

However, some (37.7%) of the principals architects had other qualifications in other architecture related fields in addition to their degrees in architecture (Figure 4.20). It thus appears that very few architects educated themselves formally after their professional education. The additional qualifications indicated included degrees in urban and environmental planning (masters and post graduate diplomas), degrees in management science or international relations, degrees in building, construction management or project management, degrees in information technology and post graduate diplomas in Education. Table 4.1 shows that 31.6% of the principals who had additional degrees had the degree in management or international relations; 21.0% in urban/ environmental planning; 15.8% in information technology, 15.8% in building, construction management or project management and 15.8% in other degrees. It is surprising to note that more of the principals possessed degrees in management related courses than those who possessed degrees in building or construction related courses. It appears the principals found a need for knowledge in management sciences more than in any other area of study.

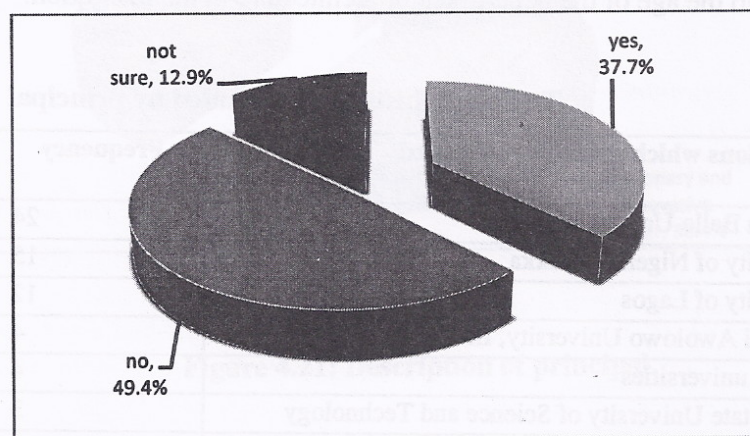


Figure 4.20: Other qualifications

Table 4.1: Additional qualifications of principals of architecture firms

Additional qualifications of principals	Frequency (Number of principals)	%
Information Technology, Computer Science	3	15.8
Urban Planning/ Environmental Planning (Masters and PGD)	4	21.0
MBA, Management Science, International/Human Relations	6	31.6
Building/ Construction management/ Project management	3	15.8
Others (Diploma in Education , Photography, and Energy)	3	15.8
Total	32	100%

4.5.4 Institutions Attended

The study found that the highest proportion of the principals were graduates of Ahmadu Bello University (Table 4.2). This may be explained by the fact that Ahmadu Bello University was that first school of architecture in Nigeria. The second highest proportion of principals (18.1%) graduated from University of Nigeria, Nsukka. It appears that the proportion of principals from each institution is related to the age of the department of architecture in the institution.

Table 4.2: Institution attended by principal

Institutions which principals attended	Frequency	Percent (%)
Ahmadu Bello University, Zaria	24	28.9
University of Nigeria, Nsukka	15	18.1
University of Lagos	12	14.5
Obafemi Awolowo University, Ile Ife	4	4.8
Foreign universities	4	4.8
Enugu state University of Science and Technology	3	3.6
Federal Polytechnic Nekede, Owerri	2	2.4
Ambrose Alli University	2	2.4
University of Jos, Plateau State	2	2.4
Federal University of Technology, Akure	2	2.4
Abia State University, Ogun State Polytechnic, Rivers State University of Science and Technology	3	3.6
Total	92	100.0

4.5.5 Leadership Styles

As shown in Figure 4.21 most of the principals (40.7%) of the architecture firms described themselves as either productivity-oriented achievers or visionary and innovative leaders (38.4%). It was surprising that very few (11.6%) of the principals described themselves as efficient managers, and even fewer principals (9.3%) believed that they were mentors. This implies that little emphasis is placed on the efficient business management and mentoring in the firms but rather on task accomplishment. One of the participants in the interview was of the opinion that most principals did not see their firms as businesses asserting that

The fact is.....we do not run the firms as businesses.

This may be the reason why the principals did not see themselves as managers of firms or as efficient managers.

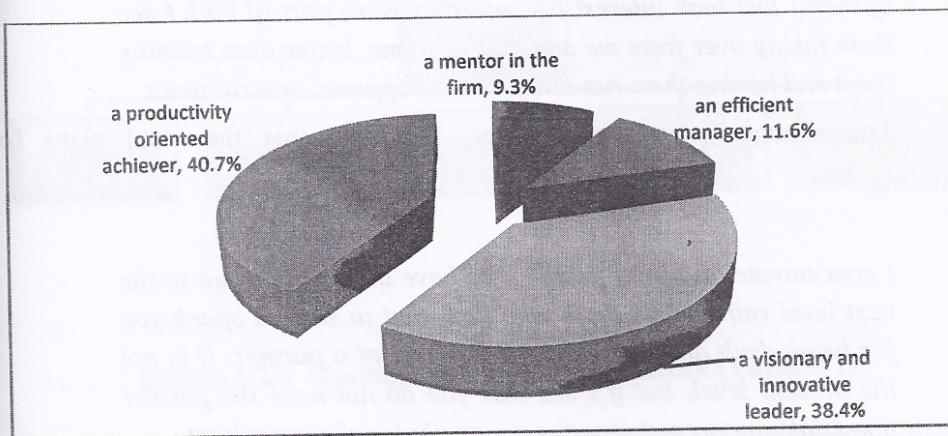


Figure 4.21: Description of principal

With respect to mentoring, most the participants in the interviews agreed that they no longer mentored their members of staff, because of previous experiences. One of the interviewees noted:

