An Exploratory Typology of MSMEs Using Dimensions of Entrepreneurial and Market Orientations: The Case of Iligan Entrepreneurs

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Abstract

An increasing trend in the number of registered businesses indicates a healthy business environment. For Iligan City, despite an attrition rate of 15%, a slow but persistent increase in registered businesses every year appears to be due to a steady stream of nascent entrepreneurs. However, these businesses are predominantly micro in size and seem to remain so for much of its lifespan. A better understanding of the entrepreneur is important in crafting relevant and purposive policies to scaffold entrepreneurial aspirations and endeavors as well as programs to enhance business networks and competencies. But what do we know about the Iliganon entrepreneur? This paper contributes to the literature on local entrepreneurial and market orientation using cluster analysis. Four distinct groups emerge to comprise the Iliganon entrepreneurs.

Keywords: entrepreneurial orientation, market orientation, cluster analysis, Iligan entrepreneur, competencies

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Rationale

Small and medium enterprises (SMEs) have been widely regarded as a driver of economic growth. Particularly, as economies aspire for growth, SMEs in developed economies "generally exploit entrepreneurship" while those in less developed economies have a propensity to do so through job-creation (Hu, 2010). Small enterprises are considered main drivers for innovation, poverty reduction, employment generation and social integration (Subhan, Mehmood, & Sattar, 2013). An increasing trend in the number of registered businesses therefore, is deemed an indicator of a healthy business environment.

lligan City is one of the urban centers in Northern Mindanao. The cost of doing business in Iligan City is relatively low due to the considerably low rental cost of commercial spaces and the average cost of fuel (Bokingo, Resurreccion, Bolodo, & Fajardo, 2010). Comparing the results of the 2013 round of Philippine Cities Competitiveness Ranking Project (PCCRP), Iligan City is in the Top 5 among more than a hundred cities and municipalities in the country with the lowest water and electricity rates (Boniao, 2013). These resources may have positively contributed to the increasing trend in business registrations from 2002 to 2010 as presented in Figure 2.

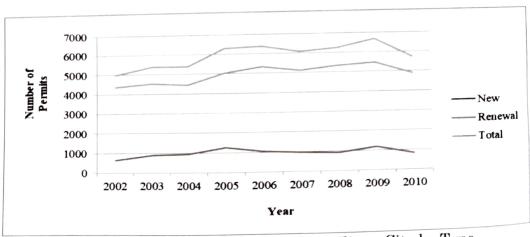


Figure 2. Number of Registered Businesses in Iligan City by Type of Permit, 2002-2010 (From the report, Profile and Trend of Registered Businesses in Iligan City, 2002-2010 by Teves, M.R.Y., 2010, Iligan City: MSU – Iligan Institute of Technology)

This increasing trend further suggests that there is a stream of nascent entrepreneurs pursuing to formally organize their businesses. However, only an average of 85% of registered businesses renew the following year (Teves, 2010).

Given the collectivist orientation archetypal of Filipinos in general, (The Hofstede Center, 2013) and of Iliganons in particular, business could have benefited from a strong relationship, which is a characteristic of collectivist societies. These strong relationships provide opportunities for easy access to and use of resources embedded in social networks" (Lin, Cook, & Burt, 2001, p. 5) (e.g., flow of information, enhanced image and credibility, some control on resource agents). Interestingly, though, businessmen in Iligan City do not seem to regard membership in business organizations as important (Asian Institute of Management Policy Center, 2009). Could this be a reason why there is persistent attrition among businesses in the city or is it an issue of business acumen?

Meanwhile, the impact of entrepreneurial orientation (EO) and market orientation (MO) on business performance has long received considerable attention in both the entrepreneurship and marketing literature. A firm with EO "engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations" (Miller, 1983, p. 771). With a hint of foresight, Peter Drucker (1985) has acknowledged that "business... simply will not survive in this period of rapid change and innovation unless they acquire entrepreneurial competence" (p. 67). This competence manifests in the development of new products, seeking new markets or both (McCline, Bhat, & Baj, 2000; Shane & Venkataraman, 2000) - all aimed to create value and to innovate through identification and exploitation of opportunities. Firms with MO embody a culture of customer focus, competitor focus, and interfunctional coordination within the firm (Day, 1994; Narver & Slater, 1990), which can be operationally executed through (1) the generation of market information about needs of customers and external environmental factors including competitors; (2) the dissemination and sharing of such information and coordination of activities among organizational functions; and (3) the development and implementation of strategies in response to the market information (Kohli, Jaworski, & Kumar, 1993; Kohli & Jaworski, 1990).

