

Moderating Influence of Organizational Characteristics on Strategic Planning Process and Performance Linkage

Peter Agyekum Boateng^{1*} Emmanuel Bismark Amponsah² Adu Frimpong Augustine³

1, 2. Valley View University, School of Business, P. O. Box AF595, Adenta Accra, Ghana

3. Valley View University, School of Business, Techiman Campus, Techiman Ghana

Abstract

In spite of the numerous benefits of strategic planning enumerated in the literature, some institutions appear to be struggling with maintaining expected performance standards. Some researchers allude this to the absence of effective strategic planning systems, or the plan itself. Others believe it is attitudinal – misconceptions about the role of contextual factors. This study has therefore considered the moderating influence of such factors (organizational characteristics – age, size, and structure) on the relationship between strategic planning process and performance. It focused on accredited private institutions that had some form of strategic planning systems in place, and had operated for at least five (5) academic years. Strategic planning committee members of such institutions provided data that were descriptively and empirically analyzed. The binary logistic regression analysis indicated that only institutional size and structure do significantly influence the strategic planning process toward enhanced performance. The age of an institution did not have any significant moderating influence. It has been suggested that higher degrees of formality shall enhance performance where there is insistence on attention to detail due to increased institutional size.

Keywords: strategic planning, process, organizational characteristics, formality, moderators, contextual factors

1. Introduction

Institutions of higher learning in Ghana have been prompted to prepare against unsuspecting turbulences. This call has become necessary due to their seemingly inability to maintain some strategic focus (Altbach, Reisberg, & Rumbley, 2009), resulting in erratic and erroneous choices. It has been mentioned that many institutions of higher learning have stumbled in their strategic planning efforts; success has been moderate (Dolence, Rowley, & Lujan, 1997). While some reject the relevance of formal planning, others consider it a periodic routine with no regard for meticulousness (O'Regan & Ghobadian, 2007). The literature expounds that attention to contextual influences has been minimal, making plans only good for shelving (Glaister, Dincer, Tatoglu, Demirbag, & Zaim, 2008; Bazziz & Grinyer, 1981; Pearce, Robbins, & Robinson, 1987). By implication, institutions' inability to perform in the face of a strategic plan is due to their apparently inability to factor into the strategic planning process some determining factors within its environments. This hiatus in practice seems to have gained roots in decision makers' attitudes and behaviors, making institutional discharge of ultimate potentials impossible. One of such contextual areas considered in this study is organizational characteristics. The focus of this study was to analyze organizational characteristics of institutions and the amount of moderated influence they have on the relationship between strategic planning process and performance.

2. Literature Review and Hypothesis Development

Organizational characteristics refer to factors that moderate the strategy-performance link. Such characteristics include the age, size, and structure of the organization. Age refers to the number of years since the establishment of an organization. Firm size (according to the Regional Project on Enterprise Development in Ghana) is classified as (i) micro enterprise, less than 5 employees; (ii) small enterprise, 5 - 29 employees; (iii) medium enterprise, 30 - 99 employees; (iv) large enterprise, 100 and more employees (Teal, 2002, as reported by Abor & Quartey, 2010, in Ganu & Boateng, 2013).

Glaister *et al.* (2008) also categorize organizations in the following order: small and medium-size firms – less than 250 employees; large firms – more than 250 employees. The structure could either be mechanistic or organic. Shenhar (2001) describes a mechanistic organization as one that is formalized, centralized, specialized, and bureaucratic; one that has several levels of authority. On the other hand, an organic organization is informally structured and decentralized, with few levels of authority and a wide span of control. Whether

mechanistic or organic (Burns & Stalker, 1961; Robins & Coulter, 2010); or along a continuum of formalization or centralization (Miller, 1987), the structure critically determines the firm's ability to process information (Glaister *et al.*, 2008). Organic (less formalized) structures tend to encourage mutual adjustment, encourage flexibility and decentralized decision making while mechanistic (more formalized) structures encourage standardization and formal rules to facilitate control and coordination (Glaister *et al.*, 2008).

