

## **Impact of Top Management Support on Entrepreneurial Behaviour of Employees and their Intentions to Network Ties: A Study on Selected Private Firms of Bangladesh**

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***Abstract:** Entrepreneurial behaviour of employees has received significant attention from scholars and professionals regarding their importance in organizational development. To enhance and support the entrepreneurial behaviour of employees, an organization has to embrace itself in managing people. Along with other factors, the support of top management found as a vital factor in creating that environment which ultimately shapes the entrepreneurial behaviour of employees. Corporate Entrepreneurship (CE) also plays a crucial role to identify the extent of network ties and its importance in managing as well as progression of an organization as a social unit. Network ties worked as a web of relations among employees in managing their entrepreneurial behaviour and innovativeness both inside and outside of the organization. This paper went for quantitative study (survey) to pinpoint the association among CE, top management support and network ties. SPSS has been used to calculate correlation, reliability, regression and factor analysis. This paper found a positive association between CE and network ties as well as between CE and top management support. The outcome of the survey entails the need of management support in CE and network ties as one of the crucial one. This paper found the importance of CE in overall performance of employees and the impact of top management support on the employees' intention to be entrepreneurial. Moreover, this paper tried to frame the need of network ties to catch the edge of innovation.*

***Keywords:** CE, Innovativeness, organization culture, top management support, network ties.*

### **Introduction**

Entrepreneurial behaviour of an organization is exhibited primarily by innovative, proactive, initiative, risk taking behaviour, and competitive aggressiveness which informs the actions and decisions made by the firm (Miller, 1983; Lumpkin and Dess, 1996). However, the top management always occupy a very critical role in promoting entrepreneurial behaviour within the organizations (Kuratko et al., 2005); they are the

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people who identify the strategic management ambition of the firm and help the employees in making them understandable to the operational level (Zahra et al., 1999). In most cases, the entrepreneurial behaviour of employees heavily relies on the successful implementation of corporate entrepreneurship in the firm where top management support plays a vital role (Kuratko et al., 2005). Therefore, this paper tried to understand the relationship between entrepreneurial behaviour of employees or corporate entrepreneurship and top management support and the intention of employees regarding network ties to enhance their entrepreneurial behaviour.

Corporate entrepreneurship can be emerged in the organization through new venture creation within the firm or making a strategic rejuvenation by transforming the existing organization (Zahra, 1991). Though it is crucial to find out the factors that stimulate entrepreneurial behaviour of employees (Kuratko et al., 2005), this study will seek to identify whether top management support act as a mediating factor there.

Apart from this, the study also tried to find out the inherent relationship between CE and network ties in the organization as well as the impact of top management support on CE. The paper examined these issues by using quantitative investigation in selected private firms of Bangladesh.

### **Objectives**

This paper aims to address the following objectives:

- To identify the association between top management support and the entrepreneurial behaviour of employees.
- To investigate the association between the intention of employees in using network ties and their entrepreneurial behaviour (CE) supported by top management.

### **Scenario of private firms towards CE in Bangladesh**

Companies in Bangladesh especially in the private sector are largely profit driven and tend to direct their actions, decisions and resources and capabilities to maximise profitability. From the literature, we can see that entrepreneurial behaviour is characterized by the entrepreneur(s) being innovative, taking the initiative, pro-active, learning and creating knowledge, and developing competence (Zahra, 1991). These characteristics require companies to allow autonomy to the effective workforce where they can exercise experimentation and devise new ideas, management practices or unique opportunities. In addition, this demands investment and incurs costs of the firm, which they cannot expect to gain immediate returns, if ever. Thus, here comes the question of the mindset of the company. The mindset of the company mainly consists of values,

beliefs, norms of the firm (where top management is the main representative) and of its' individuals (Schein, 1985). This paper seeks to identify the impact of top management support on entrepreneurial behaviour of employees of private sector organizations in Bangladesh.

In Bangladesh, Corporate Entrepreneurship (CE) is still a new or even emerging issue for organizations. Some large multinationals and a very few large local corporate bodies are concerned about this fact, and yet to find out the impact of it. So, finding out the role of top managers who initiate corporate entrepreneurship to shape the entrepreneurial behaviour of employees would provide a new lens for private firms in Bangladesh to understand the new success factor of organization.

### **Literature Review**

In an organization, the employees' attitudes towards any change influenced by the intention of the top management and the intention of top management are closely related with organizational culture (Saffold, 1988). Organizational culture found its diversified meaning and functions throughout the literature and the understanding of it acts as an attempt to be a successful organization (Zahra et al., 1999). Organizational culture generally denotes a set of norms, attitudes, values and behaviour patterns which uniquely shape an organisation's core identity (Denison, 1984), or a combination of beliefs, values, and assumptions determining management styles and processes in the organisation (Aycan et al., 2000; Schein, 1990). It is manifested by actions, especially from leaders and managers who play a primary role in nurturing and disseminating the culture and in shaping its evolution (Andriopoulos, 2001; Saffold, 1988).

