

## **Effective Strategic Decision-Making and Strategic Decision Makers' Characteristics: The Role of Cognitive Diversity and Complexity**

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**ABSTRACT:** *This study examines the effect of strategic decision makers' characteristic dimensions on effective strategic decision-making in some selected government agencies/commissions in Delta State, Nigeria. These dimensions include cognitive diversity and cognitive complexity of decision makers. To achieve this, specific objectives with corresponding hypotheses were formulated. Primary data were therefore obtained through self-structured instruments (questionnaire) that was validated and pilot-tested. From a population of 290 employees of government constituted boards of selected agencies and commissions, a sample size of 168 respondents was drawn via the Taro Yamane formula. Questionnaires were designed to elicit reactions of respondents relating to the various variables of concerns. Findings of the study established that, there is a significant positive relationship between strategic decision maker's cognitive diversity and effective strategic decision making, however, no relationship found between strategic decision maker's cognitive complexity and effective strategic decision making within the selected government agencies/commission, but when regressed alongside cognitive diversity, positive correlation exist. It was therefore concluded that, individual strategic decision maker with both characteristics is hoped to do well in strategic decision engagement. In the light of this study results and conclusion, it was recommended amongst other things that, if organization management is to appraise decision maker's characteristics as a basis to ascertain efficacy and effectiveness in decision making process and situations, priority attention should be given to both cognitive diversity and complexity characteristics.*

**KEYWORDS:** strategic decision making, cognitive diversity, cognitive complexity, decision makers.

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## **INTRODUCTION**

The ever changing and fast growing dynamism in the world business environment today requires a more dogged and proactive approaches, systems and styles that will guarantee the attainment of effective strategic decisions geared towards bracing up with the new ways and trends of doing businesses in the highly globalized and volatile business environment. Apparently, the growth, successes and productiveness of any business organization or entrepreneurial firms in this very

contemporary time in the annals of business stability and wellness depends largely and tenaciously upon effective strategic decisions-making drives and sound practices among organization decisions makers (Oana, Petru & Patrick, 2009). In recent times, strategic decisions in both private and public business outfits have been faced with myriad of challenges raging from changes in technologies, new world economic order, cultural transformation, sporadic government policies, changes in consumers taste and preferences and the host of other factors have posed a great deal of decisions-making and alternative cost challenges to decisions' makers in the organization. At this juncture, it therefore, becomes not only important but imperative for organizations or firms' decisions makers to brace up and be up and doing if they must deliver on organizations' reposed mandates of promises and long-term targets.

Strategic decision is an organization's pace setter and operational direction's determinant. Strategic decisions are those central and critical decision with far reaching long-term impacts on the overall wellbeing of an organization, they typically and systematically demand huge chunks of organizational sensitive resources and other key aspects (Mahmood, 2012), that is to say, strategic decision not only impacts the organization where they are crafted but also the environment and the society at large (Colignon & Cray, 1980). Owing to the long-term impacts strategic decisions deemed to have on organization, it becomes not only important but imperative to have a lucid and copious information insight of factors that actually influence and result in effective decisions outcome in the organization. Secondly, previous studies on strategic decisions and factors affecting the process, according to Mahmood, (2012) despite the numerous research works that have been carried out in areas of strategic decision-making, we are yet to have a full and better knowledge and fact and what characteristics on the part of decisions makers that is most effective in such an unstructured, cumbersome, nonlinear and highly risky tasks. In other words, previous studies on characteristics/factors impacts on strategic decision-making effectiveness have not yielded much generalizeable results or conclusions; therefore much more empirical work with regards to what factor characteristics contributes to strategic decision-making effectiveness in organization before any definitive assertion can be generalized, hence this study.

