Proceedings of GLOGIFT 08
June 14-16, 2008
Stevens Institute of Technology
Hoboken, NJ, pp. 800-808

MODEL OF NEW BUSINESS CREATION: AN EMPIRICAL STUDY OF INTERNAL ENVIRONMENTAL FACTORS

B.R. Bhardwaj*, K. Momaya and Anil K. Garg*****

ABSTRACT

New business creation is becoming increasingly important for survival of manufacturing and service sectors. Internal drivers play a crucial role in new business creation. There is a need to understand these drivers and their dynamics for stimulating new business creation. The key findings of an empirical research are based on data collected from 181 senior managers. Systematic methodology including design and validation of questionnaire, factor analysis was utilized to enhance reliability of the findings. Regression analysis has been done and the findings are reported for more practical application.

Keywords: *new business creation, internal drivers, regression analysis*

Introduction

Multi-national companies from advanced countries are introducing new as well as old products in the developing countries in quick succession, harnessing their innovative capabilities and the local companies are facing serious competition. The marketing landscape is becoming more and more competitive with the passage of time. This competitive landscape in many industries today is marked by intensive competition between existing players and new competitors targeting specific segments of the market. With the global competitive pressures rising in the coming years, companies are searching for innovative ways to develop new products for the markets which may provide them reasonable confidence of success. Many such companies are adopting corporate entrepreneurship (CE) through product, service, process and market innovations as their survival strategy (Antoncic and Hiscrich, 2001).

While various modes of corporate entrepreneurship are glorified, one cannot ignore the fact that a large number of new ventures fail. One of the major reasons of such failure is poor management decisions. Small firms have limited resources and little margin for error. Larger firms have resources and reputation to offset occasional lapses (Barret and Weinstein, 1998). Larger firms may have an edge in innovation in terms of resources including well-paid scientists and engineers, support staff, modern facilities and equipments and extensive research and development. These firms are big enough to cope with the risks of innovation and can finance an array of challenging projects. However, for all these new venture creations to be successful there is a need to create an internal environment which stimulates such behavior. This internal environment is characterized by several factors such as risk-taking, intelligence generation,

* PhD Scholar, Department of Management Studies, Indian Institute of Technology, Delhi
** Associate Professor, Department of Management Studies, Indian Institute of Technology, Delhi
*** ONGC, New Delhi

intelligence dissemination, work discretion, rewards, management support, time availability and organizational flexible boundaries (Hornsby et al., 2002; Kuratko et al., 2005). New business creation is emphasized as a growth strategy and an effective means for achieving competitive advantage (Hamel and Prahalad, 1996). To continue with the high rate of growth and meet the competition, companies need to be competitive. Hence, it reinforces the necessity to study the internal drivers of new business creation.

New venture creation (NVC) has been defined as entrepreneurial activities in the form of product, process and organizational innovations that is the sum of a firm's innovation, renewal and venturing efforts (Zahra and Covin, 1995). New venture creation refer to processes and activities pertaining to creation of new business ventures, and other innovative activities such as development of new products, services, technologies, administrative techniques, strategies and competitive postures (Antoncic and Hisrich, 2000). This study was conducted to study the impact of internal drivers of new business creation on CE outcomes and identify some of the most important drivers of NVC. The analysis was done on the basis of regression methodology. Various studies suggest that dimensions such as rewards and reinforcements, organizational flexible boundaries, intelligence generation and dissemination affect the NVC outcomes (Jawaroski and Kohli, 1993; Hornsby et al, 2002). Sharma and Chrisman (1999) defined new business creation as a process whereby an individual or group creates a new venture or develops an innovation. According to Zahra (1991), NVC may be formal or informal activities aimed at creating new businesses such as product and process innovations and market developments. In its broadest conception, new business creation is a comprehensive term that captures all actions related to the discovery, evaluation, and exploitation of entrepreneurial opportunities (Shane and Venkataraman, 2000). It involves use of new resources, interactions with new customers, involvements with new markets and/or with new combinations of its existing resource portfolio, customer base, and served markets. New venture creation has been emphasized as an important path to competitive advantage and improved performance in firms of all types and sizes (Covin et al, 2000).