If Iligan MSMEs are to flourish and grow, it is important to understand its characteristics so that appropriate institutional interventions can be instituted. This study particularly seeks to understand the Iliganon entrepreneur in terms of its entrepreneurial orientation, market orientation, and network ties. The succeeding discussion explores these concepts in more detail.

Review of Literature

Entrepreneurial orientation

At an organizational context, entrepreneurial orientation is regarded as a culture (Affendy, Asmat-Nizam, & Farid, 2015) and could also be a stratgic orientation since it depicts how a firm intends to compete in the market (Hughes & Morgan, 2007). It has been found to bear favorable influence on the performance of export firms (Gruber-Muecke & Hofer, 2015), small and medium enterprises (Affendy, Asmat-Nizam, & Farid, 2015; Jia, Wang, Zhao, & Yu, 2014), and marketing communications firms (Long, 2013).

According to Lumpkin and Dess (1996), EO has five essential facets, thus, expanding Covin and Slevin's (1991) widely used three EO dimensions of innovativeness, proactiveness, and risk-taking by adding autonomy and competitive aggressiveness.

Autonomy refers to the "independent action of an individual or team in bringing forth an idea or a vision and carrying it through completion... an ability and will to be self-directed in the pursuit of opportunities" (Lumpkin & Dess, 1996, p. 140) not withstanding the probable organizational constraints that might come in the way of the strategic actions.

Innovativeness reflects "a tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes" (Lumpkin & Dess, 1996, p. 142). This dimension was pioneered by Schumpeter (1934) who focused on "human action in the context of an economy of knowledge" (Simpeh, 2011, p. 2) and put forward the idea of "creative destruction." Specifically, "creative destruction" means that the creation of new businesses out of exploited opportunities will supersede established organizations who were not able to identify these opportunities and thus

failed to adapt their products, services or technologies as prompted by the changes in the market (Schumpeter, 1934). The entrepreneur, thus, is viewed as the "consummate innovator."

Risk taking refers to the "degree to which managers are willing to make large and risky resource commitments — i.e., those which have a reasonable chance of costly failures" (Miller & Friesen, 1978, p. 923) which is often typical of firms with EO. It must be noted that in the study of Sitkin and Pablo (1992), it was proposed that risk propensity mediates the effect of risk preferences and risk behavior. This implies that risk aversion or risk proclivity does not directly predict risk behavior but rather influence the possibility of an individual engaging in risky activities. This viewpoint presents a dilemma when risk taking is considered in the firm-level context where several individuals constitute an organization. Studies of firm-level risk in the EO-performance relationship, however, have widely used the scale of Miller (1983).

Proactiveness refers to actions archetypal of a future oriented perspective (Lumpkin & Dess, 1996) and expected to shape the environment (Miller & Friesen, 1978). In later works of Miller (1983), proactiveness was used to describe a firm that was fast to innovate and first to launch new products or services in the market. However, this view was refuted as a study by Miller and Camp (1985) found that a second entrant to the market has similar chances of success as the first entrant through proactiveness.

Competitive agressiveness refers to "the type of intensity and head-to-head posturing that new entrants often need to compete with existing rivals" (Lumpkin & Dess, 1996, p. 139). In their subsequent study, Lumpkin and Dess (2001) notably dropped the new entrant context of their definition. Either way, this dimension of EO was implied in the earlier EO concept of Miller (1983) who described an entrepreneurial firm as one that "engages in product market innovation, undertakes somewhat risky ventures and is first to come up with 'proactive' innovations, beating competitors to the punch" (p. 770).

Market orientation

Market orientation (MO) was defined by Narver and Slater (1990) as the competitive strategy that most efficiently generates the right kinds of behavior to create enhanced value for the consumer and therefore assures better long-term results for firms (Olivares & Lado, 2003, p. 286).

An expanded view of market orientation was provided by Lado, Olivares, and Martinez (1998) which they defined as a competitive strategy that involves everyone in the organization, the customer, the intermediaries, the competitors, and the environment. Morris and Paul (1987) advanced a similar description of marketing orientation, referring to it as the size and consistency of its investment in marketing activities and people, and includes the firm's adoption of the marketing concept (i.e., a customer orientation).

Studies have shown that market orientation positively influences firm performance (Dubihlela & Dhurup, 2015; Long, 2013). Smooth and fast supply chain integration was achieved by shipping firms due to their market orientation coupled with their information and communication technology competencies (Tseng & Liao, 2015).

