

Organizational Behavior a Predictor of Corporate Culture and Performance: The Tail of Two Phenomenon

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Abstract: *This study seeks to validate the phenomenon of organizational culture types that purports to support an organization's performance. The study further determines if there is any substantive relevance to the argument proposed by scholars in organizational culture theory that an organization's culture predicating on its performance, specifically in public sector organizations. The purpose of this quantitative research is to develop a model by charting the relationship between specific culture types that best complement an organizational performance thereby enhancing organizational effectiveness; thus, adding to the body of knowledge that currently exists.*

Keywords: *Corporate, Culture, Performance, Organizations, Behavior.*

I. INTRODUCTION

Cameron and Quinn (2006) asserted that there is a need for leaders to constantly evaluate their strategic position and align the organization's overall mission, goals and objectives with a philosophical purpose for the continued existence of the organization. Cameron and Quinn (2006) further argued that there is a tremendous level of uncertainty associated with organizations remaining the same, given the high levels of unpredictability that currently exists in the global economy. The inability to effectively predict the future as it relates to organizational functionality, both in the public and private sectors, has given rise to a number of concerns relating to the future direction and stability of these organizations. Another dilemma that has been argued by scholars is the ability to effectively define an organization's framework and diagnosed the contributions that organizational leadership and culture make on a firm's performance (Bass & Avolio, 1994; Cameron & Quinn, 2006; Kouzes & Posner, 2002).

It has been argued that the benefits of delineating a working understanding of the relationship that leadership and culture have on improving organizational effectiveness is not limited to non-profit organizations. The findings can be used as a model for diagnosing and changing organizational leadership styles and culture types, and for restructuring the functionalities of public sector organizations such as government agencies, educational institutions, and for-profit businesses. However, there is a need for continued research in organizational leadership and culture to further support the argument that these two important phenomena have a significant impact on an organization's performance and continued existence (Cameron & Quinn, 2006; Schimmoeller, 2006).

Thus, the purpose of this study was to determine if there is any relationship that exists between organizational culture types employee's performance in public sector organizations. The research drew parallels by reviewing literature relating to organizational culture in the public and private sectors, specifically literature that is primarily concerned with the capabilities required to enact organizational performance successfully. In order to achieve this research objective, a comprehensive review and analysis of the work of scholars and practitioners in organizational theories was implemented.

II. The Meaning of Organizational Culture

Howard (1998) argued that the concept of organizational culture has evoked serious research into the behavioral sciences of organizations' performances, and scientists from the field of anthropology and sociology have been studying the impact of culture on organizational effectiveness for many years. However, the arguments postulated by Schein (1992) asserted that organizational culture is an abstract and complex phenomenon, thus many definitions of culture exist and that the concept of organizations is ambiguous. As a result, scholars in organizational behavior (O'Reilly, 1998; Reynolds, 1986; Rowden, 2002) presented two

schools of thoughts conceptualizing the meaning of organizational culture. One school defined organizational culture as observable trait focusing on the physical characteristics of the organization such as architecture, artwork, dress patterns, language, stories, myths, behavior, formal rules, rituals, ceremonies, and appearances. The other school argued that the physical characteristics are not culture types; rather they are the symbolic constructs of the unobservable characteristics of culture such as the norms, beliefs, assumptions, ideologies, values and shared perceptions held by members of the organizations (Nahavandi, 2006; Robbins, 1990; Yuki, 2002).

III. The Formation of Organizational Culture

According to Howard (1998) and Robbins (1990), an organization's culture constantly changes as the organization itself changes. These changing dynamics of the organization contribute to the formations of its culture as seen through the reflective lenses of four leading scholars (Fombrun, 1983; Louis, 1985; Schein, 1990; Scholz, 1987). Schein (1990) argued that organizational culture forms at three levels of abstraction: assumptions, values, and artifacts. Schein (1990) asserted that the core of organizational culture exists in the basic assumptions that individuals share regarding such things as human nature, social relationships, and relations among social institutions and their environments. These philosophical assumptions are abstract in nature, exist in the subconscious minds of people, and are often taken for granted by organization's leaders (Howard, 1998). However, Robbins (1990) pointed out that the issues of dependency and authority must be factored into the paradigm of culture development, which is the focal point of cultural formation, by clearly articulating the role of the leadership in organizations. The leader selected is indicative of many values and norms of the group or organization. The second level of cultural formation is the level of values (Schein (1990). Values represent the integrity and moral fortitude that organizational members display regarding the nature of transactions and the manner in which the rules governing these transactions are upheld (Cameron & Quinn, 2006; Howard, 1998).