The literature survey reveals that various methodologies have been used to understand the determinants of entrepreneurial actions. Some of these methods have been applied in practice. This paper attempts to apply the regression methodology to understand the determinants of NVC and based on the results suggest a validated model for NVC. Corporate entrepreneurship can be classified on four dimensions namely new business venturing, innovativeness, self-renewal, and proactiveness. The innovativeness dimension refers to product and service innovation with emphasis on development and innovation in technology (Covin and Slevin, 1991). The self-renewal dimension reflects the transformation of organizations through the renewal of key ideas on which they are built (Burgelman, 2005). Proactiveness is related to aggressive posturing and leadership relative to competitors (Covin and Slevin, 1991). The present study only includes the new venture creation as a scope of the current research.

Having defined the scope and goal of the paper, the following section focuses on the literature review of new business creation and the internal drivers of new venture creation. This discussion is followed by an empirical study conducted to measure the influence of these drivers on NVC using regression methodology. Followed by it, the model for NVC is derived. The results of the study and their implications for research and managerial practice are discussed in the final section.

Theoretical Background

New venture creation involves the pursuit of creative or new solutions to challenges confronting the firm, including the development or enhancement of old and new products and services, markets, and administrative techniques and technologies for performing organizational functions (Antoncic and Hisrich, 2000). New venture creation is the organizing new organizations. Weick (1979) further described "organizing" as assembling ongoing interdependent actions into sensible sequences that generate sensible outcomes. It is also defined as a process by which individuals inside organizations pursue opportunities without regard to the resources they currently control (Stevenson and Jarillo, 1990). The new venture creation as defined by Strategic Planning Institute (include New venture 1978) is classified as independent entity, new profit centre within a company which has other established businesses, a joint venture regarded as new source of supply by its potential customers. The present scope of study includes new profit centre within an organization. New venture creation is the most salient characteristic of CE since it may result in new business creation within an existing organization (Stopford and Baden-Fuller, 1994) by redefining the company's products or services and/or by developing new markets (Khandwalla, 2003). In large corporations, it could also include formation of more formally autonomous or semi-autonomous units, the new venture creation refers to creation of new businesses that are related to existing products or markets regardless of level of autonomy. This definition includes multidimensional aspect of new venture creation. It emphasizes that individuals with expertise are key a key element of the new venture. Not only recognizes new venture as organizational entity, but also stresses that new venture creation evolves over a period of time. Extending this theory further, new venture creation is seen in the context of its environment, namely external where it competes to exist and internal, where it evolves and nourishes itself. The present scope includes the internal environment as the key focus of study.

The present concern is over how to design organizations that encourage innovative individuals. The presence of highly supportive regional entrepreneurial environments including "incubator organizations" has found to create entrepreneurs. In organization theory literature, two different views of environment have been proposed. One perspective emphasizes on environmental determinism which focuses on study of organization and its adaptiveness to external environment. The other perspective, strategic choice emphasizes on the environment which the organization creates as a matter of choice (Weick, 1979). The present study aims to address the variables which are critical for stimulating entrepreneurial behavior within organization by developing empirically validated model for new venture creation.

Hypotheses

To achieve success in today's competitive environment, firms increasingly must develop new products for international markets. To this end, they must leverage and must coordinate broad creative capabilities and resources, which often are diffused across geographical and cultural boundaries. Recent writings in the globalization and in the new product development (NPD) literatures suggest that certain "softer" dimensions that define the behavioral environment of the firm—that is, the firm's organizational culture and management commitment—can have an important impact on the outcome of these complex and risky endeavors. But what comprises these dimensions and what type of behavioral environment scenario is linked to high performance in the international NPD effort of firms has not been articulated clearly. This research focuses on these softer dimensions, with the objective of understanding and identifying their specific makeup as well as their relationship to the outcome of international NPD programs. Variables over which the organization has more control (strategic choice variables) are more readily viewed as characteristics of the organization itself and are treated as such. New business creation success is defined as the number of products, services and markets developed (Antoncic and Hisrich, 2000). Researchers studied the psychological context and examined new venture creation as an enduring behavioral attribute of individuals. These authors attempted to explain new venture creation behavior through several psychological theories including risk theories, choice theory, locus of control, attribution theory, expectancy theory, achievement motivation, and opportunity recognition. The authors also analyzed the successes and failures of related studies. Busenitz (1999) integrated the cognitive factors into a cross-cultural framework for understanding why some cultures produce individuals with a higher propensity for entrepreneurial activity. Based on an integration of two literatures—organizational and new product development—the present study identifies the behavioral environment measurement items as well as several outcome measures, that is administered to a broad empirical sample of manufacturing and services firms active in NPD. Using empirical results from 181 NPD programs, three key dimensions are identified: (i) management support, (ii) work discretion, (iii) intelligence dissemination for NPD effort. These dimensions are used to derive a model for new business creation. The research diagram is given in Figure 1.

