

# **Modelling the Relationships Between Supply Chain Strategies, Competitive Priorities and Organizational Performance**

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## **Abstract**

There are recent calls for research into understanding how manufacturing operations in Ghana can be improved, make them competitive and also increase the sector's contribution to the economy. Against this background, this study explored the relationships between supply chain strategies, competitive priorities and organizational performance in the context of manufacturing operations in Ghana. To achieve the research objectives, a structured questionnaire was used to collect data from 230 manufacturing firms. The data collected was analyzed quantitatively through Structural Equation Modelling (SEM), to establish the anticipated relationships. The study revealed that, supply chain strategies measured by efficiency and responsiveness, positively influence competitive priorities (cost, quality, speed, flexibility and dependability) and organizational performance measure by revenue and market share. Efficiency as a supply chain strategy was found to impact more on market share than revenue. Also, competitive priorities positively influenced revenue than market share. Cost as a competitive priority positively influence revenue than market share. However, Supply chain strategies had higher impact on revenue and market share than competitive priorities on revenue and market share. In view of this, the study recommends that Ghanaian manufacturing firms should adopt the efficient supply chain strategy and also Cost as a competitive priority to be able to improve their organizational performance and stay competitive.

## **Keywords**

Supply Chain Management, Supply Chain Strategies, Competitive Priorities, Competitive Strategy and Organizational Performance.

## **1. Introduction**

Effective supply chain management (SCM) has become an undoubtedly potential valuable way of obtaining competitive advantage and enhancing firm's performance as competition is no more between firms, but between supply chains (Colin et al. 2015). Supply chain strategies centers on the progress and modification of entire process between organizations and plays a crucial role in expounding firms' operating strategy (Qi et al. 2017). Competitive strategy aims to promote competitive advantage for a firm in an industry. Therefore, it refers to strategies that firms put in place to deal with competition in their market and emphasizes on realizing and sustaining a competitive advantage in the target industry (Taghipour et al. 2020). There are few variables that organizations set as their competitive priorities on which their strategies are designed. Some dimensions of competitive priorities are quality, cost-leadership, delivery, flexibility, differentiation dependability, innovation, time, service and manufacturing technologies (Bayraktar et al. 2017; Kathuria et al. 2010).

The importance and the relationship that exists between supply chain strategies, competitive priorities and organizational performance have not gained much consideration in research. Farida and Setiawan (2022) examined the association between business strategy and competitive advantage (competitive strategy) whereas Corbett and Claridge (2002) examined the link between competitive priorities and performance, and the effect of competitive priorities on the performance of operations capabilities. More so, Werastuti et al. (2019) assessed the roles of competitive strategies and strategic alliances in improving sustainability performance. Again, Vachon et al. (2009) looked at coordinating competitive priorities in supply chain; the function of interactivity with suppliers. Furthermore, Christopher and Ryals (1999) assessed supply chain strategy; its effect on shareholder value. Boyer (1998) assessed how the significance placed on four key competitive priorities (cost, flexibility, delivery and quality) is linked with the investment an organization makes to push these goals. Surprisingly, no study has looked at the relationship between supply chain strategies, competitive priorities and organizational performance to the best of the authors' knowledge. From the definitions of supply chain strategy, competitive priorities and organizational performance, it could be said that every manufacturing firm has a supply chain strategy they implement whether consciously or vice-versa to receive materials from the suppliers through to the distribution to the final consumers.

After production, these firms must compete in the marketplace with other firms in the industry with their pre-determined competitive priority (priorities) which they set before production began. Therefore, the selection of the appropriate supply chain strategy coupled with the right competitive priority is likely to make firms more competitive. For this reason, the relationship between supply chain strategies and competitive priorities is worth studying. Again, most of these related studies were conducted in Europe and other developed economies with little to no focus on developing economies such as Ghana. Furthermore, existing studies failed to examine the strand of relationships between supply chain strategies, competitive priorities and organizational performance. The increased competition brought about by multinational and foreign firms require Ghanaian manufacturing firms to understand the importance of the relationship between supply chain strategies, competitive priorities and organizational performance. Also, the choice of a competitive strategy is influenced by the customer requirement and competition. Therefore, the customers' demand for quality, speed, flexibility, and lower prices require that firms must implement a befitting strategy to meet the customer needs. The choice of the competitive strategy must as well be accompanied with the appropriate supply chain strategy so as to maintain a strategic fit which might then lead to meeting customer needs and also staying competitive. The declining contribution of the industrial sector to Ghana's Gross Domestic Product (GDP) requires that more research must be done to examine whether manufacturing firms are competing with the right competitive priorities (cost, quality, speed, flexibility and dependability) in the marketplace.

