This paper presents an overview of strategies that enhance viable architectural practice. The principal strategy discussed in the paper is diversification. Horizontal diversification which can be achieved moving into more contemporary fields like landscape architecture strengthens the existing operational structure of the architectural practice. The study gives a basic description of the nature of landscape architecture and prospects for its practice by Architects in Nigeria, through a cross sectional survey of selected firms in North Central Nigeria. It also points to challenges of the future of landscape architecture practice in Nigeria and concludes with the recommendation of the use of the diversification strategy to maintain architectural practice viability and professional relevance of the architect as a leader in the building industry.

Keywords: Diversification, landscape architecture, organizational strategies, viable architectural practice. This is an open access article under Creative Commons Attribution 4.0 License.

1. Introduction

The practice of architecture has gradually evolved from the traditional apprentice and master builder guild to the multinational global conglomerates we see today, like Gensler and Skidmore Owens and Merrill in the United States, and in Nigeria Archcon, Multi-Systems, GHK, FMA, James Cubitt Architects among others reveal that the practice of architecture has changed dramatically over the years. In the past, the average Nigerian architect had the opportunity to be commissioned for a plethora of building types. Today, however, the story has changed. The average architect is mainly involved in residential architecture. While residential architecture is a very relevant (we all after all live in houses), the amount of income generated from this building type compared to others does not always ensure billable income for an independent architectural practice. The exception in this building...
type is if the individual architect/firm obtains a large volume of work in this area (housing estates) or as a developer.

Studies confirm that the global architectural landscape is being radically redefined (Prucnal-Ogunsote 1994; Oluwatayo, 2009; Reinmuth, 2011; Robinson 2012). Locally, the Nigerian Institute of Architects (NIA) and the Architects Registration Council of Nigeria (ARCON) have taken a position to radically restructure the professional practice climate for architects in Nigeria. This is against the backdrop of the invasion of foreign firms that threaten to marginalize the Nigerian architect in the practice of architecture as we now it (Imo, 2011; Yusuf, 2012). Ola-Adisa, (2012a) defines plasticity in the practice of architecture as the ability of practices to diversify and maintain a flexibility that will enable the practice remains viable and sustainable regardless of external and internal influences. Indeed, in his ten lessons for an architect, Frank Lloyd Wright declared that, “The architect must be a prophet... a prophet in the true senses of the term, if he can’t see at least ten years ahead, don’t call him an architect” (Pfeiffer, 1994).

Reinmuth (2012) and Robinson (2012) reveal that parts of the architectural profession that will be under the greatest pressure for viability are:

a. Medium sized design-led practices, which will be under pressure from larger practices that understand the ‘business’ of architecture.

b. Small metropolitan ‘boutique’ practices which will be reliant on design-aware clients who are looking to commission exciting and boundary pushing design.

RIBA (2012) in Ola-Adisa (2012b) suggests that the architect of tomorrow may be offering a broader range of services. In a survey conducted by RIBA (2012), a number of the practices interviewed in this study said that they had at times felt restricted by the term ‘architect’, and that it was often the reason they were not able to charge a fee for work that does not fall into the traditional perception of the role. Those who most strongly voiced this opinion considered themselves instead to be ‘spatial agencies’ or ‘design houses’. Many were not ‘architects’ in the formal sense recognized by NIA and ARCON, yet still have a significant role in affecting the built environment – unsupported and unrecognized by the profession.

In plain terms, the allied design professionals may end up taking over the practice of architecture as we know it as they continue to reposition themselves in the building industry. Lawyers are now real estate agents and accountants have become project managers. In order for the architecture firms of tomorrow to survive, there is a need to strategize through diversification into other areas: interior design, landscaping facilities management, project management etc.

2. Organizational strategies and practice viability

Organizational strategies pertain to fundamental pattern of present and planned objectives; they can also refer to combinations of business approaches to achieve task completion and client satisfaction. Walker, Boyd, Mullins & Larreche, 2003; Thompson, Gamble & Strickland, 2004; Ola-Adisa, Prucnal-Ogunsote & Enwerekowe, 2018). The approaches organizations take can be either proactive or reactive indicating of the strategies usually as a response to external or internal stimuli.