The resource-based theory (RBT) of the firm is a widely used theoretical framework to explain performance (Crook, Ketchen, Combs, & Todd, 2008). Characteristically, its focus is on firms' internal forces (Ferreira, Raposo, & Fernandes, 2011). One assumption of this theory is resource heterogeneity; that firms are bundles of productive resources with differing quality and quantity. The hypothesis further explains that this uniqueness is necessary and contributes to competitive advantage. Another assumption is resource immobility; they are expensive to copy and also inelastic in supply (Ferreira *et al.*, 2013). If a well-established strategic planning process is maintained, having considered firms' age, size, and structure, it could translate into rare bundle of asset. Years of operation could award institutions rich knowledge and experience for competitiveness. The size of institutions (small or large), if clearly understood and well situated in its environs, enhances its strategic planning processes for improved performance and competition. Institutional structure (mechanistic or organic) could either enhance or slow down such processes.

Per the contingency theory, "different external conditions might require different organizational characteristics, and that the effectiveness of the organization is contingent upon the amount of congruence or goodness of fit between structural and environmental variables" (Lawrence & Lorsch, 1967; in Shenhar, 2001:395). Due to variances in institutional practices (such as age, size, and structure), effectiveness requires the adoption of different strategies. Robbins and Coulter (2012) add that approach to management should vary, determined by institutional contexts. Different institutions should identify and respond to situational variables as they are identified. In essence, the effect of an institution's strategic planning process on its performance could possibly be determined by the state of its characteristics.

Organizational characteristics, according to the systems theory, could be a composition of various factors that moderate the relationship between an institution's strategic planning process and its performance. This theory postulates that distinct components are coordinated simultaneously to achieve desired outcomes. These varied variables constitute a set of interrelated and interdependent parts that operate together to achieve a common purpose (Kinicki & Williams, 2011; Robbins & Coulter, 2012). Institutional age, size, and structure have been considered the appropriate constituents of organizational characteristics, for this study.

Older firms have a wealth of organizational knowledge and creativity which possibly culminates in the development of effective formal strategic planning processes. Such firms seem to be securely established and are positively associated with performance (Veskaisri, Chan, & Pollard, 2007; Debarliev & Trpkova, 2011). Gibson and Cassar (2002) find significant correlation between business age and strategic planning, but in two out of three sample years. However, the results suggest that both relatively young firms and relatively old firms are more likely to plan.

Borch and Huse (1993; also Veskaisri *et al.*, 2007) also found that a firm's age has direct impact on its strategies as well as its resources. It is again concluded by Davidson, Nemeč, and Worrell (2001) that a firm that has operated for a longer period may have the experience which is positively related to product strategies. In essence, the findings imply that older firms are possibly more inclined toward formal strategic planning. Another study reports a different finding. Risseuw and Masurel (1994) in their research explain that there are reasons to assume that very young firms show higher planning intensity – "Entrepreneurs enforce their solvency by making a business plan. When a firm has proven its viability, it builds equity by retaining earnings and thus becomes less dependent on loans or venture capital" (p. 314). Focus in this area of study has particularly been on the influence of size on the formality dimension of strategic planning. Lindsay and Rue (1980) comment that the influence of size is significant, and must be factored into formal strategic planning processes (see Lenz, 1981). Chae and Hill (2000) noted that informal written procedures become impossible for managers as their firms grow and diversify – they lose their intimate knowledge of business conditions. Increased firm size leads to more structured decision-making frameworks (Chae & Hill, 2000:541).

Carson (1990; according to Chae & Hill, 2000), in a study involved 68 four-year-old small firms and concluded that marketing planning in smaller firms differed from bigger firms due to scarce or limited resources, limited expertise, and limited impacts on the marketplace. This conclusion was supported by McKee *et al.* (1990; also reported by Chae & Hill, 2000) who used 211 firms in the health care industry. It was concluded that as organizational size and complexity increased, marketing planning comprehensiveness also increased. In other

words, “the larger the company, the greater was the likelihood of standardized, formalized marketing planning processes” (Chae & Hill, 2000:541).