On the contrary, Scholz (1987) typology of culture formation represents a complex phenomenon. He argued that organizational culture exists along three dimensions: an evolutionary dimension, an internal dimension, and an external dimension (Schulz, 1987). An analysis of Schulz's (1987) typology bears some relevance of Schein's (1990) view in which he postulated that culture develops over time in a series of stages. However, Scholz (1987) presented five evolutionary stages - stable, reaction, anticipating, exploring, and the creative stages - which show how the organization responds to culture challenges. According to Scholz (1987), in the stable stage no changes are contemplated; while the reactive stage shows acceptance to minimal changes. In the anticipating stage, incremental changes are accepted; compared to the exploring and creative stages where large amounts of changes are possible and continuous. Additionally, while the internal dimension of culture addresses issues relating to the conditions operating within the organization that affect the culture, the external dimension of culture focuses on the external environment. Thus, an organization facing a complex and dynamic environment is likely to develop culture that is flexible, innovative, and risk-taking (O'Reilly, 1989; Robbins, 1990; Scholz, 1987).

IV. Competing Value Framework

According to Cameron and Quinn (2006) "the Organizational Culture Assessment Instrument (OCAI) is based on a theoretical model known as the Competing Values Framework" (p. 31). They further asserted that this framework is fundamentally important in organizing and interpreting a wide variety of organizational phenomena. It must be noted, however, that no one framework is comprehensive, and there are no documented arguments supporting the applicability of one framework over the other in analyzing organizational culture (Cameron & Quinn, 2006). However, the appropriate framework should be based on empirical evidence; should effectively represent the reality being describe; and should adequately integrate and organize the majority of the dimensions being proposed (Cameron & Quinn, 2006). The Competing Value Framework will be the methodology used to diagnose and facilitate changes in the culture environments of the public sector organizations in this study. It is a framework that has empirical values, has been tested for both reliability and validity, and helps integrate many of the phenomena argued by various authors (Cameron & Quinn, 2006).

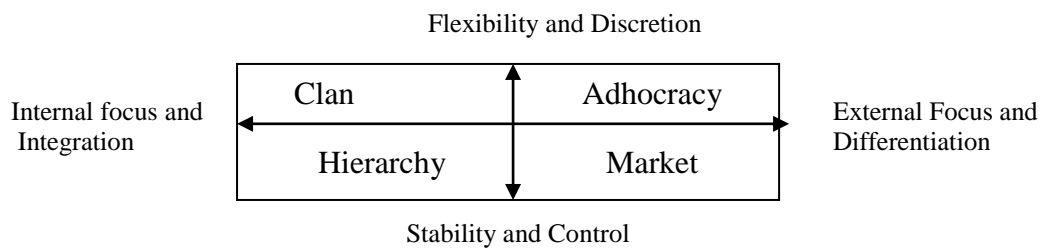


Figure 1 The Competing Values Framework

Note. From *Diagnosing and Changing Organizational Culture* (p. 52), by K. S. Cameron and R. E. Quinn, 2006, San Francisco: The Jossey-Bass. Copy right 2006, by John Wiley and Sons, Inc. Adapted with permission.

Figure 1 depicts the clan, adhocracy, market and hierarchy culture types which are extrapolated from scholarly literature that explains how different organizational values have become associated with different forms of organizational culture (Cameron & Quinn, 2006). The quadrants match key management theories about organizational success, approaches to organizational quality, leadership roles, and management skills (Cameron & Quinn, 2006). Additionally, the dimensions and quadrants in figure 1 explain the different orientations, as well as the competing values, that characterize human behavior. Further, the OCAI is an instrument that enables researchers to diagnose the dominant orientation of the organizations to be studied based on these four culture types. Finally, OCAI also assists the investigator in diagnosing an organization's culture strength, culture type, and cultural congruence (Cameron & Quinn, 2006; Howard, 1998).

V. The Four Major Types of Organizational Culture

According to Hooijberg and Petrock (1993), the Competing Values Framework developed by Quinn (1998) identifies two important phenomena among organizations. One dimension represents the control orientation within an organization's structure, focusing on control and flexibility. The other phenomenon reflects the extent to which both the internal and external environments are impacted by the functionality of the organization. The four major quadrants represented by Cameron and Quinn (2006) in Figure 9 have been labeled to distinguish the contradictory or competing variables within the framework, each with its own unique characteristics: The clan quadrant is the upper left, the adhocracy quadrant is in the upper right, the hierarchy quadrant in the lower left, and the market quadrant in the lower right. As Cameron and Quinn (2006) asserted, the dimensions and quadrants appear to be effective in explaining the different orientations, as well as the competing values that characterize human behavior. Further, the robustness of these dimensions and the richness of the resulting quadrants led the researchers to identify with each quadrant as culture types: hierarchy, market, clan, and adhocracy.

VI. The Hierarchy Culture

According to Cameron and Quinn (2006), one of the earliest pioneers to study organizations is a German sociologist, Max Weber, who studied public sector or government organizations in the early 1900s. The challenge Webber (1947) encountered in his era, was that public sector organizations failed in their mandates to effectively produce goods and services for a growing complex society. In an attempt to remedy the dysfunctionality encountered with government organizations, Weber (1947) introduced what Cameron and Quinn (2006) referred to as "classical attributes of bureaucracy rules, specializations, meritocracy, hierarchy, separate ownership, impersonality, accountability, which defines the formal characteristics within the internal structures of government organizations" (p. 37). Cameron and Quinn (2006) argued that the characteristics provided a prescriptive impetus for the improvement of organizational effectiveness, and were implemented in organizations whose major challenge was to generate efficient, reliable, smooth-flowing, and predictable output. Further, the hierarchy culture type proposed by Cameron and Quinn (2006) is categorized with clear lines of decision-making authority, standardized rules and procedures, control, and accountability as key components to organizational success.

