

## **The Relationship of Supply Chain Management Practices of Micro Enterprises to Competitive Advantage**

Limuel P. Pavico  
Tarlac State University, Philippines

— *Review of* —  
**Integrative  
Business &  
Economics**  
— *Research* —

### **ABSTRACT**

The study employed a correlation method of analysis to determine key variables for framework development. Twenty two (22) Micro Enterprises (100%) in Tarlac assisted by Provincial Cooperative and Enterprises Development Office (PCEDO) were taken and structured questionnaire was distributed to three sets of respondents to wit: micro enterprises' 22 entrepreneurs, with their 34 employees and 108 customers involved in supply chain management practices. Hence, a total of 164 or 93% responded and correlation analyses were carried out to address the objective of the study. The findings suggested an interesting perspective on supply chain management (SCM) functions among micro enterprises. The significant correlation was noted between price and promotion of marketing and supply chain management practices, this definitely made sense as micro enterprises strive to integrate their functions that are moving towards the attainment of competitive advantage in terms of cost; however, warehousing and physical distribution of logistics and price in marketing were registered to be significantly correlated with competitive advantage in terms of differentiation. Moreover, product, price and place of marketing; enterprise, customer and supplier of strategic planning were related to competitive advantage in terms of response. The findings of this study could be extended further into a proposed intervention program to Micro Enterprises to improve their Supply Chain Management practices.

**Keywords:** Supply Chain Management, Micro enterprises, Logistics, Competitive Advantage.

### **1. INTRODUCTION**

The new global era successful enterprises accurately anticipate market trends and quickly respond to changing customer needs. The customer determines the success or failure of supply chains. Firms and customers alike believe that “getting the right product, at the right price, at the right time to the consumer is not only the linchpin to competitive success but also the key to survival”. Thus, companies are forced to find flexible ways to meet customer demands, and, are focused on optimizing their core activities to maximize the response speed (Bensaou, 2014).

Supply chain management has been receiving increased attention from all fronts, namely academicians, consultants, and business managers. Organizations have recognized that SCM is the key to building sustainable competitive edge in the 21<sup>st</sup> century. Moreover, it has been widely talked about from various perspectives such as purchasing, logistics/distribution/transportation, operations and manufacturing

management, organizational behavior, and management information systems. Industrial organization and transaction cost analysis resource-based and resource-dependency theory competitive strategy.

A supply chain is a network of organizations operating different processes and activities to produce value in the form of products and services for the customer. Supply chain management is done with the integrated and process-oriented approach to the design, management and control of the supply chain, with the aim of producing value for the end customer, by both improving customer service and lowering cost. These activities involved in delivering a product to the customer, including sourcing raw materials and parts, production and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, delivery to the customer, and the information systems necessary to monitor all of these activities.

Now more than ever, firms worldwide have embraced the concept of supply chain management as important and critical to business. For the last few years, a number of companies and organizations have taken the lead to develop and improve their supply chain architecture, resulting in marked improvements in their performance (Li, 2005).

## 1.1 STATEMENT OF THE PROBLEM

This study is aimed to determine the relationship of supply chain management practices of micro enterprises to competitive advantage.

Specifically, the sought to answer the following questions:

1. How are the supply chain management practices of micro enterprises described along the areas of:
  - 2.1 logistics:
    - 1.1.1 materials management;
    - 1.1.2 warehousing;
    - 1.1.3 materials handling; and
    - 1.1.4 physical distribution;
  - 2.2 Information Technology:
    - 1.2.1 supplier coordination;
    - 1.2.2 production related; and
    - 1.2.3 customer taking order;
  - 2.3 marketing:
    - 1.3.1 product;
    - 1.3.2 price;
    - 1.3.3 promotion; and
    - 1.3.4 place;
  - 2.4 strategic planning:
    - 1.4.1 enterprise;
    - 1.4.2 customer; and
    - 1.4.3 supplier?
2. How do the supply chain management practices of micro enterprises relate to competitive advantage along areas of:
  - 3.1 cost;

- 3.2 differentiation; and
- 3.3 response?

