The Role of Perceived Environmental Uncertainty and Strategic Agility on the Performance of Selected Banks in Oyo State of Nigeria

Prof. Ogunsiji, Amos Sola (Ph.D)
Department of Management & Accounting, Faculty of Management Sciences, Ladoke Akintola University of Technology, Ogbomoso, P.M.B. 4000, Oyo State, Nigeria
E-MAIL: amosogunsiji@yahoo.com;
Akanbi, Paul Ayobami
Department of Business Administration, Faculty of Social And Management Sciences, Ajayi Crowther University, Oyo, P.M.B. 1066, Oyo State, Nigeria
E-MAIL: paulayobami@yahoo.com;

Abstract
This study examined the impact of perceived environmental uncertainty and strategic agility on the perceived performance of selected banks in Oyo State of Nigeria. The study aimed at determining the main and interactive effect of perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity on organizational performance. It also looked at the connection between perceived environmental uncertainty variables (perceived market turbulence and competitive intensity) as well as strategic agility variables (strategic sensitivity, leadership unity and resource fluidity) and organizational performance. Four hypotheses were formulated and tested using Multiple Analysis of Variance (MANOVA), Canonical Correlation and Multiple Regression. The findings showed that the independent variables (perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity) were predictors of organizational performance. The study also established a significant positive relationship between perceived environmental uncertainty variables as well as strategic agility variables and organizational performance. Based on the findings, it was recommended that there is a need for organizations especially banks to understand the dimensions and nature of environmental uncertainty and evolve appropriate strategies to deal or cope with the uncertainty. Organizations should also be strategically agile by making concerted efforts to deploy resources to achieve objectives, strategically sensitive to the environment and leaders should support and implement strategic decisions that can bring about improved organizational performance and sustainable competitive advantage.

Keywords: Perceived environmental uncertainty, strategic agility, strategic management, resource based view, organizational performance

Introduction
A growing number of organizations are recognizing the impact of environmental threats and pressures on their activities and operations. Organizational theorists emphasize that organizations must adapt to their environments if they are to remain viable. One of the main issues in this process is coping with uncertainty. Organizations should attempt to mitigate the impact of uncertainty by proactively anticipating change and getting equipped to manage change (Oetinger, 2004).

Changes in the environment facing a firm can be both dramatic and sudden. As environments become more dynamic, threatening, and complex, traditional managerial orientations are proving to be deficient. The result is all too often a loss in market position, declining profits, or outright business failure (Khandwalla, 1972; Cooper, 1979; Covin & Slevin, 1989; Hayes & Abernathy, 1980; Waterman, 1987). Early researchers of this proposition identified the concepts of turbulence and its opposite, placidity (Emery & Trist, 1965).

Smart and Vertinsky (1984) broadly defined turbulence as change that occurs in the factors or components of an organization’s environment. One end of the change continuum is a static environmental state (no change), and the other end is a turbulent or dynamic state where all factors are in constant flux. The amount of environmental turbulence closely relates to the degree of uncertainty facing a firm. As the environment becomes increasingly turbulent, factors become less predictable and more uncertain, and the values of important variables and the variables themselves move in an unpredictable manner (Smart & Vertinsky). According to Drucker (1980) and Huber (1984), turbulence displays dramatic increases in the number of events that occur within a given period.

Strategic agility is the ability to continuously and adequately adjust and adapt in appropriate time the strategic direction in core business in relation to changing circumstances, be known by sensitivity to the environment. This may include creating new products and services or creating new business models and innovative ways to create value for the company. (Swafford et al., 2006). The performance of a company
depends on its activities and activities of its competitors, customers, suppliers, partners and governments. These activities could wholly be referred to as the business environment (Turban et al, 2008). The current business environment characterized by intense technological innovation, powerful customers with diverse requirements and short product life cycle in a global economy have significantly shortened market visibility and increased uncertainty (Swafford et al., 2006).