Performance in large institutions is seen to be relatively affected by the use of formal strategic planning because of their complexity, and their need for coordination and control (Miller & Cardinal, 1994). Glaister *et al.* (2008, referring to Mintzberg, 1979), explain that small organizations tend to abandon strategic planning because their industry environments are relatively less complex. It also appears that their operations are easily managed by a single or few individuals without any comprehensive planning. From a study conducted among some small banks, Robinson and Pearce (1983) argued that the size of an organization be considered an important moderator of the relationship between strategic planning and performance. Glaister *et al.* (2008) reported a study by Powell (1994) who concluded that large firms engaged in more strategic planning than small firms. Fredrickson and Mitchell (1984) point out that a firm that has greater available resources (staff and expertise) and increased internal differentiation lead to increased planning. In their research they managed to confirm the positive association between business size and business planning. Fredrickson & Iaquinto (1989) claimed that organizational size is positively related to the extent of comprehensiveness in the decision-making process but Dean and Sharfman (1993) found no such a relationship.

On the other hand, other studies have produced contradictory results. Strategic planning is seen as a useful tool, not only for large firms, but also for small and medium-size firms, according to Matthews and Scott (1995). Miller and Cardinal (1994) concluded a study that posited that the size of a firm does not moderate the influence of strategic planning on performance. Again in the study of Hopkins and Hopkins (1997), they concluded that the relationship between firm (bank) size and the intensity of strategic planning is negative; planning activities of bigger banks seemed low.

It is speculated that some firms perform low due to the failure of seeking synchronization between its strategies, structure, and the operating environment. Shenhar (2001) observes that mechanistic firms should perform better in simple, stable, and more certain environments while an organic firm is best for uncertain environments. Mechanistic firm structure enhances deliberately established strategic planning process over emergent strategies. Along the same line, Miller (1987) also noted that formalization positively impacted formal strategic choices. According to Covin and Slevin (1990, in Altinay & Altinay, 2005), the best way entrepreneurial firms can respond to dynamic environmental changes is to adopt structure attributes that allows flexibility to quickly react to changes. An organic structure is best for turbulent (dynamic), uncertain environments while mechanistic structure is considered more appropriate for stable and certain environments. “A high level of uncertainty in the environment therefore requires less formalized and more flexible structures, and more complex ... departments and roles” (Lawrence & Lorsch, 1967, in Glaister *et al.*, 2008:372). The trend seems to be uniform, but Mintzberg (1979) notes that support for these arguments has not been consistent in the literature.

Based on this background information from the literature, this study proposes the hypothesis that organizational characteristics have no significant moderating influence on the relationship between an institution’s strategic planning process and performance. Both resource-based theory and dynamic capabilities approach gives an insight into factors of the organization that moderate the relationship between the strategic planning process and performance. Such characteristics include firm structure – organic or mechanistic, age – old or new, and size – large or small (Robbins & Coulter, 2007; Veskaisri *et al.*, 2007; Glaister *et al.*, 2009). Institutional characteristics may be of value only when they are re-adjusted to accommodate strategic changes (due to the changing environments) for improved performance. The study may inform decision makers on the types of strategies to pursue, based on institutional characteristics, for enhanced performance.

Hypothesis Development: Based on the postulations of the foregone review of literature, the study therefore proposes the hypothesis that organizational characteristics (age, size, and structure) have no significant moderating influence on the relationship between the institution’s strategic planning process and performance.

3. Methodology

This descriptive survey focused on private universities in Ghana, regulated by the National Accreditation Board (NAB) – specifically, accredited private universities. A total of fifty three (53) institutions were listed (National Accreditation Board, 2013) and therefore considered by the study.

Stratified and purposive techniques were adopted to include institutions that were accredited and had operated for at least five academic years. These were further sampled to determine institutions with strategic planning committees, and strategic plans. Twenty six (26) private institutions were believed to be well positioned to detail

their strategic planning process experiences. Committee members of these institutions provided data needed for the study. Sources of data were both primary (survey) and secondary (documentary). Likert-type scale structured closed-ended questionnaire was the instrument for data collection. The variables of organizational characteristics were measured as follows: Age – AGEI (number of years an institution had been in operation – new or old institutions); Size – SIZI (number of employees in an institution – small, medium and large institutions); Structure – STRU (organic or mechanistic).

