INNOVATIVE MANAGEMENT STYLES, ORGANIZATIONAL STRUCTURES, AND STRATEGIES IN TURBULENT TIMES

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ABSTRAK
Artikel ini membahas berbagai ukuran tingkat inovasi dalam satu organisasi, faktor-faktor kunci pendorong inovasi, baik yang dari dalam (internal) maupun luar (eksternal) organisasi, dan tipe-tipe manajemen yang lebih handal untuk memacu dan memajukan inovasi, sehingga membuat kegiatan inovasi sebagai salah satu sumber persaingan yang membedakannya (differentiator) dari kompetitor lain. Dari berbagai sudut inovasi, artikel ini mengidentifikasi berbagai sumber keunggulan organisasi inovatif, antara lain: organisasi inovatif mengungguli lawannya berkat fleksibilitas struktur organisasi yang dimilikinya; pengembangan dan pemanfaatan kerja tim dan komunikasi dengan baik; penilaian dan manajemen sumber daya manusia yang baik; memiliki ceket bila produk, strategi produk baru, pe-implementation strategi secara konsisten; memiliki sistem tracking kinerja semua kajian dan fungsi organisasi yang baik; networking yang luas dan menggunakan informasi dengan tepat; cepat dan aktif serta komitmen organisasi yang kuat. Evolusi budaya organisasi yang ramah inovasi (innovation friendly), merupakan keberkuan untuk manajemen dalam penyelesaian masalah masalah yang dihadapi secara cepat dan tepat sehingga jaringan menjadi batu sandungan organisasi inovasi yang massa kini dicirikan dengan proyek yang bermacam macam yang dilaksanakan secara mandiri dalam tim tim proyek kecil yang tersebar tidak dalam satu lokasi, negara atau kawasan, tetapi di seluruh dunia.

Kata kunci: Budaya inovatif, Persaingan, strategi

INTRODUCTION

"It is important to keep in mind, however, that while turbulence presents major challenges, it also creates opportunities." Olson, Paschle, and Stelter (2008), Authors of BCG 10th Annual report 2008

"There seems to be some perverse human characteristic that likes to make easy things difficult."
- Warren Buffett

"Think Different." Steve Jobs

We are living in turbulent times, characterized by globalized product and service markets, supported by globalized but decentralized production networks, rapidly changing customer preferences that are demanding more, higher quality, cheaper, safer, environmentally sound, and economically sustainable products and services; major technological shift from analog to digital technology, which has heightened uncertainty as winning product designs and technologies are in flux pushing the probability of failure significantly higher.

At a time when three of the World’s five largest investment banks in the number one economy are now history, and the remaining two, were more than ready to change

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their operational mode from investment banking to bank holding companies, what were yesterday’s winners are today’s crumbling empires suffering huge debt overhangs obviously contracted under conditions of high public confidence which often discounts and dismisses potential risk as alarmist and potential bankruptcy supplanting to the state for bailouts, there isn’t better and cogent evidence that the land we are treading isn’t only rocking but it is tilting as well. Such time is very opportune for new start-ups, owing their presence to new product concepts, business models, and winning business strategies as well as other innovative organizations to stand themselves out to stardom from the imploding pack, the fate that truly befits the non-innovative rest.

The pressure on organizations is to live to the ever-changing demands of the ever-demanding consumer, while at the same time technological changes complemented by government and regional organizational legislation leave little option but to innovate. It is apparently stunning to realize how far the notion of innovation has come since the times of Schumpeter, who regarded it as the mother of creation, yet not many organizations took it aboard because in times of chronic scarcity the costs of innovating far outweighed the benefits making its risk untenable; to the current situation whereby the very survival of the modern organization is inextricably linked and determined in terms of its capacity to innovate. It is thus an inalienable fact that innovation is quite crucial for organizational performance. According to Edquist (2001), innovations, which are broadly categorized into process (technological and organizational); and product (goods and services), occur in continuous small incremental changes, discontinuous radical innovations, and massive shifts in some pervasive ‘general purpose technology’ (GPT), sometimes called ‘techno-economic paradigms; comprise “new creations of economic significance normally carried out by firms, or sometimes individuals, they maybe brand new, but are more often new combinations of existing elements. It is a matter of what a firm produces.” Innovations are nurtured and sustained in a complex social, political, economic, cultural, technological environment, which defines, influences and is influenced by the component parts and relations between them—an innovation system.

The importance of innovation, which is manifested in different forms ranging from volume of R and D, patents issued, HRD dedicated to R and D expenditure, product or industrial design, transformation process (efficiency of the innovation output process) trials, market analysis or introduction, training, licensing activities, product announcements, product/service announcements from trade and technical journals, and innovation-related fixed asset investments, to firm performance has long been an established fact Schumpeter (1934) in Kemp, et al. (2003). Klomp and Van Leeuwen (1999) finds a positive correlation between new product introduction and new processes, small wonder. Mohnen & Dagenais, 2002, finds R and D expenditures to
correlate positively with innovation expenditures. Innovative firms are found to enjoy higher profitability than those that do not innovate (higher performance) (Diederin et al. 2002; enhances knowledge capital productivity; elevates export competitiveness Kleinknecht and Oostendorp (2002). On the other hand, accumulating knowledge capabilities with the interaction of organizational culture and external environment is found to have positive and significant effects on organizational innovation (Su-Chao and Ming-Shing, 2008).

Felder et al. (1996) finds positive relationship between innovation and firm size, as do Kleinknecht (2000), Kleinknecht and Mohnen (2002), and Lee (2004), with large firms having a higher innovative intensity than small firms. Lee (2004), studying innovation in Malaysian manufacturing firms, finds innovation level to positively determined by large size of firms, as is ownership structure with public and private limited enterprises having higher innovating rates than sole proprietorships, and market concentration. On the contrary, Vossen and Nooteboom (1996) finds that small scale firms have higher innovation intensity than larger firms, an advantage that enables the former to achieve higher productivity than the latter. However, large firms operating under business climates that are characterized by high market concentration (high profits and retained earnings, R and D investment) are found to have better innovation sustainability. Loof et al. (2001) uses labor and capital as inputs and innovation-investment variable consisting firm size, prior patent applications, non-R&D engineers, percentage of administrators and control variables in a Cobb Douglas model to determine differences in productivity across Nordic countries. He finds firm size and patent applications significant determinants of productivity in all three countries, export intensity in two countries, and only one country registers significance in the other variables.

Moreover, technological opportunities, factor intensity and sector characteristics are also key determinants of the decision to innovate. Determinants of product innovation per se include: (i) technological competition proxied by the percentage of innovators in one sector; (ii) downward and horizontal knowledge sourcing, the inverse of industry R&D spillovers; (iii) diversification, laboratory research, innovation experience, and high capital intensity; iv) firm size; economic competition; v) foreign ownership and a recession; upstream sources of knowledge and consortium research.; vi) complementarity between product and process innovations; vii) and adoption of cost-reduction strategies (Kemp et al. 2003).

