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LETTER FROM THE EDITORS

We are extremely pleased to present Volume 4, Number 1, of the *AEJ*. The Academy of Entrepreneurship is an affiliate of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The *AEJ* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to advance the knowledge, understanding, and teaching of entrepreneurship throughout the world. To that end, the journal publishes high quality, theoretical and empirical manuscripts, which advance the entrepreneurship discipline.

The manuscripts contained in this volume have been double blind refereed. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies.

As editors, we intend to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

The Editorial Policy, background and history of the organization, officer lists and addresses and calls for conferences are published on our web site. In addition, we keep the web site updated with the latest activities of the organization. Please visit our site and know that we welcome hearing from you at any time.

Beginning with the next volume of the Journal, we are announcing a new Editor, Dr. Thomas M. Box, Department of Management, Kelce School of Business, Pittsburg State University, Pittsburg, KS 66762 316-235-4582; Fax 316-235-4513; tbox@pittstate.edu. Please feel free to contact Dr. Box with journal submissions. Also, if you wish to serve on the editorial board of this journal, please contact him and let him know. We look forward to a successful year and an outstanding relationship with Dr. Box.

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ARTICLES

A CROSS-CULTURAL STUDY OF FINNISH AND U.S. ENTREPRENEURS' NEED FOR ACHIEVEMENT

Mika Tuunanen, University of Jyväskylä, Finland

ABSTRACT

The present cross-sectional study sets out to explore Finnish and U.S. entrepreneurs' need for achievement (n Ach) in a comparative analysis design. Two main goals set are: first, to make an extensive literature review of the previous studies of need for achievement, and second, to utilize the Personality Research Form's (PRF) achievement subscale (Jackson, 1974) to reveal potential differences and similarities in the strength of achievement motivation among Finnish and U.S. entrepreneurs. Thus, the purpose of this paper is twofold. In the theoretical section of the study, past research on n Ach is reviewed in order to examine the relevance and applicability of n Ach theory in the field of entrepreneurship. In the empirical section, results based on the analysis of nine hundred Finnish and U.S. respondents of n Ach will be reported.

The literary review carried out indicated the n Ach to be a key entrepreneurial trait and a major factor to entrepreneurial behavior. Empirical results showed U.S. entrepreneurs' dominance in inclination for achievement motivation compared to the Finnish counterparts. Significant differences at .000 level were found between samples and every subgroup (gender, business goals, start-up roles, business planning mode) analyzed. Overall, results were parallel with past findings and consistent with the n Ach theory.

INTRODUCTION

For once, let's approach the problem the other way around - starting with people rather than resources, making sure that there is a critical mass of competent, highly motivated entrepreneurs who will, on their own initiative, develop an area economically. It will turn out, I feel sure, that they will find the resources needed for development, and that they will need less in the way of resources than people who are provided with resources but who do not have the personality characteristics which we know are crucial for entrepreneurial success...without motivation the people will perish." (McClelland, 1986, 232-233)

Arthur H. Cole (1942) was the first, who suggested that to study an entrepreneur is to study the main player in economic activity. The pioneering efforts in this field were made by David McClelland. In 1961 his best known book "*The Achieving Society*" was published. Since then the personality of entrepreneur has been undoubtably one of the most researched areas in the field of entrepreneurship (Béchard, 1997; Filion, 1997), but

it is still one of the least understood areas. The entrepreneur still remains "an enigma, his/her motivations and actions far from clear..." (Kets de Vries, 1977, 36).

The underlying two assumptions of the research of entrepreneurial personality traits are as follows: first, traits are distinguishable and measurable variables, and second, traits are especially related to the entrepreneurs' personality as a distinction of non-entrepreneurs, and, furthermore, they are somehow relevant in entrepreneurial behavior (Palmer, 1971; Lachman, 1980; Hornaday, 1982). These clauses determine the most frequent research efforts focused on trait approach. To fulfil these requirements reliable and validated instruments to measure entrepreneurial traits are needed, and, moreover, the results should show that these traits distinguish entrepreneurs from people in general, and/or managers, and/or unsuccessful entrepreneurs. The two most investigated personality traits are need for achievement and locus of control (Brockhaus, 1982; Gasse, 1982; Gartner, 1985). These concepts are closely related to each other. This study focuses foremost on the need for achievement. In the theoretical section of the study a comprehensive literature review of the previous studies on n Ach is made. The empirical part of the study consists of observations of nine hundred Finnish and U.S. entrepreneur's need for achievement measured with the Jackson PRF achievement subscale (1974).

PREVIOUS RESEARCH

McClelland's early research and his motivation theory were greatly influenced by Murray's contributions of personality studies dated back to 1938. Murray (1938, 164) defined achievement motivation as "...the desire or tendency to do things as rapidly and/or as well as possible and to accomplish something difficult. To master, manipulate and organize physical objects, human beings or ideas. To do this as rapidly and independently as possible. To overcome obstacles and attain a high standard. To excel one's self. To rival and surpass other. To increase self-regard by the successful exercise of talent." Murray was also one of the creators of the Thematic Apperception Test (TAT), the method which McClelland later used to measure achievement motivation (Morgan & Murray, 1935; McClelland, Atkinson, Clark & Lowell, 1953; McClelland, 1955).

The leading assumption of McClelland's n Ach theory was that the motive of the entrepreneur is not, as was earlier generally supposed, a quest of profit, self-interest, or social recognition and prestige. But, it is the strong desire for achievement itself - strive for excellence and success, to attain an inner feeling of personal accomplishment. Money and profits were primally in the role of the measure and feedback indicating how well one has done. (McClelland, 1961; 1962). The core of McClelland's n Ach theory can be described briefly and accurately. The theory claims that a person with a high achievement motivation is characterized by three role features in his thoughts and action - (1) initiative to take personal responsibility for solving problems in situations where the outcome depends on his abilities and efforts, in other words not in chance or factors out of his control; (2) tendency to take calculated risks by setting moderate achieving goals; and (3) need for a concrete, direct, immediate feedback as to know the results and evaluate how he is doing

using money and profits for the purpose. This kind of behavior is energetic and involved with novel instrumental activity aimed to be more efficient, i.e. obtain same result in less time or with less effort avoiding repetitive routine work, and anticipated of future possibilities. As an outcome people with high n Ach tended to seek themselves in the entrepreneurial positions, occupations, or self-employment (McClelland, 1961; 1962; 1965a; 1965b; 1966). As a matter of fact, this finding implicitly established the ground of intrapreneurship, in other words, entrepreneurial behavior in the organizations. McClelland strongly emphasized that almost every human endeavor can be initiated and managed in an entrepreneurial way. Finally, it is worth mentioning that n Ach is related to two other key entrepreneurial traits: risk taking and innovativeness.

McClelland vigorously believed that people with low n Ach cannot see and seize the opportunities surrounding them (McClelland, 1962; 1965). Thus, in his opinion much more attention should be paid to the individuals, instead of environmental conditions in order to stimulate and initiate economic development and growth through public programs. Indeed, subsequent research findings indicated that higher achievement motivation influenced people's business activity, such as increasing new start-ups, business expansion, profit and efforts towards innovations. More importantly, it has been indicated in many studies that achievement motivation is a trainable character that can be strengthened. Miron and McClelland (1979) came to the conclusion that motivation training has a positive effect in business performance by increasing energy to improve and establish business.

McClelland and Winter (1969) discovered that those who participated in achievement motivation courses showed significant improvement in their post-training entrepreneurial behavior compared with themselves and three control groups. Likewise, Timmons (1971) found that key development of minority enterprise lies in motivational training. He pointed out that training seems to be most effective in creating and intensifying entrepreneurial behavior, expansion of small firms and facilitating the start-up behavior among present and prospective small businessmen (Timmons, 1971; 1973). Moreover, Patel (1975) emphasized the importance of both business and motivation training to attain effective results in business start-ups.

Durand (1975) came to similar findings in his longitudinal study of thirty five black business people, that achievement training is useful to carry out in conjunction with management training, and this kind of training enhanced course participants achievement motivation scores and also they became less external. Together, these influenced positively by increasing their business activity. He also found significant relationship between Rotter's (1966) internal control perception scores and McClelland's achievement motivation scores. The motivational training enhanced one's feelings of being in personal control over the outcome of events. Thus, he stated internal perception to be consistent with personal responsibility construct of n Ach. This was verified in his later studies. Entrepreneurial thoughts are most successfully translated into business action when the individual feels in control of his fate and recognizes the steps that are instrumental in reaching goals. (Durand & Shea, 1974, 57). Earlier McClelland stated that self-confidence

is being related to a strong achievement orientation (1962, 104). This kind of thinking should be quite plausible and natural to the entrepreneurs: why to take personal responsibility and pursue hard on goals set by oneself, if one does not rely on his/hers ability to effect the outcomes?

More light was shed on the phenomena when Candace Borland (1975) studied the relationship between locus of control, n Ach and entrepreneurial drive of university students and found interaction. Hull et al. (1980) concluded in their study on predicting likelihood to start a business, that n Ach and internal locus of control were not the most important variables. Their findings indicated that risk-taking and creativity as personality traits had better potential of identifying entrepreneurial types. Perry et al. (1986) reported that rankings of need for achievement and internal locus of control distinguished their three samples of Australian small business owners-managers, super-entrepreneurs (i.e. highly successful entrepreneurs) and group sampled from general population. Their study made the non-linear relationship between n Ach and locus of control clearer. The conclusion was that: "n Ach is the energy which is used to achieve goals, and locus of control shows the direction of the n Ach drive...A very high internality and very high n Ach small business will direct and energize a person towards the success exhibited by the super-entrepreneurs of this study" (Perry et al, 1986, 62).

There are several studies on n Ach which have dealt with the relation of entrepreneurial success and motivation. For example, Schrage (1965) found that most successful R&D entrepreneurs in terms of company profits are high in achievement motivation, low in power motivation, and high in awareness of self, the market, and his employees. Also, Komives (1972) studied high-tech entrepreneurs, sample of twenty successful ones were high in achievement and decisiveness, and low on need for support. Smith and Miner (1984) used task motivation theory and the instrument, based on McClelland's n Ach, to investigate technologically innovative and successful entrepreneurs in terms of firm growth. They found that motives involving self-achievement, avoiding risks which were heavily loaded with uncertainty and chance (i.e. not skill involved), seeking feedback, personal innovation and positive orientation to the future (i.e. planning and goal setting) are strongly labeled in successful entrepreneurs. These findings were largely replicated by Bellu (1988). Fifty-one technical entrepreneurs were studied by Wainer and Rubin (1969) focusing upon the relationships between entrepreneurs motivation and company performance. They concluded that successful companies run by entrepreneurs with high need for achievement and moderate need for power performed high.

As a distinction between entrepreneurs and managers, McClelland (1975; 1976) showed that successful managers might also have a relatively strong need for achievement, but it is dominated by an even greater need for power, and that combination directs one's thoughts and action for the organization, while entrepreneurs motivational construct is identified by a high need for achievement and a modest need for power, and, therefore, one's thinking and doing is directed towards self-accomplishment. Rokeach (1973) confirmed that the need for power is negatively correlated to the need for achievement. In their study of 122 minority and non-minority female entrepreneurs, DeCarlo and Lyons

(1979) discovered that the scores of both groups differed significantly from women in general. Entrepreneurs in their samples manifested higher personal value on measures of achievement, autonomy, aggression, independence, leadership, and lower personal value on scales of support, conformity, and benevolence.

The instrument of measuring n Ach, TAT is a projective type, and accordingly it can be administered as well as interpreted only by a highly professional and trained psychologist. This feature widely limits opportunities to utilize the method for larger populations. Facing the problem and in terms of overcoming it, a research program was initiated in order to develop a valid, simple format and ease of administration and interpretation objective measurement. The major findings of two studies carried out in the program, suggested that successful entrepreneurs scored significantly higher on the scales of need for achievement, independence, and leadership effectiveness and lower on scale reflecting need for support than the norm groups, and that the structured - far more practical, objective scale can be used instead of "heavy" projective tests. (Hornaday & Bunker, 1970; Hornaday & Aboud, 1971).

Since 1971, objective tests of measuring entrepreneurs' achievement need became the most popular type. The question which has received far too little attention is whether the need for achievement should be measured as a conscious motive (as objective techniques do) or unconscious motive (as projective techniques do), and whether these types measure the same phenomena. To solve the problem, theoretical arguments are clearly not enough, strong empirical evidence is required. This demands a research design, where projective TAT and objective measures are used in conjunction. Moreover, the following definitional distinguish suggested by Kahl (1965) should be considered - the achievement motivation concept should be used when projective instruments are used, and the achievement value or orientation concepts when objective measures are used.

Finally, according to Bird (1989) the achievement motivation can be used to predict entrepreneurial propensity and venture success. And, together with one's perception of ability, they predict the decision to start a new venture, the ability to implement that decision and the results of the venture. These outcomes are also determined by circumstances and external environment. To end and briefly summarize the literature review, it can be stated that previous studies strongly suggest that n Ach is a distinguishable, measurable, and trainable character. Additionally, it is particularly an entrepreneurial trait which distinguishes them from non-entrepreneurs, affecting not only their decision to become an entrepreneur, but also entrepreneurial behavior - i.e. drive and success.

RESEARCH METHODOLOGY

The Instrument

The instrument employed to measure the need for achievement was the Achievement Scale of Personality Research Form (Jackson, 1974). PRF is a self-report,

'paper and pencil' -type, comprehensive personality inventory assessing twenty relevant needs. Needs, when expressed by a person, depict his or her personality traits. Personality trait can be defined as a certain mode or a way of behavior that is distinguishable and relatively consistently expressed. The need for achievement scale was especially devised to measure achievement, and it yields a quantitative measurement describing that need. The scale consists of sixteen homogeneous, bipolar, 'true versus false' -forced choice statements, and can be completed easily by untrained people. The bipolarity assumes a trait scale extending from one extreme of behavior through a neutral point and on to the extreme opposite. The result is a score which is varying between minimum score, zero, and maximum score, sixteen. A qualitative description of achievement scale (Jackson, 1984, 6) is given below (see Table 1).

TABLE 1 TRAIT DESCRIPTION FOR THE ACHIEVEMENT SCALE OF JACKSON PERSONALITY RESEARCH FORM

Description of High Scorer:

Defining trait adjectives:

Aspires to accomplish difficult tasks; maintains high standards and is willing to work toward distant goals; enterprising, responds positively to competition; willing to put forth effort to attain

excellence.

Striving, accomplishing, capable, purposeful, attaining, industrious, achieving, aspiring,

self-improving, productive, driving, ambitious, resourceful, competitive.

The above given definition here has a crucial role here: it has been shown earlier that a considerably amount of research efforts on achievement motivation of entrepreneurs is weakly linked to the original work of McClelland. That is, literature used in theoretical backgrounds of those studies has been inadequate. Jackson (1984, 9, 25) derived his PRF achievement concept from Murray's work - from the very same source that constituted the basis of McClelland's n Ach. Moreover, the instruments utilized to measure achievement orientation or achievement values have often been poorly validated and/or weak in respect to reliability. Likewise, the correlations of other measurements to McClelland's TAT have been without statistical significance or even negative. Contradicting results have emerged as a consequence. The concept of achievement motivation became fuzzy. To McClelland it was clear and determinable:"...n Ach is a measurable factor in groups and individuals ...achievement motivation is a precise term." (McClelland 1965, 8). As a matter of fact, many researches have dealt with the concepts of "achievement values" or "achievement orientation", but used the concept "achievement motivation" incautiously or incorrectly.

The PRF instrument has been shown to have high reliability in terms of scales' homogeneity and test-retest stability (Jackson, 1974), and to display convergent and discriminant validity. The high correlations with self- and peer ratings were .65 and .46 respectively (Jackson & Guthrie, 1968). Odd-even reliabilities for two groups (N=83 and N=84) were .57 and .66 after application of the Spearman-Brown correction (Jackson, 1974).

Anastasi (1976) has reviewed the PRF as a highly psychometrically sound assessment device. Also, Wiggins (1973), Kelly (1978) and Hogan (1978) have reported encouraging results of the validity of PRF. Mehrabian (1969) used Jackson's PRF Achievement Scale to validate his achievement scale. Indeed, these two were the only among twenty-two different achievement measures that had both sufficient validity, good internal consistency and the required stability across time (Fineman 1977).

Furthermore, Edward, Abbott and Klockars (1972) found significant correlation (.25, p<.05) between Edwards Personal Preference Schedule and Jackson's Achievement measure. According to Edwards (1959), the achievement subscale of EPPS is the second most frequently used measure of achievement motivation of entrepreneurs. Not surprisingly, the most used is McClelland's version of TAT. Fineman (1977) did not cite studies in which the achievement scale of the PRF was used in conjunction with McClelland's TAT. Johnson (1990) mentioned two studies from the field of entrepreneurship where the PRF were used. The first by Sexton and Bowman (1983; 1984) who studied university students' entrepreneurial propensity. The second by Mescon and Montanari (1981) who examined personality differences of independent and franchise entrepreneurs in real estate business. Probably, all the other studies which have utilized Jackson PRF's Achievement subscale are carried out by Carlands (see e.g. 1988; 1990; 1996; 1997).

The Samples

The cross-cultural data were collected during the summer of 1995 in Finland and in the United States. The Finnish sample was developed by mailing the surveys to a group of 1,000 owners of small businesses of two different regions of Finland, using mailing lists of the Federation Finnish Enterprises. After a second mailing, response rate climbed to 43%. Hence, 434 usable answers were received. The fairly high response rate suggests a minimal non-response bias.

The American sample was gathered in two phases using a convenience sampling technique. In the first instance, 225 surveys were distributed through graduate students from the Southeastern United States. They were asked to have small business owners complete the questionnaires. Fourteen responses were later eliminated in data input process because the informant had omitted some key questions crucial in classifications. Hence, 211 responses were usable. The final sample consisted of principal owners of small firms as defined by the U.S. Small Business Administration. Later, the U.S. sample was increased to 456. A convenience sample, when sufficiently large one, has a level of confidence which approaches that of a random sample (Mason, 1982), thus most criticism faced of sampling can be erased here. Moreover, this technique minimizes non-response bias. Fewer than two out of ten subjects approached through

personal contact declined to respond. Likewise, there are other benefits in this kind of data gathering due to not so anonymous sample and controlled data set. Also, it is an economical way to carry out a survey.

The demographics of the groups, displayed in Table 2, indicate similar distributions, but some differences also emerged. For instance, regarding the type of business, the American sample was more retail intensive and a proprietorship was more general business form in the USA. American enterprises were also older and their respondents had a higher education. The most striking difference, which might have an effect on the later empirical results, was that an overwhelming majority of Finnish subjects reported 'Family Income' as their primary business objective.

On the other hand, over a half of U.S. respondents manifested to be "Profit and Growth-oriented" in their business goal setting.

BAS	TABLE 2 SIC DEMOGRAPHIC		LES
	Finnish American Sample Sample (N=434) (N=456)		
Type of Business	Retail Service Wholesale Construction Manufacturing	18% 45% 4% 15%	46% 38% 4% 6% 5%
Annual Sales	Under \$100,000 \$100,000 to \$500,000 \$500,000 to \$1,000,000 Over \$1,000,000	34% 35% 14% 15%	43% 41% 13% 0%
Number of Employees	10 or less 11 to 50 51 or more	78% 12% 2%	79% 17% 3%
Business Form	Proprietorship Partnership Corporation	25% 37% 37%	42% 19% 37%
Sex of Respondent	Male (Female)	75% (25%)	70% (30%)
Age	34 years or younger 35 to 44 45 to 54 55 or elder	13% 29% 41% 16%	22% 33% 26% 16%
Education	Less than 12 years 73%	33%	

	12 to 15 years	9%	22%
	16 years	3%	28%
	More than 16 years	9%	14%
Role in Start Up	Started Business	81%	71%
_	Purchased Business	13%	23%
	Inherited Business 5%		6%
Primary Objectives	Profit & Growth	21%	55%
	Family Income	77%	43%
Plans for the Business	None	11%	29%
	Written	13%	19%
	Unwritten	76%	51%
		May not add	d to 100% due to missing res

RESULTS

Key statistics for the both samples' scores on the Jackson n Ach scale are shown in Table 3.

