

KNOWLEDGE ENTREPRENEURSHIP IN INDIA

Dharm Bir Singh* & Mohita Maggon**

ABSTRACT

Entrepreneurship is the professional application of knowledge, skills and competencies of monetizing a new idea by an individual or an organization. Knowledge entrepreneurship is the ability to recognize or create an opportunity and take action aimed at realizing the innovative knowledge in practice or product. Environmental awareness, attitude towards risk, entrepreneuring, new project support and communication are some of the factors affecting Knowledge Entrepreneurship. Status of knowledge entrepreneurship in India is less researched area and therefore conclusive findings are not there to illustrate the point. However the topic has gained sufficient interest in western countries particularly USA and Europe. Some useful research has been done on “Knowledge Entrepreneurship”. The theme of the entrepreneurial university has received lot of controversy even in USA. Some scholars and professional management practitioners stressed that it could lead to higher efficiency and higher competitiveness essential in the surges of the globalized education market. The objective of this paper is to highlight some key aspects and concepts of knowledge entrepreneurship.

1. WHY ENTREPRENEURSHIP?

Entrepreneurship means different things to different people; Peter Marris considers entrepreneurship as ‘an ability to assemble or reassemble from what is available into a new kind of activity’. Conceptually and in practice, the term hints of no stereotypical model. Yet its very etymology – derived from the French ‘**entreprendre**’ which literally means, ‘to undertake’ – indicates the minimum characteristics of an entrepreneur. From the perspective of economic functions, three crucial characteristics of entrepreneurial activity are: risk taking, innovation and venturing into new business activities for profit. We can define Entrepreneurship as follows:

‘Entrepreneurship is the professional application of knowledge, skills and competencies and/or of monetizing a new idea, by an individual or a set of people by launching an enterprise de novo or diversifying from an existing one (distinct from seeking self employment as in a profession or trade), thus to pursue growth while generating wealth, employment and social good’.

Knowledge entrepreneurship describes “the ability to recognize or create an opportunity and take action aimed at realizing the innovative knowledge practice or product.” Knowledge entrepreneurship is different from ‘traditional’ economic entrepreneurship in later it does not aim at the realization of monetary profit, but focuses on opportunities with the goal to

* Director, GNIT, Greater NOIDA, Uttar Pradesh.

**Faculty (Management Studies), NIET, Greater NOIDA, Uttar Pradesh.

improve the production (research) and throughput of knowledge (as in personal transformation (Harvey & Knight, 1996)), rather than to maximize monetary profit. It has been argued that knowledge entrepreneurship is the most suitable form of entrepreneurship for not-for-profit educators, researchers and educational institutions.

2. The Knowledge Entrepreneurship Model

“entrepreneurial” characteristic can not only be applied to individuals, but to organizations as social systems, as well as to projects (Clark, 2004). However, in

contrast to Clark, the dynamic process of vision, and change aspects of entrepreneurship (Kuratko, 2006; Schumpeter & Opie, 1934), also known as entrepreneuring are stressed. Thus entrepreneurship is the act of adapting new ways of doing things in a real context, or more specifically “the essential act of entrepreneurship is new entry” (Lumpkin & Dess, 1996). Or as Brown puts it: “Entrepreneurship is a process of exploiting opportunities that exist in the environment or that are created through innovation in an attempt to create value” (Brown & Ulijn, 2004)

Figure 1: Model of knowledge entrepreneurship. (McDonald 2002)



(Kanter, 1983) stresses that entrepreneurs and entrepreneurial organizations “always operate at the edge of their competence, focusing more on the resources and attention on what they do not yet know (e.g. investment on R&D) than controlling what they already know. They measure themselves not by the standards of the past (how far they have come) but by visions of the future (how far they have yet to go). And they do not allow

the past to serve as a restraint on the future; the mere fact that something has not worked in the past does not mean that it cannot be made to work in the future. And the mere fact that something which has worked in the past does not mean at all that it should remain.”. The following specific set of attractors have been proposed by Senge (2007) to directly influence the knowledge entrepreneurship ability:

