

Journal of Construction in Developing Countries, 17(2) 2012, 1–21, 2012

Culture of Architectural Firms in Nigeria: An Exploratory Study

*Adedapo Adewunmi Oluwatayo¹ and Dolapo Amole²

Abstract: What is the culture of an architectural firm, and what are the organisational characteristics that shape this culture? These are the questions addressed by this paper that surveys 92 Nigerian architectural firms. The study investigated the culture of these architectural firms using the response of the firms' principals to a questionnaire of value statements regarding innovation, stability, people orientation, outcome orientation, team orientation and aggressiveness. The culture types were determined using a two-step cluster analysis of the data. Categorical regression was also used to determine the factors that shaped a firm's culture. The study revealed that the architectural firms did not have either market or hierarchical cultures. The findings also challenged the notion that larger firms tend to be more impersonal. However, the predominance of responsive and staff-oriented cultures confirmed the notion that service sector organisations are more people-oriented than outcome-oriented firms. The leadership style of the principals best predicted a firm's culture.

Keywords: Culture, Architectural firms, Organisational culture, Values, Culture types

INTRODUCTION

Maister (1993) notes that architectural firms have cultures that differ from those of other types professional firms. However, the characteristics of this cultural uniqueness have yet to be described. While definitions of the concept of culture differ, the content of those definitions is based on shared assumptions of values, meanings, symbols, rituals, organisational stories, jargon, humour, material manifestations (workplace arrangements and artefacts), formal structure, policies, and other explicit or inferred cultural characteristics. This study uses the description of culture proposed by Denison (1990: 2), which states that culture provides the underlying values, beliefs and principles that serve as a foundation for an organisation's management system, as well as the set of management practices and behaviours that both exemplify and reinforce those basic principles. These principles and practices endure because they hold meaning for the organisation's members.

Researchers have also agreed on the existence of internal and external factors of an organisation that influence its culture. Such factors include the values of the society and the organisation's specific environment (Erez and Earley, 1993; Schein, 1991; Goffee and Jones, 1998; Cameron and Quinn, 1999). In addition, Chatman and Jehn (1994) demonstrate that the specific industry accounts for differences in patterns of organisational culture. This finding seems to suggest that individual industries require further analysis of their peculiar cultures and the organisational characteristics that influence their cultures.

The culture of an organisation is important for several reasons. Schein (1985) noted that the two functions of organisational culture are to ensure survival, adaptation to the external environment and internal integration. Denison (1990),

¹Department of Architecture, Covenant University, Ota, Ogun State, NIGERIA

²Department of Architecture, Obafemi Awolowo University, Ile-Ife, Osun State, NIGERIA

*Corresponding author: dapo.oluwatayo@covenantuniversity.edu.ng

Brown (1995) and Alvesson (2002) expand these two functions to include conflict reduction, coordination and control, reduction of uncertainty, motivation and serving as a source of competitive advantage. In addition, Baker (2002) notes that an organisation's culture promotes knowledge management, creativity, participatory management and leadership. Despite the importance of culture in this context, there is a dearth of information on the culture of architectural firms. Hence, this study investigates the peculiar culture of architectural firms in Nigeria.

Within the professional service firm, culture is claimed as a major source of competitive advantage (Hofstede et al., 1990). Previous studies have included multiple industries, making it difficult to determine the culture specific to any particular service industry. In this paper, the following questions were answered: what is the culture of architectural firms, and what characteristics of the architecture firms influence their culture? By examining the culture of an architectural firm as a professional service firm, this paper seeks to contribute to the literature in two ways. Blau (1984) suggests that architectural firms are different from other professional organisations. The first contribution of this paper to the literature therefore presents an industry – specific account of culture, thereby exploring the limits of the generalisability of previous findings with respect to culture. Second, the paper identifies the specific characteristics of the architectural firms that shape their culture.

Theoretical Background

The term "culture" was first integrated into organisational literature by Pettigrew (1979). Since then, various aspects of culture have been studied, including stability versus change and innovation versus personal growth. These characteristics relate to individuals' propensities towards stability or change (Reynolds, 1986; Hofstede and Bond, 1988; Hofstede et al., 1990; Cooke and Szumal, 1993; Leithwood and Aitken, 1995). Denison and Mishra (1995) suggest that innovation takes priority when organisations promote risk, while risk-averse organisations focus more on personal growth. The culture of organisations has also been analysed in terms of its orientation and focus: for example, whether the organisation focuses more on internal people and processes or on customers, competitors and the external environment (Denison and Mishra, 1995). The orientation towards work, tasks and co-workers was studied by Rokeach (1973) and O'Reilly, Chatman and Caldwell (1991). These studies focus on the balance between work as a productive activity and a social activity. The dimension of isolation versus cooperation relates to whether individuals accomplish most of the work or whether a premium is placed on collaboration and teamwork (Denison and Mishra, 1995; Schein, 2010; Hofstede and Bond, 1988; Tucker and McCoy, 1988). The studies by O'Reilly, Chatman and Caldwell (1991) involved a broader investigation (Sarras et al., 2005).

O'Reilly, Chatman and Caldwell (1991) identify seven dimensions of organisational culture based on the values of organisations. The dimensions include innovation, stability, people orientation, outcome orientation, detail orientation, team orientation and aggressiveness. Chatman and Jehn (1994) note that the magnitude of the cultural dimensions varies between organisations. These variations may be determined by characteristics specific to the organisations. This study investigated six of the dimensions: innovation, stability, people orientation, outcome orientation, team orientation and aggressiveness. Detail orientation was

not investigated in this study. Detail orientation entails being analytical, attentive to detail, and precise, all of which are fundamental to architectural practice and which are therefore anticipated to be common characteristics amongst all architectural firms. This stance is based on the assertion of Mayo (1988) that an architect is an analyst and a technician whose work is mainly performed through explicit details. The dimensions identified by O'Reilly et al. are often used to assess the culture types of organisations. The widely investigated typologies were derived from a study by Cameron and Quinn (1999).

Four culture types were identified by Cameron and Quinn (1999), including the hierarchy, clan, market and adhocracy. The clan is like an extended family and is characterised by teamwork, open communication, empowerment, and leaders acting as mentors. The adhocracy culture is characterised by innovation, creativity, risk taking and visionary leaders. However, the hierarchical culture is characterised by efficiency, control and leaders who monitor. The market culture is characterised by achieving goals, beating competitors, productivity and hard-driving leaders. It has been said that these culture types are determined by various factors within the organisation (Vadi and Alas, 2006).

