

The strategic fit between strategic purchasing and purchasing involvement: The moderating role of leadership styles

Abstract

Purpose – The aim of this study is to investigate and examine the impact of strategic purchasing practices on strategic fit by analysing the influence of strategic purchasing practices on purchasing involvement in business strategy formulation with path-goal theory leadership styles as moderators.

Design/methodology/approach – Using survey data from 320 respondents representing 64 manufacturing firms in the Middle East, we measure strategic purchasing practices, purchasing involvement, leadership styles, and strategic fit of the purchasing function with business strategy.

Findings – Building on the path-goal approach to leadership, results suggest that participative, supportive, and achievement-oriented leadership styles are pure moderators, while directive leadership style is a quasi-moderator in boosting the relationship between strategic purchasing practices and strategic purchasing involvement.

Research limitations/implications – Limitations of the sampling methodology and sample size restricts the scope for generalising the hypotheses. Further, data were collected only from manufacturing companies. The paper provides managerial implications on purchasing involvement in business strategy formulation and the different roles of leadership styles.

Originality/value – This is the first scholarly work to examine the different leadership styles as a moderator that affects the strategic involvement and status of strategic purchasing.

Keywords – Strategic purchasing practices, Strategic purchasing involvement, Strategic-Fit, Leadership styles

Paper type – Research paper

1. Introduction

Purchasing had been historically considered as a sub-function confined to buying, selling and distribution (Fayol, 1916). Porter (1986) started to view it as a strategic business function, but it was not until late 1990's when purchasing started to receive a noticeable attention in literature (Hammer, 2001; Pressey *et al.*, 2009). Purchasing is now viewed as a key function that directly affects supplier relationships (Foerstl *et al.*, 2020) and contributes to achieving improved supply chain performance (Hallikas *et al.*, 2021). Furthermore, the emergence of new opportunities associated to purchasing like electronic procurement, spend management, outsourcing, joint product design and many others has ultimately led organizations to realize purchasing as a source of competitive advantage (Akin Ates *et al.*, 2018; Towers *et al.*, 2020; Hallikas *et al.*, 2021), and achieving a successful performance (Field and Meile, 2008; Kim *et al.*, 2015). Importantly, a growing body of literature asserts that it is the strategic fit between functional strategies and business strategy that have a positive effect on corporate performance (Joshi *et al.*, 2003). Accordingly, a fit between business strategy and purchasing strategy became essential to create a competitive advantage (Baier *et al.*, 2008). Furthermore, the strategic fit between the purchasing practices and the firm business strategy became the focus of attention of many researchers due its impact on organizations' financial performance (González-Benito, 2007; Samawi *et al.*, 2019).

Terpend *et al.* (2008, p47) defined purchasing strategies as the “patterns of decisions made by purchasing professionals during the purchasing process and in response to internal and external constraints in the business environment”. Several scholars identified a set of multiple purchasing management practices that changed the traditional view of the purchasing function and marked these practices as “strategic” (Chen *et al.*, 2004; Cousins *et al.*, 2006; Parmigiani, 2007). Additionally, viewing the purchasing practices as a strategic function allows to partake a vital part in corporate planning, and is more likely to lead to effective collaborative relationships, both internally and externally (Chen *et al.*, 2004). In any case, the involvement of the purchasing function in the strategy generation and formulation process has become rather essential (Das and Narasimhan, 2000; Krause *et al.*, 2001; Alistair and Desiree, 2018). The degree of this involvement leaned toward a rather positive effect on the performance of the purchasing function and on firm's performance (Prajogo *et al.*, 2012).

However, the purchasing function cannot be considered a strategic function if it is not entrenched and involved in the process of making decisions by top-level management (Ellram and Carr, 1994; Akin Ates *et al.*, 2018). Historically, the act of involvement in developing strategy was solely restricted to senior management (Porter, 1996). Nevertheless, the success of functional involvement in the process of developing organizational strategy is not another simple and mindless task; on the contrary, such a task demands an extraordinary effort (Carr and Smeltzer, 1997). Importantly, an important driver to the firm's successful strategy formulation is the leadership style adopted in the organization (Hsieh and Yik, 2005; Karamat, 2013; Burawat, 2019). In this study, we use the path-goal theory which demonstrates the relationship between supervisors and subordinates in their day-to-day operations (House, 1996). The complexity of strategy formulation process fits well with the flexibility of path goal theory, in which leaders choose plausible behaviours as they see fit with the environment (House and Mitchell, 1974). This is particularly relevant to supply chains and supplier-related strategies due to their complex nature which requires a facilitative leadership (Kull *et al.*, 2019; Burawat, 2019). The leaders do that by guiding their employees through their path to achieve daily work activities and ultimate objective at the end of the day (Northouse, 2013; Kull *et al.*, 2019).

A critical review of the extant literature enabled this study to delineate few important research gaps that we seek to address. First, previous studies focused on the strategic fit (alignment) between business strategy and manufacturing practices and the effect of alignment on performance of the firms (Das and Narasimhan, 2000; Lawson *et al.*, 2009), while there are very few have focused on alignment between purchasing function practices and business strategy. Second, most previous studies focused on the relationship between strategic purchasing involvement and performance (Prajogo *et al.*, 2012; Kim *et al.*, 2015), while there are few studies that focused on the relationship between strategic purchasing involvements and strategic fit. Third, and to the best of our knowledge, there has been no previous studies examining the leadership styles as a moderator that affects strategic purchasing practices and strategic purchasing involvement. Accordingly, the aim of this study is to present an investigation and examination of the impact of strategic purchasing practices on strategic fit by analysing the influence of strategic purchasing practices on purchasing involvement in business strategy formulation with leadership styles as possible moderator. Furthermore, the study investigates the impact of this involvement on strategic-fit. Therefore, our study attempts to answer the following questions:

RQ1. Do organization leadership styles affect the relationship between strategic purchasing practices and strategic purchasing involvement?

RQ2. Do strategic purchasing practices affect the strategic purchasing involvement?

RQ3. Does the degree of purchasing involvement affect strategic-fit?

Hence, this study investigates channel relationships among strategic purchasing practices, strategic purchasing involvement, leadership styles, and strategic fit. This is the first scholarly work to examine the different leadership styles as a moderator that affects the strategic involvement and status of strategic purchasing.

The remainder of the paper is organised as follows: in the next section, a review of relevant literature to develop the proposed theoretical framework with proposed hypotheses are presented. Section 3 presents and discusses the research methodology. In Section 4, the findings are presented. Section 5 presents the discussion and conclusions, and Section 6 provides the research limitations and directions for future work.

2. Literature review and research hypothesis

This section is divided into three sub-sections; literature related to proposed constructs; literature related to relationships between investigated constructs, and a proposed theoretical framework with developed hypotheses.

2.1 Literature related to proposed constructs

2.1.1 Strategic purchasing practices construct

Van Weele (2010) defined strategic purchasing practices as necessary activities that lead to achieve a higher degree of involvement in the business strategic formulation process. These activities involve reviewing and adjusting the plan to match corporate strategic plans; producing a long-range purchasing plan (Lawson *et al.*, 2009), coming to a decision on the nature of the relationships the firm decides to have with the main suppliers, and collaborating with other functions (Doha *et al.*, 2013). Therefore, a string of purchasing management practices emerged such as control and monitoring practices; supplier involvement practices; and logistical practices,

and consequently Rodríguez-Escobar and González-Benito (2017) marked such practices as ‘strategic’.

2.1.2 Strategic Purchasing Involvement Construct

Not all organizations permitted the purchasing function to add to strategy progress and development (Carr and Pearson, 2002; Alistair and Desiree, 2018), because of the blind belief that several corporations purchasing personnel ought to perform administrative and clerical occupations (Kim *et al.*, 2015). The concept of the purchasing involvement refers to the act of integrating purchasing professional and the firm’s key supplier in the firm’s decision-making process with respect to sourcing decision (Carr and Pearson, 2002; Kim *et al.*, 2015). Interestingly, strategic involvement concentrates on highlighting the role of the purchasing function and fits significance within the firm to get involved in the formulation of the strategy of the firm (Lawson *et al.*, 2009). In other words, the purchasing function viewed as an important participant in the business strategic formulation process because it can contribute ideas and knowledge to the process (Narasimhan *et al.*, 2001). However, high levels of involvements occur when the function has strong top management support (Carr and Smeltzer, 1997). Not only do top management play an important role in influencing the organization’s attitude toward purchasing, but they can also devote resources in terms of time, personnel and finances toward improving the capability of the function (Carr and Pearson, 2002). Where purchasing considered strategic, it is more likely to be involved in the strategic dialogue of the firm (Das and Narasimhan, 2000) including identifying the practices to engage employees in the strategic formulation process.

2.1.2 Leadership Styles Construct

Leadership, defined as, the process of direction, guidance, and influencing others and establishment of interpersonal relationship for the achievement of the objectives of the organization yielding satisfaction to all (Hernandez *et al.*, 2011; Famakin and Abisuga, 2016; Northouse, 2013). From the employees’ perspective, leadership encompasses anything a leader does, which in turn influences the process of carrying out the objectives and methodically attaining them along the prosperity of both the employees and the corporation. Scholars have touched upon many different theories of leadership in previous literature. This is largely due to the nature of leadership concept which has no universal or global form (Hernandez *et al.*, 2011; Famakin and Abisuga, 2016; Cho and Jung, 2014).

This study adopted the path-goal theory of House (1971) which fits perfectly well with this study for several reasons. Firstly, the path-goal theory of House (1971) highlighted the dynamic use of various leadership styles to obtain many employee goals. Secondly, the path-goal theory demonstrates the relationship between supervisors and subordinates in their day-to-day operations (House, 1996). Thirdly, the complexity of strategy formulation process fits well with the flexibility of path goal theory. In this theory, the leaders choose plausible behaviors as they see fit with subordinate environment (House and Mitchell, 1974). The leaders do that by guiding their employees through their path to achieve daily work activities and ultimate objective at the end of the day (Northouse, 2013; Kull *et al.*, 2019). Consequently, this makes it clearer for subordinates, specifically what they must do (Hernandez *et al.*, 2011). This theory explicitly marks out four types of leadership styles in various terms to increase subordinates' motivation, starting from directive, supportive, participative, and achievement-oriented (House and Mitchel, 1974). Table I presents a brief description of the different styles.