Russell (1989, 1999) expanded the dimensions of norms (viz., creativity norms, external resource searching norms, resource support norms, information sharing norms, risk tolerance norms, consideration norms and implementation norms) to clarify the role of top managers in employees' entrepreneurial behaviour. For creating an effective organization culture for promoting entrepreneurial behaviour, we have to look on the four basic subsystems (i.e., flexible organizational management structure, teamwork, work environment and compensation & reward) to make them the formal support system for patronizing corporate entrepreneurship (Kuratko et. al., 2015). Thus, based on the evidence it is clear that top managers who are the representative of organizational culture is playing a key role to motivate entrepreneurial behaviour (Kanter, 1983; Russell and Russell, 1992) in the organization.

A generalized observation on the importance of managers at all levels of organization has been shown to have impact on whether an organization is successful or not (Floyd & Lane, 2000; Ireland et al., 2002). In this context, role of top-level managers is to decide on the corporate strategies on which the employees have to work on and communicate it

in both ways to understand the information properly (Kuratko et al., 2005). By replicating and compiling all the factors, Hornsby et al. (2002) approached with five factors which are identified from previous research: the willingness of the management to support entrepreneurship; commitment in tolerating failure regarding innovation; performance based rewards and encouraging risk taking; and providing enough time for exploring innovation. Afterwards, Kuratko et al., (1990) turned it down to three factors (managerial support, organizational structure and reward and resource availability) which were underpinned by Zahra (1991) where he studied a number of internal organizational factors and also the relationship between the financial performance and corporate entrepreneurship.

Top management needs to support and facilitation to encourage employees both individually and collectively for being entrepreneurial (Quinn, 1985; Hisrich & Peters, 1986; MacMillian et al., 1986; Stevenson & Jarillo, 1990; Kurtko et al., 1993). This support can take any forms like encouraging employees in creativity, and creating environment for internal network ties (Hornsby et al., 2002). For this paper, management support (Hornsby et al., 2002, 2013a) has been used as a factor to understand the entrepreneurial behaviour of the employees. To cover all the related factors following the prior literature (Hornby et al., 20002, 2013a; Hughes & Mustafa, 2015; Van Wyk & Adonisi, 2011, 2012; Ireland et al., 2009), this study proposes-

**Hypothesis 1:** There is a positive relationship between top management support and entrepreneurial behaviour of employees.

On the other hand, for successful venture creation, entrepreneurial orientation with social capital works together in using the informal ties (Stam & Elfring, 2008). It consists of two common elements; it has some aspects of social structure and it helps to facilitate the actions of people or corporate actors in a specific structure (Coleman, 1988). To be entrepreneurial, an organization needs top management which promotes intra- and extra industry social capital to take the advantages of network ties both strong and weak (Stam & Elfring, 2008). The strength of ties both formal and informal and strong and weak will identify the readiness of the organization to be entrepreneurial (Nahpiet & Ghoshal, 1998; Stam & Elfring, 2008). Social capital theory resides in the structural relations among actors like corporate actors or purposive organizations or persons (Coleman, 1988). In organizational setting, three forms of social capital can be seen which are obligation, expectations, and trustworthiness of structures which are associated with the centrality of the network ties, information channel which appreciates the strength of weak ties (Granovetter, 1973) of managers within and outside of the organization (Burt, 1997; Coleman, 1988).