Boyd & Danks (2000), view organizational strategies in architectural practice in three dimensions, the Task; the social relations of the project and the professional project of architecture. In the operational model outlined in Figure 1, the model depends task. The task itself consists of four hidden economies which are symbolic, financial, social and functional. The task is the specific assignment that the organization is carrying out. The symbolization and functionalism refers to the design in the case of architecture firms; the supervision of the design development and construction and the occupation of the architect involved in the supervision refers to the financial and social dimensions. The social (or public) relations of architectural practice determine the role of the organization in building the environment., which are negotiated as the project processes. The professional project is the most uncertain strategy in the three dimensions.

The professional project is a longer term strategy, in relation to the social relations strategy ensuring the sustainability of the architecture firm’s authority in the long term as the firm cannot typically determine whether it would be involved in one or all of the various stages of the project, i.e. pre-design, design development supervision, post occupancy evaluation. The uncertainty of the
professional project often leads firms to consider other strategies which can ensure that the practice may be involved in other aspects of the project. This would explore the meaning of architecture and not limit architecture to the core competencies of design and construction alone. Organizational strategies will then expand and redefine the roles of architects in projects to include strategies usually in the areas of risk minimization and management.

Figure 1: An operational model of architecture practice
Source: Adapted from Boyd and Danks (2000)

3. **Diversification as a strategy for viability**

Diversification can be defined as a strategy to reduce risk by investing in a variety of assets. It can also be defined as a means of increasing sales volume from new products and new markets (Kotelnikov, 2013). The two principal objectives of diversification are:

a. Improving core process execution, i.e. the quality and quantity of designs produced and built and/or

b. Enhancing a business unit’s structural position. i.e. increasing the relevance of the business unit (architectural firm) through versatility

The fundamental role of diversification for architects is to create value for clients in ways clients cannot do better for themselves. The additional value is created through synergetic integration of a new aspect of business into the existing one thereby increasing its competitive advantage. Every good architect is expected to possess the potential to design landmark structures like luxury hotels and resorts, but not every architect is equipped to handle a resort golf course design or the landscaping of a hotel (Kotelnikov, 2013). Diversification typically takes one of three forms:

- **Vertical integration:** along the value chain like product design (interlocking tiles, garden lighting etc.)
  a. Horizontal diversification: moving into new industry like landscaping.
  b. Geographical diversification: opening up branches or presence in new locations.

The research specifically addressed horizontal diversification. The means of achieving diversification include internal development, through skill acquisition in landscape design, acquisitions through the outright purchase of a horticultural or hard landscape production outfit and/or, strategic alliances and joint ventures with Landscape architects. As each route has its own set of issues, benefits, and limitations, various forms and means of diversification can be mixed and matched to create a range of options.
The individual architect or architectural firm's core competencies can be defined as skills that the individual or firm can perform better than most other. These can often be extended to areas such as specialized skills like Computer Aided Design and Drafting (CADD) or ability to adapt designs or supervised projects in places beyond those in which they were originally designed for e.g. designs and construction in arid places or under water. They can also be expanding skills to areas not typically considered the preserve of architects. Such extensions represent excellent opportunities for diversification. Kotelnikov, (2013) opines that any core competence that meets the following three requirements provides a viable basis for a firm to create or strengthen its architectural viability:

a. The core competence must translate into giving the firm a meaningful advantage.

b. The new design aspect of the firm must have enough similarity to the main firm to benefit from the firm's core competencies. In other words, it should be fully integrated in order to facilitate team work.

c. The bundle of competencies achieved through diversification should be difficult for others to imitate.

4. Methodology

This study is part of a larger study focusing on architectural practice in North Central Nigeria. The study aim was to gather empirical data on architectural practice, laying emphasis on determining organizational strategies that enhance viability in practice. This was achieved through a questionnaire survey of architects in practice. was administered to principal architects in North Central Nigeria. The area of focus is the North Central Zone of Nigeria which derived from the current division of Nigeria into six geopolitical zones (The Conference, 1995). The area consists of six states, Benue, Kogi, Kwara, Nasarawa, Niger, Plateau and the Federal Capital Territory (FCT).