## **2. LITERATURE REVIEW**

Indeed, the management of supply chain is necessary because companies have to become more specialized by initially searching for suppliers who can provide low cost, quality materials rather than own their sources of supply. Another reason stems from increased national and international competition. Customers have multiple sources to choose from; locating product throughout the distribution channel for maximum customer accessibility at a minimum cost becomes crucial. A third reason for the shift in emphasis to the supply chain is due to a realization by most companies that maximizing performance of one function may lead to less than optimal performance for the whole company. For these, managers in companies across the supply chain work together to make the supply chain competitive (Blackwell, 1999).

This resounding phenomenon in the global arena has inflicted even the micro enterprises in the country. Micro enterprises subsequently embrace the concept of supply chain management. The pressure is building up and there now exist the need to catch up to be competitive. Despite superior features and quality of goods and services, micro enterprises put premium on more superior customer service to gain competitive advantage over bigger companies. Supply chain efficiency is a domain within which micro- to mid-sized enterprises may find ways to gain such advantage (Li, 2005).

The micro enterprises' view of supply chain management seems to be the exertion of power by customers and consequently is seen as a one-way process. They do not employ SCM; they are managed at arm's length by large customers. Fawcett (2012) offer two reasons; first, globalization has brought increased pressure on manufacturing micro enterprises who have to continually reduce prices against a backdrop of improving quality and services, and second, for many micro enterprises, the expenditure on goods and services account for a high production of turnover and it is influential in the achievement of business objectives. Based on these, this study considers SCM as a tool to improve the performance of micro enterprises.

The influence of micro enterprises on Tarlac Province's industrial and economic competitiveness is considerable. However, many of these enterprises are slow to invest in new technologies and to benefit from SCMs best practices. This study is an attempt to assess the competitive advantage that micro enterprises are capable of attaining through SCM practices.

## **3. METHODOLOGY**

To determine the profile of the Micro Enterprises in Tarlac, a directory from the Provincial Cooperative, and Enterprise Development Office (PCEDO) Tarlac was scrutinized to obtain the necessary data. Simple frequency distribution was used to present the data.

Moreover, to determine the supply chain management practices of Micro Enterprises, weighted means were calculated and provided with corresponding adjectival descriptions.

The researcher used Pearson's  $r$  coefficient in its endeavor to correlate the relationships between supply chain management practices of Micro Enterprises to competitive advantages.

### **3.1 RESPONDENTS OF THE STUDY**

The researcher considered three sets of respondents: 1) 22 entrepreneurs, representing 100% or total enumeration of the micro enterprises' entrepreneurs engaged in manufacturing firms in the Province of Tarlac assisted by Provincial Cooperative and Enterprise Development Office for the period 2012, 2011 and 2010; 2) 34 Micro Enterprises' employees, representing 81% were requested to answer the questionnaire; and 3) 108 customers were randomly selected from the Micro Enterprises to respond to questions pertaining to competitive advantage.

### **3.2 INSTRUMENTATION**

Instruments to measure SCM practices were patterned after the study of Thakkar (2008), and, the competitive advantage constructs were based from the study of Ismail, et. al (2008). The instrument was developed, tested and enhanced by the researcher to ascertain the accuracy of the data gathered. Consultations from marketing consultants, production/operations management professors and from some SCM practitioners were undertaken to finalize the questionnaire.

The instruments had been administered to a smaller sample to cement the validity and reliability of such. The instruments' validity and reliability are crucial to measure what is intended to be measured as well as to establish the response consistency.

The instruments' reliability were calculated using the Cronbach's Alpha coefficient with the minimum standard of alpha higher than 0.6. The Cronbach's  $\alpha$  scores were .783. All  $\alpha$  scores were higher than 0.70 and could depict a good measure of reliability. Both of the tests utilized SPSS computer software.

## **4. DISCUSSION AND ANALYSIS**

### **4.1 MICRO ENTERPRISES' INDUSTRY PROFILE**

Table 1. Industry Sector of Micro Enterprises

Industry Sector	Frequency	Percentage (%)
Food and Food Products	14	63%
Gifts and Holiday Décor	3	14%
Handicraft	3	14%
Wearable	2	9%
Total	22	100%

The table shows 14 out of 22 (63%) Micro Enterprises were from the food and food products industry. They produce delicacies, desserts, pastries, and the like. Some were engaged in the manufacturing of processed foods, refreshments and food preparation. The demand for food away from home is on top of the spectrum, Micro Enterprises venture in the food industry. This may be explained that despite inflation and the challenges brought by business cycles, the market for food service meals is stable. Rising household income and demographic development may also account for this.