TABLE 3 DESCRIPTIVE STATISTICS FOR JACKSON NEED FOR ACHIEVEMENT SCORE				
Finnish Sample American Sample				
Mean Score	10.59	12.83		
Standard Error of Mean	.115	.123		
Standard Deviation	2.40	2.62		
Mode	12	14		
Median	11	13		
Minimum	4	0		
Maximum	16	16		
Number of Cases	434	456		

Already the descriptive statistics indicate the major direction of the difference: the American dominance in achievement orientation. Next, t-tests with background variables were conducted to investigate more closely the potential differences and similarities in mean responses between different respondent groups of the nationalities. Moreover, a combined sample, a group

of 890 respondents was used to exhibit findings in both countries. The results of the nine t-test executed are given in Table 4.

TABLE 4 T-TEST RESULTS FOR THE DIFFERENCES IN JACKSON NEED FOR ACHIEVEMENT SCORES						
	Finns Amo	ericans				
	Mean (N) Mea	nn (N) t	p			
Nationality	10.585 (434) 12.8	332 (453) -13	3.30 .000			
Gender Male Female 10.39		748 (318) -10 34) - 8.70				
Primary Objectives Profit & Growth .000 Family Income						
Role in Start Up Founder Non-Founder .000		338 (320) -11 12.846 (130)				
Plans for the Business Established None .000		13 (319) -12 12.164 (134)				

The first glimpse reveals the U.S. entrepreneurs' significantly higher achievement score at the level of .000 in every subgroup investigated compared to respective Finns. Therefore, the focus will be largely in discussion of similarities and differences found in the samples.

What can be said about U.S. entrepreneurs significantly higher achievement score compared to Finnish counterparts? To give a short but complete explanation is certainly impossible. Nevertheless, looking at the origin of achievement motivation, which stems from values, attitudes, ideology, and religion, it can be noted that it is undoubtably a culture-related phenomena and deeply rooted in the society and its history. In other words, it is that symbolic American dream of entrepreneurial success which has a considerable role in motivating people to start their own business and strive towards excellence and accomplishment. The entrepreneurial "mythology" of America, the values, dreams, and ideals of a culture are objectively real. This cultural heritage is fundamental, hence individuals are more or less exposed to it (Collins, Moore & Unwalla, 1964). Kets de Vries (1977, 34) depicts this phenomenon, when he stated that entrepreneurship contains an element which is commonly perceived as highly popular mythology and legend, where entrepreneur is folk hero of the industrial world, the last lone ranger, a bold individualist fighting the odds of the environment, and finally after many hardships and trials, seems to have "made it". The need for achievement is a central tenet in the American view of the entrepreneurial psyche (Carland, Carland & Koiranen, 1997). In Finland, there does not exist this kind of comparable, long social heritage or similar shared meaning of entrepreneurship. On the other hand, since the 1990s, there have been signs holding great promise to the powerful raise of entrepreneurship in Finland.

U.S. female entrepreneurs manifested stronger orientation to achievement (p=ns) compared to their male colleagues. Controversially, Finnish male entrepreneurs scored slightly higher (p=ns) than their female counterparts on the achievement scale. There is very little comparative research made on entrepreneurs' gender differences on achievement feature. Although some support can be found for the current results. Carland and Carland (1990) found no significant difference between male and female entrepreneurs. Similarly, in that study, U.S. women scored slightly higher compared to men. Additionally, results showed that entrepreneurs of both genders, were more achievement-oriented than respective managers. Findings made here are consistent with many previous results by Horner (1970), Burlin (1976), Schwartz (1976), Strake (1979), and DeCarlo and Lyons (1979) who suggested that females have a strong achievement drive. Hisrich (1986) concluded that both women and men entrepreneurs tended to be goal-oriented, energetic and independent. Men in his data seemed to strive to make things happen and be in control, while women had a strong sense of accomplishment of goals and being independent. Hisrich (1986) found strong similarities in personalities of both genders. Similar findings can be drawn from the study of value profiles of male and female entrepreneurs by Solomon and Fernald (1987). In their study, achievement and self-actualisation related values, more precisely, a sense of accomplishment as a terminal value, and instrumental values like: ambitious, broad-minded, capable, obedient and self-control, were ranked by male and female entrepreneurs in an incredibly similar way. Welsch and Young (1983) found personality differences between male and female entrepreneurs to be minor.

The differences between founders and those who bought or inherited their businesses, i.e. non-founders, on achievement scale were minor and insignificant in both countries. It seems that subjects who are involved in entrepreneurship are driven by equal achievement motivation despite their different start-up roles. Because group of non-founders in this study did not consist

of salaried managers and business executives, not much can be said of these results in the light of previous studies. Begley and Boyd (1986) found significant difference between founders and non-founders on achievement scale in favor of the founders. These results were supported in their later study, when achievement orientation was measured with closely related concept Type-A behavior (see Jenkins 1975). Founders' companies grew faster and did not show weaker profitability than non-founders (Begley & Boyd, 1987). While their non-founder samples in both studies consists of hired managers, supportable conclusion can not been drawn to the current study. Distinction between managers and entrepreneurs as regards to achievement motivation is made also by Carland and Carland (1990), Smith and Miner (1984), and Bellu (1988).

Those who had established formal, written or unwritten plans for their businesses scored significantly higher on the achievement scale than those who were improvising without any formal plans for their business development. This finding is fully supported by Carland, Carland and Aby (1988) who ended the very same. According to McClelland's n Ach theory it could be supposed that a greater need for achievement will affect one's behavior in a way that indicates greater need for goal-setting and planning as a consequence of anticipation of future opportunities. Seeing planning as a vitally important part of goal setting, it is also a method of risk management and evaluation of future outcomes. It seems to be a critical element of intentional and achievement-driven behavior of entrepreneurs. Similarly, it is frequently cited as a required function of growth oriented entrepreneurs (Sexton & Bowman, 1991). Thus, a strong correlation (Chi-square, p=.000) between respondents' business goals and the planning modes was discovered in the combined sample. In other words, some eighty-five percent of small business owners with growth and profit objective had formal plans. And, on the other hand, seven out of ten of those with no plans pursued family income as their primary business goal. Undoubtedly, this hints that entrepreneurs and entrepreneurial ventures are engaged in strategic management practices (Carland, Hoy, Boulton & Carland, 1984). Interestingly, Davidsson (1991) showed that entrepreneurs' need based factors were more important than their abilities or opportunity determinants in explaining, not only the growth motivation, but also actual historic growth of small firm. He simply stated that the core thing that matters is an individual with the right motivation. Former mentioned features give distinctly understandable, coherent and plausible picture of entrepreneurial behavior in the light of n Ach theory.

DISCUSSION

The current study tried to take steps in avoiding some weaknesses and pitfalls that might considerably diminish the value and usefulness of the results. These have been pointed out earlier in the research efforts delineating personality characteristics of entrepreneurs by Sexton and Bowman (1983). The present study was carried out with relatively large samples, it was comparative and cross-cultural in nature and the subjects sampled were not defined as successful ones. Furthermore, utilizing well validated and reliable instrument with well established and explicit theoretical background is an effort which is needed when pursuing more consistent results.

The nature of entrepreneurship is a complex and dynamic process. The undeniable fact and starting point is, that entrepreneurship is first and foremost a matter of each individual. To understand the dance, i.e. entrepreneurial behavior, one should understand the dancer (Carland, Hoy & Carland, 1988). The dance takes on the personality of the dancer. And to teach the dance, one must teach the dancer. (Carland, Carland & Steward, 1996). Achievement motivation for an individual stems from the beliefs, values, and ideologies which are inculcated into his psychological system. Nevertheless, at the same time it is a fact that entrepreneurship has a cultural, social, and situational context (Shapero & Sokol, 1982; Aldrich & Zimmer, 1986; Carsrud, Olm & Eddy, 1986; Peterson, 1988; Low & MacMillan, 1988; Carsrud & Johnson, 1989). Also, entrepreneurship tends to occur differently in different countries (Giamartino, McDougall & Bird, 1993). If the social system surrounding the individual highly values entrepreneurial behavior, e.g. achievement, internal locus of control, risk-taking, and innovativeness, it is simply more likely to produce entrepreneurial events than a environment with other or contrasting values. To understand the differences in business behavior, factors such as social ideology, norms and rewards for behavior, individual and national aspirations, religious doctrines, and education, must be examined on a comparative basis. Obviously, the need for a cultural approach is not just limited to comparative analysis, but is also indispensable for an intra-cultural examination of entrepreneurial behavior (Palmer, 1971).

But what remains is the individual who decides based on his/her own perceptions of desirability and feasibility which actions will subsequently need to be taken by him/her in the given environment and situation. The trigger of the act and the initiating force is an individual who sees and seizes the opportunity (Carland, Carland & Steward, 1996). It is the intentional, highly motivated and opportunity-seeking individual in the starting point of entrepreneurial behavior. Thus, naturally individual entrepreneur is the most salient unit of analysis in entrepreneurship research and theory (Herron & Sapienza, 1992).

Given the relatively small size of the U.S. sample and the differences in the sampling, the results of this study are of real value strictly with regards to Finland. Bearing in mind the pilot nature of the study, caution will be used in drawing conclusions. Firstly, the major finding of this cross-cultural study suggest that the need for achievement is stronger among U.S. entrepreneurs compared to the Finnish counterparts. This significant difference was found in every sub-population, i.e. gender, business goals, role in start-up and planning mode, examined. Secondly, data form both nationalities indicates that there does not seem exist gender differences in the strength of achievement motivation among entrepreneurs. This finding is fully supported by the former results (Horner, 1970; Burlin, 1976; Schwartz, 1976; Strake, 1979; DeCarlo et al., 1979, Welsch et al., 1983; Hisrich, 1986; Solomon et al., 1987; Carland et al., 1990). Likewise, entrepreneurs who are profit, growth and planning oriented in their businesses seem to manifest stronger achievement proclivity than those who are providing family income through their businesses, and have more intuitive and improvising style to manage their firms. The above mentioned results can be verified through replication of this study. Longitudinal study is required to reveal whether the stronger achievement motivation of U.S. entrepreneurs leads to better business success, faster growth and/or improved profitability, compared to the Finnish counterparts.

Therefore, as limitations of the study can be mentioned cross-sectional research design, and concentration on only one, although key entrepreneurial personality trait. It has been stated earlier that entrepreneurial behavior is a combination of multiple personality factors, such as innovativeness, risk-taking, internal control, and achievement motivation.

"If there is one thing that all this research has taught to me, it is that men can shape their own destiny, that external difficulties and pressures are not nearly so important in shaping history as some people have argued." (McClelland, 1962, 112)

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ADAPTORS AND INNOVATORS IN RURAL FINLAND

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ABSTRACT

Michael Kirton (1980) developed his Adaption-Innovation Inventory (KAI) to measure individual innovation preferences. Individuals are conceptualized as falling on a continuum ranging from an extreme adaptor to an extreme innovator. Adaptors try to operate more efficiently within existing boundaries, whereas innovators tend to break down existing barriers and often develop new paradigms. Although the inventory has been tested in many countries and organizations, the link between entrepreneurship and the KAI has only recently been explored in more detail. Especially, there is a dearth of KAI studies that compare entrepreneurs with non-entrepreneurs. Moreover, the inventory has not previously been used in Finland. This paper tries to shed more light on these issues by using the KAI to measure the styles of creativity among people living in rural Finland. In particular, the aim is to test whether or not there are differences between entrepreneurs and non-entrepreneurs.

The KAI Inventory was mailed to some 3,200 people in Central and Eastern Finland. The statistical tests used to explore the differences in mean scores were t-tests and variance analyses. The KAI mean score for the total sample of 1,479 observations was 88.79 (S.D.=13.33), total scores ranging from 48 to 149. The mean for the entrepreneurial sample was 92.08 which was significantly higher than the respective non-entrepreneurial mean at 86.82 (p=.000). The would-be entrepreneurs, with a mean score of 93.44, scored slightly higher than entrepreneurs. Business founders were significantly more innovator-oriented than non-founders (p=.001). The more innovative entrepreneurs had also started more businesses than their adaptive counterparts. Regarding age of business, entrepreneurs with firms established less than 10 years ago were more innovative than their colleagues in older firms. Finally, micro entrepreneurs were significantly more adaptive than entrepreneurs employing more than 10 people (p=.000). These first results obtained for the Finnish sample were largely in accordance with the findings of previous KAI studies on entrepreneurs.

INTRODUCTION AND PREVIOUS RESEARCH

The view that there is a powerful set of links between innovativeness, creativity and a small enterprise has often been expressed (Cannon, 1985, 33). Past literature reflects a belief that the nature of the entrepreneur allied to the particular characteristics of the small enterprise as a method of organization is very appropriate for innovative or creative activities. Various factors have contributed to this belief: the notion of the entrepreneur as a "mould maker"; the link

between open and organic organization and creativity; the proposition that smallness, decisiveness and flexibility counterbalance absolute investment; and the evidence that small businesses account for a disproportionate number of new processes and products.

Schumpeter (1965) defined an entrepreneur as "an idea man and a man of action who possesses the ability to inspire others, and who does not accept boundaries of structured situations [cf. Kirton's definition of an innovator below]. He is a catalyst of change who is instrumental in discovering new opportunities, which makes for the uniqueness of the entrepreneurial function". Similarly, Krausher (1970) argued that an innovator has a strong personality capable of generating enthusiasm, persuading others to his or her point of view. An innovator is creative, possessing enough imagination to look at the future, and foresee opportunities. He or she is a risk-taker and capable of inspiring creativity.

Based partly on the above arguments, Kirton (1976) has proposed an Adaption-Innovation Theory which focuses on individuals' different cognitive styles of creativity, problem-solving and decision-making in the context of organizations. Defining adaption-innovation as a basic dimension of behavior, Kirton (1976, 622) has argued that everyone can be located on a continuum ranging from an ability to 'do things better' to an ability to 'do things differently'. The ends of this continuum were named as adaptor and innovator behaviors.

On the one hand, adaptors tend to be conservative, place great emphasis on precision, efficiency, discipline, attention to norms and take a problem as initially defined and develop solutions within currently accepted guidelines (Kirton, 1976). Thus, the adaptors are eminently capable of initiating changes that improve the current system, but persistently fail to see possibilities outside the accepted pattern. On the other hand, innovators are considered as the men of ideas capable of generating ideas for more radical change, but who often fail to get them accepted. Innovators are more likely to change the context of the situation in generating solutions, to create novel solutions, to prefer less structured work environments and to concentrate on effectiveness rather than efficiency (Stewart, 1996, 5). Innovators are those who incorporate and treat the structure surrounding the problem as part of the problem and hence involve "doing things differently". They see the guidelines as part of the problem and often incorporate new and untried processes into their solutions. They are risk-takers who challenge and attempt to change the guidelines. Thus, innovators are often undisciplined rules-challengers and look for new and different ways of solving problems and in the process often cause upheavals in the normal routine (Whyte, 1950).

Kirton (1976, 622) is careful to point out that both adaptors and innovators create in their own way, although past literature on creativity has mainly focused on describing innovators. To put the difference between the two in a nutshell, adaptors try to operate more efficiently within existing boundaries, whereas innovators tend to break down existing barriers and often develop new paradigms. Entrepreneurs have often been shown to exhibit the latter characteristics. Later, Kirton (1980) developed and Adaption-Innovation Inventory (KAI) to operationalize his theory.

Although the inventory has been tested in many countries and organizations, the link between KAI and entrepreneurship has only recently been explored in more detail (see Buttner & Gryskiewicz, 1993; Walsh & Anderson, 1995). There is also a dearth of KAI studies that

compare entrepreneurs with non-entrepreneurs. A review of past entrepreneurial studies with KAI is displayed in Table 1.

TABLE 1: PAST ENTREPRENEURSHIP STUDIES USING THE KAI INVENTORY

Researchers	Samples	Results
Tandon (1987)	Founder owner-managers (N=25)	Innovative entrepreneurs displayed higher failure rates than their more adaptive colleagues.
Dewan et al. (1989)	Entrepreneurs (N=100), government officers (N=100) and private sector executives (N=100)	Entrepreneurs scored significantly higher on the KAI than non-entrepreneurs.
Gimenez (1991)	Entrepreneurs (N=74)	Innovators were heavily concentrated in less mature and smaller firms.
Goldsmith & Kerr (1991)	Entrepreneurship students (N=34) and a control group of business students not in the ent.ship program (N=24)	Entrepreneurship students more innovative.
Buttner & Gryskiewicz (1993)	Founder owner-managers (N=81) and Kirton (1987) mean for U.S. managers in large organizations	Entrepreneurs significantly more innovative than US managers. Innovative entrepreneurs had started more businesses than their more adaptive colleagues.
Walsh & Anderson (1995)	Founder owner-managers (N=51) and non-founder owner-managers (N=57)	Founders were significantly more innovative than non-founders.

These findings show that entrepreneurs have tended to score higher than non-entrepreneurs. Business founders also seem to have the edge over non-founders. The present exploratory study attempts to shed more light on these issues by measuring the differences in KAI scores between entrepreneurs, would-be entrepreneurs and non-entrepreneurs in rural Finland. The survey also included demographic variables such as gender, age, education, place of residence, role in start-up, business sector & size, etc. *The KAI Inventory has not previously been used in Finland*.

METHODOLOGY AND SAMPLE

The KAI inventory consists of 32 items designed to reveal different cognitive styles of creativity, problem-solving and decision-making. Each item is scored by the subject on a scale from 1 to 5, producing a continuum of total scores ranging from 32 to 160, with a theoretical mean of 96. The higher an individual scores, the more innovative is his or her problem solving and decision making style. Instead of emphasizing any dichotomous features, individuals are conceptualized as being situated on a continuum ranging from an extreme adaptor to an extreme innovator. Location on the continuum is neither pejorative nor praiseworthy. In Table 2, a summary is given of the typical behavioural characteristics of adaptors and innovators as presented in the KAI (Kirton, 1994, 10-11).

TABLE 2: A SUMMARY OF THE CHARACTERISTICS OF ADAPTORS AND INNOVATORS (KIRTON, 1994, 10-11)

The Adaptor	The Innovator
Characterized by precision, reliability, efficiency, methodicalness, prudence, discipline, conformity.	Seen as undisciplined, thinking tangentially, approaching tasks from unsuspected angles.
Concerned with resolving residual problems thrown up by the current paradigm.	Could be said to search for problems and alternative avenues of solution, cutting across current paradigms.
Seeks solutions to problems in tried and understood ways.	Queries problems concomitant assumptions: manipulate problems.
Reduces problems by improvement and greater efficiency, with maximum of continuity and stability.	Is catalyst to settled groups, irreverent of their consensual views.
Seen as sound, conforming, safe, dependable.	Seen as unsound, impractical: often shocks his opposite.
Liable to make goals of means.	In pursuit of goals treats accepted means with little regard.
Seems impervious to boredom, seem able to maintain high accuracy in long spells of detailed work.	Capable of detailed routine (system maintenance) work for only short bursts.
Is an authority within given structures.	Tends to take control in unstructured situations.
Challenges rules rarely, cautiously, when assured of strong support.	Often challenges rules, has little respect for past custom.
Tends to high self-doubt. Reacts to criticism by closer	Appears to have low self-doubt when generating

outward conformity. Vulnerable to social pressure and authority; compliant.

Is essential to the functioning of the institution all the time, but occasionally needs to be 'dug out' of his system.

When collaborating with innovators:

Supplies stability, order and continuity to the partnership.

Is sensitive to people, maintains group cohesion and co-operation.

Provides a safe base for the innovator's riskier operations.

ideas, no needing consensus to maintain certitude in face of opposition.

In the institution is ideal in unscheduled crises, or better still to help avoid them, if he can be controlled.

When collaborating with adaptors:

Supplies the task orientations, the break with past and accepted theory.

Appears insensitive to people, often threatens group cohesion and co-operation.

Provides the dynamics to bring about periodic radical change, without which institutions tend to ossify.