In the literature, there appears to be two competing views of MO. On one hand, Kohli and Jaworski (1990) identified three elements inherent to the concept of MO: (1) generation and analysis of information about the market; (2) dissemination of this information throughout the organization to contextualize strategic planning; and (3) implementation and execution of strategies to meet market requirements. On the other hand, Narver and Slater (1990) identified three behavioral components of MO:

- 1. Customer orientation, defined as "the sufficient understanding of one's target buyers to be able to create superior value for them continuously" (p. 21);
- 2. Competitor orientation, defined as a seller's understanding of the "short-term strengths and weaknesses and long-term capabilities and strategies of both the key current and the key potential competitors" (pp. 21-22); and
- 3. Interfunctional coordination, defined as the "coordinated utilization of company resources in creating superior value for target customers" (p. 22).

A meta-analysis of extant literatures on MO by Ellis (2006) highlighted several observations in the study of the relationship between MO and performance, to wit:

 There appears a significant difference in the effect sizes of MO on performance when using any one of the MO scales –

MARKOR by Kohli et al.(1993) and MKTOR by Narver and Slater (1990). The MARKOR scale resulted in significantly higher effect sizes than the MKTOR scale. The MKTOR scale was criticized for (1) lack of factors that impact customer needs, preferences, and expectations; (2) failing to consider speed of market intelligence generation dissemination within a firm; (3) allegedly including items not reflecting market orientation (Kohli et al., 1993); and (4) issues of reliability and validity (Farrell & Oczkowski, 1997; Siguaw & Diamantopoulos, 1994). Criticisms of the MARKOR scale pertains to ambiguity in domain specification, failure to include customers and channel partners, and the lack of evidence on its reliability and validity (Gabel, 1995). While these two scales have been extensively used in the study of MO, it appears that there is a need for a scale that incorporates the elemets of each MO concept.

- 2. Linking MO to objective and subjective performance measures do not result in similar effect sizes (Ellis, 2006). This is in contradiction to the findings of Rauch et al. (2009).
- 3. Cultural distance, market size and stage of economic development were found to be significant moderators to the MO performance relationship.

On the issue on measurement, this study argues that both Narver and Slater's (1990) and Kohli and Jaworski's (1990) conceptualizations of market orientations are akin to each other as customer and competitor orientation cannot be demonstrated without the necessary information and the appropriate responses to the information generated. Furthermore, both views recognize the need for organization-wide coordination, which is believed to be difficult to implement when information gathered about customers and competitors are not disseminated throughout the organization.

Network ties

Social capital is "a theory based on the exploitative nature of social relations" (Lin et al., 2001, p. 4). The underlying premise behind social capital is construed as "simple and straightforward: "investment in social relations with expected returns" (p. 6). In a summary of the

theories of capital, social capital is described as "access to and use of resources embedded in social networks" (Lin et al., 2001, p. 5).

Lin et al. (2001) cite four reasons why resources embedded in social networks improve the outcomes of actions (pp. 6-7):

- 1. It facilitates the flow of information;
- 2. These social ties may exert influence on agents;
- 3. Social tie resources, and their acknowledged relationships to the individual, may be conceived by the organization or its agents as certifications of the individual's social credentials, some of which reflect the individual's accessibility to resources through social networks and relations; and
- 4. Social relations are expected to reinforce identity and recognition.

In settings where formal business – supporting institutions are not yet established, network ties may act as the enabler in achieving positive outcomes from strategic orientation activities (Bruton, Ahlstrom, & Obloj, 2008; Li & Zhou, 2010). For instance, social ties may facilitate minimizing "institutional voids" in the midst of inefficiencies of the legal and regulatory institutions in managing and regulating economic exchanges (Granovetter, 2005; North, 1990; Sheng, Zhou, & Li, 2011).

Notably, empirical studies confirm the influence of social capital. Making use of data from entrepreneurial firms in Ghana, Boso et al. (2013) found that EO and MO further improves performance when the firms' social ties, defined in the study as managers' social ties, contacts and connections with executives in external governmental and industry bodies, and business ties operationalized as the extent to which firms interact with industry counterparts including suppliers, customers, distributors, and competitors, are well developed.

