

## HOW DO AGE, TYPE, SIZE AND NATURE DETERMINE FIRMS' ENTREPRENEURIAL ORIENTATION?

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**Abstract:** *This study clarifies the association of entrepreneurial orientation with the diverse characteristics of a firm. Descriptive, cross sectional research design has been adopted in a survey of 457 key informants from Indian organizations. Second order CFA has been used for the measurement of the uni-dimensional construct of entrepreneurial orientation. Chi square test of independence assesses the association the degree of entrepreneurial orientation with the diverse characteristics of a firm. The findings reveals that extent of entrepreneurial posture adopted by a firm is not associated with the age of firm and nature of the industry. However some degree of association of the degree of entrepreneurial orientation with the size of firm and type of organization has been supported by the study but the strength of these associations is not very strong. The study has important implications for managers/ entrepreneurs. As the degree of entrepreneurial orientation is not strongly associated with the diverse characteristics of a firm, the policy makers of any kind of firm should not feel constrained while adopting entrepreneurial posture.*

**Key Words:** *Entrepreneurial orientation, Chi square test of independence, Dimensionality of entrepreneurial orientation.*

**JEL Classification:** L26, C12, C16

### INTRODUCTION

Entrepreneurial orientation has emerged as a major construct in the field of entrepreneurship and strategic management literature. Scholars have theorized that firm-level entrepreneurial behaviour - a propensity to engage in relatively high levels of risk taking, autonomy, innovativeness, competitive aggressiveness and proactiveness - is positively associated with organizational profitability and growth (e.g. Covin & Slevin, 1989; Lumpkin & Dess, 1996; Zahra *et al.*, 2002; Antoncic & Hisrich, 2004; Krauss *et al.*, 2005; Clercq *et al.*, 2010; Soininen *et al.*, 2012). However, the magnitude of this relationship seems to vary across studies. While some studies have found that firms that adopt a strong entrepreneurial orientation perform much better than firms that do not (e.g. Covin & Slevin, 1988; Wiklund & Shepherd, 2003; Hult *et al.*, 2004; Krauss *et al.*, 2005; Stam & Elfring, 2008; Kreiser & Davis 2010; Grimmer *et al.*, 2013), other studies reported lower correlations between entrepreneurial orientation and firm performance (e.g. Zahra, 1991; Dimitratos *et al.*, 2004; William & Sinkula 2009). Some studies were unable to find a significant relationship between entrepreneurial orientation and business performance (e.g. Hart, 1992; Covin *et al.*, 1994; George *et al.*, 2001; Tang & Koveos, 2004). Some studies have shown that the relationship between entrepreneurial orientation and business performance is not that straightforward; rather it is shaped like inverted U (e.g. Bhuian *et al.*, 2005; Tang *et al.*, 2008) which means that a very high or very low degree of entrepreneurial orientation may not always be desirable in certain organizational, market and structural conditions.

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Though the importance and impact of entrepreneurial orientation on the performance of a business has been widely studied, the linkage of entrepreneurial orientation with the diverse characteristics of a firm has not received the considerable attention of researchers. It is quite possible that the firms of different kinds might differ in their demonstrated level of entrepreneurial behavior. Small firms might not possess sufficient advanced technological capabilities and knowledge resources required for innovations. Young firms may exhibit more entrepreneurial orientation in their desire to become big. Manufacturing firms might have higher inclination for entrepreneurial behavior, in order to achieve full capacity utilization, to bring continuous differentiation in products and processes, and to better serve the customer's needs with high quality and unique products. It is quite possible that the inclination towards entrepreneurial behavior may fade with age of the organization.

In order to better understand the importance and impact of the pursuit of entrepreneurial behavior, it become necessary to refine our understanding regarding the relationship of entrepreneurial orientation with the organizational contexts. Present study is an endeavor to fill this gap by answering following research question:

How do age, type, size and nature determine firms' entrepreneurial orientation?

## **THEORETICAL FRAMEWORK**

Entrepreneurial Orientation has often been conceptualized as *the extent to which a firm showcases innovativeness, demonstrates proactiveness, prefers risk taking, shows competitive aggressiveness and allows autonomy to its employees* (Miller, 1983; Covin & Slevin, 1989; Naman & Slevin, 1993; Lumpkin & Dess, 1996; Morris *et al.*, 2007; Covin & Lumpkin, 2011; Gupta & Pandit, 2012; Vij & Bedi, 2012; Kraus *et al.*, 2012; Kreiser *et al.*, 2013; Grunhagen *et al.*, 2014).