Some of these factors have been identified in the literature. For example, Barron, West and Hannan (1994) and Goffee and Jones (1998) argue that a strong positive correlation exists between the age, size and culture of an organisation. In addition, Dastmalchian et al. (2000) found a correlation between an organisation's size and its intra-organisational relationships in terms of organisational formalisation and centralisation. These relationship variables may also influence the culture of architectural firms. Furthermore, some researchers argue that privatisation leads to significant changes in the culture of an organisation (Zahra and Hansen, 2000; Cunha and Cooper, 2002). It may thus be suggested that an organisation's ownership also influences its culture.

Leaders of organisations have also been identified as creators of culture (Kaiser, Hogan and Craig, 2008). Scholars such as Kaiser, Hogan and Graig (2008) and Block (2003) note that because an organisation is created by the values, motives and world view of its leader, its culture can be consciously designed and manipulated. It can therefore be inferred that the leader of an organisation, or the principal of an architectural firm in this case, shapes the culture of the firm per his/her own values and beliefs. Culture is created within an organisation when the leaders endorse certain values, beliefs and assumptions about the organisation (Schein, 2010).

However, very little is known about the culture of architectural firms. There is a need to identify the types of culture that exist in architectural firms as well as the factors that influence those cultures. Statements such as the one made by Hofstede et al. (1990) that service sector organisations are necessarily more people oriented than outcome oriented also need to be confirmed or refuted. This study therefore investigates the culture of architectural firms and the characteristics of the firms and their principals that influence their dominant culture.

RESEARCH METHOD

This study adopted the survey approach and used quantitative methods. Although qualitative methods are often used for cultural investigations, Xenikou and Furnham (1996) argue that they do not form the basis for systematic comparison due to their frequent preclusion of any multivariate analysis. However, it is often necessary to compare individuals' responses to understand the culture of an organisation, an approach that requires quantitative methods. Furthermore, Rosseau (1990) argue for the use of quantitative measures for the examination of more conscious dimensions of culture, such as values or behavioural norms. Xenikou and Furnham (1996) subsequently suggest that quantitative methods are more appropriate for studies focused on measuring rather than interpreting culture. This study requires a multivariate analysis, as it compares the cultural attributes amongst architectural firms to determine the dominant culture of each firm and also analyses the influential characteristics of the firms that shape their respective cultures. A quantitative method was therefore adopted. Existing studies on the culture of organisations that employed quantitative methods include Chatman and Jehn (1994) and Dastmalchian, Lee and Ng (2000).

The study was conducted on architectural firms in Nigeria. A single firm served as the unit of analysis. The total population was defined as the total number of Nigerian architectural firms registered to practice by the Architects Registration Council of Nigeria (ARCON). In 2006, the ARCON register listed 341 firms as registered to practice in Nigeria. The sample size was calculated using the method determined by Frankfort-Nachimias and Nachimias (1992: 189), assuming a 95% degree of confidence. Cities with the highest number of architectural firms were selected for convenience. These cities included Lagos, Abuja, Kaduna Enugu, Port Harcourt and Ibadan and they were home to 77.7% of the registered firms. A total of 92 usable responses represented a 58.6% return rate from the 157 firms who received questionnaires. Sarros et al. (2005) suggest that managers and senior executives can significantly influence cultural identity. It was therefore expected that the principal or senior members of staff would best describe the culture of their firm. One questionnaire was administered per firm, and it was administered to the principal or a senior staff member. It was expected that partners also would be leaders at certain architectural firms. However, because an initial partnership is often formed amongst people with similar values, personalities and practice characteristics (Malos and Campion, 2000), this study collected information on the founding principals of the firms. The data were collected between March and June of 2008.

The quantitative measurement required by this study necessitates the assessment of visible cultural traits such those proposed by O'Reilly, Chatman and Caldwell (1991). As noted earlier, this study investigated six organisational dimensions of culture: innovation, outcome orientation, aggressiveness, team orientation, stability and people orientation (O'Reilly, Chatman and Caldwell, 1991; Sheridan, 1992; Chatman and Jehn, 1994). These dimensions were used to construct statements used in the study (Appendix). Respondents were asked to indicate the architectural firms' characteristic cultural values orientation along a five-point Likert scale where 1 = not applicable at all, 2 = minimally applicable, 3 = moderately applicable, 4 = considerably applicable and 5 = very applicable.

Culture types that applied to the architectural firms were derived from the responses to the value statements.

The Statistical Package for Social Scientists (SPSS) was used to carry out a two-step cluster analysis to identify the culture types and to group architectural firms based on commonality in cultural emphasis. Due to the categorical nature of the data, two-step cluster analysis was used to identify the homogeneous subgroups of architectural firms based on culture. A categorical regression analysis was also carried out to determine the characteristics of the firms associated with multiple culture types.

RESULTS

The firms investigated possessed the characteristics illustrated in Table 1. First, Cronbach's alpha test was used to evaluate the reliability of the measures. The Cronbach's alpha measurement for the culture was 0.73, which, according to George and Mallery (2003), is acceptable. A two-step cluster analysis was used for the 18 cultural variables to determine the natural groupings of the firms. The log-likelihood distances between groups measured similarity or dissimilarity. Variable importance was measured by the use of the chi-square test and the confidence level was set at 95%. A 4-cluster solution was obtained. The results placed 6 (6.52%) of the firms in the first cluster, 20 (21.74%) in the second cluster, 28 (30.43%) in the third cluster and 38 (41.3%) in the fourth cluster. Subsequent discriminant analysis classification showed that cluster analysis correctly classified 74.2% of the firms. This result suggests the internal validity of the 4-cluster solution, thus supporting the resulting taxonomy of architectural firms based on their culture.