Corporate entrepreneurship branded itself differently from other forms of entrepreneurship as it emphasizes more on renewal, change, development of new ideas rather than personality and leadership. According to McMillan et al. (1986), corporate entrepreneurship can have both internal and external orientation. Internal activities may include the development of the firm internally for example administrative, technology, process or production innovation (Burgelman & Sayles, 1986; Kanter, 1989; Nielson et al., 1985; Zahra, 1989). For the internal activities, the closure of network ties is needed as it gives the managers access to the information which is not available in his/her own possession (Burt, 1997; Coleman, 1988). The information benefits and obligations, expectations and trustworthiness of the internal network ties facilitate the entrepreneurial behaviour of the mid-level managers as they are known to be the information disseminator in the organization (Stam & Elgring, 2008). The external activities may include mergers, joint ventures or acquisitions (Zahra, 1991). To be successful in executing these external activities, managers can go for another form of social capital which is structural holes and the weak ties outside the firm (Burt, 1997; Coleman, 1988). So, both high network centrality and strength of weak ties enable the mid-level managers to flourish their entrepreneurial behaviour within and outside the organization (Stam & Elgring, 2008). Connecting and combining the network ties expand the knowledge base and increase the capacity of the firm of being entrepreneurial and exploit the knowledge in gaining the access of intra-industry ties (Cohen & Levinthal, 1990). Through combining corporate entrepreneurship with the centrality of ties and the bridging of weak ties, the firm can step forward to facilitate human and social capital and ultimate value creation of the organization (Burt, 1997; Coleman, 1988; Stam & Elfring, 2008). Thus the interpersonal network ties (Granovetter, 1973) along with the structural hole and strong network centrality will create a pathway for mid-level managers to flourish their entrepreneurial behaviour to enhance the organizational success. All these studies have been conducted on the western countries perspectives and in most cases on large firms (Oh et al, 2004; Stam & Elfring, 2008). CEAI (corporate entrepreneurship assessment instrument) has been used in emerging developing countries (Hughes & Mustafa, 2015; Van Wyk & Adonisi, 2011), but only for assessing the antecedents of CE. But in this paper CEAI has been used for identifying the network ties by taking four items (statement 3,4,5 and 18) as network ties indicator and the rest 17 elements as CE. This discussion leads to the second hypothesis:

**Hypothesis 2:** Increasing entrepreneurial behaviour of the employees vis-a-vis organization network ties.

## **Methodology**

### ***Research Strategy***

This paper will follow a quantitative methodology due to its unique nature of inquiry. Quantitative research mainly relies on numeric information like numbers or sometimes on figures, on the other hand qualitative method mainly depends on narrative words (Blumberg et al., 2005). The nature of research questions can be a guiding factor for choosing the methods (Crooty, 2003).

Quantitative method is appropriate for analyzing and specifying narrow hypotheses and data to support or refute the hypotheses (Creswell, 2003). In order to follow the quantitative method, the data are collected by conducting survey with structured questionnaire (Appendix A). This study used 5 point Likert interval scale to get more precise answers where 1 represented strongly disagree and 5 represents strongly agree and the information collected will be analyzed using statistical procedures and hypothesis testing. SPSS (version 23) software has been used for this purpose. Regression analysis and correlation will be done through SPSS to find out the desired associations and relationships.

This study used pre-existing questionnaire (Appendix A) as the key survey strategy as it confirms credibility of the questionnaire (Sebora & Theerapatvong, 2010). The data was collected through using a portion of the pre existed CEAI to identify the factors which affect entrepreneurial activities within the organization (Hornsby et al., 2002) and took twenty one (21) elements from it. Though, Wood et al. (2007) argued that CEAI is tested only in few setting, the validity of the tool is still consistent with our study. Holt et al. (2007) argued that CEAI is an incomplete tool as it does not include context and personality variable. Since, this paper is a firm-level research, the necessity of individual variables are irrelevant. The wordings were slightly changed in both parts to make it suitable in our context.

### ***Sampling***

Bangladesh has been chosen as the context for this paper to assess the relationship between top management support and entrepreneurial behaviour of employees in the private firms in developing countries. To comply with the objectives and consequent hypotheses, this paper went for random sampling approach (Saunders et al., 2012) without emphasizing on the industry or firms. This method was chosen since it offers a range of personnel and department for collecting data across the organization. This paper also involved in snowball sampling (Saunders et al., 2012) in finding several organizations who were voluntarily interested in providing required information. The following table represents some demographics of the sample:

**Table 1: Frequency of Respondents**

<b>Number of organization</b>	<b>Total respondents</b>	<b>Male</b>	<b>Female</b>
18	350	240	110

***Data Collection***

The data has been collected through questionnaire as this method of survey is suitable to assemble the responds of a group of people in a specific local area (Sekaran, 2003). The time constraint has been managed by using this method as this method helps to collect completed data within a short period of time (Sekaran, 2003). The organizations are selected through informal network and two of them are through snowballing. The industries which have been covered are Ready Made Garments (RMG), Fast Moving Consumer Goods (FMCG), Pharmaceuticals, Telecom and Media; and the departments of each organizations has been selected are marketing, human resource, sales and production. The agent administered 350 survey questionnaires and after data editing 225 surveys were taken for analysis. The following table represents some distribution of the collected data:

**Table 2: Frequency of Industry Type**

<b>Industry</b>	<b>Frequency</b>	<b>Percent</b>
Telco	20	8.9
FMCG	50	22.2
RMG	84	37.3
Media	34	15.1
Pharmaceuticals	37	16.4
Total	225	100

***Data Analysis***

The data has been analysed through SPSS (version 23) after the data was categorized and coded. Firstly, the data were reduced to ascertain the relevant information and reorganized to be integrated with theory and hypotheses (Sekaran & Bougie, 2010). In this paper, the independent variable represents 'management support', while the dependant variables are 'entrepreneurial behaviour of the employees' and 'network ties'.