It reveals a unique combination of organizational strategy, culture, and structure, in response to the environment, for achieving higher organizational performance. According to Miller (1983), entrepreneurial firms, in pursuit of environmental opportunities, seek to generate relatively high returns through somewhat risky ventures and demonstrate a tendency to proactively engage in product market innovation by being first to market with new products, technologies, or processes so as to exploit environmental opportunities. Covin and Slevin (1989) argue that an organization's entrepreneurial orientation is the summation of the extent to which top managers are inclined to take business related risks, to favour change and innovation in order to obtain a competitive advantage for their firm, and to compete aggressively with other firms. They suggest that the strategic posture of a firm can vary anywhere on a continuum from a fully conservative orientation to a completely entrepreneurial one, based upon the operating management philosophy of the firm's top management. They concluded that firms with a propensity to engage in relatively high levels of risk taking, innovative, and proactive behaviour have *entrepreneurial orientation* while those engaging in relatively low levels of these behaviour have *conservative orientation*.

Wang (2008) has considered entrepreneurial orientation as a proclivity of a firm's top management to assume risks, to demonstrate creative behaviour, and to showcase proactive and aggressive behavior towards rivals. However, Stevenson and Jarillo (1990) suggest that an entrepreneurial orientation is not only created or imposed by firm's top management rather it is to be exhibited by multiple layers of management. According to Mintzberg (1973)

entrepreneurial orientation is the reflection of strategic posture and is deeply related with strategy making process. Entrepreneurial orientation reflects how business is to be organized.

Entrepreneurial orientation has also been conceptualized as a process construct (Lumppkin & Dess, 1996), which is concerned with the behavior of manager while realizing organizational objectives i.e. 'In what way do entrepreneurs go through the entrepreneurial process?', 'How do entrepreneurs behave while trying to be entrepreneurially different from others in the course of realizing their entrepreneurial ambition?', and 'How entrepreneurial activities are to be implemented?' Entrepreneurial orientation not only reflects the methods, policies and processes adopted by the managers in their decision making, but also manifests the entrepreneurial behavior of the firm.

Entrepreneurial orientation is a contextual phenomenon (Dess *et al.*, 1997; Yusuf, 2002; Chang *et al.*, 2011; Grande *et al.*, 2011) and the degree of entrepreneurial orientation, demonstrated by a firm, is often affected by the environmental context in which a firm operates eg. according to Lumpkin and Dess (2001), degree of proactive behavior adopted by a firm is often affected by the stage of industry life cycle and the firm's which are at early stage of their industry life cycle are benefited more by employing higher level of entrepreneurial behavior. Schepers, *et al.*, 2014 have stressed upon the type of firm while measuring the entrepreneurial orientation of a firm and its impact on the performance of a firm. According to Huang and Wang (2013), the rate of change in the external environment of a firm effects the orientation of firm. In an environment, where conditions changes rapidly and opportunities emerges continuously, organizations which anticipate future needs, took business related chance, introduces new products and services and keen to adjust its marketing and management activities to the changing market needs, are more likely to gain over their competitors. Rauch *et al.*, 2009 have affirmed the influence of national culture, size of a firm, and its technology intensity on the strength of entrepreneurial orientation – business performance relationship. Studies such as: Zahra *et al.*, 1999; Lee & Lim, 2009; Tang & Tang, 2012; have considered organizational size as a predictor of entrepreneurial behavior. Organizational resources have also been considered as one of the factor affecting the strategic posture of a firm (eg. Wiklund & Shepherd, 2005; Moreno & Casillas, 2008; Liu *et al.*, 2009; Frank *et al.*, 2010). Kreiser and Davis (2010) have demonstrated the impact of organizational structure on the degree of entrepreneurial behavior adopted by a firm. According to Vij and Farooq, (2014) the strategic posture adopted by a firm may be impacted by the organizational size, age and type. Based upon above arguments, we propose the following null hypotheses to be tested to answer the research question:

- H<sub>1</sub>: Age of firm is not significantly associated with the degree of entrepreneurial orientation.
- H<sub>2</sub>: Size of firm (in terms of number of employees) is not significantly associated with the degree of entrepreneurial orientation.
- H<sub>3</sub>: Size of firm (in terms of number of annual turnover) is not significantly associated with the degree of entrepreneurial orientation.
- H<sub>4</sub>: Nature of firm is not significantly associated with the degree of entrepreneurial orientation.
- H<sub>5</sub>: Type of organization is not significantly associated with the degree of entrepreneurial orientation.

