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# AN INQUIRY INTO THE CHARACTERISTICS OF ENTREPRENEURSHIP IN INDIA

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## ABSTRACT

*We investigate the distinctive characteristics of entrepreneurship in India. Based on a review both prior literature on the factor sequences and consequences associated with entrepreneurship and evidence from India, we challenge the assumption that entrepreneurship is not supported by Indian culture; and lastly. Using process mapping methodology, we elaborate on the characteristics of five forms of entrepreneurship, by connecting their origins to historical phases. These phases include pre-1700 (Panchayati Raj), 1700-1950 (British Raj), 1950-1985 (License Raj), 1985-1995 (Jugaad Raj), and 1995-2010 (Invisible Raj). We also discuss the emerging role of women as “cultural entrepreneurs,” being stewards of deep cultural knowledge.*

## INTRODUCTION

A recent hit Hindi film, “Chak De India,” about a disgraced soccer star who returns to coach a diverse group of Indian women, and inspires them to win the World Cup, captures the pulse of a new India. The term “Chak De,” which means “to pick up something that is down,” is rural Punjabi slang used to encourage somebody to rise from adversity—it is a term that applies to the New India. This new India, like the coach in the film, has many inspiring figures—ones that have worked hard to achieve global success. There have been several architects of this new India – with five larger-than-life entrepreneurial leaders that are particularly notable.

Narayana Murthy is the famous entrepreneur icon who shaped India’s IT boom. He was one of six founders who started Infosys with a \$1000 investment, and turned it into a world-class company valued at \$13 billion. He leads an unpretentious lifestyle in his modest residence.

Ratan Tata is the Chairman of the Tata Group, which was founded in 1859. Tata started. As head of the group since 1991, he has expanded the global reach of his family’s business, with its revenues growing over sixfold to \$25 billion. He is currently leading the charge to launch a car that will only cost \$2500.

Lakshminivas Mittal heads Mittal Steel, that his father Mohan started. Mittal has grown the family business’s steel making facilities to fourteen countries, employing more than 150,000 people, and controlling 10% of world’s steel production. Currently, the world’s fifth wealthiest person, valued at \$40+ billion, his daughter Vanisha's wedding in 2004 was the world’s most expensive, at \$55-million.

Azim Premji heads Wipro Technologies, and has transformed his father's fledgling vegetable oil business into one of the largest software companies in India. Forbes listed Premji as the richest person in India from 1999 to 2005, and his current wealth is \$15 billion. He is a champion of universal primary education in India.

Mukesh Ambani heads Reliance Industries, which was founded by his visionary father Dhiru Bhai Ambani. Mukesh Ambani is now India's wealthiest person, valued at \$50 billion. In 1981, he initiated Reliance's backward integration from textiles into polyester fibers and then into petrochemicals, creating 60 new, world-class manufacturing facilities and India's largest private sector firm. He then set up Reliance Telecomm - the world's largest and most complex information and communications technology venture. With the world's largest retail initiative, he is now "planning to remake India from its farms to its stores to its biggest cities."

In 1987, India had 1 billionaire entrepreneur, in 2007, Forbes counted 36, vs. Japan's 24. India's top entrepreneurs have taken their family businesses and startup businesses to global heights, and joined the elite company of the wealthiest and most influential in the world-- but they are not solely focused on their own success. Instead, these entrepreneurs work on bringing happiness and power to the grassroots level, with innovative business models. These models range from making all employees, including clerks, into millionaires by offering equity participation, to financing development initiatives in the rural areas, to developing world's cheapest cars, and to providing high quality products at street prices to the masses.

Though India's top entrepreneurs get the most ink in the international media, an even bigger story is quietly unfolding in the nooks and crannies of India. This bigger story is about grassroots and women entrepreneurs. It is a story that needs to be told, as it holds the potential to fundamentally transform the lives of the billions in this world.

## **THE STORY OF EMERGING INDIAN ENTREPRENEURSHIP**

Over the past fifty years, we have seen the emergence of three major entrepreneurial paradigms in Asia – Japanese, Chinese and Indian. Based on anecdotal evidence, entrepreneurs in Japan, China, and India have pursued this opportunity in distinct manner. These pursuits may be loosely encapsulated into the following paradigms:

Japanese "discarded generation" paradigm: Japanese entrepreneurs took control of both peripheral physical and intellectual assets discarded by Western firms. In this endeavor, the entrepreneurs found opportunities for redeploying and repacking these assets into popular products. They then demonstrated how such products could be produced using peripheral assets, such as transplanting factories in Asia and other less attractive regions. The use of peripheral assets is depicted by the Japanese in the 1950s as they bought scrap steel from Western junkyards and reprocessed it in their mini steel plants. Later, during the 1980s, the Japanese partnered with US auto parts suppliers who were subject to huge bargaining pressures from US assemblers. In this

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partnership, the Japanese transformed from being suppliers of basic functional vehicles to suppliers of augmented high end vehicles (Gupta, 1998)

Chinese “prior generation” paradigm: Chinese entrepreneurs took control of their previous generation’s physical and intellectual assets, which had been transferred by Western firms. Specifically, several Western firms were transferring their older generation’s assets into the consumer electronics, auto, and other sectors to China since the cost of losing intellectual property rights was relatively limited (Gupta & Wang, 2004). During this time, the entrepreneurs found opportunities for redeploying the assets more cost-effectively using a range of mass products. In discovering such opportunities, the entrepreneurs demonstrated astute negotiation for huge premiums from Western firms; these Western firms were seeking to acquire their share in the joint ventures, while wanting to give up their own share for a huge discount.