Sixteen variables were responsible for the formation of the first cluster. The variables included employees being driven to achieve results, aggressiveness in the pursuit of new business opportunities, caution in risky ventures, new ideas and technology determining the firm's strategy, teamwork and staff development. Other variables responsible for the formation of the first cluster of firms included encouragement of staff personal style and initiatives, innovation, gender equity in hiring staff, concern for profit and gender equity in task allocation. The remaining variables responsible for the formation of this cluster were the presence of plants, awards, plaques, souvenirs, models, artwork, reading materials and drawings in the reception area. The six firms in the first cluster received low scores for motivation of employees to achieve results, aggressiveness in the pursuit of new business opportunities, and exercising caution in risky ventures. The firms also scored low on encouraging the personal style of staff members and personal initiatives, gender equity in hiring staff, concern for profit and gender equity in task allocation. The firms did not personalise their reception areas with plants, awards, plaques, souvenirs, models, artwork, reading materials or drawings. However, the firms scored high on allowing new ideas and technology to determine the firms' strategies, encouraging teamwork, encouraging staff development and promoting innovation. The culture of these firms could be described as relaxed while simultaneously risk-taking and innovative, allowing new ideas and technology to determine their strategies and encouraging teamwork. This culture could thus be referred to as an ad hoc or improvised culture.

Table 1. Profile of Responding Firms

Demographic Variables	Categories	Percentage (%)
Location of firm	Kaduna	9.78
	Lagos	54.35
	Abuja	10.87
	Enugu	13.05
	Port-Harcourt	7.6
	Ibadan	4.35
Age of firm	Up to 5 years	9.88
	6–10 years	16.06
	11–15 years	27.16
	16–20 years	19.75
	21–25 years	13.58
	26 years and above	13.58
Ownership form	Sole principal	52.27
	Partnership	21.59
	Limited liability company	17.05
	Unlimited liability company	7.95
	Public company	1.14
Firm size	1–5 staff	14.94
	6–10 staff	33.33
	11–20 staff	27.59
	21–30 staff	8.05
	31–40 staff	6.9
	41–50 staff	5.75
	51 staff and above	3.45
Age of principal	Below 30 years	1.10
	30–40 years	22.35
	41–50 years	43.53
	51–65 years	27.06
	Above 65 years	5.88
Years of experience of principal	Up to 5 years	1.52
	6–10 years	12.12
	11–15 years	15.15
	16–20 years	18.18
	21–25 years	21.21
	26 years and above	31.82

(continued on next page)

Table 1 (continued)

Demographic Variables	Categories	Percentage (%)
Degree of centralisation of decision-making	Low level of centralisation	27.8
	Moderate level of centralisation	31.94
	High level of centralisation	40.3
Degree of formalisation of office activities	Informal	7.5
	Fairly formal	37.5
	Very formal	55.0
Leadership style of principal	Mentor	9.3
	Visionary and innovative leader	38.37
	Efficient manager	11.63
	Productivity oriented achiever	40.7

The second cluster was determined by two variables: employees being driven to achieve results and consistency and maintenance of tradition. The 20 firms that comprised the second cluster scored high on motivating their employees to achieve results but scored low on consistency and the maintenance of tradition. These firms appeared to be more interested in achieving their goals than maintaining stability. The culture of these firms can thus be described as achievement-driven.

The five variables responsible for the formation of the third cluster were caution in risky ventures, importance of teamwork and staff development, importance of new ideas and technology in determining the firm's strategy, gender equity in task allocation and encouragement of staff to express personal style and initiative. The firms in this cluster scored high on exercising caution in risky ventures, teamwork and staff development, and allowing new ideas and technology to determine the firms' strategies. These firms also scored high on practicing gender equity in task allocation and encouraging staff to express personal style and initiative. It appears that these firms prioritised their staff. The 28 firms in the third cluster could thus be labelled as a staff-oriented culture.

The four variables responsible for the formation of the fourth cluster were gender equity in task allocation, gender equity in hiring staff, caution in risky ventures, new ideas and technology as determinants of the firm's strategy. The fourth cluster consisted of the largest number of firms (38), and the firms scored low on gender equity in task allocation and hiring staff. The firms also scored low on exercising caution in risky ventures and allowing new ideas and technology to determine the firms' strategies. The firms in this cluster appeared reasonable regarding hiring staff, allocating tasks and even in selecting their strategy. They seemed to respond as the occasion demanded. Their culture could thus be described as responsive.

As noted earlier, Cameron and Quinn (1999) assert that organisations have different cultures and that these cultures can be divided into the following categories: clan, adhocracy, hierarchy and market. The first culture type in the study, ad hoc or improvised culture, has characteristics similar to the adhocracy culture described by Wells, Thelen and Ruark (2007) and is characterised by innovation, creativity, teamwork, risk taking and visionary leaders. The third culture

type also displayed characteristics similar to the clan culture of Wells, Thelen and Ruark (2007), which is characterised by a sense of extended family, teamwork and staff empowerment. None of the firms surveyed had characteristics similar to the hierarchical or market cultures.

Categorical regression analysis was conducted to identify the factors most closely associated with the types of culture present in the architectural firms and the proportion of variation in the firms' culture determined by these factors. The age, size, ownership, location, level of formalisation and centralisation of the firm as well as the age, experience and leadership styles of the principal were entered as independent variables; the culture types were set as the dependent variables. Table 2 shows the result of the regression analysis. One model was extracted with adjusted R^2 of 0.394. The F value for the model was also significant ($p = 0.000$). The standardised regression coefficients of some variables related to the firm were significant ($p \leq 0.05$). These variables were the ownership, location, size and formalisation of the firm. Other variables with significant standardised regression coefficients included the age, experience and leadership style of the principals. These variables accounted for 39.4% of the variance in culture types. The study found that the age of the architectural firm and level of centralisation did not significantly influence its culture. The largest beta value was for the principals' leadership style, suggesting that this variable made the largest unique contribution to the firms' culture. This value was followed by the experience and age of the principals.