To find out the outcomes and the validity of the hypotheses which have been constructed earlier, the following tests have been conducted –

- i. Factor analysis: The data has been tested through Shapiro–Wilk test to identify the distribution of factor responses which have been analysed. The significance of p value has been extracted from this analysis to understand the normality of data. The result of this assessment has been provided in results section.
- ii. Reliability Assessment: It has been evaluated through Cronbach’s alpha to measure the reliability of the psychometric assessment of the sample as it was very important to assess the scales before the analysis. Higher score represents more reliability (Field, 2009).
- iii. Linear relationships: This paper conducted Kolmogorov-Smirnov test and Shapiro-Wilk test to identify the normality of data and found (Appendix C) that the data are differently distributed (sig .000 that means  $p < .05$ ) and in addition all the data of this study is ordinal. Thus, Spearman’s correlation coefficient (Spearman, 1910) has been conducted for these non-parametric and ranked data (Field, 2009). The Spearman’s correlation coefficient uses two letters ( $\rho$ ) for population and ( $r_s$ ) for sample. It can be ranged from +1 to -1 where +1 represents strong positive relations and -1 represents strong negative relation.
- iv. Regression Analysis: A regression analysis has been performed to predict an outcome from one predictor variable (simple regression) or several predictor variables (multiple regressions). This tool is incredibly useful because it allows us to go a step beyond the data that we collected (Field, 2009). This study conducted multiple regressions to ascertain the prediction among management support, corporate entrepreneurship and network ties (Appendix D and E).

### ***Measure***

The original Hornsby et al., (2002) CEAI was developed to assess the organizational factors that encourage entrepreneurial behaviour of employees within a firm which consisted of 84 items. For this paper, 21 elements have been taken from Hornsby et al. (2002).

## **Results**

### ***Descriptive Analysis***

The Descriptive statistics (Appendix B) has been used to examine the survey which have been conducted on 350 people of various private firms in Bangladesh from which 225 (Male-145 and Female-80) were selected to analyse after data cleansing. Table 3 represents the frequencies of respondents in percentage.



**Table 3: Frequency Distribution**

Total Number of Respondents-225

Age		Frequency	Percent
Valid	25-35	135	60.0
	35-45	77	34.2
	45-55	13	5.8
	Total	225	100.0
Sex		Frequency	Percent
Valid	male	145	64.4
	female	80	35.6
	Total	225	100.0
Years in Current organization		Frequency	Percent
Valid	0-5	143	63.6
	5-10	70	31.1
	10-15	12	5.3
	Total	225	100.0
Total Experience in year		Frequency	Percent
Valid	5-10	145	64.4
	10-15	53	23.6
	15-20	27	12.0
	Total	225	100.0

Out of the 225 responses, the average years most respondents in their current organization is between 0-5 years and total experience is 5-10 years and 60% of them are from the age group of 35-45.

In answering negative questions which were set to verify the consistency of the responses, the respondents were found consistent with other questions responses. In answering their discretion in decision making on their own job, 78 respondents (34.7%) were indifferent whereas 79 (35.1%) respondents were in agreement. The same results can be seen in the authority distribution in needed level (Indifferent 37.3%, Agree 39.6%)

and top management's trust in employees (Indifferent 32.4%, Agree 35.6%). But in answering questions relative to administrative consistency and promotion the frequency of indifference are 44.9% and 38.7%, respectively, which were higher than other choices.

### ***Correlation Analysis***

The variables of this study are ordinal and in selecting correlation if all variables are ordinal then Spearman's rho is the only option (Bryman & Bell, 2003). Spearman's rho Correlation analysis has been done to identify the relationships between the factors of organizational culture and organizational performance. The following table represents the relationships between management supports with CE which was found moderately positive.

**Table 4: Correlation between CE and Mgt Supports**

			Mgt.s	C.E
Spearman's rho	Mgt.s	Correlation Coefficient	1.000	.419**
		Sig. (2-tailed)		.000
		N	225	225
	C.E	Correlation Coefficient	.419**	1.000
		Sig. (2-tailed)	.000	
		N	225	225

From the above table, the paper identified that management support has positive relationship with CE (.419) which means that increase of any one of them will increase the others in organization and are internally related in influencing the behaviour of employees.

And for understanding the interaction between network ties and entrepreneurial behaviour of organization, correlation has been done. The result of correlation showed a positive relationship between these two variables. This study transform the questions through computations and did the correlation where net work ties comprised of question number 3, 4, 5 and 18 and rest of the seventeen questions represented the corporate entrepreneurship. The following table is showing the Spearman's correlations between CE and network ties.