Indian “next generation” paradigm: Indian entrepreneurs are taking control of their current generation’s physical and intellectual assets since Western firms are finding them costly to deploy. In this endeavor, the entrepreneurs are transforming the next generation’s assets by making them accessible to even the grassroots markets. As Indian entrepreneurs make assets accessible a variety of markets, they are also examining how grassroots can serve global markets. They are discovering how grassroots can use their unique culturally-embedded knowledge, which, until now, has been invisible.

This use of culturally-embedded knowledge is exemplified in a Chicago Tribune article as it states “In farm sheds and machine shops and on small rural plots, India's back-yard inventors are coming up with creations that their backers hope will make it big, solve a few of the world's problems, boost India's exports and continue cutting the country's dismal poverty rate” (Goering, 2007). An example of these back-yard entrepreneurs is Conserve in New Delhi, which employs poor urban rag-pickers to collect, sort, weigh, and clean the plastic bags that litter the streets. The bags are melted together to create a thicker material. Since the bags come in all colors, different designs can be created using strips and cutouts of bags. This recycled trash is then turned into chic handbags that are sold for \$50 in European boutiques. By tapping rag-pickers for their business, Conserve helps grassroots women earn three times what they previously made (World Resources Institute, 2007).

To understand this and other emerging forms of entrepreneurship in India, let’s first review the literature on the parameters of entrepreneurship, and the evidence on India.

## LITERATURE REVIEW

We may categorize the parameters of entrepreneurial literature into two groups. First, factor sequences, which is a theoretical list of personal traits that an entrepreneur ought to have. Second, factor consequences, which are the empirical outcomes of entrepreneurial functions.

## Factor Sequences

Theoretically, entrepreneurship rests on three core factor sequences or personal traits. 1) Risk taking propensity (e.g. Cantillon, 1755); 2) achievement motivation (e.g. McClelland, 1961), and 3) human capital (e.g. Romer, 1991).

The first factor sequence is risk taking propensity. Cantillon, who was the first to define “entrepreneur,” referred to the term as a specialist in risk-taking. For instance, workers receive an assured income (in the short run, at least), while entrepreneurs bear risks caused by price fluctuations in consumer markets (Cantillon, 1755). Later, Knight (1921) saw that the entrepreneur is able to both “lay off” risks based on knowledge of the market and absorb any uncertainty in exchange for profits.

Empirical studies of different Indian regions indicate that both male and female entrepreneurs in India score rather low on risk-taking propensity measures (Rutten, 2006). This low risk-taking propensity serves as an explanation for the historical preference in India for service ventures - which have lower initial capital outlays and shorter breakeven periods compared to the manufacturing ventures. The studies in the 1960s, notably Berna (1960), Hazlehurst (1966), and Fox (1969), link service preferences to the social origin of Indian entrepreneurs – the traditional Vaishya or trading community ethic.

However, subsequent studies in the 1970s, such as by Veen (1976), highlight the role of structural factors in India, including market imperfections for venture capital and the non-supporting institutional environment for industrial investments. Later, in the 1980s, other studies, including Chadha (1986) and Streefkerk (1985), documented how several artisans, such as blacksmiths, masons, and carpenters, set up small industrial workshops and gradually became industrial entrepreneurs. These studies discredited the assumption that a low risk-taking propensity is an impediment to industrial entrepreneurship in India. More recently, using data from the 62-society GLOBE study, Gupta, Surie and Macmillan (2004) conclude that risk-taking propensity is a cultural-specific entrepreneurship trait, not culturally universal.

The second factor sequence is achievement motivation. McClelland (1961) identified the “need for achievement” as key to entrepreneurship. He, particularly, noted that high achievers are motivated by an enduring desire to succeed and “to exploit opportunities, to take advantage of favorable trade conditions; in short, to shape his own destiny.”

Early empirical studies indicated that Indian entrepreneurs have low levels of achievement motivation (McClelland & Winter, 1969). However, more recent studies show fairly high levels of achievement motivation among men entrepreneurs, while only medium level among women entrepreneurs (Shivani et. al., 2006). This disparity between men and women is exemplified in some early studies, which show that small group cohesiveness is far more common among Indian women than men; during this group cohesiveness, a highly respected informal female leader was more frequently present and women tended to be more assertive when denied fairness (James, 1962).

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Rather than being only achievement motivated, women in India tend to also build and mobilize support networks for achieving success.

With respect to the temporal shifts, an important factor is the easing of structural restrictions, which began in the 1980s. In fact, a 2007 global survey of 17 nations by Swedish research and consulting firm Kairos Future (2007) reports that Indian youth (16-29 year olds) are the happiest in the world. For example, these youth strikingly exude more optimism about their future and their society's future. Additionally, work comes as top priority for Indian youth, followed by a good career and higher status; these priorities exemplify values of both endurance and entrepreneurship.

The third factor sequence is human capital. Many scholars note technical, human, and conceptual skills as critical to entrepreneurship (Nafziger & Terrell, 1996). However, others deem these characteristics as necessary, but not sufficient. For instance, Hosseini (1990) observes, "The... presence of the most able work force... can be of little use if the individuals are not sufficiently motivated to work hard."