Subsequently, this study seeks to address these gaps by modelling the association between supply chain strategies, competitive priorities and organizational performance considering manufacturing firms in Ghana. Modelling the relationship will explain the combined effect of competitive priorities and supply chain strategies on performance as well as the individual effect each has on performance and also the effect of supply chain strategy on competitive priority.

### **1.1 Objectives**

The main objective of this paper is to examine the relationships between SCS, CP and organizational performance.

The specific objectives are to:

1. Establish the supply chain strategy or strategies (efficiency and responsiveness) pursued by Ghanaian manufacturing firms.
2. Establish the competitive priorities or a bundle of priorities (cost, quality, speed, flexibility and dependability) that manufacturing firms in Ghana compete on.
3. Determine the extent to which competitive priorities are influenced by supply chain strategies.
4. Determine the extent to which organizational performance (Revenue and Market Share) is influenced by supply chain strategies.
5. Ascertain the degree to which organizational performance (Revenue and Market Share) is influenced by competitive priorities.

## **2. Literature Review**

In this section, we review the literature to develop insights into the interrelationships existing between supply chain strategy, competitive priority organizational performance to develop a sound theoretical foundation for the study. We established the components of supply chain strategies, competitive priorities and organizational performance and the associated linkages. Some concepts and theories regarding these constructs have also been reviewed.

Chuang and Lin (2017) posit that, firms' internal properties can be defined in terms of tangible and intangible (assets) and competencies and internal knowledge (capabilities). According to Innocent (2015), RBV theory have been adopted for several studies on organizational performance. It views organizational success as dependent on resources specifically internal properties. From the RBV theory, superior performance and competitive advantage is an outcome of the resources an organization possesses. The trade-off theory also explains that, for organizations to outperform competitors, they have to select one priority over the others at one particular point in time but depending on what customers' needs and wants are. They cannot run or work with more than one priority at a given point in time (Acaravci 2015). The Sand Cone theory of competitive priority also states that, competitive priorities should be implemented in a progressive manner to a point where they (organizations) may offer quality products, customized products at a lower cost etc.

Supply chain strategy requires decisions involving the selection of distribution channels, the decisions on facilities, and the choice of suppliers. These decisions are made with reference to the supply chain objectives of the firm. There are three phases involved in the supply chain management process. The first phase is the supply chain strategy which is mostly done by top management and it comprises the structural layout of the entire supply chain. The second phase which is the supply chain planning phase is done according to the demand and supply views. The third stage is the supply chain operations where the actual supply chain activities are carried out in every department. That is, starting from handling customers' orders to delivering customers' orders (Christopher and Holweg 2011). The study focuses on efficiency and responsiveness as the variables measuring supply chain strategies. The current competition in the market place requires the implementation of either the efficient and responsive supply chain strategies (Ambe and Badenhorst-Weiss 2010). Prajogo et al. (2017) argue that, the efficient supply chain concerns itself with low-cost strategies that emphasis on producing the highest cost efficiencies in the supply chain through improvements in assets, labor utilization and materials. A responsive supply chain on the other hand, concentrates on being responsive to customer requests by presenting a wide range of product variation with numerous product features and being able to adjust capacity quickly. However, the supply chain strategy that a firm selects must align with the overall strategy of the organization to ensure a strategic fit to prevent discrepancies that might affect the organizational performance in the long term. There has to be a strategic fit in terms of the resources (human, financial, technology etc) available to the firm to be able to implement the supply chain strategy as these strategies cannot be implemented without the necessary resources. Again, there has to be a strategic fit between supply chain strategies and the other strategies the organization implements in order for the organization to realize its goals.