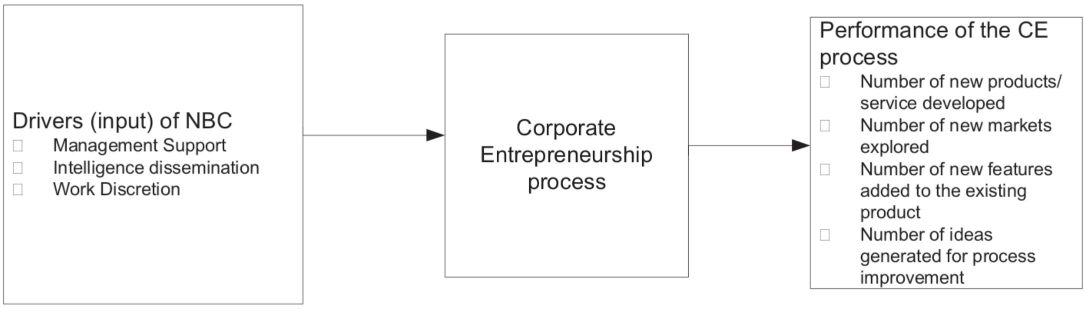

Figure 1: Conceptual Diagram

Management support is an important antecedent for CE. Management support (MS) is defined as the willingness of management to promote entrepreneurial behavior; including the championing of innovative ideas and providing the resources people require taking entrepreneurial actions. Management support has been measured by receptivity (to employees' ideas), promoting innovative ideas, management encouragement, financial support, awarding ideas, and unconditional support (Kuratko et al. 1993). Sathe (1989) emphasized upon the importance of management support in terms of encouraging the employees to take up innovative ideas. Researchers have emphasized upon management support in terms of providing necessary resources is critical for CE (Stevenson and Jarillo, 1990; Damanpour, 1991; Kuratko et al. 1993; Pearce et al., 1997; Kuratko et al., 2005). Management Support can take many forms, including championing innovative ideas, providing necessary resources or expertise, or institutionalizing the entrepreneurial activity within the firm's system and processes. Thus the following hypothesis is proposed.

Management support influences new business creation positively.

Firms act on the basis of their market intelligence including their intelligence of customers and competitors. The concepts of intelligence dissemination have also been emphasized for CE outcomes. Appropriate infrastructure and processes are the instruments for improving intelligence dissemination (Ruggles, 1996) (i.e., selecting, training and motivating people to share intelligence) and organizational measures (i.e., self-regulating teams to enhance dissemination intelligence). Intelligence dissemination (ID) is defined as sharing of knowledge of the other person (through teams' experiences with one another). Some authors argue that it increases the mutual predictability of team members' actions; similarly, self-disclosure increases mutual trust, all leading to increase in expected interaction and cooperation, effective organizational interfacing, and good team spirit and communication. Intelligence dissemination has been measured by periodical circulation (of important reports e.g. customer need), cross-functional meetings, sharing information (about technology for new products development) and interdepartmental collaboration (Nonaka and Takeuchi, 1995; Nonaka and Toyama, 2002). Thus the following hypothesis is proposed.

Intelligence dissemination influences new business creation positively.

Work discretion explains the degree of autonomy provided to the workers in terms of decision making and work methods. Organizations allow employees to make decisions about their work processes and avoid criticizing employees for making mistakes. Work discretion refers to the degree of autonomy given for entrepreneurial efforts (Hornsby et al., 2002). Work discretion has been measured by autonomy in work methods, autonomy in judgment, autonomy in abilities and autonomy in decision-making (Gatewood et al., 2002). Hornsby et al. (1993) also emphasized on having appropriate organization structure for facilitating work discretion within the organization. Some authors have researched the autonomy in work methods to be a predictor of CE outcomes. Chau and Siu (2000) findings suggest that work characteristics significantly impact the CE outcomes. These characteristics include the organizational and individual characteristics defining the work environment of the organization. Work discretion (WD) refers to the degree of autonomy given for entrepreneurial efforts. Work discretion has been measured by autonomy in work methods, judgment, abilities and decision-making (Hornsby et al. 2002). Thus the following hypothesis is proposed.

