organisations" (Matofska, 2015). This is not a new concept; we always shared things with siblings, neighbours, friends and family members. In a sharing economy, sharing is not just limited to kinship ties but is a move away to sharing with strangers. Apps like Uber are not as much 'shared economy' as they are third party service providers who are charging for services. As Killick has rightly summarised, companies like Uber are not sharing anything with consumers and sellers (Killick, 2015). This model of economy fits with the current neo-liberal paradigm where labour rights and benefits are curtailed. In fact both the businesses have displaced small hotel owners and taxi drivers which we can see through the constant protests happening all over the country and the world. So they haven't created anything new.

The private capitalists use this space for investment and creative destruction which results in dehumanisation and alienation of labour. Both of these represent the idea of disruptive innovation where with new technology they shatter existing organisational systems, thereby shattering labour systems. It further alienates the labour as there is absolutely no possibility of interacting or collectivising. With the rise in people engaging in this individualised entrepreneurial economy, it is creating more independent workers who are highly vulnerable and insecure. Commenting on this, an article on sharing economy says, "the real winners in this process have been the 'pirate capitalists' who have moved in and used the technology to break up and disrupt existing industries. This has been and forever will be the story of capitalism:

creative destruction. The internet-driven changes are the latest phase of a centuries-old economic system, not the harbinger of a new one" (ibid).

Arguments which are commonly given by the pro-disruption camp are that the market will fix everything based on the ratings and there is no need for state regulations (Carr, 2015). As individuals we have our biases which are constantly shaping our views and thought processes. These biases will inform our rating of the driver. So the rating is never going to be just based on the ride, it goes beyond the ride to larger societal biases. The marginalised community will be further marginalised through this process. Though it has been argued that these jobs are highly flexible and a person can work according to his/her own needs and time, it comes with no benefits such as leave or pension. A loss or out-of-job in such cases can have a cascading effect on the individual as well as the economy. All these are clear signs of recession in the making.

As Marx has pointed out, alienation of the labourer is induced and exacerbated by technology with relation to creative destruction. Technology lives and is operated by the industrialist or the innovator. Andrew Feenberg explains this power relation,

The entire development of modern societies is thus marked by the paradigm of unqualified control over the labour process on which capitalist industrialism rests. It is this control which orients technical development toward disempowering workers and the massification of the public. I call this control "operational autonomy," the freedom of the owner or his representative to make independent decisions about how to carry on the business of the organisation, regardless of the views or interests of subordinate actors and the surrounding community (2005: 53).

The knowledge, organisation and the idea of the product produced by innovation exists in the silos of certain knowledge circles. This entire articulation of innovation, creative destruction and Jugaad function as new tools of organisation building and destruction of existing systems.

Informality and Jugaad

Going back to Christensen via Schumpeter we land at the crux of the matter, the act of globalisation. Christensen writes,

First, disruptive products are simpler and cheaper; they generally promise lower margins, not greater profits. Second, disruptive technologies typically are first commercialised in emerging or insignificant markets. And third, leading firms' most profitable customers generally don't want, and indeed initially can't use, products based on disruptive technologies. By and large, a disruptive technology is initially embraced by the least profitable customers in a market (Christensen, 1997).

Technology and thereby innovation, regardless of where it was formulated, is still in the domain of the capitalist. They don the cap of radical innovation and the cloak of caste, race and gender superiority to churn out newer systems of discrimination using technology. It is therefore important to redefine Jugaad with regards to informality. The term has been depoliticised. It is important to imbue it with the politics from which it grows so as to not obliterate the lived experience of the concept.

Ananya Roy (2009) puts forth four propositions to understand informality. Firstly she writes that informality is not solely related to poverty. This assumption is also based on the imagination that informality practised by the poor is also illegal and that the formal is absolutely devoid of informality. Next she points out that informality is 'deregulated' which is different from 'unregulated', that is there is a system of regulation even within the seemingly regulation-less informal. Her third point is that the state too, in all its various capacities, is an informal entity. This she explains in relation to the extra-legal actions that are performed by the state. The final proposition is that there are many agitations and struggles that emerge from the 'informal' and 'illegal' against the legality of the formal. She emphasises the need to understand that insurgence need not create a just space. It is important to not morph these struggles as best practices of innovation and to understand that they are struggles against discrimination.

The examination of Jugaad within this framework throws light at its inherent exoticisation when redefined as only 'disruptive innovation'. It is an act of informality that is located within the formal, the informal and everything in-between and beyond while also being an act that exists because of deregulation. To set this act out of its context removes its inherent insurgence. It becomes a latent tool of oppression than an expression of agitation. Jeffrey has used Bourdieu's notion of Habitus to elucidate how people's social positioning is important in how they respond to changes and how we consequentially understand it (Jeffrey & Young, 2014). He uses the concept of Habitus to explain how people produce similar behaviour over the period of time which reflects their social positioning in society (ibid). He further quotes Bourdieu and says "People inventively reproduce their social position through their everyday practices" (ibid). Habitus is informing the innovation or the Jugaad that people do.

Jugaad and the technology spurred by it have to be understood with relation to the Jugaad of everyday life. It has to take into consideration the multiple contexts, scales, and hierarchies in which Jugaad functions. This then highlights that formality and informality are not binaries but exist within and outside one another, where Jugaad is practised in different forms. An act of Jugaad in technology, especially as disruptive innovation, is a struggle to maximise profit. The Jugaad of everyday life embodies struggles against hegemonies, they are struggles of survival. This distinction is crucial in remembering and reiterating the varied histories, practices and interpretations of Jugaad that exist.

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