Competitive priorities are extremely vital to firms as they facilitate the formulation of attainable objectives when selecting and implementing business plans into operations plans. Competitive priorities enable firms to make right decisions for organizational processes (Jitpaiboon 2014). According to Guimarães and Garo Jr (2018), there are many distinct perspectives on competitive priorities; many of the studies show that, competitive priorities are made up of four fundamental dimensions: quality, delivery, flexibility and cost. Literature proposes the above-mentioned dimensions of competitive priorities to make up the basis of a company's operations strategy. As research into operations strategies increased, researchers established innovation, dependability and service (Zakaria et al. 2012) as equally critical operations performance dimensions. For the purposes of this study, we define competitive priorities to include cost, quality, speed, flexibility and dependability. These operations priorities were selected based on their dominance in the literature as well as their relevance and fit to the Ghanaian manufacturing operations.

Organizational performance is the reflection of productivity of members of an organization measured in terms of growth, profit, large market share etc. (Kehinde et al. 2012). Different studies have different ways of measuring organizational performance. Some researchers have classified organizational performance measurement into objective and subjective measurements (Singh et al. 2016). According to Richard et al. (2009), organizational performance is made up of three broad aspects of firms: (1) Financial performance (revenue, profits etc) (2) product market performance (market share, sales etc.); lastly (3) shareholder' return (economic value added, total shareholder returns etc.). In the current study, we characterize organizational performance by revenue and market share as these two are core to the success of any firm as evident from the literature.

A competitive advantage can be achieved through a firm's supply chain strategies by aligning supply chain competences with market requirements; that is, the price consumers want to buy the goods, delivery dates and times, etc. (Soni and Kodali 2011). Consequently, supply chain strategies must be aligned with the firm's strategies to engender sustainable competitive advantage (Hofmann 2010). It was empirically verified that, the alignment between firms' supply chain strategy selection and the firms' business environment affects their overall performance. It is thus pertinent to associate business performance with the alignment between supply chain strategy and competitive strategy (Soni and Kodali

2011). From the above, it could be said that competitive priorities have a positive relationship with organizational performance. Similarly, supply chain strategies are anticipated to have influential effect on organizational performance. Also, selecting the appropriate supply chain strategy in addition to competitive priorities could have a positive impact on organizational performance.

The resource-based view (RBV) suggests that organizations' performance is dependent on the resources they possess. Similarly, both the Trade-Off theory and Sand Cone theory also lay emphasis on the use of appropriate resources. Therefore, for organizations to achieve superior performance, they must possess valuable resources (capabilities) that will be invested into crystalizing these priorities. A firm could either select one or more supply chain strategies and also one or more competitive priorities based on the Sand Cone theory in relation to the number of resources they possess and also what they seek to gain at the end. The relationships between the research variables that this study sought to establish is conceptualized in Figure 1 below.

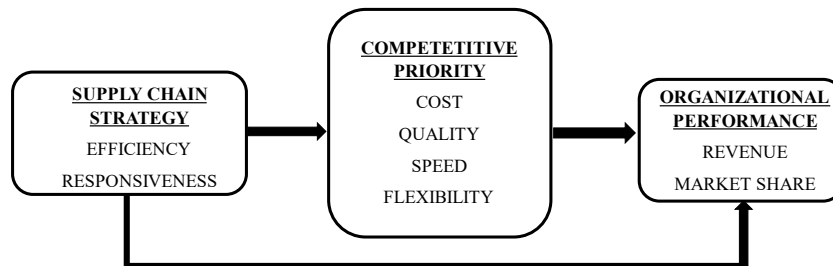


Figure 1. The conceptual framework of the study

This section has reviewed literature on the main constructs of the study which are supply chain strategies (SCS), competitive priorities (CP), and operations performance (OP). The theoretical basis on which the relationships were explored included the RBV theory, the Trade-Off theory and the Sand Cone theory. The review of the literature establishes that, the research variables (SCS, CP and OP) have been examined individually in many studies but very little to no attempt has been made explore the associations between SCS, CP and OP in the same study. The current study aims at filling the identified literature gap by establishing an understanding of the relationships from a developing economy perspective.