The data of the present paper is based upon a postal survey in Central and Eastern Finland. The original KAI Inventory was translated into Finnish and mailed to some 3,200 people representing the economically active population between 25 and 49 years of age. The total number of usable returns received was 1,479 yielding a very high response rate of 46,4%, demonstrating the keen interest which Finnish people have in supporting entrepreneurship research. The mean age of the respondents was 39 years. Some 75% were male and 25% female. The returns (1,479) consisted of 193 entrepreneurs: 139 founders and 54 non-founders, 286 would-be entrepreneurs: 123 "wanna-bes" and 163 potential entrepreneurs, and 1,000 non-entrepreneurs: 698 salaried workers and 302 unemployed people. Even though the last group was named as `non-entrepreneurs', this is, of course, not to say that these people would not possess any entrepreneurial drive and spirit.

The would-be entrepreneurs were differentiated from the general population on the basis of them fulfilling strict criteria concerning entrepreneurial characteristics and inclinations. The criteria dealt with issues such as: prior entrepreneurial and work experience, educational background, parent(s) of respondents being or having been entrepreneurs and variables measuring Need for Achievement (adapted from Cassidy & Lynn, 1989) and Locus of Control (adapted from Levenson, 1973). The class of would-be entrepreneurs was further divided into two subgroups based on whether the respondent had or had not a serious intention of setting up a small business. This was due to the fact that some people with real potential for self-employment indicated that they were not going to enter small business ownership. The two groups were thus named as "wanna-bes" and "potential entrepreneurs".

The informants were residents of either the regional center of Central Finland, Jyväskylä, or one of three types of geographical areas in Central and Eastern Finland. The subregions were rather sparsely populated municipalities located quite far from big centers. These three different areas of countryside consisted of municipalities where 1) entrepreneurial activity has always been

very high (Alajärvi & Lapua), 2) entrepreneurial activity has traditionally been low whereas agricultural activity has been relatively high (Iisalmi & Nilsiä) and 3) entrepreneurial activity is currently high, but has previously been relatively low (Saarijärvi & Viitasaari). Some 75 per cent of respondents indicated that they had lived most of their live in rural areas or smallish industrial towns, the rest in larger towns or cities. The demographics of the samples are displayed in more detail in Table 3.

Finally, the statistical analyses of the KAI data included descriptives, t-tests and variance analyses. These were carried out to explore the potential similarities and differences between different groups of respondents.

TABLE 3: BASIC DEMOGRAPHICS

May not add to 100% due to missing responses	Total Sample	N=1,479
Sex of Respondent	Male Female	74.5% 25.5%
Age	Less than 30 years 30 to 40 41 to 49	17.6% 38.2% 43.7%
Basic Education	Comprehensive school High school	64% 28%
Professional Education	No professional edu. Vocational training Intermediate grades University degree	12.9% 51.3% 23.6% 12.3%
Place of Residence	Town/city centre Countryside	22.2% 77.2%
Entrepreneurial Sample		N=193
Business Sector	Service Industry	17.6% 67.4%
Age of Business	1-5 years 6 to 10 years 11 to 15 years 16 or more	38.2% 29.4% 15.6% 16.8%

Number of Employees	10 or less 11 to 25 26 to 50 51 to 100	79% 13% 4% 2%
Role in Start-up	Founders Non-founders	72% 28%
Number of Start-ups	One Two or more	78.9% 21.1%

RESULTS

The mean KAI score for the total sample was rather low at 88.79 (S.D.=13.33), total scores ranging from 48 to 149. T-tests were conducted to examine differences in mean scores with respect to demographic variables. These are displayed in Table 4.

TABLE 4: T-TEST RESULTS FOR DIFFERENCES IN KAI MEAN SCORES

BACKGROUND VARIABLES (N=1,479)							
Variable Mean (N) S.D. t p							
Gender							
]	Male	89.78 (1102)	13.04	4.93	.000	
]	Female	85.89	(377)	13.76			
Age							
_	Less than 30		90.38	(260)	11.48	2.41	.017
3	30 or more		88.43 (1212)	13.60		
Less than 40		89.80	(825)	13.22	3.38	.001	
4	40 or more		87.46	(647)	13.22		
Basic Education							
	Completed high:	school	92.52	(414)	15.05	6.25	.000
	No high school		87.34 (12.31		
Professional Education							

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Completed	89.40 (1289)	13.33	4.62	.000	
No professional edu.	84.64 (190)) 12.64			
Academic Education					
Holds a degree	94.97 (182	2) 14.81	6.11	.000	
No academic edu.87.92 (1297) 12.	38			
Place of Residence					
Town/city centre 91.56	(330) 13.	30 4.30	.000		
Countryside	87.98 (1115				

Interestingly, residents of urban environments, whose mean was 91.56 (S.D.=13.80), tended to be more innovative than those living in rural areas with a mean of 87.98 (S.D.=13.14). A significant difference in favor of the "townies" emerged (p=.000). This result is consistent with the findings of Niittykangas & Tervo (1996, 138) from their study on the environmental and personality characteristics affecting small business start-ups in the province of Central Finland. In their sample of 2,728 respondents, people living in the countryside were clearly more conservative towards new and aberrant issues than residents of bigger centers. This may largely explain the surprisingly low mean score of the whole sample found in the present study, since 80 per cent of respondents lived in the countryside.

Next, t-tests and variance analyses were conducted to explore the differences in the KAI mean scores between and within different subgroups in the sample. These results are displayed in Tables 5-7. The mean for the entrepreneurial sample was 92.08 (S.D.=13.89) which is significantly (p=.000) higher than the respective non-entrepreneurial mean at 86.82 (S.D.=12.34). This finding gets support from a study by Dewan et al. (1989) in India. They used the KAI to measure three organizational groups: small manufacturing business entrepreneurs, private sector executives and government officers (N=300). The entrepreneurial sample scored significantly higher than the combined non-entrepreneurial sample. Similar entrepreneurial hegemony over managers in KAI scores was evident in the studies by Buttner & Gryskiewicz (1993) and Rosenfeld et al. (1993). Both sets of researchers indicated managers to be clearly more adaptor-inclined.

TABLE 5: ONE-WAY ANALYSIS OF VARIANCE BETWEEN SUBGROUPS OF RESPONDENTS

Source	Sum of Squares	S	DF]	Mean Sq	uares	I	F-Ratio	F-Prob.
Between Groups	12127.723		2		6063.8	662		35.715	0
Subgroups		N	Iean (N))	S.D.	Group	1	Group 2	Group 3
Entrepreneurs	Group 1		92.08 (193)		13.89				* * *
				\neg					

Would-bes	Group 2	93.44 (286)	14.68		* * *
Non-entrepreneur s	Group 3	86.82 (1000)	12.34		

^{* * *} Indicates a significant difference at .000 level between groups

TABLE 6: T-TEST RESULTS FOR DIFFERENCES IN KAI MEAN SCORES WITHIN SUBGROUPS

Variables	Mean	(N)	S.D.	t	p	
Entrepreneurs	92.08	(193)	13.89	-5.30	.000	
Non-entrepreneurs	86.82 ((1000)	12.34			
Entrepreneurs						
Founders		94.12 ((139)	14.30	-3.37	.001
Non-founders		86.82	(54)	11.29		
Would-bes						
"Wanna-bes"		98.83 ((123)	14.88	-5.68	.000
Potential ent.		89.37 (163)	13.17		
Non-entrepreneurs						
Salaried worke	rs	87.20 ((698)	12.18	-1.47	.141
Unemployed pe	ople	85.95 (302)	12.68		

TABLE 7: T-TEST RESULTS FOR THE ENTREPRENEURIAL SAMPLE (N=193)

Varial	ble 1	Mean (l	N)	S.D.	t	p	
Gende	er						
	Male	92.60 (1	72)	13.83	1.49	.138	
	Female	87.83	(21)	13.98			
Age							
C	Less than 30		86.97	(25)	10.87	-2.03	.044
	30 or more		92.95 (167)	14.12		
Basic 1	Education						
	Completed high s	school	95.83	(46)	15.57	2.12	.036
	No high school		90.91 (147)	13.16		

Holds a degree	97.90	(10)	16.96	1.36	.174
No academic edu.	91.76 (183)	13.69		
Dalain Stant un					
Role in Start-up	04.10 /	120)	1420	2.25	001
Founders	94.12 (14.30	-3.37	.001
Non-Founders	86.82	(54)	11.29		
Number of Start-ups					
_	5 (138)	14.06	3.64	.000	
Two or more	99.84	(37)	11.81		
Business Sector					
Industry	92.03	(34)	15.55	46	.648
Services 93.31	1 (130)	14.27			
Age of Business					
Less than 10 years	95.91 (122)	15.32	-1.79	.076
10 years or more	91.72	(51)	13.52		
No. of Employees					
Less than 10	91.59	(8)	13.52	3.96	.000
10 or more		` ′	111.13	(165)	15.52

In the present study, the would-be entrepreneurs, with a mean score of 93.44 (S.D.=14.68), were found to be significantly more innovative than the non-entrepreneurs with a mean of 86.82 (p=.000). Interestingly, the "would-bes" scored slightly higher than the entrepreneurs. In comparing the two subgroups of would-be entrepreneurs, namely "wanna-bes" (mean= 98.83, S.D.=14.88) and potential entrepreneurs (mean=89.37, S.D.=13.17), a significant difference in favor of the former group emerged (p=.000). This result might imply that a conscious desire to found a firm involves an innovative cognitive style and "wanna-be" entrepreneurs may only have lacked the proper opportunity to found a firm perhaps due to external factors.

Moving to the entrepreneurial sample, founders exhibited classical entrepreneurial features by scoring significantly higher on innovativeness than non-founders (p=.001). This is parallel with a study by Walsh & Anderson (1995, 4) on Irish small business owner-managers. They found that individuals with less innovative scores on the KAI exhibited "latent entrepreneurial behavior", ie. did not found their businesses. Kirton (1989) has also indicated that innovator-inclined individuals with high risk taking propensity are more likely than others to set up their own businesses.

The more innovative entrepreneurs had also started more businesses than their adaptive counterparts. The former group had started at least two businesses on average, while the latter ones had usually only started their current business. This result is supported by Buttner & Gryskiewicz (1993) who found that the more adaptive US entrepreneurs had started 1.2 businesses on average, whereas the more innovative averaged 2.4 start-ups. Regarding age of business, entrepreneurs with firms established less than 10 years ago were more innovative than

their counterparts in older firms. Finally, micro entrepreneurs appeared to be more adaptive than entrepreneurs employing more than 10 people. By comparison, Gimenez (1991) found that the innovator-oriented Brazilian entrepreneurs were heavily concentrated in smaller and less mature firms.

CONCLUSION

Bearing in mind the exploratory nature of the study and the fact that the instrument was a Finnish translation from the original KAI concept, the results must be reviewed with some caution. Moreover, since the surveyed respondents were all located in either Central or Eastern Finland, the results are not necessarily reflective of the innovation orientations of people in other parts of Finland. Nonetheless, the results are of real value regarding rural Finland.

To sum up, the results of the present study supported the findings of earlier KAI studies on entrepreneurs (cf. Table 1). Namely, 1) entrepreneurs significantly out-scored the non-entrepreneurs and 2) business founders scored much higher than non-founders. As a whole, the respondents seemed to gain rather adaptive scores on the KAI. This is a result which reflects the high share of the rural population in the sample as well as the adaptive-oriented attitudes and behaviors in the Finnish countryside, since the respondents of the urban areas gained significantly higher scores than those living in rural areas. Moreover, the low level of education, again reflecting the high share of rural respondents, found throughout the sample may partly explain the low mean score. As a result, the findings call for further empirical investigation with more general samples.

Perhaps the low Finnish mean scores can also be attributed to cultural aspects as well as the personal characteristics of the individuals. We should keep in mind that national cultures are important moderating variables affecting especially attitudes and personality traits (Näsi, Näsi & Hyrsky, 1997).

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ENTREPRENEURIAL PERFORMANCE IN FOREIGN SETTINGS: ANALYSIS OF PERSONAL, EDUCATIONAL, AND EXPERIENTIAL PREDICTORS

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ABSTRACT

This study analyzes the degree to which individual, personal characteristics, educational backgrounds, experience and managerial activities are predictive of entrepreneurial performance in Thailand. Predictors are examined both individually and as a group using a 1994 data set of 187 Thai entrepreneurs. The implications for cross cultural comparisons are presented. The data are analyzed using the simultaneous equation procedure of LISREL.

It makes sense to search for factors which predict the performance of entrepreneurs in various national settings. Personality traits associated with entrepreneurship include the need for achievement, independence and autonomy needs, calculated risk-taking tendencies, self-confidence and high energy levels. In the United States, two of the individual characteristics associated with successful entrepreneurial outcomes are a high need for achievement and an internal locus of control. People with an internal locus of control believe that rewards and outcomes occur as a result of their own efforts, talents and abilities. In the United States people with an internal locus of control are thought to be more likely to succeed as entrepreneurs.

Of 187 Thai firms, 138 were from manufacturing, 20 from finance, insurance and real estate and 21 from other services. Of the seven variables hypothesized to effect entrepreneurial performance only three were confirmed by significant paths in the LISREL model. Age and environmental scanning were positively related to the company's revenue statistics. However, greater industry experience was correlated with less entrepreneurial success. Experience in industry may have kept the new entrepreneur from trying innovative new ideas.

Training materials, business curricula and short courses for entrepreneurs should not be based on the assumption of complete carry-over from western cultures to Asian cultures. Also, more research focused on local and international networking as a driver for entrepreneurial success is needed.

INTRODUCTION

Entrepreneurial activities are key ingredients in the growth and development of many national economies. In the United States, innovative business ventures are a primary source of new jobs as the twentieth century comes to a close. Large, longstanding institutions simply do not provide the same growth in employment opportunities which are present in these inventive, smaller start-up firms. In less economically developed countries, entrepreneurial start-ups are a major factor in the economic well-being of a region (Tsuruoka, 1993).

Most efforts to examine ideas about the determinants of entrepreneurial performance have been centered on data sets from Western cultures. However the need to understand the sources of entrepreneurial performance is even greater in countries such as Thailand, Malaysia and Indonesia where traditional agricultural employment opportunities are inadequate to support the rural population and large numbers of people are flocking to the urban areas in search of employment (Tasker, 1995).

It is important to recognize that successful entrepreneurial enterprises are difficult to spawn and develop, but that these firms are truly the ones which develop and support long-term economic growth. Therefore, it makes sense to search for factors which predict the performance of particular individuals or businesses in various national settings. Two key issues immediately emerge. First, are there factors which are predictive of entrepreneurial performance across cultures. If yes, an understanding of these characteristics and activities may facilitate funding decisions, consulting and counseling activities, and training programs.

Second, it is clear that simple correlational analyses of predictive factors in the area of entrepreneurship are insufficient. In other words, merely correlating needs for achievement, self-confidence, an internal locus of control, needs for autonomy, and other individual characteristics with the performance is insufficient. Holistic predictive models of entrepreneurial performance must be developed and tested. This research effort is designed to address both of these concerns.

The purpose of this research, then, is to analyze the degree to which individual personal characteristics, educational and experiential backgrounds, and managerial activities are predictive of entrepreneurial performance. These predictors are examined both individually and as a group. Implications for cross-cultural comparisons are then drawn.

BACKGROUND

Any number of factors may enhance or reduce the possibility that a particular new company will succeed. National upheavals (riots, revolutions, governmental changes) or world-wide changes in economic conditions, including the occurrence of an international recession are beyond individual control. Discounting these, the level of analysis pursued by most entrepreneurship research has been on individuals. The researchers have sought to identify personal attributes, educational achievements, and managerial activities which are predictive of the future success of a new firm. Factors from each of these three categories have been selected for this study.

PERSONAL CHARACTERISTICS

A number of personality traits have been associated with entrepreneurship. These include the need for achievement (McClelland, 1961), independence and autonomy needs, calculated risk-taking tendencies, self-confidence and high energy levels (Sexton and Bowman, 1984). Two of the most prominent individual characteristics which have been associated with successful entrepreneurial outcomes are a high need for achievement and an internal locus of control.

The need for achievement has been predictive of two separate entrepreneurial processes: (1) the decision to start a new business, and (2) subsequent success in that business. Individuals who yearn for positions of authority and for success in those positions are normally the new business owners who are most likely to prosper in their new ventures. Those who have identified this variable suggest that it is not the desire for money, but rather the desire for outward signs of success which drive the high achiever in the business world. High need for achievement and entrepreneurship are well documented correlationally in the United States. In addition, some studies of this personality trait suggest that it is possible to generalize the finding that high achievers become successful business owners all around the world. For example, similar findings have been reported by McClelland (1961) in a study in India, and Hisrich and O'Cinneide (1986) in Ireland. There is, however, some dispute as to the predictive value of the need for achievement standing alone in studies of entrepreneurship (Gartner, 1988). Given the number of instances in which higher need for achievement levels have been associated with higher profitability and growth of a person's company, the inclusion of the variable was deemed helpful to this study. Miller and Droege (1986) found that a CEO's need for achievement was significantly related to various measures of firm structure, and thereby perhaps related indirectly to firm performance, strengthening the case for inclusion of the variable in a holistic model of performance.

Locus of control is the second personality variable selected for this study. Specifically, an internal locus of control is expected to be related to higher performance levels in entrepreneurial ventures (Rotter, 1966). Internals are individuals who believe that rewards which occur and outcomes which people encounter are the result of their own efforts, talents, and abilities. Conversely, externals tend to believe that events which occur and rewards or punishments which follow are consequences associated with chance, luck, fate, or powerful others (Rotter, 1966). The scale used to determine ones predisposition is called the Locus of Control (LOC) instrument. A *low* LOC score is indicative of internality.

It is logical to believe that internals would be more likely to succeed as entrepreneurs. Individuals who believe their own efforts will determine performance tend to seek out and find more options in difficult situations (see Luthans, Baack, and Taylor, 1984). They are also more inclined to take action when circumstances make them unhappy. Consequently, internals are likely to respond proactively to challenging conditions and respond with greater flexibility to environmental changes and other difficulties. Several previous studies have linked internality with entrepreneurial and managerial performance (e.g., Box, White, and Barr, 1993; Govindarajan, 1988; Miller and Toulouse, 1986; Miller, Kets de Vries and Toulouse, 1982).

EDUCATIONAL AND EXPERIENTIAL BACKGROUND

Entrepreneurs may learn in the following two major ways. First, classroom knowledge combined with the training given by consultants and other experts may assist in the operation of a new firm. Second, prior business experiences may be highly instructive to a prospective new entrepreneur. These experiences include time spent in the same business at another company, previous business start-up attempts, prior experience in the industry, and the age of the individual as a proxy for specific experiences.

Age and formal education were correlated positively with entrepreneurial performance in several previous studies (Birley and Norburn, 1987; Hisrich and Brush, 1984; Hoad and Rosko, 1964). Logically, those who have had more experiences are potentially at an advantage when compared to younger compatriots with less experience. Formal education should teach skills such as reasoning, planning, and decision making which may help the entrepreneur to be more successful.

Previous start up attempts have also been associated with increased likelihood of success in a new entrepreneurial enterprise (Box, Watts and Hisrich, 1994). Those with previous start-up experiences may report greater levels of satisfaction with the new business, and those latter businesses should be more successful than their earlier ventures.

Previous managerial experiences as part of another entrepreneur's top management team or experience in a particular related industry may season the new entrepreneur, giving the individual greater odds of success. Box, Watts, and Hisrich (1994) as well as Box, White, and Barr (1993) report a positive relationship between previous industry experience and performance.

MANAGERIAL BEHAVIORS

Numerous managerial behaviors assist the leader in driving a new firm toward profitability and growth. Of these, environmental scanning is one key element. Scanning may help the company avoid unexpected disruptive events. Scanning will also assist in identifying opportunities for growth. In earlier studies, entrepreneurial environmental scanning intensity was found to be positively correlated with subsequent firm performance (Daft, Sormunen, and Park, 1988; Watts and Ormsby, 1990).

