

Effect of Entrepreneurial Orientation on SMEs Product Innovativeness

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Abstract: This study investigated the effect of Entrepreneurial orientation (EO) on product innovativeness in manufacturing SMEs. Using a cross sectional survey design with a sample size of 196, a standard multiple linear regression (MLR) was performed between product innovativeness as the dependent variable and proactiveness and risk-taking dimensions of EO, as independent variables. The results indicate that the predictors explained 22.9% of the variance ($R^2=.241$, Adj $R^2=0.229$), $F(2,123) = 19.565$, $t = p < 0.01$. Proactiveness ($B = .368$, $t = 2.934$, $p < .004$ and risk taking ($B = .221$, $t = 3.272$, $p = .001$) positively and significantly contributed to predicting product innovativeness. It is concluded that proactiveness enhances SMEs' potential to introduce new products featuring more differentiated characteristics for the market. Similarly, risk-taking enables SMEs to deliver new products of higher uniqueness that enables them surmount fierce competition. The researcher recommend that SME owner-managers should be proactive in seeking new product ideas and customer product information that will in turn enable them generate ideas on designing and manufacturing innovative products.

Keywords: Entrepreneurial Orientation (EO), Product Innovativeness, Performance, Small and Medium Enterprise (SME).

1. INTRODUCTION

The concept of an entrepreneurial orientation (EO) to explain the mindset of firms engaged in pursuing development of new products provides a useful framework for researching entrepreneurial activity (Avlonitis & Salavou, 2007; Lumpkin & Dess, 2001). Studies have indicated that EO of firms and product innovativeness dimensions could give pointers to differences in performance potential and hence competitiveness in the market. This is crucial to become subject of investigation, in order to provide additional explanations of how the firms adapt to a state of flux where the very basis of competition within the manufacturing small and medium-sized (SMEs) environment is constantly and globally redefined. Adaptation to shifting landscapes through aspects of entrepreneurship and successful product innovation is of major concern for all enterprises, especially for SMEs that are dominant in most developing economies such as Kenya, and in particular Kisumu Town.

Studies have shown that SMEs' critical success factors are related to the firm entrepreneurial orientation, and product innovativeness (Hassim, Abdul-Talib & Bakar, 2011). These factors are also recognized as the engine to drive international competitiveness among SME's. Firms need to be aware of every possible opportunity that exists in the market. Entrepreneurial orientation is related to being proactive and willing to take a risk when implementing certain strategy to compete with the business rivals. Many high performance firms are market driven, that is, they listen to what their customers are telling them and continually respond to perceived shifting customer needs.

Innovative firms are argued to be those which collect information about their customers and competitors, disseminate such information to appropriate decision makers within the firm, and then take appropriate actions to meet better the needs and wants of their customers by manufacturing innovative products. By embarking on market intelligence, firms should be better able to understand the needs and wants in the marketplace, resulting in delivering superior value to customers (Hassim, Abdul-Talib & Bakar, 2011). This in turn will enhance the SME performance. In the market-

orientated firms, entrepreneurial orientation is important to promote firm performance (Atuahene-Gima & Ko, 2001). They further stated that in such cases, when a firm's entrepreneurial orientation and product innovativeness are aligned, the maximum positive effect on performance is achieved.

The performance impact of product innovation and that of entrepreneurial orientation have been studied in two separate bodies of literature, but only a handful of studies have investigated entrepreneurial orientation and, product innovativeness simultaneously (Avlonitis & Salavou, 2007; Matson et al. 2002). There is evidence that SMEs' performance is importance to the owner, managers, policy makers and society, however, there is limited of knowledge on which entrepreneurial factors influence SMEs product innovativeness in Kenya, worse still, Kisumu Town. On the basis of the research problem, this study was guided by the following research questions:

2. LITERATURE REVIEW

2.1 Entrepreneurial Orientation and Product Innovativeness in MSEs:

Jennings and Lumpkin, (1989) argue that firms tend to engage in entrepreneurial behavior, which is a salient strategy and decision-making process (Dess *et al.*, 1997; Lyon *et al.*, 2000). According to Atuahene-Gima and Ko (2001), entrepreneurial orientation (EO) constitutes an organizational phenomenon that reflects an entrepreneur's capability by which firms embark on proactive and aggressive initiatives to alter the competitive scene to their advantage through risk-seeking ability and innovativeness.