### 3. Methods

This study employed the quantitative research approach as it sought to predict the relationships between the variables through statistical means. Primary Data was collected from 267 Ghanaian manufacturing companies, consisting of small, medium and large-scale enterprises. The sample size consisted of both local (firms that have presence in Ghana alone) and multinational manufacturing firms. The targeted respondents were the operations managers, plant managers, supply chain managers or their equivalence in the respective firms. Structural Equation Modelling was used for the statistical analysis of the data in AMOS.

### 4. Data Collection

The study adopted the face-to-face method of administering questionnaires to the respondents. Contact addresses of respondents who were not able to immediately complete the questionnaire were taken and contacted later for them to complete the questionnaires. 267 questionnaires were administered to the manufacturing firms. Meetings with respondents were organized through industrial visits and at such meetings the purpose of the study was explained. A 5-point Likert scale was adopted in the questionnaire design to provide options to the respondents in answering the questions on the questionnaire. The questionnaire was in two parts. The first part sought information on the background of the firms whilst the second part sought information on supply chain strategies, competitive priorities and firm's performance. The questionnaire was made up of 62 items (questions), all of which addressed the objectives of the study. Data was collected over a period of three months. At the end of the three months, 230 out of the 267 questionnaires were retrieved generating a response rate of 86.14%.

Results from the sampled data revealed that 207 out of 230 respondents which represented 90% of the total respondents were operations managers and the remaining 10% were plants managers. 20% of the respondents at the time of the data

collection have been occupying their positions for less than a year and the remaining 80% have been occupying the position for a period between 1 to 5 years. This is an indication that many of the respondents had experience in the production process of their organizations and so their views and information given may be considered as reliable. Food processing dominated the responses with 49.1% of the total respondents, followed by beverage production with 28.3%, followed by wood processing with 10%, and then rubber production with 7%, followed by construction materials with 4.8% and pharmaceuticals with 0.9%. 98.7% of the total respondents were local firms, specifically those firms that do not have international presence with only 1.3% having international presence.

## **5. Results and Discussion**

This section discusses the SCS firms in the Ghanaian manufacturing industry implement, the competitive priorities Ghanaian manufacturing firms implement, the relationships that exists between supply chain strategies, competitive priorities and organizational performance, the extent to which the supply chain strategies and competitive priorities affects organizational performance.

Two (2) SCS were presented to the manufacturing firms in Ghana. These SCS were characterized as Efficient Supply Chain (SCE) and Responsive Supply Chains (SCR). The results of the analysis as presented in Table 4, shows that both strategies, that is, SCE and SCR were determined to adequately measure SCS. This finding goes contrary to that of Randall et al. (2003) in their study where they sought to make a choice between efficient and responsive supply chains. They concluded that, responsive supply chain is present in the North American mountain bike industry than efficient supply chain. The difference in the findings is understandable, looking at the context where both studies were conducted. Notwithstanding, some firms also implement the responsive supply chain from the findings of this study where these firms try as much as possible to meet the target market's differing needs and wants.

The competitive priorities dimensions in this study were cost, quality, speed, and flexibility. Three of these competitive priorities dimensions which are cost, quality and flexibility were determined to adequately measure competitive priorities from the analysis of data as presented in Table 4. Among these three priorities, cost was the best measure of competitive priorities in the Ghanaian manufacturing sector. This finding is however in contrast with that of Thürer et al. (2014), who found out that delivery, quality and innovativeness are the appropriate measure of competitive priorities in the Small and Medium-Scaled Manufacturing Sector in Brazil than cost.