It was followed by handicraft and gifts and holiday décor industries, three out of the twenty-two registered Micro Enterprises (14%). Sourcing of other income encouraged entrepreneurs to venture in this industry, stemming from Department of Trade and Industry's (DTI) training programs on handicrafts. Demands on these goods increase significantly in the third and fourth quarters of the year. These entrepreneurs may have been driven by previous work experience and exposure to family business. It may be said that entrepreneurial motivation came from their desire to augment existing family income and took advantage of the opportunity.

#### 4.2 SUPPLY CHAIN MANAGEMENT PRACTICES OF MICRO ENTERPRISES IN TARLAC.

Table 2 shows the practices in logistics of micro enterprises.

Table 2. Supply Chain Management Practices of Micro Enterprises in Tarlac

Practices	Grand Mean	Industry							
		Food and Food Products		Gifts and Holiday Decor		Handicraft		Wearables	
		Mean	Adjective Rating	Mean	Adjective Rating	Mean	Adjective Rating	Mean	Adjective Rating
Logistics	3.79	3.64	Often	3.74	Often	4.09	Often	3.73	Often
Information Technology	3.25	2.06	Seldom	3.64	Often	3.38	Sometimes	3.25	Sometimes
Marketing	3.82	3.66	Often	3.81	Often	4.09	Often	3.74	Often
Strategic Planning	4.17	4.07	Often	4.20	Often	4.38	Often	4.14	Often

Grand Description	3.75- Often	3.38	Sometimes	3.85	Often	3.99	Often	3.72	Often
-------------------	----------------	------	-----------	------	-------	------	-------	------	-------

An overall view shows the supply chain management practices of Micro Enterprises. Strategic Planning registered the highest mean score with 4.17. This explains that through strategic planning proper coordination was assured within the enterprise and element of precision which would ensure the right product/service will be at the right place at the right time.

The different sectors had remarkable growth potential and principally act as a motor of sector development and economic growth of the entities. As the table summarizes the findings from the different involved in strategic planning to wit; food and food products (4.07), gifts and holiday décor (4.20), handicraft (4.38) and wearables (4.14). These all signify an often practiced by the micro enterprises.

For marketing, the most emphasized SCM practices were registered by the handicraft industry (4.09). As displayed in the table, the micro enterprises in different industries showed full extent of practice “often” responses that they do consider marketing variables as a significant in their SCM. Most micro enterprises effectively leverage the place component of the marketing mix through effective use of location variables.

Practices of utilizing information technology on the other hand indexed the lowest mean (3.25). Although, there are notable differences between industries, and therefore any generalization would have its own exceptions. The major IT-adoption problems faced by Micro Enterprises include limited budgetary access and impracticality of IT in the specific industry sector that would improve supply chain management performance; limited access to best practices, technologies, and methodologies for improving supplies chain management performance and a lack of collaboration to reach sizes sufficient to compete to large entities.

For food and food products recorded the lowest mean score of 2.06 which under “seldom” category. The remaining industries however, registered limited extent of practice with often adjectival description. This explains that customer bring forth some of the elements that comprise information sharing, including data acquisition, processing, storage, presentation, among others, for Micro Enterprises’ competitiveness.

In relations to SCM best practices, micro enterprises still grope to adopt and conform with limited extent of such benchmark indices: selecting the right suppliers and forming strategic alliances with them were not taken into consideration. The micro enterprises still cling with the age-old concept of selecting suppliers. The micro enterprises have no metric system of continuously monitoring the performance of the suppliers. The performance measures for the suppliers may include: conformance of the product and services, on-time delivery, flexibility, willingness to share knowledge/information, willingness to participate in product development and communication systems. The best practice suggested that micro enterprise must concentrate on few selected suppliers who consistently show high performance and

form strategic alliances with them. With adequate systems to listen to voice of customers and to select the right suppliers, it is relatively easy for enterprises to improve their operational efficiencies. It is the operational efficiencies that help to cut costs and improve profitability for all members in the supply chain.

It is quite interesting to note that the respondents have identified some practices and adopt with limited extent. While there are efforts to collaborate with suppliers in strategic planning, in general, the rate of adoption is relatively low. Collaboration with suppliers in various industries is generally done through traditional communication systems as discussed earlier.