... it is very difficult to train anybody. Because some of these young people are not ready to wait, they are impatient and need the money faster than you need. Therefore, hardly can you get anyone to train. Once they have been trained to the point of registering, they pack their luggage and they want to go and establish somewhere else. That is the problem with architecture. That is why you find it very difficult....minus those who are old, you find it difficult to have architecture firms of two or three young people now. Once they distribute the first payment, everybody goes on his own way.

One of the principals who said he had plans for succession had a different type of mentoring plan. He stated that

... I have my two (2) sons who are reading architecture: one in 400 levels and the other one in 200 level. This is Nigeria, why rely on somebody else, when my two sons (I did not force either of them) just took interest because they were part of me? I see them taking over from me and that is, to me, better than training them and having them run away. It has happened several times.

The younger principals however, suggested that they had plans for mentoring.

I concentrate on hiring people who have the ability to go to the next level rather than those who just want to work. I spank you for being drab and not suited to the level of a partner. It is not the present level, but if I see that you do not have the partner potential, you are not showing the attributes of a consultant.

However, only one of the principals interviewed had a structure on ground to mentor staff members.

4.6 Organizational Structures of the Architecture Firms

The study investigated the forms of organizational structure of the architecture firms based on their organizational hierarchy. The firms were asked to

indicate the official titles used in their firms. Four different structures were identified.

In the first form of organizational structure (*Simple Organizational Structure, Variant 1*), the Principal who was the managing director had all other staff members reporting directly to him/her (Figure 4.23). In this form, similar occupations were grouped together, with each member of staff reporting directly to the principal. In this form of organizational structure, all the architects and other staff members worked together on every project. This structure is similar to the organizational structure that Rao and Narayana (2000:185) referred to as the simplified functional structure.

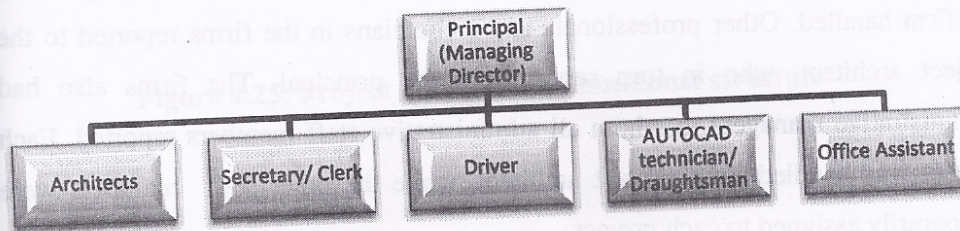


Figure 4.23: Simple organizational structure (Variant 1)

The second form of organizational structure (*Simple Organizational Structure, Variant 2*) found among the firms was similar to the first (figure 4.24), but with the addition of the partner(s) or senior architect(s) taking some of the responsibilities of running the firm. In this form of organizational structure, all the staff members also worked together on every project. These firms sometimes had other professionals.

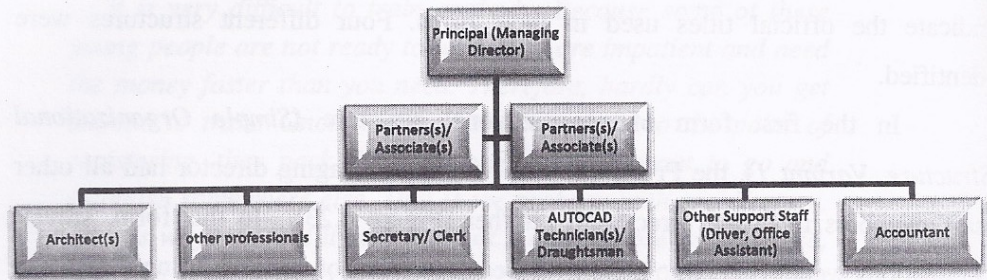


Figure 4.24: Simple organizational structure (Variant 2)

Figure 4.25 shows the third form of organizational structure (*Project Manager Organizational Structure*) found among some of the architecture firms. The firms with this structure had project architects in charge of every project that the firm handled. Other professionals and technicians in the firms reported to the project architect, who in turn reported to the principal. The firms also had administrative managers to whom all administrative staff members reported. Each project was handled by a project architect, while the other staff members were temporarily assigned to each project.

Firms that adopted the fourth form of organizational structure (*Departmental Organizational Structure* as shown in Figure 4.26) had different departments which had specific responsibilities. Each department was headed by a director who was either an associate or a senior architect. Other members of staff reported directly to the directors of their units. The directors in turn reported to the principal or the partners in the firms. Members of a particular department carried out specialized tasks for every project. The staff members that worked with the director of design carried out tasks related to design, while staff members that worked with the director of construction carried out tasks related to construction.