Data were analyzed descriptively and empirically. Descriptive analysis was enhanced with some tools and measures of descriptive statistics like percentage distribution tables, bar charts, mean, median, mode, range, standard deviation, and skewness. Empirical analysis centered on data derived from quantitative responses and their perceived functional relationships. Qualitative responses were processed into quantitative data and presented using relevant statistical tools. The impact of strategic planning process on institutional performance was determined by linear regression. Binary Logistic Regression analysis which determined moderator variables that significantly interacted with strategic planning process formality (SPPF) to influence performance included - 2 Log Likelihood, Goodness-of-fit, Classification of cases, Wald statistics, and Odds. Results then became basis of analysis for the model. Contextual variables were standardized and moderated with the criterion variable. Performance was then regressed on the moderated variables (using Linear Regression) to determine their volume of influence on the strategic planning process-performance (SPPF-PERF) relationship.

4. Data Analyses, Results and Discussion

This study has focused on the strength of organizational characteristics (OC) on the relationship between SPPF and PERF. These contextual factors referred to, include the age (AGEI), size (SIZI), and structure (STRU) of the institutions studied. Five (5) questionnaire items determined institutional structures. The degrees of association between these variables have been computed (Table 4).

Table 1. Binary Logistic Regression – Variables in the Equation

| | | β | S.E. | Wald | Df | Sig. | Exp(β) |
|---------------------|----------|---------|-------|--------|----|------|----------------|
| Step 3 ^c | SIZI | 1.208 | .611 | 3.908 | 1 | .048 | 3.348 |
| | STRU2 | .744 | .314 | 5.627 | 1 | .018 | 2.104 |
| | Constant | -5.703 | 1.771 | 10.368 | 1 | .001 | .003 |

Source: field survey (2014)

Per Table 1, Odds (Exp(β)) for SIZI (3.348) and STRU2 (2.104) clearly indicate a high probability that these variables could possibly influence formal strategic planning. For variables not in the equation, see Table 3).

Table 2. Skewness of Variables in the Equation

| | N Statistic | Minimum Statistic | Maximum Statistic | Sum Statistic | Mean Statistic | Std. Deviation Statistic | Skewness | |
|-------|----------------|----------------------|----------------------|------------------|-------------------|-----------------------------|-----------|------------|
| | | | | | | | Statistic | Std. Error |
| SIZI | 84 | 1 | 2 | 135 | 1.61 | .491 | -.447 | .263 |
| STRU2 | 84 | 1 | 6 | 363 | 4.32 | 1.032 | -1.023 | .263 |

Source: field survey (2014)

Table 2 previews that SIZI was -1.70 skewed. Most organizations with higher degrees of SPPF were large size institutions. STRU2 was -3.89 skewed, and suggested that most institutions with higher degrees of SPPF maintained an attention to detail (mechanistic) culture – where formally laid down rules were followed. Results from Table 1 and Table 2 suggests the need to re-consider and re-configure the original conceptual model of the study.

Table 3. Variables not in the Equation

| | | Score | df | Sig. | |
|--------|-----------|-------|-------|------|------|
| Step 3 | Variables | AGEI | .449 | 1 | .503 |
| | | STRU1 | .007 | 1 | .932 |
| | | STRU3 | 1.038 | 1 | .308 |
| | | STRU4 | .019 | 1 | .889 |
| | | STRU5 | .685 | 1 | .408 |

Source: Field survey (2014)

Table 3 displays the Binary Logistic Regression Analysis results of variables not in the equation. These were not considered to have any significant interaction with the strategic planning process. The variables, AGEI, STRU1, STRU3, STRU4, and STRU5 have no significant p values (0.503, 0.932, 0.308, 0.889, and 0.408 respectively).

Table 4. Pearson Correlation Coefficients for OC – Model 3

| | | STRU2 | AGEI | SIZI | SPPF |
|-------|---------------------|--------|-------|--------|------|
| STRU2 | Pearson Correlation | 1 | | | |
| | Sig. (2-tailed) | | | | |
| AGEI | Pearson Correlation | .277* | 1 | | |
| | Sig. (2-tailed) | .011 | | | |
| SIZI | Pearson Correlation | .323** | .235* | 1 | |
| | Sig. (2-tailed) | .003 | .032 | | |
| SPPF | Pearson Correlation | .450** | .246* | .504** | 1 |
| | Sig. (2-tailed) | .000 | .024 | .000 | |

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field Survey

4.1 Age of Institution (AGEI)

From Table 4, all variables correlated positively and significantly with SPPF. The rejection of AGEI was possibly due to its weak relationship at the 0.05 level ($r = 0.246$; $p = 0.024$). SIZI is significant at the 0.01 level ($r = 0.504$; $p = 0.000$) – increase in size led to increase in strategic planning process formality. STRU2 is also significant at the 0.01 level ($r = 0.450$; $p = 0.000$) – as institutional structure moved from organic toward mechanistic, strategic planning process formality also intensified.