## METHODOLOGY

For this study, we have adopted a descriptive and cross sectional research design. A purposive sample of 500 senior level managers (key informants) of Indian companies, having their registered office in north Indian, has been used for data collection. Out of the key informants from 500 companies, after weeding out the non serious and incomplete responses, 457 responses were finally selected for analysis. The sample profile is shown in Table 1.

**Table 1**  
**Sample Characteristics**

<i>Sr. No.</i>	<i>Parameter</i>	<i>Description</i>	<i>Absolute No.</i>	<i>%</i>
1	Type of Organization	Listed	201	43.98%
		Non- Listed	256	56.02%
		Total	457	100.00%
2	Nature of Industry	Manufacturing	312	68.27%
		Non- Manufacturing	145	31.73%
		Total	457	100.00%
3	Age of your organization	More than 15 years	368	80.53%
		Less than 15 years	89	19.47%
		Total	457	100.00%
4	Annual Turnover	More than Rs. 500 crores	155	33.92%
		Between Rs. 50-500 crores	302	66.08%
		Total	457	100.00%
5	Number of employees	More than 250	342	74.84%
		Upto 250	115	25.16%
		Total	457	100.00%
6	Investment made in the company	More than 10 crores	455	99.56%
		Upto 10 crores	2	0.44%
		Total	457	100.00%

*Source:* Primary Data

## Measures

To assess the entrepreneurial orientation of a firm, uni-dimensional view of entrepreneurial orientation has been considered. A twenty eight item seven point scale of entrepreneurial orientation has been developed, where 7 items reflect innovativeness, 5 items measure risk taking, 6 items highlight proactiveness, 5 items indicate competitive aggressiveness and 5 items measure autonomy. Entrepreneurial orientation has been operationalized in terms of dimensions proposed by of Covin & Slevin (1989) and Lumpkin & Dess, (1996). Items of the scale have been sourced from various studies.

## RESULTS AND ANALYSIS

Analysis follows a two-step procedure: Assessing the validity of the entrepreneurial orientation construct through confirmatory factor analysis (CFA) by using AMOS 19.0, followed by assessing the association of entrepreneurial orientation with different demographics of an organization through chi square test. For the measurement of entrepreneurial orientation, a reflective measurement theory has been adopted by considering entrepreneurial orientation as a second order CFA. All twenty eight items, firstly loaded on five independent constructs in the first-order CFA and then these five dimensions loaded on the one single dimension i.e. entrepreneurial orientation (Refer Figure 1).

Figure 1: Uni-dimensional view of the construct of entrepreneurial orientation



The results of uni-dimensional model of entrepreneurial orientation reveal normed chi-square = 2.48; GFI = 0.879, AGFI = 0.858; NFI = .914; CFI = .947; RMR = 0.161; and RMSEA = 0.057. RMR exceeds the cutoff of .08. GFI and AGFI fall below the guidelines of .90. The standardized residuals and modification indices were investigated to find the reasons for poor model fit.

Based upon these insights some modification has been made in the model. Items such as AU\_3, AU\_5 and RT\_5 have been dropped from the further analysis due to their inability to capture the true meaning of underlying constructs. Items such as IN\_4 and PR\_4 have been dropped, as these items are highly correlated with the measures of some other constructs. The relationship between IN\_2 and IN\_3, CA\_4 and CA\_5 and the error terms of the first order construct risk taking and autonomy has been assessed by introducing a sign of covariance between these items.

The results of revised uni-dimensional model of entrepreneurial orientation reveal that all the goodness of fit indices eg. GFI, AGFI, NFI and CFI are above the cutoff of .90 (refer Table 2), badness of fit indices eg. RMR and REMSA are less than the threshold of .08 (refer Table 2),

Normed chi-square has been observed as 1.57. All these indices reveal a good model fit. Further, all the standardized regression weights (of all first order constructs - refer Table2 and all individual items - refer Table 3) are above the threshold of .50, which supports the claim that the instrument is capable in providing the accurate interpretation of underlying uni-dimensional construct of entrepreneurial orientation. An AVE score of .592, reflect the high amount of shared or common variance and affirms the claim that the amount of variance captured by the scale is relatively higher than the amount of measurement error. Although various dimensions of entrepreneurial orientation are unique in nature but the CR of .872 supports the high positive correlation between the different dimensions of entrepreneurial orientation and proves the convergence of various dimensions towards the common meaning of entrepreneurial orientation.