Meanwhile, Yu, Chen, and Hsien (2010) finds that investment in R and D positively affects firm value, an effect that is strengthened by long-term relations with funding sources such as exists in Keiretsu Relationships in Japan. Czarntitzi and Kraft (2004) find innovation activity to have positive influence on credit rating, and enhances
productivity thanks to higher R and D, patents and other forms of intangible assets. However, a lot of innovativeness, has adverse effect on credit on credit rating, due to the perception of higher risk in a firm’s assets and liability portfolios.

Meanwhile, Klomp (2001) charts a new course in innovation research by proposing the delineation of innovation into three stages which include input (R & D expenditures, human resources, and), throughput (cooperation, innovative environment, partnership, networking, information creation, and sharing) and output (from innovation in puts to firm productivity and new products, (firm performance) as one of the ways effectiveness in measuring the impact of innovation on firm performance. Innovation input is found to have positive and strong influence on innovation output, which in turn has positive and strong influence on firm performance (Klomp and van Leeuwen, 2001; Guo, 2010).

Innovation literature cites the use of systems approach, which draws much from Crepon, Duguet and Mairesse model (1998) collapses the three stages of innovation into a linear innovation determinants (input) to firm performance analysis (output), which raises problems of separating cause from effect, difficulties in isolating components of innovation, problems that Kline and Rosenberg, 1986’s chain linked model endeavors to eliminate (Léger and Sushmita, 2006).

The systems theoretical model (Figure 1) comprises four components, which include: i) the decision to innovate or not, which impacts on; ii) level of innovative input / innovative intensity; iii) innovative output; which entails the transformation of innovation input into output; and iv) translation of innovative output into firm performance output is related to the firm performance. The four main components are linked by feedback loops that run from innovative output, firm performance to innovation intensity, from firm output to decision to innovate, and in turn innovation intensity, highlighting the interrelatedness of the four components of innovation-firm performance nexus. This justifies the use of simultaneous analysis techniques.

Figure 1. Systems theoretical approach

(Source: Mohnen and Degenais (2002))
Mohnen and Dagenais (2002) argues that firms innovate in different ways either through internal research or research networks, one would say today, some use both channels. To take a leaf from Schumpeterian entrepreneur, firms do innovate when they produce a new product or improve the quality of an existing product, introduce a new production method, or make an improvement on an existing one, gaining control of a new source of raw material, or intermediate products, enter into a new market, reorganize the industry in new ways, all of which activities generate new profit opportunities (Dejardin, 2000). In charting a new course for maintaining and scaling up knowledge based learning society, Tekes (2005) identifies “globalization and competence in the business environment, demographic change and social development and values, sustainable development, knowledge and competence and their management, technology, and networking,” as the drivers of economic and social progress.

The Underlying drivers of innovation is the need for ever higher creativity, productivity, flexibility, adaptability and better quality of production processes, products, and services; innovative inter-sectoral and intergenerational alliances; focus on resource efficiency in carrying out economic growth not only to ensure that future generations will continue to use existing resources, but also by reducing resource waste, environmental sustainability is ensured, which boosts social and well being; the need for the capacity to ‘monitor changes and identify weak points’.

Moreover, integral to that process, is the need for individuals, enterprises and society, not only maintain but more importantly, constantly reappraise and renew capacity, capabilities and competence to master cutting-edge technology, and the multifarious benefits of being part of the worldwide networking system. In any case, a learning society which is powerful enabling environment for innovation augments and cements its drivers.

The thrust of this paper is an effort to making an in-depth analysis of the prime movers of innovation, as well as alternative ways of creating company culture that nurtures and sustains innovations in an organization. Equally important are the obstacles which innovative organizations face in developing and maintaining their innovations, which the paper will give sufficient attention. Thus, against that backdrop, this paper attempts to answer four questions: i) Does innovation require a particular management style, if so what is it?; ii) Do innovative enterprises develop typical strategies?; iii) What critical factors that underline the success of innovative enterprises, whatever their sizes; and iv) What are the challenges innovative enterprises face in their sustaining innovations?
Every section of the paper attempts to provide an answer(s) to one research question, hence the article will be presented as follows: Section two discusses organizational structure and management style that nurse and support innovations, which is followed by section three, that elucidates on winning strategies for innovative forms. Section four, tackles critical success factors for innovative enterprises, which is followed by section five that assesses challenges innovative companies face. Section six concludes the paper.

INNOVATIVE ORGANIZATIONAL STRUCTURES AND MANAGEMENT STYLES

Innovation refers to the process of adopting a new thing, idea, or behavior, while an innovation according to Quinn (1995) "is the adoption of an idea, of behavior pertaining to a device, system, process, program, product, or service that is new to the adopting organization." Meanwhile, OECD (1997) defines innovation to constitute "as all the scientific, technological, organizational, financial, and commercial activities necessary to create, implement, and market new or improved products or processes." As regards the dimensions and forms of innovation, there are broadly categorized into technological, managerial and social processes through, which a new idea and concept is first reduced to practice in a culture. On the other hand invention as different from innovation, is described as providing the first verification that a real problem can be solved in a particular way, where as discovery is reckoned to be the initial observation of a new phenomenon.

Meanwhile, an innovative Organization, according to Mintzberg (1995), must have the design that is conducive to continuous change. The design of an Innovative organization, thus, has features that are in line with the demands of a dynamic and complex environment circumscribing it. Mintzberg accordingly, identifies key features that distinguish the design of an innovative organization from that of other organizations as encompassing a high organic structure, with as little formalization as possible; specialized jobs based on expert training, which are occupied by experts in a variety of disciplines, which are grouped into functional units for housekeeping purposes, but are deployed in small project teams for their work; the reliance on expert teams in different fields to work upon projects; role of integrating managers of various sorts in order to induce mutual adjustment and coordination of small project teams in the organic organization; the high degree of decentralization within and between the teams located at different places in the organization each of which has its line managers, staff and operating experts; little standardization for the diversity of the projects worked upon hardly encourages that; flexibility has to be high to enable flexible flow of
information which engenders innovation; there is no room for unity of command. The rate at which firms generate innovations is found in part to depend on organizational culture, firm size, management (leadership) style, the extent to which information and communication technology is integrated into work processes, communication channels among employees on one hand and between employees and supervisors and management, on the other.

Nonetheless, for a firm to have a working environment that is conducive to innovation and creativity requires fair process in management. Fair process in management, which is the extent to which decisions made on various issues that affect the organization are considered to be fair; is in today’s knowledge-based economy very vital for employee performance in general and innovation in particular as is found to have a linear relationship with the rate of innovation, other factors remaining constant. An organization that exercises fair process in management (Figure 2) (living to the principles of engagement, explanation, expectation clarity); creates an atmosphere of trust and satisfaction between employees and leaders / supervisors, colleagues, which enhances commitment to the organizational values, goals and objectives (Limberg, 2008; Kim and Mauborgne, 1991; 1993a; 1993b; 1995; 1996; 1997; 1998).

Figure 2. Innovation management and innovation performance

![Diagram showing the relationship between innovation performance and fair process in management.]

