

Determinants of Innovation and Factors Affecting Small Business Success and Failure

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Abstract

This paper is a literature review on the above theme and there is main five current debates on this area has been discussed. First, to find out a common list of variables that could explain the factors that determines innovation in an organization. Second, to see the most important factor out of firm specific factors and environmental factors. Third, is to see the impact of innovation on organizational performance and success. Fourth, what determines success of a firm and what is the most important factor which determines success in an organization. Fifth, is to see what are important determinants of innovation in developing countries compared developed countries. Throughout this paper all the important concepts in relation to the above theme have discussed. Important concepts in innovation have been discussed first and then all the important concepts in relation to organizational success has discussed. Concepts such as introduction to innovation, innovation measurements, determinants of innovation, barriers to innovation, characteristics of innovative firms, relationship between some determinants (market structure, firm size, age of the firm, ownership structure, networks, training) and innovation, and relationship between small business success and innovation have been discussed in relation to the concepts of innovation. In relation to small business success concepts such as characteristics of successful entrepreneur, small business success and failure and factors affecting small business success and failure, have also been discussed.

Keywords: innovation, success, failure, measurements, determinants

1. Introduction

This is a literature review-based research paper. In this paper it is expected to discuss all the important theoretical concepts in relation to the above theme such as; to find out a common list of variables that could explain the factors that determines innovation in an organization, to see the most important factor out of firm specific factors and environmental factors, to see the impact of innovation on organizational performance and success, to see what determines success of a firm and what is the most important factor which determines success in an organization, to see what are important determinants of innovation in developing countries compared developed countries. Initially it will be discussed important concepts in relation to innovation and then on the concepts in relation to organizational success.

2. Overview to Innovation

Though the importance of innovation is increasing these days there is an immense difficulty in understanding it. Read (2000) suggest that one of the initial difficulties in innovation research is defining exactly what innovation is. There exists a clear anxiety throughout the academic world as to the way of defining it. North and Smallbone (2000) suggest that Innovation is an elusive concept which is interpreted in different ways by different authors. Some researchers confine their work to product and process innovation, whereas other also includes changes in other aspects of the business

as well, such as marketing and management methods. The definition and the theory of innovation thought seem to be so important in the days of the knowledge economy and high-tech driven economic growth. Innovation becomes a crucial way of achieving high economic development and growth. There seem to be a need for introducing as objective as possible innovation definition. There is various definition of innovation that appears in the literature.

Kacker (2005) points out that the word innovation comes from the Latin word '*innovare*' which means '*to make new*'. Innovations involve new methods of doing things and are associated with risk, failure, new ways of management thinking and unlearning of old ways. Innovation is the process of doing new things. It is important to recognize that innovation implies action, not just conceiving of new ideas. According to Schumpeter (1934) in his classic '*The theory of Economic Development*', describes the motor of the development as the innovation. The innovation was not well defined by that time but it was clearly described in his proceeding works in which he used the innovation term. Drucker (1985) innovation can be generally defined as: the process of equipping in new, improved capabilities or increased utility. It is worth saying that innovation is not a science or technology but a value which can be measured with environmental impact. Business Council of Australia (1993) suggest that in business, innovation is something that is new or significantly improved, done by an enterprise to create added value either directly for the enterprise or indirectly for its customers. Thomas et al (2004) suggest that innovation is the capacity to introduce some new process, product, or idea in the organization. According to Drucker's (1974) theory innovation has to be market oriented and if it is product oriented it will create a '*technology miracle*' without creating required benefits. According to Porter (1990) innovation can be broadly defined to include both improvements in technology and better methods or ways of doing things, which can be manifested in product changes, process changes, new approaches to marketing, and/or new forms of distribution. Rogers (1998) points out that innovation can be defined as the application of new ideas to the products, processes or any other aspect of a firm's activities. Innovation is concerned with the process of commercializing or extracting value from ideas; this is in contrast with '*invention*' which need not be directly associated with commercialization. McDaniel (2000) suggests that invention becomes an innovation only when it is put to productive use. That is an invention becomes an innovation only when the invention is applied to an industrial process and a new production function results from this application. Likewise, not all managers or owners of business are entrepreneurs because one can run a business without trying new ways of doing business. This trying of new ideas and new production methods separates a group of pioneers known as entrepreneur and this endeavor is refereed to as innovation. Schumpeter (1934) points out five types of innovation: (i) the introduction of a new good or an improvement in existing product) (ii) the introduction of a new process(iii) the opening of a new market (especially exporting) (iv) the identification of a new source of supply of raw materials (v) the creation of a new type of industrial organization. OECD (1997) defines innovation in two ways. First, a technological product innovation can involve either a new or improved product whose characteristics differ significantly

from previous products. Second, a technological process innovation is the adoption of new or significantly improved production method, including methods of product delivery.

