

Determinants of Key Favorable Environment for Intrapreneurship Development: an Empirical Study of Some Selected Companies in Chittagong, Bangladesh

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Abstract

The global economy is creating substantial changes for organizations and industries throughout the world. These changes make it necessary for business firms to carefully examine their purposes and to devote a great deal of attention to selecting strategies. These strategies pursue the levels of success that are highly probable to satisfy multiple stakeholders. In response to hyper-globalized changing economic environment, many established companies have restructured their operations in meaningful ways. This research gap induces the authors to undertake the present study. For primary data some companies have been selected randomly in Chittagong, Bangladesh with the sample size of forty. We used the sophisticated statistical model Principal Component Analysis (PCA). Results of this analyzed study based on factor analysis, indicate the four important factors considered by the respondents when developing intrapreneurship such as: (1) Technically skilled labour force, (2) Layout of the organizations, (3) Knowledge of the market and (4) Availability of Secrecy.

Key words: *favorable environment, intrapreneurship development, global economy*

JEL Classification: *M1, M14, M16*

Introduction

The new century is seeing corporate strategies focused heavily on innovation. This new emphasis on entrepreneurial thinking developed during the entrepreneurial economy of the 1980s and 1990s. Today, a wealth of popular business literature describes a new “corporate revolution” taking place owing to the infusion of entrepreneurial thinking into large bureaucratic structures. Continuous innovation (in terms of products, processes, and administrative routines and structures) and an ability to compete effectively in international markets are among the skills that are increasingly expected to influence corporate entrepreneurship which is envisioned to be a process that can facilitate firms’ efforts to innovate constantly and cope effectively with the competitive realities that companies encounter when competing in international markets. Entrepreneurial attitudes and behaviors are necessary for firms of all sizes to improve and flourish in competitive environments. In recent years the subject of intrapreneurship has become quite popular, though very few people thoroughly understand the concept. Most researchers agree that the term refers to entrepreneurial activities that receive organizational sanction and resource commitments for the purpose of innovative results. The major thrust of intrapreneuring is to develop the entrepreneurial spirit within organizational boundaries, thus allowing an atmosphere of innovation to prosper.

Literature Review

Many companies today realize the need for cooperate entrepreunering. Articles in popular business magazines (Business Week, Fortune, Success, U.S. News and World Report) are reporting the infusion of entrepreneurial thinking into large bureaucratic structures. In fact, Peters (1997) devoted entire sections to innovation in the corporation. Quite obviously, business firms and consultants or authors are recognizing the need for in- house entrepreneurship. Pramodita and James (1999) defined corporate entrepreneurship as a process whereby an individual or a group of individuals, in associations with an existing organization, creates a new organization or instigates renewal or innovation within the organization. Under this definition, strategic renewal (which is concerned with organizational renewal involving major strategic and or structural changes), innovation (which is concerned with introducing something new to the market place), and corporate venturing (corporate entrepreneurial efforts that lead to the creation of new business organizations within the corporate organization) are all important and legitimate parts of the corporate entrepreneurial process.

Fariborz (1991) noted that corporate innovation is a very broad concept that includes the generation, development, and implementation of new ideas or behaviours. An innovation can be a new product or service, an administrative system, or a new plan or program pertaining to organizational members. According to Burgelman (1983) the intrapreneurship approach to entrepreneurship advocates that innovation can be achieved in existing organizations by encouraging people to be entrepreneurial. Further, the intrapreneurial success depends upon the awareness and ability of key managers (intrapreneurs) to explore and exploit the environmental opportunities.

On the other hand, Shaker (1991) observed that corporate entrepreneurship may be formal or informal activities aimed at creating new business in established companies through product and process innovations and market developments. These activities may take place at the corporate, division (business), functional, or project levels, with the unifying objective of improving a company's competitive position and financial performance. William and Ari (1990) have stressed that corporate entrepreneurship encompasses two major phenomena such as: (1) new venture creation without existing organizations and (2) the transformation of organizations through strategic renewal. Cunningham and Lischeron (1991) attempted to give key people freedom to think them as entrepreneurs. Hence, intrapreneurship is a "Team" model whereby individuals asked to work together in solving problems and creating opportunities.