Table 2. Results of Categorical Regression Analysis

Dependent Variable	Independent Variables	Standardised Beta	Significance	Adjusted Model R^2	F	Sig.
Culture type				0.394	2.972	0.000
	Ownership form	-.303	.000*			
	Age of firm	.056	.547			
	Location of firm	-.314	.000*			
	Size of firm	.300	.000*			
	Age of principal	.383	.000*			
	Experience of principal	-.389	.000*			
	Level of formalisation	-.216	.014*			
	Level of centralisation	.107	.240			
	Leadership style of principal	.438	.000*			

*significant at $p < 0.05$

Figures 1 to 7 illustrate how the significant variables influenced culture. Lagos, Nigeria, was the location of the majority of the firms with an ad hoc culture, while most of the firms in Kaduna had the responsive culture. Most of the firms in Enugu, Abuja and Port Harcourt had an achievement-driven culture, while most of the firms in Ibadan had a staff-oriented culture. Most of the firms with the ad

hoc/improvised culture were small, with between one and 10 staff members. Most of the medium-sized firms adopted an achievement-driven culture, while the large firms mostly adopted a staff-oriented or responsive culture. The results show that most of the firms with a single principal and unlimited liability ownership adopted a staff-oriented culture, while most of the firms with a partnership and public company status had an achievement-driven culture. Ad hoc culture was most common among firms with limited liability ownership. The results also show that while most of the older principals (41 years and above) adopted a staff-oriented culture, a responsive culture was most commonly adopted by firms with principals 31 to 40 years, and an achievement-driven culture was most commonly adopted by firms with principals 30 years or younger. Given a limited amount of experience (1–5 years), most principals adopted a responsive culture; with additional experience, the principals tended to adopt an ad hoc culture (6–15 years); finally, the most experienced principals adopted an achievement-driven or staff-oriented culture. Furthermore, while most of the principals who were mentors and efficient managers adopted an ad hoc culture, the principals who were visionaries and innovative leaders adopted a responsive culture. Most of the principals who were productivity-oriented achievers adopted a staff-oriented culture. The results demonstrated a link between informal office procedures and a responsive culture, while highly formal office procedures were linked to most firms with an achievement-driven culture. Fairly formal office procedures were associated with a staff-oriented culture.