3. Innovation Measurements

Neely and Hii (1998) suggest that measurement of innovation is still clouded with statistical and conceptual problems. The literature suggests that most of the research carried out in the area of innovation performance measurement is technically biased. According to Narayana (2005) it is very difficult to measure innovative activity. R&D and patent are the most widely used proxy indicators of innovative activity, but we know it has many difficulties. CEI/DTI (1993) point out that innovation is widely acknowledged to be difficult to measure. Avermaette (2003) argues that although innovation has been studied extensively, there is no generally accepted way of measuring innovation. Rogers (2004) suggest that a major issue in any analysis concerning innovation is how to measure innovation itself. Previous literature has often focused on R&D (an input to the innovation process) patents (considered as both input and output) as well as qualitative or subjective measures of innovation. All these measures have various drawbacks. According to Unger and Zagler (2000) innovation can be measured the input side (R&D expenditure, Total innovation expenditure) and from the output side (patent applications or patents granted, literature based output indicator identified from scientific and trade journals, export and sales of innovative products).

However, Tidd, Bessant and Pavitt (1997) suggest number of possible measures and indicators.

Measures of specific outputs of various kinds: Patents and scientific papers as indicators of knowledge produced, or number of new products as indicators of product innovation success.

Operational or process measures: Customer satisfaction survey to measure and track improvements in quality of flexibility.

Measures of strategic success: Overall business performance is improved in some way and where at least some of the benefit can be attributed directly or indirectly to innovation.

It is also possible to consider number of more specific measures of the innovation process particular elements of it. For Example: number of new products introduced over past three years and percentage of sales and/or profit derived from those new products due to them, number of new ideas generated at start of product innovation system, failure rates- in the development process, in the marketplace, customer satisfaction measures-was it what the customer wanted?, time to market (average, compared with industry norms), cost of product versus sector trends, quality versus sector trends, manufacturability versus sector trends, testability, disposability, man hour per new product, process innovation average lead time for introduction, number of new processes installed and type over last

three years, measure of continuous improvement- suggestions/ employee, number of problem-solving teams, savings accruing per worker, cumulative savings.

Neely and Hii (1998) put forward R&D expenditure, patent counts and counts of major or minor innovations (innovation counts) as the common measures of innovation. Roger (1998) points out two measures of innovation such as output measures and input measures. Key output measure of innovative activity is the success of the firm whereas input measure of innovative activity is the level of research and development expenditure. According to Hughes (2002) innovative activity measures fall into two categories of input and output measures. Input usually includes expenditure on R&D, and measures of the staff employed in R&D. Output measures include patents and measures of the incidence of product, process and logistic innovation. Romijn and Albaladejo (2002) suggest three measures of innovative capability of an organization such as at least one major product innovation during the 3 years preceding the survey, number of patents held and product innovation index. Peeters (2003) suggest three types of innovation measures. They are: share of sales allocated to R&D, firms' patent applications, share of sales due to innovative products and processes.

4. Determinants of Innovation

Lee (2004) suggests that survey based and firm level empirical literature on the determinants of firms' innovation is fairly recent.

Neely and Hii (1998) points out three sets of factors which influence innovativeness of an organization (see figure 01). They are: organizational characteristics, managerial characteristics and environmental characteristics. Kraft (1989) suggests that technology used in the organization, skill level of the workforce and role of the dynamic entrepreneur are the main determinant of innovation in an organization. Mohr (1969) points out that innovativeness seems to be affected most by individual creativity and by the degree of hierarchical informality in organizational structure. Innovation on the other hand has been linked to size, wealth, environment, ideology, motivation, competence, professionalism, non-professionalism, decentralization, opinion leadership and still other variables. Read (2000) found management support for an innovative culture, customer/market focus, communication/networking, HR strategies that emphasize innovation, teams and teamwork, knowledge management, development and outsourcing, leadership, creative development, strategic posture, flexible structures, continuous improvement, technology adoption are the determinants of innovation and management support for an innovative culture is the top out of them .

Kimberly and Evanisko (1981) suggest that characteristic of the organizational leaders, characteristics organizations themselves, and characteristics of their contexts are the main determinants of innovation in organizations. Subramanian and Nilakanta (1996) point out that organizational characteristics such as size of the organizations, degree of centralization, degree of formalization, resources slack,