<Insert Table I>

2.1.3 *Strategic Alignment Construct*

Organizations are becoming more and more complicated owing to the elements in the dynamic business environment that must be governed to guarantee achieving and realizing the strategic initiatives (Towers *et al.*, 2020; Samawi *et al.*, 2019). Therefore, formulating effective strategy is considered as a key to meet the challenges facing companies (Porter, 1996; Foerstl *et al.*, 2020). Firms cannot be competitive if their business and functional strategies are not fit. In this vein, the term 'alignment' is employed to showcase how a strategy need to be 'fitted' or 'aligned' with its external environment and how the internal organization need to be properly meshed with the strategy (Carr and Pearson, 2002). Regarding purchasing strategy, the necessity for alignment is highlighted, as Carr and Pearson (2002) shed the light in their study on the role of purchasing alignment on effective management of the cost of inputs to production, improve the efficient quality and deliver of materials by establishing close relationships with supplier. Moreover, González-Benito (2007) indicates that the full value of purchasing function can only be obtained if its activities are aligned with the company business strategy. Porter (1996) indicate that companies should respond to external environment and gain competitive advantages by employing basic strategies, cost reduction and differentiation. This study sheds light on what mostly adopted

dimensions of the business strategy in literature, the conventional business strategies of cost, quality, and availability (Samawi *et al.*, 2019).

2.2 Inter-relationships among the constructs

The section discusses literature related to relationships among (strategic purchasing practices, strategic involvement, leadership style and strategic fit).

2.2.1 Strategic Purchasing Practices and Strategic Purchasing Involvement

Watts *et al.* (1992) states that purchasing function takes a huge part in business strategy formulation and implementation to attain consistency between business aims and purchasing objectives. Furthermore, over time, the undeniable role and involvements of the purchasing function has been received as a primary part of the business strategy formulation process (Prahinski and Benton, 2004). Furthermore, González-Benito, (2007) declared that the final motive of any purchasing practice is to attain specific abilities that matched with business strategy despite the means of achieving them. Kim *et al.* (2015) indicates that the weight of purchasing in the strategic planning process is becoming increasingly important and that it has positive effects on the performance of the purchasing function and consequently on business performance. Furthermore, several studies have emphasized the positive impact that implementation of strategic purchasing practices has on the organization (Paulraj *et al.*, 2006; Sánchez-Rodríguez, 2009; Prajogo *et al.*, 2012; Ashenbaum and Maltz, 2017).

2.2.2 Leadership Styles and Strategic Purchasing Involvement

Leadership has an undeniable cause-effect linkage with firms' success (Lasrado and Kassem, 2020; Burawat, 2019) and considered as a link that connects the strategic management process with the company's futuristic vision (Cho and Jung, 2014). Zhang *et al.* (2014) state that leadership appears to be one of the single biggest factors affecting employee involvement. In addition, Li *et al.* (2018) state that leadership styles are significant predictors of employee involvements. Autocratic leadership has a significant negative impact on employee engagement, while achievement-oriented leadership has a positive impact on functions involvement (Northouse, 2013). However, Baxter (2013) found that supportive leadership is positively related to employee engagement.

2.2.3 *Strategic Purchasing Involvement and Strategic Fit*

Strategic fit among functions and business strategy is necessary not only for competitive advantage but for the sustainability of that advantage (Kathuria *et al.*, 2007). Researchers in the fields of operations management, human resource management, and information technology have traditionally focused on the integration of activities within their organizations business strategy (Kathuria *et al.*, 2007). González-Benito, (2007) hastened to realize that the extent of strategic integration of the purchasing function positively moderates the relationship between business performance and purchasing potency. In his model, González-Benito (2007) suggested that the strategic involvement of the purchasing function can be showed as a good indicator of strategic alignment. To phrase it differently, purchasing function's active involvement in the firm strategy can enhance strategic fit.

2.3 **Theoretical Framework and Hypotheses**

Based on the identified research gaps and related literature review, this study proposed a conceptual scheme as shown in Figure 1.

<Insert Figure 1>

Three hypotheses are proposed based on the developed theoretical framework. The first hypothesis investigates the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI); accordingly, the first hypothesis is stated:

H₁: Strategic Purchasing Practices (SPP) is positively correlated with Strategic Purchasing Involvement (SPI).

The second hypothesis investigates the relationship between Strategic Purchasing Involvement (SPI) and Strategic Fit (SF); accordingly, the second hypothesis is stated:

H₂: Strategic Purchasing Involvement (SPI) is positively correlated with Strategic Fit (SF).

Finally, the third set of hypotheses relates to exploring the nature of effect of the proposed leadership styles on the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI) as being moderator. Accordingly, the following sub-hypotheses are proposed:

H_{3.1}: Participative leadership style (PLS) moderates the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI).

H_{3.2}: Directive leadership style (DLS) moderates the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI).

H_{3.3}: Supportive leadership style (SLS) moderates the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI).

H_{3.4}: Achievement-Orientated leadership style (AOL) moderates the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI).

3. Methodology

3.1 Data collection and the sample

The study investigates the impact of strategic purchasing practices on strategic fit by examining the relationship between the strategic purchasing practices and the extend of involvement in business strategy formulation, taking into consideration meanwhile, the leadership styles that may affect this relation using data collected from manufacturing companies in the Middle East. The manufacturing industry is particularly relevant and an interesting context due to its large contribution to the national economies of most countries in the Middle East. The study targeted 70 manufacturing firms that have a dedicated purchasing department. Two of the authors of this study contacted the firms through emails and phone calls to confirm whether the firm has a dedicated purchasing department or not, and inquire about the investigated constructs and the firm's willingness to take part in the study. Sixty-four manufacturing firms agreed to become our respondents, as the unit of analysis. The questionnaire was personally administered, and data collected from senior managers, middle level managers, functional level managers and operational staff. The responding firms included manufacturing firms from 4 main sectors. These are manufacturers of agricultural products (30%), beverages (28%), textiles (24%) and pharmaceuticals (18%). The details of the respondents and their firms are shown in Table II.

<Insert Table II>

3.2 Operationalization of the constructs

The study developed a questionnaire with six sections including demographic data section and a section for each of the five constructs as given in Appendix A. The first section of the questionnaire is for the general information about the organization and respondents. The second section of the questionnaire used closed questions, with a fixed range of possible answers, and relied on the use of a five-point Likert scale where 1 “strongly disagree”, and 5 “strongly agree” to assess strategic purchasing practices as shown in Appendix A. Furthermore, strategic purchasing practices were operationalized into three dimensions with 19 items. This study adopted and adapted the items from several researchers (Rodríguez-Escobar *et al.*, 2017; Akin Ateş *et al.*, 2018; Doha *et al.*, 2013; Lawson *et al.*, 2009; Cousins *et al.*, 2006). This section of the survey was personally administered to purchasing managers and supervisors’ level in every organization in the targeted sample.

The third section of the questionnaire used closed questions, with a fixed range of possible answers, and relied on the use of a five-point Likert scale where 1 “strongly disagree”, and 5 “strongly agree” to assess strategic purchasing Involvement as given in Appendix A. Furthermore, strategic purchasing Involvement were operationalized into 10 items. This study adapted the items from several researchers (Ellram and Carr, 1994; Narasimhan and Das, 2001; Alistair and Desiree, 2018). This section of the survey administered personally to purchasing managers and supervisors’ level in every firm in the sample.

The fourth section of the questionnaire used closed questions, with a fixed range of possible answers, and relied on the use of a five-point Likert scale where 1 “strongly disagree”, and 5 “strongly agree” to assess the type of leadership styles implemented in the organization as given in Appendix A. Furthermore, leadership styles were operationalized into 20 items. The path-goal leadership questionnaire adopted and adapted from Indvik (1988). The directive leadership style consisted of items 1, 5, 9, 14 and 18, while, the supportive leadership style consisted of items 2, 8, 11, 15 and 20. Furthermore, the participative leadership style includes items 3, 4, 7, 12 and 17, while the achievement-oriented leadership style consisted of items 6, 10, 13, 16 and 19. For the purpose of this study, the path-goal instrument was modified from a leader-rated instrument to a subordinate-rated instrument. This modification changed the verbiage from “I” to “My immediate manager.” This section of the survey administered personally to managers (not purchasing), supervisors, and employees in every firm in the sample.

The fifth section of the questionnaire used closed questions, with a fixed range of possible answers, and relied on the use of a five-point Likert scale where 1 “strongly disagree”, and 5 “strongly agree” to assess the purchasing priorities. Furthermore, the purchasing priorities were classified into three dimensions with 17 items. The three dimensions include cost priorities, quality priorities and availability priorities as shown in Appendix A. This study adopted the items from Samawi *et al.* (2019). This section of the survey administered personally to purchasing managers, supervisors’ and purchasing employees in every organization in the sample.

The final section of the questionnaire used closed questions, with a fixed range of possible answers, and relied on the use of a five-point Likert scale where 1 “strongly disagree”, and 5 “strongly agree” to assess business strategy as shown in Appendix A. Furthermore, business strategy was operationalized into three dimensions with 6 items as shown in Appendix A. This study has adopted the related items from Samawi *et al.* (2019). This section of the survey administered personally to general managers.

3.3 Validity and reliability of the constructs

Validity of proposed constructs is to ensure that the developed tool in the study can truly measure the concepts that it is supposed to measure (Cooper and Schindler, 2003). Content validity shows how well a construct is operationalized by the items developed, providing an adequate and representative sample of all items that could measure the construct. To ensure content validity, the questionnaire derived from previous and peer-reviewed literature as discussed in previous section. To ensure that the test items do actually measure the proposed construct and maintain consistency of measured results, a construct validity and reliability tests are investigated (Cooper and Schindler, 2003). Accordingly, factor analysis conducted to examine construct validity on each construct separately (Hair *et al.*, 2010). Kaiser–Meyer–Olkin (KMO) value and Bartlett’s test are used to check that the data set is adequate to run the factor analysis. Furthermore, eigenvalue was used to determine the number of items on each construct separately (Reio and Shuck, 2015). Table III exhibits that several items were recommended to be omitted. Furthermore, the table shows that all constructs explain more than 50 percent of total variance. In addition, all the KMO values are greater than 0.50 as recommended by Kaiser (1974), indicating patterns of correlations are relatively compact, and thus, factor analysis is reliable. Moreover, the Bartlett’s test is significant at alpha ($\alpha = 0.05$) for all the constructs, implying the variables are highly correlated to provide a

reasonable basis for factor analysis (Coakes and Steed, 2007). Consequently, the constructs used are valid and eligible. Furthermore, construct reliability is assessed by using Cronbach's alpha, whereas Cronbach's alpha value is used to check the internal consistency of the data set. Table III shows that all items of the questionnaire have Cronbach alpha values above the recommended value of 0.7 (Field, 2013). Thus, construct validity and internal consistency are satisfactory.