Two types of tests assessed viability in the selected firms; quantitative and qualitative. The quantitative criteria came through the distribution of a questionnaire survey while the qualitative criteria came through observation, interviews, collation of firm data and use of company profiles. The questionnaire survey was designed to capture data on quantitative factors consisting of firms' ability to obtain new business; perception of profitability; perception of growth and expansion; firms resources; Firms assets; Firms’ cash flow over past three years; turnover or volume of work measured in N10 millions per annum; longevity or age of the firm); resilience or ability to maintain relevance over time.

Quantitative factors also include amounts and quality of intellectual capital; debt profile if any. The study also carefully considered diversification of Services including Arbitration; Architectural Advisory Services; Engineering Services; Feasibility Studies; Interior Design Services; Landscape Architectural Services; Modelling; Project Management; Project Site Master Planning Services; Sales of Building Materials; Urban Planning Services and Valuation.

The qualitative questions posed in the interview schedule included; firms Reputation in the marketplace; ability to differentiate the firm from competitors; quality and depth of portfolio; extent of contacts and resources; current and potential market penetration; skills and experience of key people; breadth of client base and geographic reach; history of repeat clients; particular areas of expertise and delivery methods and efficiencies.

The research posed this hypothesis in order to establish a relationship between enhanced viability in practice and organizational strategies to develop minimum benchmarks for optimal practice. Hypothesis One concerning the tested factors is stated herewith:

H0 There is no relationship between organizational strategy of diversification of services rendered in architectural firms and viability in practice.

H1 There is a relationship between organizational strategy of diversification of services rendered in architectural firms and viability in practice.

Correlation was used to study magnitude of the association and the functional relationship between viability (dependent variable) and architectural practice (independent variables). The Multiple regression analysis technique was also selected to analyse the relationship between dependent variable, viability and independent or predictor variable and architectural practice.
5. Results

The hypothesis was tested using Linear Regression and Pearson's correlation analysis as presented in Tables 1 and 3. A scatter plot (Figure 2) showed a positive linear correlation. A Pearson product-moment correlation explored the relationship between organizational strategy of diversification of services rendered in architectural firms and viability in practice. This analysis was found to be statistically significant, \( (M = 0.898), p < .01 \), indicating a strong positive relationship between organizational strategy of diversification of services rendered in architectural firms and viability in practice. Reliability test was performed using Cronbach’s alpha, (.985) was statistically significant. A Normality Test using Shapiro-Wilk was also significant, establishing normal distribution of the variables.

A regression was performed using viability as the criterion and organizational strategies of diversification of services (e.g. landscape architecture) as predictors in order to determine if viability in practice could be predicted as a function of diverse services rendered in architectural firms. The analysis was found to be statistically significant. The correlation coefficient is 0.762, while the coefficient of determination is 0.581. \( F (118) = 68.66, p < .01 \), indicating that diverse architectural services are good predictors of viability in practice. This regression accounted for 58.1% of the variability, as indexed by the adjusted \( R^2 \) statistic. The variable of Project Site Master Planning as indexed by its \( \beta \) value of 0.931, was shown to have the strongest relationship to viability in practice, while Arbitration Services as indexed by its \( \beta \) value of 0.635, was shown to have the weakest relationship to viability in practice (Table 3).

The Correlation coefficient for the model in general revealed a very strong correlation between Enhanced Viability and the Organizational (survival) strategy of diversification of services rendered in architectural firms. The value for \( R = 0.762 \), meaning 76.2 %, while the coefficient of determination \( R^2 \) which measured the extent to which variation in the independent variable (Enhanced Viability) was explained by the dependent variables (organizational strategy of diversification of services rendered in architectural firms), is 0.581, i.e. 58.1 %. The model summary can be interpreted to mean that provision of diversified services by the firms had influenced the level of viability up to 58.1 %. The remainder of this value, 0.419, or 41.9 % was due to the unexplained variation which is represented by \( U \) in the model. The Sig. \( F \)-change showed that there is a significant relationship between organizational strategies of diversification of services rendered in architectural firms and enhanced viability in practice. The significance is noted because the value obtained .000 is less than the confidence level of 0.05. In carrying out the test, the researcher has made the following assumptions:

a. Five parameters characterize viability in architectural practice: Profitability, Market value, Growth, Organizational Strategies (System and Survival) and Culture (Ideology).

b. The strategy of diversification of services has a significant relationship with viability.

c. The results indicate a significant and strong positive correlation between diversification of services and viability, so the null hypothesis is rejected.