degree of specialization affect organizational innovativeness. Romano (1990) argues that both management variables and environmental variables determine an organizational innovativeness. Management variables consists of education of the owner, training of the owner, management style, planning, technology/production, product/market mix, research and development, product quality, risk. Environmental variables consist of market change, competitive turbulence, customer base, product life cycle, technological innovativeness, labor force and finance. Dijk et al (1997) suggest that although many determinants of innovation have been proposed as candidates in previous empirical studies of R&D, the following six are usually considered: Firm size, market concentration, capital intensity, profitability, market growth and skilled labor. Firtz (2001) considers both characteristics of the enterprise and characteristics of the environment as determinants of innovation. Characteristics of the enterprise includes size of the firm and execution of the top management function where as characteristics of the environment includes industry of the firm and competitive pressure. Bhattacharya and Block (2004) suggest that firm size, market structure, profitability and growth are the main determinants of innovation in organizations. Mohnen and Dagenais (2002) found that the propensity to innovate in Denmark is significantly determined by industry type, firm size and group subsidiary. Bladwin et al (2002) suggest that R&D and firm size are significant determinants of innovation in organizations. Martinez-Ros and Jose (2002) which looked at Spanish experience found that firm size is not a significant determinant of innovation. Their study also indicates that factors such as managerial ability, corporate culture, know-how, and other time invariant variables may be important determinants of innovation. Avermaete (2003) suggest that innovation of an organization depends upon age of the company, company size and regional economic performance. Read (2000) found a number of common innovation determinants such as management support for innovative culture, a customer/market focus, and a high level of internal and external communication/networking. Romijn and Albaladejo (2002) point out two determinants of innovation in an organization such as internal sources and external sources. Internal sources include professional back ground of founder/manager(s), skills of workforce and internal efforts to improve technology where as external sources include intensity of networking, proximity advantages related to networking and receipt of institutional support. Love and Roper (1999) points out three possible routes by which firms may obtain the main ingredients for innovation. They are: R&D, technology transfer and networking. According to Peeters (2003) firms must master four competencies to be innovative. They are: development of a culture of innovation, generation of innovative idea, implementation of idea and management of intellectual property. Harrison and Samson (2002: 49) suggest that many attempts have been made to identify those organizational characteristics that differentiate an innovative firm. Several factors including continuous and intensive organizational collaboration and interaction, management of uncertainty, a recognition of the cumulative nature of technological capabilities, and the differential nature of technological skills have been identified as characterizing superior innovative performance. Saleh and Wang (1993) have developed one of the comprehensive models which identify three key organizational attributes for effective innovation.

- **Entrepreneurial strategies**

- Risk taking: in such dynamic business environment, risk taking becomes part of doing business as firms need to make strategic decisions with incomplete information.
- Proactive approach: successful firms are proactive and anticipate, rather than react to change. Consequently, they regularly scan environments and act accordingly.

- **Organizational structure/ group functioning**

- Flexible structures: the relationship between innovation and organic structural forms has long been recognized.
- Synthesis: innovative firms are able to effectively integrate activities across organizational boundaries.
- Collective orientation: synthesizing targeting activities between departments, groups, and individuals is underpinned by a common collective understanding of the goals of the business.

- **Organizational Climate**

- Open/ promotive climate: openness in exchanging information facilitates not only effective innovation but also trust and respect between employees
- Collegiality: in a collegial climate, authority and power are shared equally among colleagues
- Reward system: well planned reward systems have been found to be effective tools for reinforcing expected behaviors and shaping the development of the desired climate.

According to Hyvarinen (1990) personal participation, inventions, different technologies, information, outside know how, life cycles, internal know how, ideas, financial input, motivation, attitudes, working hours, education, strategy, competition, cooperation between departments, economical support, infrastructure, political input, branch, market, hostility, location, interest groups are the main determinants of innovation in small and medium scale organizations. Hoffman et al (1998) suggests that qualified scientist and engineers, owner-manager leadership (and education), nature of commercialization and marketing efforts, degree of marketing involvement, macro-economic conditions, finance, external linkages are the main determinants of innovation in SMEs. Brouwer and Kleinknecht (1996) points out that R&D intensity, sales growth, SME presence, employees, R&D function, dependence on mother company, R&D focus, consultation of innovation center, sector, location, external knowledge and collaboration are the main determinants of innovation in Small and medium scale businesses. Hadjimanlois (2000) examines three types of characteristics as determinants of innovation in SMEs. They are:

Owner characteristics: age, education, prior experience, cosmopolitanism

SME characteristics: size, age, sales turnover, existence of written strategy, degree of internationalization, R&D expenditure, employment of scientist and engineers, environmental scanning, cooperation with technology providers

Environmental factors: intensity of competition, environmental change, importance of external barriers, level of networking

Bougrain and Haudeville (2002) points out that industrial corporation (sector of production, technical partners, linkage to external sources), R&D intensity, number of executives and existence of design office are the main determinants of innovation in SMES. Aces and Audretsch(1988) suggest that R&D expenditure, capital intensity, employee- union membership, four firm concentration ration,, advertising expenditures, skilled labor, large firm industry employment, value of shipments are the main determinants of innovation in small and medium scale organizations. Kim et al (1993) have studied four types of characteristics which determined innovations in organizations. They are:

Environment: dynamism, complexity

Strategy: scanning, internal control, R&D intensity, external technology linkage

Structure: formalization, centralization, professionalism, administrative intensity

Top management characteristics: internal locus of control, risk taking propensity, tolerance for ambiguity.

Freel (2003) points out that networking, R&D expenditure, skill level of employees as main determinants of innovation in SMES.