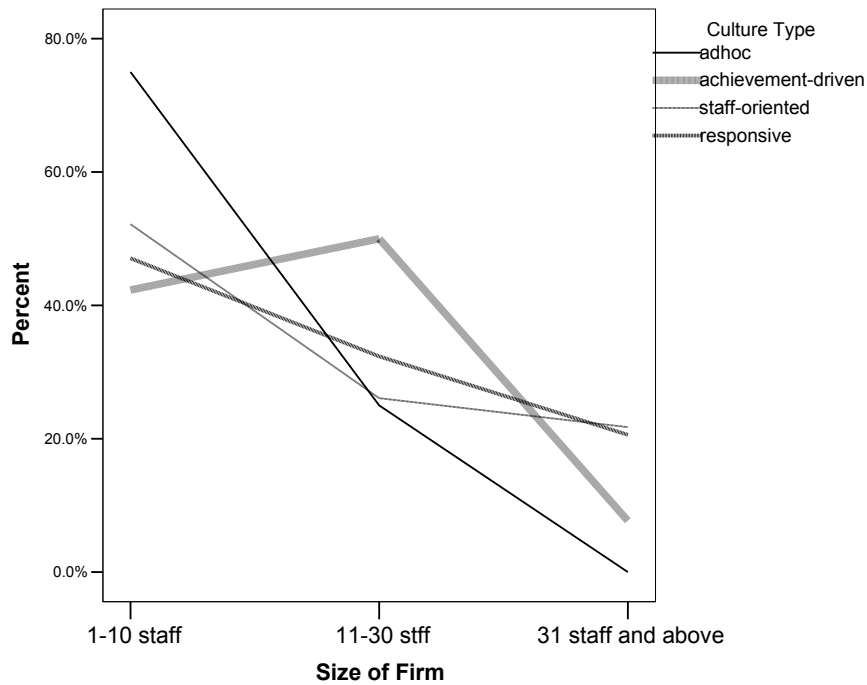


Figure 1. Size of Firms and Culture

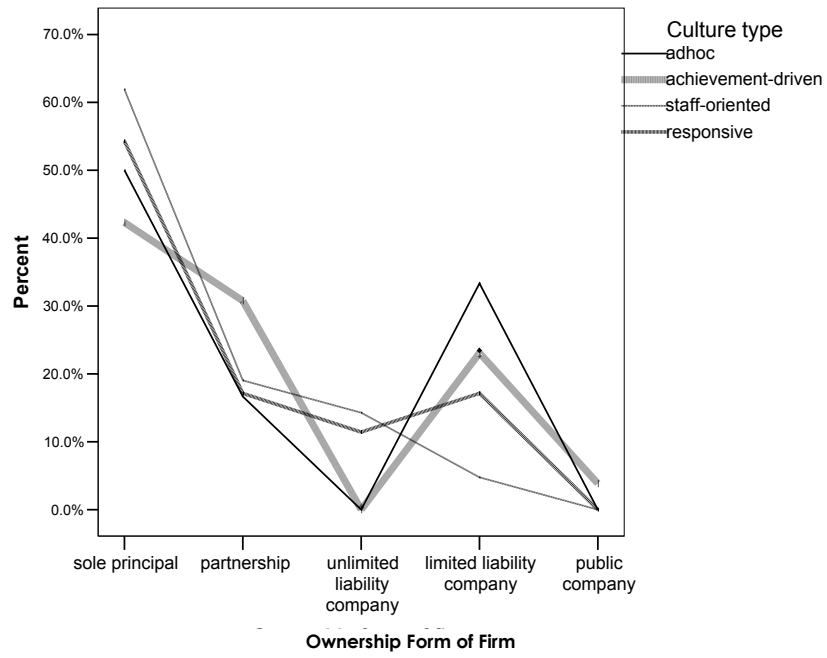


Figure 2. Ownership of Firms and Culture

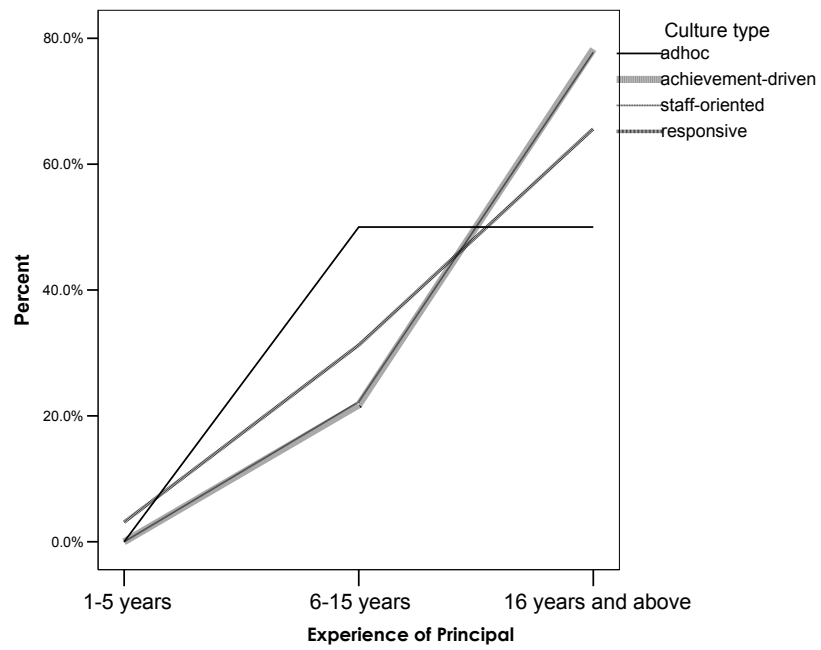


Figure 3. Experience of Principal and Culture

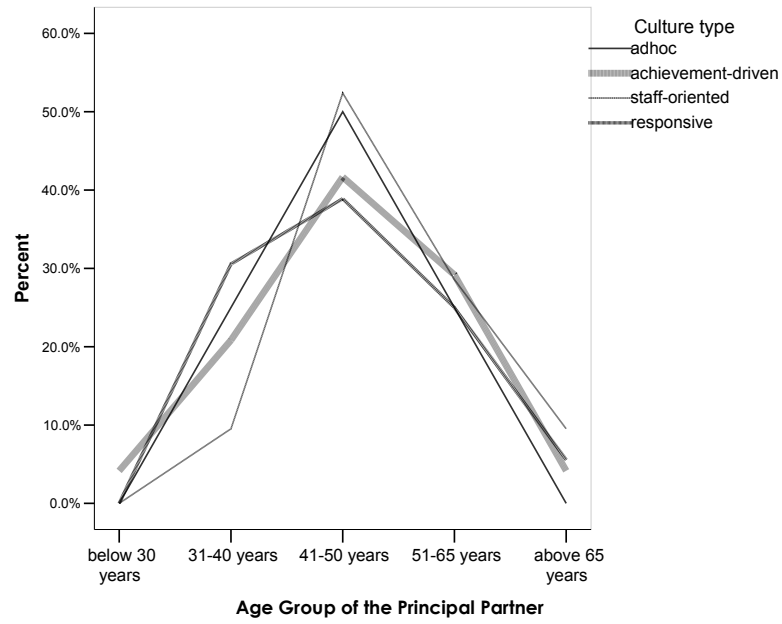


Figure 4. Age of Principal and Culture

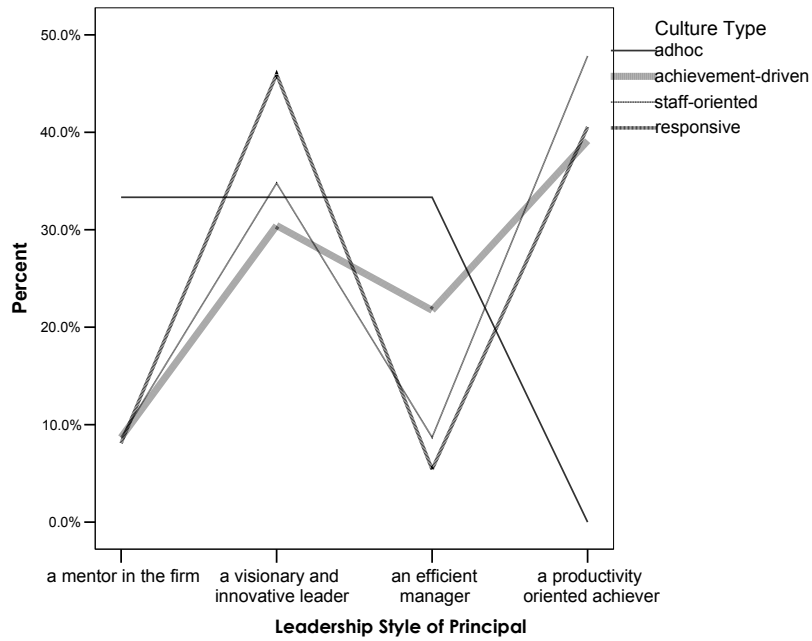


Figure 5. Leadership Style of Principal and Culture

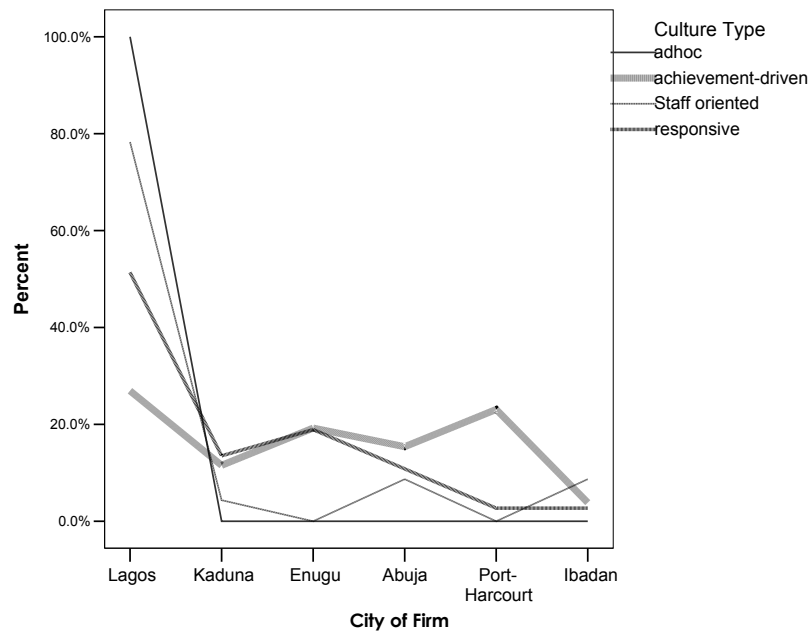


Figure 6. Location of Firm and Culture

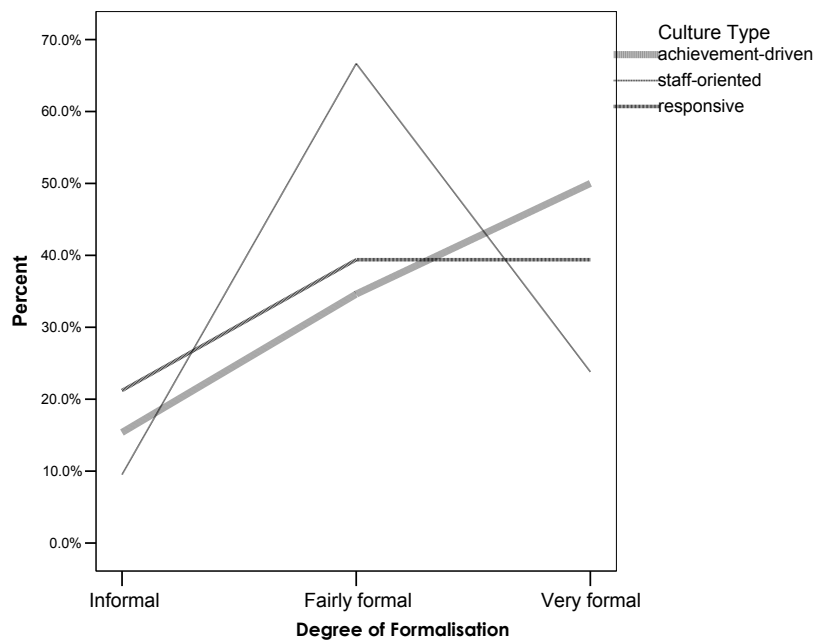


Figure 7. Degree of Formalisation of Office Activities and Culture

DISCUSSIONS

This study demonstrates that the predominant cultures among the studied architectural firms were responsive and staff-oriented, confirming the assertion of Hofstede et al. (1990) that service sector organisations are more people-oriented than achievement-oriented. The least predominant culture was the ad hoc culture, which is similar to the adhocracy culture of Cameron and Quinn (1999). The architectural firms in the study did not adopt market or hierarchical cultures. This result suggests that organisational culture may be industry specific.

The findings of the study regarding leadership style and the experience and age of the principal confirm the assertions of Kaiser, Hogan and Craig (2008) and Sarros et al. (2005), respectively, that the leader of an organisation significantly influences its cultural identity. Although many studies have focused on the influence of the age and size of an organisation on its culture, this study found that the age of an architectural firm did not significantly influence the firm's culture. In addition to the size of the firm, its ownership and the city in which it is located contribute significantly to its organisational culture. Another characteristic of the firm that influenced its culture was the level of formalisation of office activities.

Contrary to the findings of Cameron and Quinn (1999), the age and experience of the principal rather than the age of the firm had a greater influence on the culture. The results demonstrate that principals with little experience tended to adopt a responsive culture first and then an ad hoc culture after gathering more experience; the firms with the most-experienced principals had an achievement-driven or staff-oriented culture. These findings suggest that architectural firms with less-experienced principals are more flexible and unprejudiced. The firms with more-experienced principals adopted either an achievement- or people-oriented culture. This result suggests that a firm's culture changes with the level of experience of its principal. The same trend was observed in regard to the age of the firm. However, it is interesting to note that all principals younger than 30 years adopted an achievement-driven culture. It would appear that these newcomers desired to make their mark without adhering to any particular pattern. The fact that most of the large-sized firms (with over 30 staff members) adopted a responsive or staff-oriented culture also suggests that larger firms are more staff-oriented than smaller firms, which were found to be mostly innovative and risk-seeking.

One interesting result was that most of the principals who described themselves as mentors adopted the ad hoc culture (similar to the adhocracy culture), while most of the principals who described themselves as visionary and innovative leaders adopted a responsive culture. However, principals who described themselves as productivity-oriented achievers most often adopted a staff-oriented culture (similar to the clan culture). This finding runs contrary to the argument by Cameron and Quinn (1999) that leaders of organisations with an adhocracy culture are innovative leaders, while leaders of organisations with a clan culture are mentors. This finding can likely be attributed to the peculiarity of the architectural firm as a professional service firm. An agenda of innovation and risk taking would seem to require a principal willing to carry others along instead of a visionary and innovative leader. However, an architectural firm with a visionary and innovative culture tends to adopt a responsive culture. Similarly, team building