With reference to Table 4, the relationship between SCS and CP was positive. This gives an indication that all things being equal, a one standard deviation increase in SCS increases CP by 0.035 standard deviations. Simply put, implementing an appropriate supply chain strategy would increase the impact of competitive priorities by 0.035 and this in effect would improve the firm's competitiveness in the market place. This finding is consistent with a previous finding from the study of Chi et al. (2009) where they found a positive alignment between supply chain strategies and competitive priorities which led to a better business performance of firms in the U.S Textiles Manufacturing Industry. The concentration here is on market share and revenue as these were the organizational performance dimensions. There is a positive significant relationship between SCS and market share (0.607) as well as with revenue (0.214). There is also a positive significant relationship between CP and market share (0.180) as well as with revenue (0.289); if CP is chosen rightly to suit a target market, market share and revenue would also increase. This finding confirms the claim by Kim (2013) that there is a strong relationship between competitive priorities and target market, after conducting exploratory research on how high performing firms align their competitive priorities with supply chain strategies in the fashion industry. These relationships are consistent with previous findings such as Kavitha et al. (2013) who measured competitive priorities on the dimensions, of quality, cost, delivery, flexibility, customer focus and established a positive relationship between these competitive priorities and organizational performance. Li et al. (2006) indicated in their findings that, there is a positive significant relationship between supply chain strategy and organizational performance as is evident in this study. In this study however, supply chain strategy showed a stronger positive relationship with revenue and market share than competitive priorities with revenue as well as with market share even though all the relationships were positive.

Looking at the estimates in Table 4, it is evident that SCS has a significant relationship with Revenue (a measure of organizational performance). Judging from a weight of 0.21, SCS' impact on revenue is noticeable. This statistically means all things being equal, a one standard deviation increase in SCS increases revenue by 0.21 standard deviations. In that, having a SCS that fits the target market a firm serves, could increase that particular firm's revenue to a high extent. Furthermore, SCS had a stronger positive significant relationship with market share (the other OP measure) with a weight of 0.61. This statistically says, all things being equal, a one standard deviation increase in SCS increases Market

share by 0.61 standard deviations. This shows SCS have a greater positive impact on market share than revenue. It should also be noted that, the direct impact of efficient supply chain on market share and revenue is greater than that of responsiveness on market share and revenue. SCS, therefore impacts organizational performance to a very high extent per the findings of this study. This is consistent with studies of Ahmad and Adnan (2017), where they provided empirical evidence and concluded that the choice of SCS positively affects organizational performance where they measured organizational performance with Perceived Business Performance (PBP), Perceived Supply Chain Performance (PSCP) and Perceived Overall Performance (POP).

The analysis also explored the strength of the relationship that exists between CP and OP, where OP is measured with Revenue and Market share. Looking at Table 4, CP loads on Revenue with 0.29 which means holding all other factors constant, a one standard deviation increase in CP increases revenue by 0.29 standard deviations. This impact is appreciable. Again, CP loads onto Market Share with a weight of 0.18 which is also significant and positive. Although CP impacts more on revenue than market share from the results, the impact of CP on both market share and revenue (organizational performance) are great. From CP's R squared value of 0.56, cost as a priority had a higher positive effect on revenue and market share than all the other priorities. That is competing on cost in the Ghanaian manufacturing industry has a higher possibility of increasing organizational performance than all the other priorities. In all, CP to a high extent impacts organizational performance positively as seen in the results. This finding is supported by Soni and Kodali (2011), who provided empirical evidence that competitive strategy (priorities) positively impacts organizational performance in specific market conditions.

### 5.1 Numerical Results

The normality test was conducted using IBM SPSS Statistics 25. The result for the normality test is shown in Table 1 below.

Table 1. Normality Results

Statistics				
		CPF2	CPF3	CPF4
N	Valid	230	230	230
Variance		0.508	0.515	0.593
Skewness		-0.895	-0.572	-0.775
Std. Error of Skewness		0.160	0.160	0.160
Kurtosis		2.232	1.005	1.097
Std. Error of Kurtosis		0.320	0.320	0.320

The normality test was done for the entire data set including all the items in the questionnaire, to check for items that had kurtosis and skewness values that are not less than -2 or greater than +2. The results of the normality test depicted, all the items in the questionnaire passed the normality test. All the values were between -2 and +2 except the item with the variable name CPF2 (Competitive Priority- Flexibility 2) which had a high kurtosis of 2.232 (marked with red), being greater than +2 as the rule of thumb indicated. An item with high kurtosis means the variable is an outlier (it is either too small or too big to be in the data set) and could therefore impact the analysis negatively. Therefore, the item with the variable name CPF2 was removed as there were enough items measuring flexibility.