Table 1 confirmed that the degree of association between AGEI and SPPF may have no significant influence on PERF when moderated, hence its rejection at the Binary Logistic Regression analysis stage. At 95% confidence interval, the set of variables that were significantly pulled together to interact with the strategic planning process did not include AGEI. It implies that among the institutions studied, the number of years an institution had been operating had no significant moderating influence on the SPPF-PERF link. SPSS split file and frequency analysis were then employed to seek explanation.

It was found from available data that where strategic planning process was more formal, new institutions constituted the majority. The data reports that of the total respondents who reported that their strategic planning processes were formal, 51.6 percent were new institutions, and 48.4 percent were old institutions. Further probe to determining the PERF of these two groups revealed new institutions with higher degrees of formal strategic planning processes that performed ‘Good’ were 53.1 percent – with the remaining 56.9 percent performing poorly. It suggests that majority of new institutions performed poorly due to higher degrees of formality (within ‘dynamic’ environments). Again, old institutions with higher degrees of formal strategic planning processes whose performance was also ‘Good’ were 83.3 percent – with the remaining 16.7 percent performing poorly. This meant that most new institutions adopted higher degrees of strategic planning process formality but did not perform as good as the old institutions. The percentage of poor performance among new institutions is higher than the percentage among old institutions. The environments of these institutions were further assessed, and it revealed that most new institutions (64.7%) indicated they operated in dynamic environments; only 35.3 percent were old. In summary, new institutions (constituting the majority) operating in dynamic environments are more formal in their strategic planning processes, but do not perform better than the few older institutions.

Various conclusions on the influence of an institution’s age on the SPPF-PERF link have not been directional. For this reason, the finding of this study that AGEI had no significant moderating influence on the relationship between SPPF and PERF is not out of place. While some studies have found positive relationships between AGEI, SPPF and PERF, others have indicated a weaker or no relationship. Debarliev and Trpkova (2011) found in a study that older firms have a wealth of organizational knowledge that culminates in effective strategic planning processes for enhanced performance (see also Davidson *et al.*, 2001). This is also supported by Gibson and Cassar (2002) who found a significant correlation between business age and strategic planning (earlier studied by Borch & Huse, 1993). On the other hand, Risseeuw and Masurel (1994) have postulated that younger firms also engage in higher planning intensity to prove their viability for loans and other resources. Intensity in planning is taken for ‘frequency of planning’ and not ‘formality in planning’. That is exactly the situation when an environment is relatively dynamic for an institution; planning frequency is expected to increase while

formality decreases. The study does support the findings that the older an institution, the richer the knowledge/experience, and the more effective the strategic planning process formality, given a more stable environment.

4.2 Size of Institution (SIZI)

Per the Binary Logistic Regression results (see Table 1 – Variables in the Equation), SIZI was considered to interact significantly with SPPF to positively influence PERF. This was confirmed by its r value of 0.504 ($p = 0.000$) at the 0.01 level (Table 4). The actual influence of SIZI on the SPPF-PERF relationship was calculated by multiplying its standardized score with the SPPF composite value. PERF was then regressed on the results to determine the moderated influence. The discussion here has focused on what SPPF-PERF relationship is without the influence of SIZI; how much influence SIZI added to the relationship, and the estimated error of the model.

Table 5. Coefficients^a – Moderated SIZI on SPPF-PERF Relationship

| Model | Unstandardized Coefficients | | Standardized Coefficients | | Sig. | 95.0% Confidence Interval for B | |
|----------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
| | β | Std. Error | Beta | t | | Lower Bound | Upper Bound |
| 1 (Constant) | 17.202 | .521 | | 32.996 | .000 | 16.165 | 18.240 |
| Moderated SIZI | .013 | .004 | .359 | 3.482 | .001 | .005 | .020 |

a. Dependent Variable: Institutional Performance

Source: field survey (2014)

According to Table 5, the value for performance without SIZI-SPPF moderation is 17.202. The model reports that for a unit increase in moderated SIZI, performance among the institutions studied significantly improved by 1.3 percent. The t statistic value of 3.482 was significant ($p = 0.001$).