1. Environmental Awareness - describes with what practices and with what intensity the organization gathers information about its external and internal environment. The importance of this practice for the establishment of an entrepreneurial organization was also recognized by Cornwall and Perlman (1990).
2. Attitude Towards the Risk - It is inherent in the pursuit of all innovation is captured under the concept of risk tolerance.
3. Entrepreneurship - This ability is strongly related to strategic thinking and planning, describes its culture of envisioning and scouting new ideas.
4. New project Support - refers to the degree to which new initiatives are institutionalized as a means of institutional development. Thereby the monetary means, as well as managerial attention given to experimental projects is looked at.
5. Communication - is the last variable taken into consideration as a major influence for knowledge entrepreneurship. The organizational style of communication and the richness of communication channels are evaluated here.

Furthermore the **organizational condition**, as described through its setting and its current **leadership** and its **organizational culture** are set to determine the general possibilities for knowledge entrepreneurship to occur. Thereby the organizational setting represents the basic factual being of the organization; its size, type of institution, business model, history and historic approach to innovation. Under leadership, the style and values embraced by the current top decision makers, as well as the governance structure itself is

evaluated. The concept of organizational culture is central to the understanding of the enabling or discouraging conditions of the organization, as it adapts its attitude towards organizational learning and whether values like innovativeness, competitiveness, entrepreneurship etc. are embraced or rejected.

3. Knowledge Entrepreneurship: Literature Review

A variety of authors have dealt with topics related to knowledge entrepreneurship, but, only the few works that have been identified to have used the concrete term 'knowledge entrepreneur' (and derivatives) are reviewed. Most of them have only a broad understanding of the concept and are thus only cited to give a context. The Ph.D. research conducted by McDonald (2002) seems to be the first to have proposed and tested a conceptualization of the term as defined here. The literature review is given as below:

1. The Demos Think-Tank published a report entitled: "Surfing the long wave: Knowledge entrepreneurship in Britain" (Leadbetter & Oakley, 2001). The Demos report is meant to influence policy planning in the UK. Even though there is no specific definition of the term given, they use knowledge entrepreneurship to indicate that the entrepreneur is starting an enterprise that is based on knowledge work.
2. Colin Coulson-Thomas a Professor and Consultant promoted his version of the concept in various articles and workshops as well as in the book "The knowledge entrepreneur" (Coulson-Thomas, 2003). He describes knowledge-based opportunities as distinct from (classical) resource based opportunities; unfortunately there is no

- clear definition of a knowledge based opportunity which makes it difficult to demarcate, as all opportunities except for purely spontaneous action or intuition based opportunities are somehow knowledge based. He also puts forward a list of eleven things a knowledge entrepreneur needs to understand. It is a very extensive list starting with the ability to acquire, develop, share, manage and exploit information, knowledge and understanding, and related support tools, and it ends with the ability to lead and manage knowledge workers, network organizations and virtual teams.
3. Stan Skrzyszewski (2006) wrote about knowledge entrepreneurship in the librarian context in his book titled 'Knowledge Entrepreneur' that was originally meant to be entitled "The Entrepreneurial Librarian". He defines: "A knowledge entrepreneur is someone who is skilled at creating and using intellectual assets for the development of new ventures or services that will lead to personal and community wealth creation or to improved and enhanced services. The knowledge entrepreneur must have sufficient personal knowledge capital to be able to create value and/or wealth through the use of that knowledge capital"
 4. McDonald (2002), has conducted his PhD research entitled "Knowledge entrepreneurship: Linking organizational learning and innovation" about a comparison of the conditions at hospitals regarding their approaches to knowledge sharing and exploration and the entry of innovations. The work is assessed as the first to develop the distinct characteristics of knowledge entrepreneurship.
 5. Jennifer Rowley (2000) in her paper "From learning organization to knowledge" deals with how organizational learning can be meaningfully conceptualized. Thereby she stresses learning and the usefulness of the knowledge codified. In this context she elaborates on the concept of the knowledge entrepreneur. She writes knowledge entrepreneurship serves to "build bridges between people and systems".
 6. Bouchikhi & Kimberly (2001) published a short paper titled "It's difficult to innovate: The death of the tenured professor and the birth of the knowledge entrepreneur" in the Human Relations journal. The paper describes a near future where knowledge entrepreneurs are "working under a diversity of employment contracts and attachments". The authors are dealing specifically with business and management education, for which they are painting a profoundly transformed scenario as they are "break[in] out of their institutional straight jackets and redefine their roles in the production of knowledge". Therefore "knowledge entrepreneurs will be hired and compensated based on their ability to imagine, execute, and use of the results of research to develop original educational products".