While a systematic random sampling is used to target manufacturing firms and since the level of analysis in this study is the organization to investigate the relationship among the investigated parameters; industry type is a variable that might correlate to strategic purchasing practices is a controlled parameter. Moreover, other variables which could be changed, but for the purpose of this study are being kept at a constant value, to understand and explore the nature of the relationships being assessed are size of the organization. The results show that industry type, as a control variable, had no significant effect on strategic purchasing involvement ($\alpha \leq 0.5$).

4. Results

4.1 Descriptive analysis

As shown in Table IV, the means (averages) of strategic purchasing practices sub-constructs ranged from 3.574 to 3.939, with the standard deviation ranging between 0.438 and 0.612. This indicates that at a certain level, the purchasing function in the investigated manufacturers have been moderately involved in strategic practices. In addition, this indicates that the data points are spread out over a wider range of value. In terms of strategic purchasing involvement, the mean value was 3.604, with a standard deviation of 0.684. This implies moderate to high involvement of purchasing function. In terms of leadership styles, participative leadership style had the highest mean value 4.013 with a standard deviation of 0.462, while supportive leadership had the lowest mean value 3.727 with a standard deviation of 0.542 among the four principal leadership styles as shown in Table IV. Achievement-oriented leadership style also assigned higher mean values 3.749 with a standard deviation of 0.4831 and directive leadership assigned mean value 3.859, with a standard deviation of 0.541. This high variability indicated wide ranges of different situations covered in the sample. The mean for business strategy and purchasing priorities are shown in Table IV. In terms of strategic fit, the scores were calculated using the moderation method proposed by Venkatraman (1989) and measured by multiplying the ratings of

each of the purchasing priorities. In this case, a high rating for purchasing priorities and a high rating of business strategy results in a high strategic fit (SF) measure. On the other hand, a low rating of business strategy and a low rating of purchasing priorities will give a low alignment score. For example, the rating of a business strategy is multiplied by the rating of its respective purchasing cluster priorities for each company and strategy area. An ideally aligned firm would score 25 on each business strategy, as shown in Table V. The overall strategic alignment is calculated by finding the square root of multiplying total sub-aligned strategic fit. A totally aligned firm would score 125 for overall strategic alignment. The scores for overall SF ranged from 17.40 to 102.55, with a mean of 72.93 and a standard deviation of 16.19. This high variability indicated wide ranges of different situations covered in the sample. It also showed that respondents used the full range of possible responses on the questionnaire. However, a mean of 72.93 is not considered low compared to the possible score.

<Insert Table IV>

<Insert Table V>

4.2 Hypotheses testing

This study tested research hypotheses H_1 , H_2 using simple regression analysis. Accordingly, H_1 tested using a simple regression analysis to assess the significant relationship between strategic purchasing practices (overall) and strategic purchasing involvement. Table VI reports the findings of this analysis, and the model was significant as indicated by the overall F statistics at $\alpha < 0.05$, and strategic purchasing practices explained 54.0 % of the total variances. The regression analysis also suggests that strategic purchasing practices has a positive and significant effect on strategic purchasing involvement at $\alpha < 0.05$. Accordingly, the hypothesis H_1 confirmed. That is to say, the more adoption of strategic practices by the purchasing function, the more the involvement of the purchasing function in the strategy formulation process.

<Insert Table VI>

To test H_2 , simple regression analysis were used to assess the significant relationship between the strategic purchasing involvements and strategic fit. Table VII reports the findings of

this analysis, and the model was significant as indicated by the overall F statistics at $\alpha < 0.05$, and strategic purchasing involvements explained 73.5 % of the total variances. The regression analysis also suggests that strategic purchasing involvements has a positive and significant effect on strategic fit at $\alpha < 0.05$, and accordingly the hypothesis H₂ confirmed. This means that the more the involvement of the purchasing function in the business strategy formulation process the more strategic fit between purchasing priorities and business strategy.

<Insert Table VII>

However, to test H₃ hypotheses, this study investigates if the leadership styles (Participative; Directive; Supportive; Achievement-oriented) have a moderator effect. To test for moderation, Baron and Kenny (1986) proposed the use of regressions, which most widely employed in studies on moderation effects (Seiders *et al.*, 2005; Chao, 2008). Furthermore, regressions are not affected by the differences that may exist in the variances of the independent variables, or the changes in measurement error of the dependent variable, as it happens in a correlational analysis (Baron and Kenny, 1986). In addition, there is a pure moderation if the moderator variable only interacts with the exogenous variable x, but itself does not exert any direct influence on the endogenous variable y. Besides, there is a quasi-moderation if the moderator variable additionally exerts a direct influence on the endogenous variable y (Darrow and Kahl 1982). Nevertheless, if it is not clear a priori whether a quasi or a pure moderation is involved. Accordingly, the following approach recommended by Cohen *et al.* (2003) followed, and as per this approach, three regression equations are considered:

$$Y = a + b_1X \quad (\text{Eq. 1})$$

$$Y = a + b_1X + b_2M \quad (\text{Eq. 2})$$

$$Y = a + b_1X + b_2M + b_3X*M \quad (\text{Eq. 3})$$

Where Y is the dependent variable, X is the independent variable and M is the potential moderating variable. Whether or not we find a moderating effect can be judged by the significance of the regression coefficient b₃ belonging to the interaction term (Aguinis, 2004; Helm and Mark, 2012). Alternatively, to the t-test for the regression parameter b₃, it can be examined with the F test whether the change of the coefficient of determination R² from the base model to the interaction model is significantly different from zero. The change of the coefficient of determination (ΔR^2) is

also a measure for the effect size of the moderator effect (Aguinis, 2004). The R^2 -increase indicates how much criterion variance is additionally explained by the product term and, therefore, can be ascribed to the moderator effect (Aguinis, 2004). The strength of the moderator effect is often displayed in form of the effect size index $\{f^2 = (R_3^2 - R_1^2) / (1 - R_3^2)\}$, whereby R_3^2 characterizes the coefficient of determination of the interaction model and R_1^2 characterizes the coefficient of determination of the basic model. For the evaluation of the effect size, Cohen *et al.* (2003) has proposed the following values of f^2 that are conventionally established: 0.02 = low; 0.15 medium; 0.35 = high.

Table VIII shows the results of investigating hypothesis H_{3.1}: “Participative leadership style (PLS) moderates the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI)”. According to the results, H_{3.1} is supported by the significance of the regression coefficient b_3 belonging to the interaction term (p-value = 0.001). Furthermore, Participative leadership style is a pure moderation since the moderator variable only interacts with the exogenous variable strategic purchasing practices, but itself does not exert any direct influence on the endogenous variable Strategic Purchasing Involvement, and Adjusted R^2 is negligible (Adj. $R^2 = .006$) as shown in Table IX. In addition, the effect size index of the pure moderator is medium to high ($f^2 = 0.335$).

<Insert Table VIII>

<Insert Table IX>

Table X shows the results of investigating the hypothesis H_{3.2}: Directive leadership style (DLS) moderates the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI). According to the results, H_{3.2} is supported by the significance of the regression coefficient b_3 belonging to the interaction term (p-value = 0.003). Furthermore, Directive leadership style is a quasi-moderation since the moderator variable additionally exerts a direct influence on the endogenous variable Strategic Purchasing Involvement and was able to explain 33.1 percent of the variance (Adj. $R^2 = 0.331$), as shown in Table XI. In addition, the effect size index of the quasi-moderation is high ($f^2 = 0.867$).

<Insert Table X>

<Insert Table XI>

Table XII shows the results of investigating the hypothesis H_{3.3}: Supportive leadership style (SLS) moderates the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI). According to the results, H_{3.3} is supported by the significance of the regression coefficient b₃ belonging to the interaction term (p-value = 0.000). Furthermore, Supportive leadership style a pure moderation since the moderator variable only interacts with the exogenous variable strategic purchasing practices, but itself does not exert any direct influence on the endogenous variable Strategic Purchasing Involvement, and Adjusted R² is negligible (Adj. R² = 0.030) as shown in Table XIII. In addition, the effect size index of the pure moderator is high ($f^2 = 0.368$).

<Insert Table XII>

<Insert Table XIII>

Table XIV shows the results of investigating the hypothesis H_{3.4}: Achievement-Orientated leadership style (AOL) moderates the relationship between Strategic Purchasing Practices (SPP) and Strategic Purchasing Involvement (SPI). According to the results, H_{3.4} is supported by the significance of the regression coefficient b₃ belonging to the interaction term (p-value = 0.002). The Achievement-Orientated leadership style exert a direct influence on the endogenous variable Strategic Purchasing Involvement, but the Adjusted R² is negligible (Adj. R² = 0.086) as shown in Table XV.

<Insert Table XIV>

<Insert Table XV>

Accordingly, the Achievement-Orientated leadership style will be considered as a pure moderation since the moderator variable interacts with the exogenous variable Strategic purchasing practices, with a high effect size index ($f^2 = 0.364$).

5. Discussion and Conclusion

This study investigates channel relationships among strategic purchasing practices, strategic purchasing involvement, leadership styles, and strategic fit as shown in Figure 1. The study suggested that strategic purchasing involvement boosts the strategic-fit of the purchasing strategic priorities and business strategic objectives. However, while the results confirm that purchasing practices boost strategic purchasing involvement, the study, meanwhile, looks at leadership styles that may facilitate or reduce the strength of this linkage. Accordingly, we established the moderating effects of the path-goal theory four leadership's styles: participative; directive; supportive and achievement oriented (House, 1971; Famakin and Abisuga, 2016; Li *et al.*, 2018).