**Table 5: Correlations between Network ties and CE**

			net.t	Corp.e
Spearman's rho	net.t	Correlation Coefficient	1.000	.354**
		Sig. (2-tailed)		.000
		N	225	225
	Corp.e	Correlation Coefficient	.354**	1.000
		Sig. (2-tailed)	.000	
		N	225	225

\*\*Correlation is significant at the 0.01 level (2-tailed).

In Table 5, this paper found that the correlation between CE and network ties is (.354) which means if CE is practiced in organizations, there is a possibility of forming network ties among employees within and outside of organization.

### ***Factor Analysis***

After conducting the Spearman's Correlation test and recognizing that several variables are interrelated, a factor analysis has been conducted to understand the common characteristics and construct validity of the variables measured (Field, 2009). Both Kaiser-Meyer-Olkin and Bartlett's test of Sphericity show that factor analysis is the appropriate test to be conducted for this study as the results show the data sampled is adequate and variables examined are significant as  $p \leq .001$ . Exploratory factor analysis (EFA) aims to build on previous known theories, help in easier interpretation of numerical data, measure latent variables, test hypotheses and also minimize a group of correlated variables into a smaller set of factors by launching their common variances (Field, 2009; Landau and Everitt, 2004; Conway and Huffcutt, 2003). Factor analysis has been applied in this paper to measure whether the items in top management support dimension affect the entrepreneurial behavior and employees' intention to network ties of the private firms in Bangladesh.

From the factor analysis (in SPSS), top management support possesses .848 KMO which implies a great sample adequacy (Table 7). In factor analysis, all the components explain 63.834% of the cumulative variance of the twenty one variables examined (presented in table 7). All the components have eigenvalues of  $>1$ , effectively showing their significance for this research (Cattell, 1966).

**Table 6: KMO and Bartlett's Test for Management Support**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.848
Bartlett's Test of Sphericity	Approx. Chi-Square	3259.288
	df	406
	Sig.	0.000

**Table 7: Total Variance Explained for CE**

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.819	33.857	33.857	3.807	13.127	13.127
2	2.013	6.943	40.800	3.297	11.367	24.494
3	1.873	6.459	47.260	2.783	9.598	34.092
4	1.471	5.074	52.334	2.612	9.006	43.098
5	1.229	4.236	56.570	2.184	7.532	50.631
6	1.085	3.743	60.313	1.950	6.724	57.355
7	1.021	3.521	63.834	1.879	6.479	63.834
8	.976	3.364	67.198			
9	.833	2.872	70.070			
10	.757	2.612	78.105			
11	.478	1.647	89.790			
12	.419	1.444	91.233			
13	.387	1.335	92.569			
14	.360	1.241	93.810			
15	.309	1.067	94.877			
16	.297	1.024	95.901			
17	.258	.890	96.791			
18	.240	.826	97.617			
19	.221	.763	98.380			
20	.187	.644	99.024			
21	.149	.514	99.538			

Extraction Method: Principal Component Analysis.

A principal components factor analysis with varimax rotation was employed in this study. For the analysis of the result, only items with factor loadings of .40 or above were selected for any particular factor as the study's sample size was 225. After conducting principle component analysis (PCA) a common extraction tool used in the social sciences, followed by Varimax (orthogonal) rotation the main seven factors were reduced to a total of five factors (shown in table 8) representing a total cumulative variance of 63.834% of the data set. These five factors were reduced as some variables were too complex to interpret as they had relatively equal cross-loadings in different factors and other items did not load strongly on any factor (<0.40). The factor matrix shows that factor 1 loaded with nine items reflected the top management support in the organization for encouraging entrepreneurial behaviour (Hornsby et al., 2002), factor 2 loaded with eight variables reflected entrepreneurial behaviour and network ties' intentions, that is, the scope of employees in doing their job and related organizational structure.

**Table 8 : Rotated Component Matrix of CE**

	Component				
	1	2	3	4	5
Methods	.604				
Initiative	.764				
Boundary	.418			.464	
Network	.744				
s.conduct	-.447		-.472		
Control	.525				
Innovate	.543				
Creative	.681				
Failure	.483			.569	
Ability		.476			
Trust		.654			
Uncertainty				.712	
Risk			.631		
Flexibility			.664		
Resources				.682	
Experiences					.559
Promotion				.409	.614
Support			.569		
Reward			.729		
Recognition			.751		
Obstacles			.505		.451

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

### ***Reliability Analysis***

Cronbach's alpha value test was used to assess the readability of CE and network ties and was statistically tested for the psychometric properties, validity and reliability. Cronbach's alpha shows a numerical representation of reliability (Field, 2009; Garth, 2008; Cronbach, 1951). For CE the Cronbach's alpha value was  $\alpha = 0.811$  (shown in Table 9) and for Network ties the Cronbach's alpha value was  $\alpha = 0.734$  (shown in Table 10). According to these results and prior research (Zahra & Covin, 1995; Zahra, 1993) conducted if the Cronbach's alpha value of a certain scale is equal to or above the value of 0.70 it is reliable for analysis (Field, 2009; Garth, 2008; Cronbach, 1951), therefore the constructs hold great internal reliability.