Using the IBM SPSS 25 software to perform the EFA involves a series of steps which include iterating until a clean pattern matrix is arrived at, checking for adequacy, checking for convergent validity, discriminant validity and reliability. There Kaiser-Meyer-Olkin (KMO) test of sampling adequacy was used to measure how adequate the data is before proceeding to the factor analysis. According to Kaiser (1974), to pass the adequacy test, the KMO value should be greater than 0.70. The initial results showed a Kaiser-Meyer value of 0.877. Moving to the initial communalities table and looking at the extraction column, two of the items were below 0.3 but the rule of thumb is that, it should be above 0.3. This shows some items were supposed to be deleted. At the initial Total Variance Explained table, looking at the cumulative column it came out with 10 factors and it explains 62.5% of the total variance as the rule of thumb is to

explain above 60% (Gaskin and Lim 2016). At the initial pattern matrix section, the items measuring Dependability failed to load appropriately and only a few items were left to measure dependability and hence dependability had to be dropped. After dropping Dependability and running the EFA again, the CPQ8 (Competitive priority- Quality item 8) and OPR1 (Organizational Performance-Revenue item 1) didn't load on any factor and as such also had to be dropped. All these were done in the preliminary EFA to arrive at the final KMO in Table 2 below.

Table 2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	9688.150
	Df	1275
	Sig.	.000

The results of the KMO test of sampling adequacy after dropping dependability, CFQ8 and OPR1 was 0.886 which is an improvement over the initial results of 0.877 as presented in Table 2 above. In EFA, all the items were given an initial total communality of 1. The final extraction of each item explains the variance it shares with its corresponding factor (variable). 51 items were left in the final EFA out of the 62 initial items at the start of the analysis. The other 11 items were removed from the analysis because some had a very low communalities or they cross-loaded (1 item loading on two or more factors) or didn't even load at all in the preliminary analysis. All the values in the final communalities were at least 0.4 (Gaskin 2012). This means the variance explained in the data is acceptable.

As evidence of convergent validity, all the loadings were above .50. From the reproduced correlations section, there was 4.0% non-redundant residuals with absolute values greater than 0.05 which is good as the rule of thumb is to be below 5% (Hu and Bentler 1999). An evidence of discriminant validity is that there are strong loadings with almost all the values above 0.50. Reliability test had to be conducted and the researchers adopted the Cronbach's Alpha method in SPSS to do the reliability test. According to Hu and Bentler (1999), the rule of thumb is that all the Cronbach Alpha values should be greater than 0.7, which means the constructs are reliable. For e.g., the Cronbach Alpha value of 0.921 for Factor 2 means the items measuring Efficiency are 92.1% reliable and so the questionnaire actually measures major research variables.

To begin the structural model, the first thing to do was to check for outliers and influencers using the data imputed from the common method bias corrected. This was done with SPSS version 24. There were two dependent variables in the model which were revenue and market share. A regression was run for the two dependent variables separately with SCS, SCR, CPC, CPQ, CPS, and CPF as the independent variables. According to Dhakal (2017), if any of the plots is greater than 1 then it's pulling, leveraging or it's influential but with this one, the highest is around 0.70. This means there were no outliers in the data at this point. Another graph was plotted using market share as the dependent variable and SCS, SCR, CPC, CPQ, CPS, CPF as the independent variable. Comparing the model fit values to that of the threshold, the model fits very well. Looking at the R-squared (coefficient of determination) values which is presented in the Table 3 below, many of the predictor variables explain more than 50% of the variation in their predicted variables.