Studies, including one by Leeuwen (2007), show that India lagged behind in human capital during the 20<sup>th</sup> century, making it difficult for entrepreneurs to adopt new technologies, and for politicians to support new technology-based entrepreneurship without causing social unrest. However, recent data indicate a fairly high level of human capital among men entrepreneurs in India, but only a low level among women entrepreneurs (Shivani et. al., 2006). This low level among women entrepreneurs in India may be associated with a lack mentors and role models to assist them with the acquisition of technical and conceptual skills.

### **Factor Consequences**

Empirically, major consequences of entrepreneurship are innovativeness and growth (Schumpeter, 1934). Many scholars have mistakenly cited India's religion as an impediment to innovativeness and growth (e.g. Weber, 1905). They believe the caste system in India inhibits social mobility and Hindu spiritualism inhibits pursuit of material growth (Anstey, 1952; Morris, 1967). Many empirical studies also indicated a generally low level of innovativeness amongst both men and women entrepreneurs; exemplified by the fact that most entrepreneurs in India were less likely to develop new products or new production methods (Shivani et al, 2006).

A new study by Debroy and Bhandari (2007) has found that 52% of the workforce in India is self-employed. Indian entrepreneurship is thus helping to create new sources of income for even the poorest members of society. Between 1993 and 2004, the average income for the bottom 20% of the population grew by 10%. This is nearly at par with the 12% for the top 20% of the population in rural and urban areas. Both population strata have high rates of self-employment. However, although many areas of India are experiencing an income growth, fixed-income towns experience it the least.

Overall, many, such as Turner (2007), dismiss India's recent dynamism as a temporary phase. For instance, they attribute this dynamism to 1) the returning Indians who have held

leadership positions and/or have access to leading edge technology and exposure to global operations and 2) the US-born children of Indian immigrants leading the new generation of high tech entrepreneurs. Therefore, it would be fruitful to examine the origins of the various emerging forms of entrepreneurship in India.

## METHODOLOGY

The long-term variations in entrepreneurial innovativeness are now recognized as a function of the nation's work culture system, including "the economic, political, legal, financial, logistical, and social structures that characterize a society" (Morris, 1998). Along with these structures, work culture system also includes the rules of the game that influence the allocation of entrepreneurial resources "between productive activities such as innovation and largely unproductive activities such as rent seeking or organized crime" (Baumol, 1990). In order to understand the varying forms of innovativeness, one ought to study the shifts in a nation's work culture system, including the rules of game, over time.

For understanding the origins of entrepreneurship, it is important to map the historical development of the rules of the game. A nation's work culture system during any period is not independent of the system in the prior periods. Rather, historical forces tend to have a cumulative and continuing effect on the subsequent rules of the game.

To add rigor to a historical study, process mapping is a useful method. According to the US Environmental Protection Agency (1999: 1), "process mapping is an approach to systematically analyzing a particular process. It involves mapping each individual step, or unit operation, undertaken in that process in chronological sequence. Once individual steps are identified, they can be analyzed in more detail."

We study India's work culture system over five historical phases, and demonstrate the significance of each of these periods on India's current emerging forms of entrepreneurship. These phases are termed as Panchayati Raj, British Raj, License Raj, Jugaad Raj, and Invisible Raj. Raj means rule, and each of these is associated with different rules of the game.

Phase I: Panchayati Raj (until 1700) - The primary unit of work culture system in India is the *panchayat*, which is the community of elders. Historically, the Panchayati Raj system germinated a crafts form of entrepreneurship as each village had different occupation-based community groups, all of which specialized in a particular class of crafts or services. The rural communities in India came to be the repositories of deeply embedded cross-generational craft insights. With these crafts came another important element of the Panchayati Raj--traders who specialized in the international markets. These traders paved the way for a future of global entrepreneurship.

In India today, numerous grassroots innovations are now being discovered under an initiative launched by Prof. Anil Gupta and India's National Innovation Foundation. Grassroots innovations are generally intended to reduce drudgery – the work often given to children and women, and to

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empower the poor by solving their problems using the resources to which they already have access. The power of grassroots innovation is well depicted in the life of Jagani, a man who dropped out of his village's school at the age of 10 as a result of financial hardship. During this time, the bulls in his village had little fodder in a drought-affected region and the farmers worried how to cultivate their fields. Jagani hoped to help rectify his village's problems with the use of the powerful Enfield Bullet Motorcycle, which is a common sight in Indian villages. Specifically, Jagani modified the motorcycle by replacing the rear wheel with a \$450 cultivating device that had attachments for tilling, weeding, and sowing. After completing all necessary modifications, Jagani was able to sell his product for much less than other cultivating devices, which can cost up to \$6,000 (Neelakantan, 2005).

Similarly, Agrawat saw women pulling water from the well with a rope, and noticed that the bucket would rush back down the well if the rope slipped. He added a lever so that the bucket would stay in place, so that women can catch a breath. Chitagopakar and Harshangi developed a modified stick for the visually challenged, that can sense can sense obstructions with different alarm signals. And Saidullah developed a bicycle that not only travels on land, but can also float on water. This helps people easily cross over ponds and rivers (National Innovation Foundation, 2005).

These micro entrepreneurs have provoked an interesting dialogue on the ownership of intellectual property rights on the micro innovations. For instance, some say that ownership resides with the community that passes on the primal skills, others say that the ownership is with the innovative entrepreneur, and yet others believe that ownership resides with those who spotted, perfected, and promoted the micro innovation (Gupta & Chandak, 2005).