5. Barriers to Innovation

Peeters (2003) suggests that obstacles can come up at any time during the innovation process. They come from various sources, internal or external to the firm. Such barriers are: high innovation or development costs, high economic risks, time constraints, lack of financial strength/ support, resistance to change, lack of qualified personnel or competencies, inappropriate public regulations, customers' organizational rigidities, lack of customers' reaction to innovation, poor communication inside the business unit, lack of leadership, internal organizational rigidities, trade unions, lack of access to competent suppliers, imperfect protection system. Kacker (2005) suggests that managerial barriers, financial barriers, technological barriers are main faced by Indian SMEs. John Stark Associates (2006) suggest that there are seven types of barriers to innovation. Some of them are within the organization and some of them are in the external environment. They are: organization not conducive to innovation, environment not conducive to innovation, insufficient resources, traditional management behavior, group behavior, individual behavior, traditional accounting practices. Oke (2004) suggests that concept testing, motivating employees to buy into innovative culture, generating innovative ideas, lack of innovation legacy, getting top management support, developing ideas that are not easily copied by competitors, protecting innovations with patents, having an effective development

process are the main barriers to innovation in organizations. Noone (2000) identifies two types of barriers to innovation such as internal barriers and external barriers, internal barriers include tradition, institutional culture and institutional inertia. External barriers include federal laws, accreditation guidelines or state regulations. According to Hadjimanolis (1999) barriers can be classified in various ways, a usual one differentiates between external to the firm or exogenous and internal or endogenous ones. External barriers can be further subdivided into supply, demand and environmental related. Internal barriers can be further subdivided into resource related, e.g. lack of internal funds, technical expertise or management time, culture and systems related. Neely and Hii (1998) states that there are external and internal barriers to innovation. They are:

External barriers: lack of infrastructure, deficiencies in education and training system, inappropriate legislations, an overall neglect and misuse of talents in society.

Internal barriers: rigid organizational arrangements and procedures, hierarchical and formal communication structures, conservatism, conformity and lack of vision, resistance to change, and lack of motivation and risk avoiding attitudes.

6. Characteristics of Innovative Firms

Harrison and Samson (2002) points out following as the characteristics of innovative firms. Members of top management have technological and business back grounds take a hands on view of technological issues. Business issues and technological capabilities are considered simultaneous such that technological capabilities are focused toward supporting and driving business strengths. Among successful innovation, organizational attributes such as culture, infrastructure, coordination mechanism, organizational structures, and reward system are supportive of the innovation process.

State Department of China (2006) points out that six characteristics of innovative firms in high technology industry. They are: company has intellectual property of key technology, persistent innovative ability, possession of company own brand, company has a dominant position compared to other firms in the industry, company has the profitable ability and high level of management skills, company has a long-term strategy of innovation in its own culture.

State Department of China (2006) also suggests that following are the innovation measurement for measuring innovativeness in high technology business.

They are total R&D account for 5% of Total sales, more than 30% of the employees have graduated from universities, more than 10% of the employees engage in R&D related jobs and total income from new products more than 50% of the total sales(three year)

Rocha et al (1990) suggest that there are two types characteristics of innovative firms. They are, firm characteristics and manager characteristics. Under firm characteristics they categorize four characteristics.

Firm size: There is a positive relationship between size of the firm and innovativeness

The research and development effort: More innovative firms have substantially greater proportion of their employees assigned to R and D than do the less innovative firms.

Age of the firm: More innovative firms were slightly younger than less innovative firms.

Export activity of the firm: there was a positive relationship between the adoption of innovations and exporting.

Under manger characteristics also they categorize four characteristics. They are,

Technical education of the chief executive officer: Greater the technical education of the CEO, the greater the probability that he would be associated with a more innovative firm.

Ownership by the chief executive officer: The CEOs of the more innovative firms participate in the ownership of their firms

Foreign contacts of the chief executive office: The greater the contact of the CEO with other countries, the less the probability that he is associated with an innovative firms.

Prior Experience of the mangers: Greater professional experience combined with leadership positions appears to be positively associated with successful innovation.

Khan and Manopichetwattana (1989) points out those salient characteristics of innovative firms are proactiveness, risk taking, product differentiation and research expenditure.

7. Market Structure, Firm Size, Age of the Firm, Ownership Structure, Networks, Training, and Innovation

Rogers (2004) suggest that the traditional economic approach to understanding innovation suggests that market structure has an important role. In other words while it is likely that market structure affect innovation, it is also probable that innovation affect market structure. Sapolsky (1967) suggest that it is still uncertain which type of market structure (competitive, oligopolistic, or monopolistic) is the most conducive to innovation. Kraft (1989) points out that there is a strong positive impact of

imperfect competition on innovative activity in an organization. Schumpeter (1950) suggests that imperfect competition provide the best environment to internalize the benefits of R& D. Levin and Reiss (1984) develop a model of non corporative oligopoly with free entry in explaining the relationship between market structure and R&D. Aces and Audretsch (1987) suggest that relative innovative advantage of large and small firms is determined by the extent which a market is characterized imperfect competition.

Rogers (2004) argues that a further aspect stressed by traditional literature is the role of firm size, with large firms having an advantage in innovation. This view is based on a number of subsidiary arguments, namely, large firms have stronger cash flows to fund innovation. Equally, larger firms may have higher assets to use as collateral for loans, in each of these cases the assumption is that external capital markets may be unwilling to finance innovation, a larger volume of sales implies that fixed cost of innovation can be spread over a larger sales base, large firms may have access to a wider range of knowledge and human capital skills than small firms, allowing higher rates of innovation.

