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Corporate Entrepreneurship: How?

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The competitive landscape in many industries today is marked by intense competition among existing players and the emergence of many focused competitors targeting specific segments of the market. In addition, the macro environment is characterised by rapid technological progress in many fields rendering current solutions to customer problems obsolete, explosive industrial growth in some sectors, and recession-like conditions in others leading to industry-wide restructuring. In this scenario, any company that is not continually developing, acquiring, and adapting to new technological advances and to the changing business environment, may be making, in the words of Merrifield (1993), the unintentional strategic decision to be out of business within a few years.

These changes have highlighted the need for companies to become more entrepreneurial (Dess, Lumpkin and McGee, 1999; Brazel and Herbert, 1999) and companies around the globe are indeed attempting to foster entrepreneurship so that business opportunities are perceived and exploited (Sathe, 1988; Russell, 1999). Many companies have succeeded in their endeavour to foster entrepreneurship and have developed new approaches to innovate and to create new businesses and achieve profitable growth. Change, innovation, and entrepreneurship describe what such successful companies do to compete. (Zahra, 1991; Zahra, Kuratko and Jennings, 1999, Christensen and Raynor, 2003). At the same time, a larger question looming in the challenge of sustaining such changes, both in growing and mature organisations, particularly when the charismatic leadership that inspired the change disappears from the scene. For, while existing capabilities provide the basis for the current performance of a company, without renewal, these capabilities are likely to constrain future ability to compete; this is an organizational paradox (Leonard-Barton, 1992). Institutionalising entrepreneurship is not at all easy, though everyone wishes to have it always.

What is Corporate Entrepreneurship

The essence of entrepreneurship is innovation (Schumpeter, 1934; Drucker, 1985) leading to wealth creation (Khandwalla, 1987) and sustained growth of corporations (Miller, 1983; Naman and Selvin, 1993; Lumpkin and Dess 1996; Ray and Ramachandran 1996). The motive for entrepreneurship lies in the urge to identify sources of existing and emerging customer dissatisfaction and developing solutions to eliminate them (Ramachandran, 2003).

There are three main phases in the entrepreneurial process: the perception and commitment to opportunity, the pursuit of opportunity, and de-commitment (Burgelman and Sayles 1989).

The first of these involving the process of identifying an opportunity is the toughest of all. Recent years have witnessed major research interest in opportunity identification (Shane 2004; Timmons 1999; Shane and Venkatraman, 2000), but except for a few frameworks developed by Kim and Manborgne (2003), Ramachandran (2003) and Shane (2004), the board is essentially blank.

Corporate Entrepreneurship (CE) is the process by which individuals inside organisations pursue opportunities without regard to the resources they currently control (Stevenson, Roberts, and Grousbeck, 1999). An entrepreneurial manager links up discrete pieces of new technical knowledge that would provide a solution to a customer problem and matches this technical capability with the satisfaction of a market and garners resources and skills needed to take the venture to the next stage. This process leads to the birth of new businesses and to the transformation of companies through a renewal of their key ideas (Guth and Ginsberg, 1990).

Within the realm of existing firms, CE encompasses three types of phenomena that may or may not be interrelated (Sharma and Chrisman, 1999). These are:

i) The birth of new businesses within an existing firm

ii) The transformation of existing firms through the renewal or reshaping of the key ideas on which they are built, and

iii) Innovation

Researchers have used a variety of labels to describe the first two CE phenomena. The creation of new businesses by firms through this process has been called internal corporate venturing (Zajac, Golden and Shortell, 1991), intrapreneurship (Pinchot, 1985) and so on. The process of transformation of corporations through a renewal of their key ideas has been called strategic renewal (Guth and Ginsberg, 1990), strategic change, revival and transformation (Schendel, 1990), organisation renewal (Stopford and Baden-Fuller, 1994) and so on. Synthesising these views, Sharma and Chrisman (1999), defines corporate entrepreneurship as the process whereby an individual or a group of individuals, in association with an existing organisation, create a new organisation or instigate renewal or innovation within that organisation.

Corporate entrepreneurial efforts that lead to the creation of new business organisations within the corporate organisation are called corporate venturing. They may follow from or lead to innovations that exploit new markets, or new product offerings, or both. If corporate venturing activities result in the creation of semi-autonomous or autonomous organisational entities that reside outside the existing organisational domain, it is called External Corporate Venturing. If corporate venturing activities result in the creation of organisational entities that reside within an existing organisational domain it is called Internal Corporate Venturing.

Strategic Renewal refers to the corporate entrepreneurial efforts that result in significant changes in an organisation's business or corporate level strategy or structure. These changes alter pre-existing relationships within the organisation or between the organisation and its external environment and in most cases will involve some sort of innovation. Renewal activities reside within an existing organisation and are not treated as new businesses by the organisation.

As is evident from the above, innovation is at the heart of entrepreneurship (Stevenson and Gumpert, 1985) and refers to the introduction of a new product, process, technology, system, technique, resource, or capability to the firm or its markets (Covin and Miles, 1999), either independently or as part of an organisational rejuvenation process.

Benefits of Corporate Entrepreneurship

CE can make a significant difference to a company's ability to compete (Zahra, Kuratko, and Jennings, 1999). It can be used to improve competitive positioning and transform corporations, their markets, and industries when opportunities for value-creating innovations are developed and exploited (Miller, 1983; Khandwalla, 1987; Naman and Slevin, 1993; Lumpkin and Dess, 1996). A key benefit of CE may be to push companies to employ a range of strategies, often in unique combinations (Dess, Lumpkin, and McGee, 1999). By doing so, companies build layers of advantage by combining distinctive bases for competitive superiority (Hamel and Prahalad, 1989).