The results indicate that participative; supportive and achievement-oriented leadership styles are pure moderators, while directive leadership style is a quasi-moderator in boosting the relationship between strategic purchasing practices and strategic purchasing involvement. That is to say; leaders can adopt participative; supportive and achievement-oriented leadership styles to influence the level of involvement in business strategy formulation, given that the purchasing function practices are strategic in nature (Hsieh and Yik, 2005; Karamat, 2013; House and Mitchel, 1974; Towers *et al.*, 2020). However, if the purchasing function practices are not strategic in nature, then participative, supportive, and achievement-oriented leadership styles are not proper to adopt since they do not affect the level of purchasing strategic involvement in business strategy formulation. On the other side, the finding that directive leadership style is a quasi-moderator implies that purchasing managers adopting this leadership style can influence the level of involvement in the business strategy formulation (Zhang *et al.*, 2014; Li *et al.*, 2018) even though the purchasing function practices are not strategic in nature. However, a higher level of involvement is achieved if the purchasing function practices are strategic in nature and a directive leadership style is adopted. Directive leaders provide clear instructions to employees and explain exactly what they need to do, which may explain why involvement in business strategy formulation can still be achieved even if purchasing practices were not strategic.

This study also adds to existing literature by empirically investigating the impact of strategic purchasing practices on the strategy formulation process (Prahinski and Benton, 2004; Samawi *et al.*, 2019), and by providing new evidence of the strategic role of the purchasing function (Towers *et al.*, 2020). The theoretical contribution of this paper is manifested in theorizing

channel relationships between purchasing strategic practices and business strategic-fit via purchasing involvement in business strategy formulation.

Unlike most previous studies which focused on the strategic fit (alignment) between business strategy and manufacturing practices and the effect of alignment on performance of the firms (Das and Narasimhan, 2000; Lawson *et al.*, 2009), this study contributed to the existing purchasing literature by providing empirical evidence on the alignment between purchasing function practices and business strategy. While previous studies have largely focused on the relationship between strategic purchasing involvements and performance (Prajogo *et al.*, 2012; Kim *et al.*, 2015), this study focused on the relationship between strategic purchasing involvements and strategic fit. Finally, through the lens of the path-goal theory, our study is the first scholarly work to provide empirical evidence on the different leadership styles as a moderator that affects the strategic involvement and status of strategic purchasing. However, researchers must consider other variables that could boost or reduce the linkages in an investigated channel relationship. Accordingly, this study added to this growing body of knowledge by investigating leadership styles and their role as moderators and identified the type of moderations within the investigated channel relationships.

Considering the findings of this study, some managerial implications can be highlighted. For the purchasing function to elevate its status in their organization via involvement in the business strategy formulation, it must adopt and implement practices that are strategic in nature, which would result in better strategic fit with the business strategy objectives (Samawi *et al.*, 2019). However, organizations must pay attention to leadership styles practiced when purchasing managers adopt practices that are strategic in nature as the organization can adopt any of the four investigated leadership styles to boost the relationship between purchasing strategic practices and purchasing involvement in business strategy formulation. However, adopting a directive leadership style would result in a higher involvement compared to the other three investigated leadership styles (participative; supportive; achievement-oriented).

6. Limitations and Future Research

There are some limitations to the study which open up avenues for future research. First, data was collected entirely from the manufacturing firms and did not take into consideration other sectors. Future studies, therefore, can be extended to assess purchasing strategic practices applicable to other sectors such as the service due to its large contribution to the economy. Second, the limited sample size is another limitation of this study. Third, this study only investigated four leadership styles; and thus, future studies are encouraged to consider more leadership styles. Fourth, this study only considered two-way moderation (separate two-way interactions) of a relationship compared to joint moderation (a three-way interaction). Finally, our study considered only Middle Eastern firms; therefore, future studies are also encouraged to investigate other national and cultural settings which may have a different business culture (Cho and Jung, 2014; Lasrado and Kassem, 2020). These limitations are important to be addressed when conducting similar future studies.

References

- Aguinis H. (2004), *Regression analysis for categorical moderators*, Guilford Press, New York, NY.
- Akın Ateş, M., Van Raaij, E.M. and Wynstra, F. (2018), “The impact of purchasing strategy-structure (mis)fit on purchasing cost and innovation performance”, *Journal of Purchasing and Supply Management*, Vol. 24 No.1, pp.68–82.
- Alistair, B. and Desiree K. (2018), "The role of strategic purchasing in dynamic capability development and deployment: A contingency perspective", *International Journal of Operations & Production Management*, Vol. 38 No. 2, pp. 446-473.
- Ashenbaum, B. and Maltz, A. (2017), “Purchasing-logistics integration and supplier performance: an information processing view”, *The International Journal of Logistics Management*, Vol. 28 No. 2, pp. 379-397.
- Baier, C., Hartmann, E. and Moser, R. (2008), “Strategic alignment and purchasing efficacy: An exploratory analysis of their impact on financial performance”, *Journal of Supply Chain Management*, Vol. 44 No. 4, pp. 36 - 52.

- Baron, R.M. and Kenny, D.A. (1986), “The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations”, *Journal of Personality and Social Psychology*, Vol. 51, pp. 1173-1182.
- Baxter, L. E. (2013). "Supportive leadership, employee engagement and occupational safety: A field study" PhD Dissertation, University of Tennessee. Available from https://trace.tennessee.edu/utk_graddiss/2556
- Burawat, P. (2019), “The relationships among transformational leadership, sustainable leadership, lean manufacturing and sustainability performance in Thai SMEs manufacturing industry”, *International Journal of Quality & Reliability Management*, Vol. 36 No. 6, pp.1014-1036
- Carr, A.S. and Pearson, J.N. (2002), “The impact of purchasing and supplier involvement on strategic purchasing and its impact on firm’s performance”, *International Journal of Operations & Production Management*, Vol. 22 No. 9, pp.1032–1053.
- Carr, A.S. and Smeltzer, L.R. (1997), “An empirically based operational definition of strategic purchasing”, *European Journal of Purchasing & Supply Management*, Vol. 3 No. 4, pp.199–207.
- Chao, P. (2008), “Exploring the nature of the relationships between service quality and customer loyalty: an attribute-level analysis”, *The Service Industries Journal*, Vol. 28 No. 1, pp. 95-116.
- Chen, I., Paulraj, A. and Lado, A. (2004), “Strategic purchasing, supply management, and firm performance”, *Journal of Operations Management*, Vol. 22 No. 5, pp.505-23.
- Cho, Y. S., & Jung, J. Y. (2014), “The verification of effective leadership style for TQM: A comparative study between USA-based firms and China-based firms”, *International Journal of Quality & Reliability Management*, Vol. 31 No. 7, pp.822-840.
- Coakes, S. and Steed, L. (2007), *SPSS Version 14.0 for windows: Analysis without anguish*, Milton: John Wiley & Sons.
- Cohen, J., Cohen, P., West, S. and Aiken, L. (2003), *Applied Multiple Regression/Correlation Analysis for the Behavioural Sciences*, 3rd edition, Lawrence Erlbaum Associates, Mahwah, NJ.
- Cooper, D.R. and Schindler, P.S. (2003), *Business Research Methods*, 8th Edition, McGraw-Hill Irwin, Boston.
- Cousins, P.D., Handfield, R.B., Lawson, B. and Petersen, K.J. (2006), “Creating supply chain relational capital: The impact of formal and informal socialization processes”, *Journal of Operations Management*, Vol. 24 No. 6, pp.851–863.

- Darrow, A. and Kahl, D. (1982), “A comparison of moderated regression techniques considering strength of effect”, *Journal of Management*, Vol. 8 No. 2, pp. 35–47.
- Das, A. and Narasimhan, R. (2000), “Purchasing Competence and Its Relationship with Manufacturing Performance”, *Journal of Supply Chain Management*, Vol. 36 No. 2, pp.17–28.
- Doha, A., Das, A. and Pagell, M. (2013), “The influence of product life cycle on the efficacy of purchasing practices”, *International Journal of Operations and Production Management*, Vol. 33 No. 4, pp.470–498.
- Ellram, L.M. and Carr, A. (1994), “Strategic Purchasing: A History and Review of the Literature”, *International Journal of Purchasing and Materials Management*, Vol. 30 No. 1, pp.9–19.
- Famakin, I.O. and Abisuga, A.O. (2016), “Effect of path-goal leadership styles on the commitment of employees on construction project”, *International Journal of Construction Management*, Vol. 16 No. 1, pp.67–76.
- Fayol, H. (1916), *General and Industrial Management*, Institute of Electrical and Electronics Engineering, Ravenio Books, Paris.
- Field, A. (2013), *Discovering Statistics Using IBM SPSS Statistics: And Sex and Drugs and Rock “N” Roll*, 4th Edition, Sage, Los Angeles, London, New Delhi.
- Field, J.M. and Meile, L.C. (2008), “Supplier relations and supply chain performance in financial services processes”, *International Journal of Operations and Production Management*, Vol. 28 No. 2, pp.185–206.
- Foerstl, K., A. K. Kähkönen, C. Blome, and M. Goellner (2020), “Supply Market Orientation: A Dynamic Capability of the Purchasing and Supply Management Function”, *Supply Chain Management: An International Journal*, Vol. 26 No. 1, pp.65–83.
- González-Benito, J. (2007), “A theory of purchasing's contribution to business performance”, *Journal of Operations Management*, Vol. 25 No. 4, pp. 901–917.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis*. Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey
- Hallikas, J., Immonen, M. and Brax, S. (2021), “Digitalizing procurement: the impact of data analytics on supply chain performance” *Supply Chain Management: An International Journal*, Vol. 26 No. 5, pp. 629-646
- Hammer, M. (2001), “The superefficient company”, *Harvard Business Review*, Vol. 79 No. 8, pp. 82-91.