and staff empowerment seem to require a principal who also ensures productivity and not only mentorship.

The firms under a single principal and unlimited liability ownership appeared to be more people-oriented, as they mostly adopted a staff-oriented culture. The partnership and publicly owned firms, however, appeared to be more achievement-oriented, suggesting further cultural variation related to the ownership structure. Most of the firms with limited liability ownership adopted an ad hoc culture. This result suggests that in the context of Nigerian architectural firms, original ownership influenced the culture of the firms. This finding may contribute to the conclusion by Cunha and Cooper (2002) that the original ownership and later privatisation influence the culture of organisations. The firms with a propensity towards personal indebtedness appeared to be more staff-oriented. This finding suggests that these firms assigned a higher value to their staff, which affirms the assertion by Brown et al. (2010) that staff members are an asset of architectural firms. However, risk taking and innovation were valued by firms with limited liability.

Erez and Earley (1993) argued that organisational cultures are formed by the values of the societies in which the organisations operate. Several studies have found that national culture influences organisational culture (Hofstede et al., 1990; Koopman et al., 1999; Van Muijen et al., 1999). This study also demonstrates that differences amongst the cities of architectural firms affect the firms' culture, even within the same country. This result may further support the assertion by Scott (2001) that environment affects culture. Although Lagos, Abuja, Port-Harcourt and Kaduna are referred to as the business hubs of Nigeria, only Abuja and Port-Harcourt share cultural similarities. The markets in these cities are likely to be responsible for the similarities between the firms there. The stronger spirit of innovation in Lagos may result from clients' continuous requests for iconic buildings in the commercial capital. The abundance of the achievement-oriented culture in Enugu, Abuja and Port-Harcourt may be an indication of the vibrancy of trade in those cities.

In addition, the large-sized firms' (with over 30 staff members) adoption of responsive or staff-oriented cultures suggests that larger architectural firms are more staff-oriented than smaller firms, which were found to be more risk seeking and innovative. Most of the firms with less-formal office procedures adopted a responsive and staff-oriented culture, while firms with a high degree of formalisation possessed an achievement-driven culture. This finding suggests that although formality may be required for achieving specific goals, such formality may not be found in firms with a staff-oriented culture or a culture with no strong characteristics. It also appears that the more informal the office procedures, the more likely it is that a firm will respond to occasional demands or prioritise the staff's interests.

CONCLUSION

This paper investigated the culture of architecture firms and how the firms' characteristics influenced their culture. The relationship between the firms' culture and the performance was also investigated. The results demonstrate that the predominant culture among architectural firms in Nigeria is a responsive culture.