**Table 9: Cronbach's Alpha of CE**

<b>Reliability Statistics</b>		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.811	.828	17

**Table 10: Cronbach's Alpha of N.ties**

<b>Reliability Statistics</b>		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.734	.751	4

### ***Regression Analysis***

This paper conducted linear multiple regression to find out the interplay between entrepreneurial behaviour of organization, internal network ties and management support. Since the characteristics of network structure depend on the relationships of the member themselves and with organization (Granovetter, 1992), the basis for the regression procedure was that the entrepreneurial behaviour of the organization could predict the level of organizational performance. These relationships may vary in the degree of trust, obligation, and dependence (Burt, 2000). For this purpose, the study uses the questionnaire (Appendix B) and identifies four questions (3, 4, 5 and 11) which may represent the network ties and rest of the twenty five elements have been used to represent CE. Table 11 and 12 represents the impact of other variables on the variables which explain the intention of the organization regarding the need of network. The two  $R^2$  explain the percentages (41.5%, 24.8%) of impact on the network ties and CE, respectively.

**Table 11: Regression analysis of CE (Model Summary<sup>b</sup>)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.654 <sup>a</sup>	.428	.415	4.284	.428	32.787	5	219	.000

a. Predictors: (Constant), Mgt.s

b. Dependent Variable: CE

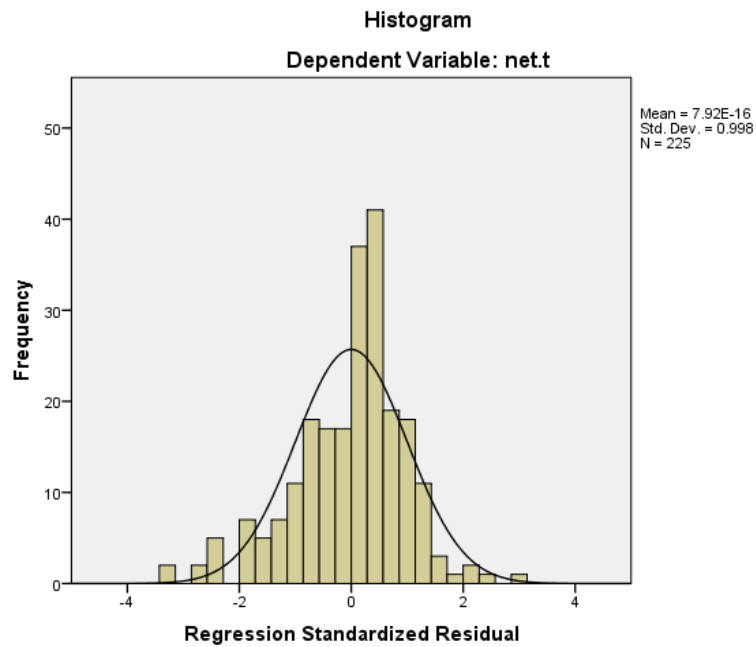
**Table 12: Regression analysis of Network ties (Model Summary<sup>b</sup>)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.498 <sup>a</sup>	.248	.244	.793	.248	73.454	1	223	.000

a. Predictors: (Constant), Corp.e

b. Dependent Variable: network

**Figure 1: Histogram of Network Ties**



This paper created network ties variable by computing these four variables through transformation and calculated an overall impact of corporate entrepreneurship and network ties which also represented a strong fit ( $R^2 = .248$ ). The overall regression analysis of all the factors have impact on the dependent variables with a significance level of .000 because the associated significance value of that F-ratio for these data (F are 73.454 and 32.787, respectively) are significant at  $p < .001$  (because the value in the column labelled Sig. is less than .001). Therefore, we can conclude that our regression model results in significant prediction of network ties and CE.

## **Discussion**

### **Hypothesis 1: Top management support and Entrepreneurial behaviour**

Analysis of the survey data demonstrated that top management support can be a critical aspect of the entrepreneurial behaviour of employees in private firms of Bangladesh. In search of the association between management support and entrepreneurial behaviour, this paper found a moderately strong relationship (41.9%). This establishes the acceptance of the hypothesis 1 that there is an association of management support and entrepreneurial behaviour of employees in the organization. So management support can enhance or constrain the entrepreneurial behaviours of employees. By improving management support, employees can spur their innovative skill and new ideas which may improve their living standard which is much needed in emerging economy (Alstroom & Si, 2015; George et al., 2015; Hughes & Mustafa, 2015).