(Source: Kim and Mauborgne (1997))

3. Fair process in management creates citizenship behavior, employees' behavior, (that is helpful and supportive behavior), voluntary cooperation and cooperative behavior, augurs well for engagement in innovative actions and creative behavior, and increases work performance.

4. Kim and Mauborgne (1997) finds out that "employees will commit to a manager’s decision – even one they disagree with – if they believe that the process the manager used to make the decision was fair."

5. Ensures ensuring employees’ involvement in decisions that affect them by giving them an opportunity to provide inputs and refute the merits of another’s ideas and assumption.

6. Making everyone involved to understand why decisions are what they are and are for the good of the company.

7. Stating clearly of the rules of the game that emanate from the decisions made (roles each employee plays, standards on which performance is to be judged, and sanctions for failure)
Consequently, employees are satisfied with the results of their efforts, which ratchets up job satisfaction, lowers employee turnover, and dampens work stress. On the contrary, firms with management styles, which are deficient in fair process generate adversity in employee attitudes toward leadership, organizational values, goals and objectives, dissonance among employees, increases work stress, and ratchets up employee turnover. To that end, management style in general and the extent to which fair process in management is effected in an organization, has positive influence on innovation in an organization.

Innovative organizations take a variety of forms, with distinguishing features of flexibility of rules, procedures and ‘the way we do things here’, hardly any formalities, lean organizational structure without hierarchy, decentralized decision making, use of project even activity work teams often doing different activities at the same time, with coordination aimed at promoting initiative, creativity, even ‘dreaming’.

Operating adhocracy is one such organizational structure. The cornerstone of such an organization is its ability to find solutions to problems brought to it by its clientele. Thus, it isn’t surprising that the core competence of such firms lies in the capacity to customize products and services in accordance with tastes, preferences and idiosyncrasies of an ever changing customer base. Making use of multi-disciplinary teams of experts, the operating adhocracy works under contract to complete a project in the time agreed upon. The administrative and operating components are fused into one entity.

Meanwhile, in professional adhocracy, creativity is the centerpiece of novel solutions to problems. The organizational 'structure' makes use of divergent thinking generated by a diversity of project team members to come up with novel solutions. The operating and the administrative work of such an adhocracy work hand in hand to complete the project which is why it rather difficult to differentiate between planning and design of the work from its execution.

In the administrative adhocracy, which is also another innovative form, constitutes an organic mass of line managers, staff experts, combined with operators in the operating component working together or even shifting relationships on adhoc projects" according to Mintzberg. As other innovative organizations, this adhocracy uses project teams to undertake projects aimed at bringing new activities in line. There is a distinction between the administrative and the operating with, or alternatively automated thus running independently. Direct manager supervision is minimized in administrative ‘adhocracy. Manager’s influence emanates from the expertise and

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8. Microsoft allows its employees a day off to do their own projects
interpersonal skills rather than formal positions. There is hardly a distinction between line and staff managers and support staff plays a crucially vital role.

One of the distinguishing features of an administrative adhocracy is the absence of techno structure (the bureaucracy), which in any case is a hindrance rather than a help in ensuring that the diversely constituted, various-special skill-powered organization carries out their work, sometimes in pursuit of one deadline but more often than not, doing different tasks, and projects requiring equally different timelines. Thus, it is not surprising that the existence of a fluid structure creates an environment that is very demanding of some of the critical and crucial management qualities to ensure that working arrangements, which are not formalized are in place. Additionally, the manager serves as 'problem-identifier-shooter' to flush out any hitches such as imminent disputes or conflicts that arise by coordinating activities that channel sources of dispute and conflicts into useful innovative ends for the organization.

This underscores the importance of interpersonal relations and attendant communications capabilities. Managers have to be masters of human relations as they have to persuade, negotiate, make coalitions and achieve rapport to fuse the individualistically oriented experts into smoothly functioning teams. That is why management must allot ample time to monitoring projects to ensure they are running according to specifications, on schedule, and within the budget. Moreover, managers have to link the adhocracy with the external world in form of customers to ensure a steady flow of projects.

Since innovative organizations are in principle in a constant state of flux with strategies changing as the external environment assumes new calibrations ever on the lookout for not only what changes affect consumer tastes and preferences, regulatory framework, which must be complied with, competitor strategies to study in depth in order to craft counter strategies as soon as possible, but also increasing the internal preparedness of the organization to have the capacity, capability, competence, and speed to read signals in the external environment, translate and transform them into winning strategies, operational procedures, policies, programs, projects and products. To achieve that the manager of an innovative organization has to draw highly skilled experts from a variety of fields to work upon a particular project. Thus, power is not rooted in authority, rather knowledge and expertise. This implies that each project comprises of experts in a variety of fields with the task to complete the project in the scheduled time.

8. This explains why Steve Jobs on his return to Apple Inc. in 1997 he hired top executives who formed his new management team and brain trust that helped him transform a US$7 billion company (2002) into a US$170 billion company in 2008, with a cash cushion of US$34 billion, with hot selling gorgeously designed mobile telephones, movies, computing, and music, (MP3 players) which are displayed and sold in 275 retail outlets in 9 countries (Burke D. and A., Lashinsky, November 5, 2009, Fortune Magazine)
The mix of experts depends on the project to be worked upon. The existence of many small project teams working upon projects located in different places, calls management dexterity in integrating and coordinating the multitude of small project teams. Thus, the innovative organization is characterized by the presence of many managers serving as: 1) functional capacity; 2) integrating capacity and; 3) heading projects. The main function of such managers is to facilitate mutual adjustment between the many project teams that are working upon a variety of projects in the organization at any given time. Moreover, the manager must have the knack to maintain an amalgam of many project teams working on various tasks in the organization, under a highly decentralized organizational framework. The power over decisions should be distributed to various places and at various levels according to the need of a particular issue, and the expertise necessary.

The manager must also provide the 'binding' that leads and directs the organization towards achieving goals, ever changing strategies, and completion of customer oriented projects under a dynamic and complex environment. Steve Jobs is a good example here. He now epitomizes Apple Inc., and Apples epitomizes Steve Jobs, whose slew of responsibilities ranged from being a company visionary who played an important role in ensuring the availability of right resources (well remunerated employees, huge cash cushion, having control over key drivers in the industry), and right strategy to do so; linked company products with customer tastes and preferences by ensuring that company products met customers' tastes and preferences without fall out of line with 'the big picture of market operations and metrics'; and keeping constant contact with customers and gauging competitors new products on offer in an out-of-box style (Burke and Lashinsky, 2009).

This calls for a management style that de-emphasizes decorum and formality in standard operating procedures but instead nurses, rewards, and promotes creativity, technical proficiency, and customer orientation. The working environment at Microsoft Corporation, Google Corp, Apples Inc., which is leaders in innovation, are good example. As project teams comprise experts with diverse areas of expertise with each aiming at maximizing his/her contribution to the success of the project, management style to be innovative must allow sufficient slack to foster experimenting, imaginative and creative activity ('dreaming'), bolstered by human resource development strategy that emphasizes competence and capability enhancing programs at all time for all employee, supported by an 'individually' customized career development path.