Each of these predictor variable categories may provide important indicators of success for a new firm, both in the United States and in other countries. The need for achievement and locus of control have been frequently used to study entrepreneurial personalities. Experience and educational attainments also have been routinely identified as key ingredients in entrepreneurial success (Bartlett, 1988). Environmental scanning and other managerial behaviors are also closely associated with a firm's performance levels (Sexton and Bowman-Upton, 1991). These variables and variable categories have often been studied separately. A logical extension of this research is to look at the variables together, in a more holistic pattern, seeking to identify patterns and trends which are predictive of performance. Also, it is essential to broaden the base of research to include data on entrepreneurs in non-Western societies.

RESEARCH METHODOLOGY AND DATA

This research was conducted in Bangkok, Thailand. The study focuses on a data set of 187 Thai entrepreneurs who were in business in Bangkok in 1994. Survey instruments were completed by 191 entrepreneurs from that location. The survey form was translated and back-translated from Thai to English. The survey was based on instruments used in two previous studies of U. S. entrepreneurs (Box, Watts, and Hisrich, 1994; Box, White, and Barr, 1993). The questionnaires were distributed and administered by M.B.A. students at Assumption University in Bangkok, under the direction of one of the authors. Of the 191 forms distributed, 187 were deemed usable.

VARIABLE MEASUREMENTS

The outcomes measures (endogenous variables) in this study were indicators of performance. While there is no single, unambiguous construct representing organizational effectiveness (Cameron and Whetten, 1983), sets of measures may be used to represent the outcome. Three related, but not multicollinear variables were developed to assess performance: (1) the average annual increase in employment, (2) the average annual increase in revenues, and (3) the average annual increase in profits. These variables are represented in this paper as Employment Growth, Revenue Growth, and Profit Growth, respectively. Employment Growth was calculated by subtracting the number of employees on the payroll in the first year of operations from the number on the payroll in 1994 and dividing by the number of years of operations. Revenues Growth and Profits Growth were calculated in a similar fashion.

The exogenous variables, as noted in the three categories mentioned above, were collected as follows. The personal characteristic, Need for Achievement, was assessed using Steers and Braunstein's (1981) Manifest Needs Questionnaire. This instrument uses a Likert Scale ranging from 1 to 7 per item. Reliability of the scale was .72

Locus of Control, the other personal characteristic, was measured using Lumpkin's (1985) abbreviated LOC questionnaire. The instrument uses a six point response range. Reliability of this instrument was .68.

The manager's educational and experiential background was assessed via self-reports. Previous industry experience, previous start ups, tenure, age, and educational level were measured with simple responses on the questionnaire.

The managerial activity of environmental scanning was assessed using an instrument devised by Miller, Kets de Vries, and Toulouse (1982). The questions were answered with seven-point range responses. Reliability of this questionnaire was .80.

SAMPLE CHARACTERISTICS

Firms represented in this sample came from several different industries. The SIC (Standard Industrial Classification Manual, 1988) codes reported on the surveys were completed

by managers from eight separate industries. The largest percentage (72%) of firms were involved in manufacturing (134 of 187). A complete breakdown of classifications is provided in Table 1. The mean age of individuals who responded to the questionnaire was 32 years. These entrepreneurs had considerable within-industry experience (mean = 7.47 years) as well as considerable experience with the start-up of new firms. Table 2 displays these and other sample characteristics.

TABLE 1 INDUSTRIES REPRESENTED IN THIS SAMPLE							
	Number of Firms						
Agriculture	4						
Construction	4						
Manufacturing	138						
Transportation	2						
Wholesale Trade	5						
Retail Trade	7						
Finance, Insurance, & Real Estate	20						
Services	21						

TABLE 2								
VARIABLES AND SELECTED VALUES								
Variable	Mean	Standard Deviation	Range					
Employee Growth	18.46	36.78	-32.5 to 260					
Revenue Growth	685	1610	-267.0 to 11,040					
Profit Growth 105.6	j .	322.2 -	80.0 to 3,150					
Previous Starts	2.433	6.427	0.0 to 45					
Age	38.27	9.73	21.0 to 78					
Industry Experience	7.47	7.73	0.0 to 50					
Need for Achievement	5.65	.821	0.0 to 7.0					
Locus of Control	3.35	.78	1.0 to 6.0					
Environment Scanning	4.28	1.29	1.0 to 7.0					

Employee growth calculated as: number of employees/year

Dollar amounts reported as: \$1,000/year (Thai Baht converted to American dollars)

Experience, Age, Education reported in years

ANALYSIS TECHNIQUES

The data were analyzed using the simultaneous equation procedure of LISREL 7 (Joreskog and Sorbom 1983; 1989). The model illustrated in Figure 1 was tested. Revenue growth, profit growth, and employee growth were used to indicate the firm's performance. Previous business starts, the respondent's age, industry experience, and educational level were entered using the self-reported scores. The need for achievement and environmental scanning values were obtained by summing individual indicants from the scale. The locus-of-control value was obtained from summing the individual indicant scores of the LOC scale.

Since individual scores were utilized in the study, the econometric procedure as outlined by Joreskog and Sorbom (1988) was used for the analysis. The structural model was based on a Pearson correlation score among the tested variables.

The results of the LISREL Findings analysis are presented in Table 3 and illustrated in Figure 2. In terms of model fit, the X^2 value was 11.51 with 15 df resulting in a p value of 0.716. The GFI was 0.988, the AGFI was 0.955, and the RMSR was 0.027. The model fit statistics indicate an excellent fit between the proposed model and the data matrix.

In terms of significant relationships among the variables studied, revenue growth had a direct impact on both profit growth and employee growth. the respondent's age and environmental scanning had a direct impact on revenue growth while industry experience had an inverse impact on revenue growth. Previous starts, education, need for achievement, and locus-of-control had no impact on revenue growth.

		TABLE 3
	RESULTS OF ANALYSIS	
Greek Notation	Path	MLE Coeff T-Value
β_{13}	Revenue Growth -> Profit Growth 0.516	8.014**
β_{23}	Revenue Growth -> Employee Growth	0.546 8.671**
γ_{31}	Previous Starts -> Revenue Growth 0.049	0.644
γ_{32}	Respondent's Age -> Revenue Growth	0.229 2.564*
γ_{33}	Indust Experience -> Revenue Growth	-0.181 -2.088*
γ_{34}	Education -> Revenue Growth	-0.002 -0.033
Age Profit Growth	γ_{35} Need for Achie -0.045 -0.589	vement -> Rev. Growth
Industry Experience Revenue Growth	γ ₃₆ Locus-of-cor -0.436	ntrol -> Revenue Growth-0.033
Entropyees Employee Growth	γ ₃₇ Environment :	scanning -> Rev. Growth
	$\chi^2 = 11.51$ with 15 df (p=.716)	
GFI = 0.988		
AGFI = 0.955		

RMSR = 0.027

- * Significant at p < .05.
- ** Significant at p < .01.

FINDINGS AND DISCUSSION

Of the seven variables hypothesized to affect revenue growth, only three were confirmed by significant paths in the LISREL model. Age and environmental scanning were, as predicted, positively related to the company's revenue statistics. Logically, someone who was older and more mature may have been in a better position to patiently guide a new firm to success. Also, environmental scanning would lead the new entrepreneur to study opportunities present in the environment and to prepare for any threats which would develop, possibly giving the company better odds of succeeding in the early, formative years.

One other path was significant in the model. A positive relationship between industry experience and performance was expected. The relationship was, however, *opposite* of what was expected (inverse). Thus, greater industry experience was correlated with less success. Experience in industry may have kept the new entrepreneur from trying innovative new ideas, but rather held them to repeating what they had done, seen, and learned before. Without establishing a new niche in the industry, the company was less likely to succeed.

An additional consideration that may explain the unexpected negative correlation between experience and performance is the existence of "craftsmen" versus "opportunistic" entrepreneurs (Cooper & Gascon, 1992). Craftsmen often have significant experience in a particular industry and create a new firm as a means of establishing income replacement, after leaving a previous employer. Conversely, opportunitistic entrepreneurs are quite committed to the growth of their new ventures. Thus, if this sample contained a large percentage of craftsmen, it would seem plausible that growth would not be related to previous experiences, since the goals of these craftsmen would merely be to maintain the size of the company and continue their present levels of income.

Revenue growth had a positive impact on both profit growth and employee growth. Increases in revenues should result in the addition of more employees and the growth of profits, as depicted in Figure 2.

The assumption that the personal factors of a high need for achievement and an internal locus of control would lead to company success were not confirmed by these data. In other words, it is possible that the cultural/religious circumstances in Bangkok do not favor these personality types in the development of a business. Perhaps these traits, which cause the individual to appear more aggressive and materialistic, may not meet with positive responses in the marketplace.

Also, formal education was not predictive of growth in revenues. One explanation would be that the educational experience may not provide the specific skills or the networking which was helpful to the entrepreneurs in the Butler Study. Since experience on the job and previous start-ups were also not associated with success, it is possible that factors other than

education and experience, such as networking, are more crucial to success of new firms in Bangkok (Oh, 1996).

In the USA, an advantage on the personality front, or experience may be the difference between success and failure, whereas in less developed markets, these traits, while helpful, are not the most crucial elements. To further extend this logic, since environmental scanning was significant, it makes sense to argue that those entrepreneurs who discovered unique outlets or markets were those most likely to succeed in the rapidly growing and developing economy of Bangkok.

CONCLUSIONS

Three basic conclusions emerge from this study. First, age and environmental scanning are predictive of performance in this sample, replicating findings from previous studies. When making cross-cultural comparisons, it follows that we should include any variable which is predictive of entrepreneurial success, regardless of the region being examined.

Second, the personal variables of locus of control and the need for achievement were not predictive of performance. It has been argued by Gartner (1988) that they should not be stand-alone predictors, and this finding supports such a position. We suggest that in a holistic model of entrepreneurial success, it may be wise to account for regional circumstances before examining personal variables. Therefore, in a very competitive economy, an aggressive, internally-driven, and goal-oriented executive may succeed where others do not. In the Asian environment, these variables may be less helpful in predicting entrepreneurial success.

Third, since educational levels, previous start-ups, and managerial experiences were not predictive of performance, we should endeavor to discover why educational advantages and past experiences do not predict success. It would be important to discover ways in which education and experience can be turned into tools to assist the new entrepreneur in a developing economy.

This research effort should be replicated in other countries to help confirm or deny the tentative conclusions being drawn here. Also, macro- economic conditions should be incorporated into holistic studies of entrepreneurial success.

As researchers, we can seek to identify personal, managerial, and experiential variables which are most often associated with performance, and couple them with training and counseling on all matters (including the choice of the type of company to be formed) which might help a new manager increase the odds that an entrepreneurial venture will be a successful and satisfying life choice.

However, training materials, business curricula, and short courses for entrepreneurs should not be based on the assumption of complete carryover from Western cultures to Asian cultures. Also, more research focused on local and international networking as a driver for entrepreneurial success is needed.

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PRODUCT MIX DECISIONS IN EXTREMELY FAST GROWING FIRMS: A QUALITATIVE STUDY

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ABSTRACT

Based on a literature review and qualitative interviews with firms selected from the 1992 inc. 500 listing, this research develops a model of product mix decisions in smaller, extremely fast-growing operations. Interviews with study participants indicated that product mix decisions were not necessarily based on findings from traditional information-gathering techniques such as marketing research. In seeking to understand the way in which fast-growing firms make product mix decisions, this research found that entrepreneurs' intuition and social networks were important sources of information for their decision-making processes. Subsequently, a model was developed which conceptualized such processes. This study concludes that intuition and discussion are important factors in entrepreneurs' decision-making processes.

INTRODUCTION

Traditional views of product mix decisions in business organizations have centered around the logical accumulation of marketing information. In larger organizations, this information has been collected through marketing research activities. Smaller, entrepreneurial firms, however, were either incapable of or lacked the resources to utilize traditional marketing research techniques. Such firms have tended to lack the sources of information deemed necessary by most marketers for product mix decisions. The objective of this paper is to conceptualize the product mix decision-making process in small, entrepreneurial firms.

Marketing texts define marketing research as a decision support tool (Churchill, 1990; Kinnear & Taylor, 1991). Biggadike (1981) further described marketing research as the key link between the strategic decision maker and the external environment. Biggadike noted that marketing research was one of the few marketing tools with the ability to reduce environmental uncertainty. Indeed, marketing research has been given the powerful role of informing decision makers of many aspects of the external environment.

Uses of marketing research could include fine-tuning the mix of products offered by a firm or assessing the effectiveness of advertisements used in the firm's promotional campaigns. Theoretically, marketing research could also be used as a tool to guide the firm's strategic

decision maker(s) in both the construction and evaluation phases of the strategic planning process (Boyd, Westfall & Stasch, 1985). Traditionally, however, only larger firms have conducted formal marketing research and, therefore, have realized its benefits. In contrast, smaller, entrepreneurial firms have not realized such benefits and have most often cited their own ineptness as a primary reason for this deficiency. Research has also shown that smaller firms cannot afford to commission marketing research from private consultants (Luck, Wales, Taylor & Rubin, 1982).

THE POSSIBLE ROLE OF MARKETING RESEARCH IN SMALLER FIRMS

Literature concerned with efforts to gain information in smaller, entrepreneurial firms has traditionally focused on the special problems entrepreneurs seem to have with the collection of primary marketing research data (Boughton, 1983). Boughton (1983) noted that most small firms are disadvantaged by their low level of market knowledge and that marketing research is a possible answer to the information gap between firms which are better informed and less-well-informed firms (see also Robinson and Pearce for a discussion of the information gap in smaller firms, 1984). McDaniel and Parasuraman (1986); Barnes, Pynn and Noonan (1982), and d'Amico (1978) all offered practical guides for the collection of marketing research data in smaller firms. Their guides represent an effort to solve the problems which smaller firms have had with the collection of primary market data. These researchers concur with Boughton (1983) by concluding that marketing research data has the ability to augment the information used by entrepreneurs and, therefore, to help the entrepreneur make better marketing decisions.

Additional research has focused on the value which entrepreneurs are inclined to place on marketing information. McDaniel and Parasuraman (1985) found that the attitude of most entrepreneurs was swayed by their experience with marketing research. Simply put, the entrepreneur with the greatest degree of experience with marketing research was inclined to be positive about its prospects for assisting the firm with decisions.

The research reviewed above has been concerned with the utility of marketing research or the logical search for marketing information in smaller firms. Most large firms conduct marketing research and have found it to be an invaluable decision-making tool (Luck et al., 1982), but entrepreneurs have been slow to adopt and use marketing research. An improved understanding of why marketing research is so underutilized by such firms is not only a valid research question, it is the kind of inquiry whose answer would further aid entrepreneurship researchers who seek to understand the process by which entrepreneurs make decisions. Notably, by focusing on the process by which entrepreneurs make decisions, this research is circumventing some of the failures of previous research (see Hofer and Bygrave (1991) for a discussion of research on the process of entrepreneurship). The objective of this research is to conceptualize the process by which marketing decisions are being made in smaller entrepreneurial firms. This research will also address the ways other than marketing research, which entrepreneurs utilize in order to gain information for decision-making. Bird and Jelinek (1988) noted that entrepreneurs must be capable in all of the traditional functional areas of the

firm. By understanding the process by which entrepreneurs make marketing decisions, one might gain some understanding about the way in which these firms are able to change so rapidly.

THE SAMPLE

The fifteen firms in the United States identified as fastest-growing through the use of the 1992 Inc. 500 list were selected as the sample for this study. Information concerning these organizations was compiled and used to contact each firm's chief executive. All firms contacted had yearly sales growth percentages which exceeded 1000 percent, with the top five firms having annual sales growth in excess of 4000 percent. The works of Gartner (1988); Carland et al. (1984).; Bird (1987); and Olson (1987) were used to derive the definition of an entrepreneur used in this study: a person who is both a founder and who has equity of at least ten percent of financial investment in the firm. Only persons meeting these criteria were interviewed.

Subsequently, officers from eight of the fifteen firms contacted were deemed to be entrepreneurs by the criteria set forth above (founder status and equity interest) and agreed to be interviewed. The companies participating in the study belonged to a diverse range of industries including computer sales, human resource leasing, textiles, environmental clean-up, and construction.

METHODOLOGY

Because of the complex nature of decision-making, qualitative techniques were deemed as most appropriate. Qualitative research methods, although not necessarily as quantitative as their objective cousins, are capable of gathering large quantities of information for further study. Qualitative research allows the social scientist to gain some understanding of the nuances of the subject being studied--product decision-making processes in extremely fast-growing firms in this instance. Understanding the subtleties of decision-making in such firms will allow for further development of a cognitive model of entrepreneurship.

The study's interviews were conducted by telephone and ranged from five to ten minutes in length. Interviewees were asked probing questions either to start or to encourage the interview. Questions of this type were designed to prompt as much response as possible and, through their use, the interviews often took on the properties of conversations. This effect was anticpicated and reflected the idea of "conversations with a purpose" (see Patton, 1990, for a further discussion).

During the study's interviews, respondents were allowed to discuss their feelings about a specific subject in detail. To the greatest extent possible, the direction of the interview was controlled by the interviewee. By allowing participants to control the interview, it was believed that additional information would be revealed which would further augment what was known about the subject. Gummesson (1991) noted that this interview format allows the interviewer to

enter the world of the interviewee and explore the way in which respondents--in this case, entrepreneurs--think.

FINDINGS

Two primary outcomes were attained by this study. First, a variety of facts concerning the use and value of traditional marketing information on product decisions in entrepreneurial firms were gained. Second, the research reached beyond the simple use of marketing research information and into the process by which entrepreneurs make product mix decisions. The focus of the research was an investigation of the process by which entrepreneurs making up this particular sample of firms made product decisions and the degree to which these chief executives were capable of making decisions of a logical, viable, and successful nature.

FINDINGS ON THE USE OF MARKETING RESEARCH

Of the eight interviews conducted, only three of the study's participants mentioned marketing research as being a regular part of their firms' operations. In contrast, when asked to evaluate marketing research as an information source for decisions-making purposes, all eight respondents noted that marketing research had limited value and rarely affected product, price, promotion, or channel of distribution decisions. One chief executive remarked that he/she used marketing research to assess the value of certain advertisements, but noted that the impact of marketing research information on those decisions was limited.

While six of the organizations contacted were identified as having commissioned marketing research from a professional research firm at some point in their history, all but one of those interviewed stated that the research provided by such firms added little to their ability to make better product mix decisions. None of the interviewees were of the opinion that marketing research information had any strategic value to the firm and all indicated that marketing research information would not impact their outlook for of their firms. In most cases, the interviewees mentioned that the marketing research either produced information that was obvious or the useful time frame for such data had elapsed. Interestingly, interviewees also remarked that they were inclined to ignore research results when they opposed their intuitive evaluation of a particular situation. The entrepreneurs taking part in this study demonstrated a great deal of confidence in their ability to make decisions about the makeup of the product mix. Self-confidence appeared to be a factor that impacted all stages of these entrepreneurs' product mix decision-making process.

Additionally, participants were of the opinion that a formal decision-making process, including marketing research, would lead to lower levels of flexibility. Most interviewees stated that any formal decision-making system was unacceptable and would lengthen the response time of the firm to changes in the external environment. One confusing aspect of this discussion was the use of changes in the product mix. Products were added to the product mix on a trial and error basis and their success was judged on the basis of their acceptance in the market place.

A final point of interest is that the entrepreneurs in the sample said that if they were faced with an important product mix decision which they did not believe that they had the expertise to resolve, then the use of an additional information source would be considered. Most often, this other source of information was part of their social network--respondents' friends or business associates. Participants also noted that they might employ some kind of consultant or advisor instead of commissioning a marketing research study to address the problem.

HOW ARE MARKETING DECISIONS MADE IN ENTREPRENEURIAL FIRMS?

As discussions with participants continued, the role of intuition in their decision-making processes became increasingly prominent. Interviewees noted that a myriad of factors including experience, news, intuition, and mood go into making marketing decisions. Most respondents remarked that the fact that their financial fortunes hinged on their decisions produced an inclination to trust their own intuition rather than the stark "reality" of marketing intelligence. It seemed that these entrepreneurs believed that they had their finger on the "pulse" of the consumer and were, therefore, better able to make the best decisions for their firms.