There have been many studies to substantiate the above claims. CE can improve a company's growth and profitability (Kanter, 1985; Brazeal, 1993; Zahra, 1991). The empirical evidence that CE improves performance by increasing the company's proactiveness and willingness to take risks by pioneering the development of new products, processes, and services as presented in Kuratko, Montagno, and Hornsby (1990), and Lumpkin and Dess (1996), has been termed 'compelling' by Zahra, Nielson, and Bogner (1999). A longitudinal study by Zahra and Covin (1995) provides the best evidence of a strong CE-Performance relationship. Their study examined the longitudinal impact of corporate entrepreneurship on a financial performance index composed of both growth and profitability indicators. Using data from three separate samples and a total of 108 companies, they identified a positive and strengthening linkage between CE and subsequent financial performance. In recent years, academic and practioner interest has shifted more to the process of nurturing CE, since the debate has moved from whether or not CE benefits to the ways and means of maximising benefits. Also, it is a waste to test the level of entrepreneurship in people using psychometric tests;

instead, organisations should spend their energies in encouraging people who have shown sparks of entrepreneurial qualities in corporate or other contexts.

Fostering Entrepreneurship - How

Most organisations lose their entrepreneurial spirit once they cross the start up phase. The transition from an entrepreneurial growth company to a "well-managed" business is usually accompanied by a decreasing ability to identify and pursue opportunities. Structure and systems give place to initiatives and excitement. Organisations become moronic in the process. Some of the practices that contribute to the successful management of resources inhibit the pursuit of opportunity (Stevenson and Jarillo-Mossi, 1986). The assumptions about strategic and operational environments of the firm have been undergoing rapid changes and the mix of organisational resources necessary to keep pace with them will be different. Most organisations do not realize when and what changes are required and how to accomplish them, especially when the managers do not feel compelled. The whole organisation should constantly breathe an air of innovation and excitement.

This suggests the need to develop an enabling economic and political ecostructure that does not impede small, and large-scale redeployment of resources in new ways, towards creative ends (Brazeal and Herbert, 1999). Therefore, firms must create systems that focus the attention of individual participants on innovation as an important and expected activity and direct group and firm behaviours towards entrepreneurial ends (Russell, 1999).

An entrepreneurial organisation will institutionalise practices that establish an organisational environment in which innovation is considered an accepted and appropriate response to organisational problems (Russell, 1999). These practices build commitment and enthusiasm by creating a shared sense a purpose and meaning in the organisation (Roberts, 1984). This ensures that all the firm's technical and business skills are brought to bear to achieve its purpose (Anderson, 1992). A culture that encourages creativity and creates a passion for innovation in the firm develops. Culture is an important determinant influencing individuals' willingness to accept entrepreneurial change (Floyd and Woldridge, 1999) and as Barney (1986, 1991) emphasises organisational culture can be a source of sustained competitive advantage.

This is precisely the challenge. In essence, organisations must learn to think and act in a dynamic equilibrium. This is not easy, but organisations have a range of options to choose from depending on the size, competition and industry structure to achieve entrepreneurial excellence. At one end of this option spectrum lies focused initiatives covering specific parts of the organisation and at the other, initiatives that attempt to breathe entrepreneurship across the organisation. The former is called 'Surface Entrepreneurship' and the latter 'Deep Entrepreneurship' (Sathe, 1988).

Focused Entrepreneurship

Organisations that are "mature" in a number of aspects such as product-market strategy, people attitudes, and structure and control systems would most often not like to upset their existing applecart in any way, while exploring new growth avenues. Since their ability to identify and exploit opportunities has declined, they attempt to promote entrepreneurship by mandating it as a corporate objective or, in some cases, by "injecting" it into the organisation by appointing one or more "proven" independent entrepreneurs from within the organisation as a corporate entrepreneur team. They may have shown some of the attributes of entrepreneurship such as initiative, innovativeness and change leadership. They develop new products / services and often lead their implementation, insulated from the restrictive approach of the rest of the organisation. Such attempts are often accompanied by the use of steep financial incentives to match the potential rewards of independent entrepreneurship.

In this process, the entire organisation does not become entrepreneurial, and the existing product-market strategy is not threatened but it is able to add new products / services to its mature portfolio. This is a low risk approach when changing the "chemistry" of an organisation is not easy. Also, this can be a prelude to undertaking an organisation wide initiative that changes the "chemistry" of the firm. However, this approach is not devoid of issues.

Challenges with Focused Initiatives

Entrepreneurship needs passionate managers who are excited to champion entrepreneurial initiatives. Identification of such individuals may not always be automatic. Promoting entrepreneurship through a mandating process results in the appointment of managers into the role of an entrepreneur, a role for which they may be unsuited. Such managers may follow a mechanical or superficial search process in pursuit of presumed opportunities. While they may be good at preparing an attractive business plan, quality of the basic idea itself may be questionable, if the team lacks entrepreneurial qualities. This is particularly so if the environmental characteristics are not conducive (Russell, 1999). Some organisations have gone to the extent of literally recruiting start up entrepreneurs. However, independent entrepreneurs appointed to the role of corporate entrepreneurs leads to difficulties, as they neither have the patience nor the experience to navigate the political and cultural realities of organisations. It is useful to remember that the perception and exploitation of opportunities for innovation goes beyond the efforts of one key manager (Miller, 1983). In short, it is difficult to make such "injections" of entrepreneurship sustained.

While use of steep financial incentives creates perceptions of inequity that could even result in the sabotage of the entrepreneurial initiative, use of existing financial control systems to monitor entrepreneurial ventures leads to frequent intervention and misguided direction during the progress of these ventures (Sathe, 1989). The root cause of these difficulties is the use of the classical approach of setting objectives, motivating people to accomplish them, and monitoring and controlling such accomplishment. This approach works for activities for which expected results and the process to achieve them are well known. By its very nature, entrepreneurial activity seldom fits this mould.

However, there are evidences of variations of this approach existing that actually encourage small experimental initiatives by managers, who always demonstrate entrepreneurial qualities such as initiatives, idea generation and networking. Stopford and Baden-Fuller (1994) found that it is possible for companies to shed past behaviours and adopt policies fostering entrepreneurship and accumulate innovative resource bundles that provide a platform on which industry leadership can be built. The path to be adopted begins with individual entrepreneurship by some key managers, which broadens into renewal of the entire organisation. The resources and capabilities created in the process of renewal provide a platform from which far-reaching industry change can be built.