Such an organizational culture nurtures and fosters continuous idea generation in all aspects and functions of the organization which bolsters capabilities, capacity, and
competences that facilitate competitiveness as well as readiness for organizational change. With such capacities in place, the organization has the quantum leap necessary to manage information from within and outside the organization. Subsequently, the organization is able to develop strong niche of customers, reliable network of suppliers, committed financiers, and value adding business partners and allies' relationships. Such perspective increases the value of organizational intellectual capital, which in turn facilitates faster breakthroughs in product development, nurturing the culture and reward systems that recruits and retains the best minds in the organization.

Additionally, managers of innovative organizations must adopt relevant management practices and cultures which foster the innovative spirit that churns out new products and services. To support that, top management must understand the vision, commitment to customers and solutions, establish a genuine portfolio strategy, and an entrepreneurial atmosphere, which provides fertile ground for innovation, champions to initiate and foster change in the organization. Apples, Google, and Microsoft are fitting example. New product releases often announced by Steve Jobs of Apple corporation every January during Mac World exhibition\textsuperscript{10}, often dressed in casual wear, decidedly computer gadget-savvy and Bill Gates before he retired from Microsoft Corporation, had for long living examples of the innovative spirit that is not only left to those on the factory floor, or grueling out in skunk works, but a pleasure that is so enthralling to the chief executive, who makes sure that he is not only present when new products are launched, but he is the individual who in all fanfare, grandeur exhibits the sleekness of the product, lists its innumerable uses to a diversity of users, now and in the future. That keeps the innovation spirit not only going, but gives it a shot in the arm that elevates it to the heights, not only in the company, but also among competitors (Ginsburg and Abrahamson, 1991).

Managers of large firms that innovate do not leave the innovative process to take its course to ensure that the process, though not under directives it follows a predictable, if 'controllable' direction. Innovative managers, notes Quinn (1995), do channel and control the main direction of the innovation process rather leaving to chance or possibilities. To achieve that, managers also administer the innovation process by among other things, getting actively involved in goal setting, selection of key personnel, formation of critical limits and decision points for intervention, as well as in provide vital leads that avoid elaborate planning and control system. However, management is limited to setting emerging technology or market leads, leaving the onus...

\textsuperscript{10} MacWorld exhibition held in January 2007, Steve Jobs launched the now popular i-phone, estimated by gadgetry pundits to be bought by about 45 million people Worldwide. Estimates put the number of applications for the phone that will be down loaded by middle of next year to reach 1 billion (Josh Quittner, December 16, 2008. "Why is Steve Jobs skipping the MacWorld?" Time.com
of execution to individual technical units based on defined time, resources, and specifications constraints.

Management makes sure that rewards to innovators are visible and significant which facilitates the sustenance of the innovation momentum in the organization. The academic and technical background of managers influences the success of the small enterprise in the product innovation process. The essence doesn’t lie in the level of education per se but the type of education that manager(s) are equipped with. It is also arguably true that educational experience plus interaction with likeminded persons’ influences the imaginative capacity of the manager, as is business experience, which is often acquired track records on jobs that call for management responsibilities in innovative organizations.

INNOVATIVE STRATEGIES

The structure of an organization is one of crucial factors that influence the level of effectiveness or the lack of it, of administrative and technical innovations. Mechanistic structure organizations, are not as conducive to administrative and technical innovations.

On the contrary, both administrative and technical innovations will find fertile ground in organic organizations, due to an administrative sub system that condones differences of opinion, seniority for the sake of it is abhorred, and instead risk taking in the search of better but yet unknown ways to improve administrative and technical processes, and knowledge is power. Leaders are transformational but not unduly interventionist, leaving sufficient room for workers to live their innovation dreams. This is an environment that ensures consistence and congruous rate of adoption of administrative and innovative innovations which improves and betters performance.

It is also worth noting that the size of the organization is an important factor. The size of the organization influences the capacity of the organization to adopt administrative and technical innovations. Though small size enterprises have the advantages of flexibility, quick response to any changes almost in an instant, large organizations have immense resources to develop the innovations, as well as the diversity and complexity in structures that are needed to research, conceive, design and develop, test market, and launch to the market not only a single products but a multiplicity of products at once (Nokia’s success over competitors is largely attributed to this fact, so is Toyota Corporation in the mobile phone and automobile market, respectively). Strategies grow from patterns that are allowed to emerge, which are artificially forced to be consistent. Strategies take root in any place where people can have the capacity to learn and obtain resources in support of that capacity. Strategies that
begin as relevant to small project or task teams become collective strategies when the pattern of behavior induced permeates the entire organization.

Thus, strategy formation in an innovative organization isn’t top-bottom, rather a product of efforts of many small teams working on projects located in various places in the organization. The emergence of strategies is a continuous process that permeates and pervades the entire organization, intensifying during periods of change such as is occurring today arising from the global financial crisis as such periods call for new approaches to manage corporate finances due in part to heightened government oversight over both state owned and private companies.

Moreover, there is need to make cutbacks on unnecessary costs to reduce the impact of falling demand and sales revenues on company profits and corporate value added done in such a manner that doesn’t compromise the company’s human resource capacity and competence and competitiveness, a process that often culminates into the redefinition of company core values and sticking to activities that support those, and spinning off others that don’t.

Equally important under times of economic adversity is the need to revisit corporate value chain to maximize the buck for the bang of corporate activities, hence share holder value is also needed in re-strategizing as is complying with tighter accounting and financial reporting rules need no longer take management remuneration for granted left to whisms of management and boards of commissioners to decide, rather must transparent and open to public oversight and caps are being enforced in many countries. A fitting example is provided by e-Bay, which undertakes instantaneous adoption of strategies per day in real time merely by reading and interpreting the change in business environment at the time through meetings exchanging communications among various managers via mobile phones. The adoption of a certain strategy from being just relevant to many small work teams working upon various projects to become organizational one may be by consensus but without the intervention of management. In innovative organizations the management process has little to do with preconceived strategies, but plays the role of recognizing emerging ones in the course of a myriad of tasks and activities carried out in various parts of the organization, in the administrative sections as well as factory floors, making minor intervention if and when it is deemed appropriate, even then to guide the process rather than direct it.

In other words, the environment drives the strategy formation process, as it is the cornerstone of what constitutes the organizational stated goals, products or services to keep it running, and the appropriate technology to employ in producing the product or service. The organization has to continuously and eclectically respond to the ever-changing environment. Management has to attempt to control the environment for
support while at the same time impose some broad general guidelines on the organization to ensure consistency and convergence. The strategist is a pattern recognizer, detecting emerging patterns within and outside the organization. Compatibility of administrative and technical innovations.

In other words, leaving strategy to emerge from the environment enables innovative organizations to always be up to the task to meet challenges that both stable and dynamic environments have to offer. The rate of strategy formation heightens with higher pace of changes, which induce changes in the direction that enables various parts of the organization to maintain even elevate effectiveness, efficiency and competence, and slackens somewhat during long periods of environmental stability. It is such dexterity, resilience, and relevancy of a innovative organization to its environment that makes it a winner in lean and good times. This is one reason why according to Damanpour et al. (1989) the innovative organizations always outperform non innovative organizations.