Also, the director of marketing and his assigned staff members sourced for projects for the firms.

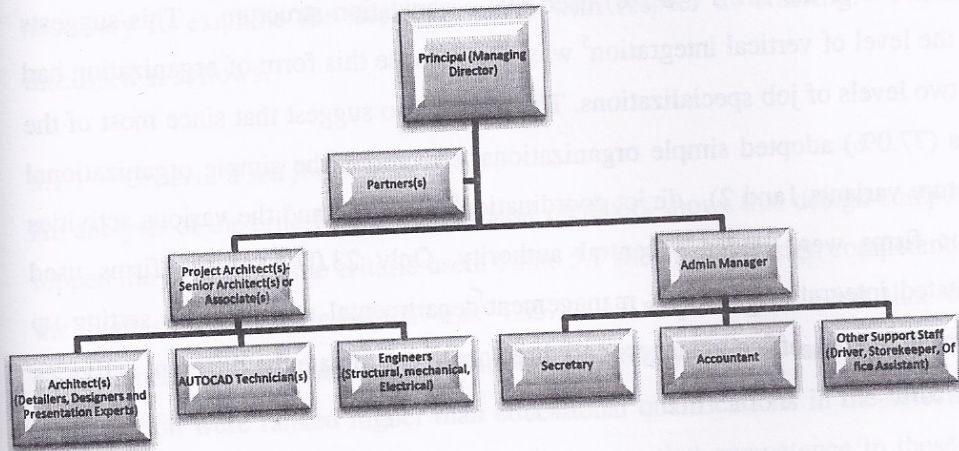


Figure 4.25: Project manager organizational structure

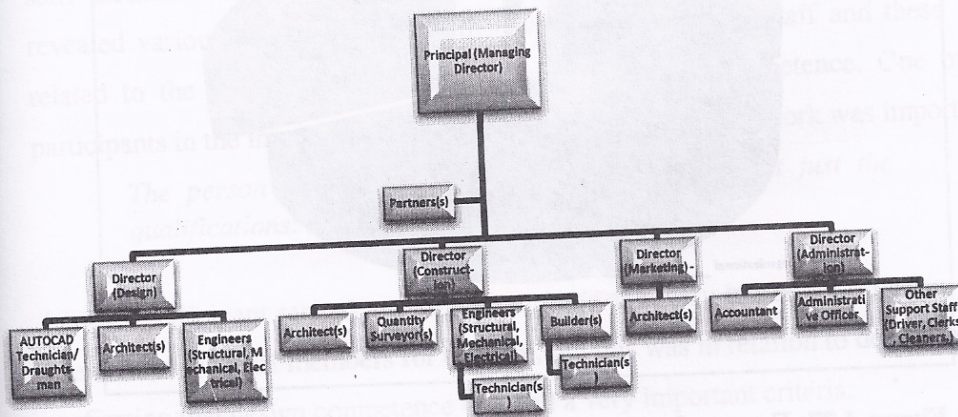


Figure 4.26: Departmental organizational structure

An analysis of the proportions of firms which had the different types of organizational structures is shown in Figure 4.27. The chart shows that the simple organizational structure variant (2) was the most used by the architecture firms. Almost half of the firms (46.2%) used this organization structure. This suggests that the level of vertical integration⁵ was low because this form of organization had just two levels of job specializations. The results also suggest that since most of the firms (77.0%) adopted simple organizational structures (the simple organizational structure variants 1 and 2), direct coordination⁶ was used and the various activities of the firms were under a central authority. Only 23.07% of the firms used facilitated integration⁷ (project management/departmental structure) by setting up project architects, office managers and directors to coordinate the different activities of the firms.

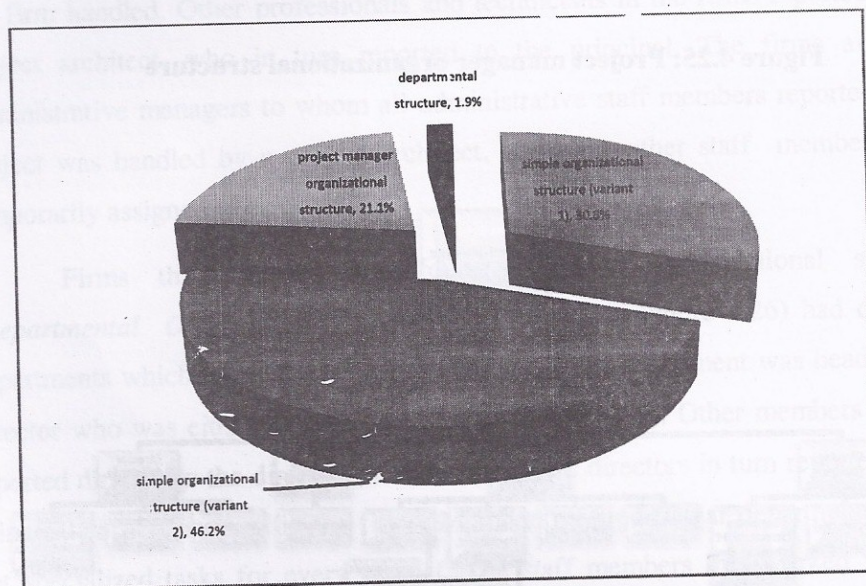


Figure 4.27: Forms of organizational structure of architecture firms

5.0 Strategic and Cultural Issues

5.1 Staffing

The most important resource for the firms was staff members. Hence it was necessary to examine the decisions taken with respect to staffing. These are discussed as follows.