4. Knowledge Entrepreneurship in India

Entrepreneurship has been 'embedded in the Indian genius and is a part of its tradition'(R Gopalakrishnan). To quote the renowned economist, T.N. Srinivasan,

'India has been an entrepreneurial society...we had the entrepreneurial skill but suppressed it for too long a time... and now it is thriving.'

The entrepreneurial spirit is an ongoing characteristic of India's history, particularly visible in a number of communities engaged primarily in trading. Traditionally, the Entrepreneurship of such communities is facilitated principally by the successful use of informal 'entrepreneurial ecosystems' and interdependent business networks. Further, there is also a rich tradition within the Indian diaspora, spanning the past several hundred years, whose spirit of enterprise is legion.

Knowledge Entrepreneurship in India occurs in 'far more encompassing and far reaching ways than in developed countries', and could therefore be far more complex, 'for there is much more that needs to be done'.

Commentators today celebrate the ubiquitous Indian attitude of '**Jugaad**' (a Hindi word roughly translated as 'creative improvisation...a tool to somehow find a solution based on a refusal to accept defeat, and calling on initiative, quick thinking, cunning and resolve...to quickly fulfill market demands at the lowest possible prices' as an entrepreneurial trait that has been as much a part of everyday Indian living as its rich tradition of philosophy and speculation.

The salience of Knowledge Entrepreneurship in India has intensified in recent times, particularly with the rise in knowledge-intensive services. New entrepreneurs who do not belong to traditional business communities have begun to emerge in large numbers.

5. The Professional Institute as Knowledge Entrepreneur

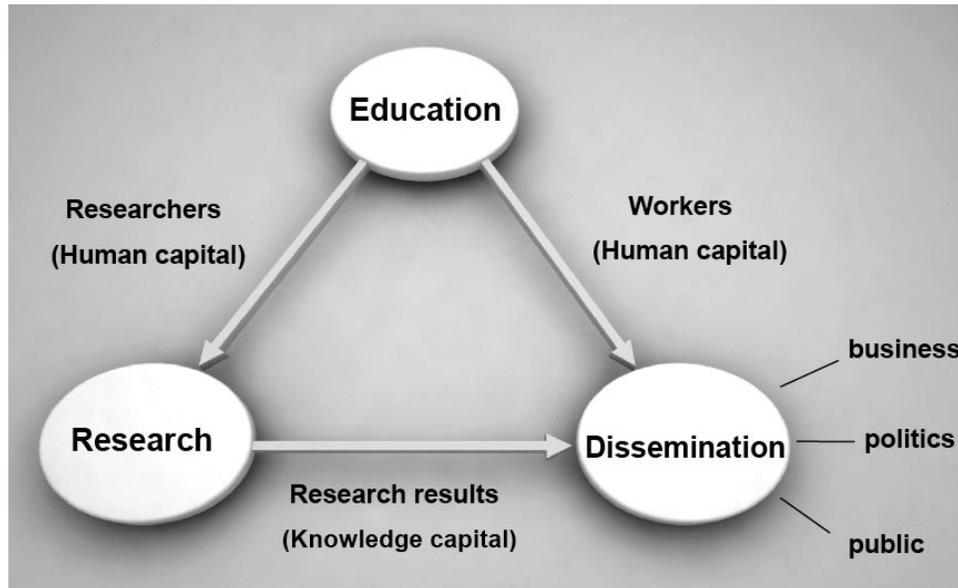
The concept of the professional institutes as a knowledge entrepreneur is believed to be instrumental in dealing with

a central issue present in the current discourse on professional education reforms. What is the role of the administration in Professional Institutes? Furthermore the Professional Institutes as knowledge entrepreneur paradigm can contribute one proposition for the role of the Professional Institutes in the 21st century and its knowledge society.