Avlonitis and Salavou (2007) posit that lower product innovativeness comes from weaker EO, whereas higher product innovativeness comes from stronger EO. These characteristics reflect a willingness to foster new ideas and to adopt change which is critical to product innovation (Tang & Murphy, 2012). Indeed, firm-level innovativeness demands proactiveness in exploring new methods of doing business (Menguc & Auh, 2006). Both Salavou (2004) and Sundbo, Orfila-Sintes and Sørensen (1997) discuss creativity in terms of a firm's thinking capability to produce ideas that are new and distinctive, which for Markides (1998) can lead to new and applicable insights that in turn could lead to development of novel and unique products.

2.2 Proactiveness and Product Innovativeness in MSEs:

Proactiveness is critical to achieving innovativeness and as Avlonitis and Salavou (2007) argue, entrepreneurs must be focused and positioned to seize opportunities. They must continuously scan the external environment and be situated to move quickly. Proactiveness is a willingness of Entrepreneurs to seize situations and create opportunities. Therefore, proactiveness is concerned with implementing and doing whatever is necessary to bring an entrepreneurial concept to fruition. Entrepreneurs must be able to aggregate, evaluate, and formulate into workable programs the new ideas that have been generated within the firm or imported from the outside. In fact, a Greek study by Salavou and Lioukas (2003) found a positive effect of EO on product innovativeness. Further to this line of evidence, Zhou, Yim, and Tse (2005) found that EO positively affects breakthrough innovations, which is in line with the work of Avlonitis and Salavou (2007) that firms with up-to-date entrepreneurial attitude do escape the myopia of me-too-ism (just imitating product recipes of competitors) and instead deliver new products of higher uniqueness, that offer greater customer satisfaction and loyalty.

H1: Proactiveness is positively related to product innovativeness

2.3 Risk taking and Product Innovativeness in MSEs:

Risk taking and the pursuit of new ideas are aspects actively promoted by innovative firms (Coward, Fox & Wilson, 2007; Saleh & Wang, 1993). Liles (1981) defines risk as the probability of an unconstructive result occurring from various courses of actions. Risk-taking is the firms enthusiasm to break away from normal path and venture into unknown territory (Venkatraman, 1989; Wiklund & Shepherd, 2003). From these definitions, the researcher opines that risk taking is the willingness to commit significant resources to opportunities that have a reasonable chance of costly failure. These risks are typically manageable and calculated. In today's rapidly changing environment, decision-makers cannot wait until they have complete information or have evaluated every alternative. They have to take risks; otherwise they will miss opportunities or fail to solve problems (Otieno, Bwisa & Kihoro, 2012). Among the numerous values associated with risk taking are: freedom to try things and fail, acceptance of mistakes, freedom to discuss "dumb" ideas, absence of punishment for failure, ability to challenge the status quo, lack of attention to the past, willingness not to focus on the short term, the expectation that innovation is part of the job, a positive attitude toward change, and a drive to improve (Lynch, Walsh & Harrington, 2010).

Entrepreneurs are risk takers, but the perception that they carelessly bear risk is not accurate. Hirunyawipada and Paswan (2006) align the notion of "innate innovativeness" with perceived risk and the tendency to make risky decisions. Thus innovative firms take measures to reduce, minimize, and/or eliminate risks. Otieno, Bwisa and Kihoro (2012) aver that the successful entrepreneur is a "moderate" risk-taker who understands when to avoid additional risk. In addition, when a new product development project is not yielding the desired results, it is acceptable to abandon the project. Unsuccessful entrepreneurs cannot abandon the new product development project because of the hope of a "breakthrough" at some time in the future. A Study by Saleh and Wang (1993) showed that innovative firms are more engaged in risk taking compared to less innovative firms. Likewise, studies by Rauch *et al.* (2004) and Covin *et al.* (2006) found that risk-taking is positively related to performance. Hence, the need for support and collaboration among staff is critical in reducing fear and gaining openness which encourages new risk taking (Hurley & Hult, 1998) towards developing innovative products.

H2: Risk taking is positively related to product innovativeness.

3. RESEARCH METHODOLOGY

3.1 Sampling and data collection:

This study adopted a cross-sectional survey design. Cross-sectional survey provides a numeric description of the fraction of the population – the sample – through data collection process at one point in time. This procedure enables the researcher to generalize the findings from sample of responses to a population (Creswell, 2009).