In spite of the tendency noted above, a belief that decisions made by entrepreneurs constitute sheer guesswork should be discouraged. The entrepreneurs in this sample were inclined to read and use information from such sources as trade magazines, newspapers, and advertisers' reports as well as utilizing their own life and business experiences as the basis for most decisions.

Marketing decisions are, as is the case for most decisions by entrepreneurs, inherently complex and extremely difficult to analyze and understand. Katz and Gartner (1988) noted that the entrepreneurial organization is extremely complex and should be addressed as such. Because they face such a complex situation, it is understandable that, as revealed by this study, entrepreneurs tended to be flexible and situational in their decision making. The process by which entrepreneurs make marketing decisions has not been found to be a rational progression of logical steps leading to an optimal conclusion. Bygrave (1989a, 1989b) noted that entrepreneurship is chaotic because the situations which entrepreneurs face are never the same. This study's findings suggest that entrepreneurs' product mix decisions should be viewed in a similar manner.

SUMMARY OF FINDINGS

Findings from this study viewed as important to understanding the decision-making processes of entrepreneurs which affect product mix choices are provided below.

Formal information-gathering systems are not part of the decision-making structure of entrepreneurial firms and entrepreneurs are inclined to resist the formalization of decision- making processes because they believe that such an action will impede the firm's flexibility.

Even in those instances in which an entrepreneurial firm has a formal decision making process, the entrepreneur(s) tends/tend to ignore it.

The entrepreneur's level of self-confidence is indirectly related to the extent to which formal decision-making structures exist within his/her organization.

If an entrepreneur(s) try/tries a strategy or tactic which they "think" will work and it repeatedly fails, then an additional information source will be employed.

Intuition seems to be a key variable in the decision-making process employed by entrepreneurs with a high degree of trust being placed in their ability to "feel" which conclusion is best for their firms.

Intuition may lose some of its impact on the decisions being made by entrepreneurs if the overwhelming majority of the information sources used by the entrepreneur are

CONCLUSIONS

diametrically opposed to the conclusion drawn from the entrepreneur's intuition.

Clearly, the entrepreneurs interviewed for this research did not appear to gain a great deal of additional decision-making power from information contributed by marketing research. Certainly, an argument could be made that the low level of expertise which entrepreneurs tend to have with marketing research limits their ability to preform such work in a manner which will be valuable to the firm. Indeed, it could be that the limited experience that their firms have with marketing research have restricted its use. The problem with this assessment is the entrepreneur's justification for the use, or non-use, of marketing research. The entrepreneurs participating in this study believed that marketing research contributed information which was either intuitively obvious or wasat the end of its useful life.

This study's respondents also feared marketing research because of its associationt with formal information retrieval and decision making systems. The concerns that the entrepreneurs had with reduced firm flexibility may be the underlying factor in the refusal of most entrepreneurs to use marketing research. They argue that by formalizing the firm's product decision-making process, the firm's ability to capitalize on the chaotic dilemmas which entrepreneurs tend to face is limited.

Clearly, the entrepreneurs taking part in this study tended to have negative attitudes towards marketing research. It is recognized, however, that entrepreneurs have a need to be cognizant of the arguments for and against the use and the value of marketing intelligence. While this study should not be viewed as having concluded that marketing research has no value to entrepreneurs, the reasons given above show that the value placed on marketing research by such individuals may well be limited by the special situations in which they operate.

ENTREPRENEURIAL DECISION MAKING

The second category of information derived from this study's qualitative interviews relates directly to the way in which entrepreneurs make decisions. This research found four sources of information to be important to entrepreneurs when making decisions. The first of these sources is intuition, which is defined as the faculty of knowing as if by instinct. Comments such as "we know", "I think" or "we feel" were made on a frequent basis by the entrepreneurs in this study and suggested a reliance on intuition. Clearly, intuition is a subject which is difficult to deal with in any research, but the increased understanding of its role in entrepreneurial firms which further study would permit would, in turn, allow a further organizing of an area of research which is currently in a relative state of disarray into a more rational body of knowledge.

A crucial concept to be drawn from this research, is the fact that entrepreneurs in extremely fast-growing businesses have a basic instinct for the businesses they manage and utilize such "instinct" or intuition as their key decision making tool. Eisenhardt (1989) explained, to a certain extent, that managers in high-velocity environments have a propensity to use intuition as part of a decision making process. Eisenhardt and Bourgeois (1988) and Bourgeois and Eisenhardt (1988) concluded that firms in high-velocity environments were capable of high-speed decisions and were most often the firms which were successful. Clearly, an entrepreneur who uses intuitive information in the decision-making context is capable of faster strategic marketing decisions. A premise of this research, therefore, is that by the nature of the growth which they are experiencing, if not by the nature of the industries to which they belong, all of the firms involved are truly in high-velocity environments.

Intuition was also cited by the participants of the study as a key aspect of their firms remaining flexible. Indeed, most of the entrepreneurs interviewed noted that their desire to remain flexible was a revelation of past experience which associated flexibility directly with the firm's long term viability.

Three other sources were cited by the study's respondents as having overall decision making value, but were discussed in lesser detail than was the case for the factor of intuition. By far, the most important of the three remaining information sources used by these entrepreneurs was discussion or interaction with the other officers in the firm. Specht (1987) noted that when entrepreneurs seek information they will almost always seek information from personal sources. Specht further noted that the ability of entrepreneurs to surround themselves with knowledgeable people was directly related to the success of the firm. The findings in this research tend to support that assertion. The interviewees conveyed that they will most likely formulate some type of opinion about the dilemma at hand, and then consult the firm's "resident expert(s)" on the subject.

Because the additional information sources mentioned by the entrepreneurs interviewed during this study are likely to be of some importance to the firm's ability to make decisions, their role should not be diminished. However, since the key goal of this study inovlves an attempt to understand the way in which externally-oriented decisions are made in extremely fast growing firms, only the most important aspects of the decision-making process were discussed.

Entrepreneurs are inclined to trust themselves and the people around them when making strategic marketing decisions rather than relying on traditional marketing research or intelligence.

A MODEL OF MARKETING DECISIONS IN EXTREMELY FAST GROWING FIRMS

Based on the data derived from the qualitative interviews and the previous research, a model has been developed which attempts to explain the process by which marketing decisions are made in extremely fast-growing entrepreneurial firms (see figure 1). This model differs from previous models in that it attempts to capture the complexity of entrepreneurship by showing that interaction between all constructs is possible. The problem with maximizing interaction and/or variance in the model is that future attempts to validate the model will be hindered by methodological difficulties.

The model itself begins with the four information sources mentioned previously as the focal points of the model feeding into or affecting the ability of the entrepreneur to identify the problem or dilemma which lies before him/her. Once the dilemma is satisfactorily identified, the four sources of information are used again to search for a solution. Once a solution has been found, it is tested and found to be useful or worthless.

An important aspect of the model is the fact that it contains several continuous feedback loops. As a result of the presence of such loops, the potential for becoming "captured" at any of the model's junction points exists. For instance, when testing the various solutions which are available to the entrepreneur, one might call the last section of the model the "trial and error" loop. Trial and error was the method which the majority of entrepreneurs interviewed cited as the way in which they tested most new products. Further, the entrepreneur's decision-making process might stall at any junction point associated with dilemma identification.

An additional attribute of the model is the capability of feedback occurring from any point to any other point in the model. The ability of the model to accomplish this task means that it must take on the chaotic characteristics of entrepreneurship and accounts for the multidirectional arrows in the model.

RECOMMENDATIONS FOR FUTURE RESEARCH

Future research should continue to focus on the process side of entrepreneurship. A focus on the processes by which entrepreneurs function or make decisions could allow large firms to be more flexible and act more entrepreneurial. For such an outcome to be realized, further details are necessary in order to fully understand the way in which entrepreneurs make externally-oriented decisions. An example of such a detail could involve the extent to which information is important to their decisions. Another such detail could be associated with the perception, seemingly supported by this research, that entrepreneurs are, by nature, risk takers. However, because such an orientation has been found not to be the case (Brockhaus, 1980), then the question of the nature of such persons still requires resolution. These and other questions concerning entrepreneurs tend to be multivariate in nature and are appropriate subjects of future research.

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Figure One A Model of Product Mix Decisions in Extremely Fast Growing Firms

LONG TERM CULTURAL AND STRATEGIC IMPLICATIONS OF THE HISTORY OF FOUNDERS: A FINNISH CASE STUDY

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ABSTRACT

This paper examines managerial beliefs and values related to founding and original culture in the context of organizational renewal. The paper suggests that original culture and founders have long term implications on the current culture and strategy of the organization. Implications are based on a longitudinal Finnish case study that was conducted in two family-owned companies. The history of founder has effect on the way the continuous pursuit of renewal is kept up in the organizations. In the organizations studied the actual founder's or successor's beliefs about the necessity of continuous quality improvement strive the organizations to develop sustainable competitive advantages. Managerial beliefs related to original culture remain relatively stable for decades.

INTRODUCTION

This paper suggests that "the history is not just an event in the past but is alive in the present and may shape the future" (Pettigrew 1990:270). The paper focuses on how the successors or actual founders hold on to the beliefs that have worked in the company's history and have remained relatively stable for several decades affecting the current managerial decision making processes. Implications are made in the context of how the organization is renewed by embedding a new managerial ideology, more specifically, total quality ideology (Savolainen 1997). Empirical findings from two Finnish family-owned companies provide needed empirical evidence on the long term effects of managerial values on current managerial practices.

Ideologies and their component systems of beliefs can play a significant role in the processes of organizational creation and renewal because they have a potential to link attitude and action (Pettigrew 1979; Savolainen 1997). The potency of organizational ideologies depends on how they are maintained and kept alive, and transferred. Successful ideological change is more deeply associated with organizational culture and values that favor change. It is more commonly found in the entrepreneurial firm which is characterized by developmental orientation, openness to new ideas, and proactiveness in competition (Kanter 1983). Founders' impact on the maintenance and change of ideologies is not very well understood and we need further empirical research to gain a deeper understanding of this matter.

HISTORY OF ORGANIZATION AND MANAGERIAL BELIEFS

The founders' personal belief systems lay at the heart of the organizational and managerial belief systems that direct and facilitate managerial decision making. The personal values of the founding "fathers" may form an integral part of the present-day belief systems (Donaldson and Lorsch 1983). The current ideologies can be traced back to the founders' beliefs because they lay down the foundation (Schein, 1985). In the course of time the underlying values lead successors (and managers) to make choices and commitments that confirm the founders' belief system and make it effective in the current managerial practices. The basic fabric of the belief system may endure for a long time because managers are emotionally committed to the fundamental principles. But we can ask why managers become so committed to the existing belief system. One of the fundamental reasons is that it works which strengthens managers' emotional commitment to the principles that have worked for the organization in the past.

Then another question arises, how willing are managers to alter practices that have been successful in the past? As long as no major external changes occur in the business environment the decision making within the existing belief systems tend to go forward. But these beliefs are not unchangeable. As the company undergoes changes, the experiences of the founders and their successors lead them to modify the belief system (Fritzsche 1997). In this process the earlier history of the company plays a role. Managerial belief systems change incrementally as a result of successes and failures. The history of the organization leads and sometimes compel managers to act in a certain, history-bound way, and depending on the situation, this turns out to be advantageous or disadvantageous. This view implies that the past may become a powerful force in the present and, therefore, the legacy of the past is worth preserving. This concerns, in particular, cultural beliefs, assumptions, and moral values.

CREATION AND RENEWAL OF ORGANIZATIONAL IDEOLOGIES

The purpose of the organization is generated through the feelings and actions of its founder who develops and maintains organizational culture (Pettigrew 1979; Fritzsche 1997; Schein 1985). Ideologies play a significant role in the creation and renewal of the organization. An ideology can be defined as a systematic cluster of ideas organized by the underlying principles of these ideas (Boas 1972; Borg 1965). The system of ideas comprises beliefs, attitudes, and insights which are related to each other. In other words, they are not a mere incidental cluster of human expressions and statements. The term ideology is a broad one. It may refer to an individual, a social group or a class, to societies or epochs. Ideology can describe the whole set of values and attitudes of an individual or of a broader philosophical system that forms the mental basis of human life. In the field of management research paradigm and world view are parallel terms for ideology.

In generating the purpose for the organization founders create beliefs, symbols, languages, rituals, etc. They formulate organizational ideology through which the socialization of organization members takes place. In the entrepreneurial firm, an entrepreneur translates the

individual drive into collective purpose and commitment forming the ideology that "pulls the entity together" (Mintzberg 1989).

Organizational renewal is outlined by Tichy and Devanna (1986) as follows: The new way of thinking becomes day-to-day practice. New realities, actions and practices are shared in a way that changes become institutionalized. At a deeper level this requires shaping and reinforcing a new culture that fits with the revitalized organization. It is an incremental adjustment process which Kanter (1983) defines as an *innovation*: "to bring new learning or capacity to the organization, involving change, a *redirection* of organizational energies...that may result in new strategies, market opportunities, work methods, technical processes, or structures". Organizational renewal involves processes of *learning* and takes into account how the organization's *past affects* the future capability of change. Organizational renewal and learning reinforce each other (Dixon 1994).

In organizational renewal, the change of ideologies is the most abstract and encompassing level of organizational change, pertaining to the dimensions of values and beliefs. In general, ideological organizational change is about the organization's *adaptive* behavior in a changing environment (Anderson et al. 1994; Reger et al. 1994). It involves innovative, learning-oriented behavior focusing on the reform of thinking and renewal of management practices.

Organization theories suggest that the organizational type affects the kind of processes an organization undergoes and experiences. Distinct organizational types are successful in different environments (Burns and Stalker 1961). In other words, success depends on how well "the organization rests in a fit between organization and environment". Innovativeness characterizes the entrepreneurial organizations (Kanter1983). *The entrepreneurial spirit*, as the basic source for producing innovations (Schumpeter 1950), more likely exists in small enterprises. Innovative organizations tend to have an organic methodology for approaching issues and problems which means openness to new ideas and "the willingness to move beyond received wisdom" (Kanter 1983).

IMPLANTATION OF IDEOLOGY

In management, ideology has a particular instrumental function. Ideas are used to influence people. They function as political, social, and institutional means for changing the thoughts, attitudes, opinions (and, as last resort, the behavior) of individuals and groups. Based on this tendency to influence, quality ideology can be defined as a set of directions/norms for attitudes and behavior, whose purpose is to direct thinking about quality and to change and improve quality practices. The role of ideology is to act as a mental instrument of managerial influence. Therefore, in ideological terms, quality is a means to exert managerial influence.

Organizational *culture* mediates the implantation of ideas encompassing a force for "pulling together" (Mintzberg 1989). Before ideas can be implanted, there must be collective faith in an idea, at least "the acceptance of some critical group" (Tichy and Devanna 1986). In other words, a sufficient number of *supporters* is needed. When a new ideology is adopted applications must be somehow *explicated*. This means discussions about the fundamental principles, and argumentations. The ideology becomes *materialized* in various forms, such as

speeches, writings, activity, agendas, symbols, etc. The advocates of the ideology present arguments, turn the principles into programs and create concrete strategies and plans of action. This happens first in the core group, within the management. After that the support of the organization members must be secured.

The implantation of ideology requires "strong power of penetration" (Hynynen 1989), and it demands popularization, simplification and concretization of the ideology. A good sounding board is needed for the ideas, that is, a susceptible spiritual soil at the level of people's everyday speech and activity (Ehrnrooth 1992). An ideology can function if it is real on two levels: 1) at the level of common sense and 2) at the abstract, philosophical level of the (original) thinkers (cf. Reger et al. 1994).

ROLE OF MANAGEMENT IN THE IMPLANTATION OF IDEOLOGY

Although an ideology is a collective phenomenon, it can ultimately be traced to an individual level. Individuals produce ideas, and spread and implant them. Management is the agent that directs developmental actions in the ideological change process (Mezias and Glynn 1993). As Beer et al. (1990:179) contend: "corporate renewal is not an impersonal process unfolding of its own accord. It is possible only when individual managers have sufficient commitment and skills." It is believed that the management takes an initiative in seeking and adopting new ideas. Management is a "natural", active part of the dynamics of the organizational innovation process. Management functions as a catalyst, promoter, in bringing about a change in thinking and actions. But management is the *object of change* at the same time as it catalyzes and influences change. The interaction is bidirectional (cf. e.g. Schein 1985). As the organization undergoes ideological change and renewal, the prevailing management paradigm - the logic of managerial actions - is undergoing change.

In a business organization the concept of paradigm concerns the prevailing logic of managerial actions based on fundamental values, norms and principles that guide "doing business". The implanting of total quality ideology, which is conceptualized as organizational ideological renewal in this paper, ideally pursues the infusion of a continuous improvement philosophy organization-wide. This ideological change process may gradually affect the logic of "doing business", in other words, business policies and values.

Since the last decade, management *practices* have called for the reform of management thinking and the need to dislodge established paradigms has surfaced (Bushnell 1994). Major environmental transformation has prompted the need to search for and adopt new and more *holistic* ideas for renewing organizational management to better align with more demanding challenges. Since the 1980s, Total Quality Management has been suggested for a timely ideological framework for management: a holistic, participative and systemic process (Roth 1993). As Roth contends: "if we view the quality movement from a historical perspective, what was evolving, was, of course, a fleshed out version of the systems approach to management... incorporating the wisdom of earlier pioneers from both the "hard" and the "soft".

The implantation of new ideology is suggested to take place through vision and communication (Bennis and Nanus 1986). Nadler and Tushman (1990:86-87) suggest that

"mundane behaviors" can serve as a powerful determinant of behavior. In other words, managers can bring about a change through "relatively unobtrusive acts, the accumulation of less dramatic, day-to-day activities". This kind of behavior is more visible in smaller enterprises in which the hands-on type of management is more inherent in managerial processes; this is to say, deep involvement in "the myriad of details that make up organizational life" (Nadler and Tushman 1990:86).

To sum up, ideological change requires advocates and supporters including the impact of original or actual founders. Ideological change also assumes the loyalty of successors (new generation, current managers) to the existing values. The cycle in Figure 1 summarizes an ideological change encompassing the five *antecedents of change*. First, the *materialization of ideas*; they are transformed into spoken or written text. Second, *influential supporters*; ideas should find quantitatively and/or qualitatively influential *promoters*. Third, *a plan of action* is needed; ideas are converted into policies, strategies and directions. Fourth, *activity and actions*; emotional commitment is a force that leads to actions. Fifth, *a 'mediating actor'*, a change agent, is required in ideological change.

[Insert Figure 1 about here]

FINNISH CASE STUDY

Empirical, qualitative data was gathered from two Finnish family-owned, manufacturing companies, a medium-sized company in the metal industry and another, larger group in the construction and concrete industry. The construction concern employs around 1,000 people including subsidiaries and its net annual sales were 800 million FIM in 1997. The metal company employs around 120 people and its net sales were around 150 million FIM in 1997. The metal company has been managed by the founder, and the concern has been led by the founder's son for over 20 years. The concern structure (several businesses) in the larger company and the divisional organization in the smaller one provided several units of analysis in this case study. The reason to focus on the manufacturing sector was the longer history of quality and improvement activity in the manufacturing sector. Unique histories, distinct cultures, sizes and businesses of the companies was a fertile foundation for the analyses and comparisons of the implantation processes of quality ideology.

Basically, the case study involves three main units of analysis: two major businesses in the concern, construction and concrete products industries, ran by separate companies, and the metal company as a single unit. The time period of the empirical study comprises about 15 years, from the beginning of the 1980s up to the mid-1990s.

RESEARCH QUESTIONS AND METHODOLOGY

The following questions were addressed: How is the organization renewed through the embedding of quality management ideology? How does the history and original culture of the organization relate to ideological renewal? The case study is exploratory in nature, and an

interpretive method was chosen (cf. Spencer 1994:466-467), due to the empirically quite unresearched area. This approach attempts to understand human intentions and actions, in their broader and historical context (Näsi 1980). Intensive data collection and analysis justifies concentrating on just a few cases. Longitudinal field studies on organizational and managerial change processes offer methodological guidelines for an in-depth descriptions and analyses of data (Pettigrew 1987, 1990; Van de Ven & Huber 1990) as well as case study research methodology (Yin 1989). Furthermore, this study applies a *cross-disciplinary approach*, drawing on the study of the history of ideas (Boas 1972) and ideologies (Borg 1965; Ehrnrooth 1992). The approach is both *dynamic and historical* at the same time. Data was gathered mainly by in-depth interviews; 29 interviews were made in all. They were all recorded and transcribed. Multiple written documents on the companies and their industries were also used.