5.1.1 Criteria Used for Staff Selection

An analysis of the criteria used to hire staff members shows that design competence topped the ranking of the criteria used. Table 5.1 shows that design competence had the highest mean score which was 4.55. It is surprising to note that design competence, Autocad skills, Information Technology literacy and knowledge of construction were ranked higher than educational qualifications in the selection of the staff members of architecture firms. It appears that competence in these areas was more important to the firms than the formal degrees earned by the aspiring employees. Interpersonal skills/ managerial skills and personality did not appear as important as design and IT skills from the results. Surprisingly, the gender of the staff members was the least important to the firms. Interviews conducted also revealed various additional criteria that were used in hiring staff and these were related to the goals of the firm and design/AutoCAD competence. One of the participants in the interviews mentioned that capacity for hard work was important,

The person must be able to work with me; it's not just the qualifications: the person must be able to work....

Another participant ranked a *teachable attitude* as a very important criterion in the selection of the staff members for the firm, but this was in relation to design thereby confirming that design competence was still a very important criteria.

...architecture is very difficult to teach. You cannot really teach design, you can teach climatology and all that..... That means they have to learn on the job. So I have moved from hiring people who think they have a terminal degree because they usually come knowing nothing. They think they know, but they do not, so that makes them very difficult to teach. Now, I just hire

those that I can train, so it makes it easy for me. Early enough you begin to learn our culture, how detailed we are.

To another interviewee however, possessing *presentation skills* was an important criterion in the selection of members of staff “... *I have this flair for (good) presentation.*”

Table 5.1: Ranking of criteria for hiring architects

Criteria for Selection of Staff members	Mean score	Ranking
Design competence	4.55	1
AUTOCAD/ IT literacy	4.33	2
Knowledge of construction	4.13	3
Educational qualification	4.10	4
Interpersonal/ Managerial skills	3.72	5
Personality	3.70	6
Gender	2.32	7

5.1.2 Staffing mode and organization of staff members to execute projects

In staffing their firms, most (63.1%) of the firms held a small core of committed staff members and employed additional members of staff as required (Figure 5.1). A few firms (17.9%) employed temporary staff members for each project, and 15.5% of the firms employed all the required staff members. Very few (3.5%) firms indicated that they adopted other modes of organization.

The firms were also asked about how they organized their staff members to execute projects. Figure 5.2 shows that most (40.5%) of the firms organized their staff members as each situation demanded (that is, in flexible ways for each project). The pie chart also shows that 34.5% of the firms used one team to begin and end a project. Very few of the firms either used different teams at different stages of the project or had all hands in the firms engaged in every project.