Additionally, Cameron and Quinn (2006) asserted that the organizational culture compatible with the hierarchy organizational structure, as assessed in the OCAI, is characterized by a formalized and structured place to work. According to Cameron and Quinn (2006) procedures govern what people do. Effective leaders are good coordinators and organizers. Thus, maintaining a smooth-running organization is important. The long-term concerns of the organization are stability and predictability while efficiency, formal rules and policies hold the organization together (Goodman, Zammuto & Gifford, 2001). Examples of organizations within this culture paradigm are public sector organizations or agencies, fast-food restaurants such as McDonald's and major conglomerates like Ford Motor Company. These organizations are generally dominated by hierarchy culture, as evidenced by division of labor, formal selection procedures, detailed rules and regulations and impersonal relations (Hooijberg & Petrock, 1993; Robbins, 1990). Additionally, organizations in this framework are typified by large numbers of standardized procedures; multi-hierarchical levels and an emphasis on rule reinforcement (Cameron & Quinn, 2006; Robbins, 1990)

VII. The Market Culture

The market culture also became popular during the late 1960s as organizations were confronted with new competitive challenges from rival firms entering into the industrial era. However, unlike the hierarchy culture type, the market approach to organizational culture relied on a fundamentally, different set of assumptions based extensively on the research of Oliver Williams (1975) and Bill Ouchi (1981). Cameron and Quinn (2006), argued that Oliver Williams (1975) and Bill Ouchi (1981) identified an alternative set of activities that they asserted served as the foundation of organizational effectiveness focusing on the ability of organizations to minimize transactional costs.

The concept of market culture, unlike the typified market approach that focuses on the consumer's demands, emphasizes the transactions with an organization's external stakeholders or constituents, such as suppliers, customers, contractors, unions and regulators (Cameron & Quinn, 2006; Goodman et al., 2001). Additionally, whereas the hierarchy culture type focused on the internal rules, specialized jobs, and centralized decisions, the market operates primarily through economic market mechanisms, mainly monetary exchange (Cameron & Quinn, 2006).

Hooijberg and Petrock (1993) argued that the primary emphasis of the market concept is to conduct transactions with external constituencies to create competitive advantage. The objectives of organizations that have a resemblance of the market orientation are more profit-driven focusing on competitiveness and productivity. Organizations such as general electric, for example, demonstrate a strong drive to improve shareholder's wealth, improve organizations' profit margins, leverage their competitive advantages through market niches, and secure a customer base. It was further argued that "the basic assumptions in a market culture are that external environments are not benign but hostile, consumers are choosy and interested in value, the organizations in the business of increasing its competitive position, and the major task of the management is to drive the organization towards productivity, results and profit" (Cameron & Quinn, 2006, p. 40). It was also articulated that a well-defined purpose and an aggressive market strategy lead to productivity and profitability (Shrader et al., 1984; Willam, 1980). As Cameron and Quinn (2006) so eloquently articulated, market organizations are not interested in holding on to market positions, which is the competitor's job; but rather, they are advancing all the time, defeating their oppositions or rivals, and marching constantly towards their goals.

Finally, Cameron and Quinn (2006) postulated that a market culture, as assessed in the OCAI is a result-oriented work environment. Organizational leaders are extremely hard-working and competitive, hold followers in high standards and high expectations with a focus on winning. Although it is unclear what the short-term implications are for the market culture type, it was argued that the long-term strategy is on competitive actions and achieving strategic goals and targeting objectives (Willam, 1980). On the other hand, while success is defined in terms of market share and penetration (Harrigan, 1980; Weidenbaum, 1979), outpacing the competition and market leadership are important in improving market share and overall profit margin (Cameron & Quinn, 2006; Hambrich, 1980; Selden & Sowa, 2004).

VIII. The Clan Culture

Cameron and Quinn (2006) represented the clan culture type as a family-type organization with a friendly environment in which people like to work and where they share personal thought and opinions about themselves. The clan culture is evident in organizations where there is a commonality of understanding among

members. It is an organizational environment in which shared values and goals, cohesion, participation and individuality permeates the family like structures. The leaders of the organization, in which the clan culture type is evident, act as mentors and role models (Hooijberg & Petrock, 1993). Cameron and Quinn (2006) also argued that unlike the hierarchy culture type, in which rules and procedures dictate individual behaviors and the competitive profit center of the market type, the clan culture typified organizations in which teamwork, employee involvement programs, and corporate commitment to employees are heavily emphasized. Further, organizations with the orientation of a clan environment emphasize the importance of investing in human resources development, coupled with strong moral principles and loyalty. Customers are thought of as shareholders playing an integral role in the success of the business, and employee's commitment is high. The organization places a significant amount of premium on teamwork, participation, and consensus building (Cameron & Quinn, 2006; Hooijberg & Petrock, 1993).