Table 6. Model Summary– Moderated SIZI on SPPF-PERF Relationship

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .359 ^a | .129 | .118 | 4.761 | .129 | 12.122 | 1 | 82 | .001 |

a. Predictors: (Constant), Moderated SIZI

Source: field survey (2014)

Table 6 reports that moderated SIZI accounted for 12.9 percent of the variation in the SPPF-PERF link, with a corresponding standardized error of 4.761. So 87.1 percent of variation in the SPPF-PERF link was explained by other factors.

4.3 Structure of Institution (STRU2)

All questionnaire items (except STRU2) were rejected in the Binary Logistic Correlation analysis due to weak degrees of association. STRU2 was considered fit with SPPF to positively influence PERF ($r = .450$; $p = 0.000$) at the 0.01 level of significance – Table 4. The focus of the discussion in this section is on the value of the SPPF-PERF link without the influence of STRU2; how much influence STRU2 adds to the relationship, and the estimated error of the model. To determine the actual influence of STRU2 on the SPPF-PERF relationship, its standardized scores were multiplied with the SPPF composite values. PERF was then regressed on the results to determine the moderated influence of STRU2.

Table 7. Coefficients^a – Moderated STRU2 & SPPF-PERF Relationship

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | 95.0% Confidence Interval for B | | |
|-------|-----------------|-----------------------------|------------|---------------------------|-------|---------------------------------|-------------|-------------|
| | | β | Std. Error | Beta | t | Sig. | Lower Bound | Upper Bound |
| 1 | (Constant) | 13.554 | 1.810 | | 7.489 | .000 | 9.954 | 17.154 |
| | Moderated STRU2 | .006 | .003 | .236 | 2.202 | .030 | .001 | .011 |

a. Dependent Variable: Institutional Performance

Source: field survey (2014)

Table 7 reports that in the absence of any influencing variable, the value of PERF is 13.554. The introduction of a unit increase in STRU2 moderation enhances the SPPF-PERF relationship by 0.6 percent holding all other independent variables constant. The t statistic value of 2.202 is also significant ($p = 0.030$).

Table 8. Model Summary^b – Moderated STRU2 and SPPF-PERF Link

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | Sig. F Change | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|---------------|------|
| | | | | | R Square Change | F Change | df1 | | df2 |
| 1 | .236 ^a | .056 | .044 | 4.956 | .056 | 4.849 | 1 | 82 | .030 |

a. Predictors: (Constant), Moderated STRU2; b. Dependent Variable: PERF

Source: field survey (2014)

Table 8 also shows that the moderated STRU2 accounted for only 5.6 percent of the variation in the SPPF-PERF link, with a corresponding standardized error of 4.956. This means that 94.4 percent of variation in the SPPF-PERF link was explained by other factors.

Institutional size (SIZI) refers to the size of an institution (considered as small/medium versus large size institutions). According to Table 2, SIZI is -1.70 skewed; an indication that most of the institutions studied (approximately 60.7%) were large size, while 39.3 percent were small/medium size. This implied that most organizations with higher degrees of SPPF were large size institutions.

It was found that for each unit of increase in a moderated SIZI, the SPPF-PERF relationship was significantly improved by 1.3 percent (Table 5), holding all other variables constant. As the size (SIZI) becomes larger, an institution that pursues higher degrees of formal strategic planning processes (SPPF) performs better (PERF). In other words, a unit increase in the size of an organization, if combined with higher degrees of strategic planning process formality, will influence the SPPF-PERF link by 1.3 percent, holding all other variables constant.

The respondents of the study indicated that large size institutions whose performance was good due to the adoption of higher degrees of formal strategic planning processes (as compared to flexible SPPF) were 74.4 percent higher than any group. For those institutions in the same group who chose flexible (or possibly 'emergent') planning, 62.5 percent performed better. In summary, among the institutions studied, higher degrees of SPPF enhances performance when there is an increase in institutional size.