Furthermore, although larger firms are expected to be more impersonal, larger architectural firms tend to be more staff-oriented. The findings of this study suggest that architectural firms may be different from certain non-professional organisations in that they lack hierarchical and market cultures. The architectural firms emphasised neither efficiency nor control, which characterise the hierarchical culture; nor did they emphasise competitive advantage or market superiority, which characterise market cultures. This finding offers credibility to the suggestion of Larson (1977) that professional organisations are democratic rather than hierarchical. It also emphasises the difficulties faced by architectural firms in viewing architectural practice as business (Winch and Schneider, 1993).

From the results of this study, one can conclude that the leaders of the firms have an important influence on their culture. The age of the architectural firm did not influence its culture. This finding suggests that a firm's culture responds to the firm's characteristics and those of the principal, irrespective of the firm's lifecycle. The level of centralisation of decisions within the firm does not affect the type of culture it adopts. Thus, it appears that while culture is not forced on a firm's members, it is determined by its leader. This finding suggests that the culture of an organisation is willingly embraced.

Further studies may be required regarding architectural firms' leaders who were mentors and who adopted an ad hoc culture instead of a clan culture, as suggested by Cameron and Quinn (1999). Furthermore, this study provides a cross-sectional analysis. Future studies may adopt a longitudinal stance by studying the principals at different stages based on their age and experience. Another limitation to this study was that only one principal's characteristics were considered. However, some of the firms had more than one principal. A later study should investigate the influence of all principals' characteristics on the culture of an architectural firm. This approach may help to validate the results of this study or reveal novel connections between organisational culture and leadership characteristics and style. A similar study may also be conducted in a related industry in a different country.

REFERENCES

- Alvesson, M. (2002). *Understanding Organisational Culture*. London: Sage Publications.
- Baker, T. (2002). Risk, insurance, and the social construction of responsibility. In T. Baker and J. Simon (eds.), *Embracing Risk: The Changing Culture of Insurance and Responsibility*. Chicago: The University of Chicago Press.
- Barron, D.N., West, E. and Hannan, M.T. (1994). A time to grow and a time to die: Growth and mortality of credit unions in New York, 1914–1990. *American Journal of Sociology*, 100(2): 381–421.
- Blau, J. (1984). Architecture and daedalean risk. In *Architects and Firms: A Sociological Perspective on Architectural Practice*. Cambridge, MA: MIT Press, 133–145.
- Block, L. (2003). The leadership-culture connection: An exploratory investigation. *Leadership and Organization Development Journal*, 24(5/6): 318–334.
- Brown, A.D. (1995). *Organisational Culture*. London: Pitman Publishing.

- Brown A.D., Kornberger, M., Clegg, S.R. and Carter, C. (2010). Invisible walls and silent hierarchies: A case study of power relations in an architecture firm. *Human Relations*, 63(4): 525–550.
- Cameron, K.S. and Quinn, R.E. (1999). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. Reading, MA: Addison-Wesley.
- Chatman, J.A. and Jehn, K.A. (1994). Assessing the relationship between industry characteristics and organizational culture: How different can you be? *Academy of Management Journal*, 37(3): 522–553.
- Cooke, R.A. and Szumal, J.L. (1993). Measuring normative beliefs and shared behavioral expectations on organizations: The reliability and validity of the organizational culture inventory. *Psychological Reports*, 72(3): 1299–1330.
- Cunha, R. and Cooper, C. (2002). Does privatisation affect corporate culture and employee wellbeing? *Journal of Managerial Psychology*, 17(1): 21–49.
- Dastmalchian, A., Lee, S. and Ng, I. (2000). The interplay between organizational and national cultures: A comparison of organizational practices in Canada and South Korea using the CVF. *International Journal of Human Resource Management*, 11(2): 171–182.
- Denison, D.R. (1990). *Corporate Culture and Organizational Effectiveness*. New York: John Wiley.
- Denison, D.R. and Mishra, A.K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*, 6(2): 204–223.
- Erez, M. and Earley, P.C. (1993). *Culture, Self-Identity and Work*. Oxford: Oxford University Press.
- Frankfort-Nachimias, C. and Nachmias, D. (1992). *Research Methods in the Social Sciences*. 4th Edition. Kent, England: Edward Arnold Ltd, 97–426.
- George, D. and Mallery, P. (2003). *SPSS for Windows Step by Step: A Simple Guide and Reference. 11.0 Update*. 4th Edition. Boston: Allyn & Bacon.
- Goffee, R. and Jones, G. (1998). *The Character of a Corporation: How Your Company's Culture Can Make or Break Your Business*. London: Harper Collins Business.
- Hofstede, G. and Bond, M.H. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16(4): 4–21.
- Hofstede, G., Neuijen, B., Ohayv, D. and Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. *Administrative Science Quarterly*, 35(2): 286–316.
- Kaiser, R.B., Hogan, R. and Craig, S.B. (2008). Leadership and the fate of organizations. *American Psychologist*, 63(2): 96–110
- Koopman, P.L., Den Hartog, D.N., Konrad, E., Akerblom, S., Audia, G., Bakacsi, G. et al. (1999). National culture and leadership profiles in Europe: Some results from the GLOBE study. *European Journal of Work and Organizational Psychology*, 8(4): 503–520.
- Larson, M.S. (1977). *The Rise of Professionalism: A Sociological Analysis*. Berkeley: University of California Press.
- Leithwood, K. and Aitken, R. (1995). *Making Schools Smarter: A System for Monitoring School and District Progress*. Thousand Oaks, CA: Corwin Press.
- Maister, D.H. (1993). *Managing the Professional Service Firm*. New York: The Free Press.