IX. Adhocracy Culture

Finally, in figure 8, the adhocracy culture type is characterized as a dynamic, entrepreneurial, and creative place to work. However, a major goal of organizations that display adhocracy cultural environment is to foster adaptability, flexibility, and creativity where uncertainty, ambiguity, and information overload are typical (Cameron & Quinn, 2006). Further, the argument was made that adhocracy cultural environments are short-termed and selected team members strategically join together to accomplish specific projects. Examples of such organizations depicting adhocracy culture type are think-tank consulting firms and the film-making industry that are mainly in the business of developing new products and services. However, the major challenge of leaders in these environments is to foster entrepreneurship, creativity, and activity that are technologically advanced (Cameron & Quinn, 2006; Hooijberg & Petrock, 1993), and such leaders are considered to be visionary, innovative and task-oriented.

Additionally, a strong commitment to experimentation and innovation in the development of new knowledge, products, and services was critical in keeping the organization focused on its goals and objectives. It was also evident that the organization's ability to adjust to changes and new challenges are critical for the continued success of the organization. Finally, Cameron and Quinn (2006), and Hooijberg and Petrock (1993) argued that organizations, which exhibit adhocracy type culture, place emphasis on long-term rapid growth and the importance of acquiring new resources. Success is measured by the organization's ability to maintain a competitive edge over its rivals by producing unique products and services, while empowering team members with significant amount of latitude to take initiative in accomplishing their tasks.

X. Impact of Organizational Culture Traits on Public Sector Organizations

Culture affects organizations in several ways: direction, flexibility, and commitment. Robbins (2005) asserted that direction refers to the impact that culture has on goal attainment. He further pointed out that an organizational culture can positively or negatively facilitate goal attainments given the consistency or inconsistency of the firm strategic vision (Robbins, 2005). However, Gordon and Milakovich (1998) argued that government organizations exist only to achieve certain kinds of goals, such as substantive programmatic objectives, for example, adequate health care. Other observers assume, in contrast, that government bureaucracies act as interest groups, are concerned with their own survival and take a limited view on public interest. Further, for many public agencies, goals are not objectively attainable (Gordon & Milakovich, 1998; Schein, 1990). Thus, a culture that is not aligned with public sector leadership will negatively affect the organization's ability to conceptualize substantive goals or program objectives (Reynolds, 1986).

Second, the flexibility an organizational culture indicates is adaptable to changing conditions. A major function of culture is to facilitate the understanding of the environment and determine how to respond to it; thereby limiting the impact of anxiety, uncertainty, and confusion (Yuki, 2002). Further, Robbins (2005) argued that public sector organizations facing changing and challenging complex environments must retain flexibility to accommodate uncertainties such as crisis situations. The fact that the internal and external challenges are closely related, the organization must deal with them simultaneously. Additionally, flexibility can be enhanced throughout the organization by job rotation, cross training and frequent reassignments which can reduce divisional alliance that may negatively impact the entire organization (Robbins, 2005; Yuki, 2002).

Finally, the culture of an organization can also impacts the degree of commitment exhibited by members. Robbins (2005) argued that organizational commitment is related to the manner in which members of a group give their efforts, ability and loyalties to the organization and its quest to accomplish its goals in return

for satisfaction. However, Yuki (2002) asserted that whereas a weak culture can undermine the ability of organization members to articulate a willingness, or lack thereof, in the pursuits of goals for satisfactory rewards, a strong culture can facilitate the likelihood that members will display a high degree of commitment to the organization.

This study investigated the relationship between culture types and organizational performance using the Competing Value Framework developed by Cameron and Quinn (2006). The research provided quantitative data to evaluate and analyze the various phenomena associated with organizational performance and critically examined the impact that two major constructs that dictate organizational performance in the public sector (Creswell, 2003). The assumptions embedded in the objective of the research will add to the body of knowledge; thus, validating the arguments of scholars and theorists that there is a need for further research in the field of organizational study (Bass & Avolio, 1994; Cameron & Quinn, 2006; Eisenbach et al., 1999).

XI. The Relationship Between Organizational Culture and Performance

A number of studies have also been conducted on the relationship between organizational culture and performance in both the public and private sector organizations. Three of such researches are summarized below. First, Cameron (2006) hypothesized that an institution with strong, congruent cultures shows significant strength over those with weaker cultures and sub-cultures. However, his study did not corroborate this hypothesis (Brown, 2007; Sckerl, 2002). Rather, his study showed that dominant culture types and not cultural strength was the real predictor of organizational performance (Cameron, 2006). Further examination of his initial research findings revealed that the data also showed that each of the four cultural elements had a particular characteristic that was consistent with their model (Brown, 2007; Cameron, 2006).