3.2 Population and Sample:

The focus of this study was at the firm level with the unit of analysis is the manufacturing SME represented by owner - managers as respondent. The sampling frame were all manufacturing SMEs registered and licensed within Kisumu Town as contained in the Official Registry of SME Associations of Kisumu, (2011), Using a cross sectional survey design with a sample size was determined according to Krejcie and Morgan (1970) survey table of samples that recommend a sample size of 196 for a population 342, at 95% confidence with 5.0% margin of error. Purposive sampling was then used to select the 136 respondent owner-managers.

3.3 Measurement of variables:

Two dimensions measure product innovativeness in the present study. These dimensions are based on the perceived assessments of the respondents that capture both the firm's and the customer's perspective of newness and uniqueness. Each dimension was measured by a three-item, 5-point Likert-type scale developed by the researchers.

EO was measured by a 12-item, 5-point semantic differential type scale that reflects owner- management's behavior in taking strategic decisions that capture the two dimensions, namely proactiveness and risk-taking. Reliability test was carried out for the three subscales, The tests resulted in retaining five items for proactiveness ($\alpha = .643$), all items for risk taking ($\alpha = .758$) and Product Innovativeness ($\alpha = .855$), Considering the resulting alpha values, the internal consistency reliability of the measures used in this study were all acceptable.

3.4 Data Analysis:

Of all the questionnaires returned only 126 were found usable. Data were entered and were analyzed using SPSS version 20.0. Multiple regression analysis was used to examine the combined relationship of multiple independent variables with a single dependent variable (Creswell, 2002, p. 376). In the current study, the dimensions of EO measures were the independent or predictor variables and the product innovativeness measures were the dependent or criterion variables. The result of the regression was used to indicate the degree and direction of any relationships between the independent and the dependent variables.

4. RESULTS

Hypothesis Testing:

To test the hypotheses, a regression was run with PI as the dependent variable and both proactiveness and risk taking as the independent variables. The results are shown in table-

Variable	B	Std. Error	Beta	T	Sig.
(Constant)	1.163	.380		3.062	.003
Proactiveness	.368	.126	.267	2.934	.004
Risk taking	.221	.068	.298	3.272	.001
R ²	.241				
Adj R ²	.229				
F-value	19.565 **				

Note. ** $p < .001$; * $p < .05$

The results of the regression indicated the three predictors explained 22.9% of the variance ($R^2 = .241$, Adj $R^2 = .229$), $F(2,123) = 19.565$, $t = p < 0.01$. It was found that Proactiveness significantly predicted product innovativeness ($B = .368$, $t = 2.934$, $p < .004$), as did risk taking ($B = .221$, $t = 3.272$, $p = .001$). Thus, H1 and H 2 are supported. Based on the summary of multiple regression analysis results as presented in the table above, accordingly, the equation of multiple linear regressions could be formulated as follows:

$$Y = 1.163 + .368X_1 + .221X_2$$

5. DISCUSSION

For hypothesis 1, this study found a significant effect of proactiveness on product innovativeness. This finding is in line with existing evidence that lower product innovativeness comes from weaker proactiveness, whereas higher product innovativeness comes from stronger proactiveness (Avlonitis & Salavou 2007; Knobens, *et al.*, 2011). Stronger proactiveness reflects a willingness to foster new ideas and to adopt change which is critical to product innovation (Tang & Murphy, 2012). Indeed, firm-level innovativeness demands proactiveness in exploring new and creative methods of doing business (Menguc & Auh, 2006). Such creativity reflects a firm's thinking capability to produce ideas that are new and distinctive (Salavou 2004), which can lead to new and applicable insights that in turn, translate to development of novel and unique products.

Hypothesis 2 assessed the effect of risk-taking on product innovativeness. The findings showed that risk-taking has a significant positive effect on product innovativeness. This finding is in assonance with Hirunyawipada and Paswan (2006) who aver that the tendency to make risky decisions is pivotal to developing innovative product.

6. CONCLUSIONS

This paper explores two research hypotheses focusing on investigating the effect of SMEs' EO dimensions on product innovativeness. Regarding the first research hypothesis, proactiveness enhances entrepreneurs potential to introduce new products featuring more differentiated characteristics for the market. Proactive SMEs will be responding to customers constantly calling for unique benefits and superior value.