- Helm, R. and Mark, A. (2012), "Analysis and Evaluation of Moderator Effects in Regression Models - State of Art, Alternatives and Empirical Example" *Review of Managerial Science*, Vol. 6 No. 4, pp. 307–332.
- Hernandez, M., Eberly, M.B., Avolio, B.J. and Johnson, M.D. (2011), "The loci and mechanisms of leadership: Exploring a more comprehensive view of leadership theory", *The Leadership Quarterly*, Vol. 22 No. 6, pp.1165–1185.
- House, R. J. and Mitchell, T. R. (1974), "Path-Goal Theory of Leadership", *Contemporary Business*, Vol. 3, pp. 81-98.
- House, R.J. (1971), "A Path Goal Theory of Leader Effectiveness", *Administrative Science Quarterly*, Vol. 16 No. 3, pp. 321-339.
- House, R.J. (1996), "Path-goal theory of leadership: Lessons, legacy, and a reformulated theory", *The Leadership Quarterly*, Vol. 7, No.3, pp. 323-352
- Hsieh, T-Y. and Yik, S. (2005), "Leadership as the starting point of strategy", *McKinsey Quarterly*, Vol. 1, pp. 67–76.
- Indvik, J. (1988). A more complete testing of path-goal theory. Paper presented at Academy of Management, Anaheim, California
- Jermias, J. and Gani, L. (2004), "Integrating business strategy, organizational configurations and management accounting systems with business unit effectiveness: a fitness landscape approach", *Management Accounting Research*, Vol. 15 No. 2, pp.179–200.
- Joshi, M.P., Kathuria, R. and Porth, S.J. (2003), "Alignment of strategic priorities and performance: an integration of operations and strategic management perspectives", *Journal of Operations Management*, Vol. 21 No. 3, pp.353–369.
- Kaiser, H.F. (1974), "Analysis of factorial simplicity", *Psychometrika*, Vol. 39 No. 4, pp. 31-36.
- Karamat, A. U. (2013), "Impact of Organizational Leadership on Organizational Performance. A Case Study of D & R Cambric Communication", *Journal of Organizational Leadership*, Vol. 6 No. 1, pp.117-133.
- Kathuria, R., Joshi, M.P. and Porth, S.J. (2007), "Organizational alignment and performance: past, present and future", *Management Decision*, Vol. 45 No. 3, pp.503–517.
- Kim, M., Suresh, N.C. and Kocabasoglu-Hillmer, C. (2015), "A contextual analysis of the impact of strategic sourcing and E-procurement on performance", *Journal of Business & Industrial Marketing*, Vol. 30 No. 1, pp. 1-16.
- Krause, D.R., Pagell, M. and Curkovic, S. (2001), "Toward a measure of competitive priorities for purchasing", *Journal of Operations Management*, Vol. 19 No. 4, pp. 497–512.

- Kull, T., Wiengarten, F., Power, D. and Shah, P. (2019), “Acting as expected: Global leadership preferences and the pursuit of an integrated supply chain”, *Journal of Supply Chain Management*, Vol. 55 No. 3, pp. 24-44.
- Lasrado, F. and Kassem, R. (2020), “Let's get everyone involved! The effects of transformational leadership and organizational culture on organizational excellence”. *International Journal of Quality & Reliability Management*, Vol. 83 No.1, pp.169-194.
- Lawson, B., Cousins, P.D., Handfield, R.B. and Petersen, K.J. (2009), “Strategic purchasing, supply management practices and buyer performance improvement: an empirical study of UK manufacturing organisations”, *International Journal of Production Research*, Vol. 47 no. 10, pp. 2649–2667.
- Li, Y., Castaño, G. and Li, Y. (2018), “Linking leadership styles to work engagement”, *Chinese Management Studies*, Vol. 12 No. 2, pp.433–452.
- Narasimhan, R., Aram, J. and Carter, A. (2001), “An Empirical Examination of the Underlying Dimensions of Purchasing Competence”, *Production and Operations Management*. Vol. 10 No., pp. 1 - 15.
- Northouse, P. G. (2013), “Leadership: theory and practice. Sage, New Delhi.
- Parmigiani, A. (2007), “Why do firms both make and buy? An investigation of concurrent sourcing”, *Strategic Management Journal*, Vol. 28 No. 3, pp.285–311.
- Paulraj, A., Chen, I.J. and Flynn, J. (2006), “Levels of strategic purchasing: impact on supply integration and performance”, *Journal of Purchasing & Supply Management*, Vol. 12 No. 3, pp. 107-122.
- Porter, M. (1986), *Competition in Global Industries*, Harvard Business School Press, Boston, MA.
- Porter, M.E. (1996), “What is strategy?” *Harvard Business Review*, Vol. 74 No. 6, pp. 61-78.
- Prahinski, C. and Benton, W. (2004), “Supplier evaluations: communication strategies to improve supplier performance”, *Journal of Operations Management*, Vol. 22, pp. 39-62.
- Prajogo, D., Chowdhury, M., Yeung, A.C.L. and Cheng, T.C.E. (2012), “The relationship between supplier management and firm’s operational performance: A multi-dimensional perspective” *International Journal of Production Economics*, Vol. 136 No. 1, pp.123–130.
- Pressey, A.D., Winklhofer, H.M. and Tzokas, N.X. (2009), “Purchasing practices in small- to medium-sized enterprises: An examination of strategic purchasing adoption, supplier evaluation and supplier capabilities”, *Journal of Purchasing and Supply Management*, Vol. 15 No. 4, pp.214–226.
- Reio, T. and Shuck, B. (2015), “Exploratory factor analysis: Implications for theory, research, and practice”, *Advances in Developing Human Resources*, Vol. 17 no. 1, pp. 12–25.

- Rodríguez-Escobar, J.A. and González-Benito, J. (2017), “The effect of strategic alignment on purchasing management”, *Management Research Review*, Vol. 40 No. 11, pp.1175–1200.
- Samawi, G., Abushaikha, I., Salhieh, L., Mdanat, M. and Al-Rashid, A. (2019), “Aligning Business Strategic Priorities and Purchasing Practices in Industrial Firms: Evidence from an Emerging Economy”, *Theoretical Economics Letters*, Vol. 9 No. 4, pp.709–736.
- Sánchez-Rodríguez, C. (2009), “Effect of strategic purchasing on supplier development and performance: a structural model”, *Journal of Business & Industrial Marketing*, Vol. 24 No. 3, pp.161-72.
- Seiders, K., Voss, G., Grewal, D. and Godfrey, A. (2005), “Do satisfied customers buy more? Examining moderating influences in a retailing context”, *Journal of Marketing*, Vol. 69, October, pp. 26-43.
- Terpend, R., Tyler, B., Krause, D. and Handfield, R. (2008), “Buyer-Supplier Relationships: Derived Value Over Two Decades”, *Journal of Supply Chain Management*, Vol. 44 No. 2, pp. 28 - 55.
- Towers, N., Abushaikha, I., Ritchie, J. and Holter, A. (2020), “The impact of phenomenological methodology development in supply chain management research”, *Supply Chain Management: An International Journal*, Vol. 25 No. 4, pp. 443-456.
- Van Weele, A.J. (2010), *Purchasing and supply chain management*, 5th Ed., Seng Lee Press, Singapore.
- Venkatraman, N. (1989), “The concept of fit in strategy research: Toward verbal and statistical correspondence”, *Academy of Management Review*, Vol. 14 No. 3, pp. 423–444.
- Watts C., Kim K., and Hahn C. (1992), “Linking purchasing to corporate competitive strategy”, *International Journal of Purchasing and Materials Management*, Vol. 28 No. 4, pp. 2-8.
- Zhang, T., C. Avery, G., Bergsteiner, H. and More, E. (2014), "The relationship between leadership paradigms and employee engagement", *Journal of Global Responsibility*, Vol. 5 No. 1, pp. 4-21.

Appendix A. (Author's own work)

Section (1): Background information

Number of years at this firm

- | | |
|------------------------------------|------------------------------------|
| 7. Less than 5 years | 7.1 5 years and less than 10 years |
| 8. 10 years and less than 20 years | 8.1 more than 20 years |

Firm size

- | | |
|----------------|-----------------------|
| ○ Less than 20 | ○ 20 and less than 50 |
|----------------|-----------------------|

- 50 and less than 100
- More than 100

Position

- Senior manager
- Middle level manager
- Functional level manager
- Operational staff

Section (2) – Strategic purchasing practices (SPP): On a scale of 1 represented “strongly disagree”, to 5 = “strongly agree”, please indicate to what extent do you agree with the following statements.

Item Description	Strongly disagree (1)	Disagree (2)	moderate (3)	agree (4)	Strongly agree (5)
Control & monitoring practices (CMP)					
CMP1: Formal evaluation of suppliers’ capacities and performance					
CMP2: Quality certifications required of suppliers					
CMP3: Quality testing of purchased materials					
CMP4: Purchasing involved in all make or buy decisions					
CMP5: Purchasing involved in future demand planning					
CMP6 : Supply market analysis are conducted and reviewed periodically					
Supplier related practices (SRP)					
SRP1: Supplier involvement in the design and development of new products					
SRP2: Purchasing knows the technology trends of their strategic suppliers					
SRP3: There is a supplier evaluation process in place for almost all purchased volume					
SRP4: Purchasing is part of regular visits to suppliers for strategic purchased items					
Purchasing strategy related practices (PSRP)					
PSRP1: The purchasing function has a formally written long-range plan (e.g., 5–10 years plan)					
PSRP2: Purchasing's long-range plan is reviewed and adjusted to match changes in the company's strategic plans on a regular basis					

PSRP3: Comprehensive purchasing strategies have been developed to support the company's strategies					
PSRP4: Purchasing's focus is on longer term issues that involve risk and uncertainty					
PSRP5: All purchasing members know the company strategy					
PSRP6: Purchasing policies are shared with all parties and linked to company policies					
PSRP7: Category purchasing strategies are established and linked to company strategy and reviewed periodically					
PSRP8: Purchasing strategy is regularly updated, adjusted to business strategy					
PSRP9: Purchasing interfaces continuously with other functions in the organization					

Section (3) Strategic purchasing Involvement (SPI): On a scale of 1 represented “strongly disagree”, to 5 = “strongly agree”, indicate your firm’s position on each of the following practices.