Work discretion influences new business creation positively.

Methodology

In order to investigate the existence of internal drivers of new business creation, an empirical study was conducted. This study measured the various parameters of CE including reward and reinforcements; organizational flexible boundaries, intelligence generation and dissemination. These eight areas, therefore, constitute the theoretical basis for the 60 items generated for the questionnaire. The questionnaire used Likert-type scales with 1 representing strongly disagree to 6 representing strongly agree. Eight items were negatively worded to avoid response tendencies by the subjects and they were reverse-scored for the analysis.

Participation in the study was voluntary. The participants were recruited from service and manufacturing organizations throughout India. Potential respondents were randomly selected from different organizations and were asked to participate in the study. The participating organizations were asked to identify individuals in various levels of management positions for the survey questionnaire. Each survey packet included a return envelope to provide confidentiality for respondents. A total of 36 firms agreed to participate. These organizations belonged to all the four regions. Region-wise break-up of the responses is given in Table 1. Data were collected from 73 respondents belonging to manufacturing and 108 belonging to service sector. Managerial level-wise break-up of the responses received is given in Table 2.

Table 1: Region-wise Break-up of the Responses Received

Region	Responses (per cent)
North	35
East	27
West	24
South	14
Total	100

Table 2: Managerial Level-wise Break-up of the Responses Received

Total experience in current Organizations	Responses from manufacturing Sector	Responses from Service Sector	Total no. of Responses	Per cent of Total Nos. of Responses
Senior management	12	21	33	18.23
Middle management	39	44	83	45.86
Operational level management	22	43	65	35.91
Total	73	108	181	100

As per Table 2, 18.23 per cent responses are from senior management persons, 45.86 per cent responses are from middle management level persons and 35.91 per cent responses are from operation management level persons. This is also right and acceptable because, the strategy formulation and related decisions are taken at senior management and implemented by middle management and operating management. The literature suggests that managers at all levels play important roles in varieties of organizational success (Floyd and Lane, 2000; Ireland, Hitt, and Vaidyanath, 2002). The total experience-wise break-up is given in Table 3.

Table 3: Total Experience-wise Break-up of the Responses Received

Total Experience in Industry	Responses from Manufacturing Sector	Responses from Service Sector	Total no. of Responses	Per cent of Total Nos. of Responses
> 25 Years	22	18	40	22.1
15-24 Years	17	23	40	22.1
09-14 Years	34	67	101	55.80
Total	73	108	181	100

Analysis

Initially an exploratory factor analysis was conducted to uncover key dimensions in the questionnaire. The macro variable analysis with the step-wise regression model has been concluded in three steps. Three macro variables namely Intelligence Dissemination, Management Support and Work Discretion have entered the regression model (Table 4). This is explained as new business creation requires dissemination of customer information throughout the organization. Moreover, new business creation is not possible without the management support. However, it requires autonomy to pursue the ideas for business development. Hence, Work Discretion has emerged as an important predictor of New Business Creation. The regression model summary of new business creation macro variable wise is given in Tables 4. The corresponding ANOVA values for the regression model and the coefficient summary are shown in Table 5 and 6. Figure 2 shows the validated model for macro variables as predictors of New Business Creation.

Table 4: Regression Model Summary for New Business Creation as Dependent Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.610	.372	.368	1.03364
2	.659	.434	.428	.98365
3	.682	.466	.457	.95863

a Predictors: (Constant), ID
b Predictors: (Constant), ID, MS
c Predictors: (Constant), ID, MS, WD
d Dependent Variable: NBC

Table 5: ANOVA for New Business Creation as Dependent Variable

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	113.235	1	113.235	105.985	.000
	Residual	191.246	179	1.068		
	Total	304.481	180			
2	Regression	132.254	2	66.127	68.343	.000
	Residual	172.227	178	.968		
	Total	304.481	180			
3	Regression	141.824	3	47.275	51.443	.000
	Residual	162.658	177	.919		
	Total	304.481	180			

a Predictors: (Constant), ID

b Predictors: (Constant), ID, MS

c Predictors: (Constant), ID, MS, WD

d Dependent Variable: NBC

The validated model for new business creation is shown in Figure 2.