Phase 2: British Raj (1700-1950) - During the British period, India's indigenous crafts faced significantly adverse environment. This adversity is well depicted in the historical records, based on which Malhotra and Patel (2003) state,

*one of the earliest industries relocated from India to Britain was textiles and it became the first major success of the Industrial Revolution, with Britain replacing India as the world's leading textile exporter.... the technology, designs and even raw cotton were initially imported from India while, in parallel, India's indigenous textile mills were outlawed by the British.... Textiles and steel were the mainstays of the British Industrial Revolution. Both had their origins in India.*

At this same time, the British period opened a window of opportunity for entrepreneurship with a global acumen. Recall that one of the main elements of the Panchayati Raj is the traders who specialized in the international markets. For instance, this revival is exemplified in the work of Ranchhodlal Chhotlal, a Brahmin in Ahmedabad, as he took a position as a clerk in the British colonial government in 1842. While working in this position, Chhotlal obtained cost information from London to determine that a local cotton textile mill would be profitable in Ahmedabad. He then found a British investor and a local banker who were each willing to finance 50% of the

necessary funding. His success motivated the local Hindu/ Jain bankers and traders to set up their own mills (Oonk, 2007).

Similarly, World War I cut off the supply of finished consumer goods from the British factories. This shortage of goods created a demand for rails to 1) support both the infrastructure and transportation needs of the British in the war and 2) allow subsequent British expansion in Asia. This demand offered a window of opportunity to JRD Tata's new iron and steel factory to thrive (Oonk, 2007).

The global acumen of entrepreneurs in India remained stifled for the first forty years after independence. However, with the advent of the internet, 'glocal' multinationals have thrived with one friend or family member based in India and another overseas in countries such as the US. Similarly, others have used new technologies or global markets for making local impacts. For instance, an illiterate masseuse, Indu Sharma in Mumbai, bought a cell phone, which resulted in the expansion of her business and a few hundred percent increase in revenue (Bhatt, 2006). More broadly, global acumen is evident in the success of both the Patel community, who owns 60% of the low-end hospitality market in the US, and the Palanpuri Jains community, who owns 50% of the world's rough diamond trade (Godrej, 2005).

Similarly, larger entrepreneurs have found new opportunities in global markets. For instance, in the US and Europe, most tractors are high horsepower, as a result of the farms being much larger. After observing the difference between Indian tractors and U.S. and European tractors, the leading marketing entrepreneurial firm, Mahindra & Mahindra, opened export markets in Africa, South America, South Asia and Middle East since the needs and uses of vehicles are akin to India. The firm has expanded its parts warehouse and assembly production in the US and the UK, as a means of sourcing more advanced features that create 75% of the Western tractors. With a new dealer network in the US and Europe, a new "hobby" farmer segment (farmers who work on farms during weekends and holidays) was created using lower horsepower models. This resulted in a 40% market share in that niche (BBC News, 2001).

Phase 3: License Raj (1950-80) - After independence, a regulatory framework of impediments and compensation was introduced in India. This resulted in the public sector taking command of major investments, while the small scale sector thrived in minor investments. The communities benefited from the public sector enterprise as it offered critical infrastructures and capital goods, while the small enterprise were assured a profitable supply and/or demand linkages.

To regulate the larger private sector's initiatives, the law required approvals for both establishing a new manufacturing unit and for expanding its capacity by more than 25% over a five year period. The larger private sector was forced into a race to obtain licenses in whatever domains it could. For instance, the House of Birlas evolved into a quasi-public company with major shareholdings that extended into many cash-rich businesses in metals, textiles, cement and fertilizer. While evolving into a quasi-public company, the House of Birlas operated according to its philosophy, to pursue any business it could obtain a license for. As a result of this, many of the group's companies became highly fragmented. For instance, its copper company, Indal, owned both



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a copper smelter and a fertilizer business. By the late 1970's, India faced substantial consumer goods supply constraints, along with economic stagnation, inflation, educated unemployment, and growing poverty.

Nevertheless, two forms of entrepreneurship thrived under the regulatory patronage: 1) *Kisan* or farm entrepreneurship and 2) *Jawan* or defense entrepreneurship. Consistent with these two patronages, *Jai Jawan Jai Kisan* became the political motto of the era. First, farm entrepreneurship was the basis of Green Revolution, whereby India left behind the famine of the mid-1960s. In this endeavor, the state-supported farm R&D and financing, while the US-style extension networks built the capacity of the farm entrepreneurs to make the nation self-sufficient in foodgrains. Second, the State supported borrowing of defense and allied informatics, transportation, and space technologies from overseas, and the development of local versions by extending capacity building to private entrepreneurs.

Common to both forms of entrepreneurship was the principle of supporting and assembling a network of smaller entrepreneurs. This principle of extension is visible in another emerging form of entrepreneurship in India. K.V. Kamath is the CEO of ICICI, the largest private financial institution in India. He is currently striving to invent a new business model where ICICI can create a distribution base effectively in 600,000 villages in India at one tenth the cost of urban India (i.e. one hundredth the cost of the West). Kamath (2006) depicts his goal by stating,

*the challenge is to be able to work with partners because we believe that the branched model will not work in this context. For example, we might partner with a local financial institution, a micro-finance agency or a company -- someone who is already in the village for a business purpose. We might even partner with someone who is selling fertilizer or seed or tractors.*

His goals are ambitious, for no one – not even the Grameen Bank – until now has gone after a large-scale rural banking model to serve a rural population of 600 million people.