## **LITERATURE REVIEW**

### **Strategic Decisions Making**

Over time, literature has highlighted that, decision making both in individual and corporate thinking, is one of the most important aspects and critical undertakings or activities. According to Nwachukwu, (2007), decision making can be regarded as one of the most critical or crucial aspects or activities of management. That is, the necessity or need to decide or shape a clearer direction is the everyday drive or preoccupation of organizations management in all forms of business outfits whether handful enterprises or large/multinational corporations (Nwachukwu, 2007). Harrison (1999) sees decision as a stound in a continuing process of assessing or evaluating available choices or alternatives related to any set goals, at which in most cases, the expectations of organization and decisions makers with a gaze to a set aside or a particular

course or subsequent courses of activity or action that drives him/her to make or produce outcome or selection (Harrison, 1999 cited in Nooraie, 2012). Decision is also seen as a systematic and conscious choice or preference to behave or act in a particular direction in a given situation (Duncan, 1973, *cited in* Nooraie, 2012). Decision making according to Mann (1976) *cited in* Nooraie, (2012) is often and expressly referred to as the bloodstream or heart of any business organization and its management process and activities. Plunkett and Attner (1994); Bedeian (1986); Harrison (1999) *cited in* Nooraie (2012) describes decision-making to mean the process of critically choosing or selecting or making a choice from among available alternatives courses of actions of activity for the central purpose of finding solution to existing management problems or attaining quality solutions to the present changes with respect to opportunities that are readily available.

Strategic decision-making, according to Nooraie (2012) has over time surfaced as one of the most important active phases of recent management and business researches. Amidst different forms of decision making facets, strategic decisions are very crucial decisions and they play ilk central roles in any business organization. Strategic decision making is a logical and systematic move by decision makers' to choose a feasible or best path/approach to success in line with organizations' expectations and long-term goal drives (Harappa, 2020). It provides organizations with near smooth sailing into the future world of business. For instance, starting a new business venture, certain factors need to be put into consideration for clearer and better understanding, such include targets customers markets, time, population, government policy, prices of other commodities, operating cost etc. Strategic decisions will organization managers/decision's makers to make or classify decisions for the purpose of reaching an ideal or feasible solution (Harappa, 2020). It also helps to formulate or articulate plans of action and tools to align an organization small or medium-term goals structures with the organization's big picture (Harappa, 2020).

Succinctly, strategic decisions manifest in their far-reaching impacts in many aspects or facets and functions/activities of the organizations where they are crafted (Nooraie, 2012; Harrison, 1999; Duncan. 1973). Strategic decision-making, especially on strategic issues in an organization overallly, is treated as strategic decision trust and as such commands management strategic considerations. In this way, a strategy presents road maps to walk along, a perception for operating business, a well-structured game plan for capturing customers values and repeat/continuous patronage (loyalty) and providing a climate for overcoming obstacles and winning competitive advantages position in the industry where the firm is doing business over sterling rivals (Strickland & Thomson, 2009).

### **Strategic Decision Makers characteristics**

Apparently, the notion or concept of organizations strategic decision's makers or management top brass gained prominence in the world of literature far back in 1980 as recorded by Hambrick and Mason (1990) *cited in* Shadrack, Rose and Anne (2016), and ever since then, it has attracted attentions of researchers from many fields of studies across management and social sciences, and

more specifically strategic management. Strategic decision makers or top management brass is defined to mean a relatively small but powerful and influential group of executives often at the apex or echelon of organizations. It also refers to in another facets as CEOs, managers, board of directors (Finkelstein, Hambrick & Camela, 2009). According to Hambrick and Mason (1984), and Irugu (2007) *cited in* Shadrack, Rose and Anne (2016) see strategic decision makers or management top brass as members of organization senior management staff saddled with the responsibility of providing the directions of the business organization. While Wiersema and Bantel (1992) view strategic decision makers as the influential or dominant coalition or assembly of individuals having the duty of setting or charting the direction of the business organization. Other view about strategic decision makers or management top brass as group of influential individuals which constitutes information processing and management centre (Haleblian & Finkelstein, 1993), to Mutuku, K'obonyo and Belo (2012) strategic decision makers or management top brass include all executive members of an organization that report to the Chief Executive Officer (CEO/MD).

Concisely and however, diverse thought and positions have been shared by scholars regarding the concept of strategic decision makers or management top brass, but in all, there was a general consensus among these scholars and writers. These areas of consensus have been seen to dominate in studies of strategic decision makers or management top brass characteristics and are summarized into three key aspects and have constituted research hot sports in recent times, and these include demographic, behavioural and psychographic variables.