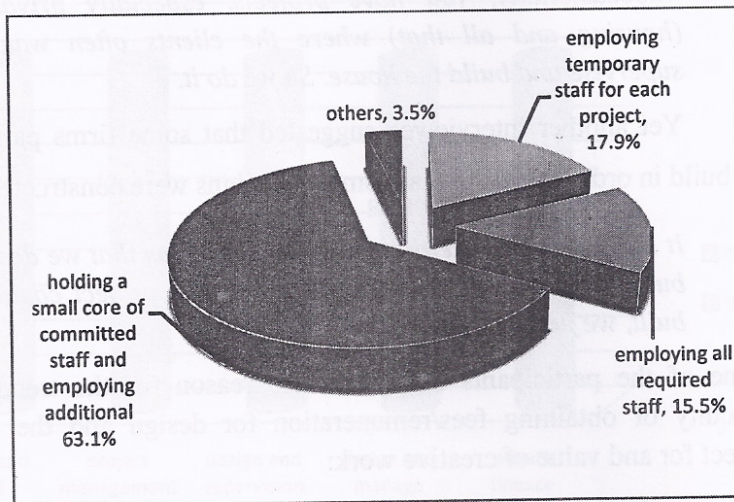


Figure 5.1: Staffing mode of architecture firms

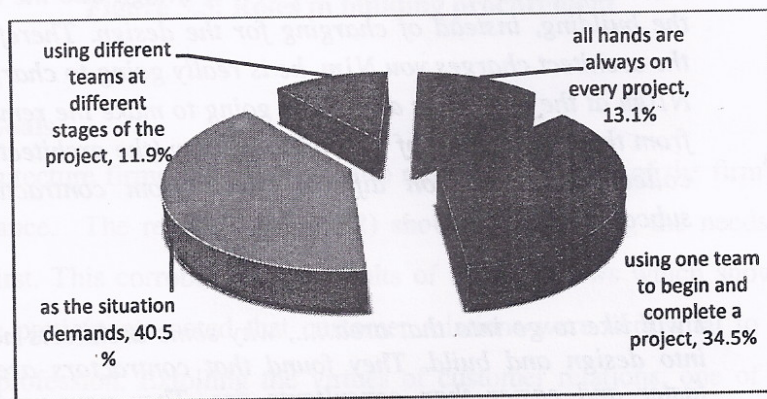


Figure 5.2: Organization of staff members for execution of projects

5.2 Roles of the firms in the procurement of buildings

The firms were asked to indicate the services offered in the procurement of buildings. The result showed that the most firms (70.2%) engaged in *Design and Build* as shown in Figure 5.3. The participants in the interviews corroborate this point. The interviewees gave various reasons for this trend. An interviewee noted that

....occasionally, you have projects, especially private jobs, (housing and all that) where the clients often want us to supervise and build the house. So we do it.

Yet another interviewee suggested that some firms participated in design and build in order to ensure that complex designs were constructed as intended.

It has happened like that on a few occasions that we design and build. When people were arguing that the project could not be built, we just build it.....

Some of the participants noted that the reason for the trend is the difficulty of obtaining fees/remuneration for design and the lack of respect for and value of creative work:

...knowing that people do not respect intellectual property (they can pay for sand and cement but they cannot pay for 'sheets of paper'), some architects tuck the cost of design into the cost of the building, instead of charging for the design. Therefore, if the architect charges you N1m, he is really going to charge you N10m at the end of the day. He is going to make the remaining from the construction of the building. They (the architects) will collect the money on different items from contracting to subcontract.

I will like to go into that area....., why some architects now go into design and build. They found that contractors are paid faster and easier than consultants are. They now went into design and build.

It is surprising that more firms engaged in project management, than the traditional method of designing and supervising the building. More surprising is the fact that there were a number of firms that participated in design and manage as well as private finance initiatives. These suggest that architecture firms in Nigeria are expanding their scope of services.

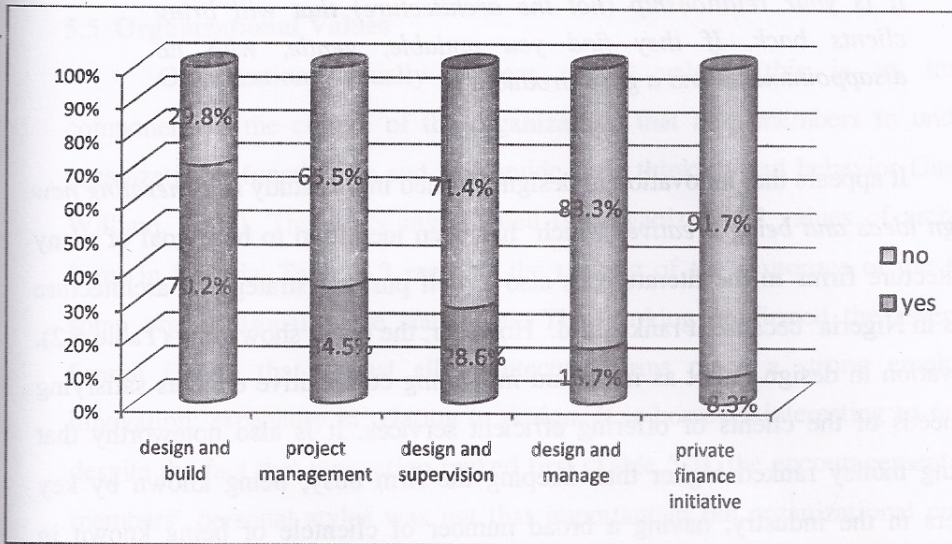


Figure 5.3: Roles in building procurement

5.3 Strategic Goals

The architecture firms were requested to rank the strategies of the firm⁸ in order of importance. The results, (Table 5.2) show that satisfying the needs of clients ranked first. This corroborates the results of the interviews which showed that most of the participants noted that customer relations were very vital to the practice of the profession. Extolling the virtues of customer relations, one of the interviewees asserted that:

....we are very strong in customer service. I actually like my clients, so I cannot hide it. The ones I do not like, I do not bother to work with. Once you like your clients, it is not a problem getting involved. I noticed that I have never lost a client. I have never had a client working with us and working with someone else.

Another participant noted that the relationship the clients had with the firm determined whether the clients continued doing business with the firm again or not:

It is your relationship (not the architecture) that will bring clients back. If they find you amiable, gentle, with no disappointments and a good product.....