At the heart of knowledge entrepreneurship is the production of knowledge. It describes the ability to identify and appropriate knowledge and other innovations which lead to a higher performance in knowledge production.

The Professional Institute should act as an intrinsically entrepreneurial institution. Professional Institutes constantly create and creatively destruct knowledge as a constant circulation. Firstly Professional Institutes create knowledge through research. In the second step that knowledge is de-constructed through its dissemination to the students and the industry. This process is immanently entrepreneurial because some of the students become the researchers of tomorrow, who then develop new knowledge through the creative destruction of the known. Thereby the competitive advantage of that old knowledge is lost and new value has been created in form of the research results. In other words, a constant creation of human capital (through education) and knowledge capital (through research) which flows towards the third mission and is there invested for the fostering of business, governmental and societal causes. This process has been interpreted and projected onto the three missions of the modern Professional Institutes (Figure 1). It became part of the 'originating theory'.

Figure 2 – The Professional Institutes as Knowledge Entrepreneur (Fuller, 2006)



6. The Entrepreneurial Professional Institutes Discourse

Professional Institutes are a very special type of organization, because they are neither part of the state, nor are they part of the economy, while they play dual role of provider of knowledge and creator of human capital.

Even though discussion about adopting the Professional Institutes to modern capitalism and management has started as early as 1966 (Rourke & Brooks, 1966), it was Burton Clark, who, with the intention to show a way for institutional autonomy, presented and coined the concept of the entrepreneurial university in the late 1990's. Clark conducted a series of case studies (Clark, 1998), which led him to propose a set of conditions which in his view allowed for institutional autonomy and well-being. The theme of the entrepreneurial university was received very controversially. Some scholars and many professional management practitioners welcomed his propositions and stressed that they lead to higher

efficiency, higher competitiveness both assessed essential in the surges of the globalized education market. Other scholars, mainly with a European, and/or humanities background, portray the development towards an entrepreneurial Professional Institutes as a sell-out of academic and scientific values, practices, and services to the capitalist economy.

7. Research Position: The Importance of Professional Institutes as Public Institutions

As described in the section above, some authors/ research scholars perceive universities and professional institutes as businesses and education as a market. Many of the industrialized nations and foremost the United States support this view in the current WTO negotiations education is negotiated to be included alongside other services like telecommunication and logistics. While there can be no doubt that universities and professional institutes comprise many aspects of economic organizations – they have budgets, they employ people who receive salaries and make careers, they



have students who receive education and scientists who produce research – universities have so far always been setup as not-for-profit organizations. There are two fundamental arguments why universities and education in general should be a public good and not be treated like e.g. banking services.

1. When universities become integrated in the market logic they lose their academic autonomy and become subordinate to the funding sources. Two results are foreseeable:

- a. As more and more applied research is conducted the question of intellectual property and subsequently of accessibility of the results is likely to be controversial, as funding bodies will hedge their interests. The public availability of knowledge is a key precondition for competition (which fosters development and affordability) as well as for the participation of small and medium sized business in the market as they can not fund research.
- b. Notably the opposite of competitive development is also the result of privatization of research. Because scientists today operate on the basis that everybody has (more or less) access to the latest knowledge, they all compete at this knowledge frontier. In comparison, when knowledge is secured as intellectual property only the owner can push development, or the owner can freeze further development.
- c. Researchers will deal with subjects related to the funding source and will not tend to be as critical as they would be without their financial support. This issue begins with the selection of basis on which organizations and aspects of them are selected for review and training which results in the concrete

conditioning of product spread. Two concrete examples are: Funding provided by Oracle to provide database management courses – naturally dealing with the administration of their solutions. Or the free provision of Microsoft Office Suites in schools and universities, which strongly favors these products in the market because users have their competence here.