**Table 2**  
**Psychometric properties of the Uni-dimensional View of Entrepreneurial Orientation**

Construct	Parameter	Index	Threshold	Dimension	SRW	Threshold	AVE	CR
Entrepreneurial Orientation (uni-dimensional View)	Chi Square	348.87	NA	Innovativeness	.923	At least 0.50	.592	.872
	Degree of Freedom	222						
	Normed Chi Square (Chi-square/ df)	1.57	Less than 3.0	Proactiveness	.884	At least 0.50		
	GFI	.937	At least 0.90	Risk Taking	.505	At least 0.50		
	AGFI	.922	At least 0.90					
	NFI	.954	At least 0.90	Competitive Aggressiveness	.898	At least 0.50		
	CFI	.983	At least 0.90					
	RMR	.065	Less than .08	Autonomy	.519	At least 0.50		
	REMSA	.035	Less than .08					

To assess the association between the degree of entrepreneurial orientation with the diverse characteristics of a firm (age, size, type and nature), chi square test for independence has been employed. As Chi square test for independence actually assesses the degree of association between the two categorical variables, the degree of entrepreneurial orientation (a continuous variable) has been assessed by classifying the summated score of entrepreneurial orientation into three categories i.e. low degree of entrepreneurial orientation, Moderate degree of entrepreneurial orientation and high degree of entrepreneurial orientation (Refer Table 4). A high degree of entrepreneurial orientation indicates the proclivity of the firm towards entrepreneurial behavior i.e. a strong inclination of firm's top management to "engages in product marketing innovation, undertake somewhat risky ventures, and being first to come up with proactive innovations, beating competitors to the punch" (Miller, 1983). A low degree indicates the adoption of conservative behavior i.e. propensity of a firm to engage in relatively low levels of innovativeness, proactiveness, risk taking, competitive aggressiveness and

autonomy. Moderate score of entrepreneurial orientation indicates a moderate approach of the organization in adoption of entrepreneurial behavior.

**Table 3**  
**Standardized Regression Weights of Entrepreneurial Orientation Items**

Construct		Items	Source	Item Code	SRW
Entrepreneurial Orientation	Innovation	In general, the top managers of my business unit....	Covin & Slevin, 1989	IN_1	0.75
		Have a strong emphasis on R&D, technology leadership and innovations.			
		Have introduced very many new lines of products or services in last 5 years	Covin & Slevin, 1989	IN_2	0.76
		Invest heavily in new product development.	Covin & Slevin, 1989	IN_3	0.86
		Is willing to try new ways of doing things and seek unusual, novel solutions**	Wang, 2008	IN_4	NA
		Emphasizes on developing new technology.	Yang <i>et al.</i> , 2007	IN_5	0.81
		Invests heavily in process improvement.	Yang <i>et al.</i> , 2007	IN_6	0.82
		Discourage employees to think and behave in original and novel ways. (Reverse coded)	Wang, 2008	IN_7	0.63
	Proactiveness	Is very often the first business to introduce new products/ services, administrative techniques, operating technologies etc.	Covin & Slevin, 1989	PR_1	0.65
		Spends time discussing customers' future needs.	Jaworski & Kohli, 1993	PR_2	0.80
		Actively collects and evaluates information on consumer needs & preferences.	Gonzalez-Benito <i>et al.</i> , 2009	PR_3	0.80
		Actively collects and evaluates information on technological developments.**	Zhao <i>et al.</i> , 2011	PR_4	NA
		Actively collects & evaluates information on interest rate, exchange rate, industry growth rate, and inflation rate etc.	Matsuno <i>et al.</i> , 2002	PR_5	0.71
		Always engage in ongoing, active search for big opportunities.	Soininen <i>et al.</i> , 2011	PR_6	0.75
	Risk Taking	A strong inclination for high risk projects (with chances of very high returns).	Covin & Slevin, 1989	RT_1	0.83
		Believe that owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives.	Covin & Slevin, 1989	RT_2	0.90
		Typically adopts a 'Bold and Aggressive Posture', in order to maximize the probability of exploiting potential opportunities.	Covin & Slevin, 1989	RT_3	0.87
		Implement plans only if they are very certain that these will work. (Reverse Coded)	Matsuno <i>et al.</i> , 2002	RT_4	0.85
		Recognize and reward the risk takers, whether they are successful or not.**	Soininen <i>et al.</i> , 2011	RT_5	NA
	Autonomy	Believe that individuals and/or teams pursuing business opportunities can take decisions on their own without constantly referring to their supervisor(s).	Hughes & Morgan, 2007	AU_1	0.84
		Encourage individuals and/or teams pursuing business opportunities to proceed without having to justify their action at every stage of development.	Lumpkin <i>et al.</i> , 2009	AU_2	0.89