### **Hypothesis 2: Corporate entrepreneurship and Network ties**

Previous literature put focus on the need of corporate entrepreneurship in building network ties (Nahpiet & Ghoshal, 1998) and appreciated the entrepreneurial behaviour of managers in enhancing network ties (Granovetter, 1973). The characteristics of network ties comprise the number and strength of relationships between organization and its members (Granovetter, 1992). These relationships can fluctuate on the basis of trust, obligation and dependence (Burt, 2000). The data from this study supports this view to understand the interplay between them. This paper found that CE may not only increase the network ties, but also decrease it by constraining through structure (Appendix E) which contradicts previous literature (Oh et al, 2004; Stam & Elfring, 2008). This paper used few elements of CEAI which represent trust and scope of networking for predicting the network ties. This study found that the scope of sharing information across the departments for new idea generation have a strong relationship of increasing network ties (.539) which has been supported by previous literature (Chung & Coleman, 1988) and thus create scope for new learning and approaches (Kotter & Haskett, 1992; Wilkins & Dyer, 1988) which increase human capital et al., (Becker, 1964). The study found the overall positive relationship (Table 5) which conform hypothesis 2. The enhancement of



network capacity thus need organizational support (Kelly et al., 2009; Dess et al., 2003) and entrepreneurial behaviour of the organizations may create the path through network development and information sharing (Starr & MacMillan, 1990).

### Conclusion

The central focus of this paper was to find whether management support can influence CE and the relationship between entrepreneurial behaviour of employees and network ties in a developing country's set up. This paper argued that even though CE treated as a strategic autonomous behaviour, it depends on the managerial control which is shaped by top management. This paper also created scope for investigating top management support, CE, and network ties in a single frame which may be used in both developed and developing countries.

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## Appendices

### Appendix A: Survey Questionnaire with Sources

	Statements	Source/Sources
1	My organization is quick to use improved work methods	Hornsby et al. (2002, 2014)
2	In my organization , developing one's own idea is encouraged for the improvement of the organization	Hornsby et al. (2002, 2014)
3	There is considerable desire among people in the organization for generating new ideas without regard to crossing departmental or functional boundaries	Hornsby et al. (2002, 2014)
4	People are encouraged to talk to workers in other departments of this organization about ideas for new projects	Hornsby et al. (2002, 2014)
5	The control system promotes strict conformance to standards of conduct regarding how employees interact with customers, suppliers, outside parties	Hornsby et al. (2002, 2014)
6	The management control system provides sufficient room for individual initiative and personal agency	Hornsby et al. (2002, 2014)
7	Employees are given lots of encouragement to innovate in their jobs	Hornsby et al. (2002, 2014)
8	This organization provides the chance to be creative and try my own ways of doing the job	Hornsby et al. (2002, 2014)
9	People are encouraged to try new things even if their efforts completely fail	Hornsby et al. (2002, 2014)
10	This organization provide the chance to do something that makes use of my abilities	Hornsby et al. (2002, 2014)
11	Top management displays a high level of trust in organization's employees	Hornsby et al. (2002, 2014)
12	The organization ready to take large, bold decisions despite uncertainties of the outcomes	Hornsby et al. (2002, 2014)
13	The term 'risk taker' is considered a positive attribute for people in my work area	Hornsby et al. (2002, 2014)
14	Senior managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track	Hornsby et al. (2002, 2014)
15	Money is often available to get new project ideas off the ground	Hornsby et al. (2002, 2014)
16	Many top managers have been known for their experience with the innovation process	Hornsby et al. (2002, 2014)
17	Promotions usually follows the development of new and innovative ideas	Hornsby et al. (2002, 2014)
18	Upper management is aware and very receptive to my ideas and suggestions	Hornsby et al. (2002, 2014)
19	The rewards I receive are dependent upon my work on the job	Hornsby et al. (2002, 2014)
20	My supervisor will give me special recognition if my work performance is specially good	Hornsby et al. (2002, 2014)
21	My manager help me to get my work done by removing obstacles	Hornsby et al. (2002, 2014)

**Survey Questionnaire**

Age	
Sex	
Name of the company	
Years in organization	
Years in job	
Industry	

A. Please rate the statements:

1= strongly disagree, 2=disagree, 3= Indifferent, 4= agree, 5= strongly agree.