Table 6: Coefficient Summary for New Business Creation as Dependent Variable

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	1.623	.245		6.617	.000
	ID	.624	.061	.610	10.295	.000
2	(Constant)	.981	.275		3.575	.000
	ID	.493	.065	.482	7.625	.000
	MS	.315	.071	.281	4.434	.000
3	(Constant)	.580	.295		1.967	.051
	ID	.385	.071	.376	5.384	.000
	MS	.280	.070	.249	3.996	.000
	WD	.258	.080	.216	3.227	.001

Conclusion

This study adds to the literature on new business creation by recording the existence of an underlying set of seven organizational factors that should be recognized in promoting entrepreneurial activities within an organization.

This research has several important implications. Firstly, from a theoretical perspective, the current research provides an important exploratory step toward understanding the internal drivers of new business creation. As previously noted, the literature in this area has been primarily normative in that most researchers have developed conceptual schema that have either never been empirically tested, or are based on limited case study analyses. Secondly, this study presents an exploratory analysis that emphasizes the key internal factors that are likely to impact new business creation. This focus clearly distinguishes this research from previous studies that tend to be concerned with more generalized assessments of organizations' readiness to initiate new business efforts. Thirdly, the results can therefore be used to steer further research into new business activities. By examining appropriate methods of intelligence dissemination, modes of management support, and ways to provide autonomy to the employees and the level of organizational support, researchers will be able to more clearly measure factors that influence employees' new business efforts. Further research efforts into internal environment need to give special attention to these three internal drivers uncovered in this study.

While this study suggests the existence of a set of factors necessary for new business creation, additional research addressing the relationship to such measures as the number of ideas generated in an organization; time spent on entrepreneurial ideas; and employee willingness to break through organizational boundaries. Second, while this study has initiated an important exploration, clarification, and refinement of these factors, it is necessary to further support the relationship between the measures of individual new business activities. For example, researchers may link this framework's three dimensions to financial measures of organizational performance. While companies initiate new business creation efforts for varying reasons, ultimately, senior management expects new business creation efforts to improve the company's financial position. Consequently, future researchers should study the relationship between new business creation dimensions and financial performance measures. Finally, additional research into whether or not such variables as industry type and culture play a role in the corporate entrepreneurial drivers is necessary. In summary, this study provides empirical evidence regarding the existence of internal drivers believed to enhance new business creation within the manufacturing and service sectors. The study's results and proposed framework offer a foundation for developing a reliable and valid measure of the firm's internal drivers for new business creation for manufacturing and services sectors.

References

- Antoncic B. & Hisrich R. D. (2000). Intrapreneurship modeling in transition economies: a comparison of Slovenia and the United States, *Journal of Developmental Entrepreneurship*, April, 5(1), 20-25.
- Antonic B. & Hisrich R.D. (2001). Intrapreneurship: constructive refinement and cross-cultural validation, *Journal of Business Venturing*, 16, 495–527.
- Barret H. & Weinstein A. (1998). The effect of market orientation and new business creation, *Entrepreneurship Theory and Practice*, Fall, 57-70.
- Burgelman, R.A. (2005) Managing Internal Corporate Venturing, *MIT Sloan Management Review*, Vol. 46(4), 26-34.
- Busenitz, L.W. (1999) Entrepreneurial Risk and Strategic Decision Making: It's a Matter of Perspective, *Journal of Applied Behavioral Science*, 35(3), 325-340.
- Chau L.L. and Siu W. (2000) Ethical Decision-Making in Corporate Entrepreneurial Organizations, *Journal of Business Ethics*, Volume 23, Number 4, 365 – 375.
- Covin, J.G., Slevin, D.P. & Heeley, M.B. (2000). Pioneers and followers: competitive tactics, drivers, and firm growth, *Journal of Business Venturing*, 15, 175–210.
- Covin, J.G. & Slevin, D.P. (1991) A conceptual model of entrepreneurship as firm behavior, *Entrepreneurship Theory Pract.*, 16(1), 7–25 (Fall).
- Damanpour F. (1991) Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators, Acad. Manage. J., 34, 55-390.
- Floyd S.W. & Lane P.J. (2000). Strategizing throughout the organization: managing role conflict in strategic renewal, *Academy of Management Review*, 25, 154–177.
- Gatewood E.J., Shaver K.G., Powers J.B. and Gartner W.B. (2002) Entrepreneurial Expectancy, Task
- Effort, and Performance, *Entrepreneurship Theory and Practice*, 27, 187–206.
- Hamel, G, and Prahalad, C K, 1996, 'Competing in the New Economy: Managing out of
- Bounds', *Strategic Management Journal*, 17, 237–242.
- Hornsby, J.S., Kuratko, D.F. & Zahra, S.A. (2002). Middle managers' perception of the internal drivers for new business creation: assessing a measurement scale, *Journal of Business Venturing*, 17, 253-273.
- Hisrich, R. D. & Peters, M.P. (1984). Establishing a new business venture unit within a firm', *J. Bus. Venturing*, 1, 307-322.
- Ireland R.D., Hitt M.A. & Vaidyanath D. (2002). Strategic alliances as a pathway to competitive success, *Journal of Management*, 28, 413–446.