Close relationships with the customers dictate responsiveness to their needs. Micro enterprises to a limited extent often practice these strategies which comply with marketing principles and subordinated to strategies towards final consumers. It results from adopted in such situation market orientation and requirement to conform all activities to preferences and satisfactions of consumers. Strategy towards suppliers as discussed earlier cannot be therefore shaped beyond the strategy towards final customers, but it becomes an integral part of it.

Although, not all practices of supply chain management used by micro enterprises were subordinated to influencing customers. Some of actions can support basic goals of company, even if they are not directly associated with influencing target market (e.g. active community role, extending charities) in a way compliant with assumed way of affecting the upstream level of the chain that can affect supply chain management as a whole.

### **4.3 THE RELATIONSHIP OF SUPPLY CHAIN MANAGEMENT PRACTICES OF MICRO ENTERPRISES TO COMPETITIVE ADVANTAGE**

#### **4.3.1 COST**

Table 3 presents the relationship of the Supply Chain management practices on Micro Enterprises Competitive Advantage in terms of Cost.

Table 3. Relationship of the Supply Chain management practices on Micro Enterprises' Competitive Advantage in terms of Cost

Variables Being Related to Cost Competitive Advantage	r	Probability	Significance
Logistics			
1. Materials Management	.098	.465	Not Significant
2. Warehousing	.063	.639	Not Significant

3. Materials Handling	.048	.718	Not Significant
4. Physical distribution	.031	.820	Not Significant
Information Technology			
1. Supplier Coordination	.075	.576	Not Significant
2. Production Related	.038	.777	Not Significant
3. Customer Taking Order	.154	.250	Not Significant
Marketing			
1. Product	.154	.249	Not Significant
2. Price	.437	<b>.001**</b>	<b>Significant**</b>
3. Promotion	.312	<b>.017*</b>	<b>Significant*</b>
4. Place	.213	.109	Not Significant
Strategic Planning			
4. Enterprise	.034	.802	Not Significant
5. Customer	-.021	.873	Not Significant
6. Supplier	-.044	.745	Not Significant

\*The relationship is significant at 5% level      \*\* The relationship is significant at 1% level

The table shows that there is no significant relationship between all the variables and SCM on Cost except price and promotion in marketing.

It means that materials management, warehousing, materials handling, and physical distribution of logistics; supplier coordination, production related and customer taking order using information technology; and product, and place of marketing were not related to competitive advantage on cost.

Hence, improvement of marketing price or lower of pricing by the micro, small, and medium enterprises would mean an improved competitive advantage in cost. For the marketing price, the null hypothesis was rejected at 0.01 level of significance. Thus, the alternate hypothesis that there was relationship between supply chain management practices to cost competitive advantage was accepted. Moreover, the supply chain management practices did not vary in the Micro Enterprises cost competitive advantage.

It means further, the firm cannot improve the competitive advantage on cost by itself, but only when it is supplemented by other best industry practices, which, when combined together can give Micro Enterprises a defensible position over its competitors.

Meanwhile, promotion of products may mean an improved competitive advantage in cost. Promotion adds significance and also helps customers make better judgments on choosing products/services offered. For marketing promotion, the null



hypothesis was rejected at 0.05 level of significance. Thus, the alternate hypothesis was accepted. It means further, that in order to be perceived as a company of integrity, honesty and with the ability to deliver to the customer, there is a need to engage promotional activities.

#### 4.3.2 DIFFERENTIATION

Table 4 shows the relationship of the SCM practices on Micro Enterprises' Competitive Advantage in terms of Differentiation.

Table 4. Relationship of the Supply Chain management practices on Micro Enterprises Competitive Advantage in terms of Differentiation

Variables Being Related to Differentiation Competitive Advantage	r	Probability	Significance
Logistics			
1. Materials Management	.029	.831	Not Significant
2. Warehousing	.292	<b>.026*</b>	<b>Significant*</b>
3. Materials Handling	-.029	.826	Not Significant
4. Physical distribution	.295	<b>.025*</b>	<b>Significant*</b>
Information Technology			
1. Supplier Coordination	.150	.261	Not Significant
2. Production Related	.001	.995	Not Significant
3. Customer Taking Order	.008	.950	Not Significant
Marketing			
1. Product	.229	.084	Not Significant
2. Price	.479	<b>.000**</b>	<b>Significant**</b>
3. Promotion	.247	.061	Not Significant
4. Place	.234	.077	Not Significant
Strategic Planning			
1. Enterprise	.220	.098	Not Significant
2. Customer	-.031	.817	Not Significant
3. Supplier	.008	.951	Not Significant

\*The relationship is significant at 5% level

\*\* The relationship is significant at 1% level

The table shows that only warehousing and physical distribution in logistics, and, price in marketing were related to competitive advantage on differentiation. Thus, the null hypotheses were rejected; at 0.05 level of significance for warehousing and physical distribution, and at, 0.01 level of significance for marketing price. This contends that the higher level of warehousing and stock room practices of Micro Enterprises would mean high quality and improved differentiation competitiveness (both delivery time and flexibility of product delivery).