According to Audretsch and Acs (1999) while some studies have found a positive relationship between firm size and technological change, still others have identified no relationship or even a negative one. Harrison and Samson (2002) points out that conventional wisdom has consistently argued that innovation is fostered by or at least related to firm size. Mohr (1969) suggests that there is a positive relationship between firm size and innovativeness of the organization. Dijk et al (1997) point out that recently many empirical studies have been done on the relationship between firm size and innovativeness. Most of these studies conclude that small firms can keep up with larger firms in the field of innovation. Firtz (2001) argues that small firms are often thought to be more innovative than large ones for a number of reasons. For example in many cases small firms may be more innovative because they can respond more easily to market shift and needs. Furthermore, small firms may be forced to utilize product innovations as a means of achieving competitive advantage to a higher degree than large firms. Bhattacharya and Block (2004) suggest that there is positive relationship between firm size and innovation. Avermaette et al (2003) argues that capital intensive innovation such as implementation of ISO 9000 more likely to take place in small firms compared with micro firms. Kimberly and Evanisko (1981) suggest that two different types of innovation were found to be influenced by different variables. Organizational level variables, size in particular, were clearly the best predictors of both types of innovation. Love and Roper (1999) suggest that large firms innovate more than smaller firms. Aces and Audretsch (1987) industries which are capital intensive, concentrated, and advertising intensive tend to promote the innovative advantage in large firms. The small firm innovative advantage, however, tends to occur in industries in the early stages of life cycle where total innovation and the use of skilled labor play a large role and where large firms comprise high share of the market. Audretsch and Acs (1999) suggest that small firms have a lower propensity to innovate than do the very largest enterprises.

Avermaette (2003) suggests that older companies were more likely to introduce products that are new to the market segment in which they compete where as turnover accounted for by new products was higher in younger companies.

Lee (2004) suggest that ownership structure is also found to be an important determinants of innovation, with private limited and public limited firms twice as likely to innovate than sole proprietorship firms. Rogers (2004) argues that foreign ownership lower innovation

Rogers (2004) suggests that one area of considerable recent research in the role of networks in promoting firm innovation. In particular, SMEs may rely more heavily on external knowledge networks as an input to innovation than do large firms. Almeida and Kogut (1997) find that small U.S. semiconductor firms are more closely linked to regional knowledge networks than large firms. Love and Ropers (1999) find that network intensity has a positive influence on the number of innovations in a sample of 576 U.K. manufacturing firms. MacPherson (1997) suggests in a study of U.S. scientific instrument companies in New York State, also finds support for external linkages raising innovation. Hanna and Walsh (2002) point out that networking is primarily a competitive response, it needs to evolve to enable small firms to jointly develop innovative products and processes.

Gospel (1991) finds that the potential relationship between the extent and nature of training and innovation is another issue of importance. Some authors have suggest that more highly trained workforce will have an advantage in developing, adopting and implementing new technologies.

8. Relationship Between Small Business Success and Innovation

Read (2000) argues that research suggests that there is certainly a positive effect on performance for innovative organization, however, this is an area where few empirical studies have been undertaken and, while a positive relationship has been identified, this area requires a much higher degree of in-depth research. Rogers (2004) suggest that innovation is widely regarded as a key ingredient in business success. Needy and Hii (1998) suggest that an empirical survey carried out by the Cambridge Small Business Research Center provides useful insights into SME innovative behavior in UK. During the study data were collected from more than 2000 SMEs on a range of issues relating to technology and innovation. This is by far the largest and most authoritative empirical survey. The research found that 60% of the sample had initiated a major product or service innovation in the last five years. The result suggests that SMEs are highly innovative across sectors. Baldwin (1995) points out innovative activities are the most important determinants of success; that is, for a wide range of industries, they serve to discriminate between the more and the less successful firms better than any other variables. Tomas et al (2004) argues that a key component in the success of industrial firms is the extent of their innovativeness. Geroski and Machin (1992) suggest that some commentators believe that competitive pressures in most markets are so strong that firms must innovate if they are to survive, and that

sustained growth cannot occur unless firms introduce new products and processes on a regular basis. Fritz (2001) suggests that product innovation has to be universally recognized as a central strategy for building market share and securing business success. Roper et al (2002) suggest that there is a strong relationship between innovation and business growth. Heunks (1998) reveals that the chances of a small firm to survive and to be successful are becoming ever more depended on innovation. Cefis and Marsili (2003) suggest that the growth and survival of firms will depend on their ability to successfully adapt their strategies to changing environment. In such environments, innovation creates variety of competitive positions and enhances a firm's potential to succeeded in the market.

9. Characteristics of Successful Entrepreneurs

Cunningham and Lischeron (1991) suggest that there exist a number of schools of thought which view the notion of entrepreneurship from fundamentally different perspectives. The classical school of entrepreneurship considerers innovation as the central characteristics of entrepreneurial behavior. Main behavior and skills for an organization consists of innovation, creativity and discovery according to this school of taught. Zimmerer and Scarborough (1996:6) states that twelve characteristics which are shared varying degrees by successful entrepreneurs. They are commitment and determination, desire for responsibility, opportunity obsession, tolerance for risk, ambiguity, and uncertainty, self confidence, **creativity and flexibility**, desire for immediate feedback, high level of energy, motivation to excel, orientation for future, willingness to learn from failure, leadership ability. Hill and Wright (2001) points out a wellness to accept risk, proactive posture towards seeking marketing research information, **creativity, innovation**, a need for achievement, power seeking, a dominating personality, a need for locus of control can be used to delineate entrepreneurs form non entrepreneurs. Heunks (1998) put forward some characteristics of innovative and successful entrepreneurs. They are: have a high level of knowledge, be sociable, embrace challenges and be energetic, be independent, persistent, self confident and optimistic, take calculated risks and be open to new ideas, be **flexible and creative**, desire responsibility, need achievement, value money and have a future orientation, be a dynamic leader, take initiative and have organizing skills. Carland et al (1984) list the characteristics of successful entrepreneurs by different researcher (See table 01).