However, the argument descends to another level, as to which of the two, administrative and technical innovations should be undertaken before the other? Or whether either of the two is avoidable. The answer is that both are equally important, hence intertwined in an interdependent, and self reinforcing manner. Administrative innovations affect the administrative component of an organization and have an impact on its social system. This entails the organizational members, relationship among them, rules and roles, procedures and structures that influence the communication and exchange going on in the organization among the members and with the environment. These innovations are in form of a new management system, administrative process, and staff development program. In that regard it influences the technical innovation indirectly. Technical innovations on the other hand, take place in the operating -component of the organization. These do affect the technical system of the organization comprising of equipments used, methods of operations employed to transform inputs or information into products or services. These take the form of new ideas on new product, or new service, introduction of new elements in the organization’s production process or in-service operations. It could encompass acquisition, circulation, control, cataloguing, reference services, maintenance and distribution. Effective innovative organizations get to know that there is need to balance the socio-technical systems in an organization to ensure equilibrium by introducing congruous changes in both systems. This is necessary for the effective operation of organization.

The degree of intertwineness of administrative and technical innovations is clearly manifested in hospitals, libraries, and manufacturing industries. Technology has its strongest influence in organizations, which have both administrative and technical
innovations. Technology influences the behavior of groups and individuals in an organization, social structure has to change to be in line with technical requirements of the organization. For the organization to be receptive of technical innovations, an introduction of personnel and structure conducive to the former adoption. The influence of any given innovation depends on which sub-system, administrative or technical, where there is more investment in knowledge and in which sub-environment with more frequent changes.

As far as more knowledge is invested in the technical subsystem than in the administrative sub-system, more importance is attached to technical innovation and otherwise if more knowledge is invested in the administrative sub-system. There is an interrelationship between the administrative sub-environment, primarily the administrative system of the organization comprising of the community context circumscribing the organization, resource granting agencies, political and social factors along with government organizations; and the technical sub-environment which comprises of the technical system comprising of competitors, customers, suppliers, and the technical group.

Consequently, any changes in the technical environment impact on the administrative outcomes in form of strategies, structure, policies, and decision and control systems. On the other hand, changes in the administrative environment affect the transformation process in the technical system, yet technical innovations may not have any effect on the social structure of the organization. It is the combination of administrative changes and changes in the technical sub-environment that impact on the technical system resulting into new products or services. Important as administrative innovations, they will only last if they lead to technical innovations that generate winning products in the market.

CRITICAL SUCCESS FACTORS FOR INNOVATIVE ORGANIZATIONS

Innovation is inherently risky as it may fail to produce the expected outcomes. Innovation starts with individual innovative spirit, which is a function of “an individual's attitude, motives, skills, and psychological endowments,” which need a conducive cultural and institutional context, manifested in a business environment and macroeconomic conditions that support innovativeness to foster translation of innovative ideas into improvements in processes, products, or new processes and products (UNCTAD, 2005). The following section attempts to shed light on key factors that determine the success or the lack of it, where these don't exist, of innovative firms.
Keeping abreast of the customer base needs and preferences and responding accordingly. The type of segment served by the firm with its attendant demands influences the pertinent product design and development strategy. In some instances, the innovative company, such as Nike, Levi Strauss, and Dell undertake the linking of customers to the product designing facilities of the organization to enable mass customization. This implies that products that are produced have an assured market, as consumers are involved in the product development process. This increases the acceptability of the product, reduces the costs of test marketing, and induces loyalty in consumers as they feel that they matter.

Keeping constant track of the product development cycle to avoid putting a lot of money where there are no longer golden geese eggs. The firm ensures proper identification of the life cycle of the product, which determines the requisite innovations. The firm has to undertake constant review of the product's lifecycle along with the monitoring the new techniques, and new materials available to revamp the product. In the long term, however, the firm ought to develop a new product if its survival prospects are to be guaranteed.

Being Technologically savvy at all times characterized by having cutting-edge production processes, responsive business process, effective competitor and market intelligence. Continuous and sustained product innovation requires the adoption of the latest technological processes in the production process (operations), as well as in the administrative section (innovation conducive climate), making constant improvements on existing production processes and products, creating an innovation culture in the way things are done, which translate into strong performance on the market (higher market share, higher revenue, profits, R and D, which feeds back into high innovation intensity (van Leeuwen and Klomp, 2002).

Establishing and Utilizing Networking. With digitization, basically possible through software engineering facilitates networking the organization with suppliers, partners, and consumers is made possible Quinn et al. (1996) as well as faster concept development, speedier design, and real time supply of mass customized, better quality products. Additionally, networking, also reduces the need for a lot of investment in inventory through producing by order, and using real time online supply. Dell company, manages its networking with consumers to such an extent that most of its products are made to order enabling it to pay suppliers using money paid by consumers, and no inventory. To facilitate innovativeness, the company has to put in place a recruiting mechanism that brings into the company imaginative personnel necessary for the continuous nurturing and development of products at faster, quicker, and better quality than competitors. One source of networking is external scientific organizations. The firm has to keep abreast of breakthroughs in technology, maintains constant
contacts with external scientific organizations to facilitate the supply of state of the art technology as and when it is available, and augmenting its idea generation process by inviting technology experts to the organization for brainstorming sessions.

*Keeping budgeting always in control to ensure that long term expenditure goals take precedence over short term issues.* Good product innovation requires monitoring budgetary and cost control processes. This calls for maintaining good contacts with financial institutions that provide funding, especially those that have been reliable funding sources. This makes the financial officer in an innovative organization a vitally important position for the innovation process since he/she is the master of strategy on whether to produce the product in-house subcontract or outsource or, a deft communicator within and out the organization, deal maker and of course financier. Adopting conservative strategy on firm finances though often considered the best way during a downturn, spending on consumer-focused communications to ensure that consumer loyalty is maintained even during times when orders are low, enhances consumer's willingness and commitment to firm products at all times. The same applies to spending on shock-mitigating communications with project teams to exchange news on the developments and how they affect enterprise goals, strategies, and programs, and projects, enhance employee commitment, dedication, and loyalty to their employer more than would be the case during a boom. Moreover, innovative companies should endeavor to devise financing arrangements that take advantage of the less stringent state and national policies on mergers and acquisition to make bold forays into spaces left untended by competitors by buy new investments at distressed prices which should leverage the enterprise's core competence to the full.

*Making organization prepared for shocks and stimulants at all times.* It is of crucial importance for the innovation process, to establish some in-house storm-weathering and stimulant absorbing mechanisms. This is where the enterprise risk management approach, takes account of all types of risk, both external and internal, considering risk not only as a source of potential loss but also a means to create value for firm owners/stakeholders, putting in place all the necessary systems, structures and processes that help to define risk level the firm can take on in its business strategies and operations, identifying, assessing, treating, and disseminating all risks that affect firm operations, communicating such across all firm functions, quantifying as far as possible and applicable all risks that impact on the organization.