Table 3. R-Squared Values

Variable	R-square
SCS (Supply Chain Strategy)	0.69
CP (Competitive Priority)	0.56
Revenue	0.18
Market share	0.49
OP (Organizational Performance)	0.62

The co-efficient of determination (R squared) shows the percentage of variation in the dependent variable (Y) which is explained by all their corresponding independent variation (X); the bigger the better. It is always a value between 0-1 and so cannot be a negative value. The estimates column from the Table 4 below shows the strength of the relationship

that exists between the research variables, the bigger the estimate the stronger the relationship that exists between the variables. For instance, the impact of SCS (Supply Chain Strategies) on organizational performance looking at the estimate is 0.502. This means SCS has a strong positive impact on organizational performance per the findings of this study (Table 4).

Table 4. Standardized Regression Weights: (Group number 1 - Default model)

		Estimate
SCS	<--- SCE	.658
SCS	<--- SCR	.242
COMPETITIVE_PRORITY	<--- CP_C	.399
COMPETITIVE_PRORITY	<--- CP_Q	.224
COMPETITIVE_PRORITY	<--- CP_S	.064
COMPETITIVE_PRORITY	<--- CP_F	.210
COMPETITIVE_PRORITY	<--- SCS	.035
OP_R	<--- SCS	.214
OP_MS	<--- COMPETITIVE_PRORITY	.180
OP_R	<--- COMPETITIVE_PRORITY	.289
OP_MS	<--- SCS	.607
ORGANIZATIONAL_PERFORMANCE	<--- COMPETITIVE_PRORITY	.025
ORGANIZATIONAL_PERFORMANCE	<--- OP_MS	.255
ORGANIZATIONAL_PERFORMANCE	<--- OP_R	.178
ORGANIZATIONAL_PERFORMANCE	<--- SCS	.502

## 5.2 Graphical Results

The Figure 2 below shows the structural model with the relationships that exists between the research variables and also the strength of the relationship between the research variables.

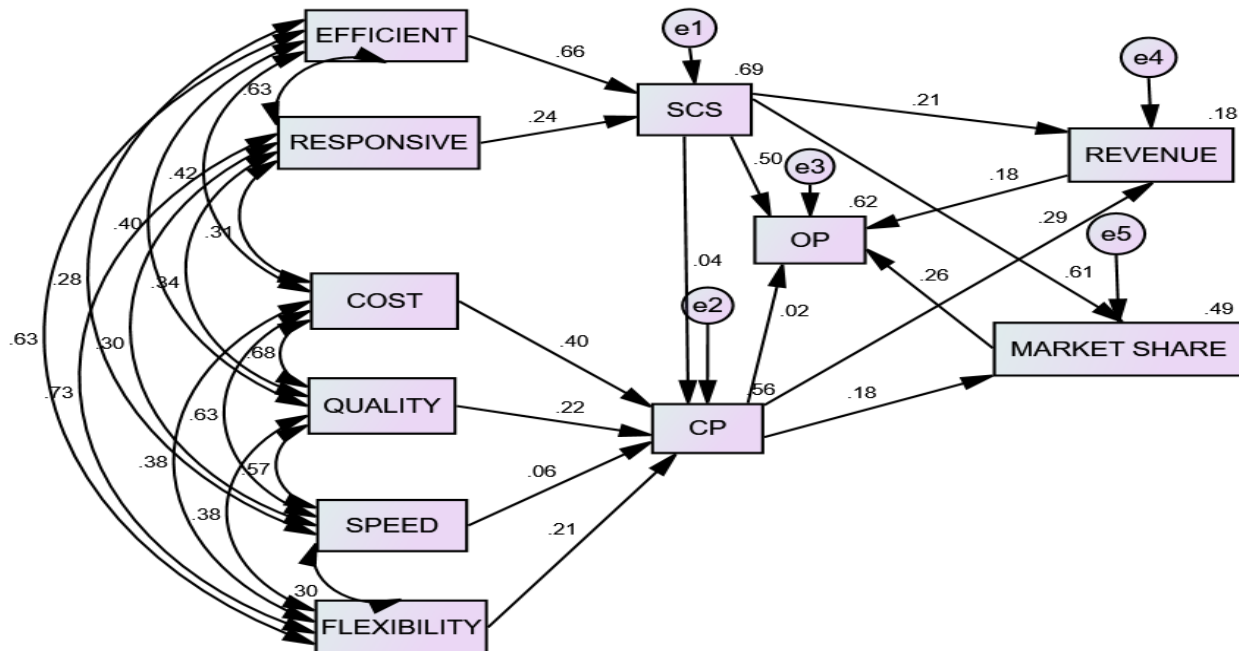


Figure 2. The Final Structural Model



Figure 2 above, shows the structural model with the relationships that exists between the research variables and also the strength of the relationship between the research variables.