Table 01: Characteristics of Successful Entrepreneurs

Year	Author(s)	Characteristic(S)	Normative	Empirical
1848	Mill	Risk bearing	x	
1917	Weber	Source of Formal authority	x	
1934	Schumpeter	Innovation, initiative	x	
1954	Sutton	Desire for responsibility	x	
1959	Hartman	Source of formal authority	x	
1961	McClelland	Risk taking, need for achievement		x
1963	Davis	Ambition; desire for independence; responsibility; self confidence		x
1964	Pickle	Drive/mental; human relations; communication ability; technical knowledge		x
1971	Palmer	Risk measurement		x
1971	Hornaday & Aboud	Need for achievement; autonomy; aggression; power; recognition; innovative/independent		x
1973	Winter	Need for power	x	
1974	Borland	Internal locus of control		x
1974	Liles	Need for achievement		x
1977	Gasse	Personal value orientation		x
1978	Timmons	Drive/self confidence; goal oriented moderate risk taker; internal locus of control; creativity/innovation	x	x
1980	Sexton	Energetic/ ambitious; positive reaction to setbacks		Contd. x
1981	Welsh & White	Need for control; responsibility seeker; self confidence/ drive; challenge taker; moderate risk taker		x
1982	Dunkelberg & Cooper	Growth oriented; independent oriented; craftsman oriented		x

Source: Carland, J.W., Hoy, F., Boulton, W.R. and Carland, J.A.C. (1984). Differentiating Entrepreneurs from Small Business Owners: A Conceptualization, *Academy of Management Review*, 9(2), pp. 354-358.

10. Small Business Success and Failure

Watson and Everett (1996) suggest that much have been written about the small businesses and in particular about small business failure rates. Lussier (1996) sates that there are many studies to better understand success versus failure.

According to Johnson (1976) success in business requires many things, but above all a burning commitment to succeed. To make it, a manager has to get the best he can out of his people, for employees are the staff of which success is made. Ibrahim and Goodwin (1986) point out that the success in business is defined in terms of rate of return on sales and age longevity of the firm. In other words, successful firms have an above average rate of return and have been in business for five or more years. Steiner and Solem (1988) argue that the successful businesses must seek a balance between the ends to which the organization aspires and the ways and means available to achieve them. Luk (1996) believes that the owner's satisfaction with the performance of the given small business should be one of the most important indicators of success. They define the success of small business as a *level of performance equal to or exceeding the expectations of the firm's owner*.

Bruno and Leidecker (1988) state that no two experts agree on a definition of business failure. Some conclude that failure only occurs when a firm files for some form of bankruptcy. Others contend that there are numerous forms of organizational death, including bankruptcy, merger, or acquisition. Still others argue that failure occurs if the firm fails to meet its responsibilities to the stakeholders of the organization, including employees, suppliers, the community as a whole, and customers, as well as the owners. Lussier (1996) states that, there are many questions still to be resolved and justify with additional explanation. Previous studies do not provide a comprehensive or unified explanation for small firm failure.

Fredland and Morris (1976) state that failure occurs when firm's earning return on investment (ROI) less than opportunity cost of capital. Ulmer and Nielsen (1947) point out that failure is termination to avoid losses. Dun and Bradstreet (1967,1981) argue that the failure is termination with losses to creditors and shareholders and termination due to bankruptcy. Watson and Everett (1996) group the studies carried out in small business failure according to the four definitions of failure such as discontinuance of a business for any reason, bankruptcy/loss of creditors, disposed of to prevent further losses and failing to "make a go of it". Bruno and Leidecker (1988) point out that the problem from a research investigation point of view is that the definition of failure used can significantly affect the compositions of databases. Watson and Everett (1996) state that clearly reported failure rates are influenced by the definition of failure used. Broad definitions of failure lead to higher failure rates than would be reported using a narrow definition of failure.

11. Factors Affecting Small Business Success and Failure

Bruno and Leidecker (1988) point out managers should aware of factors that can make their firms successful, it might be more useful to know the factors that can lead to firms' failure. Lussier (1996) argues that it appears critical for researchers and business owners and managers to better understand the factors contributing to the failure of small business. Success versus failure research benefits entrepreneurs, those who assist, train and advise them, those who provide capital for their ventures,

suppliers, and public policy makers. Wijewardena and Tibbits (1999) also state that it is important to identify the causes of failures and discontinuances as well as the factors contributing to the success or growth of small enterprises.

Wijewardena and Tibbits (1999) argue that the causes of failure and factors of success may vary from county to country, depending on the economic, geographical, and cultural differences. Huck and McEwen (1991) noted that success or failure factors in one country might not work in another because cultural and governmental differences may require a different approach.