➤ *Psychographic characteristics strategic decision makers or management top brass:* This characteristic self-efficacy, locus of control, self-esteem, emotional intelligence and stability, optimism, desires, hope etc constitute centre and central focus in most studies in the field of strategic management, management and social sciences.

➤ *Demographic characteristics:* This characteristics of strategic decision makers or management top brass include such attributes as gender, age, informational background, educational background/level, tenure and size of board membership etc, have also been impressively researched (Hambrick, Cho & Chen, 1996; Papadakis & Barwise, 1996; Tihanyi, Ellstrand, Daily & Datton, 2000).

➤ *Behavioural characteristics:* Scholars such as Papadakis and Barwise, (2002) have argued that behavioural characteristics of strategic decision makers or top management brass are the essential or most relevant. While Awino (2011) opines that the essential aspects of strategic decision makers or top management brass/top managers' characteristics include demographic characteristics and psychographics.

Accordingly, Awino's (2011) position is in line with this paper, as it was designed to examines the roles played by strategic decision makers' or top management brass characteristics such as cognitive complexity and cognitive diversity in effective strategic decision making in the organization.

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**Cognitive Diversity and Effective Strategic Decision making**

In literature, cognitive diversity as a concept constitutes myriad issues of concern in different research studies, especially in the management and social sciences axis. Cognitive diversity has been defined by Miller, Linda and Williams (1998) *cited in* Nooraie (2012) in terms of diversity or difference in opinions, beliefs, fate and preferences/characteristics among organization strategic decisions makers influences strategic decisions making process and activities (Hambrick & Finkelstein, 1987; Hitt & Tyler 1991; Keats & Hitt, 1988). To Willy and Baum (1994) individual difference that exist among organization strategic decision makers are very important or significant to the direction at which organizations' strategic decisions-making take place or occurs and the duo discovered that management top brass cognitive ability and potentials is significantly and positively related or correlated to effective strategic decision making. Other scholars, who in their studies on cognitive diversity include Bentel and Jackson (1989) *cited in* Nooraie (2012) found out that, diversities among team members is positively and significantly related to strategic decision's makers creativity and effectiveness. In another facet, scholars like O'Reilly, Synder and Boothe (1993) disputed that high or dominant level of members' diversity results to less effective strategic decision-making agreement and less communication etc.

**Cognitive Complexity and Effective Strategic Decision making**

Cognitive complexity is described as psychological characteristics of individual or psychological trait or variable that expresses how complex or easy going is the perceptual skills and the frame of an individual. Schnier (1979) defined cognitive complexity to mean the structural and frame of a person's cognitive system. In other words, Hambrick and Finkelstein (1987) *cited in* Nooraie (2012) posited that strategic decisions' makers team members with high cognitive complexity is deemed to have greater or better discretion and focus in strategic decision-making choices. Hambrick and Mason (1984) opine that, organization administration complexity and effectiveness has a positive significant tie with manager's experience in handling strategic decisions.

Curseu, (2008) established that, on the concept of cognitive complexity, the cognitive representation advanced or developed by strategic decisions makers concerning or relating to the decisions variable or situation are influencing or mediating factors that exist between or among individual differences, for instance strategic decision maker's self-efficacy, potential for risk taking, necessity for cognitive, and strategic decision decisional effectiveness and out-comes. However, the perceived complexity associated with aforementioned representations manifests the interaction among controlled and systematic or automatic system of information processing, and more complex attributes or representation are profitable or beneficial for strategic decision quality and effectiveness Curseu, (2008).

**Theoretical Review: Resource Based Theory**

Apparently, the resource-based theory of organizations' strategic decision-making holds grip on the principles of internal resources are key king makers. The principle, in express terms states that the growth or strength of organizations lies tenaciously in their operating internal resources



contrary or opposed to/against their positioning in the organization external environment. In other words, this theory constitutes and holds that an effective competitive advantage position of organizations lies primarily in a studious and meticulous applications/uses of collections or bundles of tangible and/ intangible variable resources at the organizations' management control or disposal (Penrose, 1959) *cited in* Abosede, Obasan and Alese, (2016). Further, in another facet, Barney, (1995) *cited in* Abosede, Obasan and Alese, (2016) amplified the efficacy of the resource-based theory by stating that, rather than just evaluating organization's business environment opportunities as well as the threats in carrying out or conducting business operations, competitive advantages lie on the capabilities and unique resources that organization possess. In nut a shell, the RBT of an organization is predicated on the basis of its underpinning principles that some types or kind of resources owned, effectively and efficiently managed and controlled by organizations has a significant, promise and potential to induce or arouse competitive resources strength, capability and advantage that could lead to organization superior performance (Ainuddin, Beamish, Hulland & Rouse, (2007). Succinctly, such viable internal resources of the organization include its human resources elements.