Equally important is the need to incorporate risk management in business strategies, processes, recruitment, selection, training and development, employees' career development paths, and performance appraisal and remuneration. The
establishment of the risk management function managed by some chief risk management office, who is responsible for developing risk management appetite and indicators thereof, for the enterprise, measure, monitor and manage such risk indicators, which are communicated to all functions of the organization, line managers and top managers, seeing to it that the firm implements risk management principles and concepts in its accounting systems, operations, employee training and development, standing operating procedures, and relations with third parties such as suppliers, customers, regulators, and competitors. This is what IAA (2009) calls 'holistic consideration of risk information relating to past events, current performance, and future outcomes.'

Having abundant cash acquired during good times serves as a good investment during economic adversity. Steve Jobs made inroads into Mobile phones, music launched the iTunes music software, the Mac OS X operating system, opened the first Apple retail store, launched the first iPod, the 5 GB PM 3 players, all in 2001, which was recession year that left many dotcom startups burst as risk aversion gained ground with attendant withdrawal of much needed venture capital (Burke and Lashinsky, 2009).

Consistent execution of product development strategy is also a key element that ensures the sustainability of innovations in organizations, large and small. This calls for sufficient and timely funding, sufficient remuneration that ensures that skilled human resources has the motivation to work on a diverse collection of new products.

Fitting company operations with comprehensive information management programs. Latest breakthroughs in communications and information technologies, has made the leverage of information and knowledge in an enterprise, a priceless endeavor that yields invaluable benefits that range from better documents management, intellectual property asset management through timely and accurate identification, packaging, branding, patenting, selling; data management (input, dissemination, updating, sharing); customer tastes and preferences monitoring to track fads, trends which are transformed by company’s business process into winning products and services, state of the art production and delivery processes; diverse, faster networking with institutions of higher learning, research centers, suppliers, associations which enable the company to follow trends in the development of technology in core business products, processes, standards, and practices.

A regulatory regime that fosters competition. Innovation as Schumpeter saw it, constitutes a creative destruction process in which various ideas, players, processes, and products compete, with the best gaining the upper hand over the lackluster. In Wennekers and Thurik (1999)'s expression “...many individual entrepreneurial actions compose a mosaic of new experiments...expand and transform the productive potential
Inventiveness and proximity to demand for Innovative products. Though innovation and inventiveness are different concepts, they are underpinned by more or less factors. The demand for innovative products which isn’t sporadic but sustained year to year provides the economic rationale for innovators to keep injecting resources into idea generation, concept development, requisite human resource development, networking, and knowledge management activities which make the constant release of innovative products possible. Moreover, with a large potential market for innovative products in close proximity, innovative firms find it easier to obtain funding from venture capitalists as well as conventional lenders. The success of the US IT industry in general and software products in particular, in maintaining its lead in inventiveness measured by the number of patented IT products over other countries besides the existence of competitors that push companies to either innovate or implode, has been attributed to the proximity to a large US IT market, and complementers which generate high agglomeration advantages (Arora, Forman, and Yoon, 2007).

Utilizing internet capabilities to tap customer generated innovations (Ewing and Cappel, 2008). Innovative companies are turning to the internet to seek ideas from web surfers, users and non-users of the products they produce and sell alike. Nokia uses its sports tracker application, which is downloadable, and was originally meant to help runners and cyclists using global positioning facility on some Nokia phone models to make suggestion for improvement, for free. The idea has been concretized in the Beta Lab web site, which allows users to test smart phone software and make suggestions for improvements. NOKIA leveraged the Internet to improve its global positioning facility, and smart phone software application as well as other products the company sells, generating hefty rewards in extra revenues. Google is another example, with its internet based idea generation initiative which allowed users to suggest innovations in exchange for cash which spawned many brilliant ideas. Its “Google Model Your Town Competition,” allows the creation of a 3D portrait of one’s community and sharing it with the world, enabled the company to widen its customer base, as well as ideas on enriching its Google Earth application. With Broad band internet becoming pervasive, internet as a source of innovation has risen dramatically worldwide.

CHALLENGES FACING AN INNOVATIVE ORGANIZATION

Managing an innovative organization has its thrills, but also its "threats", the following section delves into some of the major challenges innovative organizations have to deal with in order to sustain an innovative spirit in the organization.

Identifying enterprise core business and sticking to it. Though enterprises would prefer to enjoy high economies of scope by producing in-house innovative products that
require perhaps similar inputs, expertise, there is a danger that they might end up being jacks of all trades but masters of none. The drivers of today’s growth companies have shifted from overemphasis on diversification which though reduces risk tempers growth benefits in the process, to differentiation and producing specialties, which are sold at premium prices. Moreover, with better knowledge and expertise in specialized products, enterprises may over time undertake vertical integration enabling them to produce not only innovative specialized products but also innovative production processes that produce them which will lead to higher productivity, better product quality, and more customer oriented.

Managing a fluid ‘impermanent’ organization. Of prime importance is the fluidity of its structure, which makes the manager’s job more of a guider and controller of chaos than leader, planner, organizer, reporter or budgeter. This is made the more complicated by the flux nature of rules and regulations, which are made in such a way as to accommodate the diversity of personnel opinion and inclination. Moreover, the authority that usually emanates from resource control is instead vested in the ideas or knowledge. This implies that the manager has to be good at interpersonal relations, an eclectic visionary and good coordinator without appearing to impose his will on the multitude of work teams spread in different locations.

Maintaining an intelligent, independent, and creative workforce. Intelligent people rarely want to stay on one job for long even if the wage remuneration is very high. This is because what drives their interest in what they do has little to do with pecuniary incentives and a lot to do with self actualization and sense of achievement. Moreover, the demand for such workforce is ever on the rise, which makes other factors such as working conditions, performance appraisal, reward systems, career development management, networking capacity with fellow professionals, as well as other non-pecuniary elements crucial in maintaining it. This is aggravated by the fact that such workforce has a high probability of leaving the firm to establish his/her start up as the core of what he/she does, lies in the capacity to generate ideas, which are then translated into concepts and product prototypes. The demise of Linkabit enterprise is attributed to the inability of management to keep in place working conditions that allowed independence, creativity, and non intrusive culture (West and Simard, 2007).

Setting up an effective incentive plan. The firm employs experts in a variety of fields each of which makes his or her contribution to the success of the task that is handled by the task force. The difficulty lies in putting in place not only the effective recruiting mechanism, but also the evaluating and rewarding mechanism for the diversity of such a workforce. Putting in place a good workforce performance incentive program is very crucial for according even in companies with low R and D expenditure,
it is found to boost worker productivity, especially in the technology intensive industries (Anderson, Campbell, Brown, Chiang and Park, 2005). Yet as is often quoted, innovative organizations are faced with the task of poaching which makes the training and development of employees a costly process. It is basically the ingenuity of innovative management that such a difficulty can be overcome.