The second research hypothesis confirms that risk-taking is key to product innovativeness. Risk-taking is rather an up-to-date entrepreneurial attitude that enables SMEs to escape the myopia of me-too-ism (just imitating product recipes of competitors), and instead deliver new products of higher uniqueness that enables them surmount fierce competition.

7. RECOMMENDATIONS

These results present important grounds for SME owner-managers in formulating and implementing strategies to improve their product innovativeness. The researcher recommends that SME owner-managers should be proactive in seeking new product ideas and customer product information that will in turn enable them generate ideas on designing and manufacturing innovative products.

The setting up of SMEs support policies that promote collaborations in research for purposes of sharing information / accessing the diverse knowledge base on new product design, development and production. Such collaborations and the direct contact with customers will reduce risks and durations of the innovation process because of direct or informal information transfer between partner firms and research institutions, hence enhanced.

Areas for Further Research:

Researchers should replicate this study across multiple industries and sectors using a larger sample. This would increase our understanding regarding the way SMEs approach product innovativeness and enhance their competitiveness. The study did not investigate firm-specific proactiveness/risk-taking activities that may influence firm ability to translate information into innovative products. Therefore, this is a line of investigation that future research should embrace.

REFERENCES

- [1] Atuahene-Gima, K., Ko, A. (2001). "An empirical investigation of the effect of market orientation and entrepreneurship orientation alignment on product innovation", *Organisation Science*, Vol. 12 No.1, pp.54-74.
- [2] Avlonitis G.J. & Salavou, H. E. (2007). "Entrepreneurial orientation of SMEs, product innovativeness, and performance." *Journal of Business Research*. (60) 566–575.
- [3] Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approach* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc
- [4] Hassim, A., Abdul-Talib, A., & Bakar, A. (2011). "The Effects of Entrepreneurial Orientation on Firm Organizational Innovation and Market Orientation towards Firm Business Performance." Proceedings of paper presented at the *International Conference on Sociality and Economics Development IPEDR vol.10 (2011) IACSIT Press, Singapore*, pp. 280-284.
- [5] Hirunyawipada, T. & Paswan, A.K. (2006). "Consumer Innovativeness and perceived risk: implications for high technology product adoption." *Journal of Consumer Marketing*, 23(4): 182-198.
- [6] Knoblen, J., Raspe, O. & Arikan, A. (2011). "Agglomerations and Firm Performance: One Firm's Medicine is Another Firm's Poison." Paper presented at the DRUID 2011 on Innovation, Strategy, and Structure- Organizations, Institutions, Systems and Regions at Copenhagen Business School, Denmark, June 15-17, 2011.
- [7] 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.
- [8] Lynch, P., Walsh, M. & Harrington, D. (2010). "Defining and Dimensionalizing Organizational Innovativeness." (July 31, 2010). University of Massachusetts – Amherst *International CHRIE Conference-Refereed* http://scholarworks.umass.edu/refereed/CHRIE_2010/Saturday/18pdf. Retrieved on 07/07/2011
- [9] Matsuno, K., Mentzer, J.T., Özsomer, A. (2002), "The effects of entrepreneurial proclivity and market orientation on business performance", *Journal of Marketing*, Vol. 66 (July 2002), 18-32.
- [10] Menguc, B. & Auh, S. (2006). "Creating a firm-level dynamic capability through capitalizing on market orientation and innovativeness." *Journal of the Academy of Marketing Science*, 34 (1): 1552- 7824.
- [11] Otieno, S., Bwisa, H., Kihoro, J (2012). "Influence of Entrepreneurial Orientation on Kenya's Manufacturing Firms Operating under East African Regional Integration", *International Journal of Learning and Development*. 12(1) pdf, www.macrothink.org/ijld. Retrieved 20.03.2012
- [12] Salavou, H. (2004). "The concept of innovativeness: should we need to focus?" *European Journal of Innovation Management*. 7(1) pp 33-44.
- [13] Tang, J. & Murphy, P. J. (2012). "Prior Knowledge and New Product and Service Introductions by Entrepreneurial Firms: The Mediating Role of Technological Innovation". *Journal of Small Business Management* 50(1), pp. 41–62