It appears that innovation in design (defined in this study as *generating new design ideas and being creative*) which has been identified to be a goal of many architecture firms in the literature, is also a well pursued strategy of architecture firms in Nigeria because it ranks third. However, the result shows that (Table 5.2), innovation in design is not as important in gaining competitive edge as satisfying the needs of the clients or offering efficient services. It is also noteworthy that making money ranked higher than keeping the firm busy, being known by key players in the industry, having a broad number of clientele or being known in important clientele circles. It thus appears that architecture firms would rather pursue very financially rewarding projects than just being busy or just being popular. Ranking last is being known for expertise in particular building types, which confirms the fact that architecture firms in Nigeria do not specialize in any particular building type. Indeed it does not seem that the Nigerian society or the environment of architectural practice have advanced to such a level.

Table 5.2: Ranking of strategies of architecture firms

Strategic Actions	Mean score	Rank
Satisfying the needs of clients	4.89	1
To be known for efficient architectural services	4.69	2
Generating new design ideas and being creative	4.63	3
Service to society/ enhancing the environment by design	4.39	4
Making money	4.22	5
Keeping the firm busy always	4.19	6
To be known by key players in the building industry	4.18	7
Having a broad range of clientele	4.18	8
To be known in important clientele circles	4.11	9
To be known for expertise in particular building types	3.84	10

5.5 Organizational Values

Organizations usually possess shared values (this is an important component of the culture of the organization) that help members to understand organizational functioning and thus guide their thinking and behavior (Jaskyte & William, 2004). The study investigated the organizational values of architecture firms in Nigeria. Table 5.3 presents the ranking of the responses of the firms to some organizational value statements. This ranking confirmed the assertion by Emmit (1999) that almost all architecture firms place a strong emphasis on innovation; especially in relation to design. It is however interesting to note that, despite the fact that innovation ranked first (Table 5.3), the encouragement of staff members' personal styles was not that important in the organizational culture of architecture firms as it ranked seventh. The emphasis on innovation was therefore about the expression of innovative ideas of the principal(s). This may further be explained by the fact that most principals, in the first place, started firms to express their design philosophies. One of the interviewees stated explicitly that all design ideas ought to originate from the Principal:

"...to me, that is where it is because the idea must flow from me...."

Table 5.3: Ranking of organizational value statements

Statement	Mean score	Rank
In this firm innovation is very important	4.52	1
Maintaining a tradition and consistency is important in this firm	4.41	2
Employees are driven to achieve desired results	4.34	3
Teamwork and the development of staff are very important in this firm	4.33	4
In this firm, new ideas and technology are the most important determinants of our strategy	4.16	5
Our firm exercises a lot of caution in risky ventures	4.09	6
Staff members are encouraged to express their personal styles and initiative	4.09	7
In this firm, female architects will be just as easily hired as their male counterparts	4.01	8
Female and male architects are given the same tasks in this firm	3.95	9
This firm will aggressively pursue every business opportunity	3.72	10
This firm is concerned mostly with profits	3.02	11

It is also interesting to note that the next two most important values (apart from innovation) were maintaining tradition (consistency) and achieving results by maximizing the potentials of the employees. This implies that the architecture firms considered establishing traditions very important. It would be worthwhile to investigate in the future the nature of this value and how the firms achieved it. The interviews also show that employees of architecture firms were driven in order to achieve results. This may explain why it ranked high (third) in the culture of architecture firms. The interviews suggested that hiring of staff was mostly influenced by the employer's drive to achieve results as one of the principals commented:

Now, I just hire those that I can train, so it makes it easy for me. Early enough you begin to learn our culture, how detailed we are..... I design everything from toilet to lights....

However, less important values were encouraging staff members' personal initiative, gender equity in employment and task allocation. Indeed, a very low value is placed on gender equity probably because the firms are not gender sensitive and probably because they perceive themselves as private organizations which should have little social responsibilities towards issues like gender equity. The architecture firms were also not very aggressive or concerned with profit as these were the least important issues. This is surprising because the principals stated that most architecture firms in Nigeria were poor economically: "*Architecture firms are not doing well*". You would expect that for this reason they would be very concerned about business and projects. This apathy for aggressiveness in business and profit may be as a result of the difficulties of obtaining remuneration as expressed in the complaints of some of the principals that

I have more of my money outside; I think that's one of the problems of practice...

Consequently, architects may not be as aggressive as expected in strategizing about clientele. In fact, one of the interviewees stated that

I don't choose them (my clients). When they come to me and they want me to do a job for them, I do it for them; I'm not picky if you know what I mean?

This suggests that architecture firms in Nigeria probably do not strategize with respect to clients, but rather, they accept all clients who approach them. Along the same line, one of the principals commented that in trying to keep afloat in difficult times, architecture firms “do other things such as construction, interior design (and) any other thing that comes their way.”

Teamwork and staff development ranked fourth in the culture of architecture firms. The results (the responses were actually about team work than staff development because) of the interviews suggest that the culture of developing and training staff members in firms is low. One principal who was previously predisposed to staff development stated that:

....it's very difficult to train anybody. Because some of these young people are not ready to wait, they are impatient and they need the money faster than you do. Therefore, hardly can you get anyone to train. Once they have been trained to the point of registering, they pack their luggage and they want to go and establish somewhere else.

Another principal shared an experience that made him quit training his members of staff:

I have tried to train people, I have sent out some people to attend courses. Some people went for this 3D Studio Max so that they can be better for the firm. Immediately they finished, they ran away. It has happened several times, so I do not bother myself.