Item Description	Strongly disagree (1)	Disagree (2)	moderate (3)	agree (4)	Strongly agree (5)
SPI1: A yearly budget is allocated to improve the purchasing department					
SPI2: Purchasing’s views are regularly required in the strategy formulation process					
SPI3: Purchasing is recognized as an equal partner with other functions					
SPI4: Purchasing actively participates in organization-wide process improvement					
SPI5: There is a precise measurement to help assess the progress of purchasing performance					
SPI6: Purchasing staff have the technical capabilities to help our suppliers improve their processes and products					
SPI7: Purchasing regularly attends strategy meetings					
SPI8: Purchasing staff have the necessary skills to improve the firm’s total cost of doing business with the firm’s suppliers					
SPI9: Findings of the purchasing function progress discussed for remedial action.					

SPI10: Our firm has a strategic purchasing plan in place					
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Section (4): Leadership styles

This part of the questionnaire contains 20 questions about different styles of path-goal leadership. On a scale of 1 represented “strongly disagree”, to 5 = “strongly agree”, Indicate how often each statement is true based on your opinion.

	Strongly disagree (1)	Disagree (2)	Moderate (3)	Agree (4)	strongly agree (5)
Items					
LS1: My immediate manager communicates what is expected of me					
LS2: My immediate manager maintains a friendly working relationship with me					
LS3: My immediate manager consults me when facing problem					
LS4: My immediate manager listens receptively to my ideas and suggestion					
LS5: My immediate manager informs me about what needs to be done and how it needs to be done					
LS6: My immediate manager expects of me to perform at the highest levels					
LS7: My immediate manager act without consulting me					
LS8: My immediate manager does little things to make it pleasant to be a member of the group					
LS9: My immediate manager asks me to follow standard rules and regulation					
LS10: My immediate manager set goals for performance that are quite challenging					
LS11: My immediate manager says things that hurt personal feelings					
LS12: My immediate manager asks me for suggestion concerning how to carry out assignments					
LS13: My immediate manager encourages continual improvement in performance					
LS14: My immediate manager explains the level of performance that expected of me					

LS15: My immediate manager helps to overcome the problem that stop me from carrying out tasks					
LS16: My immediate manager shows doubts about my ability to meet most objectives					
LS17: My immediate manager asks me for suggestions on what assignments should be made					
LS18: My immediate manager gives vague explanations of what is expected of me on the job					
LS19: My immediate manager consistently set challenging goals for me to attain					
LS 20: My immediate manager is behaving in a manner that is thoughtful to my personal needs					

Section (5) – Purchasing priorities: On a scale of 1 represented “strongly disagree”, to 5 = “strongly agree”, please indicate to what extent do you agree with following statements

Item Description	(1) Strongly disagree	(2) Disagree	(3) Moderate	(4) Agree	(5) Strongly agree
A. Cost Practices (CP)					
CP1: The purchasing department is actively involved in evaluating and redesigning its own processes in order to reduce costs and efforts.					
CP2: Your purchase IT system has a search facility to help identify the item you wish to purchase e.g., based on keywords.					
CP3: Your purchase IT system has an Automatic issue of an order by fax or e-mail. Once the order approved, the computer should be able to send it to the supplier electronically without the need to print off a hardcopy and send it by post.					
CP4: For non-high value, low risk purchased item, your purchasing procedures are not to inspect purchased item.					
CP5: For certain items, once a contract signed: End-users, appropriately authorized, would identify the items they need from the contract and communicate their requirements directly to the suppliers. Accordingly, there would be no need for them to seek approval from purchasing or from anyone else before doing so.					
CP6: When purchasing certain item, your purchasing procedures allows you to set up an					

account with a supplier that allows you to make purchases via the supplier's Internet website.					
CP7: Your supplier can issue consolidated billing to reduce the frequency of invoices. Hence, the amount of time and effort involved in processing these invoices and making payment by your organization.					
CP8: Your organization agrees with suppliers to work jointly on total cost reduction initiatives.					
B. Quality Practices (QP)					
QP1: Purchasing management is actively involved in activities to promote quality in the company.					
QP2: Purchasing management communicates to purchasing personnel that quality is the most important goal.					
QP3: Performance evaluation for purchasing management based on quality performance (materials purchased defects rate, degree of internal customer satisfaction).					
QP4: Quality is the most important criteria in the selection and evaluation of suppliers.					
QP5: We visit suppliers' factories to assess their facilities; suppliers are recognized and rewarded for materials quality improvement.					
QP6: We collect information (data) about quality performance (supplier's rejection rate, degree of internal customer satisfaction).					
C. Availability (AP)					
AP1: Our demand forecasts inserted as slot requirements into the supplier's production schedule, and thereby reduce the risk of delayed delivery, and a basis for making more reliable contractual commitments to a supplier.					
AP2: The purchasing department is actively involved in evaluating and redesigning its own processes to adjust its processes to fit in better with the supplier's processes. (Reduce lead-time to delivery).					
AP3: Pool both your company's and the supplier's knowledge and expertise in order to reduce lead-time to delivery.					

Section (6) - Business strategy: The following statements help us understand your business strategy. Please indicate by ticking the appropriate box the extent to which you agree with each statement as best reflecting your company's

business strategy in the past two years. On a scale of 1 represented 'strongly disagree', and 5 represented 'strongly agree'.

Item Description	Strongly disagree (1)	Disagree (2)	moderate (3)	Agree (4)	Strongly agree (5)
A. Cost					
i. We attempt to be ahead of our competitors by cheaper pricing of our products					
ii. We constantly drive to improve the efficiency of our processes					
B. Quality					
i. We attempt to be ahead of our competitors by quality products rather than price.					
ii. We attempt to be ahead of our competitors by providing quality products to our customers					
C. Availability					
i. We attempt to be ahead of our competitors by satisfying our customers in the right quantity at the right time					
ii. We attempt to be ahead of our competitors by delivering our products quicker to our customers.					

Tables, Figures and Appendices

Table I: Path Goal Theory leadership styles; adapted from (House and Mitchell, 1974; House, 1971; House, 1996; Famakin and Abisuga, 2016; Hernandez *et al.*, 2011)

Leadership styles	Description
Directive style:	<ul style="list-style-type: none"> • Breaks down everything into smaller segments to make it easier to comprehend. It achieves that by setting expectations and offering specific aid and guidance to attain the desired expectations based on performance and organizational rules. • Known as autocratic leadership in which the leader is naturally controlling yet pathetically narrow-minded. • Perceived as aggressive, controlling, descriptive and structured by dictating what needs to be done, when and how it can be done. • Give clear instructions and clarification rules, policies, and procedures. Makes followers have complete understanding of what is required of them and teaches them how to execute their tasks.
Supportive style:	<ul style="list-style-type: none"> • Create a friendly organizational atmosphere and successfully acknowledges the achievements of employees in gratifying modus. • Viewed as a transformational leadership style • Concern for the wellbeing of workers and build a friendly and mentally supportive work environment. • Appropriate when workers lack faith in their ability to perform a task and lack of motivation
Participative style:	<ul style="list-style-type: none"> • Leader maintains the final decision authority, but also adopts an advisory behavior like soliciting employees for suggestions before taking a final decision. • Viewed as the democratic leadership style. • More suitable if subordinates demonstrate a lack of judgment or when subordinate procedures have not been followed. • Subordinates involved in the planning, decision-making, and implementation level.
Achievement-orientated style:	<ul style="list-style-type: none"> • Leader sets challenging goals, expects subordinates to perform at their best, seeks continuous improvement, and demonstrates a high level of confidence in their ability to take responsibility, put forth effort, and achieve challenging goals. • Viewed as transactional leadership style. • Leader provides both strong direction and a high level of encouragement. • Suited for vague tasks and employees who need to raise morale to get the tasks done.

Tables, Figures and Appendices

Table II: Profile of respondents (N=320) (Author's own work)

Characteristics of firm & respondents		Frequency	%
Years of experience	Less than 5 years	114	35.6
	5 years and less than 10 years	88	27.5
	10 years and less than 20 years	80	25
	More than 20 years	38	11.8
Firm size	Less than 20	-	-
	20 and less than 50	4	6.25
	50 and less than 100	14	21.87
	More than 100	46	71.87
Position	Senior manager	66	20.6
	Middle level manager	76	23.7
	Functional level manager	70	21.87
	Operational staff	108	33.75

Tables, Figures and Appendices

Table III: Validity and reliability of proposed constructs (Author's own work)

Construct	No. of items	Deleted items	KMO	Bartlett's test	P-value	Eigenvalue	% Variance	α^c
Control& monitoring practices (CMP)	6	CMP1	0.780	59.652	0.000	2.974	59.486	0.826
Supplier related practices (SRP)	4	SRP4	0.673	21.536	0.000	2.011	67.040	0.753
Purchasing strategy related practices (PSRP)	9	PSRP1, PSRP2, PSRP3	0.790	61.571	0.000	3.253	54.221	0.828
Strategic purchasing Involvement (SPI)	10	SPI1, SPI2, SPI3	0.789	173.794	0.000	4.726	67.517	0.916
Participative Leadership (PLS)	5	PL12	0.711	31.972	0.000	2.357	58.921	0.763
Directive Leadership (DLS)	5	DL9	0.697	35.958	0.000	2.338	58.447	0.756
Supportive leadership (SLS)	5	SL8	0.756	40.993	0.000	2.548	63.691	0.789
Achievement-oriented leadership (AOL)	5	-	0.712	31.530	0.000	2.425	55.496	0.734
Purchasing Cost Priorities (CP)	8	CP1, CP2, CP4	0.745	248.623	0.000	3.577	71.549	0.897

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Purchasing Quality Priorities (QP)	6	QP1, QP4, QP6	0.535	27.297	0.000	1.982	66.077	0.739
Purchasing Availability Priorities (AP)	3	AP3	0.500	10.419	0.001	1.545	77.275	0.706
Cost-Strategy	2	-	0.500	13.580	0.000	1.607	80.370	0.754
Quality-Strategy	2	-	0.500	19.382	0.000	1.694	84.699	0.814
Availability-Strategy	2	-	0.500	21.407	0.000	1.718	85.916	0.834

Table IV: Descriptive statistics of constructs (Author's own work)