- Jawaroski B.J. and Kohli A.K. (1993) Market Orientation: Antecedents and Consequences, *Journal of Marketing*, 57, July, 53-70.
- Khandwalla P.N. (2003) *Corporate Creativity – The Winning Edge*, New Delhi: Tata McGraw-Hill Publishing Company Ltd.
- Kuratko, D.F., Hornsby, J.S., Naffziger, D.W. & Montagno, R.V. (1993). Implementing entrepreneurial thinking in established organizations, *Adv. Manage. J.*, 58(1)(Winter), 33.
- Kuratko D.F., Ireland R.D., Covin G. J. and Hornsby J.S. (2005) A Model of Middle Manager's
- Entrepreneurial Behavior, *Entrepreneurship Theory and Practice*, Nov, 699-716.
- Manimala, J. M. (2002) *Global entrepreneurship monitor*, India Report, 1-82.
- Nonaka, I. & Takeuchi, H. (1995). *The knowledge company: how Japanese companies create the dynamics of innovation*, Oxford Univ. Press, New York.
- Nonaka I. and Toyama R. (2002) A Firm as a Dialectic Being: Toward the Dynamic Theory of the Firm,*Industrial and Corporate Change*, 11, 995-1109.
- Pearce J.A., Kramer T.R. and Robbins D.K. (1997) Effects of Managers' Entrepreneurial Behavior on, Subordinates, *J. Bus. Venturing*, 12, 147-160.
- Ruggles R.L. (1996) *Knowledge Management Tools*, Heinemann: Boston, MA.
- Sathe V. (1989) Fostering Entrepreneurship in Large Diversified Firm, *Organ. Dyn.*, 18, 20-32.
- Shane, S. & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research, *Academy of Management Review*, 25, 217–226.
- Sharma P. & Chrisman J.L. (1999). Toward reconciliation of the definitional issues in the field of new business creation, *Entrepreneurship Theory and Practice*, 23(3), 11-27.
- Stevenson, H.H. & Jarillo, J.C. (1990). A paradigm of entrepreneurship: entrepreneurial management, *Strategic Manage. J.*, 11, 17–27 (special issue).
- Stopford, J.M. & Baden-Fuller, C.W. (1994). Creating new business creation, *Strategic Manage. J*, 15, 521-536.
- Weick, K. E. (1979). *The social psychology of organizing* (2nd ed.). Reading, MA: Addison-Wesley.
- Zahra S.A. & Covin J.G. (1995). Contextual influences on the new business creation-performance relationships: a longitudinal analysis, *Journal of Business Venturing*, 10(1), 43-58.
- Zahra, S. A. (1991). Predictors and financial outcomes of new business creation: an exploratory study, *Journal of Business Venturing*, 6 (4), 259-285.
- Zahra, S.A. & Covin, J.G. (1995). Contextual influences on the new business creation-performance relationships: A longitudinal analysis, *Journal of Business Venturing*, 10(1), 43-580.