**Capability to manage ambiguity and chaos.** Innovative organization are fraught with lack of job definition clarity, ambiguous authority relationships, lines of communications, intense competition for resources, and employees rivaling each other seeking for recognition are the other factors that makes the, managing of fluid organizations calls for strong interpersonal and negotiation skills, impartiality, yet resolute on decisions made, once one is certain of that they are the right ones for the good of the organization. This obviously increases the risk that any fallout from a decision taken without sufficient foresight, falls squarely on the shoulders of the manager. Nonetheless, its is because of such risks that managers of innovative firms earn huge remunerations, which are definitely complement the self actualization they earn on realization their high risk but high value added programs ad projects for the companies they lead.

**Dealing with organizational impermanence.** Most innovative organizations live as long as the product or order they work upon is completed. This makes it difficulty for management to recruit employees, put in place procedures, and establish some modicum of permanence that can facilitate recognition from the ecosystem the firm is located. Moreover, with time a small innovative organization gradually acquires the paraphernalia that characterize mechanized organizations as workforce becomes larger, orders mount, paperwork increases. Larger companies no longer provide the exciting working environments where curiosity is allowed to roost, and the generation of ideas, however wacky at first, is tolerated. Spin-offs often arise as a sign of protest by intelligent, independent, and creative workforce against such a trend (West and Simard, 2007). This transience complicates funds generation, society involvement and inhibits long term planning. This of course doesn’t not apply to companies such as Microsoft Corporation, Apples Corporation, IBM, and Cisco systems that have discovered mantra of staying alive for long and become big, while innovating throughout.

**The overwhelming demand for a superhuman manager.** In an innovative organization the rules and case study approach that managers are used to tumble down. In its place the manager has to behave like a member of an orchestra to do the improvisation as a situation arises. It thus calls for an expert in information as well as people management, an allies maker, insightful, knowledgeable in a variety of fields and a good listener. These are not easy skills to acquire by any one person. This is the more
head spinning if managing a global company comes into the picture. For a chief executive officer, who must manage country managers in various countries on seven continents with their attendant differences in time zones, diversity in belief systems, values and customs, work ethics, regulatory regimes, the task is even more daunting. What should also be noted that, products in different markets which are at different maturity complicate efforts to reap benefits of scale and scope economies by concentrating production in some markets where production costs are the lowest, with other markets just serving as markets.

The difficulty of making alliances and partners in outsourcing. The Innovative organization ensures it minimizes the investment in inventory through linking its production processes to the network of suppliers. This ensures real time delivery of raw materials, while at the same time fastens the delivery process to the consumer. Moreover, in order to reduce the cost of production to the minimum, the firm only undertakes the functions in which it most effective and efficient, outsourcing the rest to other firms or subcontractors. This implies that one of the key issues for a manager is to be dealmaker as well as an expert at communication. This is evidently challenging in a static environment; it becomes baffling in a dynamic and complex one. The constancy of change makes the partners keep on changing, as are the members that can be talked into an alliance. In any case it must be noted that the decision whether to produce a service or part of a product in-house or outsource it, is harder than at seems at first time. Outsourcing is mainly driven by several considerations which include: reducing product cost, gaining access to new markets, gaining access to human resources and technology from new areas.

Nonetheless, outsourcing has opened many companies to foreign competition as links in many an IT company’s value chain become vulnerable to external suppliers. Moreover outsourcing companies lose some of the cost advantages, value added, knowledge capabilities and competencies which are attributable to production of many products and need to expand production process. The implication is increasing reliance on suppliers for product design knowledge and expertise, product quality specifications, which must be met by suppliers; various services from suppliers; and product cost (Herrigel and Wittke (2004)). "increasingly dependent on outside knowledge..., and because their future technological and manufacturing needs are uncertain and always subject to change, the process of surveying suppliers has become a

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12. One of the reasons endogenous economic growth theorists give for the development gap between developed and developing countries is the higher technical progress enjoyed by the former, which is an integral part of knowledge hence characterized by high indivisibility and high externalities. The more a country has, the higher its capacity and capability to generate it. Outsourcing often does the very opposite that is de-compartmentalizing knowledge, which though creates cost cutting advantages, undermines the firm's capacity to enjoy knowledge spillovers that emanate from individual and group learning, experimentation, and trials and errors.
crucial mechanism for learning for the customer firm.” Outsourcing is in fact integral to the trend of IT industries to go back to core businesses, divesting or outsourcing activities and businesses which weren’t. It is a point that Prahalad and Hamel (1990) make succinct in suggesting reasons for the failure of US companies to compete with Japanese companies, in their remark that “... senior management (of US companies, author’s emphasis) conceived of their companies as portfolios of discrete business units, divesting those with weaker returns regardless of possible synergies with other units or possibilities for future strategies.”

Moreover, by locking and hooking up the production operations to another company with its own interests, strategies, and what not, the company, risks the risk of sharing some vital strategic information to competitors who may also opt to outsource the production of the intermediate product with the same company. The case of what once were sourcing companies India, Brazil, Mexico, and China for Japanese, European, United States IT companies have today become stiff competitors in both emerging markets and in developed markets now daunts many a corporate executive to pursue the outsourcing strategy to take more caution in taking the ‘deep’ irrevocable plunge (Lynn and Salzmann, 2007). And once lost, the intrinsic knowledge necessary to produce the product, takes long to develop, as human development priorities shift over time.

Procrastinations by even the most bullish of company managers which often characterize investment and financing decisions during uncertainty-fraught recession times makes the identification of partners to form a mutually beneficial strategic alliance even harder. This is because, as Tamboto (November 26, 2008) notes value creation in a downturn comes from keeping tight vigilance of a company’s cash flow to avoid high indebtedness to avert the danger of failing to live up to creditors’ expectations as revenue slide, which might end in insolvency and bankruptcy; focusing on mergers and acquisitions as these generate higher total shareholder returns during downturns than in upturns13, which has the implication that companies with ample cash may prefer strengthening their competitive position gobbling up weakened rivals to harnessing strategic alliances; revisiting company value creation goals to determine the extent to which they are realistic, and if so propel the company structure, by refocusing on the fundamentals to live up to it, while if not, company efforts and energy will be consumed by reviewing, resetting, structuring, and relating the goals to fundamentals.

Relating company goals to fundamentals will not suffice if the strategy generated doesn't link strongly with prime share holder interest, which is value creation. Hence, underlying it all, especially in times of turmoil, according to Olson, Paschle, and Stelter (2008) company managers must ensure that total share holder value creation is central to sustainable corporate strategy process which encompasses business strategy, investor strategy, and financial strategy.

Oftentimes, however, companies awash with vaults of cash, which are likely to be targets of becoming partners in an alliance in a downturn, may either be too preoccupied with reviewing the extent to which company competitive strategies are in congruence with the dynamic and uncertain environment characterized by falling orders and revenues, dealing with hardships to meet payroll requirements, as well as increasingly unreliable suppliers, and cash constrained competitors trying to use all means to penetrate market shares of competitors by hook or crook. As uncertainty dawns, suspicion of ill intentions take center stage, making alliance making a feat hard to formulate, negotiate, let alone consummate.