Variable	N	Mean	StDev	Minimum	Maximum
Strategic purchasing practices (SPP)					
Control & monitoring practices (CMP)	64	3.939	0.612	2.000	4.800
Supplier related practices (SRP)	64	3.737	0.438	3.000	5.000
Purchasing strategy related practices (PSRP)	64	3.574	0.611	2.167	4.667
Strategic purchasing involvement (SPI)	64	3.604	0.684	1.857	4.929
Leadership styles					
Participative (PLS)	64	4.013	0.462	2.722	4.820
Directive (DLS)	64	3.859	0.541	2.150	4.625
Supportive (SLS)	64	3.727	0.542	2.500	4.875
Achievement oriented (AOL)	64	3.749	0.483	2.600	4.710

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Purchasing priorities					
Cost (CP)	64	4.047	0.590	2.330	5.000
Quality (QP)	64	4.038	0.632	2.330	4.880
Availability (AP)	64	3.818	0.628	2.110	5.000
Business strategy					
Cost	64	4.021	0.584	2.110	4.750
Quality	64	4.5541	0.4649	3.1200	5.0000
Availability	64	4.6041	0.397	3.550	5.000
Strategic fit (SF)	64	72.93	16.19	17.40	102.55

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Table V: Partial Calculation of the alignment scores (Author's own work)

Code	Type	Purchasing Priorities			Business Strategies			Alignment Results per Strategy			Overall Strategic Fit
		Cost Priorities (CP)	Quality Priorities (QP)	Availability Priorities (AP)	Cost	Quality	Availability	Cost	Quality	Availability	
CO.1	1	4.078	4.67	4.25	4.41	5.00	5.00	18.00	23.33	21.25	94.48
CO.2	1	3.55	4.5	3.55	4.54	4.00	5.00	16.12	18.00	17.75	71.76
CO.3	1	4.00	3.55	4.45	3.65	4.65	4.55	14.6	16.51	20.25	69.85
CO.4	1	3.11	2.33	4.12	3.55	4.65	3.55	11.04	10.83	14.63	41.83
CO.5	1	5.00	4.33	4.00	3.75	4.75	4.75	18.75	20.58	19.00	85.63
CO.6	2	3.40	4.00	3.50	4.5	5.00	4.75	15.3	20.00	16.63	71.32
CO.7	2	3.60	4.00	3.50	4.75	5.00	5.00	17.1	20.00	17.50	77.36
CO.8	1	3.87	4.00	4.00	4.75	4.75	4.00	18.37	19.00	16.00	74.74
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CO.61	1	4.55	4.33	4.12	3.56	4.11	4.23	16.19	17.7963	17.4276	70.88
CO.62	2	4.70	4.67	4.25	4.75	4.75	5.00	22.33	22.17	21.25	102.55
CO.63	2	3.80	3.78	3.67	4.5	4.75	4.50	17.11	17.96	16.515	71.23
CO.64	2	4.40	3.56	3.50	4.5	4.75	4.75	19.80	16.91	16.625	74.61

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Table VI: Hypothesis Test (H₁ Simple regression output) (Author's own work)

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.741 ^a	0.55	0.54	0.46		
a. Predictors: (Constant), Strategic Purchasing Practices (SPP)						
ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.95	1	15.95	75.687	0.000 ^b
	Residual	13.06	62	0.211		
	Total	29.01	63			
a. Dependent Variable: Strategic Purchasing Involvement (SPI)						
b. Predictors: (Constant), Strategic Purchasing Practices (SPP)						
Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.768	0.506		-1.519	0.134
	Strategic Purchasing Practices (SPP)	1.166	0.134	0.741	8.700	0.000
a. Dependent Variable: Strategic Purchasing Involvement						

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Table VII: Hypothesis Test (H₂ Simple regression output) (Author's own work)

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.860 ^a	0.739	0.735	8.267		
a. Predictors: (Constant), Strategic Purchasing Involvement (SPI)						
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12022.46	1	12022.46	175.90	0.000 ^b
	Residual	4237.60	62	68.35		
	Total	16260.06	63			
a. Dependent Variable: Strategic-Fit (SF)						
b. Predictors: (Constant), Strategic Purchasing Involvement (SPI)						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.436	5.627		-0.077	0.939
	Strategic Purchasing Involvement (SPI)	20.358	1.535	0.860	13.263	0.000
a. Dependent Variable: Strategic-Fit (SF)						

Table VIII: Moderator regression results of Participative Leadership style (Dependent variable: Strategic Purchasing Involvement) (Author's own work)

Values	Equation (1)		Equation (2)		Equation (3)	
	Beta	p-value	Beta	p-value	Beta	p-value
Strategic purchasing practices (SPP)	0.741	0.000	0.763	0.000	0.407	0.003

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Participative Leadership Style (PLS)			0.223	0.008	-0.159	0.246
Cross product of Strategic purchasing practices (SPP) and Participative Leadership Style (PLS)					0.557	0.001
R-square	0.550		0.599		0.663	
Significance level of F	0.000		0.000		0.000	
Sig. F Change	0.000		0.008		0.001	

Table IX: Simple Regression of Participative Leadership Style and Strategic Purchasing Involvement (Author's own work)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.640	1	0.640	1.399	.241 ^b
	Residual	28.367	62	0.458		
	Total	29.008	63			
a. Dependent Variable: Strategic Purchasing Involvement (SPI)						
b. Predictors: (Constant), Participative leadership style (PLS)						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.721	0.751		3.625	0.001
	Participative leadership style (PLS)	0.220	0.186	0.149	1.183	0.241
a. Dependent Variable: Strategic Purchasing Involvement (SPI)						
Adjusted R Square = .006						

Table X: Moderator regression results of Directive Leadership style (Dependent variable: Strategic Purchasing Involvement) (Author's own work)

Values	Equation (1)		Equation (2)		Equation (3)	
	Beta	p-value	Beta	p-value	Beta	p-value

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Strategic purchasing practices (SPP)	0.741	0.000	0.635	0.000	0.409	0.000
Directive leadership style (DLS)			0.425	0.000	0.139	0.221
Cross product of Strategic purchasing practices (SPP) and Directive leadership style (DLS)					0.453	0.003
R-square	0.550		0.719		0.759	
Significance level of F	0.000		0.000		0.003	
Sig. F Change	0.000		0.000		0.000	

Table XI: Simple Regression of Directive Leadership Style and Strategic Purchasing Involvement (Author's own work)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.923	1	9.923	32.239	.000 ^b
	Residual	19.084	62	0.308		
	Total	29.008	63			
a. Dependent Variable: Strategic Purchasing Involvement (SPI)						
b. Predictors: (Constant), Directive leadership style (DLS)						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	0.752	0.507		1.483	0.143
	Directive leadership style (DLS)	0.739	0.130	0.585	5.678	0.000
a. Dependent Variable: Strategic Purchasing Involvement (SPI)						
Adjusted R Square = 0.331						

Table XII: Moderator regression results of Supportive Leadership style (Dependent variable: Strategic Purchasing Involvement) (Author's own work)

Values	Equation (1)		Equation (2)		Equation (3)	
	Beta	p-value	Beta	p-value	Beta	p-value
Strategic purchasing practices (SPP)	0.741	0.000	0.741	0.000	0.398	0.001

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Supportive leadership style (SLS)			0.213	0.011	-0.224	0.113
Cross product of Strategic purchasing practices (SPP) and Supportive leadership style (SLS)					0.620	0.000
R-square	0.550		0.595		0.671	
Significance level of F	0.000		0.000		0.000	
Sig. F Change	0.000		0.011		0.000	

Table XIII: Simple Regression of Supportive Leadership Style and Strategic Purchasing Involvement (Author's own work)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.313	1	1.313	2.939	.091 ^b
	Residual	27.695	62	0.447		
	Total	29.008	63			
a. Dependent Variable: Strategic Purchasing Involvement (SPI)						
b. Predictors: (Constant), Supportive leadership style (SLS)						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.603	0.590		4.414	0.000
	Supportive leadership style (SLS)	0.268	0.157	0.213	1.714	0.091
a. Dependent Variable: Strategic Purchasing Involvement (SPI)						
Adjusted R Square = 0.030						

Table XIV: Moderator regression results of: Achievement-Orientated Leadership style (Dependent variable: Strategic Purchasing Involvement) (Author's own work)

Values	Equation (1)		Equation (2)		Equation (3)	
	Beta	p-value	Beta	p-value	Beta	p-value
Strategic purchasing practices (SPP)	0.741	0.000	0.719	0.000	0.422	0.001

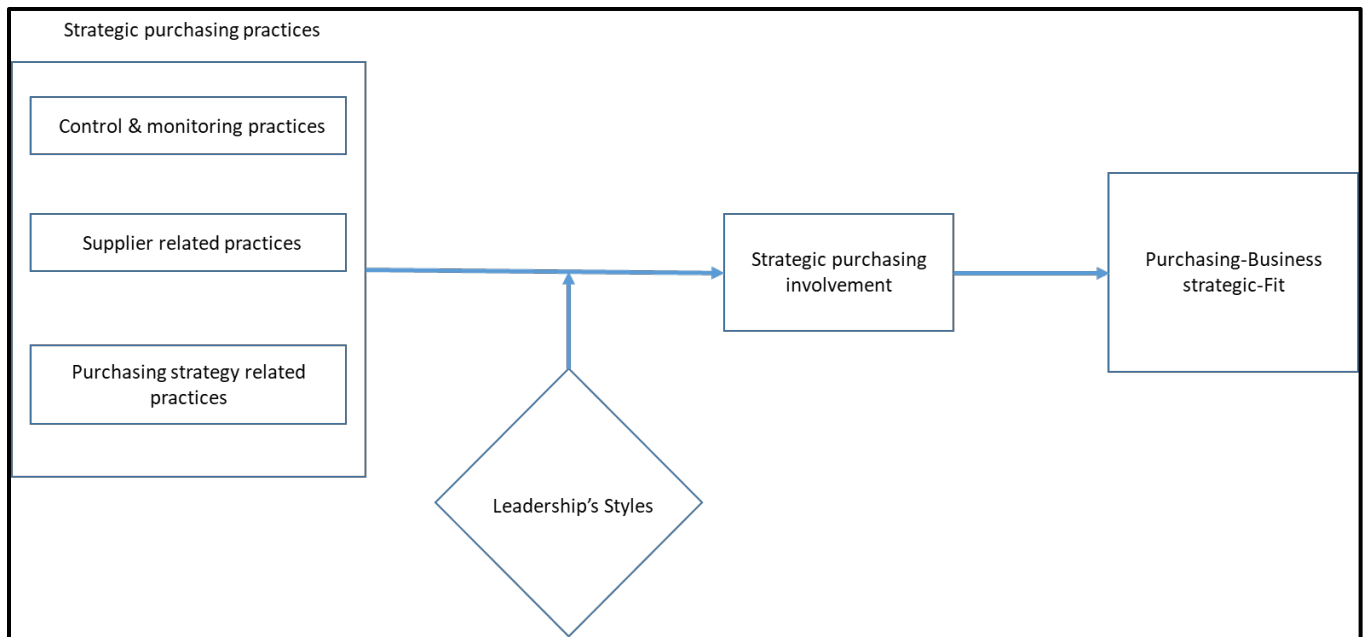
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Achievement-Orientated leadership style (AOL)			0.256	0.002	-0.143	0.330
Cross product of Strategic purchasing practices (SPP) and Achievement-Orientated leadership style (AOL)					0.569	0.002
R-square	0.550		0.615		0.670	
Significance level of F	0.000		0.002		0.002	
Sig. F Change	0.000		0.011		0.000	