Organizations must respond to the challenges and opportunities brought by the business pressures in order to survive or gain sustainable competitive advantages. This hyper-competitive environment requires specific dynamic strategies to gain competitive advantage and sometimes even to survive (Wiggins & Rueff, 2005). For instance, competition has become so intense that companies have been forced to collaborate and formulate survival strategies. Customer focus, electronic commerce, intelligent data management and business networks are some of the noticeable business responses (Turban et al, 2008, Sull, 2009).

Objectives of the Study

The primary objective of this research work is to examine the role of perceived environmental uncertainty and strategic agility on the performance of selected banks in Oyo State of Nigeria. Other objectives include:

1. To determine main and interactive effect of perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity on organizational performance.
2. To ascertain the significant relationship between perceived environmental uncertainty(perceived market turbulence and competitive intensity) and organizational performance.
3. To assess whether perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity can jointly and independently predict organizational performance.
4. To examine the significant relationship between strategic agility variables(strategic sensitivity, leadership unity and resource fluidity) and organizational performance.

Research Hypotheses

In line with the objectives set for this study, four hypotheses are to be tested namely,

i. There is no main and interactive effect of perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity on organizational performance.
ii. There is no significant relationship between perceived environmental uncertainty(perceived market turbulence and competitive intensity) and organizational performance.
iii. Perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity cannot jointly and independently predict organizational performance.
iv. There is no significant relationship between strategic agility variables(strategic sensitivity, leadership unity and resource fluidity) and organizational performance.

Literature Review and Conceptual Framework

According to Slattery and Olsen (1984), ‘environmental complexity’ refers to the number of variables likely to have an impact on the firm and is a function of the scope of the firm’s operations, the more complex the organization, the more complex will be the environment; and ‘environmental illiberality’ refers to the degree of threat to the industry competitors from sources outside the industry, for example the economy, regulations and substitutes. The business environment will be confronted with environmental change and complexities as well as internal resource constraints and limitations. A key management task is to scan the environment for opportunities and to adjust its resources and processes to meet future challenges presented by the environment.

Robbins (1990) proposed that the environment’s effect on an organization is a function of dependence and that a dynamic environment has more influence on International structure than does a static one. His contention was that complexity and environmental uncertainty are directly related; that formalization and environmental uncertainty are inversely related; that the more complex the environment the greater the decentralization; and that extreme hostility in the environment can lead to temporary centralization. Olsen (1989) pointed out that for an organization to compete in a mature and competitive environment over the long term, it must be able to match these structural variables with activities and trends occurring in the environment. He further states that the existing complexity of the environment can be expected to increase, as will variability and uncertainty; therefore, the hospitality manager must be capable of knowing and understanding the events which occur in the business and general environment.

Complexity and rate of change are two characteristics of the environment that affect environmental uncertainty (Duncan, 1972a; Tung, 1979). Child (1972) suggested that complexity was caused by the heterogeneity of relevant environmental events. Diversity and a large number of external events produce high environmental complexity. Rate of change involves the frequency of changes occurring in the external
environment (Daft, Sormunen, & Parks, 1988). Duncan determined that the degree of environmental uncertainty perceived by strategic decision makers increased with the increased complexity and rate of change in environmental sectors.

Environmental complexity and dynamism have been closely linked to the information-uncertainty perspective (Lawrence & Lorsch, 1967; Thompson, 1967), whereas hostility has been tied to the resource-dependence perspective (Aldrich; 1979; Pfeffer & Salancik, 1978). These perspectives offer a better understanding of the impact of each environmental dimension on the formulation of a firm’s strategy. These dimensions affect top management’s perception of uncertainty, which in turn influences such strategic decision characteristics as propensity for risk taking, proactiveness, and defensiveness (Miles & Snow, 1978; Miller & Friesen, 1982). Venkatraman and Prescott (1990) predicted that a fit between environmental dimensions and strategic orientation would lead to better organizational performance.