It is pertinent to discuss some parallel organisational forms such as new venture divisions and skunk works that companies have used to stimulate entrepreneurial behaviour. We agree with the view of Floyd and Wooldridge (1999), derived from their observation of one for these forms in practice, that while these parallel forms may stimulate initiative, by their very nature, the design erects barriers between the on-going organisation and the renewal process. This makes it more difficult to access and leverage the existing capability base and to integrate new initiatives back into operational activity. The mixed results obtained by Hindustan Lever Limited, under its Project Millennium initiative in the beginning of this century, is a case in point.

Organisationwide Entrepreneurship

At the other end of the spectrum comes organisations that wholeheartedly support entrepreneurial initiatives of any kind, minor such as a small improvement to products or processes to totally unrelated diversification ideas. Most often such companies start driving entrepreneurial initiatives while the organisation is still young without the rigidities of a mature organisation. Of course, that does not mean that a mature organisation cannot imbibe the spirit of entrepreneurship right across the organisation. Circumstances make everyone flexible, including older people and organisations.

Entrepreneurship in such companies is a shared value and drives managerial behaviour in conscious and subconscious ways. Sathe (1988) characterised such entrepreneurship as “deep entrepreneurship” and identified many of its key attributes, which have been described below. Over the years, variations of the same have appeared, but the essential features have remained the same.

Socialised into an entrepreneurial culture, managers who are so inclined seek out opportunities to make their mark. Those who succeed move into bigger jobs where they undertake such activities at a larger scale. Opportunities are perceived and pursued by such entrepreneurs on the basis of an in-depth knowledge of the industry and personal conviction, rather than through superficial analysis and mechanical selection.

Money is neither offered nor seen as a primary motivator. Entrepreneurial contributions are rewarded with recognition through playing up and promoting company's success stories and champions' enhanced status, and the opportunity to engage in entrepreneurial activity on a bigger scale.   For instance, very often, idea champions get opportunity to drive the new project into a new business division. Moreover, failure is considered normal for such activity. Mangers, therefore, perceive low personal / career risk. Further, when failure occurs, the focus is on problem solving and learning from failure rather than on apportioning blame.

Although companies displaying the pattern of deep entrepreneurship use state of the art analytical techniques, their risk-taking philosophy is rooted not in these techniques or their judgement but in their willingness to bet on entrepreneurs. When faced with difficult decisions regarding opportunities, it is the conviction of the person engaged in entrepreneurial activity that carries the day.

These companies normally have excellent information and control systems, and top management keep themselves informed of the progress of each venture; great emphasis is placed on the quality and integrity of information supplied. Ventures are frequently reviewed with the purpose of challenging the entrepreneur's thinking to help uncover blind spots, and not to issue edicts about the venture. Along with this, a certain amount of insubordination is tolerated provided it is within reasonable bounds; results indicate it is justified in results. Management is also very careful in cutting budgets and believes that such cuts can both help or harm a venture.

One of the most difficult decisions in such ventures is to decide when to pull the plug and bury the project or at least send to cold storage faced with uncertainties. In reality, most projects do not show sudden unattractiveness; since the quality of assumptions is judgemental, a decision to discontinue, which is always painful, is difficult. The challenge is in building a ‘detached passion’; though it sounds like an oxymoron, in reality the manager should feel totally passionate with the project, when it is pursued but should be able to agree with an objective evaluation and discard the project, if required. This is like actors shows extreme passion with the characters during the shooting of a specific film, but leave it and develop passion with a new character in anew film soon after. Royer (2003) found the need to have exit champions to kill bad projects since many managers have difficulty in giving up a project. One reason for this is lack of another project with the same individual. Hence, exit champions have to have both the temperament and the credibility to question prevailing belief. Most often, they demand hard data on viability and are able to make a forceful case for killing bad projects.

The contrast between the patterns of focused and organisation wide deep entrepreneurship runs across every element of the organisation, starting with its mission and deeply covering strategy, structure, systems, processes and people skills and attitude. New knowledge creation is normal in such organisations. They allow new organisational units to form and disband without fanfare or prejudice and provide for flexible boundaries among organisational sub-units (Stevenson and Jarillo, 1990).

Developing Organisationwide Entrepreneurship

Companies interested in developing and preserving entrepreneurship should strive to create a corporate environment in which those who believe in the attractiveness of opportunities feel encouraged to pursue it (Pinchot, 1985). In such an environment, a process of self-selection takes place, whereby entrepreneurs “bubble up” to the surface (Sathe, 1989). Since, entrepreneurial activity involves high levels of uncertainty, management under such conditions requires rapid information processing abilities and high levels of trust in entrepreneurial individuals and teams. In this process, management ensures high level of interaction between the individual, organisation and external environment, at all levels. The whole purpose is to identify areas of inefficiencies and ineffectiveness and find new solutions to customer needs. Innovations may be at any link on the value chain, and not limited to new products and services in a traditional sense (Galbraith, 1973; Kanter, 1977).

Managements interested in promoting entrepreneurship at lower levels must be willing and able to appreciate the perceptions and judgments of people at those levels. The two major challenges that management face are related to ensuring that the freedom granted is not misused, and the risks inherent in entrepreneurial activity contained.

McGrath & MacMillan (2000) has identified four broad sets of practices that go into creating an organisation focused on identifying and exploiting opportunities. Practices that set the right tone for innovation are climate-setting practices like disproportionate allocation of attention, resources and talent to this activity. Next, there are practices that orchestrate the processes of seeking and realizing opportunities to grow the business that include defining the ballpark of innovation activities the firm would undertake and instilling the discipline of parsimony so that investments and costs are minimized until an upside potential is demonstrated. Then, there are hands-on practices that get top management actively involved and requires the institution of analytical processes to identify opportunities that the firm is uniquely positioned to exploit. Finally, a process of managing failures sets the standard for future commitment to such initiatives and involves conducting constructive post-mortems and recouping benefits from failed projects for use elsewhere.