Phase 4: Jugaad Raj (1980-1995) - In the early 1980s, a new factor sequence, the professionals, came on the horizons. Particularly, the license raj had trained a large army of educated professionals through its army of public sector firms, government R&D labs, and technical colleges; however, they lacked the capacity to utilize the individuals in the developmental process. This led to the emergence of two forms of entrepreneurship during the early 1980s [pause] – hardware dealers and designers, and Software developers. The rule of the game in this phase was *Jugaad* – i.e. finding creative short-term workarounds, and then building capacity.

Firstly, many small entrepreneurial firms began importing and assembling Korean and Taiwanese computer kits by exploiting their market reach and knowledge. Additionally, many larger entrepreneurial firms hired professional talent to build their capacity to compete on designs. As a result of such initiatives, a wide range of industries, even the smaller firms, began to offer custom designs and complex solutions over time. With these new opportunities, a small but growing

percentage (currently estimated at about 5%) of engineering and management alums moved into entrepreneurship.

Secondly, many firms began hiring professionals to construct capacity for participating in the national automation projects. For instance, the government helped to link these professionals with the American MNCs, while also offering a captive infrastructure support to others. Over time, closer alliances with the US firms allowed the Indian entrepreneurs to shift the higher cost systems analysis and design work to India. Conversely, the low-skill programming, which involved short-term client interactions, was retained onsite in the US.

All this inspired numerous ancillary ventures in entertainment, media, transportation, hospitality, and infrastructure. Later, the Internet gave rise to several big Indian portals (such as Sify). Additionally, mid-sized challengers with specialized offerings (such as the Hyderabad-based NowPos with voice e-mail applications), startups (such the Bangalore-based RHR Networks that runs many India specific websites), and uncounted casualpreneurs (those with full-time day jobs who created India centric web products in their spare time using internet advertising based revenue models) also blossomed as a result of the internet (Ranjan, 2006).

The idea of specializing in the value-adding activities, founded in the nation's various resource endowments, has become the hallmark of many entrepreneurial initiatives in India. Specifically, this is well-depicted in the growth of Indian entrepreneurship in the country's global bio-tech industry as, according to McKinsey Consulting, the country's clinical trials sector is estimated to be \$1 billion by 2010. This growth is associated with the wide array of healthcare facilities in the country, including 221 medical colleges, 700,000 specialty beds, and the largest pool of patients with diseases such as cancer and diabetes. The diversity and depth of Indian's medical community enhances reliability of results and reduces the cost to a fraction of \$150 million, which is the amount used for a clinical trials in the U.S (Basu, 2004).

Furthermore, in the West, if there is a disease, firms search for New Chemical Entities (or NCEs) that would cure/treat and then patent them. Conversely, in India, many entrepreneurs now use the nation's software capabilities to scan for all non-patented NCEs, then patent what they discover, and finally license them to Western firms for further analysis. Additionally, many entrepreneurs are venturing into modifying NCEs and discovering new forms and new drug delivery systems. For instance, Hepatitis B, after its development in late 1980s, was priced by the US drug companies at \$50 per day of dose. Shantha Biotechnics, an upstart by a computer scientist with no pharma background, developed the drug with less than \$1 million investments over a five year period; it was then marketed for \$5 per day of dose (Varaprasad, 2001).

India is thus evolving from the world's software programmer to the world's back office where service intensive business processes are performed to the world's laboratory where the quality and availability of knowledge workforce make the cost of risk-taking very affordable for companies around the world. In depicting India's evolution, it is important to note that the private equity investments of Indian firms now stands at \$60 billion, with more than \$10 billion in 2007 alone; these amounts are a result of the firms' capability to quickly set up strong R&D and back-office

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operations. Over 100 multinational firms, including GE, General Motors, Intel, Texas Instruments, Microsoft, and IBM, have set up R&D operations in India (Sinha, 2007).

Phase 5: Invisible Raj (1995-2010?) - By the mid-1990s, the foreign MNCs emerged as an important influence on local entrepreneurship. Many MNCs transferred older technologies and product designs, while pushing them using attractive consumer credit. They offered higher compensation to lure away experienced employees. Consequently, the survivalist form of entrepreneurship became pervasive as many were forced to form micro-enterprises. These enterprises had limited life span and produced serial opportunistic ventures. Specifically, if a paint factory underperformed, the entrepreneur opened a paint shop; if that too failed, he may move into the real estate business.

In this scenario, it is obvious that new generations of entrepreneurs are rethinking the fundamentals of business strategy. For instance, they are solving manpower, supply chain, and distribution constraints by extending the training, recruitment, and value chain networks of the country's interiors. Thus, they are giving eyes to the previously invisible resources and opportunities. For instance, Aravind Eye Hospital, with a mission to provide quality healthcare to the needy, has grown to be the largest provider of eye care services in the world. In total, on average, it treats two free patients for every one fee paying patient. It charges only \$20 per eye surgery, compared to \$2000 in the US, and it has a success rate comparable to that in the US, while still generating 40% operating margins. (Express Healthcare, 2007).