		Encourage individuals and/or teams to think "Outside the Box" when making decisions.**	Lumpkin <i>et al.</i> , 2009	AU_3	NA
		Supports the efforts of individuals and/or teams that work autonomously.	Lumpkin <i>et al.</i> , 2009	AU_4	0.83
		Encourages employees to make decisions on their own.**	Hughes & Morgan, 2007	AU_5	NA
	Competitive Aggressiveness	Regularly benchmarks its activities against the best players in the industry.	Matsuno <i>et al.</i> , 2002.	CA_1	0.88
		Adopts innovative methods to beat the competition.	Matsuno <i>et al.</i> , 2002.	CA_2	0.86
		Engages in competitive intelligence to generate actionable foresight for strategy making.	Zahar <i>et al.</i> , 2002	CA_3	0.79
		Adopts an aggressive attitude toward our competitors.	Lumpkin & Dess, 2001	CA_4	0.80
		Indulge in competitor response modelling and war gaming exercises.	Zahar <i>et al.</i> , 2002	CA_5	0.80

\*\* Items dropped

Table 5 provides the results for the association of the degree of entrepreneurial orientation with diverse characteristics of a firm. Chi square statistic of 1.259 with a p-value of 0.53 has been observed for the association between the age of a firm and degree of entrepreneurial orientation. Inspection of chi square critical value table - at 5 percent level of significance with 2 degrees of freedom, reveals a cutoff of 5.99 for the rejection of null hypothesis of independent relationship. Since the chi square statistic of 1.259 with a p-value of 0.53 does not fall under the critical region of rejection so the null hypothesis of no association between the age of a firm and the degree of entrepreneurial orientation cannot be rejected at 5 percent level of significance. The evidence produced by the data suggests that the age of a firm and the degree of entrepreneurial orientation, are independent of each other.

**Table 4**  
**Classification of entrepreneurial orientation into different categories**

Parameter	Degree of Entrepreneurial Orientation	Score	Range of summated score of Entrepreneurial Orientation
Entrepreneurial Orientation	Low	Upto 80.00	43 to 152
	Moderate	80.01 to 120.00	
	High	More than 120.00	

The cross classification table for the association between size of firm - reflected through annual turnover and degree of entrepreneurial orientation produces a chi squared statistic of 16.08, which was large enough to reject the null hypothesis of independent relationship at 5 percent level of significance. Though the chi square test of independence suggest significant association between the annual turnover and degree of entrepreneurial orientation, but an index of 0.188 for 'Cramer V' implies a weak form of association between these variables.

The results of chi square test of independence regarding size of firm in terms of number of employees and degree of entrepreneurial orientation (Refer Table 5) affirms significant association between these variables. The data yields a chi squared statistic of 13.27, which exceed the critical value of 5.991 and provides sufficient evidence of significant association



between these variables. However, the strength of the association remains low (Cramers V=0.17).

**Table 5**  
**Results of Chi Square test of Independence**

Association between Age of firm and Degree of entrepreneurial orientation										
Parameter	Classification	Degree of entrepreneurial orientation			Total	Chi Square statistics	Degree of Freedom	Critical Value of Chi Square	p-value	Cramers V Statistic
		Low	Moderate	High						
Age	More than 15 Years	22	138	208	368	1.259	2	5.99	.533	.052
	Upto 15 Years	4	29	56	89					
Total		26	167	264	457					
Association between Size of firm in terms of annual turnover and Degree of entrepreneurial orientation										
Annual Turnover	More than Rs. 500 Crores	1	49	105	155	16.08	2	5.99	.000	.188
	Upto Rs. 500 Crores	25	118	159	302					
Total		26	167	264	457					
Association between Size of firm in terms of No. of employees and Degree of entrepreneurial orientation										
No. of Employees	More than 250	12	123	207	342	13.27	2	5.99	.001	.170
	Upto 250	14	44	57	115					
Total		26	167	264	457					
Association between nature of industry and Degree of entrepreneurial orientation										
Nature of Industry	Manufacturing	17	116	179	312	0.236	2	5.99	.889	.023
	Non-manufacturing	9	51	85	145					
Total		26	167	264	457					
Association between type of organization and Degree of entrepreneurial orientation										
Type of Organization	Listed	18	76	107	201	8.16	2	5.99	.017	.134
	Non-listed	8	91	157	256					
Total		26	167	264	457					

Contingency table for the association between the nature of industry and degree of entrepreneurial orientation reveal a chi square statistic of 0.236 with a p-value of 0.889, which was not large enough to reject the null hypothesis of independent relationship. The degree of entrepreneurial orientation reflected by a firm remains invariant in both manufacturing and non-manufacturing organizations.