Based on the literature reviews, various studies have been done, and it is clearly revealed that a detailed study has not yet been conducted in Bangladesh context, especially in Intrapreneurship development. This research gap determined the authors to undertake the present study.

The *objectives* of the research are as follows:

1. to examine necessary factors for the favourable environment for intrapreneurial development;
2. to identify the factors which are determinant of favourable environment for entrepreneurial development.

Material and Methods

Sampling Design

The sample for this study consisted of companies in Chittagong port city in Bangladesh. A purposive sampling technique was used to select the organizations. Initially researchers identified forty companies, then, decided to distribute questionnaires among each company to the Managing director.

Data collection

Primary and secondary data was used for the study. Primary data was collected through the written questionnaire following direct personal interviewing technique. The secondary data was gathered from journals, books, magazines, etc.

Measures

The questionnaire was administered among managing directors in companies. The questionnaire was designed by the researchers as a seven item scale from strong disagreement (-3) to strong agreement (+3) adopted to identify key favorable environment indicators. In this study, "Factor Analysis" model (*Principal Component Varimax Rotated Factor Analysis Method*) has been used to group the indicators. Final ranking of the indicators has been made on the basis of mean scores.

Results and Discussions

To identify underlying potential dimensions of the key favourable environment for intrapreneurship development used in the current study, responses of the participants were subjected to factor analysis method. Before applying factor analysis, testing of the reliability of the scale is very important as it shows the extent to which a scale produces consistent results if measurements are made repeatedly. This is done by determining the association in between scores obtained from different administrations of the sale. If the association is high, the scale yields consistent result, thus it is reliable. Cronbach's alpha is the most widely used method. It may be mentioned that its value varies from 0 to 1 but, satisfactory value is required to be more than 0.6 for the scale to be reliable (Malhotra, 2002; Cronbach, 1951). In the present study, we, therefore, used Cronbach's alpha scale as a measure if reliability. Its value is estimated to be 0.898. If we compare our reliability value with the standard value alpha of 0.6 advocated by Cronbach (1951), a more accurate recommendation Nunnally and Bernstein (1994) or with the standard value of 0.6 as recommended by Bagozzi and Yi's (1988) we find that the scales used by us are highly reliable for data analysis.

After checking the reliability of scale, we tested whether the data so collected is appropriate for factor analysis or not.

The appropriateness of factor analysis is dependent upon the sample size. In this connection, Kaiser – Meyer- Olkin (KMO) measurement of sampling adequacy is still another useful method to show the appropriateness of data for factor analysis. The KMO statistics varies between 0 and 1. Kasier (1974) recommends that values greater than 0.5 are acceptable. Between 0.5 and 0.7 are mediocre, between 0.7 and 0.8 are good, between 0.8 and 0.9 are superb (Field, 2000). In this study, the value of KMO for overall matrix is 0.756 (For details please see table 1), thereby indicating that the sample taken to process the factor analysis is statistically significant.

Table 1. KMO and Bartlett's Test

| | | |
|---|---------------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .756 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 358.123 |
| | df | 120 |
| | Sig. | .000 |

Source: survey data

Bartlett's test of sphericity (Barlett, 1950) is the third statistical test applied in the study for verifying its appropriateness. This test should be significant i.e., having a significance value less than 0.5. In the present study, test value of Chi – Square 358.123 is significant (as also given in Table 1) indicating that the data is appropriate for the factor analysis.

After examining the reliability of the scale and testing appropriateness of data as above, we next carried out factor analysis to identify the key favourable for intrapreneurship development. In order to do this, we employed Principal Component Analysis (PCA) followed by the varimax rotation, (Generally, researchers' recommend as varimax). Statistical Package for Social Science (SPSS) software (version 13.0) was used for this purpose. Four variables were extracted from the analysis with an Eigen value greater than 1, which explained 69.091 percent of the total variance (For details please see Table-2).