These challenges are met through constructive control mechanisms that help avoid irresponsible behaviour and contain risks of the entrepreneurial activity. To promote entrepreneurship, individuals must be allowed the freedom to think and act in unconventional ways. Proscribed behaviour sets the limit for the exercise of this freedom and defines what is considered irresponsible and not be tolerated. In order to contain the risks, management must control the entrepreneurial process and not specific initiatives. If the process is right, a certain percentage of success will follow. Also, projects, small and big will not be judged by the outcome, but the quality of the processes followed. As evidence of its commitment, several organisations have created separate venture funds for supporting innovative ideas.

Organisations follow different criteria while selecting entrepreneurial initiatives for support. As is evident from the illustrative models discussed in Boxes 1-6, it depends on the organisational leadership, strategy, history and resource characteristics.

CE activities create new knowledge that enhances the company's competencies and results in the development of new ones. This knowledge is of three types (Zahra, Nielsen, and Bogner 1999). The first type is specific to the present line of activities of the company and is the key to future product refinements and product line extensions. Such knowledge is predominantly technical and is seldom sufficient for a company to develop a sustainable competitive advantage. A second type of knowledge is integrative in nature. This knowledge brings together many elements and is firm specific in nature. This interlinking of existing competencies in idiosyncratic ways can frustrate rivals' efforts aimed at imitating the firm's products thus giving the firm a competitive advantage (Itami, 1987). CE activities can also lead to a third type of knowledge by suggesting new ways of exploiting the technical and integrative knowledge of the firm. Such knowledge can lead to the commercialisation of new products and services (Zahra, Nash, and Bickford, 1995).

Creating value from the wide range of new knowledge generated in CE activities through the introduction of a new product, process, technology, system, technique, resource, or capability to the firm or its markets requires management of the process of articulating, focusing, sharing, and transferring this knowledge. Lynn and Akgun (1998) find that a learning-based innovation strategy is appropriate for managing the process of creation and dissemination of knowledge generated through innovation efforts so that it can be used to enhance and develop capabilities.

Institutionalising Entrepreneurship

Some of the principles that are followed to develop and sustain entrepreneurship are the following:

- selectively rotate talented managers to expose them to different business territories that can stimulate perception of new opportunities
- resource allocation has to be multi-stage
- leadership should communicate clearly its long term sustained commitment to entrepreneurship
- not all ideas will be winners, but learn from experiments and bet on people capabilities

The quality of leadership represented by top management plays a very critical role in driving innovation in firms and in mastering its dynamics (Kipp, 2001; Kuczmarski, 1998; Schoen, 1968; Utterback, 1994; Van De Ven, 1986). Firm success is determined by the collective leadership of top management teams (Reich, 1987) with skills complementing each other (Timmons, 1979).

Top Management, which believes that CE can make a significant difference in a company's ability to compete and achieve successful performance, will pursue an entrepreneurial strategy. This represents a policy decision to seek competitive advantage through innovation on a sustained basis (Mintzberg, 1983). They will:

i) Design an organisational context conducive to the autonomous generation of entrepreneurial initiatives – this entails the creation of structures and a culture that facilitates entrepreneurial behaviour

ii) Provide a sense of overall direction for innovation initiatives through an entrepreneurial vision

iii) Ensure that promising ventures receive necessary resources as they move through the uncertain development process.

A firm intent on creating a CE enabling ecosystem will not only adopt an entrepreneurial strategy, but create an entrepreneurial organisation that considers innovation an accepted and appropriate response to organisational problems. It will also develop appropriate practices to manage the process of creation and dissemination of knowledge generated through innovation efforts, and operate effectively as a team in order to fulfil its role of recognising the value and opportunities presented by specialised knowledge. Such an ecosystem will help the firm reap benefits in terms of capability development and enhancement and the development of new products, services, and processes that enables it to compete effectively in the marketplace and produce superior performance. A Top Management Team that adopts an entrepreneurial strategy and creates a milieu in the firm such that this strategy displays Entrepreneurial Leadership (Devarajan, Ramachandran, and Ramnarayan 2003).

Thus, the role of the top management team, in firms that pursue an entrepreneurial strategy, is to build an organisational setting that stimulates exchange of information between individuals and develop a culture that encourages innovation. The team also fulfils the role of recognising the value and opportunities presented by specialised knowledge and integrating it to create rents (Alvarez and Busenitz, 2001).

The Top Management Team, in the context of an entrepreneurial organisation must function in such a way that it solves problems, particularly in relation to innovation, in a well-honed, effortless and effective manner so that innovation activity thrives in the firm and the value of specialised knowledge created is recognised and integrated to create rents. Deftness is a quality in a group, which permits such functioning (McGrath, MacMillan, and Venkataraman, 1995. For a top management team to perform with deftness, clear and shared goals and roles must exist, communication must be accurate, sharing of information rapid, constructive confrontation encouraged, and belief and trust in each other and in the team built.

Conclusion: The highly competitive and dynamic environment prevalent in most industries is forcing many companies to adopt an entrepreneurial strategy, which is seeking competitive advantage through innovation on a sustained basis. The current debate is more on 'how' of entrepreneurship, and we have seen there are many possible routes to follow. This requires the Top Management Team to create an organisational setting that focuses the attention of individual participants on innovation as an important and expected activity and enables and directs group and firm behaviours towards entrepreneurial ends. The team will also use appropriate processes to capture knowledge created in the innovation process and operate in a manner that enables integration of knowledge to create rents. Institutionalising elements of entrepreneurship is crucial for sustaining competitive organisations.