Objectives of the Study

Given the background of the study and the paucity in empirical documentation that establishes the characteristics of entrepreneurs in Iligan City, there seems to be an impetus and opportunity to gain a better understanding of the Iliganon entrepreneur so that concerned

government agencies such as the Department of Trade and Industry as well as policy makers can come up with appropriate initiatives that will create an environment favorable for entrepreneurialism and equip nascent and newly established entrepreneurs with the necessary competencies and, consequently, the confidence to prosper and grow. Businesses do not exist in a vacuum. Institution theorists (i.e., Peng, Sun, Pinkham, and Chen (2009); Peng, Wang, and Jiang(2008); Peng(2002) contend that businesses are influenced by their environment.

This is particularly imperative since the integration of the ASEAN Economic Community in 2015 offers vast opportunities for Philippine MSMEs. It comprises one big market with its over 600 million "young and dynamic population." "The ASEAN has a total aggregate gross domestic product (GDP) of USD 2.3B and an average per capita of USD 3,751" (DTI, 2013). The Department of Trade and Industry (2013) reported that in 2012, "total trade between the Philippines and ASEAN amounted to USD 24B or 21% of the country's total trade. In the same year, the ASEAN bloc accounts for 7.3% of total approved investments in the Philippines amounting to P21B, a significant seven-fold increase from P3B in 2011". Taking advantage of this opportunity could boost the country's economic health. It is, thus, all the more important to better understand how we could maximize performance potentials through EO, MO. formal institutions, and market conditions so that MSMEs could acquire the necessary capabilities and confidence to expand and grow visà-vis the ASEAN market.

Specifically, the study sought to determine and analyze the possible entrepreneur groups or clusters of Iligan entrepreneurs based on the dimensions of entrepreneurial orientation, market orientation, and network ties.

Methodology

This study surveyed 135 key decision makers and 179 business owners of micro, small and medium enterprises (MSMEs) in Iligan City, Lanao del Norte in 2014. Following the PCCRP of 2009, micro—enterprises included in the study were those with a registered capitalization of at least PhP150,000 based on the assumption that businesses with assets below Php150,000 do not have a long—term interest and capability in maintaining the business. Owners and key

decision makers of respondent enterprises were chosen to answer the survey since "the nature of SME... is dominated by the inherent characteristics of the entrepreneur/owner/manager" (Carson & Gilmore, 2000, p. 1). Moreover, given the firm — level approach of the study, Lumpkin and Dess (1996, p. 138) averred that "the small business firm is simply an extension of the individual who is in charge". The respondents were distributed proportionately according to their population from the list of registered businesses in Iligan City as of 2012.

Table 1. Distribution of respondents

			Sample size			
Firm size	Populati on as of 2012	%	Target based on list	Actual after checking/ excluding outliers	% of actual sample based on target sample	
Micro	1,580	91.435	297	279	85.846	
Small	115	6.655	22	18	5.538	
Medium	33	1.910	6	17		
Total	1,728	100.000	325	314	5.231 96.615	

To further understand the profile of the MSME respondents, Table 2 presents the distribution of respondents according to their line of business, form of ownership, firm age, number of employees, and total asset valuation.

Table 2. Demographic profile of respondent MSMEs in Iligan City

Description criteria	f	%	Median	Min	Max	Mean	SD
Line of business							
Trading	114	36.3					
Services	144	45.9					
Manufacturing	19	6.1					
Real estate	35	11.1					
Livestock	2	00.6					
Total	314	100.0					
Form of ownership							
Sole proprietorship	243	77.4					
Partnership	13	4.1					
Corporation	55	17.5					
Cooperative	3	1.0					
Total	325	100.0					
Firm age							
3-15 years	213	67.8	12	3	87	14.72	11.514
16-28 years	63	20.1					
29-41 years	30	9.5					
42-54 years	3	1.0					
55-67 years	4	1.3					
68-80 years	0	0.0				,	
81-93 years	1	0.3					
Total	314	100.0					
Number of employees							
1-9	258	82.2	4	1	200	7.00^{2}	14.000
10-99	55	17.5					
100-199	0	0.0					
200 and above	1	0.3					
Total	314	100.0					
Total assets							
0 - P500,000	81	25.8					
P500,001 - P1,000,000	103	32.8					
P1,000,001 - P3,000,000	91	29.0					
P3.000,001 - P5,000,000	8	2.5					
P5,000,001 - P10,000,000	6	1.9					
P10,000,001 - P15,000,000	8	2.5					
P15,000,001 - P25,000,000	2	0.6					
P25,000,001 - P50,000,000	3	1.0					
P50,000,001 - P100,000,000	8	2.5					
More than P100,000,000	4	1.3					
Total	314	100.0					

^aThis value is rounded off to the nearest whole number.