This further means an improved ability of a firm to address changes in customer demand. Operations system may differentiate in the enterprise that includes both manufacturing and service operations. Differentiation component in the logistics system include selecting logistics components that accommodate and adjust warehouse capacity or stock room to address demand changes, handle a wide range of products, vary transportation carriers, have the ability to pack product-in-transit to suit discreet customers' requirements, and have the ability to customize products close to the customer that is related to higher competitive advantage.

On the other hand, the higher the level of logistics in distribution practices by a firm, the higher the level of its competitive advantage in differentiation. In other words 'physical distribution practices' of a firm can improve the competitive advantage in differentiation of supply chains- which implies differentiation could lead to the competitive advantage of the micro enterprises' supply chain management.

Physical distribution assists organizations to have a smooth network to customers thereby improving the ability of suppliers to design, produce, and deliver quickly too.

This implies that physical distribution practices improve the supplier network responsiveness in a supply chain. Hence, firms that can reconfigure and reorganize production teams quickly without loss of efficiency can minimize the manufacturing response time without compromising on the quality of product design or process execution that would differentiate the operations of micro enterprises.

The lower the pricing of Micro Enterprises to its products would mean an improved competitive advantage in differentiation. This means that improvements in manufacturing costs and productive efficiency is the necessary condition for a differentiation in supply chain and which further reduces the time to market.

Extensive coordination with suppliers and customers involving them in new product development process has been found to enhance the ability of organizations to develop successful new products, and thus gain competitive advantage in the marketplace.

Hence, supplier integration can reduce material costs and quality, product development time and cost, and manufacturing cost while improving functionality. Advantages of supplier participation in new product development include reduced project costs and improved perceived product quality. A long-term relationship with the supplier would have a lasting effect on the competitiveness of the entire supply chain.

The rest of the hypotheses were accepted (materials management, materials handling, supplier coordination, production related, customer taking order, product, promotion, place, enterprise, customer and supplier). Micro Enterprises did not differentiate the supply chain management as to competitive advantage.

### 4.3.3 RESPONSE

Table 5 presents the relationship of Supply Chain Management practices on micro enterprises' in terms of response.

Table 5. Relationship of the Supply Chain management practices on Micro Enterprises' Competitive Advantage in terms of Response

Variables Being Related to Response Competitive Advantage	R	Probability	Significance
Logistics			
1. Materials Management	.120	.370	Not Significant
2. Warehousing	.101	.453	Not Significant
3. Materials Handling	-.152	.256	Not Significant
4. Physical distribution	.247	.062	Not Significant
Information Technology			
1. Supplier Coordination	.065	.629	Not Significant
2. Production Related	.040	.766	Not Significant
3. Customer Taking Order	-.032	.811	Not Significant
Marketing			
1. Product	.418	<b>.001**</b>	<b>Significant**</b>
2. Price	.324	<b>.013*</b>	<b>Significant*</b>
3. Promotion	.306	<b>.020*</b>	<b>Significant*</b>
4. Place	.225	.089	Not Significant
Strategic Planning			
1. Enterprise	.341	<b>.009**</b>	<b>Significant**</b>
2. Customer	.336	<b>.010**</b>	<b>Significant**</b>
3. Supplier	.362	<b>.005**</b>	<b>Significant**</b>

\*The relationship is significant at 5% level

\*\* The relationship is significant at 1% level

As shown on the table, only product, price and promotion of marketing; and enterprise, customer and supplier of strategic management were related to competitive advantage in terms of response. For these variables, the null hypotheses were rejected.

The rest of the hypotheses were accepted (materials management, warehousing, materials handling, physical distribution, supplier coordination, production related, customer taking order, and place).