Second, Kotter and Heskett (1992) conducted several research studies to examine the link between organizational culture and economic performance in government organizations. The researcher implemented a combined quantitative and qualitative case study to test the hypothesis on the relationship between organizational culture and long-term performance. In summarizing their findings, Kotter and Heskett (1992) were able to identify with similar trends presented in Cameron's (2006) previous research. Four conclusions were drawn from this study: First, it was interesting to note that an organizational culture is more important than its subcultures. Second, an organizational performance is facilitated by a well-entrenched culture (Kotter & Heskett, 1992).

Third, organizational performance is greatly enhanced when it is adaptable and focuses on strategies that facilitate organizational, customers' and employees' needs. Finally, Kotter and Heskett (1992) found that adaptive culture has three major elements- shared vision and strength; a common understanding of the mission, goals and objectives; mutual support and trust. Third, Denison (1990) conducted a series of studies using quantitative and qualitative methods to examine the continued impact of organizational culture on organizational performance. Thirty (30) supervisors from two (2) government organizations were surveyed. In the continued evaluation of Denison's (1990) performance theory, the four hypotheses were subjected to further research by Denison and Mishra (1995) and ultimately incorporated into the Denison's Culture and Performance Model (Denison, 1995, 1997). Extrapolating the results from these two studies, Denison (1990) hypothesized that:

Organizational involvement is an aspect of culture that will be positively related to performance;
The degree of shared norms and consistency is an aspect of culture that will be positively related to performance;
Adaptability or the ability to respond to external conditions by changing internally is an aspect of culture that will be positively related to performance;
A sense of mission or long-term vision is an aspect of culture that will be positively related to performance. (pp. 214-216).

Brown (2007) asserted that Denison's model used two axes to identify culture types and is very similar to the original Culture Values Framework developed by Cameron and Quinn (2006), as well as the Modified Culture Value CV) Framework developed by Zammuto and Krakower (1991); Shortell (1996). The major difference between Denison (1997) cultural Framework and Cameron and Quinn's (2006) model is that Denison's four quadrants are cultural values (Involvement, Consistency, Mission, and Adaptability), while Cameron and Quinn (2006) and Shortell (1996) label their quadrants with specific culture traits (Adhocracy, Hierarchical, market, Clan), and for Shertell (1996) (Group, Hierarchical, Rational, and Developmental).

XII. The Competing Value framework

An analysis of the literature review revealed that a number of studies have utilized either the original CV Framework (Cameron & Quinn, 2006) or a modified version to link culture traits with organizational performances. Three of the studies will be elaborated on in this section. First, Quinn and Spreitzer (1991) conducted a study using 766 executives from 86 public sector organizations. The purpose of the study was to determine if there were any organizational cultures traits present within the internal environments of the utility's agencies using the quality of life for executives as a measurement. As a result, four clusters of culture profile were observed. The study found the cluster in the Developmental Culture and Groups Culture recorded high scores, while the Hierarchy and Rational cultures scored low. Quinn and Spreitzer (1991) argued that there was a need for a balance among the four cultures types in order to improve performance, since two culture profiles that were balanced also scored higher in executive satisfaction. Second, Cameron and Freeman (1991) conducted a research in 334 universities throughout the United States in order to examine the relationship between organizational culture and nine different performance measures. The CVF was used to measure performances relating to academic and personal development, faculty satisfaction, faculty quality, and organizational health and change (Brown, 2007). The results of the study revealed that an organization's performance was more aligned with its cultural traits than with its internal strength (Cameron & Freeman, 1991, p. 47).

The study also found that many of the universities surveyed demonstrated characteristics of several cultural types, while others were found to have at least one dominant culture type that is associated with specific types of performance measures.

Cameron and Freeman (1991), concluded that Group Cultures were related to high moral teamwork; Developmental Cultures were related to external adaption and innovation; and Rational Cultures were related to productions (Brown, 2007). The third argument that showed the relationship between organizational culture and performance was carried out by Zammuto and Krakower (1991). Zammuto and Krakower (1991) studied 332 colleges and universities and also noted a cluster effect that was closely aligned with the competing values culture profiles. The researchers found eleven (11) clusters with organizational performance relating to the competing value quadrant evident in individual cluster. From the results of the study, Cameron and Freeman (1991) extrapolated that each culture type was higher in performance in domains of activity that were consistent with their domain characteristics. The Group Culture, for example, was more effective than any other on dimensions relating to morale and human resources concerns. The Developmental Culture was more effective than the other cultures on dimensions relating to the external environment and academic quality. The Rational Culture scored highest on the ability to acquire resources from the external environment. The Hierarchical Culture did not score high on any of the nine performance dimensions. One of the implications of these findings is that it may be possible to predict in what area an institution will excel based on the type of culture that it possesses. (p. 52)

The performance indicators were climate, strategic orientation and organizational characteristics. Zammuto and Krakower (1991) concluded that organizational culture seemed to be embedded in the value systems of most academic institutions as a rule rather than the exception; and that different culture types were associated with distinct organizational characteristics, climate and strategic orientation. Finally, the study conducted on the Cultural Value Framework revealed that an organization with a particular dominant culture type has the propensity to score higher in performance with cultural constructs that are similar to its dominant Characteristics (Brown, 2007; Zammuto & Krakower, 1991). Relying upon these conclusions, this study is focused on the relationship between transformational leadership styles and organizational culture types in improving performance in public sector organizations by addressing the following questions:

- 1) Is there a relationship between clan culture and a specific leadership style as the dominant leadership style in public sector organizations?
- 2) Is there a relationship between adhocracy culture and a specific leadership style as the dominant leadership style within public sector organizations?
- 3) Is there a relationship between hierarchy culture and a leadership style as the dominant leadership style within public sector organizations?
- 4) Is there a relationship between market culture and a specific leadership style as the dominant leadership style within public sector organizations?
- 5) Which organizational culture type is directly related to transformational leadership and is most conducive to organizational performance in public sector organizations?