Table XV: Simple Regression of Achievement-Orientated Leadership Style and Strategic Purchasing Involvement (Author's own work)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.920	1	2.920	6.940	.011 ^b
	Residual	26.088	62	0.421		
	Total	29.008	63			
a. Dependent Variable: Strategic Purchasing Involvement (SPI)						
b. Predictors: (Constant), Achievement-Orientated leadership style (AOL)						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.920	0.644		2.979	0.004
	Achievement-Orientated leadership style (AOL)	0.449	0.171	0.317	2.634	0.011
a. Dependent Variable: Strategic Purchasing Involvement (SPI)						
Adjusted R Square = 0.086						

Figure 1: Proposed theoretical framework (Author's own work)



Appendix A. (Author's own work)

Section (1): Background information

Number of years at this firm

- Less than 5 years
- 10 years and less than 20 years
- 5 years and less than 10 years
- more than 20 years

Firm size

- Less than 20
- 50 and less than 100
- 20 and less than 50
- More than 100

Position

- Senior manager
- Middle level manager
- Functional level manager
- Operational staff

Section (2) – Strategic purchasing practices (SPP): On a scale of 1 represented “strongly disagree”, to 5 = “strongly agree”, please indicate to what extent do you agree with the following statements.

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Item Description	Strongly disagree (1)	Disagree (2)	moderate (3)	agree (4)	Strongly agree (5)
Control & monitoring practices (CMP)					
CMP1: Formal evaluation of suppliers' capacities and performance					
CMP2: Quality certifications required of suppliers					
CMP3: Quality testing of purchased materials					
CMP4: Purchasing involved in all make or buy decisions					
CMP5: Purchasing involved in future demand planning					
CMP6 : Supply market analysis are conducted and reviewed periodically					
Supplier related practices (SRP)					
SRP1: Supplier involvement in the design and development of new products					
SRP2: Purchasing knows the technology trends of their strategic suppliers					
SRP3: There is a supplier evaluation process in place for almost all purchased volume					
SRP4: Purchasing is part of regular visits to suppliers for strategic purchased items					
Purchasing strategy related practices (PSRP)					
PSRP1: The purchasing function has a formally written long-range plan (e.g., 5–10 years plan)					
PSRP2: Purchasing's long-range plan is reviewed and adjusted to match changes in the company's strategic plans on a regular basis					
PSRP3: Comprehensive purchasing strategies have been developed to support the company's strategies					
PSRP4: Purchasing's focus is on longer term issues that involve risk and uncertainty					
PSRP5: All purchasing members know the company strategy					
PSRP6: Purchasing policies are shared with all parties and linked to company policies					
PSRP7: Category purchasing strategies are established and linked to company strategy and reviewed periodically					

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PSRP8: Purchasing strategy is regularly updated, adjusted to business strategy					
PSRP9: Purchasing interfaces continuously with other functions in the organization					

Section (3) Strategic purchasing Involvement (SPI): On a scale of 1 represented “strongly disagree”, to 5 = “strongly agree”, indicate your firm’s position on each of the following practices.

Item Description	Strongly disagree (1)	Disagree (2)	moderate (3)	agree (4)	Strongly agree (5)
SPI1: A yearly budget is allocated to improve the purchasing department					
SPI2: Purchasing’s views are regularly required in the strategy formulation process					
SPI3: Purchasing is recognized as an equal partner with other functions					
SPI4: Purchasing actively participates in organization-wide process improvement					
SPI5: There is a precise measurement to help assess the progress of purchasing performance					
SPI6: Purchasing staff have the technical capabilities to help our suppliers improve their processes and products					
SPI7: Purchasing regularly attends strategy meetings					
SPI8: Purchasing staff have the necessary skills to improve the firm’s total cost of doing business with the firm’s suppliers					
SPI9: Findings of the purchasing function progress discussed for remedial action.					
SPI10: Our firm has a strategic purchasing plan in place					

Section (4): Leadership styles

This part of the questionnaire contains 20 questions about different styles of path-goal leadership. On a scale of 1 represented “strongly disagree”, to 5 = “strongly agree”, Indicate how often each statement is true based on your opinion.

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	Strongly disagree (1)	Disagree (2)	Moderate (3)	Agree (4)	strongly agree (5)
Items					
LS1: My immediate manager communicates what is expected of me					
LS2: My immediate manager maintains a friendly working relationship with me					
LS3: My immediate manager consults me when facing problem					
LS4: My immediate manager listens receptively to my ideas and suggestion					
LS5: My immediate manager informs me about what needs to be done and how it needs to be done					
LS6: My immediate manager expects of me to perform at the highest levels					
LS7: My immediate manager act without consulting me					
LS8: My immediate manager does little things to make it pleasant to be a member of the group					
LS9: My immediate manager asks me to follow standard rules and regulation					
LS10: My immediate manager set goals for performance that are quite challenging					
LS11: My immediate manager says things that hurt personal feelings					
LS12: My immediate manager asks me for suggestion concerning how to carry out assignments					
LS13: My immediate manager encourages continual improvement in performance					
LS14: My immediate manager explains the level of performance that expected of me					
LS15: My immediate manager helps to overcome the problem that stop me from carrying out tasks					
LS16: My immediate manager shows doubts about my ability to meet most objectives					
LS17: My immediate manager asks me for suggestions on what assignments should be made					
LS18: My immediate manager gives vague explanations of what is expected of me on the job					
LS19: My immediate manager consistently set challenging goals for me to attain					
LS 20: My immediate manager is behaving in a manner that is thoughtful to my personal needs					

Section (5) – Purchasing priorities: On a scale of 1 represented “strongly disagree”, to 5 = “strongly agree”, please indicate to what extent do you agree with following statements

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Item Description	(1) Strongly disagree	(2) Disagree	(3) Moderate	(4) Agree	(5) Strongly agree
A. Cost Practices (CP)					
CP1: The purchasing department is actively involved in evaluating and redesigning its own processes in order to reduce costs and efforts.					
CP2: Your purchase IT system has a search facility to help identify the item you wish to purchase e.g., based on keywords.					
CP3: Your purchase IT system has an Automatic issue of an order by fax or e-mail. Once the order approved, the computer should be able to send it to the supplier electronically without the need to print off a hardcopy and send it by post.					
CP4: For non-high value, low risk purchased item, your purchasing procedures are not to inspect purchased item.					
CP5: For certain items, once a contract signed: End-users, appropriately authorized, would identify the items they need from the contract and communicate their requirements directly to the suppliers. Accordingly, there would be no need for them to seek approval from purchasing or from anyone else before doing so.					
CP6: When purchasing certain item, your purchasing procedures allows you to set up an account with a supplier that allows you to make purchases via the supplier's Internet website.					
CP7: Your supplier can issue consolidated billing to reduce the frequency of invoices. Hence, the amount of time and effort involved in processing these invoices and making payment by your organization.					
CP8: Your organization agrees with suppliers to work jointly on total cost reduction initiatives.					
B. Quality Practices (QP)					
QP1: Purchasing management is actively involved in activities to promote quality in the company.					
QP2: Purchasing management communicates to purchasing personnel that quality is the most important goal.					
QP3: Performance evaluation for purchasing management based on quality performance (materials purchased defects rate, degree of internal customer satisfaction).					
QP4: Quality is the most important criteria in the selection and evaluation of suppliers.					
QP5: We visit suppliers' factories to assess their facilities; suppliers are recognized and rewarded for materials quality improvement.					

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QP6: We collect information (data) about quality performance (supplier's rejection rate, degree of internal customer satisfaction).					
C. Availability (AP)					
AP1: Our demand forecasts inserted as slot requirements into the supplier's production schedule, and thereby reduce the risk of delayed delivery, and a basis for making more reliable contractual commitments to a supplier.					
AP2: The purchasing department is actively involved in evaluating and redesigning its own processes to adjust its processes to fit in better with the supplier's processes. (Reduce lead-time to delivery).					
AP3: Pool both your company's and the supplier's knowledge and expertise in order to reduce lead-time to delivery.					

Section (6) - Business strategy: The following statements help us understand your business strategy. Please indicate by ticking the appropriate box the extent to which you agree with each statement as best reflecting your company's business strategy in the past two years. On a scale of 1 represented 'strongly disagree', and 5 represented 'strongly agree'.

Item Description	(1) Strongly disagree	(2) Disagree	(3) moderate	(4) Agree	(5) Strongly agree
A. Cost					
i. We attempt to be ahead of our competitors by cheaper pricing of our products					
ii. We constantly drive to improve the efficiency of our processes					
B. Quality					
i. We attempt to be ahead of our competitors by quality products rather than price.					
ii. We attempt to be ahead of our competitors by providing quality products to our customers					
C. Availability					
i. We attempt to be ahead of our competitors by satisfying our customers in the right quantity at the right time					

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ii. We attempt to be ahead of our competitors by delivering our products quicker to our customers.					
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