A major factor sequence being discovered as a result of the deep-extending value chain networks is the hitherto invisible and unacknowledged power of women. For instance, in India, in late 1990s, about 6% of those in managerial positions were women; this percentage has now more than doubled. India has been dealing with two generations of gender issues. The first generation was defined by the lack of managerial opportunities for women, because of an assumption that they were only good for easy jobs. Furthermore, the second generation issue was the oppression of women using subtle barriers, even in the face of equal opportunity policies. These barriers include paucity of mentors and role models and the masculine policies such as working late nights and rigid hours. However, the introduction of flex work and other gender-sensitive policies have allowed women to enter in non-traditional jobs and sectors.

As a third generation issue, women's need for varying work-life balance over their careers has remained unaddressed. Insensitivity about this need has resulted in a growing new perception amongst the Indian men that the gender sensitization policies are over-hyped. It has made many Indian men uncomfortable about working with women bosses, feeling that they will be asked to do extra work while the women bosses will have it easy. Women are addressing this issue by becoming entrepreneurs—both within and outside of corporations. This parallels the development in the US, where the rate of women entrepreneurship is growing twice as fast as male entrepreneurship; and, the number of women business owners is now about the same as male business owners (National Association of Women Business Owners, 2007).

## WOMEN AS CULTURAL ENTREPRENEURS

In India, women are pioneers in “cultural entrepreneurs” -- women have always been the stewards of cultural knowledge, and are in charge of cultivating this knowledge amongst children and other family members. In the new India, women are also taking charge of culturally-embedded opportunities outside of the traditional male domains. And they are doing so in a diverse array of organizations: multinational firms, the large private sector, family businesses, their own start-ups, and micro-ventures.

Firstly, multinational firms in India, particularly the US ones, have set aggressive percentage goals for hiring, retaining, and advancing women as a means of addressing a rapidly expanding workforce requirement. All concerns about the business case for such initiatives have been put to rest by women like Indira Nooyi, ranked by Fortune as the world’s most powerful businesswomen in 2006. Non-cola beverages are culturally preferred over the cola beverages in India for health reasons, and sensing health conscious in the West, she co-authored Pepsi’s 21st century transformation by successfully moving it into non-cola beverages.

Secondly, the large private sector firms have been prodded by diverse teams of overseas clients to include women amongst their top teams. The Senior Vice President of Satyam – a top Hyderabad computer firm, notes, “it is a little awkward if you don't have a single woman leader, particularly when the customer might have 4-5 women in their group.”

Thirdly, as they face intensified competition, the family businesses are calling upon their daughters and daughter-in-laws to take charge of exploiting new opportunities using their culturally sensitive insights. For instance, Hero Group, a leader in the motorcycle business, called upon the family daughter, Shefali Munjal, to champion a new firm offering IT solutions to small and medium auto businesses; in only a short period of time, she successfully made this new firm a market leader. Not surprisingly, the group thereafter decided to diversify into the scooters segment; to accomplish this goal, the company developed Just4her women-only showrooms, women friendly product designs, and women supervisors and sales executives.

Fourthly, there are now stories of start up women entrepreneurs such as Kiran Mazumdar Shaw, who is counted among the Fortune’s top 50 powerful global businesswomen. In the 1970s, after obtaining her master’s degree in microbiology, Shaw wanted to be a master brewer following her father; however, was denied entry into the male bastion. She resolved to start Biocon, a biotech firm, in her garage with a budget of \$1000. Shaw brought in biotech research and clinical trials from overseas firms. Within time her firm achieved a first-day market cap of \$1 billion, making her the wealthiest woman of India.

Finally, women are leaders in micro ventures as well, focusing on leveraging key cultural resources such as the one exemplified by the rag picker story. Women account for more than 90% of all micro loans, and have more than 95% repayment rates.

As cultural entrepreneurs, women are guided by socially sensitive leadership. They focus on sustainability, as opposed to short term profits, and are acutely aware of the impact of their decisions

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on various participants in the cultural system, including suppliers, buyers, and employees, in addition to the members of their families and communities, and the environment.

## DISCUSSION & CONCLUSIONS

A paradigm of entrepreneurship, distinct from earlier generations' Japanese and Chinese paradigm, appears to be emerging in India. The Japanese model of entrepreneurship was based on the use of globally discarded materials and manpower; conversely, the Chinese model has been based on the cost-effective use of earlier generation's global machinery and methods. The emerging Indian model will be based on the making of the next generation's products and services accessible to the grassroots (Prahalad and Hammond, 2002), and creating new products and services by leveraging the intellectual properties of the grassroots.

We have specifically identified five major emerging forms of entrepreneurship, with their roots in the different work-cultural phases of India:

The five emerging forms taken together may help develop an inclusive program for entrepreneurship—one that would include first identifying the hitherto invisible deep-rooted knowledge of each local community through Grassroots Entrepreneurship. Second, it would connect the local knowledge with global technologies and/or the global markets, with Glocal Entrepreneurship. Third, with emerging Extension Entrepreneurship, it would develop extension-style networks to assemble and augment diverse pools of complementary local knowledge. Fourth, it would use global relational links and local knowledge pools to externalize cost-escalating activities offshore, and to internalize value-adding activities inshore, with Value-adding Entrepreneurship. Finally, this program would utilize Cultural Entrepreneurship to transform the heuristics that are impeding the entrepreneurial potential of diverse participants. As demonstrated by our study of women entrepreneurs, this comprehensive paradigm has the power to substantively revitalize gender roles, families, and communities.