Eisenhardt (1989) characterized highly competitive environments as those with intense price and non-price competition. Such intense rivalry is often associated with rapid and sometimes discontinuous changes in the market and in competitive and technological conditions. Competitors’ actions and reactions may be highly unpredictable, and the speed of adjustment to market and technological conditions become the key to survival of participants in such environments (Eisenhardt). Among retailers, intra-type competition and inter-type competition are the most common and representative models of modern retail competition today (Berry, 1995; Miller, Reardon, & McCorkle, 1999; Mishra. 2004). Yet, for most retailers, inter-type competition is the most challenging (Berry). Increasing inter-type competition has made it harder for retailers to identify and monitor their competition. Intra-type competition is defined as “competition between two retailers of the same type, such as two drugstores” (Mason & Mayer, 1987). Inter-type competition is defined as “competition between different types of retail outlets selling the same merchandise” (Mason & Mayer).

Douglas (1999) maintained that firms must become more responsive in responding to changes in an external environment characterized by intense competition. As competition becomes stronger, the choices available for consumers increase. Kohli and Jaworski (1990) suggested that a business must become more aggressive in discovering customer wants and building superior customer value in order to satisfy consumers in the face of increased competition. An organization must monitor and respond to consumers’ changing needs and preferences to insure that they select its products/services over its competitors’ (Egeren & O’Connor, 1998).

Strategic agility is the ability of an organization to continuously adjust and adapt strategic direction in core business, as a function of strategic ambitions and changing circumstances, and create not just new product and services, but also new business models and innovative ways to create value (Doz and Kosonen, 2008) as the market is uncertain, strategic market making and collaboration will evolve over time.

Strategic Sensitivity involves sharp opinions which are environment and situation oriented. This is promoted by a combination of a strong external orientation and internally participative strategy process, a high level of attentiveness and tension and internal dialogue which is rich, intense and open may exist (Doz & Kosonen, 2008; Overby et al., 2006). Intensive interchange with the external environment and deep reflection are prerequisites for strategic insight. These can be achieved by maximizing the channels of communication and integrity of knowledge exchange with the external environment (Overby et al., 2006).

Furthermore, an agile enterprise enforced by strategic sensitivity leads to agile partners who form an agile organization. In addition, networking for external needs have to be beyond immediate felt needs. There is also need for experimental attitude in developing strategy. Internal integration should also be analyzed from an outsider’s point of view to achieve complete connectedness and cohesion (Doz & Kosonen, 2008).

Co-strategizing is the sharing of key assumptions, ideas and scenarios about future markets, technologies and competition. This has to be done with leading customers, non-customers, end-users, partner, substance experts and other key stakeholders aiding companies to improve sensitivity to new opportunities (Doz & Kosonen, 2008, Overby et al., 2006).

Moreover, several parties share and test their different insights in relation with their environments. Successful co-strategizing evolves with time and incorporates joint experimentation and resource commitment from all parties. Active and purposeful dialogue with the key stakeholders allows companies to learn from others’ insights and foresights. Trust and acceptance of exchange of companies’ power positions are required (Doz & Kosonen, 2008) as the market is uncertain, strategic market making and collaboration will evolve over time.

Leadership unity is the unification of the decision making body in making fast decisions after a strategic situation is encountered and the choices it opens or closes are well understood (Doz & Kosonen 2008). Agarwal et al., (2007) also emphasized the need for committed top management for an enterprise to be agile. Commitments are not deferred or postponed because of the political statements and personal insecurities of the top executives. Strategic sensitivity can only be acquired if there are agreements of top management on critical strategic redirects and commitments. Moreover, the successful implementation of the other key strategic agility dimensions significantly depends on the work of the top management.
Resource fluidity is the reconfiguration of the business systems and redeployment of the resources rapidly after consideration of the internal capabilities (Doz & Kosonen, 2008). Strategic sensitivity and collective commitments are only useful if there is resource fluidity. Resource fluidity is the ability to redeploy resources quickly towards developing strategic opportunities. Strategic agility only becomes real if there is the ability to mobilize and reallocate resources toward new strategic opportunities with maximum fluidity (Overby et al., 2006). Competitive advantage can be realized if intelligence and commitment is swift in a fast-developing strategic situation (Doz & Kosonen, 2008).