## METHODOLOGY

### Design Population and Data

In order to provide lucid and fundamental foundation for the study efficacy that would guarantee its ability to produce effective furnishing towards meeting the objective needs of this paper, survey research design was adopted. The study draws its population from three (3) state government commission and agency's boards and top management staff in the study arena, Delta State, Nigeria. And these include Delta State Capital Territory Development Agency (DSCTDA), Delta State Oil Producing Areas Development Commission (DESOPADEC) and Delta State Board of Internal Revenue (DSBIR).

For the purpose of clarity, the elements of the selected population are presented in table below:

**Table 1: Spreads of Population Elements of the Study**

S/N	Government Establishment/Board	Labels	Population Elements
1	Delta State Capital Territory Development Agency	DSCTDA	25
2	Delta State Oil Producing Areas Development Commission	DESOPADEC	150
3	Delta State Board of Internal Revenue	DSBIR	115
	<b>TOTAL</b>		<b>290</b>

**Source:** *Fieldwork*, 2022.

In an attempt to determine an adequate sample frame work for the study from the selected population elements, the study adopted the Taro Yamane (2004) formula. With the aid of this

formula, a sample size of 168 was drawn for the study. The Taro Yamane (2004) formula is stated algebraically as follows:

### Where:

n = sample size, N= total population, 1= constant, E= level of significant (0.05).

Lucidly, questionnaire was used as instruments to elicit desired responses from target respondents. The instrument contained closed ended questions adapted from past researches. All items were rated and scored on 4-points like Likert scale. Sekaran (2000) supported the adoption and uses of the 4-points likert like scale for it has the capacity to guarantee adequate results or outcomes. Sufficingly, questionnaire on effective strategic decision making were modified from Oana, Petru and Patrick, (2009). While strategic decision makers' or top management brass characteristics were adopted and modified from Nooraie (2012). A total number of 168 questionnaires were administered to top management staff and directors being key actors in strategic decisions matters in the selected population.

### Model Specification

The composite model of the study is given as:

$$\text{Effective Strategic Decision Making} = f(\text{Decision maker's characteristics}) \quad \text{eq. 1}$$

In a bid to test this study's hypotheses the following models were subsequently developed:

#### Model 1

$$ESDM = f(CogD) \quad \text{eq.2}$$

$$ESDM = \alpha_0 + \beta_1 CogD + \mu_t \quad \text{eq.3}$$

#### Model 2

$$ESDM = f(CogC) \quad \text{eq.4}$$

$$ESDM = \alpha_0 + \beta_1 CogC + \mu_t \quad \text{eq.5}$$

#### Model 3

$$ESDM = f(CogD, CogC) \quad \text{eq.6}$$

$$ESDM = \alpha_0 + \beta_1 CogD + \beta_2 CogC + \mu_t \quad \text{eq.7}$$

### Variable Description

ESDM = Effective Strategic Decision Making

CogD = Cognitive Diversity

CogC = Cognitive Complexity

$\alpha_0, \beta_1, \beta_2$  = Regression coefficients of the model

$\mu_t$  = Error term.

## RESULTS AND DISCUSSION

### Demographic Characteristics Analysis of Respondents

**Table 1: Demographic Characteristics of Respondents**

S/N	Variables	Categories	Frequency(N=133)	Percentage (%)
1.	Gender	Male	107	80.45%
		Female	26	19.55%
		<b>Total</b>	<b>133</b>	<b>100.0%</b>

**Source:** *Fieldwork, 2022.*

It is crystal clear from the data on Table 1 that a total of 107 (80.45%) of the participants happens to be males while on the other hand, their female counterparts were 26 (representing 19.55% of the total respondents). This trend may be attributable to the fact that most government appointees into various boards and promotions of management staff to hold strategic offices are dominated by males.