This indicates that product, price and promotion of marketing; and supplier coordination, enterprise and customer taking order of strategic planning of supply chain management could provide the Micro Enterprises with competitive advantage on response. It means an improved product/more innovative product offered by Micro Enterprises could provide competitive advantage to them.

This further means that having close relationships with customers in a supply chain would increase responsiveness of organizations to the customers' needs. As customers become more demanding, entities must understand how to design, and operate production systems that can meet the specific needs of the customers with speed, in large volumes so economies of scope were achieved.

For entrepreneurs, this implies that being operationally responsive would enable organizations to introduce new products faster than major competitors. Micro Enterprises pricing indicates that the improved level of supply chain management practices by a firm, the higher the level of its competitive advantage in response. In other words 'SCM pricing practices' of a firm has a direct positive influence on its competitive advantage.

The successful lower pricing implementation would improve the organization's responsive performance that would give the organization a defensible position over its competitors through the coordination of inter-organizational activities along the supply chain.

This further means an improved ability of a firm's major suppliers to address changes in the firm's demand. A key to responsiveness is the presence of responsive and flexible partners upstream and downstream of the focal firm pricing.

The ability of firms to react quickly to customer demand is dependent on the reaction time of suppliers to make volume changes and improved pricing that would give them competitive advantage.

On the other hand, an improved marketing promotion of the enterprise would mean a more competitive advantage in response by the Micro Enterprises. This means that promoting the business can move toward developing competitive advantage stress the importance of the business to demonstrate flexibility, agility, speed and adaptability, and that these abilities seem to be increasingly important sources of competitiveness in the existing business environment. Micro Enterprises can leverage the sources of competitiveness in an effective fashion.

In addition, proven techniques in developing competitive advantage for micro enterprises include developing customers, forging strategic partnerships, intensifying marketing promotions, and facilitating people effectively within the business. Meanwhile, the enterprise's improved ability to introduce new products and features in the market place, as well as improved firm's ability to provide on time delivery would mean a competitive advantage of the Micro Enterprises. Meeting these needs requires

responsiveness in the supply chain at various stages from the raw materials to finished products to distribution and delivery would bring the micro enterprises competitive advantage in response.

Moreover, the higher level of supplier partnership as a strategy would mean a greater level of competitive advantage to Micro Enterprises. This means further that the long term relationship between the organization and its suppliers designed to ascertain the strategic and tactical perks and competitive advantage. An improved strategic partnership provides long-term relationship between trading partners and promotes mutual planning and problem solving efforts to be responsive.

All other variables did not show sufficient evidence for the alternate hypothesis to be rejected in each statistical test. This only meant that the Micro Enterprises' competitive advantage in terms of response did not vary with the supply chain management practices.

## **5. CONCLUSIONS**

In light of the findings of the study, the following conclusions were drawn:

### **5.1. PROFILE OF MICRO ENTERPRISES**

Majority of the Micro Enterprises were engaged in food and food products industry and most of them were in business operations for 20-29 years with not more than six employees.

### **5.2. SUPPLY CHAIN MANAGEMENT PRACTICES OF MICRO ENTERPRISES**

#### **5.2.1 LOGISTICS**

The micro enterprises from the different industries practiced to a limited extent of SCM in logistics with their suppliers and customers. The SCM practice fully explored by micro enterprises was the Physical Distribution. On the other hand the least often practiced was the Materials Handling.

#### **5.2.2 INFORMATION TECHNOLOGY**

The SCM practices by the micro enterprises in Supplier Coordination and Production Related were still conducted in the traditional and conventional way. However, Customer Taking Order was often practiced through limited social media communications to customers. The low adoption of SCM practices to IT by micro enterprises was attributed to the non availability of IT facility in an industry.

#### **5.2.3 MARKETING**

Micro enterprises of different industries have often practiced the various marketing elements of SCM practices that include product, place and price.

#### **5.2.4 STRATEGIC PLANNING**

Varied industries of micro enterprises often managed its supply chain to determine the strategy by planning of the enterprise, its suppliers and customers' capabilities through combinations and collaborative functions in long term basis.

### **5.3 SUPPLY CHAIN MANAGEMENT PRACTICES OF MICRO ENTERPRISES RELATE TO COMPETITIVE ADVANTAGE**

#### **5.3.1 COST**

Price and promotion of marketing of SCM practices were significantly correlated to competitive advantage in terms of Cost. This definitely would make sense as Micro Enterprises strive to integrate their functions that were moving towards the attainment of competitive advantage.