Results of the profiling may be traceable to Iligan's roots as the "Industrial City of the South" from the 1950's to the 1980's, where most of the population in the urban areas was employed in the various large industrial manufacturing companies. The city's economic environment then was more driven by the export activities of these large companies while income was spent more on consumption rather than investments. Thus, business establishments that flourished during the period were those that were into retail.

Meanwhile, the MSME respondents are predominantly micro in terms of number of employees, which bears a mean of 7.23 employees, a median of four employees, and a mode of three employees, making the number of employee distribution highly positively skewed and characteristically extremely leptokurtic. Moreover, the distribution observed one outlier pertaining to a medium — sized construction company which has been operating for 16 years and has a total of 200 employees. This case was not excluded since firm size in this study was classified according to asset value.

The questionnaire contained scaled-response and open-ended question formats. Measures for each variable were culled from various literatures reviewed and were adapted to suit the objectives of the study (Table 3).

Table 3 Scales used to measure the variables in the study

i abie o. Bea	Construct	Measures
Entrepreneu rial	Innovativeness(INNO) Proactiveness(PROA) Risk taking(RISK)	Adapted all 9 items Roxas and Chadee (2013)
Orientation (EO)	Autonomy (AUTO)	Adapted 3 items from Jambulingam et al. (2005)
	Competitive aggressiveness (ComA)	Adapted 3 items from Jambulingam et al. (2005)
	Information generation(InfoG)	• 2 items adapted from Wang et al. (2012)
Market	Information dissemination(InfoD)	• 2 items adapted from Wang et al. (2012)
Orientation (MO)	Responsiveness to market information (RESP)	• 3 items adapted from Wang et al. (2012)
	Inter-functional Coordination (InterFC)	 1 item adapted from Farrell and Oczkowski (1997) based on the work of Narver and Slater (1990) and 1 item from Li et al. (2008)
Network	Social ties (ST)	• 3 items adapted from Boso et al. (2013)
Ties (SC)	Business ties (BT)	• 3 items adapted from Boso et al. (2013)

The survey instrument was subjected to face validation test. After which, the items and instructions on the revised questionnaire was translated to Cebuano, the local dialect. To ensure quality of the translation, the Cebuano – translated items were re-translated back to English to correct discrepancies from the original English version of the items. The final version of the instrument was then administered to thirty business owners of MSMEs coming from the municipalities of Linamon, Lanao del Norte and Luga-it, Misamis Oriental for pretesting. The data gathered in the pretest were subjected to reliability analysis in order to determine the reliability of the scales used in the instrument. This was accomplished by examining the Cronbach's a of the items within a constructs' scale.

The measurement theory initially proposed and specified was validated through confirmatory factor analysis (CFA). However, the

factor structure was not confirmed upon validation of a priori assumptions of the scales. Hence, an exploratory factor analysis (EFA) is recommended (Suhr & Shay, 2009). In the EFA, factor loadings below 0.50 are excluded from subsequent analysis. Subsequently, a CFA was again performed for the components or dimensions of the main variables using the factor structure derived from the EFA. prompted for the exclusion of items with the lowest factor loadings and with standardized residual covariances > |2.5| in several iterations until the measurement model satisfactorily meet the goodness-of-fit values recommended by Hair et al.(2010). Convergent validity was then verified by examining the values of the average variance extracted (AVE) and construct reliability (CR) for each component of the main variables. As suggested by Hair et al. (2010), threshold values for AVE and CR for a component or dimension to be considered as acceptable is 0.50 and 0.70, respectively. Discriminant validity was assessed by comparing the AVE of each component or dimension and square of the correlations of any two combinations of the components. Square of correlations greater than the AVE of any one of two components compared indicate a problematic scale. Problematic scales were reviewed and the item with the lowest factor loading is excluded. Several iterations are performed in testing for discriminant validity using this test until no square of correlations values are greater than the AVEs of the components or dimensions compared.

As a result of this procedure, the following reconfigured dimensions were identified as shown in Table 6.

Table 6. Dimensions of entrepreneurial orientation, market orientation, and network ties after CFA and EFA

Construct	Dimensions
Entrepreneurial orientation	Innovation and proactiveness (INPR)
	Risk taking (RISK)
	Autonomy (AUTO)
	Competitive aggressiveness (COMP)
Market orientation	Market agility (MA)
Network ties	Social ties
	Business ties

Results of the study

Using hierarchical cluster analysis, four clusters were identified. Cluster 1 has high levels of market orientation considering that the means of the cluster's market agility and inter-functional coordination are 5.769 and 6.451, respectively. The clusters' network ties is also relatively high since its social ties has a mean of 4.87 correspondingly interpreted as upper moderate level and its business ties has a mean of 6.432 which is at a high level.