Resource fluidity is closely related to responding proposed by Sambamurthy et al. (2003) and Overby et al. (2006). In fact, resource fluidity is part of the reaction by the enterprise but is not complete as there are other activities which also contribute to reaction such as innovation. However, resource fluidity is like the oil which smoothen the operations. It has to be carefully and adequately undertaken to enable a smooth reaction to the business environment pressures. A smooth operating enterprise as a result of resource fluidity leads to an efficient and effective manufacturing firm being agile.

Sambamurthy et al. (2003) and Overby et al. (2006) emphasized the need to responding to business environment pressures after sensing the changes. Furthermore, the response has to be in time and with adequate speed and precision. The strength of the response is judged from its effectiveness and how the enterprise thrives after the response. In some cases, there is need for an element of surprise (Sambamurthy et al., 2003) especially to the competitors.

Subjects
The subjects of this study were seventy six males and thirty females who were employees of Skye Bank, Eco Bank and Zenith Bank located in Ogbomoso, Oyo and Ibadan in Oyo State, Nigeria selected using stratified random sampling technique.

Instruments
The study made use of a questionnaire which was divided into four sections. Section A focused on the demographic information of the subjects covering sex, age, marital status and cadre among other things. Section B centred on perceived environmental uncertainty. The scale for perceived environmental uncertainty (measuring perceived market turbulence(items 1-4) and competitive intensity(items 5-10) was adapted from the scales developed by Jaworski and Kohli (1993) and Hwang (2005). It is a ten item questionnaires with Likert scoring format ranging from (SA) strongly agree (5) to (SD) strongly disagree (1). The scale had a reliability Cronobach alpha value of 0.69.

Section C looked at strategic agility measured in terms of strategic sensitivity, leadership unity and resource fluidity. The strategic agility scale is fifteen item scales adapted from a scale developed by ojha (2008) with a Likert scale scoring format ranging from strongly agree (5) to strongly disagree (1). The scale had a reliability Cronobach alpha value of 0.89. Items 1 to 6 measured strategic sensitivity, items 7 to12 measured collective commitment while items 13 to 15 measure resource fluidity respectively.

Organizational performance was measured in section D. The organizational performance scale is adapted from a scale developed by khandwalla (1977) and David et. al (2002) which is an eighth item scale with a Likert scoring format ranging from very high (6) to very low (1). The scale had a reliability Cronobach alpha value of 0.87.

The instruments were revalidated and the Cronobach alpha reliability values gave the following results: perceived environmental uncertainty: 0.68 , strategic agility: 0.93 and organizational performance: 0.78

Statistical Analysis
The biodata information was analysed using frequency counts and simple percentage. Hypothesis 1 was tested using Multiple Analysis of Variance (MANOVA) while hypotheses 2 and 4 were analysed using Canonical Correlation. Hypothesis 3 was tested using Multiple Regression

Results and Discussion
Hypotheses Testing
Hypothesis 1
There is no main and interactive effect of perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity on organizational performance.
Table 1: summary of the Multiple Analysis of Variance (MANOVA) showing main and interactive effect of perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity on organizational performance.

<table>
<thead>
<tr>
<th>Variables</th>
<th>F- Ratio</th>
<th>Sig of P</th>
<th>Canonical Correlation</th>
<th>R²</th>
<th>Pearson Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived market turbulence</td>
<td>5.933</td>
<td>.000</td>
<td>.72149</td>
<td>.52055</td>
<td>.266**</td>
</tr>
<tr>
<td>Competitive intensity</td>
<td>5.761</td>
<td></td>
<td>.132</td>
<td></td>
<td>.618**</td>
</tr>
<tr>
<td>Strategic sensitivity</td>
<td>3.865</td>
<td></td>
<td>.618</td>
<td></td>
<td>.620**</td>
</tr>
<tr>
<td>Leadership unity</td>
<td>1.749</td>
<td></td>
<td>.620</td>
<td></td>
<td>.529**</td>
</tr>
<tr>
<td>Resource fluidity</td>
<td>2.418</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 1 shows the summary of the canonical correlation analysis of main and interactive effect of perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity on organizational performance of Banks in Oyo State. This contains multivariate tests for statistical significance, where test namely, Pillais, Hotellings, Wilks and Roy (see MANOVA analysis) both of which show that the model as a whole is statistically significant at 1% level of significance. There is more than one way to combine the independent variable into a latent factor, to combine the dependent variable into a latent factor, and to relate the two latent factors to one another. The first canonical correlation is always the largest, because it was selected to maximize the associations between the two sets of variables (performance variables on one hand and Perceived Environmental Uncertainty and Strategic Agility on the other hand). That’s the one that is usually reported for a canonical correlation analysis. For this analysis, the canonical correlation is .72149. The implication of this is that there is a strong positive correlation between the set of dependent variables and the respective set of independent variable. When the variables are examined individually, Perceived market turbulence (r = .266**, F = 5.933), Competitive intensity (r = .132, F = 5.761) and Strategic sensitivity (r = .618**, F = 3.865), Leadership unity (r = .620**, F = 1.749) and Resource fluidity (r = .529**, F = 2.418) are significant at .01 level of significance. All variables are positively related to organizational performance. With these we can conclusively say that there is main and interactive effect of perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity on organizational performance of Banks in Oyo State.