Box 1

Firm A

The New Ventures Fund of this engineering and manufacturing company was created to help any employee with a potentially profitable idea to obtain funding outside normal budgetary channels in order to pursue it. The hallmark of the fund is its informality. A short memo describing the idea, its potential and initial funding requirements is all that is needed to obtain funding. Each operating unit contributes 0.5% of its revenue, creating a modest incentive to reward those coming up with innovative ideas. The emphasis is on 'new'. Projects, which are extensions of existing product lines or other natural evolutions of current work, are not funded.

Box 2

Firm B

The objective of the New Products Centre (NPC) of this engineering firm is to use company's technology to develop new products or markets that its internal clients can use to grow their existing businesses. It balances autonomy – the ability to explore new ideas with relatively little interference – against accountability to clients and client organisations. One of the secrets of NPC's success is that it deliberately encourages and even forces interaction among staffers in diverse disciplines, and between staff and external customers.

Box 3

Firm C

The New Venture Organisation (NVO) is a formalised structure to identify, develop, and obtain sponsorship for opportunistic ideas that do not fit in to their originating organisation. Proposals go through an individual initiative stage, a seed financing stage, and finally, an implementation and commercialisation stage.

A network of 20 'innovation' offices is located throughout the corporation. Any employee can approach an innovation office and receive support, guidance and access to a network of internal consultants who can advice them on the merit of the idea. Sponsorship is sought for ideas that survive this stage within the existing organisations of the company.

If an existing business does not support the idea, it is presented to the business development arm of 'New Opportunities Development' (NOD), an organisation that guides people's efforts and enhances the likelihood of promising ideas becoming significant new businesses. NOD provides promising projects seed money to cover anything – prototypes, market research, or design work. Funds are mostly used for market research that determines how to optimise a core innovation in the proposal. Before a full business plan is written, the proposal is again run through existing organisations.

The third and final tier is the Venture Board, which reviews proposals and provides staged financing from its investment pool.

For the venture manager, there are opportunities for special reward, including bonuses. However, if the venture fails, there is no assurance that the manager will have a job in the corporation, although every attempt is made to find a job comparable to the one he or she left.

Box 5

Amtrex

Amtrex was transformed from a small time air conditioner manufacturer with a turnover of Rs.60 million in 1986, to a high quality world class manufacturer of air conditioners with a turnover of Rs.2 billion by the turn of the century, through entrepreneurial initiatives of a management team. The company created cross functional innovation teams which regularly met and brainstormed on new possibilities for adding further value to customers. This resulted in improvement for efficiency across the value chain, besides creating a new hope of excitement across the organisation, it also led to new product development. One such product was "Nidra". This novel product, first of its kind in the world not only made sleeping in air-conditioned room much more comfortable but also helped customers reduce their power bill.

The origin of Nidra is interesting. It was in one of the innovation committee meeting that somebody asked an innocent question, "why do we need a blanket to sleep in an air-conditioned room, but do not feel the need when we sit in an air-conditioned room for much longer hours". With a series of discussions that followed they finally concluded that heat generated by the body due to metabolic activities comes down during sleep. Next, Amtrex designed a fuzzy logic system that helped customers to programme their AC to generate cool air according to their sleeping hours.

The company rewarded all those who came up with interesting ideas.

Box 6

Corporate Entrepreneurship at Wipro Ltd.

Though more organized and structured attempts to foster innovation in every aspect of the company has started only a few years ago, but Wipro Ltd. has a long history of innovation and intrapreneurship. It is an enigma that how a very traditional vegetable oil company incubated so many successful business ventures over the years. Wipro's first brush with corporate entrepreneurship could be traced way back in late seventies when it started its Information Technology business. In 1977-78, facing the unfriendly policies of the Government of India headed by Prime Minister Morarji Desai foreign corporations such as Coca Cola and IBM pulled out of India. Ajim Premji, Chairman and Managing Directors Wipro Ltd. immediately recognized that exodus of companies like IBM would create a market for Indian vendors of computers and software.

Wipro entered the Infotech area and tasted early success in its Research & Development. In 1980, an energetic, committed team of 15 professional R & D and marketing managers was brought together and in a small laboratory at the Indian Institute of Science (IISc) Bangalore. The team developed the first Indian mini computer based on Intel 8086 chip. Wipro launched its infotech business with this minicomputer to capitalize on first wave of IT boom. In 1983, Wipro Infotech limited and Wipro Systems limited were formed as two separate companies focusing on computer architecture and software and software product development respectively. A year later, the company released Wipro 456, a spreadsheet program similar to Lotus 123, a top seller in the U.S. at the time. This was followed with Wipro's first personal computer in 1986 powered by Intel 386 microprocessor.

Protected by the high tariffs Wipro infotech focused on Indian market and continued to design and develop mini and personal computer fitted with operating systems and application softwares primarily for corporate clients. The company acquired licenses from some of the global hardware and software giants such as Intel for microprocessor, IBM for Unix and Sun Microsystems for servers. It developed about 100 member strong R&D team to assimilate the collaborator's technology and develop architecture suited to Indian market.

However, when the Indian government headed by Prime Minister P.V. Narasimha Rao opened the Indian economy in 1991, Wipro's hardware and software were no longer protected by 325 per cent duties. The quality of its hardware and software products was not good enough to take on might of global giants such as IBM, Compaq, Apple Computers and Microsoft. In a smart move, Wipro put its battalion of software programmers to work for the corporations that were streaming into India. As a result the software business got its first real impetus on export. The focus shifted from product software to service software.

The real coup de grace was, however, what Wipro did with the 100 member strong R&D team, a highly competent but idle resource in the changed circumstances. The team suddenly faced a situation when its expertise was no longer required by any other division of Wipro. It was forced to look outward. The concept of “Lab on Hire” was conceived by Dr. Sridhar Mitta, the then R&D Chief at Wipro to leverage the technology competencies developed over one decade by providing R&D services to erstwhile technology partners like Intel, Sun, Motorola and Cisco. By virtue of working together in many an occasion in the eighties, this group had the understanding of the partner’s technology platform, knowledge on networking and design processes. This enabled the company to start the lab on hire business and offer the R&D services to companies like Intel at a much lower cost. The concept was an instantaneous success as it created more value for customers in the way of reducing R&D cost and capture more value for the company by putting to use an idling resource group profitably.