Table 2. Total Variance Explained

| Component | Initial Eigen values | | | Extraction Sums of Squared Loadings | | |
|-----------|----------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 6.658 | 41.610 | 41.610 | 6.658 | 41.610 | 41.610 |
| 2 | 2.113 | 13.207 | 54.817 | 2.113 | 13.207 | 54.817 |
| 3 | 1.249 | 7.809 | 62.626 | 1.249 | 7.809 | 62.626 |
| 4 | 1.034 | 6.465 | 69.091 | 1.034 | 6.465 | 69.091 |
| 5 | .917 | 5.732 | 74.823 | | | |
| 6 | .813 | 5.082 | 79.905 | | | |
| 7 | .639 | 3.996 | 83.901 | | | |
| 8 | .588 | 3.672 | 87.573 | | | |
| 9 | .529 | 3.307 | 90.880 | | | |
| 10 | .387 | 2.421 | 93.301 | | | |
| 11 | .295 | 1.844 | 95.146 | | | |
| 12 | .245 | 1.529 | 96.674 | | | |
| 13 | .193 | 1.207 | 97.881 | | | |
| 14 | .157 | .983 | 98.864 | | | |
| 15 | .107 | .666 | 99.531 | | | |
| 16 | .075 | .469 | 100.000 | | | |

Source: survey data

Extraction Method: Principal Component Analysis

One method to reduce the number of factors to something below that found by using the "eigenvalue greater than unity" rule is to apply the scree test (Cattell, 1966). In this test, eigenvalues are plotted against the factors arranged in descending order along the X-axis. The number of factors that correspond to the point at which the function, so produced, appears to change slope, is deemed to be the number of useful factors extracted. This is a somewhat arbitrary procedure (for details please see Figure 1). Its application to this data set led to the conclusion that the first four factors should be accepted. Within this solution, Factor 1 had fourteen items with their primary loading on that factor, one item and two items had their primary loading on Factor 2 and Factor 3 respectively, but Factor 4 did not contain any primary loading.

It is worth mentioning out here that factor loading greater than 0.30 is considered significant. 0.40 is considered more important and 0.50 or greater is considered very significant. The rotated (Varimax) component loadings for the four components (factors) are presented in Table 3. For parsimony, only those factors with loadings above 0.50 were considered significant (Pal, 1986; Pal and Bagi, 1987; Hair, Anderson, Tatham, and Black, 2003).

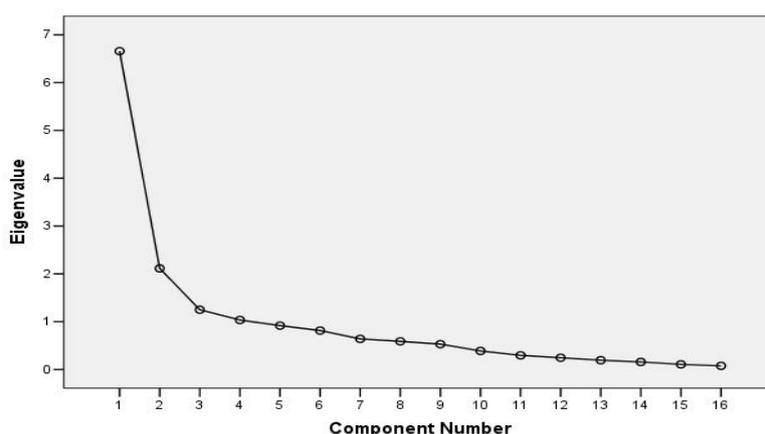


Fig.1. Scree Plot

Table 3. Principal Component Analysis – Varimax Rotation Factors of favorable environment for Intrapreneurship development

| Indicators | Indicators | | | |
|---|---------------|---------------|---------------|---------------|
| | Factor - I | Factor - II | Factor - III | Factor -IV |
| Layout of the organization | .853 | | | |
| Intrapreneurial participants | .805 | | | |
| New project meetings | .743 | | | |
| Informal communication | .613 | | | |
| Mentality of the employees | .556 | | | |
| Knowledge of the market | | .807 | | |
| Encouraging the actions | | .725 | | |
| Reward of the personnel | | .616 | | |
| Team work | | .556 | | .523 |
| Availability of the Secrecy | | | .793 | |
| Innovative ideas | | | .719 | |
| Environment for creativity and diversity | | .573 | .609 | |
| Identification of the potential entrepreneurs | | | .568 | |
| Technically skilled labour force | | | | .824 |
| Sponsoring the intrapreneurial projects | | | | .701 |
| Taking actions | .528 | | | .533 |
| % of Variance | 41.610 | 13.207 | 7.809 | 6.465 |
| Cumulative percentage of % | 41.610 | 54.817 | 62.626 | 69.091 |

Source: survey data

Factor 1: Layout of the Organizations – This factor was represented by five variables with factor loadings ranging from .853 to .556. These were: layout of the organization, intrapreneurial participants, new project meetings, informal communication, and mentality of the employees. This competency accounted for 41.610% of the rated variance.