OVERVIEW OF THE INDUSTRY CONTEXT OF THE CASE COMPANIES

The internationalized metal industry plays a significant role in the Finnish economy in general and has been a kind of pioneer in quality development issues at the national level. In Finland, the metal industry seemed to be the first one to awaken to quality, to a greater extent in the 1970s. The construction and construction products industry, in turn, represents a mature, mostly domestic-oriented sector. It has not paid quality issues more explicit attention at the industry level until very recently, although quality has been an issue and quality control an inherent activity in the field for a long time. There have been quality improvement activities in the construction field, however, among the industry's few 'forerunners', even though the industry's comparative quality profile still ranks poorly.

The external environment of the case companies was undergoing major changes in Finland during the 1980s and early 1990s. The struggle for market shares between companies and consequent price competition sharpened substantially toward the end of the 1980s. The severe national recession faced businesses with an urgent need for adaptation, both financially and operationally, after the turning of the present decade, as the domestic demand dropped drastically. The metal industry company is internationalized and thus dependent on the forces in the international markets. This environment did not remain stable either.

In the longer term development of *the metal, construction and concrete industries*, a change of demand pattern of the industry have occurred generating adaptive needs for organizations. In the sharpening domestic competition within the construction industry, the growth strategy has been focused on geographic expansion of the markets while in the metal business internationalization has taken place. Both have presented a more demanding challenge to the companies during the the previous and present decades. External forces mostly manifest themselves in growing customer demands and consequent changes in industry-level production structures. The latter have gradually shifted demand patterns and have stimulated companies to adapt with specific reforms in order to better align themselves to the voice of the markets.

BRIEF BUSINESS HISTORIES OF THE CASE COMPANIES

The construction and concrete group currently represents a significant company in the industry in Finland. The group that began as a small concrete foundry in 1953 has developed into a nationwide concrete products and housing & construction company operating throughout Finland. The housing construction business constitutes about 2/3 of the total sales.

The company culture is crystallized in the core values. The foundation of the culture was laid by the founder of the company in the first decades of the company's life. The fundamental values take shape in the following four principles: 1) great risks and debts must be avoided, 2) business activity must be effective and profitable, 3) achieved market share must not decrease, 4) new ideas must be invented and implemented continuously.

The founder of the company did not have any training in the field. However, he had entrepreneurial "passion" and courage to apply and carry out new ideas. He studied the business, its problems and opportunities on his own and sought to solve creatively many technological problems of the field with the assistance of appropriate expertise available. He had a powerful vision: "to be the first or among the first in the concrete industry" (Rissanen & Isotalo 1993:18). He had "a good nose for business", which in the current management would be called strategic ability. The founder searched for opportunities, traveling around the world on his *study tours* - not even his lack of foreign language skills could prevent the observation and collection of *novel ideas*; these were accumulated by making observations (Rissanen & Isotalo 1993:23). The founder was also involved in the institutional level activities (the Central Federation of Finnish Concrete Industries, among other things).

The successor has *chosen to build on the same foundation* as the founding father, having found the tried and tested principles solid and functional during the recent, turbulent decades in business. The company's transfer to the next generation has meant stronger orientation toward growth and organizational renewals in many areas, for example, in management systems which have gradually *changed management* toward a more participative style. Stakeholder management has been even more visible during the successor's period of management.

The entrepreneurial spirit, characteristic of the founding generation, is still embedded in the current company culture. This manifests itself in a kind of *innovation logic* (Kanter 1983), which is shown by the value placed on inventing and continuously implementing new ideas. In management practice it appears as developmental orientation. The development of products and production technology has played an important role throughout the company history. The leading idea of the founder was to develop technology that would allow manufacturing *high quality products*. Overall compatibility, product development, and quality and technology, have supported each other and developed intertwined with each other. *Innovativeness* has been a unifying thread in the company's business logic: some sort of organizational renewal has been the ongoing issue, realized in various types of programs, most visibly in quality improvement. In the second generation of managers, innovative logic has been even more explicitly based on the founder's belief that there exist real opportunities in business to continually improve operations to a certain extent.

The metal industry company was established in the early 1970s by four shareholders. Quite soon one of the original founders with his family became the only shareholder. He acted as a managing director until the end of 1995 and since then as CEO. The

company has two major *business areas*: tube and sink divisions that produce stainless and acid-resistant steel tubes and hollow sections for different industrial construction purposes. The company is internationalized operating mostly in the European markets. Exports account for about 85 percent of the company's total sales. On the global scale, the company is a little below the average size in tube manufacturing but because of its specialization, it is one of the world leaders in certain product types. In the domestic tube markets the company is the market leader.

The core *values* are basically created by the founder. They are the organizational cornerstones which characterize company culture and form concrete guidelines to success in business. The following points are appreciated in the company: know-how, diligence, serviceability, success, honesty, social skills and harmony with the environment and nature. These values are backed by the founder's prior experiences in a large mechanistic work organization which have affected his beliefs about the superiority of a more human leadership to traditional management. This is manifested in managerial practices, for example, as a cliche: "leading with the guys" and in "anti-Tayloristic" beliefs of disapproving work studies and division of tasks and preferring participation and cooperation. The environmental values imply the recent changes in managerial thinking, which has led to the development of environmental products as well as EMS.

The company's efforts for improving quality have been publicly noted in Finland in the 1990s. Two recognitions made the company a 'Double Quality Winner': first, the Quality Prize of the Finnish Society for Quality in 1990, and second, the first Finnish Quality Award in the small and medium-sized company division in 1991. Lately the goal of achieving the European Championship in the Quality Award contest has been set. This, in a way, suggests the company's basic orientation toward new ideas and pursuit of quality, in particular. Openness to new ideas and a tendency for manageable risk taking are characteristic of the entrepreneurial owner-founder.

IMPLANTATION OF QUALITY IDEOLOGY IN THE CASE COMPANIES

First, the processes of embedding quality ideology are briefly described company by company. The discussion follows the description, and, finally, conclusions and implications are made.

CONSTRUCTION COMPANY

In *the construction company* quality ideas were originally gathered from abroad, which was stimulated by the change in the management. But the applications were specifically tailored for the organization. With the combined efforts of the organization, the goal was to create "*The company's way of doing things*". No separate quality organization was formed at any stage. As a result of ten years of systematic and a kind of *pioneering* quality improvement efforts in the field, the quality ideology has developed into the ideology called Solid Measures which reflects a new emerging company culture. The entering and introduction of the ideology centered on the quality-circle thinking, but in the course of years it has evolved "endemically", into various operation-specific forms.

The construction company's process pattern can be called as the 'Pioneering Applier' (Figure 2). The strategy of implanting the continuous improvement philosophy reflects an embedded tendency for innovation orientation. This is profoundly tied to the founder's values which imply the logic of innovation (Kanter 1983). It is best characterized by the entrepreneurial spirit and manifested in the orientation to continuously developing new ideas. The ideas of quality were gradually spread more widely in the organization, first proceeding functionally from marketing department to production and then organization-wide.

A manager at the *upper management* level undoubtedly played a role of a key supporter. He introduced and spread new ideology most forcefully and can be called "a champion who pushes the idea to fruition and inspires others making it happen" (Hunt 1992:46). Conveying ideas into the organization and winning the support of the different organizational levels required persistent coaching and unyielding persistence with occasional application of coercive power. The role of the successor (owner-manager at the top management level) is quite central in the process. Its faith in quality London 1988:51) as a step-by-step cultural change, rather than an isolated fashion, created a *value base* that made it possible for quality ideology to gain a foothold, spread and be assimilated into the company's business policies and values.

Besides upper and top management, the middle management played a role in the renewal process (London 1988:54). Getting ideas accepted required the support of the middle management that acted as popularizer, simplifier and concretizer toward the receiving supervisor level, and further on toward the foreman and worker levels. The middle management also seems to be in the position of an intermediary for maturation of strong worker mentality. Endeavors to create cooperative spirit led middle managers to handling counter forces at the supervisor, foreman and worker levels in the process of gaining support of these levels. External experts acted along the way as temporary suppliers and conveyors of the ideas and experiences, and contact creators.

The fruits of the implantation of quality ideology ripened during the years of economic recession in the early 1990s. In the grip of the difficult business decline, quality thinking, as far as it was rooted by then, provided an *uplifting force*. It functioned as a mental weapon during the worst period of depression and facilitated the company's *survival* by providing beliefs and practices which had been sufficiently embedded before the economically difficult years. The shaping *ideology had mentally integrated the organization* to better encounter the painful and rapid adaptation necessitated by the poor economic situation. As stated by an interviewee: "The point is, it's a competitive advantage that cannot be copied or stolen, it must be accomplished and earned through your own efforts, it's not the kind of knowledge that you can steal from someone."

[Insert Figure 2 about here]

CONCRETE PRODUCTS COMPANY

The concrete business started conscious quality efforts in the late 1980s soon after the business manager of the concrete business changed. As the construction business already actively was carrying out quality programs, the new manager began to look for ideas and experiences in that direction. The first joint event arranged for the introduction of quality ideas for the company's business management and office personnel took place. This caused certain antagonism and even irritation, and the ideas would not catch on. Nevertheless, the seeds were sown to germinate in people's minds.

After a while, quality improvement was attempted through the 'first trial' by an internal professional which was not successful and the 'second trial on a wide front' (in the main factories) followed a few years later Again, an internal quality engineer took up this undertake which was organized so thoroughly that it had to succeed this time... But it didn't go through on such a wide front. The development work made promising progress until it was wrecked by organizational change in the department, as key persons changed. Structural change caused repercussions in the priorities and quality was no longer found to be as central as before. The counter forces rose from the middle management. Antagonism also appeared in the factories. As a result, the development work in its initial form was abandoned.

The quality ideology was crystallized in the pursuit of cost savings through quality. Quality ideology was promoted by *quality system orientation* and by means of *internal professionals* recruited from external sources. This method of promotion created counter forces within the line management. Resistance was more broadly embedded in the structures of the labor union system.

A separate organization for the coordinating and directing of quality efforts also supported quality improvement efforts The process proceeded oscillating, and can be called 'the mode of trial and error' (Figure 3). The whole undertake ultimately fragmented after the second, wide-front test. An internal quality professional and counter forces turned out to be an important part of the renewal process in this case, affecting the oscillating nature of the process. The business manager level (upper management) took an active and positive stand on quality issues but counter forces that rose from the middle management level hindered him. The successor (top management), acting in the quality council, did not express any specific insights into disseminating quality ideology in the concrete company. He basically let the fundamental company value of striving for continuous development of ideas lead the process on. But top management also accepted the impact of specific industry-related factors and company-specific forces on the change process. It is also worth noticing that although counter forces slowed down the promotion of quality ideology, they could not wreck the whole process: it nevertheless strove persistently (and fragmented) ahead even after the second 'trial'.

[Insert Figure 3 about here]

METAL INDUSTRY COMPANY

In the metal industry company, more systematic quality development efforts started in the mid-1980s. The spreading of quality ideology mostly proceeded by introducing a new

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quality-related theme annually to be worked on in the organization. The quality council represented the structure that was involved in the organization-wide operational efforts of spreading quality ideas. Quality training was the most important behavioral means in the company and quality education was implemented organization-wide in the beginning of the systematic development phase. Education played an important role in the involvement of human resources and the enabling of participation. Quality education was supported by organizing teams in production departments. Production cells were organized. Management systems were developed more widely at the same time. Pay systems were reformed in the manufacturing departments: no payments were made any more for repairing products.

The renewal process features the roles of the actors at different levels. The founder-manager (top management) played a significant role that was at least twofold: authoritative conveyer and supporter. He created a drive for transmission which can best be described as "gentle persuasion" in the organization. The top management periodically participated in the promotion of the ideology with hands-on effort. A prominent role of an external quality expert in the company is evident. This person conveyed "theory" from outside across the boundary of the organization, introducing concepts, operationalizing and communicating them (cf. London 1988:60). His role can best be characterized as the supplier of quality wisdom. The board of directors turned out to be significant as well. Furthermore, the line management - production managers in the first place acted as persuaders, popularizating, simplifying, and concretizing 'quality theory'. The internal quality professional assisted the line organization with his expertise but did not, as auxiliary personnel, played as visible a role as the line supervisors. His role seemed to rather be that of an educated applier than of a popularizer or simplifier.

Overall, the process proceeded, in essence, 'by the book', due to the visible role of the expert (Figure 4). But it seemed important that the cooperation between the top management and the expert worked in the process, and additionally, that the top management had confidence in the external expert. In brief, this case represents a 'schoolbook example' and the most significant factors in the process seemed to be: top management commitment, the role of external expert, participation of organization members, and the tactic of gradual implementation with persistent, 'gentle' persuasion.

[Insert Figure 4 about here]

DISCUSSION

The empirical investigation of the implantation of quality management ideology primarily leads the discussion to *the acting agents, their beliefs and organizational culture* in the process because the main *mediating agents* emerge from management. The actual founder and successor took a crucial stand on adopting a new thinking for managing quality (cf. Beer et al. 1990, Beer & Walton 1987). Their role was supportive in initiating the development process and carrying it out, even though an external source of expertise and internal professionals acted as contributors and implementors. The beliefs of these managerial agents formed the foundation which

determined the attitude toward renewal, and the influence of these managerial actors turned out to be crucial in integrating the organization (Mintzberg 1989; Beer & Walton 1987).

ORIGINAL CULTURE AND FOUNDER'S BELIEFS IN IDEOLOGICAL CHANGE

These findings show that managerial beliefs of the original or actual founder laid the foundation for the embedding of quality ideology. Managerial influence of the actual founder or successor, who represented authoritative key supporters in these cases, seems to render the ideology effective in the course of time (cf. Beer & Walton 1987; Kimberly 1981). Without their support the conveyance of new ideas would probably have remained in the rhetorical phase. In the construction company, it was a person from the *upper management* that was personally more involved in functioning as a change agent. This 'coaching champion' showed the loyalty to these values which affected the success of the ideological renewal in this case. The owner-manager's beliefs about the strategic role of quality in business and consequent resource allocation supported the champion's efforts. This strategic insight of the successor reflected the beliefs that had existed in the company for several decades. The role of organizational culture as a force for 'pulling together' became evident in the period of the difficult business decline.

In the concern, the strong developmental orientation implies the entrepreneurial spirit which stems from the founder's values. Kanter (1983) terms this spirit as "a logic of innovation". In current practices, this logic is embedded in shared cultural values. It becomes visible in the dominant managerial logic of the post-founder manager appearing as a strategic insight on quality improvement (cf. Beer et al. 1990; London 1988; Mintzberg and Westley 1992).

In the founder-managed metal company, the link between organizational culture and managerial logic may not seem to be so obvious. However, cultural values are closely bound to the actual founder, given the life cycle of the organization (Schein 1985). Openness to new ideas is characteristic of the organization. The continuous use of external expert when carrying out several developmental undertakings in contract-based cooperation shows this most clearly. It is the entrepreneurial spirit that seems to be the ultimate catalyst for persistent, gentle persuasion in supporting quality improvement processes in the metal company.

In conclusion, the findings confirm prior results on the stronger commitment and influence of founder-managers on organizational innovations. The findings also allow us to propose that commitment originates in the history of the organization and is established through shared cultural values Schein 1985; cf. Savolainen 1998; Beer et.al 1990).

CULTURAL AND STRATEGIC IMPLICATIONS OF THE HISTORY OF FOUNDERS

The transferring of managerial beliefs seems to function *through* organizational *culture*, which forms a 'binding force' for the implantation. It is what Beer et al. (1990:179-180) have termed as "the climate that encourages renewal". The cases studied show that it is the founder, in the first place, that creates, keeps and transfers managerial beliefs (Donaldson and Lorsch 1983; Schein 1985). These beliefs become real in current strategic decisions and may result in gaining an inimitable competitive advantage through continuous quality improvement.

Of the cases studied, The Pioneering Applier (Figure 2) shows the greatest degree of intensity in implanting new ideas. This is related to the major influence of the manager who showed the loyalty to the existing belief system of the company. Moreover, it is connected to the 'indigenous', implantation strategy. A schoolbook example (Figure 4) implies more wisdom in implanting quality ideology which makes the process progress more smoothly. But the actual founder's strong influence was crucial for the process. The mode of trial and error (Figure 3), on the other hand, indicates stronger persistence in endeavors reflecting the embedded cultural value of the pursuit of continuous searching for new ideas. The oscillating nature of the process is explained by organizational factors and the visible role of internal, non-managerial professionals.

CONCLUSION

This paper proposes that managerial beliefs and values which stem from the founding and original culture have an influence on the current processes of organizational renewal. The founders' beliefs are transferred through education and culture and become effective in the current managerial decision making. In present managerial practices, beliefs and values are embedded in the dominant managerial logic. In the cases studied, they are manifested in the logic of innovation which reflects the strategic insight into continuous search and applications of new ideas. The founders' beliefs seem to function here-and-now affecting managerial strategic decision making about the competitiveness and survival of the organization (Donaldson and Lorsch 1983). The attachment the successor hold on to the founders' beliefs may be strong and may remain relatively stable for decades contributing to the processes of renewal over time.

Although the major mediating agent seems to be the actual founder or successor the professional managers, who have adopted the belief system through culture, play an important role. There are several types of actors, managerial and non-managerial with different combinations and with distinct degrees of influence in the process of renewing the organization. For these actors the original cultural values form the foundation for building their current managerial actions.

The dynamics of the organizational renewal process is connected with tacit organizational resources: in the family-owned companies studied, managerial influence is backed by the spirit of entrepreneurship which proves the ultimate catalyst for keeping up a continuous pursuit of organizational renewal. Further research is needed for gaining a deeper understanding of the dynamics of these processes of transferring and changing belief systems. This paper may well serve as a useful piece of knowledge but suggests that further empirical evidence is needed on the long-term effects of the founders in family-owned firms, in particular.

These findings imply for managers that in the process of renewing the organization tacit resources generated by the earlier history of the organization may be a strength for the current managerial practices. Further research would benefit organizations to more effectively build on the strength that the history of the organization and the founders, in particular, may generate for the present through realizing competitive advantages.

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MODEL OF CORPORATE ENTREPRENEURSHIP: INTRAPRENEURSHIP AND EXOPRENEURSHIP

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ABSTRACT

This article extends the model of corporate entrepreneurship designed by Covin and Slevin (1991) into intrapreneurship and exopreneurship. Intrapreneurship is closely related to corporate entrepreneurship that is creation of new products within the large organization using existing employees. On the other hand exopreneurship is the generation of innovation outside the boundary of organization using external agents known as exopreneurs. The modes to intrapreneurship have been in the dispersed and focused forms (Birkinshaw, 1996). Exopreneurship process can be attained through franchising, external venture capital, subcontracting and strategic alliance (Siti Maimon and Chang, 1995). This article reviews the different conditions that trigger intrapreneurship and exopreneurship and established prepositions to identify the dissimilarity of both processes that build up corporate entrepreneurship in large organizations.

INTRODUCTION

There is a number of leading research journals and published articles that present the exploratory work on corporate entrepreneurship. The research has developed a number of models of corporate entrepreneurship that focused on internally generated innovations within the organizations also known as intrapreneurship. The models are domain model of corporate entrepreneurship (Guth and Ginsberg, 1990), a conceptual model of firm behavior (Covin and Slevin, 1991), organizational model for internally developed ventures (Brazeal, 1993) and an interactive model of corporate entrepreneuring (Hornsby, Naffziger, Kuratko and Montagno, 1993). These models are centered on innovations that are generated within the organizations to revitalize largely established and bureaucratized organizations into strategically entrepreneurial performers.