This concept was further extended to give rise Offshore Development Centre which maid offshore sourcing a truly great value proposition. Earlier the technology companies modeled their R&D centers on a fixed instead of variable cost structure. This model often restricted a company’s ability to bring a product to market in the lowest cost and shortest time possible because of the static nature of headcounts and budgets. Moreover, with the large amount of testing and verification that were required to bring a technology to market, companies with the static R&D model would very likely miss the opportunity that could be gained when there was a boom. By being at the forefront of outsourced research and development, Wipro could offer its technology customers the chance to be the first to catch opportunities when a boom hit.

Over the years the R&D services business grew rapidly and became one of the main revenue earners for Wipro Technology. Later this business was renamed as Technology Solutions vertical with over 8000 member strong team working for a large number of clients that included the who’s who of the global telecommunication industry and contributing close to one quarter of Wipro Technology’s revenue.

Pushing the offshore idea a little further Wipro hit upon another business opportunity to manage customer’s IT infrastructure through the Remote Infrastructure Service Model. The services were delivered from an offsite location using high availability and secure infrastructure and industry certified expert skills. The Infrastructure Service was delivered Global Command Centre (GCC) located in Bangalore to the global clients.

In the last two decades there were many such cases where Wipro successfully deployed its competencies developed to support an existing business in creating new business opportunities. Another most recent example of corporate entrepreneurship at work in Wipro was how the internal quality initiatives were translated into a quality consulting practice with over 150 `customer touch' Six Sigma projects under way. The business transformation practice would engage in such projects over double that number in the future combined with consultancy in other quality models such as PCMM and CMMi. The internal quality measurements had set the benchmark for other companies and the company took a conscious decision to migrate the benefits to customers' projects and processes, making a viable business in the process.

Leveraging the lessons from its internal quality initiatives, the company developed a copyrighted Six Sigma for software methodologies. Wipro Technologies was increasingly getting Quality Consulting assignments where it was drawing out the blueprint for many of its customer organisations to improve their quality standards. This initiative began when Wipro customers wanted help from them to improve their quality. In the process of catering to these occasional demands of their customers, Wipro managers hit upon a very lucrative business opportunity that could leverage their existing competencies.

Though the Quality Consulting business of Wipro started in 2002 and was just a little over two-years-old, but the division was fast emerging as a key contributor to the company's revenues. Within the first 7-8 months of its operation, the division contributed $1 million. During the previous fiscal, this increased to $3.5 million and is on track to double its business to $7 million in the current fiscal. The company was offering quality consulting in the BFSI and manufacturing sectors in the US and additionally to captive BPO centres in India. So far more than a dozen of customers received the expertise of the quality consulting division. From inception till date, this division had about 30-35 engagements and fine-tuned various processes for its clients. These included processes like software testing before roll-out to enable clients to move towards CMM Level 5 or Six Sigma. Wipro's quality team is nearly 150-strong. Of this nearly 55-60 people are purely for the quality consulting business.

Apart from spawning many such new businesses Wipro was an incubator for a large number very successful corporate spin outs such as Mindree Consulting started by Ashok Soot and Subroto Bagchi among others, e4e Labs started by Dr. Sridhar Mitta, Exodus started by K.B. Chandrasekhar, Prio started by Ashok Narshiman and many others. The owner driven meritocracy and a very open organization completely devoid of politics in Wipro nurtured an entrepreneurial culture and allowed free space for innovation to take root and flourish. While some of the ideas got the support of the top management and were taken to the market within the umbrage of Wipro, some other ideas did not get blessings of the power that be resulting in spin outs. However, the moot point was Wipro always remained a grooming ground for entrepreneurs.

In the recent years after the exodus of some top professionals from Wipro in the pursuit of their entrepreneurial ambitions the company put together a more structured innovation programme and methodology to take most outstanding ideas to market on an ongoing basis. It formed the ‘Innovation Council’ in late 2000 to build intellectual property, new products and services and take most outstanding ideas to market. As the company has been attempting to move up the value ladder, there is greater need for bright innovative ideas to flow more frequently. What has been embedded in Wipro culture all these years is brought to surface in the form of a slogan “Innovation is Wipro: Wipro is Innovation”[1]. The vision is clear - to make Wipro habitually innovative, a place where thousand

[1] Wipro’s Annual Report 2003-2004.

flowers bloom. The company is trying to manage the duality of simultaneous existence of high degree of individual freedom conducive for creativity and robust organizational processes to direct the innovation for creation of higher shareholder value. It puts together an innovation programme towards achieving this vision. At the root of this programme lie the repeated individual and collective attempts to find answers to some critical questions such as:

- Are we attracting the best talent and keeping the talent challenged and contemporary?
- Are we creating higher value for our customers? Are we creating relatively higher value?
- Is creating value for customers sufficient to create value for other stakeholders and the larger community?
- How do we leverage our learnings within and without the organization?
- Are we doing low risk experimenting to filter out "good" ideas from the truly outstanding ones?
- Are we taking positions on technology developments and building skills to anticipate tomorrow?
- In the process of work within the organization are we continuously eliminating redundancy and non-value adds?
- Are we capturing the benefits of small companies even as we grow rapidly?

The Innovation Council evaluates proposals and provides internal funding for the best ones. The resulting projects develop intellectual property that can be licensed to customers and integrated into their products. The Innovation Council is made up of senior managers but the ideas are gathered 'bottom-up'. It is the engineers and project managers who are immersed in the technical issues generate the creative long-term ideas. Council's job is to choose the best ones and sponsor the same, based on its analysis of how the resulting technologies and components will, in turn, provide value to its customers. Wipro's approach to innovation is pragmatic, a structured process that involves sifting through ideas, identifying themes and setting clear goals. The innovation would go through various stages of approval and commitments of funds. An idea has to meet certain goal sets before going through the next stage of support. This being a very structured process leads to higher hit rates and cost effectiveness. There is also "financial measurement system" to enable Wipro staff share the gains generated by their ideas.