Of course, it may not be feasible to spot deep-rooted knowledge pools in all communities as the patterns of poverty, terrorism, migration, and other exogenous factors may have acted to thin these pools. In such milieus, one may need to begin by first acknowledging the potential of diverse families and groups within a community (Cultural Entrepreneurship). Thereafter, the community may be involved in specific value-adding activities (Value-adding Entrepreneurship). Extension networks may then be formed to broaden and deepen the participation of the members of the community, through targeted support (Extension Entrepreneurship). Several communities across international boundaries may then be linked together for mutual exchange (Glocal Entrepreneurship). This will thicken the local knowledge pools and build the capacity of the hitherto isolated communities to solve their grassroots challenges (Grassroots Entrepreneurship).

<b>Table 1: Major Emerging Forms of Entrepreneurship in India</b>	
Form	Description
Grassroots entrepreneurship	where people in the street respond to the problems of the street with novel and innovative solutions; in creating such solutions, the people are able to make a living. They do so using their deep-rooted and specialized crafts knowledge.
Glocal entrepreneurship	where people transform their apparent resource deficiencies into their strength for competing alongside dominant participants in global markets and in localized niches. They do so using their trading acumen for combining local resources with global technologies or markets.
Extension entrepreneurship	where the challenge of cost escalation in reach and upgrading quality is resolved by forming extension-style networks with those who understand local environments, communities, and endowments.
Value-adding entrepreneurship	where activities best performed by global markets are externalized; the activities where the value may be added are diligently internalized.
Cultural entrepreneurship	where those hitherto engaged in the cultural roles –and excluded from the market roles – join in to translate their culturally-embedded knowledge into transformative solutions.

Is the above paradigm a viable one? The New India believes it is. In fact, Bagchi (2005), a leading Indian entrepreneur underlines the following lesson from the celebrated Indian entrepreneurs: “It is about ordinary people delivering extra-ordinary results.” More than a billion people worldwide live on less than \$1 a day. A little girl living among these people innocently asked the President of India in 2006 if there is a hope for her in the new India. The President of India had no answer. However, the analysis here can provide us with a path to get to a possible answer. It shows that first, we need an entrepreneurial vision for the development and exchange of culturally-embedded grassroots know-how. Second, we need an institutional framework that acknowledges the rights of communities to these grassroots intellectual properties.

In the next ten years, about 100 million youth will be starting their careers in India. Some will enter the corporate workforce—but many more will go on to start business ventures of their own. The emerging forms of entrepreneurship hold promise for this population to have meaningful and sustainable human rights tomorrow. Just like the disgraced soccer star in “Chak De India,” the new India has had to overcome many challenges. And, in rising up from adversity, India can serve as a global model for creating big visible entrepreneurial solutions out of invisible nothingness.

## REFERENCES

Anstey, V. (1952). *The Economic Development of India*. London: Longman, Green and Co.

- 
- Bagchi, S. (2005). *Lessons in Entrepreneurship from the Indian IT Industry*. Speech at LST 2005, September 24, Mumbai: National Entrepreneurship Network.
- Basu, I. (July 23, 2004). India's clinical trials and tribulations. *Asia Times Online*, Retrieved December 23, 2007 from atimes.com.
- Baumol, W. (1990). Entrepreneurship, Productive, Unproductive and Destructive. *Journal of Political Economy*, 98(5), 893-921.
- BBC News* (September 3, 2001). India's tractors plough into the US. Retrieved December 23, 2007 from news.bbc.co.uk
- Berna, J G. (1960). *Industrial Entrepreneurship in Madras State*. Bombay: Asia Publishing House.
- Bhatt, K. (August 2, 2007). Do Indians Lack A Flair For Entrepreneurship? Retrieved December 23, 2007 from kamlabhattshow.com.
- Cantillon, R. (1755). *Essay on the Nature of Trade in General (translated by H. Higgs. 1964 reprint)*. New York: A. M. Kelley.
- Chadha, G., (1986) *The State and Rural Economic Transformation; The Case of Punjab, 1950-85*. Delhi, Sage.
- Debroy B & Bhandari L (2007). Exclusive Growth—Inclusive Inequality. Working Paper, *Centre for Policy Research*, Delhi.
- Express Healthcare* (September, 2007). Aravind Eye Hospital, Madurai, Retrieved December 23, 2007 from expreshealthcaremgmt.com.
- Fox, R G. (1969). *From Zamindar to Ballot Box; Community Change in a North Indian Market Town*. Ithaca, NY: Cornell University Press.
- Godrej, A. B. (January 16, 2005). The Family Concern. *Business Today*, Retrieved December 23, 2007 from businesstoday.digitaltoday.in.
- Goering, L. (August 6, 2007). India nurturing homegrown ideas. *The Chicago Tribune*, Retrieved December 23, 2007 from chicagotribune.com
- Gupta, A. & Chandak, V. (2005). Agricultural Biotechnology in India: Ethics, Business and Politics. *International Journal of Biotechnology*, 7(1-3), 212-225.
- Gupta, V. (1998). *A Dynamic Model of Technological Growth: Diffusion of Japanese Investment Networks Overseas*. Unpublished Ph.D. Dissertation, The Wharton School, Philadelphia, PA: University of Pennsylvania.
- Gupta, V., MacMillan, I., & Surie, G. (2004). Entrepreneurial Leadership: Developing a Cross-Cultural Construct. *Journal of Business Venturing*, 19(3), 241-260.