### Analysis of Questionnaire Items

#### Cognitive Diversity

**Table 2: Cognitive Diversity and Effective Strategic Decision-making**

S/N	Questionnaire Items	N	Mean	Std. Dev	Remarks
Q.1	<i>Manager's/organizations top management team members' cognitive diversity ability has a significant drive to making effective strategic choice at a glance from cumbersome situations, and where there are many or conflicting alternatives.</i>	133	3.38	0.49	Agree
Q.2	It is opined that cognitive diversity of a decision maker has a positive and significant influence on the quality and effectiveness of strategic decisions.	133	3.40	0.49	Agree
Q.3	<i>It is believed that strategic decision makers with good dose of cognitive diversity characteristics/background often do very well in crafting strategic ideas with less ado to pursue organization long-term goals with much clout.</i>	133	3.32	0.47	Agree
Q.4	Cognitive diversity characteristics of a strategic decision maker often create a buffer energy and information resource based for effective strategic decisions making in an organization.	133	3.38	0.49	Agree
Q.5	<i>It is often asserted that, various levels of business and administrative successes recorded by most business organizations in terms of long-term goals and objectives performance are attributed to strategic decision maker's high cognitive diversity ability.</i>	133	3.36	0.48	Agree
Q.6	It is believed that strategic decision maker/organization top members staff with appreciable level of cognitive diversity usually has increased efficiency in the pursuit of organization's long-term goals and objective commitment.	133	3.41	0.49	Agree

**Source:** *Fieldwork, 2022.*



Apparently, the mean responses and their corresponding standard deviations for the questionnaire items designed to obtain information on the impact of cognitive diversity on effective strategic decision making is copiously presented in Table 2 above. As discovered, the standard deviation value obtained for all items in the table ranged from 0.47 to 0.49 which connotes that the overall responses were not too far from the overall mean response. Concisely, the mean responses obtained for all 6 items were above 3.00, but below 3.50 thus suggesting that the respondents agreed that the dimensions of cognitive diversity have the capacity of affecting effective strategic decision making within the business organizations.

### Cognitive Complexity

**Table 3.: Cognitive Complexity and Effective Strategic Decision-making**

S/N	Questionnaire Items	N	Mean	Std. Dev	Remarks
<b>Q.7</b>	<i>It's opined that cognitive complexity of strategic decision maker has a positive clout on the quality and effectiveness of strategic decisions outcomes.</i>	133	3.35	0.48	Agree
<b>Q.8</b>	Manager's/top management team members cognitive complexity ability has a significant drive to make a strategic choice at a glance from unclear/cumbersome situations, and where there are many conflicting alternatives.	133	3.41	0.49	Agree
<b>Q.9</b>	<i>It is believed that manager/organization top members staff with greater level of cognitive complexity usually has increased desires in the pursuit of organization's goals and objective commitment strategically.</i>	133	3.32	0.47	Agree
<b>Q.10</b>	It is asserted that, various degrees of business successes recorded by most business organizations in terms of long-term goals and objective performance are traceable to decision maker's high cognitive complexity ability/background.	133	3.35	0.48	Agree
<b>Q.11</b>	<i>Cognitive complexity characteristics of a strategic decision maker often create a buffer energy based and drive for strategic decisions makers.</i>	133	3.35	0.48	Agree
<b>Q.12</b>	It is believed that strategic decision makers with good dose of cognitive complexity characteristics often do very well in the pursuit of organization long-term goals with much clout strategically.	133	3.35	0.48	Agree

**Source:** Fieldwork, 2022.

Table 3 shows the mean responses and their respective standard deviations for the questionnaire items designed to elicit response and information on the effect of cognitive complexity on effective strategic decision-making. From the above results, it is clear that the values obtained with respect to the standard deviation ranged from 0.47 to 0.49 as recorded in questionnaire items Q.9 and Q.8 respectively. The low values of standard deviations suggest that the generality of responses was not too far from the overall mean responses.