Premji has always put emphasis on making Wipro a dynamic, evolving entity continuously innovating and actively seeking change. There has been a constant focus on bench marking and upgrading in Wipro. It keenly follows the companies like Hindustan Lever, Infosys and GE and tries to adopt the best practices. Wipro continuously compares itself with those considered best on various functions. As explained by Premji[2], "You may decide that Infosys is the best on a campus outlook, that Hindustan Lever is best on the quality of the induction of management trainees, that Sun Micro is best in terms of aggressive selling. You try to understand the process and see how you can bridge the gap or exceed the gap. This is a continuous process. We have councils, consisting of all our

[2] The Week, May 5, 2002.

financial, human resources, quality and marketing people. They typically meet 4 or 5 times a year, one or tow days each time, and significant part of the agenda is sharing what the other is better at. So that improvement of one division is quickly transferred to the rest of the company. …We are using processes like six Sigma to keep on fine tuning, reducing cost, increasing productivity and maintaining and improving consistency in the quality of our execution.” This trait of Wipro to continuously explore new ideas and seek change proactively helps company transform itself several times to face the future better by warding of any threats and capitalizing on the emerging opportunities.

References

1. Alvarez, S. & Busenitz, L. (2001). The entrepreneurship of resource-based theory. *Journal of Management*, 27(6), 755-775.

2. Anderson, Kye (1992). The Purpose at the Heart of Management. *Harvard Business Review*, 70(3), 52-62.

3. Barney, Jay B. (1986). Organizational Culture: Can It Be A Source Of Sustained Competitive Advantage? *Academy of Management Review*, 11(3), 656-665.

4. Barney, J.B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.

5. Brazeal, D. V. (1993). Organizing for Internally Developed Corporate Ventures. *Journal of Business Venturing*, 8(1), 75-90.

6. Brazeal, D. V., and Herbert, T. T. (1999). The Genesis of Entrepreneurship. *Entrepreneurship Theory and Practice*, 24(1), 29-45.

7. Bungelman, Robert A., and Sayles, Leonard. *Inside Corporate Innovation: Strategy, Structure, and Management Skills*. New York: Free Press.

8. Christensen, Clayton M., Raynor, Michael E. (2003). *The Innovators Solution: Creating and Sustaining Successful Growth.* Boston: Harvard Business School Press

9. Covin, J. G., and Miles, M. P. (1999). Corporate Entrepreneurship and the Pursuit of Competitive Advantage. *Entrepreneurship Theory and Practice*, 24(1), 47-63.

10. Dess, G. G., Lumpkin, G. T., and McGee, J. E. (1999). Linking Corporate Entrepreneurship to Strategy, Structure, and Process: Suggested Research Directions. *Entrepreneurship Theory and Practice*, 24(1), 85-102.

11. Devarajan, T.P., K. Ramachandran and S. Ramnarayan, Entrepreneurial Leadership and Thriving Innovation Activity, Proceedings of 7th *International Conference on Global Business & Economic Development*, Bangkok, forthcoming 8-11 January, 2003.

12. Drucker, Peter F. (1985). *Innovation and entrepreneurship: Practice and Principles*. New York: Harper & Row.

13. Floyd, S. W., and Wooldridge, B. (1999). Knowledge Creation and Social Networks in Corporate Entrepreneurship: The Renewal of Organizational Capability. *Entrepreneurship Theory and Practice*, 24(1), 123-143.

14. Galbraith, J.R. (1973). *Designing Complex Organizations*. Reading MA: Addison-Wesley

15. Guth, W. D., and Ginsberg, A. (1990). Guest Editors' Introduction: Corporate Entrepreneurship. *Strategic Management Journal*, 11(5), 5-15.

16. Hamel, G, and Prahalad, C. K. (1989). Strategic Intent. *Harvard Business Review*, 67(3), 63-76.

17. Itami, H. (1987). *Mobilizing Invisible Assets*. Boston: Harvard University Press.

18. Kanter, R.M. (1977). *Men and Women of the Corporation*. New York: Basic Books.

19. Kanter, R. M. (1985). Supporting Innovation and Venture Development in Established Companies. *Journal of Business Venturing*, 1(1), 47-60.

20. Khandwalla, P. N. (1987). Generators of Pioneering-Innovative Management: Some Indian Evidence. *Organization Studies*, 8(1), 39-59.

21. Kim, W.C. and Manborgne, R. (2000). Knowing a Winning Business Idea When You See One. Harvard Business Review, September – October, 129-137.

22. Kipp, Michael. (2001). Mapping the Business Innovation Process. *Strategy & Leadership*, 29(4), 37-39.

23. Kuczmarski, T. (1998). The Ten Traits of an Innovation Mindset. *Journal for Quality & Participation*, 21(6), 44-46.

24. Kuratko, D. F., Montagno, R. V., and Hornsby, J. S. (1990). Developing an Intrapreneurial Assessment Instrument for an Effective Corporate Entrepreneurial Environment. *Strategic Management Journal*, 11(5), 49-58.

25. Leonard-Barton, D. (1992). Core Capabilities and Core Rigidities: A Paradox in Managing New Product Development. *Strategic Management Journal*, 13 (summer 1992), 111-125.

26. Lumpkin, G. T., and Dess, G. G. (1996). Clarifying the Entrepreneurial Orientation Construct And Linking it to Performance. Academy of Management Review, 21(1), 135-172.

27. Lynn, Gary S., Akgun, Ali E. (1998). Innovation Strategies under Uncertainty: A Contingency approach for New Product Development. *Engineering Management Journal*, 10(3), 11-17.