These comments suggest that the low rank of staff development in the cultural scale is probably due to the unpleasant past experiences of the firms.

A factor analysis⁹ was carried out (using the responses to the organizational values in Table 5.3) to determine which underlying factors best describe the cultural values of the architecture firms. Table 5.4 shows that three factors best described these architecture firms. The first factor (which was the most important) was *Goal Achievement and design innovation*. The second factor (next most important factor) was *Stability*, while the third factor was *Business*. This means that the underlying

values of the firms were issues related to achievement, innovation and stability of the firm and they defined the framework by which the firms organized and performed daily business activities.

Table 5.3: Factors of cultural values of architecture firms

Dimension	Representing variables
Factor 1: Goal achievement and design innovation	In this firm, new ideas and technology are the most important determinants of our strategy
	Teamwork and development of staff are very important in this firm
	Employees are driven to achieve desired results
	Staff members are encouraged to express their personal styles and initiative
	In this firm, female architects will be just as easily hired as their male counterparts
	In this firm innovation is very important
	Female and male architects are given the same tasks in this firm
Factor 2: Stability	Our firm exercises a lot of caution in risky ventures
	Maintaining a tradition and consistency is important in this firm
Factor 3: Business	This firm is concerned mostly with profits
	This firm will aggressively pursue every business opportunity

6.0 Types of Architecture Firms

In order, to examine how homogenous/heterogeneous the firms were, the questions used in investigating the profiles of the firms were subjected to a two step cluster analysis¹⁰ to determine the natural groupings of the firms (appendix 4). A five- cluster solution suggesting five types of firms (Figure 6.1) was obtained. The five-cluster solution was found to be statically valid. This validity test provides substantial support for the resulting taxonomy of architecture firms based on the profiles of the firms. Most firms (65.2%) were of two types; Type B and Type C. The other three types of firms (A, D, and E) were not so common. The pie chart shows that, of the 92 firms, 17(18.48%) firms were assigned to Type A; 30(32.61%) firms to Type B; (30)32.61% firms to Type C; 4(4.35%) firms to Type D; and 11(11.96%) firms to Type E.

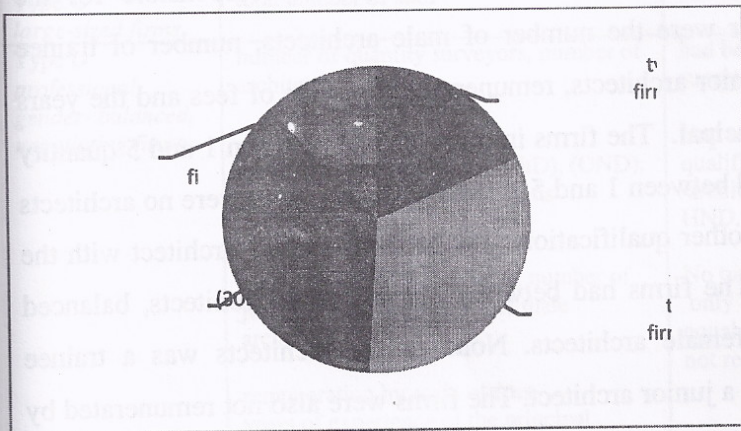


Fig 6.1 Types of firms

Each of the types had specific characteristics. The summary of these descriptions are shown in Table 6.1. Two variables were responsible for the formation of the Type A firms. The first variable was the average size of projects carried out by the firms in the last two years, while the second variable was the sex of the principal. This type comprised 17 firms. The firms in this type carried out small sized projects costing less than N100million in the last two years. All the firms in the type also had principals who were men. The firms in the Type A could be described as *small-project male-headed firms*.

The second type of firm, Type B, comprised 30 firms. The only variable which was responsible for the formation of this type was remuneration by the scale of fees. All the firms in this type were not remunerated by the scale of fees. These firms may be described as *negotiating firms*.

The total number of staff was the only variable that was responsible for the formation of the third type, (Type C) which comprised 30 firms. All the firms in Type C had more than 10 staff members and could be referred to as *large-sized firms*.

The fourth type, Type D comprised just 4 firms and the variables that were responsible for the formation of the type included the number of quantity surveyors in the firm, the number of architects in the firm, and the number of architects with the doctor of philosophy, (PhD), ordinary national diploma (OND), higher national diploma (HND), and other qualifications. Other variables responsible for the formation of this cluster were the number of male architects, number of trainee architects, number of junior architects, remuneration by scale of fees and the years of experience of the principal. The firms in this type had between 1 and 5 quantity surveyors. They also had between 1 and 5 architects. While there were no architects with the PhD degree or other qualifications, the firms had just 1 architect with the OND or HND degree. The firms had between 2 and 3 male architects, balanced with equal number of female architects. None of the architects was a trainee architect, and only 1 was a junior architect. The firms were also not remunerated by scale of fees. Apparently, these firms had mainly qualified and experienced architects and in addition, they had quantity surveyors in-house to deal with project costing/management issues. These firms could be called the *professional, gender-balanced, negotiating firms*.