XIII. Organizational Culture Measurement

To effectively diagnose the organizational culture, Cameron and Quinn (2006) recommended the Organizational Culture Assessment Instrument (OCAI) for evaluating the various phenomena associated with organizational culture. The instrument or survey is in the form of a questionnaire that requires individuals to respond to questions; six of which were found to be extremely predictive of an organization's culture. According to Cameron and Quinn (2006), there are a variety of ways and instruments to assess organizational culture. However, the OCAI was found to be the instrument of choice given its usefulness and accuracy in diagnosing important aspects of an organization's underlying culture. Further, the instrument has been used in conducting research in more than one thousand organizations (Cameron & Quinn, 2006), and it was found to predict organizational performance. Finally, the intent of the OCAI is to help identify the organization's current culture. The same instrument helps in identifying the culture that organizational members think should be developed to match the future demands of the environment and the opportunities to be faced by the company (Cameron & Quinn, 2006; Howard, 1998). In formulating a model for studying organizational culture types it was necessary to identify with the pertinent hypotheses that will guide the research questions.

1. Is there an association between organizational performance and market culture within public sector organizations?
2. Is there an association between organization performance and hierarchy culture within public sector organizations?
3. Is there an association between organization performance and clan culture within public sector organizations?
4. Is there an association between organizational performance and adhocracy culture within public sector organizations?
5. Which organizational culture type is associated with organizational performance in public sector organizations?

The following hypotheses provided a procedural process of the intended research questions of the study:

- Ho:** There is no linear relationship between organizational performance and organizational culture types as defined by the Competing Values Framework.
- Ha:** There is a linear relationship between organizational performance and specific culture types as defined by the Competing Values Framework.

XIV. METHOD

The surveys were distributed to all full-time employees in four (4) public sector agencies of the United States Virgin Islands. The agencies were the Department of Public Works, Bureau of Motor Vehicles; Virgin Islands Fire Services, and the Virgin Islands Waste Management Authority. The participants were given hard copies of the survey to complete with instruction to return the completed copies in sealed envelopes to ensure confidentiality and anonymity. The completed data were keyed into a computer program using both Microsoft Excel and SPSS spread sheets to secure the data and to further preserve anonymity of the responses.

The full-time participants of all four agencies received hard copies of a letter asking them to complete the survey by answering questions about their demographics; their organization's leadership and management styles of their immediate supervisors, and their organization's culture. A total of 220 surveys were distributed with 200 returning. Of the 200 that returned, nine (9) were rejected due to insufficient data resulting in 191 usable surveys yielding a response rate of 96%. For example, only the demographic sections of 4 surveys were completed, with another 2 surveys incorrectly distributing the points for OCAI. Note: respondents scored all items on the scale 100 points.

XV. Data Analysis

The data was analyzed in three stages: demographics, factor analysis, and regression analysis. First, the data was examined using descriptive statistics to understand the samples without testing the hypotheses. The age of the respondents ranges from 22 to 55. The mean age was 42.3 years with a standard deviation of 11.72. Gender was 34% male and 65% female. 98 % of the respondents reported full-time tenure with their agencies with a mean of 9 years. 5% of the respondents reported tenure with less than 5 years, while 3% reported tenure with less than 1 year. Although the demographics were incorporated into the data set, they were only used to

better understand the sample, and were not used in the analysis of the questionnaires. The results of the sample showed that the respondents were mostly females, well-experienced and have a long tenure with their organizations.

Table 1 Pearson Test of Correlation of Organization Effectiveness with Culture types

	Clan	Adhocracy	Market	Hierarchal
Clan Correlation	1.000	-0.315	-0.315	-0.265
Sig (2-tailed)	.	0.000	0.000	0.000
Adhocracy Correlation	-0.315	1.000	0.194	-0.543
Sig (2-tailed)	0.000	.	0.008	0.000
Market Correlation	-0.315	0.194	1.000	-0.484
Sig (2-tailed)	0.000	0.008	.	0.000
Hierarchal Correlation	-0.265	-0.543	-0.484	1.000
Sig (2-tailed)	0.000	0.000	0.000	.