Siti Maimon (1993) coined "exopreneurship" as part of the process of corporate entrepreneurship to revitalize large organization by acquiring ideas or innovation from external sources. The term exopreneurship is viewed as acquiring innovations that are outside the organization into the firm. The external innovation can be acquired as franchising, strategic alliance, external capital venture, and subcontracting (Siti Maimon and Chang, 1995). This paper proposes to differentiate the domain of corporate entrepreneurship into intrapreneurship and exopreneurship. The proposed model (figure 1)intends to identify the differences in the antecedent factors that trigger intrapreneurship and exopreneurship.

This paper starts with an explanation of the development of sourcing innovation internally (intrapreneurship) then moves to the divergence in sourcing innovation's externally (exopreneurship). Based on the model of corporate entrepreneurship designed by Covin and Slevin (1990) with the several prepositions made, the later section of article discusses the differences in the antecedents that trigger intrapreneurship and exopreneurship

INTERNALLY SOURCED INNOVATIONS: INTRAPRENEURSHIP

Corporate entrepreneurship universally known as intrapreneurship employs internally generated innovations from employees. Corporate venture groups such as 3M and DuPont were sources of innovations chronicled with business renewal in the early 1960's despite Pinchot (1985) made intrapreneurhsip popular in the mid 1980's. Scientific research by Burgelman (1983a,b, 1984) revealed how corporate entrepreneurship should be synergized into the overall corporate strategy of any organizations that desires to diversify their innovations. He showed how traditional research and development should be transformed into new business through internal corporate venturing that grew in stages from conceptual, pre-venture, entrepreneurial and organizational. Kanter and Richardson (1991) identified four approaches to the process of corporate entrpreneurship that include pure venture capital, the new venture development incubator, the idea creation centre and employee project model. They discovered that the internal employee program yielded higher frequency of innovations

Kanter (1984) discovered that large organizations involved in internal venturing began to sponsor or became equity partners to innovative employees in the formations of new venture creations. These became the new venture companies. Burgelman (1985) suggested that new venture division exploit employees' expertise to achieve corporate growth through acquisition. This became another popular strategy for corporate growth but this approach considered entrepreneurship can be controversial. The study of corporate entrepreneurship as internally sourced innovations became popular among strategic management researchers throughout the 1980's and early 1990's (Hubbard, 1986; Kanter, Ingols, Morgan & Seggerman, 1987; Wood, 1988; Morris, Davis & Ewing;1988; Sathe, 1988; Jennings and Lumpkin, 1989; Morris and Trotter, 1990;Fulop, 1991; Carlisle and Gravelle, 1992; Hornsby et. al 1993). Morris, Davis and Allen (1994), Ginsberg and Hay (1994) and Bryon (1994) studies also supported the same idea.

Byron (1994) found that product innovation depends on the type of internal ventures. His research revealed that the innovative ideas conceived from research and development departments have the fewest successful ventures, even though they represented the greatest degree of technical diversification. Byron's work inferred those sources of idea for innovation effect the success of new ventures. Studies by Farrel and Doutriaux (1994) showed that corporate growth did not have to depend on internal development. However, external strategy such as collaboration strategies based on franchising, external venture capital, subcontracting and strategic alliance can diversify product innovation. Their findings found that external agreement had a positive impact on sales and technology competency.

DIVERGENCE IN SOURCING INNOVATION: EXOPRENEURSHIP

Aldrich and Auster (1986) recommended strategies for large and aged organizations such as subcontracting and franchising to smaller companies as corporate entrepreneurship to make them young and viable. Starr and MacMillan (1990) examined social contracting as an approach to resource acquisition. External strategies adopted by organizations to gain competitive advantage, exploited the weaknesses of the other organizations. Therefore, corporate entrepreneurship should envelop both intrapreneurship and exopreneurship that is externally sourced ideas as proposed by S. Maimon and Chang (1995).

Internally sourced innovations may take a long time to develop and involves higher risk of failure as invented by Lengnick-Hall (1991). She suggested that other modes toward the process of corporate entrepreneurship such as joint venture and acquisition involves externally sourced relationship. This pushes the idea of internally sourced idea of corporate entrepreneurship to vie for external relationship. Perhaps factors such as the speed of innovations to meet market demands and the leverage of failure has put corporate strategist to look into other designs to the process of corporate entrepreneurship.

Recent research has recommended the use of externally sourced innovations of products or services (Jones and Butler, 1992). Cowan (1993) expressed that the mode of corporate entrepreneuring would depend on the result of market research. This implies that not all intrapreneurship programs would provide the diversity of organizations to build their competitive edge. Schumann, Prestwood, Tong and Vanston (1994) emphatically stressed the creation of innovative organizations that must include the elemental infrastructure containing both internally and externally sourced innovations. However, they did not specifically define this idea as corporate entrepreneurship.

Rice, Wilkinson and Wickham (1994) tried to link the performance of the incubator program (a form of exopreneurship to new product development) with companies that sponsored the research. The survival rate is higher than start up program with the success rate to breakout at about nine years. This suggests that exopreneurship can speed up diversity in large established organizations into the market and provide higher success rate. Study by Daniels and Hofer (1994) revealed that the success rate of university based new venture development has 80 per cent success rate of survival.

Exopreneurship as strategic alliance plays a very important linkage to Asian market. Western multinationals are finding it difficult to move into Asian market because host country makes more demands. The demands include types of technology transfer, local content and are getting less accommodating in selling natural resources at cheap prices. Consequently many opportunities were closed to Western companies. Therefore, large multinationals must be smart to use business relationship to achieve superior growth that deals in strategic alliance.

In short, compared with intrapreneurship, exopreneurship creates diversity in large companies in a speedier route to corporate entrepreneurship. For instance, DuPontt found out that intrapreneurship may take up to 15 years to commercialize certain products. Schumann et al (1994) have suggested some form of exopreneurship such as the use of contract research and development; universities; consultants or government supported centers. External venture

center focuses on product or business oriented that include acquisition and establishment of joint venture. They specified licensing as a form of subcontracting because it shortens time to market and maintains technical dynamism of an industry. Gee (1994) coined corporate entrepreneurial activities that are both internally and externally sourced as corporate business renewal that includes strategic alliance. However, Siti Maimon and Chang (1995) have proposed the creation of new venture in large organizations through franchising, subcontracting, strategic alliance and venture capital. Table 1 gives a summary of the differences in the intrapreneurship and exopreneurship.

MODEL BUILDING FOR EXOPRENEURSHIP AND INTRAPRENEURSHIP

This section outlines conceptual model of corporate entrepreneurship as a result of exopreneurship or intrapreneuship or both phenomena. The model intends to depict the differences in the antecedents for exopreneurship and intrapreneurship at the organizational level. The proposed models delineate the antecedents and the types of venture creation of a corporate entrepreneurial posture and firm performance. The proposed model is based on the model incepted by Covin and Slevin (1991) which consists of the original component. However certain components are altered for the purpose of this paper.

COMPONENTS OF THE MODEL AND THEIR INTERRELATIONSHIPS

Figure 1 depicts the proposed model of corporate entrepreneurship based on organization behavior depending on the use of internally sourced (intrapreneurship) or externally sourced (exopreneurship) innovations. The model shows the antecedents to intrapreneurship and its consequential intrapreneurial posture and the antecedents to exopreneurial posture. The three main variables comprising external variables, strategic variables and internal variables in the model and their interrelationship are discussed below.

CORPORATE ENTREPRENEURIAL POSTURE AND ACTIVITIES.

The entrepreneurial posture reflected by Covin-Slevin (1991) are risk taking, product innovation and proactive with similar descriptions upheld by Miller and Friesen (1982); Jennings and Lumpkins (1989) and Guth and Ginsberg (1990). Yeoh and Jeong (1995) argued that innovativeness involves seeking creative or unusual solutions to problems and needs. This includes product innovation, development of new markets, and new processes and technologies for performing organizational functions. Risk taking refers to the willingness of management to commit significant resources to opportunities in the face of uncertainty. Proactivenes is defined as the firms's propensity to know the what their competitive rivals are doing.

However, Kao (1991) and Churchill and Muzyka (1994) believed entrepreneurial organizations are opportunity seeking with a built in imperative to continually renew their businesses. In the opinion of the author, it is the opportunity seeking that pushes organization to be risk-taking, innovative and proactive. Yeoh and Jeong (1995) argued that the opportunistic

capability of entrepreneurial organization which is an element of proactive drives firm to take advantage of the hostile environment. This opportunistic outlook of entrepreneurial organizations drives them to source for innovation outside the corporations. In short, the corporate entrepreneurial posture stems out from the opportunity seeking capability which is manifested in two forms that is intrapreneurial and exopreneurial behaviors.

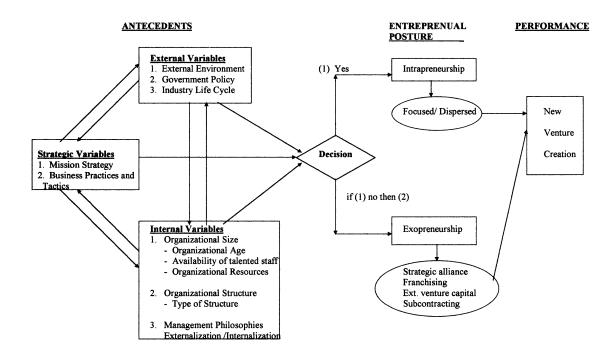


Figure 1. Intrapreneurship and exopreneurship. Model by Jane Chang

Intrapreneurial activities which are focused include internal corporate venturing also known as new venture division and formal research and development group. The dispersed intrapreneurial activities include idea creation centre and employee project model (Kanter and Richardson, 1991). Exopreneuship typifies the use of outside entrepreneurs for new venture creation such as franchisees, subcontractors, strategic alliance partners and external corporate venturing.

DIFFERENCES IN ANTECEDENTS TO INTRAPRENEURSHIP

AND EXOPRENEURSHIP

Numerous research explored the antecedents that trigger intrapreneurship. However, this list does not differentiate the different conditions that cause intrapreneurship or exopreneurship. This section attempts to distinguish the differences in the antecedents that trigger intrapreneurship and exopreneurship. The proposed model is to dispute the differences in the antecedents of both seemingly entrepreneurial behaviors based on Covin and Slevin model (1991). The antecedents categorized into three areas known as external environment, strategic variables and internal variables.

The external variables include the external environment, industries life cycle and government intervention. The strategic variables include mission strategy, firm's business practices and competitive tactics. The antecedents that comprise the internal variables are organizational size; organizational age; organizational competency, organizational structure, and management philosophies. Having argued the differences in antecedents between exopreneurship and intrapreneurship, a set of prepositions postulated for the creation of model for both entrepreneurial behaviors. The antecedents to exopreneurship and intrapreneurship are shown in table 1.

Table 1
A Summary of the difference between Intrapreneurship and Exopreneurship

Area	Intrpareneurship	Exopreneurship
1. Origin	*synergised internal creativity to create new innovations *internal employees who are willing to run the risk of commercialising new products	*synergised outside creativity to create new innovations detected by sponsoring companies or independent entrepreneurs or orgaanization search for opportunities from large companies.
2. Activities	Sponsoring organization source innovation from product champion, employee program, new venture team, new venture division, research and department	Sponsoring organization request or map out the right partner in sourcing new innovation then the commercialization process depend on the type of exopreneurial mechanisim.
3. Investment	Sponsoring organization gives seed money (budget) to source innovation internally until the new product is commercialize	The investment is dependent on the types of entrepreneurial mechanism
4. Involvement	Involved only internal employees from idea to commerciliazation	Working with outside partners

	of product. Depending on the types of intrapreneurship program.	involvement of large organization may be minimal because it becomes a separate function of the large organization.
5 Control	monitoring the success of intrapreneurial program depends on the procedure of organization. Easy to control because inside the organization	difficult to control because involved at least two different cultured organization of different systems in running organization
6. Culture of organization	easy to implement change because within similar organziation	exopreneurship results in changes therefore difficult to change the attitude of other "partner". Need to form a new culture in the process of the new venture creation
7. Mission Strategy	holistic mission for the whole organization.	Need to input part of the "partners" vision into own vision
8. Risk	The risk is dependent on the success of project	risk involves lose of goodwill besides financial risk.
9. Cost Reduction	cost effectiveness in management because communication within on e organization	cost reduction in terms of sharing and using the comparative advantage of organizations involved.

EXTERNAL VARIABLES

The dimensions of external variables incorporate external environment, industries life cycle and the type of government intervention. These dimensions include environmental technology sophistication, the state of industry life cycle and the type of government intervention.

External Environment

Cowan (1983) stressed that corporations must understand their external environment through market research to find the nugget in their environment. The understanding of the environment would result in entrepreneurial ideas within the organizations. Indeed environmental characteristics elicit entrepreneurial behaviour on the part of organizations. High tech industries are composed of disproportionate numbers of entrepreneurial firms (Maidique & Hayes, 1984). Firms operating in uncertain environment show higher levels of innovation

(Karagoszoglu & Brown, 1988; Walters and Samiee, 1990). Dynamic environment challenge organizations to take risks, be innovative and exhibit proactive behaviors (Johnston and Czinkota, 1985; Reid, 1987; Miller, Droge & Toulouse, 1988).

Hostile and Benign Environment and Industry Life cycle

Dynamism of environment includes escalating cost of technology, globalization, information revolution, product life contraction, greenism and so on have shifted organization into entrepreneurial paradigm of seizing opportunities from the enveloped surrounding. The level of hostility, heterogeneity and dynamism (Miller and Friesen, 1982, 1983;Miller, 1983),turbulence (Davis, Morris & Allen, 1991) or volatility (McKee, Varadarajan & Pride, 1989) influence the external environment. The scale on the external environment ranges from hostile to benign (Covin and Slevin, 1989; Covin, 1990). Precarious industry setting, intense and fierce competition, harsh and overwhelming business climate and the relative lack of exploitable opportunities represent hostile environment. Benign environment provides a safe setting for business operations due to the richness in investments and marketing opportunities.

Several studies indicate that the relationship between entrepreneurial posture and firm performance is moderated by environmental conditions. Firms operating in hostile environment are entrepreneurially inclined and promote higher level of firm performance (Covin and Slevin, 1989 &1994;Dean et.al, 1993; Jansen and VanWee, 1994;Stopford and Fuller, 1994; Zahra, 1991&1993; Zahra and Covin, 1995). Empirical studies by Dean et. al (1993) and Zahra and Covin (1995) revealed that firms operating under hostile environment yielded higher performance. However, there is no empirical evidence on the level of hostility to internally or externally mechanism of corporate entrepreneurship.

Baden- Fuller and Volberda (1997) discovered that strategic renewals depends on the technology of organization. They suggested that firms operating in benign competition adopt technology variation through internal corporate venturing. This mechanism supports the firm in diffusing knowledge and technology throughout the firm which reorder the organizations' core competencies thus increasing the survival rate (Fast, 1979;Block, 1982; Block and MacMillan, 1993). Organizations faced with resource rich environment, undertake core competence renewal project at lower risks by organizing change in specialized parts of the firm such as new business developments. This implies that intrapreneurship prevails in organization operating in benign environment. Fuller-Baden and Volberda (1997) viewed that both corporate venturing and specialized innovations are slow to strategic renewal and at the expanse of speed. For instance, intrapreneurship project in DuPont took up to 15 years to commercialize certain products. 3M searches for innovative approaches to reduce the time frame of commercializing products in its intrapreneurship projects (Strategic Direction, 1996). This suggests that internally generated innovations are laggard to react to high level of hostility which requires speed as a competitive edge over firms' rival. Therefore, intrapreneurship is not an appropriate mechanism to corporate entrepreneurship under this hostile environment.

Firms functioning in high level of competition and emerging industries faced with instability and uncertainty, requires speed as weapon to edge over their rivals. Firms operating

in intense competition, market saturation and new emerging industries tend to use franchising, strategic alliance, external corporate venturing and subcontracting to enhance their competitive position. Studies on franchising (Anonymous, 1982, 1984, 1995; Sanghavi, 1991; Sadi, 1994; Kedia, Ackerman and Bush, 1994) used this strategic means to enhance competitive position. Similarly subcontracting (Florida and Kenny, 1990;Goe, 1991; Scott, 1991) becomes a popular strategy under hostile condition to improve efficiency and quality of product in shorter time spent as tool to competitive edge. Strategic alliance in the form of equity and non equity partnership (Vyas, Shelburn & Roger, 1995; Glaister and Buckley, 1996) and external corporate venturing (Roberts, 1991; Hurry, Miller & Bowman, 1992; Thayer, 1993; Gersick, 1994; McNally, 1995; Rotman, 1996) are popular means of product or service innovation for firms of converging technology in new emerging industries. Under these conditions, exopreneurship becomes a prevalent mechanism to corporate entrepreneurship to outwit the competitive rivals in term of speed to deliver products or services to target market.

From the preceding arguments, it can be concluded the organizations operating in benign with rich resource environment with ample opportunities of investments have the propensity to use intrapreneurship because speed does not play a crucial role to competitive advantage. On the other hand, organization performing in hostile environment requires speed to compete with its rivals, therefore, chooses a faster route to innovation by acquiring it externally. Therefore, organization with knowledge-based competition (Chaharbaghi and Nugent, 1996) of the level of hostility can create and exploit opportunities either through intrapreneurship or exopreneurship. The author speculates the following propositions:

Proposition 1:	Intrapreneurship is prevalent in benign environment while exopreneurship is prevalent in hostile environment.	
Proposition 2:	Intrapreneurship is prevalent in growth and mature industry while exopreneurship is prevalent in the early stage of industry.	

Government Policy

Studies revealed government fiscal and regulatory environments have an impact on entrepreneurial activity (Kilby, 1971; Kent, 1984). The regulatory environment depends on the macroeconomic objective of government which has indirectly favoured exopreneurial activities. In developed countries there is a growing application of government regulation to all facets of business activities which increase the demand for service functions such as accounting, legal services and insurance (Stanback, 1979; Daniels, 1985; Orchel & Wegner, 1987). These requirements caused organizations to externalize these functions. The developing countries and former Soviet block insist foreign investment must contain local market partner (Beamish, 1988; Ghazali, 1994). For instance, the Malaysian government induced the business environment into an exopreneurial one. The various new form of foreign investment include joint ventures (equity strategic alliance), technology, know-how and management agreements and licensing and patent agreement (non-equity strategic alliance), franchising and subcontracting. The regulatory

policy in Malaysia aims at multinationals to exopreneurialize (externalize). In doing so, the locals have opportunities to gain access to modern technology and export markets. The author speculates that government policy plays a vital role in exopreneurial activities.

Proposition 3: Exopreneurship is prevalent in government policy that encourages agency theory while intrapreneurship is prevalent in corporate innovation policy.

STRATEGIC VARIABLES

The strategic variables in the Covin-Slevin model include mission strategy and the firm's business practices and competitive tactics.

Mission strategy

The development of mission strategy has evolved with the progress of strategic management. Covin-Slevin model embedded on strategies comprised of build, hold, harvest and divest. Scholarly research such as Gupta and Govindarajan (1982), Burgelman (1985); Hubbard (1986); Morris and Trotter (1990), Zahra (1991, 1993); Dean (1993) affirmed Covin-Slevin model that entrepreneurial postures manifested in the build and hold strategies for growth however did not specify which kind of entrepreneurial posture.

To delineate the types of mission strategy as antecedents to exopreneurial and intrapreneurial activities four strategies are classified. Integration strategies allow firms to gain control over distributors, supplier and competitors. Intensive strategies require intensive efforts to improve a firm's competitive position with existing new products and diversification strategies to diversify portfolio of products. Finally defensive strategies include joint venture, retrenchments, divestiture or liquidation.

Integration strategies include forward integration, backward integration and horizontal integration. Forward integration involves gaining ownership or increased control over distributors or retailers. An effective means of implementing forward integration for growth is franchising (Caves and Murphy, 1976; Brickley and Dark, 1987; Martin, 1988; Carney and Gedajlovic, 1991; Hoffman and Preble, 1991; Sanghavi, 1991; Huszagh, Huszagh & McIntyre, 1992) because business can expand rapidly as costs and opportunities are spread among many external individuals.