- Malos, S.B. and Campion, M.A. (2000). Human resource strategy and career mobility in professional service firms: A test of an options-based model. *The Academy of Management Journal*, 43(4): 749–760.
- Mayo, J.M. (1988). Critical reasoning for an enlightened architectural practice. *Journal of Architectural Education*, 41(4): 46–57.
- O'Reilly, C.A., Chatman, J. and Caldwell, D.F. (1991). People and organisational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34(3): 487–516.
- Pettigrew, A.M. (1979). On studying organizational cultures. *Administrative Science Quarterly*, 24(4): 570–581.
- Reynolds, P.D. (1986). Organisational culture as related to industry, position and performance: A preliminary report. *Journal of Management Studies*, 23(3): 333–345.
- Rokeach, M. (1973). *The Nature of Human Values*. New York: Free Press.
- Rosseau, D.M. (1990). Assessing organizational culture: The case for multiple methods. In B. Schneider (ed.). *Organizational Climate and Culture*. San Francisco: Jossey-Bass.
- Sarros, J.C., Gray, J., Densten, I.L. and Cooper, B. (2005). The organizational culture profile revisited and revised: An Australian perspective. *Australian Journal of Management*, 30(1): 159–182.
- Schein, E.H. (2010). *Organizational Culture and Leadership*. 4th Edition. San Francisco: Jossey-Bass.
- . (1991). The role of the founder in the creation of organizational culture. In P.J. Frost, L.F. Moore, M.R. Louis, C.C. Lundberg and J. Martin (eds.). *Organizational Cultures*. Beverly Hills, CA: Sage Publications, 14–25.
- . (1985). How culture forms, develops, and changes. In R.H. Kilmann, M.J. Saxton, R. Serpa (eds.). *Gaining Control of the Corporate Culture*. San Francisco: Jossey-Bass.
- Scott, W.R. 2001. *Institutions and Organizations*. Beverly Hills, CA: Sage Publications.
- Sheridan, J.E. (1992). Organizational culture and employee retention. *Academy of Management Journal*, 35(5): 1036–1056.
- Tucker, R.W. and McCoy, W.J. (1988). Can questionnaires measure culture?: Eight extended field studies. Paper presented at the *Annual Convention of the American Psychological Association*. Atlanta, 12–16 August.
- Vadi, M. and Alas, R. (2006). Employee attitudes and their connections with organisational culture in the process of change in Estonian organisations. *Baltic Journal of Management*, 1(1): 49–66.
- Van Muijen, J., Koopman, P., De Cock, G., De Witte, K., Lemoine, C., Susanj Z., Papalexandris, N. et al. (1999). Organisational culture: The focus questionnaire. *European Journal of Work and Organisational Psychology*, 8(4): 551–568.
- Wells, M.M., Thelen L. and Ruark J. (2007). Workspace personalization and organizational culture: Does your workspace reflect you or your company? *Environment and Behavior*, 39: 616. Available at <http://eab.sagepub.com/cgi/content/abstract/39/5/616>. [Accessed on 21 September 2007].
- Winch, G. and Schneider, E. (1993). Managing the knowledge-based organisation: The case of architectural practice. *Journal of Management Studies*, 30(6): 923–941.

- Xenikou, A. and Furnham, A. (1996). A correlational and factor analytic study of four questionnaire measures of organisational culture. *Human Relations*, 49(3): 349–371.
- Zahra, S.A. and Hansen, C.D. (2000). Privatisation, entrepreneurship and global competitiveness in the 21st century. *Competitiveness Review*, 10(1): 83–103.

APPENDIX

Questionnaire

Dear Sir/Madam,

Kindly give candid answers to the questions below. The questionnaire is designed to collect information on the culture of architectural firms in Nigeria. I would be grateful if the principal or a senior architect completes the questionnaire. Please be assured that the information which you will provide will be treated in strict confidence and the results will be published only in an aggregated form. Your firm will remain anonymous.

Thank you.

1. When was the firm established?

19..... 20.....

2. How would you describe the form of ownership of this firm?

- [1] Sole Principal [2] Partnership [3] Unlimited liability company
- [4] Limited liability company [5] Public company [6] Not Sure

3. What is the total number of each of the following professionals in your firm?

Professionals	No of staff
a. Architects	
b. All engineers	
c. Quantity surveyors	
d. Builders	
e. Urban designers/others	
f. Administrative staff	
g. Accountants	
h. Others	

4. What is the sex of the principal partner?
 [1] Male [2] Female
5. Please tick the age group of the principal partner.
 [1] Below 30 [2] 31-40 [3] 41-50 [4] 51-65 [5] Above 65
6. What is the highest qualification of the principal partner in architecture?
 [1] HND [2] BSc [3] MSc [4] BArch [5] Others (specify.....)
7. When did the principal partner obtain the qualification above?
 19..... 20.....
8. How long has the principal partner been registered as an architect?
 [1] Above 30 years [2] 24-30 years [3] 16-25 years [4] 5- 15 years [5] Less than 5 years
9. How would you describe the principal?
 [1] A mentor in the firm [2] A visionary and innovative leader
 [3] An efficient manager [4] A productivity-oriented achiever
 [5] Others (Please specify.....)
10. How applicable are the following statements to your firm? Tick the level of applicability on a scale of 1 to 5.

	[1] Not applicable at all	[2]	[3]	[4]	[5] Very applicable
(a) In this firm innovation is very important					
(b) The Staff are encouraged to express their personal styles and initiative					
(c) This firm is concerned mainly about profits					
(d) Teamwork and staff development is very important in this firm					
(e) Employees are driven to achieve results					

-
- (f) In this firm, female architects will be just as easily hired as their male counterparts
 - (g) In this firm, new ideas and technology are the most important determinant of our strategy
 - (h) This firm will aggressively pursue every business opportunities
 - (i) Female architects are given the same job as their male counterparts in this firm
 - (j) Our firm exercises a lot of caution in risky ventures
 - (k) Maintaining a tradition and consistency is important in this firm
-

11. Which of the following is displayed in the reception area? (please tick as many)

- [1] Drawings [2] Models [3] Arts works/paintings
- [4] Plants [5] Awards, plaques, souvenirs [6] Reading materials

12. How is most of your office designed?

- [1] As Cubicles/ individual offices
- [2] Open plan design/ One or two large workspaces for the staff
- [3] Partly open plan and partly cubicles

13. How formal (written or documented) are the following office tasks?

Task	Informal	Fairly formal	Very formal
a. Communication with staff within the office			
b. Communication with other professionals			
c. Communication with clients			
d. Financial matters and budgeting			
e. Management decisions			
f. Staff working conditions and job descriptions			
g. Meetings in the office			

14. Who usually takes decisions about the following?

Issues requiring decisions	Principal Partner	Senior architect	Any architect	Admin. Manager/ Accountant	Any Admin staff	Any staff
(a) How to get new jobs and clients						
(b) Collaborations with other firms						
(c) Managing the non-design staff						
(d) Fees to be charged for projects						
(e) Hiring/ promotion of architects						
(f) Design ideas to use in projects						
(g) Managing projects						
(h) Salaries of staff						

Thank You