Managing Innovations in crises. During lean times the company has to maintain financial expenditure for new product developments, yet as everyone knows, inventory is piling up in warehouses. Unless the crisis hits all firms equally across the board, there will always be some vulture hunters ready to cash in on by investing at a time of depressed asset prices as many competitors lie low waiting the downturn to pass. Such investment is in the form of R and D and new product efforts to prevent competitors making inroads into the firm’s market share, and if possible make inroads into market shares of companies curbing their expenditure. This is not an easy proposition to forward to company owners at such times of low profits. Yet the new product strategy should be sustained for ensuring the company’s short term as well as long-term success against competitors. A fitting example is Nokia.

Besides its huge R and D investment, Nokia sustains its advertising campaign even at times when the projections of its quarterly profits plummet, knowing well that any let up will open the opportunity that competitors such as SonyEricsson (acquired by Sony in early 2012), Samsung, LG can exploit to full advantage. This has made it virtually impossible for rivals to make inroads into its market leadership in Indonesia and world market in the mobile phone business.

Nonetheless, the crisis comes with its challenges. For while tariff barriers may be difficult to re-erect because of free trade commitments many countries have already committed to through regional and plurilateral frameworks, non tariff barriers are likely to increase in number and intensity aimed at protecting domestic firms from ever graver woes for the economy and society. In any case, a lot of tax payers' money has
already been spent to ensure that domestic economy stay afloat, hence ironically the state should arguably side with economic players to stem the rise in economic and social cost, which foreign competition would unleash.

Finding adequate and timely financing for Innovative companies. Though innovative companies in general and SMEs in the technology loaded sectors such as information and communications technology in particular, contribute substantially to economic productivity, growth, and employment generation, many find difficulties in raising funds to get off the ground, expand, invest in new staff, product development, and process development, due to the fact that many of them are start ups, without conventional management instruments such as financial management and risk management, coupled with scanty use of information instruments such as financial statements, and balance sheets which give a glance at the firm’s net worth (OECD, 2006; Marzunisham, 2006).

Moreover, the products innovative small scale firms are offer are riskier than those offered by conventional SMEs because they are new, untried, products, the market of which, is still potential but not tried, tested, and proven. To complicate the issue further, business models many technology savvy SMEs offer are unique, hence no existing comparison providers of funds to base on in evaluating creditworthiness of their investment proposals. This means that new novel financing initiatives are required, which SMEs find difficult to access let alone get informed in time about their existence. Coupled with the need to make huge investment in R and D, which large companies find hard to do, but small innovative SMEs consider an insurmountable task.

Increasingly assertive and diverse, emerging market. Despite the watershed in a unprecedented sustained growth in global prosperity marking the 1980s and 1990s and early 2000s, which has led to the emergence of a vibrant middle class in emerging markets in Brazil, China, India, and Russia, among others, the current global financial crisis has created, the number of people throwing off the shackles of poverty in the world will continue to rise thanks to rising global productivity, access to education, medical care, global disaster efforts which are becoming more integrated, organized, and fast and focused in reading signs of emerging man-made disasters to take necessary, timely, and apt preventive action, and where natural disaster hit, prompt, massive, full-scale, coordinated action. This has cut the death toll from both manmade and natural disasters significantly. The falling cost of communications and information technologies has not only served as a helper in bridging the telecommunications and information divide existing between industrialized and developing nations, enhanced enterprise access, capacity to create, acquire, use, disseminate, share, update, and leverage knowledge, to improve competitive advantage as well as generate intellectual capital, but has become a
vital source of employment, driver of innovation, and integrator of business processes, welding them together into effective and competitive enterprises that have become tough competitors with those from developed nations. Meeting the demand of an assertive, dynamic, diverse, demand of new products that must reflect unique features in each key emerging market without losing sight of common features in such products that enable global product and service producers to continue to use mass production even as they have to differentiate, are not easy challenges for the faint hearted (Garelli, 2008). Innovations in product/service design, marketing, after sales service provision, to meet constantly changing tastes and preferences that characterize a youthful, increasingly wealthy, and assertive market, coupled with global climate change, poverty eradication, and demand for responsible corporate citizens trends, will shape the determinants of which innovative companies stay in the lead, those to throw in the towel to become conventional follow-anything-that-moves enterprises, and the laggards that will perish into oblivion, come the second half of the 21st century.

*Combining advantages of large scale and small scale enterprises to achieve the best from both worlds.* While large firms have resource based advantages to undertake R and D, Hire the best human resources, high caliber and transformational managers, marketing clout both at home and abroad through wide networking, and so on, small firms, have the flexibility which come with small lean size. To that end, organizations, large and small, can harness the benefits of both types of firms sizes through networking and alliance formation. Small firms can benefit from being members of a network of suppliers to large firms, which ensures some degree of certainty to resources and market for products; human resource development that is linked to production arrangements with large firms; quality improvement and development through technical advice from large firms; do not need to scale up operations. In the same vein, large firms, attain dexterity and flexibility by having some of their work cut out for them, by their small counterparts (effecting improvements in components of products quickly, reducing the need for huge volumes of working capital, spreading operational risk (including product and process innovation) to many small suppliers (Vossen, 1999).

**CONCLUDING REMARKS**

The innovative process is an imperative for an organization, small and large, that does not only wish to stay in business, but banks Small on innovation as a leverage to be the leader. Management style must be in sync with ever changing strategic goals, programs, projects, and activities. Linking innovations to customer tastes and preferences is one of the prerequisites an innovative organization must accomplish, which is only possible if the innovative spirit permeates the administrative and technical sections of the organization, top management and line management, all levels of

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management and factory floor employees. Communication and exchange of information, data, ideas, internal and external developments that have bearing on the competitive edge of the organization, is a key pre-requisite for an innovative organization to not only have the necessary capabilities to discern major changes in drivers of competitiveness in the industry, but also equally important to take the necessary redefinition of organizational mission, vision, goals, strategy, programs, and projects, to attune them to the new environment. Flexibility in strategy formation and implementation, across all organizational functions, right from ideas generation, research and development, human resources development, market research and intelligence, to marketing, definitely calls for management style that doesn't only wait for reports of how things are doing, but is always on the lookout for any help that may be needed by various small team projects to ensure that they get the resources when they need them, in quantities they need them. The main drivers of innovation have been technological developments in process and product design, the incessant demands of consumers for better, products, macroeconomic policies such as deregulation of all factor and product markets, including services, globalization, and the internet era. The innovative organization succeeds over others due to its flexible structure, use of team work and communication, better appraisal and management of human resources function, setting up new product blue print, new product strategy, consistent execution of the strategy, even if the strategy changes better tracking system, better networking, and use of information, and unequivocal organizational commitment. Small firms have advantages of higher innovation intensity, which is attributed to product innovation, having contacts with other firms, cooperation with research institutions, and continuous innovation, market research. However, their reliance on state subsidies, export market growth, and employment inelasticity of their innovative efforts as shown in Kemp et al. (2003), are serious obstacles that may hamper their operations during turbulent times in comparison with large firms. The management of such hurdles that face innovative organizations, determines the success or otherwise of the firm. Management should ensure such hurdles, which if left unattended by derail, the multi-project, small project team, innovative organization, from reaching its goals, are averted or dealt with in time, by fostering the evolution of an innovation for all supportive business culture in the organization.
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