However, the mean responses obtained for all 6 items were above 3.00 suggesting that the respondents are of the view that the dimensions of cognitive complexity as contained in

questionnaire items Q.7, Q.8, Q.9, Q.10, Q.11 and Q.12 may possibly affect effective strategic decision-making within the selected government agency and commission.

## Test of Hypotheses and Discussion

### Test of Hypotheses I

H<sub>01</sub>: There is no significant relationship between decision maker's cognitive diversity and effective strategic decision-making.

**Table 4: Model Summary for Test of Hypothesis I**

ESDM	Coeff.	Std.Err.	t	P>  t	Decision
CogD	0.3976	0.0948	3.25	0.001	<b>Reject</b>
_CONS	2.3319	0.3204	7.28	0.000	
Obs.	133				
F(1, 131)	10.54				
Prob > F	0.0015				
R-Squared (R <sup>2</sup> )	0.0744				
Adj. R <sup>2</sup>	0.0674				

**Source:** *Fieldwork*, 2022.

Hypothesis I of this study was tested by examining the relationship between decision maker's cognitive diversity and effective strategic decision making within the government agency/commission. In this way, Table 4 presents the results for the test of the Hypothesis I of this study. As shown above, the t-values obtained for cognitive diversity (CogD) is 3.25 with a corresponding p-value of 0.001. This result indicates clearly that on an individual facet, cognitive diversity has a significant influence on effective strategic decision making within the selected government agency/commission. With an adjusted R<sup>2</sup> of 0.0674, it is evident that only the explanatory variable explains over 6% of the variations in the levels of effective strategic decision making within the selected government agency/commission. Notwithstanding the low value of the R<sup>2</sup>, the value of the standard error is 0.0948. Such a low value according to Jeroh (2019) is an indication that the model specified in the study followed by the regression result is not only accurate, but very reliable. Moreover, the value of the F<sub>cal</sub> for the overall model is 10.54 with a corresponding p-value of 0.0015. Given this result, the null hypothesis I of this study is thereby rejected. This established that there is a significant relationship between decision maker's cognitive diversity and effective strategic decision making in the selected government agency/commission. The above result is in consonance with the findings of prior researches conducted by; Hambrick & Finkelstein, (1987); Hitt and Tyler (1991); Keats and Hitt, (1988), Bentel and Jackson (1989) *cited in* Nooraie (2012). However, the finding is at variance with that of O'Reilly, Synder and Boothe (1993)

### Test of Hypotheses II

H<sub>01</sub>: There is no significant relationship between decision maker's cognitive complexity and effective strategic decision-making.

**Table 5: Model Summary for Test of Hypothesis II**

ESDM	Coeff.	Std.Err.	t	P>  t	Decision
CogC	0.1438	0.1078	1.33	0.184	<b>Reject</b>
_CONS	2.8868	0.3626	7.96	0.000	
Obs.	133				
F(1, 131)	1.78				
Prob > F	0.1845				
R-Squared (R <sup>2</sup> )	0.0134				
Adj. R <sup>2</sup>	0.0059				

Source: *Fieldwork*, 2021.

*Fieldwork*, 2022

The hypothesis II of this study was tested by examining the relationship between strategic decision maker's cognitive complexity and effective strategic decision making within the selected government agency and commission. However, table 4 therefore presents the outcomes for the test of Hypothesis II. As presented in the above table, the t-value obtained for cognitive complexity (CogC) is 1.33 with a corresponding *p-value* of 0.184. The value for standard error stood at 0.1078 which indicates copiously that, the model specified in the test of the hypothesis alongside the regression analysis outcome is also precise and reliable. Furthermore, the value of the  $F_{cal}$  for the overall model is 1.78 with a corresponding p-value of 0.1845. With this result, the null hypothesis II of this study is thus accepted. This indicates that there is no significant relationship between strategic decision maker's cognitive complexity and effective strategic decision making within the selected government agency and commission. This finding corroborates the position of earlier studies such as Miller, Linda and William, (1998). However, is at variance with that of Oana, Petru and Patrick, (2009), and Curseu, (2008).

### Test of Hypotheses III

H<sub>01</sub>: There is no significant relationship between decision maker's cognitive complexity and diversity and effective strategic decision-making.