<p>| Table 1 |
| Model summary for test of hypothesis one |</p>
<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R square</th>
<th>Std. error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.762*</td>
<td>.581</td>
<td>.573</td>
<td>.751</td>
</tr>
</tbody>
</table>

<p>| Table 1 |
| Coefficients of hypothesis one |</p>
<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>4.266</td>
<td>.283</td>
</tr>
</tbody>
</table>
Table 2
**Correlation - Diversification of services and viability in practice**

<table>
<thead>
<tr>
<th>Organisational Strategy: Diversification of Services</th>
<th>Viability in Practice</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mean: Diversification Strategies</td>
<td></td>
<td>.898**</td>
</tr>
<tr>
<td>2. Arbitration</td>
<td></td>
<td>.653**</td>
</tr>
<tr>
<td>3. Architectural Advisory Services</td>
<td></td>
<td>.885**</td>
</tr>
<tr>
<td>4. Engineering Services</td>
<td></td>
<td>.815**</td>
</tr>
<tr>
<td>5. Feasibility Studies</td>
<td></td>
<td>.871**</td>
</tr>
<tr>
<td>6. Interior Design Services</td>
<td></td>
<td>.843**</td>
</tr>
<tr>
<td>7. Landscape Architectural Services</td>
<td></td>
<td>.928**</td>
</tr>
<tr>
<td>8. Modelling</td>
<td></td>
<td>.865**</td>
</tr>
<tr>
<td>9. Project Management</td>
<td></td>
<td>.924**</td>
</tr>
<tr>
<td>10. <strong>Project Site Master Planning Services</strong></td>
<td></td>
<td>.931**</td>
</tr>
<tr>
<td>11. Sales Of Building Materials</td>
<td></td>
<td>.730**</td>
</tr>
<tr>
<td>12. Urban Planning Services</td>
<td></td>
<td>.823**</td>
</tr>
<tr>
<td>13. Valuation</td>
<td></td>
<td>.864**</td>
</tr>
</tbody>
</table>

Correlation (R): 0.5 ≤ R ≤ 1 = Strong correlation/association
Correlation (R): R < 0.5 = Weak correlation
*=significant.

This indicates strong correlation between corporate ideologies and organizational strategies and they are all significant.
6. Discussion

Results supported the hypothesis postulated. For hypothesis one, the results were also statistically significant, \((M = 0.863), p< .01\), indicating a strong positive relationship between organizational strategy of diversification of services rendered in architectural firms and viability in practice. As hypothesized, firms that emphasized diversification as a strategy for viability showed enhanced financial performance. The study determined that viability in architectural practice could be achieved through survival organizational strategies as diversification. The results also reveal that Project Site Master Planning as indexed by its \( \beta \) value of 0.931, was shown to have the strongest relationship to viability in practice closely followed by Landscape Architecture with its \( \beta \) value of 0.928. This suggests that architectural firms can diversify especially into Site Master planning and Landscape Architecture in addition to the traditional practice of architecture.

7. Conclusion

In conclusion, as a strategy to maintain architectural practice viability, the twenty first century architect must take a proactive position among building professionals. This includes diversification in the allied fields of landscape architecture, interior design, facilities management and project management. The comprehensive and rigorous training of the architect both in the universities and the internships programmes that follow will ensure that even the average architect can make significant contributions to the improvement of the built environment and secure the future viability of the architecture practice of tomorrow. To repeat the words of Frank Lloyd Wright “The architect must be a prophet... a prophet in the true senses of the term, if he can’t see at least ten years ahead, don’t call him an architect”.

Figure 2: Normal P-P Plot of Regression: Correlation of Diversification of Services and Viability in Practice.
References