First, a correlation of organizational effectiveness and culture types was conducted as depicted in Table 1. When the sig. value (p - value) was compared to the significant level .05 the analysis showed that the p-value was less than .05 which indicates that there is a correlation between organizational effectiveness and culture types. The correlation coefficient was weak at -0.315; -0.265; -0.543; -0.484, but strong at 1.00; 0.194. This finding was consistent with Cameron and Quinn, (2006) who asserted that there is a strong existence of hierarchal and clan culture in public sector organizations. This study also found a strong existence of adhocracy and market culture in public sector organizations. Second, a factor analysis was also conducted in this study using the components of transformational leadership traits and culture types yielding a cumulative percentage of 97.365 for the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and a significant Bartlett’s Test of Sphericity. As depicted in Table 2, the total variance explained by the factors of Clan, Adhocracy, and Market Culture are 50. 3%; 20. 5% and 12. 0% with only three components is extracted. Reliability reported in this scale is .96 which further supports the theory that the components of transformational leadership and culture types are not independent of each other in this study.

Table 2 Factor Analysis: Total Variance Explained.

Component	Initial Eigen Value	% of Variance	Cumulative %	Extraction Sums of Squared Loadings	% of Variance	Cumulative %
1	5.034	50.34	50.34	5.034	50.34	50.34
2	2.058	20.576	70.916	2.058	20.576	70.916
3	1.208	12.082	82.998	1.208	12.082	82.998
4	0.702	7.019	90.017			
5	0.332	3.323	93.34			
6	0.291	2.914	96.255			
8	0.086	0.856	98.931			
9	0.059	0.587	99.518			
10	0.048	0.482	100.00			

Third, an aggregated variance analysis was conducted on organizational effectiveness constructs and transformational leadership Traits to identify those items that were appropriately correlated to Organizational Culture Types using variance procedures. Table 3 illustrates the mean score for each of the three organizational performance scales which were calculated, then a comparison of the means was conducted for each item to evaluate the appropriateness of each score (i.e. statistically significantly higher on the appropriate definition utilizing t-tests; p < 0.05). The analysis indicated that the sample size was adequate for assessing the practical significant differences between the means which is consistent with each observation represented in Table 3

below. The analysis also indicated that the mean scores of Organizational Effectiveness (Org. Eff.) = 37.50; Organizational Behavior (OB) = 37.50; and Organizational Productivity (OP) = 43.75; are significant when compared to Hierarchal Culture types. Intellectual Stimulation (IS); Individualized Consideration (IC) and Idealized Influence Attributes (IIA), reported less significant with 29.88; 30.42; and 29.17 respectively.

Table 3 A comparison of means culture types with org. performance and leadership traits

L. Traits	Clan	Adhocracy	Market	Hierarchal
Org. Eff.	14.17	32.5	10.83	37.50
Org. Beh.	14.17	32.5	10.83	37.50
Org. Prod.	14.72	16.72	19.22	43.72
IS	23.52	18.08	23.07	29.88
IC	7.50	19.16	36.25	30.42
IIA	16.67	19.00	25.83	29.17

A test of Correlation was used to measure the relationship between transformational leadership traits and organizational culture types. The MLQ measures Organizational performance phenomenon and leadership constructs (Bass & Avolio, 1991); while the OCAI (Cameron & Quinn, 2006) measures culture types. The components of the MLQ measuring transformational leadership are: Organizational Effectiveness (Org. Eff.); Organizational Behavior (OB); and Organizational Productivity (OP); and Intellectual Stimulation; Individualized Consideration and Idealized Influence (Attributes); Clan Culture; Adhocracy Culture; Market Culture, and Hierarchal Culture formed an overall composite score for both performance, leadership and organizational culture. This study utilized the component factor analysis with varimax rotation to measure the correlation between the three (3) different factors of transformational leadership and culture types consistent with Bono and Colbert (2005) and Schimmoeller (2006). The reliable coefficient had an alpha score of .71 and the inter-correlations were high with a range from .010 to .841 and a p-value greater that ($p > .05$) which indicates that the components of organizational performance and organizational culture types are not independent of each other in this study.

This study also found strong correlations with transformational leadership traits and organizational culture types in public sector organizations as depicted in Table 1. The links are positively related with Clan 3.333; Adhocracy 0.476; and Hierarchal culture .268, .232 respectively. What was surprising, is the positive link between Market culture .322, and .447, and transformational leadership traits in public sector organizations which Cameron and Quinn (2006), asserted is more prominent in private sector organizations. It should be noted that the links were related significantly at the stated .05 level of significance, and the P- values were also significant between the correlation’s coefficients. The implications of these findings from the standpoint of management, and their impact on organizational effectiveness will be discussed in the recommendations.

Table 4 Summary of Culture Leadership Regression

	R	R Square	Adj. R Square	t	sig
Organizational Effectiveness	0.320	0.102	0.073	11.793	0.015**
Organizational Behaviour	0.383	0.147	0.124	3.771	0.000**
Organizational Productivity	0.306	0.094	0.089	-4.425	0.000**
Inspirational Motivation	0.197	0.039	0.023	-2.650	0.009**
Intellectual Stimulation	0.308	0.95	0.075	2.774	0.006*
Idealized Influence Behaviour	0.335	0.112	0.103	-4.803	0.000**

As depicted in Table 4, the sig. value / p - value is less than .05 which enforced the fact that Organizational performance depend on organizational culture types in public sector organizations. The analysis further showed

that organizational performance variables were significantly dependent on culture characteristics with p-values of 0.00 which support the findings of Bass and Avolio (1994); Avolio and Bass (1995); and Cameron and Quinn (2006), who argued that transformational leaders appeal to their followers when improving organizational performance. There was significant evidence to also conclude that organizational effectiveness depends on organizational culture types with a p - value of 0.015 which is less than sig. value / p - value of .05.