**Table 6: Model Summary for Test of Hypothesis I11**

ESDM	Coeff.	Std.Err.	t	P>  t	Decision
CogD	0.3436	0.1152	2.98	0.003	<b>Reject</b>
CogC	-0.0701		-0.55	0.581	
_CONS	2.4460	0.1269	7.96	0.000	
Obs.	133				
F(2, 130)	5.39				
Prob > F	0.0056				
R-Squared (R <sup>2</sup> )	0.0766				
Adj. R <sup>2</sup>	0.0624				

Source: *Fieldwork*, 2022.

Precisely, to test for Hypothesis III of this study, the data gotten from the dimensions of strategic decision maker's cognitive complexity and diversity was regressed against those of effective strategic decision making tendencies. Copiously, Table 6 shows the results for the test of the Hypothesis III. As established above, the t-values obtained for cognitive diversity and cognitive complexity regressed together against the dimensions of effective strategic decision making (CogD & CogC) is 2.98 and -0.55 with corresponding p-values of 0.003 and 0.581 respectively.

The value for standard error stood at 0.1152 which established copiously that, the model specified in the test of the hypothesis III alongside the regression analysis results is not only precise but very reliable. Furthermore, the value of the  $F_{cal}$  for the overall model is 5.39 with a corresponding p-value of 0.0056 thus suggesting that cognitive diversity and cognitive complexity jointly have significant influence on effective strategic decision making within selected government agencies/commissions. Given this result, the null hypothesis III of this study is hereby rejected. This established that there is a significant relationship between decision maker's cognitive diversity and cognitive complexity and effective strategic decision making in the selected government agency/commission.

Noticeably, when cognitive complexity was studied and regressed independently against the dimension of effective strategic decision making, it was discovered that no positive correlations. But when regressed alongside cognitive diversity, positive correlation exists. This further elucidates that, individual strategic decision makers with both characteristics tend to do well in strategic decision engagement. This finding in line with extant studies Hambrick & Finkelstein, (1987); Hitt and Tyler (1991); Keats and Hitt, (1988), Bentel and Jackson (1989) *cited in* Nooraie (2012), Oana, Petru and Patrick, (2009), and Curseu, (2008), however it's at variance with that of Miller, Linda and William, (1998) and O'Reilly, Synder and Boothe (1993).

## CONCLUSION

Strategic decisions making, in recent times, organizations both private and public business outfits have been faced with mired of challenges raging from changes in information and communication technologies, new world economic order, cultural transformation, emerging government policies, changes in consumers taste and preferences, competitors' aggressions and the host of other factors have posed a great deal of decisions-making and alternative cost challenges to decisions' makers in the organization. At this juncture, it therefore becomes not only important but imperative for organizations or firms' decisions makers to brace to be up and doing if they must deliver on the organizations reposed mandates of promises and long-term targets.

In the course of this study, research hypotheses were formulated in line with the study's specific objectives and were tested by means of inferential statistics. Prior to the test of hypotheses, the questionnaire items which were designed using the 4-points Likert like scale were analyzed by means of descriptive statistics. Overall, the measures of decision maker's characteristics

(cognitive diversity, and cognitive complexity) were found to exert significant influence on effective strategic decision outcomes in the selected agency and commission of government. However, it was discovered that, decision makers cognitive complexity characteristics has no positive correlation with effective strategic decision making when regressed against the dimension of the dependent variable independently. However, seems to have positive effect when regressed alongside cognitive diversity against the dependent.

### Recommendations

On the basis of the above findings, the study therefore recommends as follows:

1. The management of organizations should emphasize more of the complexity of the cognitive representations of decision experts in developing road map or benchmarks tinted towards engaging decision makers.
2. Organization top management staff or personnel charged with strategic decision making responsibility must ensure at all times that they embrace situational principles in handling decision making task in the modern days new world order of operating business rather than sticking exclusively to their individual diversity characteristic or background.
3. If organization management is to appraise decision maker's characteristics as a basis to ascertain efficacy and effectiveness in decision making process and situations, priority attention should be given to both cognitive diversity and complexity characteristics. It should not be considered independently.

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