While Cluster 1's EO is at moderate to upper moderate levels, particularly in terms of innovativeness and proactiveness, risktaking, and autonomy, it is observed to be low in competitive aggressiveness. It is likely that this group's competitiveness is thwarted by its relatively strong inclination for establishing informal social connections which draws from the Filipino value of *pakikipagkapwa* (human relations). According to Resurreccion (1997), "at the root of this value lie all our standards of interaction" and "is against any form of exploitation against another" (p. 107). A businessman, therefore, who has *pakikipagkapwa* does not "undercut his competitors by underpricing or maligning them" (Resurreccion, 1997, p. 107).

Table 7. Descriptive statistics of clusters and test for homogeneity of variance (Levene's Test)

					Ā	Descriptive statistics	e statisti	5					Test of homogeneity of variance	homogeneit variance	5
Variable	J	Cluster 1 n = 81		5	Cluster 2 n = 88		ฮ์ ็	Cluster 3 $n=70$		5 -	Cluster 4 $n = 75$				
	Mean	Std	SE.	Mean	Std	x	Mean	Std	3	Mean	Std	35	Levene's Statistic	p –	Inter- pret- ation
Innovativeness and proactiveness	4.889	0.944	0.892	3.754	0.919	0.844	3.005	1.266	1.602	4.876	1.407	1.984	0.69690	0.000216	+
Risk taking	4.173	1.394	1.945	3.621	0.975	0.951	2.857	1.454	2.115	5.347	0.752	0.566	8.95595	0.000010	#
Autonomy	3.895	1.520	2.311	3.591	1.245	1.549	1.257	1.583	2.505	5.313	1.114	1.242	5.39590	0.001244	#
Competitive	2.562	1.122	1.259	4.051	0.792	0.627	1.357	0.539	0.291	5.493	0.985	0.970	20.65651	0.00000	+
Market agility	8.769	0.857	0.734	4.247	1.003	1.006	4.971	1.603	2.568	5.400	1.003	1.005	16.02869	0.00000	#
Interfunctional	6.451	0.626	0.391	3.960	0.894	0.800	5.929	0.926	0.857	6.120	0.825	0.681	4.09863	0.007122	, ±
Social ties	4.870	1.313	1.724	3.750	0.900	0.810	3.029	1.396	1.948	4.773	11.71	1.630	3.11508	0.026481	+
Business ties	6.432	0.715	0.511	4.705	0.999	0.998	9.300	0.878	0.77	6.200	0.775	0.601	5.53496	0.001031	+

Cluster 2 has moderate levels of market agility and interfunctional coordination. It also has moderate levels of innovativeness and proactiveness, risktaking, autonomy, and competitive aggressiveness. The cluster is also moderately inclined to engage in building their social capital in terms of social and business ties. Noteworthy of this group, though, is that in terms of business ties, they are towards the higher end of the moderate level. This suggests that this cluster pays considerable attention to strengthening their relationships with their suppliers and customers.

Cluster 3 is characterized by low levels of risktaking, autonomy, and competitive aggressiveness. This suggests that the group to have a strong preference for low-risk projects; a cautious stance in exploring the market for opportunities; and a "wait and see" posture in order to minimize the probability of making costly decisions. Employees of businesses in Cluster 3 also tend to rely on top management to initiate new product or service ideas and in pursuing market opportunities. The group is also inclined to avoid engaging in hostile steps towards competitors which is likely influenced by a strong pakikipagkapwa (human relations) typical of Filipinos. The cluster, however, exhibited upper moderate to high levels of market agility and interfunctional coordination, respectively. Meanwhile, the group tends to give more emphasis on strong relationships with suppliers and customers, given its high level of business ties compared to building its relationships with influential personalities.

Cluster 4 was found to have an upper moderate level of innovativeness and proactiveness and lower high levels of risktaking, autonomy and competitive aggressiveness. In terms of the MO dimensions, the cluster exhibited a lower high level of market agility and a high level of inter-functional coordination. Like Cluster 3, the group also has a proclivity towards giving more emphasis on strong relationships with suppliers and customers given its high level of business ties compared to building its relationships with influential personalities in the industry.