### **5.3 Proposed Improvements**

The efficient and responsive supply chains which were the dimensions of supply chain strategies in this study, proved to be adequate measures of supply chain strategy. The dimensions of competitive priorities in this study were, cost, quality, speed, dependability and flexibility. After the analysis of data, cost, quality and flexibility also proved to be adequate measures of competitive priorities, even though cost emerged the greatest contributor to performance as a competitive priority.

Supply chain strategies had a positive impact on competitive priorities from the analysis of data. Selecting an appropriate supply chain strategy and aligning it with the proper competitive priority improves organizational performance to a high extent. Supply chain strategy had a greater impact on both revenue and market share. That being said, the efficient supply chain had a greater impact on revenue and market share than with responsive supply chain and market share as well as revenue.

Competitive priorities also had a positive influence on revenue and market share. However, cost had a greater impact on revenue and market share than the other competitive priorities dimensions. Furthermore, the findings established that supply chain strategies impacted on revenue and market share (measures of organizational performance) to a high extent. Supply chain strategies had a greater impact on market share than revenue. This means if Ghanaian manufacturing firms adopt the efficient supply chain strategy, their market share would increase greatly.

Competitive priorities had a positive influence on both revenue and market share (measures of organizational performance). Competitive priorities to a greater extent impacted on revenue than market share. This means selecting an appropriate competitive priority would increase the revenue of manufacturing firms in Ghana. Manufacturing firms should therefore pay attention to the cost dimension of competitive priorities if they are to increase their revenue in manufacturing industry. For Ghanaian manufacturing firms to improve their performance and stay competitive, they should adopt the efficient supply chain strategy and also cost as a competitive priority.

The contribution of the study to theory is in two folds. First, the study contributes to theory through the insights it has provided on the relationships between supply chain strategies and competitive priorities which has received little attention in the literature, especially in a developing country like Ghana. Secondly, the knowledge provided on the extent to which competitive priorities influence organizational performance fills the literature gap as this relationship has not been sufficiently explored in the literature. Prior to this study, there were limited evidence on the importance and impact of supply chain strategies together with competitive priorities on firms' performance and how these strategies' increase the manufacturing firms' competitiveness.

The design and implementation of a reliable supply chain strategy aligned with the appropriate competitive priorities underpins the competitiveness of all manufacturing firms. To this end, the impact of supply chain strategies and competitive priorities on organizational performance have been established in this study. In this regard, Ghanaian manufacturing firms must give maximum attention to being efficient with their supply chain and also to try as much as possible to compete with cost if they are to thrive in the Ghanaian manufacturing industry per the results from this study. The selection of supply chain strategies and competitive priorities must be done with the target market in mind. It has been established in this study that cost (competitive priority) made the most significant contribution to organizational performance. Therefore, if companies are seeking to enhance their performance, much attention should be paid to cost as a competitive priority.

## **6. Conclusions**

Many studies have been conducted on supply chain strategies, competitive priorities and organizational performance in separate context but not collectively as has been explored in the current study. Many of the studies were also conducted in developed economies like China, U.S.A among others. However, developing economies like Ghana lack empirical evidence on the importance of manufacturing strategies and their impact on organizational performance. This study established the relationships between supply chain strategies, competitive priorities and organizational performance among Ghanaian manufacturers. The result from this study showed some positive relationships between the research variables and how selecting the appropriate supply chain strategies along with the right competitive priorities could

increase a firm's revenue and market share. A limitation of the study is that it was restricted to manufacturing firms operating in Ghana. It would be insightful to investigate service firms in future research to ascertain whether the industry has a role to play in the selection of the SCS and competitive priorities and how these affects organizational performance and influence service firms' competitiveness.

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