The variables which were responsible for the formation of the fifth type, (Type E) which comprised 11 firms, included the number of junior architects, and the number of administrative staff. Other variables included the proportions of international private individual clients, religious organization clients and government clients. The firms in this type had more than 1 junior architect, few

international individual clients (most firms did not have any), few religious organization clients and few government clients (most firms did not have any). The firms also employed between 1 and 10 administrative staff members (most firms had between 1-5 or none). These firms can be described as *broad clientele, support-staff, and young architects' firms*.

Table 1. Description of the types of firms

Type	Variables defining the Type	Specific characteristics of the Type
Type A <i>small-project male-headed firms</i>	the average size of projects carried out by the firms in the last two years, the sex of the principal	carried out small sized projects costing less than N100million had male principals
Type B <i>negotiating firms</i>	remuneration by the scale of fees	Not remunerated by the scale of fees
Type C <i>large-sized firms</i>	total number of staff	had more than 10 staff members
Type D <i>professional, gender- balanced, negotiating firms</i>	number of quantity surveyors, number of architects number of architects with (PhD), (OND), (HND), and other qualifications number of trainee architects, number of junior architects, number of male architects, remuneration by scale of fees years of experience of the principal	had between 1 and 5 quantity surveyors between 1 and 5 architects. Had no architects with PhD or other qualifications and 1 architect with the OND and 1 with HND. No trainee architect only 1 junior architect. equal number of female architects not remunerated by scale of fees
Type E <i>Broad-clientele, support-staff, and young architects' firms.</i>	number of junior architects, number of administrative staff. proportions of international individual clients, religious organization clients and government clients.	had more than 1 junior architect and employed between 1 and 10 administrative staff members. Few international individual clients, Few religious organization clients and few government clients.

In summary, the most common types of firms were *negotiating firms and large-sized firms*. These were firms which got their fees by negotiation and firms which had many members of staff.

7.0 Summary and Conclusion

This study set out to examine the characteristics of architecture firms in Nigeria. This involved the examination of the members of staff, principals, clientele and cultural profiles of the architecture firms. It also involved the examination of the IT characteristics, the strategic issues and the organizational structures of the architecture firms. The study found that the profiles of the firms in Nigeria were different from the architecture firms in other countries in some respect and similar in others. With respect to overall firm size, the firms in Nigeria were larger than US firms but of similar sizes with South African firms, had more female principals and had more allied professionals than the firms in Britain. However, the architecture firms in Nigeria had fewer female architects than their counterparts in California and the United States of America. With regard to number of architects in the firm, Nigerian firms had more architects in the firm than firms in Britain. Firms in Nigeria were also different from firms in other countries because they were far behind in the use and availability of Information Technology. This is not unexpected because Nigeria is a developing country. However there was enough indication of an increasing use of IT and greater presence on the web since the study of Fasheun-Motesho (2006). Architecture firms can also no longer be assumed to be homogeneous because the study found that there are indeed different types of firms. All these suggest that architecture firms should be studied as unique organizations and all general assumptions about organizations should not be expected to hold.

The firms in Nigeria were found to have qualified architects as members of staff because most of the principals and architects had the professionally registerable degrees of Bachelor of Architecture (BArch) or Master of Science (MSc) in Architecture. Most of the principals had also worked in two firms for about ten years before starting their firms. Most of the principals had been registered with the professional body for 5 years or more. It was also interesting to

note that more than a third of the principals had other qualifications in addition to their basic qualifications in architecture. Most of those who had additional qualifications had degrees in Project Management and Business Management (MBA). This implies that business-related courses should be integrated into the curriculum of architecture schools in Nigeria to ensure that upcoming architects are thoroughly prepared before they leave school. The need for business training of practicing architects also needs to be addressed through the Continuous Professional Development (CPD) of the Nigerian Institute of Architects.

A high level of availability but low use and presence on the web was found amongst the architecture firms. This, according to Knox & Taylor (2005), implies a low potential for firms in Nigeria to enter into the global world of practice either to influence or benefit from globalization, because IT is both a facilitator and an outcome of globalization. There is thus a need for architecture firms in Nigeria to utilize the opportunities provided by IT in order to operate internationally.

Most of the clients of the architecture firms were sourced through personal contacts. In addition, although innovation ranked first as a cultural value of the architecture firm, satisfying the needs of the client was the most important strategic principle that the architecture firms had. This suggests the need to train architects in managing clients and in issues related to client satisfaction.

It was interesting to note that most of the firms participated in design and build projects and very few firms focused on the traditional architectural services of design and supervision only. It appears that this is an emerging trend for architecture firms in Nigeria and it is challenging the traditional notion of the profession of architecture and architectural services which emphasizes design only. Architects were not known to provide package deals and project management services but this study has shown that architects are expanding their scope of services. It is not certain now whether this is as a result of the current economic recession or whether it is because of new demands from clients. Nevertheless, this is useful information both for the education and training of future architects and for the profession as a whole. The results of the criteria for hiring members of staff