XVI. FINDINGS

This study used the Multifactor Leadership Questionnaire (MLQ 5X), and the Organizational Culture Assessment Instrument (OCAI) to collect data from 191 full-time employees in four public sector organizations. The MLQ 5X developed by Bass and Avolio (1994) was used to define leadership traits as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The Competing Value Framework defined by Cameron and Quinn (2004) was implemented to evaluate the organizational culture types. Regression analysis measured the relationship between the independent variable and the dependent variable. It was asserted by Cameron and Quinn (2004) that organizational performance is related to Clan, Adhocracy, and Hierarchy cultures. The most significant was that organizational performance variables were significantly dependent on culture characteristics with p-values of 0.00 which support the findings of Bass and Avolio (1994); Avolio and Bass (1995); and Cameron and Quinn (2006), who argued that transformational leaders appeal to their followers when improving organizational performance. There was significant evidence to also conclude that organizational effectiveness depends on organizational culture types with a p - value of 0.015 which is less than sig. value / p - value of .05.

The findings of this study also showed that transformational leadership traits are positively correlated with Clan 3.333; Adhocracy 0.476; and Hierarchal Culture .268, respectively. What was surprising, however, is the positive link between Market Culture .447 and transformational leadership styles in public sector organizations, which Cameron and Quinn (2006) asserted is more common with leadership in private sector organizations. This finding can serve as a model framework in public sector organizations for political leaders that supports matching effective leadership styles with organizational culture types in order to enhance performance. The positive correlation between Hierarchy and Clan culture was expected with transformational leadership traits. The analysis further revealed that the traits of transformational leadership are, intellectual stimulation, and individualized consideration. What was unexpected, however, is the strong association with Adhocracy culture which is said to be dynamic, entrepreneurial, and creative place to work; and market culture which is argued to be result oriented, competitive, and goal-oriented (Cameron & Quinn, 2006; Hooijberg & Petrock, 1993).

Finally, this study corroborated the fact that organizational culture impacts the ability of leaders to improve organization performance as evident by the symbiotic relationship of each construct. The three elements of organizational performance correlated positively with the four phenomenons of organizational culture types. The analysis of the various component parts of transformational leadership made it possible to evaluate the correlation, which would have otherwise been difficult to assess.

XVII. LEADERSHIP IMPLICATION

There are several important managerial and leadership implications derived from this research for public sector organizations. The major implications that can add to the body of knowledge will be highlighted in this section. First, this study supported the empirical research by Cameron and Quinn (2006) who asserted that hierarchy culture is present in large organizations and government agencies, as evident by standardized procedures, multiple hierarchical levels and an emphasis on rule enforcement. However, this study adds to the body of knowledge by discovering that organizational effectiveness is strongly dependent on Hierarchy, Clan, Adhocracy and Market cultures, thus supporting the assumption that leaders that focus on understanding the internal environments have a stronger propensity for facilitating organizational performance.

Second, from a practical standpoint, it is useful for leaders in public sector organizations to understand the positive correlation between transformational leaders and the Hierarchy, Clan, Adhocracy and Market cultures. The understanding of this framework, as discovered by this study, can greatly enhance organizational performance by articulating a clear and aggressive strategy which ultimately will lead to productivity and efficiency (Cameron & Quinn, 2006; Hooijberg & Petrock, 1993). The implementations of these findings will enable leaders to communicate on where the organizations are going; develop the skills and abilities of subordinates; and encourage innovative problem -solving. Similarly, with this framework, Timothy et al. (1999)

conceptualized that it is these leadership behaviors that can truly transform organizations from a static environment to a more efficient and effective workplace.

XVIII. CONCLUSION

This research found that public sector organizations are dominated by Hierarchy, Clan, Adhocracy and Market culture types. The four organizations studied in this research have been characterized by one or more of the four culture types identified by the framework, and they demonstrated a strong correlation to the transformational leadership traits in that these leaders are proficient in organizing, controlling, monitoring, administering, coordinating, and maintaining efficiency. The Clan culture also demonstrated strong correlations with transformational leadership as it relates to team builders, facilitators, nurturers, mentors, and supporters.

This study also found organizational effectiveness to be positively correlated with Hierarchy and Clan culture which is consistent with the research conducted by Hinkin and Tracey (1999), that also found positive and ethical values of organizational leadership to be positively correlated with organization's effectiveness. Further research is required to investigate a wider sampling frame and to examine the relationship between culture behaviors and performance as it relates to improving relevant organizational outcomes.

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