The chi square test of independence regarding association between the type of organization (i.e. listed vs. non-listed) and degree of entrepreneurial orientation produces a chi square statistic of 8.16, which was large enough to reject null hypothesis at 5 percent level of significance. The evidences generated by data suggest some amount of association between type of organization and degree of entrepreneurial orientation but the value for Cramer's V (0.134) indicates a low degree of association between these variables.

Table 6 summarizes the results for hypotheses testing.

**Table 6**  
**Results of Hypotheses Testing**

Hypothesis	Description	Result
H <sub>1</sub>	Age of firm is not significantly associated with the degree of entrepreneurial orientation	Accepted
H <sub>2</sub>	Size of firm (in terms of number of employees) is not significantly associated with the degree of entrepreneurial orientation	Rejected
H <sub>3</sub>	Size of firm (in terms of number of annual turnover) is not significantly associated with the degree of entrepreneurial orientation	Rejected
H <sub>4</sub>	Nature of firm is not significantly associated with the degree of entrepreneurial orientation.	Accepted
H <sub>5</sub>	Type of organization is not significantly associated with the degree of entrepreneurial orientation.	Rejected

## DISCUSSION AND IMPLICATIONS

The results of the present study reveals that there is no predictable relationship exist between age of a firm and the kind of strategic posture (entrepreneurial orientation) adopted by a firm. Young firms can be conservative in their strategic posture; whereas old firms can go for an entrepreneurial posture and vice- versa. Size of firm is significantly associated with the degree of entrepreneurial orientation. Large firms, both in terms of annual turnover and number of employees differ but not very significantly, from small firms - while introducing new product and services, adopting novel practices, undertaking risky alternatives, assuming a forward looking perspective and demonstrating an aggressive behavior toward their rivals. Finding discloses an insignificant association between the nature of industry and the degree of entrepreneurial orientation. Study suggests that both manufacturing and non-manufacturing firms can adopt entrepreneurial posture with equal zeal and enthusiasm. Study reveals a significant association between the type of organization and degree of entrepreneurial orientation. Listed firms differ but not very significantly from non listed firms while exhibiting entrepreneurial behavior, may be because of differences in their legal compliances and governance pattern.

Study further implies that firms of all genres should consider being actively involved in entrepreneurial behavior. The degree of entrepreneurial orientation is not significantly associated with the diverse characteristics of a firm. The adoption of entrepreneurial posture is equally feasible for the firms of different age groups, different sizes, different types and different nature. The policy makers of any kind of firm should not constrained themselves while adopting a posture which is highly entrepreneurial. Study also advances the theories of entrepreneurship by providing a uni-dimensional validated scale for entrepreneurial orientation. Managers of all kind of firms can draw insights from these results and better decide the strategic postures of their firm.

## LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Though the findings of the study are based on input from Indian context and no generalization of the results is claimed, the results may be relevant for other emerging economies having similar business environment as that of India. Secondly the results are based on perception of individual key respondent. Response of a single respondent could be biased and may not present the true picture of the strategic posture adopted by the firm. In future studies, average response of multiple key respondents from the same firm may be considered to get more accurate picture of strategic posture adopted by the firm. Future studies should investigate the effect of the entrepreneurial orientation on the performance of firm by considering firm's characteristics as moderating variables to better assess the impact of firm's characteristics on entrepreneurial orientation – business performance relationship.