This finding is supported by Chae and Hill (2000) who in a study of organizations strategy formulation found that higher degrees of SPPF (structured decision-making frameworks) became necessary as the size of those institutions increased, which ultimately increased performance. The finding is also in line with Falshaw, Glaister, and Tatoglu (2006:23) who concluded in a study that "the formality of an organization's planning system increases with increasing size and increases with increasing environmental turbulence"; institutional size leads to more formalized strategic planning systems for improved performance. The authors, together with others (Robinson & Pearce, 1983; Lindsay & Rue, 1980; Hofer, 1975), believe that this positive relationship is due as much to the role of the planning system as a control and coordinating mechanism.

The finding again confirm the views of several other researchers (Glaister *et al.*, 2008; Powell, 1994; Miller & Cardinal, 1994) that the size of an institution has a moderating influence on the relationship between strategic planning process and performance among Ghanaian private universities; that as institutional size increases, the impact of formal strategic plan implementation becomes stronger on performance.

To support the argument that large size institutions do plan more, Chae and Hill (2000) noted that informal written procedures become impossible for managers as their firms grow and diversify – they lose their intimate knowledge of business conditions. Carson (1990), according to Chae and Hill (2000) studied some small firms and concluded that their planning differed from bigger firms. McKee et al. (1990; in Chae & Hill, 2000), in a study within the health-care industry concluded that “the larger the company, the greater was the likelihood of standardized, formalized marketing planning processes” (p. 541).

On the contrary, other findings conclude that the size of a firm does not moderate the influence of strategic planning on performance (Miller & Cardinal, 1994; Matthews & Scott, 1995). The current study seems to disagree with that. Formal strategic planning and performance relationship becomes stronger as the size of an institution increases (Glaister et al. (2008).

The degree of association between STRU2 and SPPF ($p = 0.030$) was identified to significantly influence the relationship between SPPF and PERF. There were five questionnaire items but only STRU2 was identified to be the best fit for SPPF. The questionnaire items were as follows: STRU1: Tight formal control of most operations by means of sophisticated control and information systems; STRU3: A strong emphasis on holding fast to true and tried management principles despite any change in business conditions; STRU4: Strong emphasis on a uniform management style throughout the business unit; and STRU5: Strong emphasis on getting line and staff personnel to adhere closely to formal job descriptions.

STRU2 in this category sought to determine whether strong emphasis was placed on getting things done even if it meant disregarding formal procedures (outcome oriented structure), or strong emphasis always placed on following formally laid down procedures (attention to detail structure). The latter was favored. Of all the five items STRU2 had the highest statistically skewed value of -3.89 (Table 2). This was an indication that majority of the institutions (88.1%) were characterized by mechanistic structures; only 11.9 percent were organic. Most institutions with higher degrees of SPPF maintained an attention to detail culture – where formally laid down rules were followed. It was found that a unit increase in STRU2 moderation enhanced the SPPF-PERF relationship by 0.6 percent holding all other variables constant (Table 7). As the structure (STRU2) became more mechanistic, institutions that pursued higher degrees of formal strategic planning (SPPF) performed better. In other words, a unit increase in the structure (STRU2) of an institution, if combined with higher degrees of strategic planning process formality (SPPF), enhanced the SPPF-PERF relationship (by 0.6%), holding all other variables constant.

Respondents of the study reported that institutions whose performance was good due to strong emphasis placed on getting personnel to follow formally laid down procedures (STRU2) through higher degrees of formal strategic planning processes (as compared to those who chose flexibility) were 66.7 percent (with 33.3% poor performance) higher than any group. Those institutions in the same group but chose flexible planning were 50 percent, with 50 percent poor performance.

The current finding is supported by the literature which observes that a deliberately established strategic planning process is enhanced by a mechanistically structured institution, but in a simpler and stable environments (Shenhar, 2001). The writer mentioned that mechanistic firm structure enhances deliberately established strategic planning process over emergent strategies. Miller (1987), adding to this also found in a study that formalization positively impacted formal strategic choices. The more formalized an institution is in its structures, the more formal and effective its strategic planning.