Factor II: Knowledge of the Market – Four variables with loadings ranging from .807 to .556 belonged to this factor and they included knowledge of the market, encouraging the actions, reward of the personnel and team work. Furthermore, although the variable “team work” was loaded fairly high on Factor IV as well, because of its higher loading and greater relevance it was also included in this factor. This factor explained 13.207% of the rated variance.

Factor III: Availability of Secrecy – This factor comprised four variables, namely: the availability of secrecy, innovative ideas, environment for creativity and diversity and identification of potential entrepreneurs. Factor loadings of these variables ranged from .793 to .568. Although the variable “environment for creativity and diversity” was correlated fairly high with Factor II as well, considering its higher loading and importance it was included in Factor III. A variance of 7.809% was explained by this factor.

Factor IV: Technically skilled Labour Force – This last factor consisted of three variables relating to the technically skilled labour force. These were: the technically skilled labour force, sponsoring the intrapreneurial projects and taking actions. Their factor loadings ranged from .824 to .533. The variance explained by this factor amounted to 6.465%. Furthermore, although the variable “taking actions” was loaded fairly high on Factor I as well, because of its higher loading and greater relevance it was also included in this factor.

Ranking of the above four factors in order of their importance, along with mean, is shown in Table 4. The importance of these factors, as perceived by the respondents, has been ranked on the basis of their mean values.

Table 4. Ranking of Factors according to their importance

| Factors | No. of. Variables | Mean | Rank |
|---|-------------------|------|------|
| Factor I: Layout of the Organizations | 05 | 2.60 | 2 |
| Factor II: Knowledge of the Market | 04 | 2.28 | 3 |
| Factor III: Availability of Secrecy | 04 | 2.23 | 4 |
| Factor IV: Technically skilled Labour Force | 03 | 2.73 | 1 |

Source: survey data

According to table 4, the ranking evinced the following order: (1) technically skilled labour force, (2) Layout of the organizations, (3) Knowledge of the market, (4) Availability of Secrecy from 2.73 to 2.23.

Conclusion

Through an empirical investigation, this study has identified four factors as key favorable environment for intrapreneurship development which is determined in companies. The dominant factors are: (1) Technically skilled labour force; (2) Layout of the organizations; (3) Knowledge of the market and; (4) Availability of Secrecy.

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Factori determinanți în stabilirea unui mediu cheie favorabil dezvoltării intraprenoriatului: studiu empiric pe baza unor companii selectate din Chittagong, Bangladesh

Rezumat

Economia globală conduce la schimbări substanțiale în cadrul organizațiilor și a industriilor din întreaga lume. Aceste schimbări fac necesară examinarea atentă a scopurilor de către firme și acordarea unei atenții deosebite selectării strategiilor. Aceste strategii urmăresc atingerea unor niveluri de succes care cu siguranță îi vor satisface pe mandatar. Ca urmare a mediului economic hiper-globalizat aflat în continuă schimbare, multe companii și-au restructurat operațiunile în mod semnificativ. Această lacună în cercetare i-a determinat pe autori să efectueze studiul de față. Pentru datele primare au fost selectate aleatoriu câteva companii din Chittagong, Bangladesh având aceeași mărime a eșantionului: patruzeci. S-a folosit modelul complex de analiză statistică numit Principal Component Analysis (PCA). Rezultatele acestui studiu având la bază analiza factorială indică patru factori importanți luați în considerare de respondenți în dezvoltarea intraprenoriatului, astfel: (1) forța de muncă deținătoare de competențe tehnice, (2) structura organizațiilor, (3) cunoașterea pieței și (4) disponibilitatea secretizării.