Hypothesis 2

There is no significant relationship between perceived environmental uncertainty (perceived market turbulence and competitive intensity) and organizational performance.

Table 2: Showing Canonical Correlation Between Perceived Environmental Uncertainty Variables and Organizational Performance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>N</th>
<th>Pearson R</th>
<th>Canon corr</th>
<th>P</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational performance</td>
<td>4.5224</td>
<td>.8622</td>
<td>106</td>
<td>.266**</td>
<td>.41721</td>
<td>.006</td>
<td>Sig</td>
</tr>
<tr>
<td>Perceived market turbulence</td>
<td>3.7052</td>
<td>.7463</td>
<td></td>
<td>.132</td>
<td>.178</td>
<td></td>
<td>Not sig</td>
</tr>
<tr>
<td>Competitive intensity</td>
<td>3.4827</td>
<td>.8643</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Sig. at .01 level

The table 2 shows the relationship between perceived environmental uncertainty (perceived market turbulence and competitive intensity) and organizational performance of Banks in Oyo State. The analysis shows that there is a positive correlation between Perceived market turbulence (r = .266**, p = .006) and the dependent variable (Organizational performance) and are significant at .01 level of significance while Competitive intensity (r = .132*, p = .178) is also positively related but not significant. With these respective values, it means that 1% change in Perceived market turbulence resulted in 26.6% change in organizational performance of Banks in Oyo State. As a result of this, we can conclusively say that there is a significant relationship between Perceived market turbulence and organizational performance.

Hypothesis 3

Perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity cannot jointly and independently predict organizational performance.
Table 3: Showing multiple regression of Perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity on organizational performance.

<table>
<thead>
<tr>
<th>Variables</th>
<th>F- Ratio</th>
<th>Sig of P</th>
<th>R</th>
<th>R²</th>
<th>Adj R²</th>
<th>B</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived market turbulence</td>
<td>14.292</td>
<td>.000</td>
<td>.646</td>
<td>.417</td>
<td>.388</td>
<td>.228</td>
<td>5.989</td>
<td>.032</td>
</tr>
<tr>
<td>Competitive intensity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic sensitivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership unity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource fluidity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows the linear multiple regression among Perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity jointly and independently predicted organizational performance. F = 14.292; R = .646, R² = .417, Adj. R² = .388; P = .000). The independent/predictor variables jointly accounted for a variation of about 38.8% in organizational performance. When these variables were examined individually, the parameters of Perceived market turbulence (β = .288, P <.05), Competitive intensity (β = .413, P <.05), Strategic sensitivity (β = .082, P < .05) and Leadership unity (β = -.031, P < .05) are respectively significant at 5% level of significance while Resource fluidity (β = -.117, P >.05). The tolerance value and Variance Inflation Factor (VIF) are within reasonable bound. With this result, we can conclude that, Perceived market turbulence, competitive intensity, strategic sensitivity, leadership unity and resource fluidity jointly and independently predicted organizational performance.