#### **5.3.2 DIFFERENTIATION**

Warehousing and physical distribution of logistics were related to competitive advantage; while price of marketing was related to competitive advantage in terms of differentiation. This explained that having smooth warehousing and physical distributions develop a better understanding between trading partners thus increasing a firm's ability to differentiate operations of enterprises.

#### **5.3.3 RESPONSE**

Product, price and place of marketing; and enterprise, customer and supplier of strategic management were related to competitive advantage in terms of response. This emphasized that nourishing long term mutually beneficial relationships with suppliers and customers in real time throughout the supply chain leads to more responsive enterprises that would lead to competitive advantage.

## **6. RECOMMENDATIONS**

In view of preceding findings and conclusions of the study, the following are hereby recommended:

6.1. Supply Chain Management may practice by micro enterprises in full extent to achieve a smooth collaboration with suppliers and customers geared towards competitive advantage.

6.2. The micro enterprises may consider use of IT social media accounts like twitter, google, instagram other than facebook in business operations to convey the requirements to the upstream and downstream supplier part of the chain faster.

6.3. Marketing elements may optimize by the micro enterprises in full scale of its SCM practices specifically promotion of the product to customers.

6.4. The micro enterprises should consider strategic planning with the other players or streams like competitors and government of SCM practices for long term growth that can successfully and sustainably improve their business performance.

6.5. Future researches on supply chain management should also look into other variables that could explain the differences in adoption of demand and supply management strategies other than industry category. Some variables to look into will be:

6.5.1 The extent of ownership, technology level, company resources, and other resource-based variables.

6.5.2 The link of adoption of supply chain practices with respect to supply chain performance like present capitalization versus initial investment to show if SCM has, indeed, an impact on enterprise performance.

6.5.3 A case study of selected companies that reflected relatively higher adoption of SCM-based supply chain practices. This is important to describe how these companies implemented such operations and how they derived competitive advantage from these operations.

## **ACKNOWLEDGEMENT**

The researcher is grateful to all those who have been involved in the completion of this study. While they are too numerous to name individually, prominent among them are the micro enterprises assisted by PCEDO-Tarlac, the Tarlac State University Administration and most specially my family-Hermina P. Pavico, Maricel Pavico-Ambanta, Ariel P. Pavico and Sally Pavico-Maceda who spent time and effort to support and extend help and see this endeavor through.

## **REFERENCES**

- [1] Bensaou, M. (2014), "Portfolios of Buyer-Supplier Relationships", *Sloan Management Review*, 40(4), pp. 35-44.
- [2] Blackwell, R.D. & Blackwell, K. (1999). *The century of the consumer: Converting supply chains into demand chains*. *Supply Chain Management Review*, Fall.
- [3] Council of Supply Chain Management Professionals (CSCMP). (2010). *Glossary of terms*. <http://cscmp.org/digital/glossary/glossary.asp> (updated as of February 2010).
- [4] Fawcett, S. E. (2012), "Strategic Logistics in Coordinated Global Manufacturing Success", *International Journal of Production Research*, 30(5), pp. 1081-2000.
- [5] Heizer, J., and Barry Render, (2010), "Principles of Operations Management, 7e *Operations Management*, New York: Pearson, Prentice Hall.
- [6] Li, S., Rao, S. Subba, Ragu-Nathan, T. S., and Ragu-Nathan, B. (2005), "Development and Validation of A Measurement Instrument for Studying Supply Chain Management Practices", *Journal of Operations Management*, 23(6), pp. 618-641.
- [7] Solis-Galvan, L. E. (1998), *An Exploratory Study of the Relationship between Quality Management and Manufacturing Competitive Capabilities*, Doctoral Dissertation, the University of Toledo, Toledo, OH.

- [8] Talavera, Gloria. (2010), "Measuring Supply Chain Performance in Selected Philippine Manufacturing Companies". University of the Philippines, Diliman, Quezon City.
- [9] Thakkar (2008), Supply Chain Management – A Customer-Oriented Framework, Doctoral Dissertation, University of Toledo, Toledo, OH.
- [10] Thatte, Aishish (2007), Competitive Advantage of a Firm through Supply Chain Responsiveness and SCM Practices, Doctoral Dissertation, The University of Toledo, Toledo, OH.