Contrary to this is the finding of Glaister et al. (2008) in a study involving Turkish manufacturing companies which revealed that formal strategic planning ‘is more effective for firms relying on relatively more organic structures than those relying on mechanistic structures’ (p. 381). They found that formal strategic planning improved performance for organizations with organic structures, arguing that such structures probably had ‘more loose edges to strengthen’ (p. 382). They also maintain that structure determines an institution’s ability to process information.

This current study agrees with the latter, but differs with the former concerning the state of private universities in Ghana. A mechanistic organization is one that has higher level of standardization. In such institutions, rules are formal to facilitate control and coordination (Arasa, Aosa, & Machuki, 2011). The possibility of getting employees to follow formally laid down rules does not seem feasible in an environment where informality in operations is very high. This state seems more fitting in an institution where both management and employees play down rules/procedures in order to ensure swift information processing in response to rapidly changing customer tastes.

4.4 Hypothesis Testing

The hypothesis stated that ‘Organizational characteristics have no significant moderating influence on the relationship between an institution’s strategic planning process and performance.’ The study initially revealed (per the Binary Logistic Regression results in Table 1) that moderated institutional age (AGEI) had no significant influence on performance (PERF) among Ghanaian private universities ($p = 0.503$). Hence, the study failed to reject the null hypothesis for AGEI and rejected the alternative hypothesis.

Table 5 reported that for each unit increase in a moderated institutional size (SIZI), the SPPF-PERF relationship was improved by 1.3 percent with a significant t statistic value of 3.482 ($p = 0.001$). Higher degrees of SPPF was effective where there was increase in institutional size. The study therefore failed to accept the null hypothesis (H_0 3z2b) for institutional size (SIZI) but accepted the alternative hypothesis.

Finally, the study concluded that a unit increase in the structure of an institution (STRU2) added 0.6 percent to the relationship between SPPF and PERF (Table 7) with a significant t statistic value of 2.202 ($p = 0.030$). The direction of this increase is from organic toward mechanistic structure. Insistence on getting employees to follow formally laid down procedures strengthened the SPPF-PERF relationship. The more management insisted on attention to detail, the more effective the strategic planning system. Therefore, the study failed to accept the null hypothesis for institutional structure (STRU2) and accepted the alternative hypothesis which states that organizational characteristics have significant moderating influence on the relationship between institution’s strategic planning process and performance.

5. Recommendations

Based on the findings discussed in the study, and with supporting literature, some proposals have been made. It is recommended that higher degrees of strategic planning process formality will enhance performance if institutions choose to place strong emphasis on always getting personnel to follow formally laid down procedures. Table 9 proposes that for a small, medium, or large size institution, decisions regarding strategic planning processes and its contextual environments (organizational) should be considered alongside these summarized guiding principles – *Implied Prescriptive Table*. The current study recommends that the influence of an institution’s strategic planning processes on performance will be heightened if these guiding principles are carefully considered, and aptly applied.

Table 9. Implied Prescriptive Table (IPT)

| Variables | Prescription |
|-------------------|---|
| 1 SIZI | Higher degrees of strategic planning process formality shall enhance performance when institutional size increases. |
| 2 STRU2 | Higher degrees of strategic planning process formality shall enhance performance in an institution where strong emphasis is placed on always getting personnel to follow formally laid down procedures. |
| 3 SIZI-STRU2 | Higher degrees of strategic planning process formality shall enhance performance in an institution where strong emphasis is placed on always getting personnel to follow the formally laid down procedures when institutional size has increased. |

Source: Field survey (2014)

The study suggests again that new institutions (normally smaller in size) should be less formal in their strategic planning processes. This will give room for more flexibility in the institutions’ efforts to properly adjust within its relatively new and comparatively ‘dynamic’ environments for improved performance. It should be noted that complexity in coordination, decision making and strategic choices may still be low at this level, and may not call for higher degrees of strategic planning formality. As institutions grow in size they tend to be more complex and in need of coordination and control. Performance may be enhanced in this sense if some degree of strategic planning process formality is pursued. On the other hand, the smaller the institution, the less formal the strategic planning process should be.

Suggestion for Further Study: The current study has not been exhaustive in its context. A comparative study of the role of organizational or other contextual factors on strategic planning systems and performance between private and public institutions of higher learning is recommended.

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