The ANOVA results confirm that there are, indeed, differences among groups as indicated by the p - values < 0.05. These results, however, do not provide information on the structure of the differences. Thus, post-hoc tests were carried out. Results of the Levene's test indicate that the four clusters have unequal variances in all clustering criteria. This is important in determining what test statistic to use in

examining if, indeed, there are differences in the means among the clusters. In this study, Tamhane's T2, a conservative pairwise comparisons test based on a t test, was used to examine differences in variables with unequal variances. Results of the post hoc tests suggest that there are no statistically significant differences between Cluster 1 and Cluster 4 in terms of innovativeness and proactiveness (p - value = 1.000), market agility (p - value = 0.087), social ties (p - value = 0.998), and business ties (p - value = 0.285).

The post hoc tests further indicate that there were no statistically significant differences between Cluster 3 and Cluster 4 in terms of market agility (p - value = 0.301), interfunctional coordination (p - value = 0.722), and business ties (p - value = 0.978). Additionally, Cluster 1 and 2 do not significantly differ in terms of autonomy (p - value = 0.646) while Cluster 1 and 3 do not significantly differ in terms of business ties (p - value = 0.899).

Based on the results of the post hoc tests and guided by the mean score classes and their corresponding qualitative interpretation earlier presented, the four clusters are described in Table 8.

Table 8. Cluster interpretation and cluster labels

Variable	Cluster 1:	Cluster 2:	Cluster 3:	Cluster 4:
	The Moderate EO-High MO Group (26%)	The Moderate EO/MO Group (28%)	The Low EO- High MO Group (22%)	The High EO/MO Group (24%)
Innovativeness and proactiveness	Upper moderate	Moderate	Lower moderate	Upper moderate
Risk taking	Moderate	Moderate	Higher low	Lower high
Autonomy	Moderate	Moderate	Low	Lower high
Competitive aggressiveness	Higher low	Moderate	Lower low	Lower high
Market agility	Lower high to High	Moderate	Upper moderate to Lower high	Upper moderate to High
Interfunctional coordination	High	Moderate	High	High
Social ties	Upper moderate	Moderate	Lower moderate	Upper moderate
Business ties	High	Upper moderate	High	High

Discussion

The dimensions of both entrepreneurial and marketing orientations contributes to a better appreciation of micro, small and medium enterprises in the context of a highly urbanized city in a developing economy such as Iligan City in Southern Philippines. As noted while examining the means of the four clusters of entrepreneurs in Iligan City on the dimensions and components of EO, MO, and SC, Entrepreneur Cluster 3 has the lowest score innovativeness and proactiveness, risktaking, autonomy, and competitive aggressiveness; Entrepreneur Cluster 2 has the lowest means on market agility and inter-functional coordination among the four clusters of MSMEs. Entrepreneur Cluster 3 has the lowest mean among the four clusters in terms of social ties while Entrepreneur Cluster 2 has the lowest mean among the four clusters in terms of business ties. Among the four

entrepreneur clusters, it is also noted that Cluster 4 appears to be the most competitively aggressive. It can also be observed that all clusters tend to give more importance to building strong relationships with suppliers and customers than to building strong relationships with influential personalities in the industry they belong.

Overall, entrepreneurs in Iligan City are generally high in market orientation. About a fifth of the micro, small and medium enterprises appear to be low in entrepreneurial orientation while about 25% of the sample had high levels of entrepreneurial orientation. The estimated remaining half of the entrepreneurs had moderate levels entrepreneurial orientation.

Specifically, four types of Higan City entrepreneurs emerged in the study. Cluster 1 is labeled as "The Moderate EO - High MO Group" because while they generally come up with not so minor but not so dramatic changes in their products or services, the product or service changes that they introduce are relatively new to the market. At the same time, they are able to initiate actions to which their business rivals react. They take moderate and calculated risks and their employees are moderately self-directed in carrying out business ideas. Notably, they are inclined to avoid aggressive competitive behaviors towards their competitors. The cluster is also generally characterized by high levels of market agility and even higher inter-functional coordination among employees in serving customers' needs better than competitors. While businesses belonging to this cluster only moderately engage in informal social activities with someone influential in their industry, they do maintain professional relationships with these personalities. Moreover, the group maintains strong ties with their suppliers and friendly relationships with their customers.