28. McGrath, Rita G., Macmillan, Ian C. (2000). *The Entrepreneurial Mindset: Strategies for Continuously Creating Opportunity in an Age of Uncertainty*. Boston: Harvard Business School Press.

29. McGrath, Rita G., Macmillan, Ian C., Venkataraman, S. (1995). Defining and Developing Competence: A Strategic Process Paradigm. *Strategic Management Journal*, 16(4), 251-275.

30. Merrifield, D. B. (1993). Intrapreneurial Corporate Renewal. *Journal of Business Venturing*, 8(5), 383-389.

31. Miller, D. (1983). The Correlates of Entrepreneurship in Three Types of Firms. *Management Science*, 29(7), 770-791.

32. Mintzberg, H. (1983). *Structure in Fives: Designing Effective Organizations*. Englewood Cliffs, NJ: Prentice Hall.

33. Naman, J. L., and Slevin, D. P. (1993). Entrepreneurship and the Concept of Fit: A Model and Empirical Tests. *Strategic Management Journal*, 14(2), 137-153.

34. Pinchot, G. (1985). *Intrapreneuring: Why You Don't Have to Leave the Corporation to Become an Entrepreneur*. New York: Harper and Row.

35. Ramachandran. K. (2003). Customer Dissatisfaction as a Source of Entrepreneurial Opportunity. *Nanyang Business Review*, 2 (2), 21-38.

36. Ray, S., and Ramachandran, K. (1996). A Framework for Developing a Comprehensive Theory of Entrepreneurship. *Journal of Entrepreneurship*, 5 (1).

37. Reich, R.B. (1987). Entrepreneurship Reconsidered: The Team as Hero. *Harvard Business Review*, 65(3), 79-91.

38. Roberts, N. (1984). Transforming Leadership: Sources, Process, and Consequences. Presented at *Academy of Management conference*, Boston.

39. Royer, I. (2003). Why bad projects are so hard to kill. *Harvard Business Review*, 81 (2), 48-56.

40. Russell, R. D. (1999). Developing a Process Model of Intrapreneurial Systems: A Cognitive Mapping Approach. *Entrepreneurship Theory and Practice*, 24(1), 65-84.

41. Sathe, V. (1988). From Surface to Deep entrepreneurship. *Human Resource Management*, 27 (4), 389-411.

42. Sathe, V. (1989), Fostering Entrepreneurship in the Large Diversified Firm. *Organisational Dynamics*, 8 (1), 20-32.

43. Schendel, D. (1990). Introduction to the Special Issue on Corporate Entrepreneurship. *Strategic Management Journal*, 11(5), 1-3.

44. Schoen, D. R. (1969). Managing Technological Innovation. *Harvard Business Review*, 47(3), 156-167.

45. Schumpeter, J. (1934). The Theory of Economic Development. Cambridge: Cambridge University Press.

46. Shane, SwHA. (2004). *Finding Fertile Ground: Identifying Extraordinary Opportunities for New Businesses.* New York: Wharton Business School Publishing.

47. Sharma, P., and Chrisman, J. J. (1999). Towards reconciliation of the Definitional Issues in the Field of Corporate Entrepreneurship. *Entrepreneurship Theory and Practice*, 24(1), 11-27.

48. Stopford, J. M., and Baden-Fuller, C. W. F. (1994). Creating Corporate Entrepreneurship. Strategic Management Journal, 15(7), 521-536.

49. Stevenson, H. H., and Gumpert, D. E. (1985). The Heart of Entrepreneurship. *Harvard Business Review*, 63(2), 85-94.

50. Stevenson, H.H., and Jarrillo-Mossi, J.C. (1986). Preserving Entrepreneurship as companies Grow. *The Journal of Business Strategy*, 7 (1), 10-23.

51. Stevenson, H. H., Jarillo, C.J. (1990). A Paradigm of Entrepreneurship: Entrepreneurial Management. *Strategic Management Journal*, 11(Summer 1990), 17-27.

52. Stevenson, H. H., Roberts, M. J., and Grousbeck, H. I. (1989). *New Business Ventures and the Entrepreneur*. Homewood, IL: Irwin.

53. Timmons, Jeffry A. (1979). Careful Self-Analysis and Team Assessment Can Aid Entrepreneurs. *Harvard Business Review*, 57(6), 198-206.

54. Timmons, Jeffrey A. (1999). *New Venture Creation: Entrepreneurship for the 21st Century. Boston:* Irwin / McGraw Hill.

55. Utterback, J. M. (1994). *Mastering the Dynamics of Innovation.* Boston: Harvard Business School Press.

56. Van De Ven, A. H. (1986). Central Problems in the Management of Innovation. *Management Science*, 32(5), 590-607.

57. Zahra, S. A. (1991). Predictors and Financial Outcomes of Corporate Entrepreneurship: An Exploratory Study. *Journal of Business Venturing*, 6(4), 259-285.

58. Zahra, S. A., and Covin, J. G. (1995). Contextual Influences on the Corporate Entrepreneurship – Performance Relationship: A Longitudinal Analysis. *Journal of Business Venturing*, 10(1), 43-58.

59. Zahra, S. A., Kuratko, D. F., Jennings, D. F. (1999). Guest Editorial: Entrepreneurship and the Acquisition of Dynamic Organizational Capabilities. *Entrepreneurship Theory and Practice*, 24(1), 5-10.

60. Zahra, S. A., Nash, S., and Bickford, D. J. (1995). Transforming Technological Pioneering into Competitive Advantage. *Academy of Management Executive*, 9(1), 17-31.

61. Zahra, S. A., Nielsen, A. P., Bogner, W. C. (1999). Corporate Entrepreneurship, Knowledge, and Competence Development. *Entrepreneurship Theory and Practice*, 24(1), 169-189.

62. Zajac, E. J., Golden, B. R., and Shortell, S. M. (1991). New Organizational Forms for Enhancing Innovation: The Case of Internal Corporate Joint Ventures. *Management Science*, 37(2), 170-184.