Peterson, Kozmetsky and Ridgway (1988) point out even though the number of failure among small businesses is increasing; relatively little empirical research has addressed the general causes of small business failure. An International note (1995) states that there are also virtually no empirical data identifying critical success factors for small business success. Luk (1996) points out that business success is the result of a web of factors. Lussier (1996) points out that there is no generally accepted list of variables distinguishing business success from failure. Prior researchers have created disagreement within the literature by reporting different variables as contributing factors to success or failure. Baum, Locke and Smith (2001) suggest that entrepreneurs should recognize that multiple personal dimensions affect venture success. Explaining venture success is a complex process, influenced by a variety of interrelated micro and macro domains.

According to Steiner and Solem (1988) successful small manufacturing business is likely to have following characteristics.

They are; an owner/manager with experience in the business, specialized knowledge of manufacturing processes or product knowledge, previous supervisory or management experience, access to adequate financial resources, competitive advantage based on costs, product specialization, customer specialization, or various forms of price/quality specialization, a well-developed strategy development through a formal or informal process

Wijewardena and Tibbits (1999) point out that the previous research on factors contributing to the success or growth of small firms has focused primarily on the entrepreneurial, managerial, or other personality attributes of owner-manager. An International note (1995) states that the four most critical success factors were perceived to be good management, access to financing, personal qualities, and satisfactory government support.

Huck and McEwen (1991) argue that more specifically, the researchers identified entrepreneurs' competencies in management, planning and budgeting, and marketing as most crucial for the successful operation of a small business. Wijewardena and Cooray (1995) point out that good customer relations, high quality of products, efficiency of management, and the owner's knowledge

and experience were perceived to be highly correlated with small firm success. Huck and McEwen (1991) argue that 12 competency areas such as starting a business, planning and budgeting, management, marketing/selling, advertising and sales promotion, merchandising, finance and accounting, personnel relations, purchasing, production, facilities and equipments, and controlling risks are needed for small business success. Ibrahim and Goodwin (1986) identify a set of variables associated with successful small businesses. They further state that entrepreneurial behavior and material skills were identified as key success factors in small business. Bladwin (1995) suggest that management skills, marketing ability, the skills of their employees, access to capital, cost of capital, ability to adopt technology, R&D- innovation capability, and government assistance are important for an organization to be successful. Duchesneau and Gartner (1990) identified three categories of factors that are thought to influence the likelihood of small business success: entrepreneurial characteristics, start up behavior, and the firm's strategy. Bolton and Thomson (2000:16) suggest, "*Successful entrepreneurs are often acknowledged that circumstances did combine to give them a great opportunity and they were the ones who seized that opportunity and made it happen*". Luk (1996) identifies four categories, which affect the success of a firm. They are personal factors, management factors, company factors, and product and market factors. Following were the most significant success factors under each category.

Personal Factors: Good decision-making skills, sufficient relevant work experience prior to starting own business, interpersonal skills.

Management Factors: Good marketing techniques, good personal selling techniques, good production management skills, ability to take advantage of the china factors, and ability to motivate employees and enjoy low turnover rate.

Product market and company factors: Company image, a close company customer relationship.

Steiner and Solem (1988) point out that the management characteristics; operating characteristics and competitive strategy are very important factors for the success of a firm. Theng and Boon (1996) suggest that endogenous and exogenous factors are the factors, which influence the failure of SMEs. The following is a description of those factors.

- i. **Exogenous Factors:** Economy in recession, high inflation, high labor cost, tight labor market, high interest rate, strict government regulations, high taxes, competition from public sector, competition from foreign MNCs
- ii. **Endogenous Factors**
 - **Personal shortcomings of the owner(s):** Lack of entrepreneurial judgment, lack of self-confidence, lack of managerial experience and skill, lack of knowledge of the company's

product(s), resistance to stress and pressure, lack of vitality and enthusiasm, short sighted view of future, lack of planning, lack of initiative, lack of formal education

- **Financial and operation shortcomings:** Lack of inventory control, lack of accounting records, lack of cash flow analysis, lack of trained accountant, lack of control over cash, lack of working capital analysis, lack of budgets or forecasts, lack of capital, inefficient management of receivables, excessive fixed assets, high operating expenses, low labor productivity, lack of automation/computerization in operation, inappropriate marketing strategy.

Larson and Clute (1979) suggest that the small businesses may fail due to the managerial deficiencies, financial shortcomings and the personal characteristics. They further define what are the managerial deficiencies and the personal characteristics in their research, and those are started below.

- i. **Personal Characteristics:** Exaggerated opinion of business competency based upon knowledge of some skill, limited formal education, inflexible to change and not innovative, uses own personal taste and opinion as the standard to follow, decisions based on intuition, emotion and non-objective factors, past not future orientation, little reading in literature associated with business, resistant to advice from qualified sources but, paradoxically, accept it from the least qualified.
- ii. **Managerial Deficiencies:** Cannot target market or customers, cannot delineate trading area, cannot delegate, believes advertising is an expense not an investment, immature understanding of distribution channels, no planning, cannot motivate, believes the problems is somebody else's fault and loan would solve everything.
- iii. **Financial Shortcomings:** Has little or no control over inventory, accounting records are either incomplete or nonexistent, poor understanding of the significance of cash flow and working capital analysis, does not know how to assess the ability of those who keep his accounting records, does not use accounting statements to plan for the future, does not have adequate control over cash receipts and cash disbursements, and does not understand accounting language.