- Gupta, V. & Wang, J. (2004). From corporate crisis to turnaround in East Asia: A study of China Huajing Electronics Group Corporation. *Asia Pacific Journal of Management*, 21, 213-233.
- Hazlehurst, L W (1966). *Entrepreneurship and the Merchant Castes in a Punjabi City*. Durham, NC: Duke University Commonwealth Studies Center.
- Hosseini, H. (1990). The Archaic, the Obsolete and the Mythical in Neoclassical Economics. *American Journal of Economics and Sociology*, 49 (1), 81-92
- James R (1962). The discrimination against women in Bombay textiles. *Industrial and Labor Relations Review*, 15, 209-20
- Kamath, K.V. (July 26, 2006). *ICICI's K.V. Kamath Shapes a Business Plan in Rural India's Uncertain Financial Terrain*. Retrieved December 23, 2007 from knowledge.wharton.upenn.edu.
- Knight, F (1921). *Risk, Uncertainty and Profit*. New York: Houghton Mifflin Company.
- Leeuwen, B. v. (2007). *Human Capital and Economic Growth in India, Indonesia, and Japan: A quantitative analysis, 1890-2000*. Unpublished Ph.D. Dissertation, Amsterdam, Netherlands: International Institute of Social History.
- Malhotra, R. & Patel, J. (2003). *History of Indian Science & Technology: Overview of the 20-Volume Series*. Retrieved December 23, 2007 from indianscience.org
- McClelland, D C (1961). *The Achieving Society*. New York: Van Norstrand Reinhold.
- McClelland, D C. & Winter, D.G. (1969). *Motivating Economic Achievement*. NY: Free Press.
- Morris. M.D. (1967). Values as an Obstacle to Economic Growth in South Asia: An Historical Survey. *The Journal of Economic History*, 27(4), 588-607.
- Morris M H (1998). *Entrepreneurial Intensity: Subtitle Sustainable Advantages for Individuals, Organizations, and Societies*. Verenigde Staten: Greenwood Publishing Group.
- Nafziger E W & Terrell, D. (1996). Entrepreneurial human capital and the long-run survival of firms in India. *World Development*, 24(4), 689-696.
- National Association of Women Business Owners* (2007). Retrieved December 23, 2007 from nawbo.org
- National Innovation Foundation* (2005). Finalists for the Asian Innovations Awards 2005. Retrieved December 23, 2007 from nifindia.org.
- Neelakantan, S. (September 30, 2005). Scouting for Homegrown Ingenuity. *The Chronicle for Higher Education*, 52(6), A 43.
- Nussbaum, B. (September 24, 2007). It's Time To Call One Laptop Per Child A Failure. *Business Week*, Retrieved December 23, 2007 from businessweek.com.



- 
- Oonk, G. (2007). Communal Business Families in India, 1850-1947: Three Patterns in the Emergence of Indigenous Industrialists. 48-66, In *Culturally-Sensitive Models of Family Business in Southern Asia: A Compendium using the GLOBE Paradigm*. Eds. Gupta, V., Levenburg, N., Moore, L., Motwani, J., & Schwarz T., Hyderabad: ICFAI University Press.
- Prahalad, C.K. and Hammond, A. (2002). Serving the World's Poor Profitably. *Harvard Business Review*, 80(9), 48-58.
- Press Trust of India* (September 21, 2007). Young Indians are happiest in the world, see work as top priority. Retrieved December 23, 2007 from ptinews.com.
- Ranjan. A. (2006). *India Technology 2.0: The Charge of the Indian Web 2.0 brigade*. September 09. Retrieved December 23, 2007 from podtech.net.
- Rutten M. (2006). The Study of entrepreneurship in India: In need of a comparative Perspective. In *The Oxford India Companion to Sociology and Social Anthropology*, eds. Veena Das, New Delhi: Oxford University Press.
- Schumpeter, J A (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.
- Shivani, S., Mukherjee, S.K., & Saran, R. (2006). Socio-Cultural Influences on Indian Entrepreneurs: The Need for Appropriate Structural Interventions. *Journal of Asian Economics*, 17(1), 5-13.
- Sinha, V. (September 17, 2007). PE deals hit record \$10.8 bn in 8 months. *The Economic Times*, Retrieved December 23, 2007 from economictimes.com
- Streefkerk, H (1985). *Industrial Transition in Rural India: Artisans, Traders and Tribals in South Gujarat*. Bombay: Sangam Books.
- The US Environmental Protection Agency (1999). *Process Mapping Approach*. Retrieved December 23, 2007 from <http://www.epa.gov/dfepubs/iems/tools/process.pdf>
- Turner, P. (December 23, 2007). *Entrepreneurship: Riding growth in India and China*. knowledge@Insead.com, Retrieved December 23, 2007 from knowledge.insead.edu.
- Varaprasad (2001). Personal Interview with the Founder and the Managing Director. *GLOBE CEO Project*. Hyderabad: Dhruva College of Management.
- Veen, J. H. Van der (1976). Commercial Orientation of Industrial entrepreneurs in India. *Economic and Political Weekly*, 11(35), m91 – M94.
- Weber M. (1905). *The Protestant Ethic and the Spirit of Capitalism (Translated by T. Parsons. 1984 reprint)*. London: Unwin.
- World Resources Institute (2007). *Conserve New Delhi*. Retrieved December 23, 2007 from <http://www.youtube.com/watch?v=ByRBJuCHZSc>