Cluster 2 is labeled as "The Moderate EO/MO Group" because it is typified by moderate levels in all criterion variables except in terms of business ties, since the businesses under this cluster exhibited upper moderate levels on this criterion. It must be noted though that among the four clusters, Cluster 2 has the lowest level of business ties. These characteristics suggest that this group tends to play safe by being not so entrepreneurially oriented so as to boldly take risks, to compete head on with business rivals, to come up major product or service innovations, and to proactively initiate moves that competitors just follow while at the same time by being not so market — oriented so as to invest valuable resources to acquire market information and accordingly acting on these

information, to create a work environment that encourages collaboration and cooperation towards better serving the customers, and to build strong ties with industry personalities and clients. This cluster may consider this as a better posture given the environmental conditions of Higan City since it is easier for them to make strategic adjustments rather than when they are too much or too little of being entrepreneurial and market oriented.

Cluster 3 is labeled as "The Low EO - High MO Group" because of the relatively high levels in its market orientation - related dimensions, as well as in social ties and business ties and the relatively low levels in its entrepreneurial orientation dimensions. Specifically, changes in the products or services of the businesses in this group are towards of minor nature. Businesses belonging to this cluster have the tendency to be reactive to competitors' actions. They have a strong preference for low-risk projects and are typically cautious in their responses in pursuing their business goals. Furthermore, this group typically avoids hostile steps towards the competition. However, they are quick to detect changes in the market environment and accordingly respond to these changes. Even though employees of the businesses under this cluster are not self-directed and are dependent on management in pursuing market opportunities, when they are given the direction, they cooperate and work together in serving the needs of their target markets. However, it must be noted that the group has the lowest level in the social ties dimension of social capital among the four clusters. This means that the group does not engage so much in informal social ties with influential industry personalities compared to the clusters.

Cluster 4 is labeled as "The High EO/MO Group" because it is characterized by relatively high levels of entrepreneurial orientation except for the innovativeness and proactiveness dimension, which is at upper moderate levels; relatively high levels of market orientation; upper moderate levels in social ties; and high levels in business ties. Specifically, businesses in this group claim to have undertaken moderately dramatic/extensive changes in their products or services. A little more than half the time, they initiate actions to which competitors then respond. They also claim that a little less than often, they introduce new products or services, new technologies, or marketing techniques. Moreover, this group has a strong preference for high risk projects; engages in bold strategies in order to achieve organizational goals; and adopts an aggressive posture to take advantage of market opportunities

and potentials. Their employees embody initiative and innovativeness and are self-directed. They are also relatively aggressive towards their competitors. They are fast in detecting changes in the business environment and are quick to inform members of the organization about these changes and quick to respond accordingly. While they do engage in informal social relationships with influential personalities in the industry, they do so in moderation only. They are more intent in establishing strong ties with their suppliers and customers.

Conclusion

With influences of Lumpkin and Dess's (1996) entrepreneurial orientation concept as well as Narver and Slater's (1990) and Kohli and Jaworski's (1990) market orientation concepts, this study probed the underlying types of entrepreneurs in Iligan City. It was found that, overall, MSMEs in Iligan City, appear to have moderate levels of entrepreneurial orientation and high in market orientation. The four clusters of Iligan entrepreneurs, however, cautions stakeholders to avoid generalizing these orientations on local MSMEs as the study suggests that there are distinct groups characterized by different levels of entrepreneurial and market orientations.

Meanwhile, the study recognizes several limitations. The first limitation of the study concerns the cross-sectional nature of the study. Second, the study is limited to the inherent nature of perceptions data used. Perception surveys are known for issues on reliability due to social desirability bias and recall bias, among others. Thus, the results of the study may only be relevant to and generalizable in the context of Iligan City.

Recommendations

As the study presents insights into the different attributes of entrepreneurs in Iligan City in terms of entrepreneurial orientation, market orientation and network ties, it is recommended that needs analysis be undertaken prior to any intervention by government agencies, academe and other organizations. At least four different clusters of entrepreneurs with peculiar characterizations which imply different programs to enhance their firm performance is required. Avenues for

business networking may be organized specifically targeting Cluster 3 (Low EO-High MO) since they have relatively low levels of social ties. Cluster 3 could also benefit from capability building initiatives to increase their entrepreneurial competence on innovativeness and competitive aggressiveness. As this may be due to limited knowledge on tools and resources to conduct competitive analysis, trainings to address this need is also recommended.

To further validate the differences of the four entrepreneur clusters in Iligan City, future research may consider comparing the performance of the businesses from four clusters in order to determine if membership to any of the four clusters could more likely ensure high firm performance.

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