### References

- Antoncic, B., & Hisrich, R. D. (2004). Corporate entrepreneurship contingencies and organizational wealth creation. *Journal of Management Development*, 23(6), 518-550.
- Baker, W. E., & Sinkula, J. M. (2009). The complementary effects of market orientation and entrepreneurial orientation on profitability in small businesses\*. *Journal of Small Business Management*, 47(4), 443-464.
- Bhuian, S. N., Menguc, B., & Bell, S. J. (2005). Just entrepreneurial enough: the moderating effect of entrepreneurship on the relationship between market orientation and performance. *Journal of Business Research*, 58(1), 9-17.
- Chang, H. J., Lin, S. J., Murray, L. W., Efendioglu, A. M., Khoshbakht, H., & Salteh, H. M. (2011). Entrepreneurial intensity in catering Industry: A case study on wang group in Taiwan. *Business and Management Review*, 1(9), 1-12.
- Clercq, D., Dimov, D., & Thongpapanl, N. T. (2010). The moderating impact of internal social exchange processes on the entrepreneurial orientation–performance relationship. *Journal of Business Venturing*, 25(1), 87-103.
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship Theory and Practice*, 35(5), 855-872.
- Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75-87.
- Covin, J. G., Slevin, D. P., & Schultz, R. L. (1994). Implementing strategic missions: Effective strategic, structural and tactical choices. *Journal of Management Studies*, 31(4), 481-506.
- Dess, G. G., Lumpkin, G. T., & Covin, J. G. (1997). Entrepreneurial strategy making and firm performance: Tests of contingency and configurational models. *Strategic Management Journal*, 18(9), 677-695.
- Dimitratos, P., Lioukas, S., & Carter, S. (2004). The relationship between entrepreneurship and international performance: the importance of domestic environment. *International Business Review*, 13(1), 19-41.
- Frank, H., Kessler, A., & Fink, M. (2010). Entrepreneurial orientation and business performance-a replication study. *Schmalenbach Business Review*, 62(2), 175-198.
- George, G., Robley Wood Jr, D., & Khan, R. (2001). Networking strategy of boards: implications for small and medium-sized enterprises. *Entrepreneurship & Regional Development*, 13(3), 269-285.
- Gonzalez-Benito, O., González-Benito, J., & Muñoz-Gallego, P. A. (2009). Role of entrepreneurship and market orientation in firms' success. *European Journal of Marketing*, 43(3/4), 500-522.
- Grande, J., Madsen, E. L., & Borch, O. J. (2011). The relationship between resources, entrepreneurial orientation and performance in farm-based ventures. *Entrepreneurship and Regional Development*, 23(3-4), 89-111.
- Grimmer, L., Miles, M. P., & Grimmer, M. (2013). A research note on the effect of entrepreneurial orientation on small retailer performance: a resource-advantage perspective. *International Entrepreneurship and Management Journal*, 9(3), 1-16.

- Grunhagen, M., Wollan, M. L., Dada, O. L., & Watson, A. (2014). The moderating influence of HR operational autonomy on the entrepreneurial orientation–performance link in franchise systems. *International Entrepreneurship and Management Journal*, 10(4), 827-844.
- Gupta, R., & Pandit, A. (2012). Strategic Entrepreneurial Orientation: Development of a Multi-Dimensional Construct Based on Literature Review. *South Asian Journal of Management*, 19(4), 88-110.
- Hart, S. L. (1992). An integrative framework for strategy-making processes. *Academy of Management Review*, 17(2), 327-351.
- Huang, K. P., & Wang, K. Y. (2013). The moderating effect of social capital and environmental dynamism on the link between entrepreneurial orientation and resource acquisition. *Quality & Quantity*, 47(3), 1617-1628.
- Hughes, M., & Morgan, R. E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36(5), 651-661.
- Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial marketing management*, 33(5), 429-438.
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *The Journal of marketing*, 57(3), 53-70.
- Kraus, S., Rigtering, J. C., Hughes, M., & Hosman, V. (2012). Entrepreneurial orientation and the business performance of SMEs: A quantitative study from the Netherlands. *Review of Managerial Science*, 6(2), 161-182.
- Krauss, S. I., Frese, M., Friedrich, C., & Unger, J. M. (2005). Entrepreneurial orientation: A psychological model of success among southern African small business owners. *European Journal of Work and Organizational Psychology*, 14(3), 315-344.
- Kreiser, P. M., & Davis, J. (2010). Entrepreneurial orientation and firm performance: The unique impact of innovativeness, proactiveness, and risk-taking. *Journal of Small Business & Entrepreneurship*, 23(1), 39-51.
- Kreiser, P. M., Marino, L. D., Kuratko, D. F., & Weaver, K. M. (2013). Disaggregating entrepreneurial orientation: The non-linear impact of innovativeness, proactiveness and risk-taking on SME performance. *Small Business Economics*, 40(2), 273-291.
- Lee, S. M., & Lim, S. (2009). Entrepreneurial orientation and the performance of service business. *Service Business*, 3(1), 1-13.
- Liu, Q., Manolova, T. S., & Edelman, L. F. (2009). Entrepreneurial Orientation And Firm Performance In China: The Role Of Resource Endowments. *Frontiers of Entrepreneurship Research*, 29(13), 3-15.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5), 429-451.
- Lumpkin, G. T., Coglisier, C. C., & Schneider, D. R. (2009). Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrepreneurship Theory and Practice*, 33(1), 47-69.
- Matsuno, K., Mentzer, J. T., & Ozsomer, A. (2002). The effects of entrepreneurial proclivity and market orientation on business performance. *Journal of Marketing*, 66(3), 18-32.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770-791.
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3(1), 1-25.
- Mintzberg, H. (1973). Strategy-making in three modes. *California Management Review*, 16(2), 44-53.
- Moreno, A. M., & Casillas, J. C. (2008). Entrepreneurial orientation and growth of SMEs: A causal model. *Entrepreneurship Theory and Practice*, 32(3), 507-528.
- Morris, M. H., Coombes, S., Schindehutte, M., & Allen, J. (2007). Antecedents and outcomes of entrepreneurial and market orientations in a non-profit context: Theoretical and empirical insights. *Journal of Leadership & Organizational Studies*, 13(4), 12-39.