<b>Statements</b>		1	2	3	4	5
1	My organization is quick to use improved work methods					
2	In my organization , developing one's own idea is encouraged for the improvement of the organization					
3	There is considerable desire among people in the organization for generating new ideas without regard to crossing departmental or functional boundaries					
4	People are encouraged to talk to workers in other departments of this organization about ideas for new projects					
5	The control system promotes strict conformance to standards of conduct regarding how employees interact with customers, suppliers, outside parties					
6	The management control system provides sufficient room for individual initiative and personal agency					
7	Employees are given lots of encouragement to innovate in their jobs					
8	This organization provides the chance to be creative and try my own ways of doing the job					
9	People are encouraged to try new things even if their efforts completely fail					
10	This organization provide the chance to do something that makes use of my abilities					
11	Top management displays a high level of trust in organization's employees					
12	The organization ready to take large, bold decisions despite uncertainties of the outcomes					
13	The term 'risk taker' is considered a positive attribute for people in my work area					

14	Senior managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track					
15	Money is often available to get new project ideas off the ground					
16	Many top managers have been known for their experience with the innovation process					
17	Promotions usually follows the development of new and innovative ideas					
18	Upper management is aware and very receptive to my ideas and suggestions					
19	The rewards I receive are dependent upon my work on the job					
20	My supervisor will give me special recognition if my work performance is specially good					
21	My manager help me to get my work done by removing obstacles					

I have answered all the questions on my own responsibility

I am aware about the issues which are mentioned in the questionnaire

Name:

Signature:

Date:

## Appendix B: Descriptive Statistics

### Statistics

		Industry	Age	Sex	Years in org	Total experience
N	Valid	225	225	225	225	225
	Missing	0	0	0	0	0
Mean		3.08	1.46	1.36	1.42	1.48
Median		3.00	1.00	1.00	1.00	1.00
Std. Deviation		1.177	.604	.480	.593	.701



**Industry**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	telco	20	8.9	8.9	8.9
	fmcg	50	22.2	22.2	31.1
	garments	84	37.3	37.3	68.4
	media	34	15.1	15.1	83.6
	pharmaceuticals	37	16.4	16.4	100.0
	Total	225	100.0	100.0	

**Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-35	135	60.0	60.0	60.0
	35-45	77	34.2	34.2	94.2
	45-55	13	5.8	5.8	100.0
	Total	225	100.0	100.0	

**Years in org**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-5	143	63.6	63.6	63.6
	5-10	70	31.1	31.1	94.7
	10-15	12	5.3	5.3	100.0
	Total	225	100.0	100.0	

**Appendix C: Test of Normality****Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
methods	.285	225	.000	.800	225	.000
initiative	.360	225	.000	.741	225	.000
boundary	.374	225	.000	.756	225	.000
network	.289	225	.000	.856	225	.000
s.conduct	.288	225	.000	.859	225	.000
control	.270	225	.000	.858	225	.000
innovate	.348	225	.000	.781	225	.000
creative	.346	225	.000	.787	225	.000
failure	.325	225	.000	.810	225	.000
ability	.338	225	.000	.807	225	.000
trust	.303	225	.000	.828	225	.000
uncertainty	.327	225	.000	.801	225	.000
risk	.344	225	.000	.795	225	.000
flexibiity	.341	225	.000	.817	225	.000
resources	.322	225	.000	.812	225	.000
experiences	.308	225	.000	.839	225	.000
promotion	.251	225	.000	.879	225	.000
support	.298	225	.000	.840	225	.000
reward	.312	225	.000	.834	225	.000
recognition	.285	225	.000	.848	225	.000
obstacles	.340	225	.000	.800	225	.000
a. Lilliefors Significance Correction						

**Appendix D: Regression Analysis of CE and Management Support****Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.654 <sup>a</sup>	.428	.415	4.284	.428	32.787	5	219	.000

a. Predictors: (Constant), Mgt.s

b. Dependent Variable: CE

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3008.038	5	601.608	32.787	.000 <sup>b</sup>
	Residual	4018.424	219	18.349		
	Total	7026.462	224			

a. Dependent Variable: CE

b. Predictors: (Constant), Mgt.s

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4.948	3.968		1.247	.214	-2.872	12.767
	Mgt.s	.414	.086	.482	4.839	.000	.245	.582

Variable: CE

## Appendix E: Regression Analysis of CE and Network Ties

### Regression analysis of CE and Network Ties Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.470 <sup>a</sup>	.221	.218	1.66805	.221	63.346	1	223	.000

a. Predictors: (Constant), Corp.e

b. Dependent Variable: net.t

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	176.254	1	176.254	63.346	.000 <sup>b</sup>
	Residual	620.475	223	2.782		
	Total	796.729	224			

a. Dependent Variable: net.t

b. Predictor: (Constant), Corp.e

### Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	5.209	1.037		5.021	.000	3.165	7.253
	Corp.e	.095	.012	.470	7.959	.000	.071	.118

a. Dependent Variable: net.t