Backward integration is a strategy to seeking ownership or increased control of a firm's supplier. Horizontal integration is seeking to control over the firms competitors. Vertical integration consisting of forward, backward, and horizontal integration is reducing. The cooperation with suppliers and customers and competitors in the form of subcontracting, outsourcing and strategic alliance are gaining popularity in order to improve the competitive position of organization. (Carney and Gedajlovic, 1991; Goe, 1991; Scott, 1991; Fearne, 1994; Harrison, 1994; Mattysesens & Van den Bulte, 1994; Brown and Butler, 1995; Varamaki, 1996; Stearns, 1996).

Defensive strategies in the form of joint venture is part of the strategic alliance in terms of equity sharing. Studies on mission strategy connected to joint venture have been numerous

(Harrigan and Newman, 1990; Butler and Sohod, 1995; Das and Bing, 1996; Glaister and Buckley, 1996; Stearns, 1996). The nature of this strategy requires external partnership to achieve the corporate objectives of growth.

Integration strategies and defensive strategies in the form of joint venture have the propensity to use external agencies to achieve its mission strategy. The preceding dialectic suggests that the higher propensity of a firm mission strategy to integration and joint venture, the more exopreneurial the firm's strategic posture to facilitate the achievement of growth goals. This expectation is supported by Carney and Gejadlovic's studies (1991) in franchising; Goe (1991) and Scott's (1991) in subcontracting; Fearne's (1994) in strategic alliance and Brown and Butler's (1995) in competitive strategic alliance.

Intrapreneurial behavior is expected in firms that use strategies related to the internal strength of organizations. Intensive and diversification strategies require high input of resources to improve the firm's existing competitive position. Market penetration demands higher level of marketing activities to increase market share especially in intrapreneurial behaved organizations (Nielsen, Peters and Hisrich, 1985; Dougherty, 1990, 1992, 1995; Foxall and Minkes, 1996).

The existence of internal corporate venturing and new venture division within large corporations aim to diversify the existing product portfolios (Burgelman, 1983a,b; Gee, 1994; Holt.1995). According to Gee (1994) most related diversification cost less and are more efficient because necessary resources are available within corporation and easily understood by top management (Mandell, 1971; Fast, 1978; Sykes, 1986). For instance cited in Holt (1995) horizontal diversification did not disrupt other operation by setting up divisionalized structure. In short the intrapreneurial and exopreneurial activities may be contigent upon the mission strategy exercised by organizations. The following preposition postulates how corporate entrepreneurial activities may respond to the types of mission strategy variables.

Proposition 7: Intrapreneurship is prevalent in organization exercising intensive and diversification strategy while exopreneurship is prevalent in organization exercising integration and defensive strategies.

Business practices and competitive tactics

The primary element of business strategy is always to make the organization entrepreneurially and competitive effective in the market place (Thompson and Strickland, 1987). The business strategy is the managerial action plan for directing and running a particular business unit. It is defined in terms of collection of business practices and competitive tactics. These decisions include reduction of risk, reduction of transaction cost and increasing the speed of sales to market. These expected strategies keep the organizations abreast with innovations.

Profiles of business practices and competitive tactics associated with entrepreneurial posture have been cited in Miller and Camp (1985); MacMillan and Day (1987) and Robinson and Pearce (1988). Organizations that are market (Nielsen, Peters & Hishrich, 1985; Jenning and Lumpkins, 1989; Cram, 1996) and technologically (Zahra, 1993; Zahra and Ellor, 1993; Zahra, Nash and Bickford, 1995; Zahra, 1996) driven have shown entrepreneurial posture by

producing high quality products. These studies confirmed Covin and Slevin's (1991) prepositions 11-18.

Competitive strategy such as risk reduction, increase the speed of sales and reduce transaction cost are domains leading to exopreneurial activities in franchising, subcontracting, strategic alliance and external corporate venture capital.

The most common antecedent factor that lead organizations to externalization is cost minimization. Organizations franchised their business to reduce cost of capital. Studies by Martin (1988) Carney and Gedajlovic (1991), Thompson (1994) Birkland (1995), Michael (1996), Elango and Fried (1997). Birkland (1995) found that organizations capitalize on the ideology of entrepreneurship (agency) while Michael (1996) stressed that franchising is a form of minimization in conditions of low levels of human capital and business.

Generally, subcontracting lowers production costs and increases producers' profit (Kamien and Li, 1990; Rao and Young, 1994; Shenas and Derakshan, 1994; Downey, 1995; New and Payne, 1995). Large established organization moves into externalization to focus on reduction of production cost and increase their core competencies to get closer to their customer (Belotti, 1995). Subcontracting becomes popular strategy to reduce administrative burden and escape from restriction of industrial disputes (Friedman, 1977). Sharing costs with partners is the prime motivator of strategic alliance in the form of joint venture (Bijlani, 1994; Glaister and Buckley, 1994; Cauley, 1995). On the other hand, the external corporate venturing by large organization does not depend on this factor.

Another latent factor that drives large organization to obtain outside innovation is risk reduction. Capital and business risks are transferred to the exopreneurs and therefore the large organization and the exopreneurs share lower risks. Numerous studies (Shelton, 1967; Walsh, 1983' Castrogiovanni, Justis and Julian, 1993) on franchising revealed higher rate of success than independent business start up. It provides large corporation the nimbleness because of its stability, low failure rate. It has the ability to achieve individuals desire to become entrepreneurs (Mathewson and Winter, 1985; Brickley and Dark, 1987). Thus, franchising reduces risk (Combs and Castrogiovanni, 1994) as the capital cost is spread among the franchisor and franchisees. For instance Quizno Franchise encouraged its general manager to invest in its franchise after working four to six years tapping the entrepreneurial spirit of middle managers (Ruggles, 1995).

Similarly subcontracting is a popular form of exopreneurial activity of transferring risk to exopreneurs. Studies of the Japanese industrial systems (Sako, 1991; Smitka, 1992; and Easton and Aroujo, 1994) provide examples of secondary investments in technological capabilities of Japanese subcontractors. The kereitsu system lowers the risk of business integrated system. Rao and Young (1994) research affirmed that risk transference and high quality products are part of the driving force to subcontract physical distribution in risk reduction exercise. Campbell (1995) noted that large organizations reduce risk by subcontracting its specialized projects or risky maintenance project not within the capability of organization. At the same time liability can be avoided through contract (Downey, 1995 and Baker, 1995).

Strategic alliance in the form of equity or non-equity collaboration aims to reduce risk to leverage uncertainties and reduction of escalated cost (Carnavale, 1996). Study by Glaister and

Buckley (1996) showed that strategic alliance is an attractive mechanism for hedging risk because neither partner bears full risk and cost of the alliance (Mariti and Smiley, 1983; Porter and Fuller, 1986; Contractor and Lorange, 1988). The risk reduction include: spreading the risk of a large project over more than one firm; enabling product diversification reducing market risk; enabling quicker sales to market and lower investment cost.

The common antecedent that leads organization to exopreneurial activity is to expedite the sales to market. Franchising is one of the fastest mechanism of global expansion (Hoffman and Preble, 1991;) characterized by intense competition, rapidly changing customer taste. Subcontracting is a popular alternative to hasten products or services to market (Blois, 1994; Baker, 1995; New and Payne, 1995). Similarly strategic alliance decrease time to market and access to international market at a greater pace of time (Takac and Singh, 1992; Cauley, 1995; Glaister and Buckley, 1996; Carnavale, 1996) while external corporate venture speeds up the sales through the expertise of technology of the exopreneur (Shrader and Simon, 1997).

In short, the types of competitive business tactics has contingent influence over the sort of corporate entrepreneurial activities. Prepositions 8 and 9 are speculated as follows:

Proposition 8:	Organizations which pursue externalization (exopreneurship) reduce risk through transferring to partners, increase speed of sales, and work on economy of scale.
Proposition 9:	Organizations which pursue internalization (intrapreneuship) reduce risk by diversification of related products/customers, increase speed of technology/product into market through teamwork, and to reduce cost by increasing productivity by internal creativity.

INTERNAL VARIABLES

Following Covin-Slevin entrepreneurial model, only three out of four internal variables are included as antecedents to entrepreneurial behavior. There are top management values and philosophies, organizational resources and competencies, and organizational structure. Corporate culture is excluded as internal variable because it is seen similar to top management values.

Organizational Resources and Competence

Organizational resources and competencies variables are defined in the broadest sense which include resources, capabilities and culture (Collis, 1991; Leonard-Barton, 1992). The resources refers to the specific knowledge and the specialized assets (Lippman and Rumelt, 1982; Wernerfelt, 1984; Barney, 1991; Grant, 1991; Tvorik and McGivern, 1996). Resouces range from patents, brand names to knowledge of particular processes. Capabilities direct to the ability of making use of resources (Bartlett & Ghoshal,, 1990; Amit and Schoemaker, 1993; Whitney, 1996). Dougherty (1995) argued that culture is the cognitive decision which connects resources and capabilities.

Entrepreneurially inclined organizations are resourced-consuming in nature (Romanelli, 1987). Intrapreneurial activities such as internal corporate venturing and specialized innovation to a certain extend depend on the resource capacity of organizations (Covin & Slevin, 1991; Baden-Fuller & Volberda, 1997). Majority of organizations involved in intrapreneurial activities are large and established which reflect their high level of resources and competencies. Though organizations with abundant resources and competencies engaged in entrepreneurial activities, this does not prevent lower resources and competent firms from being innovative. The latter externalizes via restructuring to improve its resources and competencies thus strengthens its competitive position.

In delineating the antecedents of exopreneurial and intrapreneurial behavior of firm, the operational definitions included in the organizational resources and competencies are organizational size, organizational age, technology driven, market driven and the level of corporate governance.

Organizational size

Organizational size is a liability to innovation (Aldrich & Auster, 1986; Jones & Butler, 1992). Growing in size in terms of employees, expansion of buildings and equity would cause organizations to be less flexible to respond to opportunities (Abernathy, Clark, & Kantrow, 1983; Ettlie, 1983; Dougherty, 1990). This scenario was seen in the United States during the early 1980; s where there huge number of innovative employees left large organizations to start their ventures (Hisrich and Peters, 1995). The operational definitions of organizational size are numbers of employee, sales turnover, and equity.

Evidently research (Romanelli, 1987; Laforge and Miller, 1987; Zahra, 1993) revealed that entrepreneurial strategies are influenced by company size. Therefore, an organizational aptness for corporate entrepreneurial posture is to some extent limited by its resource base. Bloodgood, Sapienza and Almeida (1995) found that organizations with more employees are significant to innovate through internationalization than smaller firms. Harrison (1994) and Gertz (1997) viewed that no company is too big to grow as correlation between company size and its growth is weak. This implies that organizations which are rich in size are abundant in resource, thus have the propensity to use intrapreneurship to product creation.

Conversely, smaller organizations which is low in resources based tend to externalize for appropriate alliance in search for opportunities. This is one of the driving forces to exopreneurship. Empirical studies revealed firms franchise their businesses as a result of resource scarcity (Oxenfelt an Kelly, 1968-1969; Hunt, 1973; Carney and Gedajlovic, 1991). The notion of resource constraints is evident by studies done by Thompson (1992) whereby company ownership is less likely to occur when units require high capital investment. Charging high royalty by franchisors at early stage of business also shows the low resources (Sen, 1993). Other motives that drive organization to seek exopreneurs related to resource constraint are transfer of complementary technology and access to specialized knowledge which firm that do not possess (Contractor and Lorange, 1988, Coffey and Bailey, 1990). This is due

exopreneuring organization lack of financial resources necessary to produce them internally at the time they needed or at the level of efficiency or quality is required.

The level of research and development and market specialization moderated the influence of entrepreneurial posture (Covin & Slevin, 1991). The extent of these variables also depend on the financial status of organizations. Studies by Shrader and Simon (1997) confirmed that the success of intrapreneurship depends on internal capital resources, proprietary knowledge and marketing knowledge compared to independent ventures which requires external capital resources. Undoubtedly large entrepreneurial organizations exhibited higher level of R & D and marketing expenditure on internal corporate venture (Zahra, 1996)because of their posture of innovations, risk taking and proactive. However, this does not imply that the low levels of R &D and market specialization are less entrepreneurial. Smaller resource organizations have lower capacity for research expenditure therefore, adopt externalization outlook for product development.

Organizational Age

The life cycle of the organization is another yardstick to corporate entrepreneurial activities. Large sized aging organizations become less innovative at the later stages of their evolution (Chandler, 1962, 1977; Mintzberg and Waters, 1982; Adizes, 1988). Mature business are signs of aging (Goold, 1996) with slow growth, more stable technologies, resource self sufficiency and tend not to anticipate changes (Kanter, 1983). Zahra (1993) defined established companies being minimum of eight years old. The resource self sufficiency becomes an added advantage to large corporation to introduce intrapreneurial activities to achieve variation of technologies upon the existing ones. The numerous intrapreneurial research (Burgelman, 1984; Harrel & Murray, 1986; Schaffhouser, 1986; Grove, 1987; Kiley, 1987; Rutigliano, 1987; Kapp, 1988; Pla, 1989; Shatzer & Schwartz, 1991; Denton, 1993; Weaver and Henderson, 1995; Birkinshaw, 1995, 1997) have been on large, mature and established organizations.

On the other hand, young independent organizations that are resource deficit synergize their internal competencies to complement external sources for growth strategies. This combination leads to exopreneurship among young entrepreneurial organizations with large organizations with scarce technology (Contractor and Lorange, 1988). Empirical research (Ettington and Bentel, 1994) found that organizations less than ten years old are involved in strategic alliance. However, mature industries (Davis, 1976; Harrigan, 1983; Killing, 1983; Morone, 1993) are moving into joint venture activities to reduce the opportunities of merger or acquisitions because of fear of losing talented employees as a result of acquisition.

The availability of the corporate entrepreneurs

Brazeal's findings (1993b; 1996) show an organization may have potential intrapreneurs even if they do not display any overt intentions to start a corporate venture. Large established organizations have the managerial, technical and specialization and financial economies of scale to nurture the employees entrepreneurial talents into commercialized products. An example of

dispersed intrapreneurship is "Enterprize programme at Ohio Bells (Kanter, 1991). Other methods of acquiring new innovations internally are through research and development (administrative entrepreneurship) and the set up of new venture development unit (incubative entrepreneurship). Both methods are known as focus corporate entrepreneurship.

Organizations involved in exopreneurship lack talented or specialized personnel to build their competencies. It is evident that the franchise system capitalizes on the agency theory of using external entrepreneurs as agent for expanding businesses (Combs and Castrogiovanni, 1994). Studies found that strategic alliance (Bijlani, 1994; Ingham and Thompson, 1994; Vyas et.al, 1995), external corporate venture and subcontracting (Goe, 1991) are means to increase skills without having to develop in house. The complementary role synergized through the combination of subcontracting, strategic alliance and external corporate venture between two or more organizations suggest that exopreneurship is a mechanism to seek talented expertise for new innovation.

One point worth noting is that exopreneurs can only be identified by innovative and established intrapreneurs before moving into exopreneurship. The availability of corporate entrepreneurs is also determined by the level of education. White (1995) found that intrapreneurs have higher level of education compared to independent entrepreneurs. Studies by Burenitz and Barney (1997) found that independent entrepreneurs who could be exopreneurs are bad managers because the latter has higher level of overconfidence.

Having argued in the preceding paragraph the extent to which organizational size, age and human resources may have contingent influence over the entrepreneurial activities to be taken by organization, the following preposition summarizes the argument presented earlier.

Preposition 10:	Exopreneurship is prevalent in organizations which are young,
	small and lack human and finance resource while intrapreneurship
	is prevalent in large, mature organizations with sufficient
	resources.

Organizational Structure

Increase in growth, inadvertently, increase in complexity (Butler and Jones, 1992). Complex organizational structure makes flow of communication difficult which consequently brings death of an organization (Adizes, 1988). Studies found that organizational structure and form have an impact on strategy through its direct on the strategic decision making process on the growth and survival of firms (Frederickson, 1986; Priem, 1994; Rowlinson, 1995; Shane, 1996). It was shown that structure and form has domain over corporate entrepreneurship (Russell & Russell, 1992; Gielser, 1993; Mueller, 1994; Jennings and Seaman, 1994; Chesbrough and Teece, 1996). This implies that structure moderates the entrepreneurial postures of firm behavior.

Scholars found that entrepreneurial activities are positively related to firm performance with appropriate organizational structure. Burgelman and Sayles (1986) stressed the importance

of fit between organization strategic orientations and its organizational structure. The organic structure encourages entrepreneurial activities (Khandwalla, 1977; Miller & Friesen, 1982; Miller, 1983) which was empirically supported by Slevin and Covin (1990). Further empirical evidence show attributes of organicity outperform mechanistic structures in terms of team participation and shared decision making (Nasi, Nasi, Banks & Embley, 1994).

There may be deviation in the structure of organizations that practice exopreneurship. Baden-Fuller and Volberda (1997) speculated that organizations that externalize to inter-reorder their competencies across multiple industries. This involves restructuring of organizational business. Baden-Fuller and Volberda (1997) suggested that ease of restructuring is positively related to the size of organization whereby the flow of communication tend to be top down (Prahalad & Hamel, 1990). Therefore, the author speculates that organization that externalize may have simple structure so that the strategic intent of the organization is easily related to the entrepreneurial employees as restructuring poses higher risk to large and complex organizations.

Preposition 11:	Exopreneurship is prevalent in organization with simple centralized structure while intrapreneurship is prevalent in complex and dencentralized sturcture.
Preposition 12:	Organizations that practice intrapreneurship have higher level of organicity compared to organizatiosn that practice exopreneurship.

Management Philosophies

Studies have shown that management philosophies moderates the competitive strategy choices (Andrew, 1980). The choice to intrapreneurial or exopreneurial behavior depends on the decision of management's beliefs. The choice adopted by top management must fit with the strategic intent (Khandwalla, 1987). Top management values and philosophies that may affect this choice are identified in the following preposition:

Preposition 13:	Exopreneurship is positively related to value top management
	places on externalization which brings competitive advantage to
	the organization while intrapreneurship is positively related to
	internalization values.

DISCUSSION

This proposed model of corporate has a number of limitations. First, is there any difference between internally generated innovations and externally generated innovations?. Looking at the performance angle there seems to be no difference as both strategies aimed to revitalize corporate growth in diversifying product portfolio. Ultimately both process of acquiring innovation converges to increase organizational performance. In theory, the origin of

innovation is different, which require specific ambient environment to conceive idea to commercialization of the innovation. Intrapreneurship and exopreneurship processes require different types of contextual influences to trigger it and need different modes to achieve the new venture creation.

Another limitation of this model is organizations appear to use both processes simultaneously, thus making the differentiation of the two processes more tedious. Theoretically, intrapreneurship precedes exopreneurship to give organization the uniqueness of the competitive advantage which earns monopolistic market while exopreneurship works on comparative advantage with other organizations to achieve organizational performance.

This proposed model assumes that organizations are ready to use either intrapreneurship or exopreneurship to cope with the changes of any kind. This means that organizations have strategic intent to change by being innovative. However, this may be an erroneous assumption as there are firms that are not entrepreneurial yet still perform well. Although corporate entrepreneurship has been applicable to large firms, this model can be applied to small firms, perhaps with some different degree of contextual differences influencing intrapreneurship and exopreneurship.

Finally this model has to be empirically tested. Do the conditions for exopreneurship and intrapreneurship differ fromm each other? To explore this issue the data needed must cover both time series and cross sections. The data has to be pooled and regressed to recognize the differences in the conditions that trigger intrapreneurship and exopreneurship. The differences tested, hopefully would give positive contribution to management decision with regards to corporate entrepreneurship.

CONCLUSION

Corporate entrepreneurship has been closely linked to intrapreneurship; the creation of innovation within the organization by existing employees. Exopreneurship is a new term that extends the paradigm of corporate entrepreneurship by acquiring innovation invented beyond the boundary of organization. The modes to achieve the process of exopreneurship is franchising, external corporate venture capital, strategic alliance and subcontracting. It is not the part of this article to discuss whether these modes achieve the means of corporate entrepreneurship. In conclusion the process of exopreneurship is part of corporate entreprenurship which require different conditions to trigger it than that of intrapreneurship.

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