- Naman, J. L., & Slevin, D. P. (1993). Entrepreneurship and the concept of fit: A model and empirical tests. *Strategic Management Journal*, 14(2), 137-153.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761-787.
- Schepers, J., Voordeckers, W., Steijvers, T., & Laveren, E. (2014). The entrepreneurial orientation–performance relationship in private family firms: the moderating role of socioemotional wealth. *Small Business Economics*, 43(1), 39-55.
- Soininen, J., Puumalainen, K., Sjogren, H., & Syrja, P. (2012). The impact of global economic crisis on SMEs: Does entrepreneurial orientation matter?. *Management Research Review*, 35(10), 927-944.
- Stam, W., & Elfring, T. (2008). Entrepreneurial orientation and new venture performance: The moderating role of intra-and extraindustry social capital. *Academy of Management Journal*, 51(1), 97-111.
- Stevenson, H. H., & Jarillo, J. C. (1990). A paradigm of entrepreneurship: Entrepreneurial management. *Strategic Management Journal*, 11(5), 17-27.
- Tang, J., Tang, Z., Marino, L. D., Zhang, Y., & Li, Q. (2008). Exploring an inverted Ushape relationship between entrepreneurial orientation and performance in Chinese ventures. *Entrepreneurship Theory and Practice*, 32(1), 219-239.
- Tang, L., & Koveos, P. E. (2004). Venture entrepreneurship, innovation entrepreneurship, and economic growth. *Journal of Developmental Entrepreneurship*, 9(2), 161-171.
- Tang, Z., & Tang, J. (2012). Entrepreneurial orientation and SME performance in China's changing environment: The moderating effects of strategies. *Asia Pacific Journal of Management*, 29(2), 409-431.
- Vij, S., & Bedi, H. S. (2012). Relationship between entrepreneurial orientation and business performance: A review of literature. *The IUP Journal of Business Strategy*, 9(3), 17-31.
- Vij, S., & Farooq, R. (2014). Multi-Group Moderation Analysis for Relationship between Knowledge Sharing Orientation and Business Performance. *International Journal of Knowledge Management (IJKM)*, 10(3), 36-53.
- Wang, C. L. (2008). Entrepreneurial orientation, learning orientation, and firm performance. *Entrepreneurship Theory and Practice*, 32(4), 635-657.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic Management Journal*, 24(13), 1307-1314.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Venturing*, 20(1), 71-91.
- Yang, Z., Li-Hua, R., Zhang, X., & Wang, Y. (2007). Corporate entrepreneurship and market performance: an empirical study in China. *Journal of Technology Management in China*, 2(2), 154-162.
- Yusuf, A. (2002). Environmental uncertainty, the entrepreneurial orientation of business ventures and performance. *International Journal of Commerce and Management*, 12(3/4), 83-103.
- Zahra, S. A. (1991). Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing*, 6(4), 259-285.
- Zahra, S. A., Jennings, D., & Kuratko, D. (1999). The antecedents and consequences of firm-level entrepreneurship: The state of the field. *Entrepreneurship Theory and Practice*, 24(2), 45–65.
- Zahra, S. A., Neubaum, D. O., & El-Hagrassey, G. M. (2002). Competitive analysis and new venture performance: Understanding the impact of strategic uncertainty and venture origin. *Entrepreneurship Theory and Practice*, 27(1), 1-28.
- Zhao, Y., Li, Y., Lee, S. H., & Chen, L. B. (2011). Entrepreneurial orientation, organizational learning, and performance: Evidence from China. *Entrepreneurship Theory and Practice*, 35(2), 293-317.