2. The second point deals with changes related to the role of the professional institutes as social institution. Issues related with the loss of standardization, access to faculty and elitism as well as the neglect of citizen education (Delanty, 2001) have to be raised here:

- a. Libertarians traditionally argue for the free market based allocation of goods and services as the most effective and efficient mode creating wealth and, so the argument, wealthy societies have means to secure justice and security. It is likely that a free educational market will result in a few (pricey) universities which will provide excellent education while the mass of people will either access universities with a lower standard than today or, perhaps more likely, will not have a tertiary education at all. The result of this scenario would be an amplification of the currently already increasing social divide with the finality of the distinction of an educated middle class, with the known consequences for the democratic system (populism and radicalization). If an inclusive knowledge society is the objective, education as a public good is one of the cornerstones.
- b. A last trend that is already manifesting is the increasing bias towards vocational training and the concomitant neglect of citizenship

education. Traditionally, the professional institutes were not seen as a place for vocational skills training but rather to transform its participants into educated humans, capable of holding and constructing a healthy society. This role of the professional institutes is already in decline and the commercialization of education most likely encourages this trend.

In conclusion, it is argued that the transformation of higher and professional education institutions to embrace free market conditions will likely cause (a) that the public availability of knowledge will decrease, (b) that companies will exploit the opportunity to use universities as (external) training facilities and to spread the use of their products, (c) that a competition amongst educational institutions will lead to high differentiation, while a few very excellent but very costly institutions will stand against a grand mass of low performing facilities for the masses, and last but not least (d) that the role of the professional institutes to review and critique issues of interest to society and to educate and foster its students to participate in public discourse will be diminished. Hence it is not rational to end the idea of the universities as a public institution but rather increase state funding to make it flourish as the motor of the knowledge society. As one possible remedy, the concept of knowledge entrepreneurship is proposed as suitable paradigm to be applied in the professional institutes and educational sector.

REFERENCES

- **Bouchikhi, H. H., & Kimberly, J. J. (2001). 'It's Difficult to Innovate': The Death of the Tenured Professor and the Birth of the Knowledge Entrepreneur. *Human Relations*, 54(1), 77-84**
- **Brown, T. E., & Ulijn, J. M. (2004). *Innovation, entrepreneurship and culture : the interaction between technology, progress and economic growth*. Cheltenham, UK ; Northampton, Mass., USA: E. Elgar Pub.**
- **Clark, B. R. (1998). *Creating entrepreneurial universities : organizational pathways of transformation (1st ed.)*. Oxford ; New York: Published for the IAU Press by Pergamon Press.**
- **Cornwall, J. R., & Perlman, B. (1990). *Organizational entrepreneurship*. Homewood, Ill.: Irwin.**
- **Coulson-Thomas, C. (2003). *The Knowledge Entrepreneur: How Your Business Can Create, Manage and Profit from Intellectual Capital*: Kogan Page Ltd.**
- **Harvey, L., & Knight, P. (1996). *Transforming higher education*. Buckingham [England]; Bristol, Pa.: Society for Research into Higher Education : Open University Press.**
- **Kanter, R. M. (1983). *The change masters : innovations for productivity in the American corporation*. New York: Simon and Schuster.**
- **Kuratko, D. F. (2006). *Entrepreneurship : theory, process, practice (7th ed.)*. Mason, OH: Thomson South-Western.**
- **Leadbetter, C., & Oakley, K. (2001). *Surfing the Long Wave: Knowledge Entrepreneurship in Britain: Demos*.**
- **Lumpkin, G. T., & Dess, G. G. (1996). *Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance*. *Academy of Management Review*, 21(1), 135-172**
- **Marris, Peter (1968) 'The Social Barriers of African Entrepreneurship', *Journal of Developing Societies***
- **Rowley, J. (2000). *From learning organisation to knowledge entrepreneur*. *Journal of Knowledge Management*, 4(1), 7-15**
- **Senges (2007). *Knowledge entrepreneurship in universities: Practice and strategy in the case of internet based innovation appropriation***
- **Skrzeszewski, S. (2006). *The Knowledge Entrepreneur*: Scarecrow Press.**
- **Srinivasan, T N, *The Hindu, Business Line*, April 23, 2007.**