Peterson, Kozmetsky and Ridgway (1988) identified lack of management expertise, high interest rates, and recession economy/inflation/ unemployment, under capitalization/overcapitalization, taxes, competition, cash flow, federal regulations, high overheads and others as the primary causes of small business failure. Lussier (1996) identifies 10 factors that affect small business failure. Those factors are, under capitalization and high fixed costs, slow economic activity/recession, creditor problem, slow accounts receivable, tax problems, loss of a major customer, poor management, partners, over expansion, theft. Long (1983) states that some important personality traits which affect the success or failure of small businesses are intuition, extroversion, risk taking, creativity, flexibility to change,

sense of independence, effective time management, self confidence, good health, and emotional stability.

According to Athwela Business Magazine (1999) causes of small business failure are conflicts among partners, very high greediness and no control over the business activities. Karunanayake (1999) points out that in a gloomy business environment where even the biggest business houses in the country are finding it difficult to maintain the momentum of growth, the collapse of smaller business is not surprising and the biggest problem faced by the small-scale industrialists for the growth of their business is the highest cost of finance. Premarathne (2002) argues that entrepreneur or manager use different methods to form their personal networks. There are few empirical studies available on the impact of network formation on the growth. However he further suggests that entrepreneurial networks are always regarded as advantageous for small business success. Dun and Bradstreet (1981) point out that 92% of the business failures are due to bad management. That 92% includes incompetence, lack of managerial experience, unbalanced experience, inexperience in line. Other than them neglect, fraud and disaster and unknown factors also have an influence on the success. Main management related factors which affect success and failure are, according to Lussier (1996) the two most commonly stated causes of failure are capital and management experience. According to Peterson, Kozmetsky and Ridgway (1988) the major cause of small business failure is lack of management expertise. Fredland and Morris (1976) argue that pinpointing the causes of a failure is largely a matter of definition. There are two extremes in the definitions. They are the causes of failure may always be said to be a lack of funds and at the other extreme, the cause of failure may always be said to be poor management. Sandberg (1986) argues that the entrepreneur experience and the entrepreneur psychology are the most important factors for the success of a small business. Theng and Boon (1996) clearly state that the endogenous factors are significantly more important than exogenous factors in influencing SME failure. Peterson, Kozmetsky and Ridgway (1988) suggest that the primary causes of business failure are internal problems within the firm. Sexton and Bowman (1983) provided empirical evidence that certain personality traits of small business owner or manager tend to affect the success or failure of such businesses. Steiner and Solem (1988) suggested that small manufacturing firms tend to be more successful when they are well managed in the areas of personnel supervision, manufacturing processes, and marketing and product knowledge. Larson and Clute (1979) stated that most businessmen who have failed or who are likely to fail have certain personnel characteristics they share in common. Peterson, Kozmetsky and Ridgway (1988) stated that the reasons cited by survey participants for small business failure can be categorized into internal or managerially controllable causes and external or non-controllable causes. Five out of 10 individuals interviewed cited internal problems as the primary cause of small business failure, with the most frequently cited cause being a lack of management experience. Wijewardena and Tibbs (1999) suggested that entrepreneurial behavior and managerial skills of owner-manager are key success factors in small business. Dewhurst and Burns (1993) state that it is easy to see from the stage theories of growth how firms fail because of

the interaction of the personal characteristics of the owner/manager with the managerial problems they face in their business. Baum, Locke and Smith (2001) point out that “*there is a relatively low impact of the environmental domain on venture growth, with the other, more macro dimensions, is surprising; at least in our study, this finding suggests that CEOs of small firms may have more control of their venture’s growth than some macro theories suggest*”.

12. Conclusion

According to literature review above there are main five current debates on this issue. First, to find out a common list of variables that could explain the factors that determines innovation in an organization. Second, to see the most important factor out of firm specific factors and environmental factors. Third, is to see the impact of innovation on organizational performance and success. Fourth, what determines success of a firm and what is the most important factor which determines success in an organization. Fifth, is to see what are important determinants of innovation in developing countries compared developed countries. Throughout this paper all the important concepts in relation to the research issue have discussed. Important concepts in innovation have been discussed first and then all the important concepts in relation to organizational success has discussed. Concepts such as introduction to innovation, innovation measurements, determinants of innovation, barriers to innovation, characteristics of innovative firms, relationship between some determinants (market structure, firm size, age of the firm, ownership structure, networks, training) and innovation, and relationship between small business success and innovation have been discussed in relation to the concepts of innovation. In relation to small business success concepts such as characteristics of successful entrepreneur, small business success and failure and factors affecting small business success and failure, have been discussed. Throughout this paper various types of studies have been reviewed and some studies have studied the issue that the research has been discussion in this study and have got the same results with some modifications and some does not get the same results.

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