Hypothesis 4

There is no significant relationship between strategic agility variables(strategic sensitivity, leadership unity and resource fluidity) and organizational performance.

Table 4: Showing Canonical Correlation Between Strategic Agility Variables and Organizational Performance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>N</th>
<th>Pearson R</th>
<th>Canon corr.</th>
<th>P</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational performance</td>
<td>4.5224</td>
<td>.8662</td>
<td>106</td>
<td>.618**</td>
<td>.69374</td>
<td>.000</td>
<td>Sig</td>
</tr>
<tr>
<td>Strategic sensitivity</td>
<td>4.1037</td>
<td>.6833</td>
<td></td>
<td>.620**</td>
<td></td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Leadership unity</td>
<td>4.0519</td>
<td>.6867</td>
<td></td>
<td>.529**</td>
<td></td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Resource fluidity</td>
<td>3.9874</td>
<td>.7833</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows the relationship between strategic agility variables(strategic sensitivity, leadership unity and resource fluidity) and organizational performance of Banks in Oyo State. The analysis shows that there is a positive correlation between strategic sensitivity (r = .618**, p = .000), Leadership unity (r = .620**, p = .000), Resource fluidity (r = .529**, p = .000) and the dependent variable (Organizational performance). Both are significant at .01 level of significance. With these respective values, it means that 1% change in each of strategic sensitivity, leadership unity and resource fluidity respectively resulted in 61.8%, 62.0% and 52.9% change in organizational performance of Banks in Oyo State. As a result of this, we can conclusively say that there is a significant relationship between strategic agility variables(strategic sensitivity, leadership unity and resource fluidity) and organizational performance.

Concluding Remarks

This study has examined the role of perceived environmental uncertainty and strategic agility on the performance of banks in Oyo State. It can be concluded from the test conducted that there was a strong association between perceived environmental uncertainty and bank performance. This means that banks can gain sustained competitive advantage if they can mitigate the effects of environmental uncertainty on their operations. Banks can also achieve superior performance if they can be strategically agile to learn fast and promptly deploy resources to achieve strategic goals and objectives. This is in line with findings by Ofoegbu and Akambi (2011) who found out in their study that strategic agility is positively correlated with firm performance. The hypotheses tested supported earlier study by Ojha (2008) who submitted that strategic agility has the capability to positively influence organizational performance. This study also concluded that perceived environmental uncertainty variables(perceived market turbulence and competitive intensity) and strategic agility variables (strategic sensitivity, leadership unity and resource fluidity) were predictors of bank performance. All these variables were found to be significant.
Based on the findings from this study, the following are recommended.

- Firms should be proactive rather than reactive in order to promptly and effectively deal with changes taking place in the complex business environment and also improve their performance.
- Organizations should carry along all employees in decision making and ensure that everybody in the organization has a sense of belonging to be motivated to contribute to overall organizational performance.
- Firms should ensure that their strategic agility is sustained to bring about sustained competitive advantage.
- There should be increased focus on implementation, not only on planning and decision making.

References


**APPENDIX**

**MANOVA**

***** Analysis of Variance -- Design 1 *****

EFFECT .. WITHIN CELLS Regression
Multivariate Tests of Significance (S = 5, M = 1, N = 45 1/2)

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Value</th>
<th>Approx. F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillais</td>
<td>.97797</td>
<td>2.94822</td>
<td>40.00</td>
<td>485.00</td>
<td>.000</td>
</tr>
<tr>
<td>Hotellings</td>
<td>1.64541</td>
<td>3.75975</td>
<td>40.00</td>
<td>457.00</td>
<td>.000</td>
</tr>
<tr>
<td>Wilks</td>
<td>.28940</td>
<td>3.35766</td>
<td>40.00</td>
<td>408.17</td>
<td>.000</td>
</tr>
<tr>
<td>Roys</td>
<td>.52055</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

--------------------------------------------------------------------------------
Eigenvalues and Canonical Correlations
This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE’s homepage: http://www.iiste.org

CALL FOR PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There’s no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** http://www.iiste.org/Journals/

The IISTE editorial team promises to the review and publish all the qualified submissions in a fast manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

**IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar