

A Reformation Model of Compliance to Improve the Property Tax Revenue Generation in Malaysian Local Governments

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Abstract: This study is aimed at proposing an extension on Fisher's model of compliance behavior based on empirical findings on property tax revenue generated in Malaysian local government. Adequate delivery of facilities and services alongside community engagement can significantly influence property tax revenue generation. The methodology adopted is a quantitative approach. Questionnaires are administered to about 300 respondents (taxpayers). The findings reveal that poor provision of facilities and services combined with lack of community engagement in local government delivery process results in poor property tax revenue generation. The negative effect is as a result of non compliance in property tax which increases proportionally with inadequate provisions of facilities and services within the local government set-up. This established the fact that in order to improve compliance behavior there is absolute need for adequate delivery of facilities and services alongside community engagement. This requires the need for an extension of the existing Fisher's Model of compliance behavior which is applicable within the context of the case study area. Therefore, an extension of Fisher's Model of compliance proposed is based on these requirements. The proposed model can assist the local governments in dealing with issues associated with noncompliance. Sufficient provision of facilities and services in conjunction with community engagement will motivate the taxpayers to settle their tax obligations. This will certainly encourage community development and improve property tax revenue generated. This study introduces a new property tax compliance model which emphasized on a new approach to property tax by interfacing provision of facilities and services with community engagement within the framework of Fisher's Model.

Key words: Facilities and services, property tax, public engagement, revenue generation, local government

INTRODUCTION

In the modern day architectural practice, creativity skills, technical background, management understanding and knowledge of entrepreneurship are as vital as design for the contemporary architects. Presently, an architect seeking to provide the client's needs on all fronts in this competitive economy is contentious. Hence, architects occupying and acting in the capacity of leader for the realisation of the building project is also not according an automatic status among the building team nowadays. To a greater extent, economic agents of change (technological revolution, economic and socio-political value change) contributed more challenges in the architecture profession in recent time. To apprehend these challenges, we here call for the integration of entrepreneurship teaching into the curriculum structure of architectural education in the Nigerian Higher Learning Institutions (HLIs). Most importantly, possible

ways on how to achieve the architectural-entrepreneurship curriculum integration likely impediments and the demand for a paradigm shift in the training approach of the graduating architect in the HLIs are outlined in this study.

Moreover, education is an enterprise in this era and the teaching process in the educational setting is a metaphorical expression of the function of production in an industrial process. In fact, every HLI is a production hall where educates and ideas consolidate under the supervision of the educators in an academic environment, to produce readymade graduates that are the products of the skilled labour force/market. In the same perspective, Aronowitz (2000) associated contemporary HLIs as a production system that comprises of diverse production lines such as different faculties and departments that supplied the market with assorted products (labour force).

As a matter of fact, Nigerian HLIs' production lines offered varieties of graduates into the currently saturated competitive job market. Though, in the past, the students of HLIs have enjoyed higher employment rates compared to individuals with lower levels of educational qualification (MOHE, 2011) but now it is an idea of the yesteryears. Graduates' employment problem is progressively becoming a genuine concern all over the world (Nunez and Livanos, 2010) and Nigeria labour/job market was even more grievous. The unemployment rate in Nigeria is currently recorded at over 68% (Awogbenle and Iwuamadi, 2010) and this is a serious issue that needs an urgent attention from all the educational stakeholders. The reason is that graduates are future labour force who will become the driving force for innovative and productive high-income economy.

On this account, the critical issue in the academic setting is the capacity to foresee future requirements (Oni, 2000) and the expectations of the trainees (Nikandrou *et al.*, 2009; Andabai, 2012), future markets demand (Akuegwu *et al.*, 2011) and the ability to comprehend the dynamic nature of society (Popoola, 2009). In the case of Nigerian universities, the educational system has fallen short of the anticipated quantity and quality of the echelon required for the economic advancement of a nation (Satope and Oladeji, 2012).

This study is divided into four segments. First, the Nigerian architectural education policymakers discussed. Second, an analysis of the contemporary issue as it relates to the rising unemployment and project commissioning problems in the architectural profession presented. Thirdly, the need and possible approach for architectural-entrepreneurship educational curriculum integration outlined. Finally, proactive implementation guidelines for the actualisation of the architectural-entrepreneurship transformation in the Nigerian HLIs proposed. Most importantly, the adoption or adaptation and strategic implementation for the entrepreneurial-architectural educational curriculum reformation greatly depend on the entire Nigerian educational stakeholders.

However, to have a better perception of the challenges confronting the architecture profession it is first necessary to reflect on these questions. How economically challenged is the architectural profession and how have the educational stakeholders responded to these challenges? Are the stakeholders (educators) adequately informed on the strategic importance of entrepreneurship culture implementation in the Nigerian schools of architecture? How are graduates prepared for enterprise/venture creation after graduation? Do course content and the assessment approach consider business proficiency in the design skills?

Therefore, a critical reflection on the questions mentioned above by way of addressing the future challenges of the architects' professional practice in Nigeria is the core value of this empirical paper. The key variables such as educator competency, entrepreneurship teaching in the architectural course content and impediments of the inclusion of entrepreneurship concept in the architecture education were examined. Finally, we suggested some proactive initiatives for the accomplishment and creation of the new breed of architects for the highly competitive Nigerian job/labour market.

An overview of architecture profession in Nigeria: A critical review on the historical development of the architecture profession in Nigeria, the stakeholders of the profession, the contemporary role of the architect and the challenges arising from the Nigerian economic environment discussed in this section of research paper. The essential for the entrepreneurship teaching in the architectural education and its role in the professional development presented in collaboration with the possible integration viewpoints elucidated.

The architecture profession in Nigeria: A group of architects educated in America and Europe established architectural education programmes in Nigeria. They established the Nigerian Institute of Architects (NIA) in the year 1960. Hence, architects' training proceeded at Ahmadu Bello University and followed by other Nigerian public universities: University of Lagos; University of Nigeria; University of Ife; the University of Jos and subsequent state and private universities respectively. At the beginning, architecture education operated as a single tier program for the duration of five or six years that awarded Bachelor of Architecture as cited by Eneh. Subsequently, the single tier program was re-evaluated and upgraded into a double tier (B.Sc and M.Sc Architecture) as a result of 1990's Nigerian educational transformation.

Currently, the number of universities offering architecture as a discipline had increased beyond twenty-five tertiary institutions including both public and private higher learning institutions (Olotuah, 2006; Oyediji and Tham, 2007). The curriculum structure of the institutions awarding Bachelor of Science in Architecture comprises of general studies, art and sciences courses and technology and computer-aided-design but more emphasis is given to architectural design. Also, the Master of science in architecture curriculum structure covered professional practice, architectural and urban design and research component in terms of thesis and life project. Despite, emphasis on the design still accounted

for the highest credit unit in the second-degree programme course structure that is Master of Science in Architecture.

Besides, Abdulkarim reported that one of the foundational objectives of the double tier curriculum structure for the architecture education is the interdisciplinary linkages within all the faculties at Ahmadu Bello University and achieving this goal is still a mirage till date. For instance, it is infrequent case that architecture students specialise in other related disciplines (construction engineering, real estate and facilities management and urban planning development). In fact, Abdulkarim reaffirmed that there are no interdisciplinary under/postgraduate courses/programmes established to harness the entrepreneurial diversity inherent in the architectural profession in most of the Nigerian schools of architecture.

To buttress the aforementioned gap above, it was observed in the literature as well as in the practice that architecture profession is one of the most encroached professions in the built environment (Gafar *et al.*, 2012; Chakraborty, 2014). In fact, quacks pose more threats than other allied professionals' invasion (engineers; builders; quantity surveyors; bankers; lawyers and so on. The professional encroachment in addition to the Nigeria current economic and political insecurity positioned the graduating architects' employability in the job/labour market to be more competitive (Mukhtar and Salisu, 2010; Gafar *et al.*, 2012).

Besides, scholars have argued about the need to change and stop defending an outdated architectural curriculum structure (Mukhtar and Salisu, 2010). Gafar *et al.* (2012) and Olotuah (2006) reaffirmed that lack of repositioning the profession against the challenges of the new era has created opportunities for other professionals in the built industry to exploit. More so, change is constant, the world is dynamic and that failure to face millennium reality may create more challenges on the way architecture students prepare for the future (Gafar *et al.*, 2012). Certainly, the neglect of entrepreneurship awareness and know-how on venture creation in the architectural training could have more negative impact on the graduating architecture students' employment and self-reliance prospect in the labour market. In summary, the scholars' apprehension about the architecture education is attracting more interest in the academic circle in this day and age (Chakraborty, 2014). The current Nigerian economic uncertainty, market globalization and socio-political realities and insecurity are fuelling this phenomenon.

The stakeholders in the Nigerian architecture profession: The National Universities Commissions (NUC) governs and regulates all the operational structure

of Nigeria education. In addition, the three formidable organisations that play constitutionally responsible roles in architectural education are the Nigerian Institute of Architects (NIA), Architects Registration Council of Nigeria (ARCON) and Association of Architectural Educators of Nigeria (AARCHES). Collaboration exists between these regulatory bodies. The three bodies were constituted with the primary responsibility to regulate and manage the professional ethics and accreditation of architecture education in Nigeria. At the same time, they facilitate the integration of architectural training and professional practice for national development.

The NIA was established for the purpose of upholding the practice of the architecture profession in Nigeria. The membership of the organisation ranges from graduates to the rank of the full member across Nigeria. At the same time, the organisation is a joint member of the International Union of Architects (UIA), Commonwealth Association of Architects (CAA) and Africa Union of Architect (AUA). Subsequently, the NIA is a "non-governmental organisation" that fulfils a statutory function alongside the sister organisation (ARCON).

ARCON, in collaboration with NIA, conducts the examination process for architectural professional licensing. The NIA has the formal legal status in overseeing the process of accreditation of the educational architecture programmes across all the states in Nigeria. The institution constituted the professional practice examinations and the functioning of professional development programmes for members. Also, formulation and regulation of policy, programmes and ethical issue are all within the remit of the NIA. It also has a coordinating role for the students' and practicing architects' interests and welfare. Its other role is the publication of the relevant academic and professional resources for national development. The legal issue as related to the upholding of the corporate image, ethical and professional standards and sanctions as provided in the NIA Code of Conduct and Ethics are wholly within the statutory capacity of the organisation. Lastly, both bodies regulate and manage the admission of the various categories of membership into the institution: Fellow, full member, associate, graduate, student and honorary membership. Finally, the organisation is liable for the planning of the annual workshop, seminar and specialized forum on the innovative building materials and construction technology. Also is the publication of the abridgment as to support the efforts of government and for the use of other groups concerned with national development.

The AARCHES represent a membership of architectural educators in the higher institutions of learning in Nigeria. The body acts in close harmony as

they build on the relationship between the schools of architecture for interdisciplinary intellectual linkages and research development. Though in the past, some scholars have noted that there is a missing link between the practicing architects and their fellow counterparts in the teaching profession (Mukhtar and Salisu, 2010). In this regard, AARCHES had fortunately bridged the gap that may exist then and successfully created the required collaboration and interconnectivity between the educators, students and practicing architects. In a nutshell, the organisations of NIA, ARCON and AARCHES all exist to support the active role architects play toward the sustainability of the Nigeria society.

The Association of Consulting Architects (ACA, Nigeria) is an added companion association of the NIA that comprises of architectural firms and practising architects which is contrarily to the NIA that is an organisation of individual architects in the country. ACA Nigeria, instituted in 2005, is focused on the future and the challenges facing the profession and architectural practices. For instance, it controls the illegal entrance of foreign architects into Nigeria. Daroda (2011) complained about an occurrence in which the Federal Government and private clients engage international architects to work illegally in Nigeria. Part of the core function and scope of the ACA is to promote and empower the home-based architect against the illegal intrusion of the foreign architects.

Furthermore, in the accreditation process of some selected institutions of architecture, NIA/ARCON outlined the crucial role of the entrepreneurship education in the architecture profession and for the onward sustainability of the Nigerian economic development. In the midst of the policy and procedure for accreditation of architectural education as recommended by NIA: the capacity to develop architectural designs with aesthetic value, technical standards and for the advancement of a sustainable environment. Furthermore, the 52nd Conference and General Meeting of NIA communique outlined the "Adoption of entrepreneurial training for the architects and allied professionals to reduce the employment challenges and for the urban transformation and social integration of the Nigerian populace".

Nevertheless, the bone of contention is how to establish and integrate entrepreneurial education in the face of the emerging challenges confronting the architectural profession? Subsequently, rising unemployment and the competition built up among architectural firms seeking for new building projects commissions, both demand entrepreneurship

conceptualisation in the training to create new cutting edge in the architectural practice. At this juncture, we could conclude that all supervisory bodies of the architecture profession have come to apprehend the distinctiveness of entrepreneurship education for the new generation of architects.

The next section takes a critical look at the factors causing architecture profession's challenges as to establish irrefutable reasons for entrepreneurship and innovation in architectural practice. The factors were discussed within the external wave of change the global and Nigeria economy are experiencing as well as the internal training needs for the graduating students' architects.

Contemporary role of architects in the current wave of Nigerian economy: The role of an architect has been renowned to be one of comprise on: building design, construction supervision, specification writing, seldom preparation of the bill of quantity and re-construction building development (Waldrep, 2010). Hence, this customary role of the architect constituted the curriculum development of most schools of architecture (Mimarlik, 2013). As a matter of fact, the recent global economic downturn had made some architects to develop a contrary opinion on the responsibilities mentioned above. As a result, Mimarlik revealed that the traditional approach to architectural practice is incomplete. The architect's beliefs that people will always need to build and that their service falls within the basic needs of human beings but these believe nowadays does not guarantee architect in getting commission/job. In this modern-day competitive economy, cost-benefit analysis of the products and services determine the needs and wants of clients. Therefore, an architect has to search and compete in promoting their products and services to society.

Indeed, if architects are to reoccupy their legendary status and relevancy they were accorded, they have to discover innovative products and services that can draw and not drive, clientele. The reality is that the pull and push factors would determine the noteworthiness of the new age of architects. However, the attraction of clients to architects services might depend on the quality of the designed products and services in meeting the satisfaction of the clients. On this account, Oyedele and Tham (2007) accentuated that building design which commands architectural landmarks and awards are nowadays less important to clients. In review, clients' satisfaction and the changing conditions of the economy would dictate the future direction of architectural practice (Othman *et al.*, 2005; Engelsman *et al.*, 2011).

In the effort to comprehend the challenges the architectural profession is facing in most nations

including Nigeria, it is important to dissect the impacts of the global economy with a focus on Nigeria. In the past decade, the geo-economics scenery of the world has drastically transformed. The same as every profession worldwide, architecture has expanded speedily in the 21st century through various development drivers. The change drivers are multidirectional and are dynamic in character. Leftwich outlined the drivers of transformation in the current competitive employment market and employees workplaces, such as technological revolution, economic change and the socio-political value change.

In the case of Nigeria the economy currently depends far more on the oil earnings compared to the independence era (1960) up to the late 70's economy where agriculture and general trading were the significant contributors to the national GDP. Presently, the agricultural segment and national economic growth has not been proportionate to the fast population escalation. In the past, Nigeria is among the major world exporter of agricultural products but presently is one of the African countries with the major importer of goods and services. In fact, the country is on the list of the twenty poorest nations in the world. Briefly, the agents of economic agents of change and their impact on the architectural profession are discussed as follows.

Instability of economic change: The present day, Nigeria economic scenario is unreliable and it had deteriorated as a result of over dependent on the mono-economy that is oil sector. In fact, Nigerians are facing a declining standard of livelihood and political insecurity. Several commentators have asserted that corruption is the contagious syndrome in the internal economic management of the Nigerian economy (Omotola, 2008). Unfortunately, corruption had infected every sector of the society with the degradation of infrastructure, inadequate health delivery services and high unemployment with rising poverty level in the society. Concurrently, this economic decline must have come to aggravate the crisis of a shortage of jobs for architects and prodigious redundancy in the profession (Daroda, 2011). In this respect, employment opportunities for most Nigerian architects are becoming more competitive, in fact, some are unemployed. Particularly, most renowned architectural firms are out of the job and some were so challenged to the extent that they have changed the line of business.

Technological revolution: Aside from the instability of economic landscape is the power of information technology which has had the most profound effect on the architecture profession (Kolarevic, 2003; Rae *et al.*,

2012). On one side, the transformation of the world into a global village through internet information access has impacted the architect negatively by the creation of new platforms for competition. Hence, the change driver has created globalism architectural practice in the contemporary competitive economy. On the other side, this contest has deployed powerful computer-based technology with a variety of software applications with virtual reality capabilities. In fact, the advent of virtual reality has facilitated both clients and architects in particular in understanding and seeing tomorrow today. The digital revolution in architectural practice will create more fragmentation, offices of the future will be smaller and even develop into transportable offices. Thus, the operational procedures of contemporary architectural work will be in collaboration or partnership approaches by practices networking and traversing a lot of borders online. The new knowledge-based and information age of digital is here. The rethink is for the architects in this progressively more technological innovation that is intensifying complexity and specialisations.

Socio-political value change: Certainly, an assessment of societal value changes associated with modernization, points to an unavoidable transformation in every area of life and behavioural actions (De Groot *et al.*, 2010; Thornton *et al.*, 2011). However, the non-static changing of socio-cultural values in the world today is linked to an assemblage of economic and political reality. The greatest macro-level influence of these value changes on the architect is shown to be significant. In the first instance is the shift of architectural clients from individual to the corporate body clientele. Secondly, is a change in a single home design to a mixed-used-complex design approach (mass housing schemes, condominiums in the major cities, in Nigeria. Thirdly, is the Nigerian citizen's seeking for land, finance, design and private construction that will shift towards total package mortgage facilities. In summary, the new paradigm shift is that architects must all the time consider issues of the changing values of clients, users and design philosophy.

The diversity of services requirements: The client's service requirements and expectations are ever evolving in this modern day. The service expectations on architects are amplifying exponentially, even though the prospects of securing new project commissions are sinking (Engelsman *et al.*, 2011). The project design and construction process needs a wider spectrum of professional on every different proposal. For example, a meaningful and complex commercial mixed-used project will demand a real estate consultant to carry out market and feasibilities studies. Thus, the legal, financial, social

and political implications of such projects are required to counsel the developer for the realisation and success of the proposed scheme. Malhotra and Morris outline the trends of the diversity of architecture services in this modern age. Firstly, in the design and build expertise such as BOT, developer, commercial project and PPP initiatives. Second is the expansion of the service related to the built environment such as real estate transaction, legal, arbitration and tourism enterprise. Third is the technical maintenance expertise in the domain of acoustic, illumination, colour and green energy know-how. Lastly, management expertises in the field of construction, project and facilities management are entrepreneurial trends in the construction industry (Gafar *et al.*, 2012). Therefore, architects under training and already trained need skills coordination in the specialities mentioned above. Fortunately, architects background in combining different components and resolving conflicts of problems into a unified figurative solution could facilitate the capacity to handle the divergent service requirements of this new age.

Competitive market: The current marketplace is so diverse and highly competitive with varieties of producers competing to provide quality and quantity goods and services to meet the satisfaction of the limited number of customers whereas, the situation is not so different in the building industry. Though building construction is a complex process, it now subsists in a complex competitive environment and specialists are required to offer their services to the narrow base of clients in an unpredictable close market. Also, the conflicting nature of the property market and difficulty in making optimum investment decisions set most corporate clientele seeking for multidisciplinary professionals. The rationale for this trend is to circumvent the hurdles of traversing the convoluted market. Thus, the client's preference of a consultant for a given mega-project depends greatly on competency to provide a bundle of satisfaction.

Consequently, Agbo reported that a larger percentage of developers have reduced the involvement of architects in their mass housing projects. The issue of piracy is endemic in the property market (Waziri, 2011). Nevertheless, the upstream and downstream sections in the property market are now rationed between the real estate surveyors and architects. At this point, there exist gaps for an opportunist who can unify the market under one control, just like in the legendary era of the "master builder". As a result, Waldrep Lee criticised architects as being liable for the creation of construction/project and facilities managers as a result of their inability to discharge their full responsibilities and foresee the future. On this account, architects may be set out to grass if they failed to take this entrepreneurial opportunity.

Faber (2010) also stressed that knowledge of real estate management, market analysis and financial principles are the forces that will shape future architectural practice. Likewise, Kersulienė and Turskis (2011) sustained that the firm that will thrive in the future would need to take the initiative to understand their competitive economic climate. In sum, competition is fuelling commercialisation and architect's services now seen as a bundled product. Unfortunately, the current architect training is not adequately preparing them for the competitive world.

Having established the wave of challenges the profession is facing, we propose an architectural-entrepreneurship educational transformation regarding the architects' training and practice in the current competitive Nigerian economic climate. Therefore, subsequent sections take a critical look at the importance of entrepreneurship teaching in the architectural profession.

Entrepreneurship, its education and role in professional development:

Entrepreneurship is one of the most fashionable callings in the academic world and society as a whole. Some of the considerable numbers of factors responsible for the renewed interest in entrepreneurship education integration are the competitive market, economic depression and high unemployment in most developing nations (Chan *et al.*, 2012).

Regardless of interest in entrepreneurship education in tertiary institutions, its definition is still contentious (Matlay, 2008). Opportunity recognition, creation and innovation of businesses and risk taking capacity are common words in the definition of entrepreneurship. The teaching process on how to create and innovate ventures in the academic setting is regarded as entrepreneurship education. Hence, scholars have asserted the benefits of entrepreneurial activities as self-challenge and self-discovery, thus, serving as a pathfinder for self-sufficiency and self-satisfaction (Gafar *et al.*, 2012; Galloway *et al.*, 2006; Rae *et al.*, 2012). In this regard, freedom, financial benefit and economic uplifting of society are the valuable rewards for entrepreneurial success (Jones *et al.*, 2012). Chan *et al.* (2012) recommended entrepreneurship education for the future graduates as a pathway to the academic, professional and leadership success in the modern age.

Despite, effective and efficient integration and provision of entrepreneurship education in the Nigerian higher learning institutions is still a mirage in the current implementation stage. Even though, several commentators have identified the real influence of the economic development within the science and technologically related field of studies. More so, architecture as a profession is one of such discipline that falls within the

real agent of change for the national economic development that is art, science and technical and all-encompasses enterprise disciplines. In fact, Abdulkarim connoted architectural profession as a jack of all trades. Surprisingly, it is within those disciplines that products develop but are not commercialised, often as a result of lack of consciousness of the entrepreneurship process. However, the Orthodox curriculum structure that lacks values of entrepreneurship, inexperienced educators, lack of funding and the restrictions of the professional ethic are other possible reasons.

In spite of the changeable designations of the word “professions”, it is commonly associated with an academic foundation of esoteric knowledge; lengthy education; a model of unselfish services; standard-based practice and regulated by enforceable code of practice. Johnson further ascribed a profession as an “occupational monopoly approach” based on Weber’s theories of competition. Members of professional bodies join as a group of people with the intention: to control market environment for their goodwill, to achieve occupational closure and, furthermore, “professions are legally privileged groups”. Contrarily, the roles of the professional bodies are not only for selfish gratification but onward societal sustainability.

Despite the statutory function of the professional architecture bodies, competition and challenges are enormous and compelling. Against this trend, Parrot suggested the need for the professional organizations to encourage entrepreneurship programs in the university curriculum. Notably, professional bodies should assist in shaping the curriculum for the mutual benefit of the students and their professional success. The architect’s knowledge of entrepreneurship mastery would serve as mechanisms and as a toolkit for controlling the larger share market of the built environment.

Entrepreneurship teaching and architectural curricula; integrational viewpoints: It has been argued that entrepreneurship teaching can impart the skills and business competencies required for the graduating students to succeed in the job market and competitive economy (Fayolle, 2010; Gibb, 2005; Liebenberg and Mathews, 2012; Richardson, 2013). On this account, we postulate three assumptions/suggestions on how to inculcate an entrepreneurship culture in the students of the architecture profession which are: A belief that entrepreneurship is already a part of the training of architect and that architecture is a business in its traditional practice, expansion/upgrading of the economics and management-related courses and the introduction of a new model of architectural-entrepreneurship curriculum structure.

The first assumption: The perception of architecture as a business enterprise in its traditional form and for this reason entrepreneurship must be infused into the complete program of courses. This initiative does not see the enterprise as a sectional component in the traditional training approach. The postulation is that the business issue is in all aspects of the entire course structure. The strong point of this suggestion is that it focuses on the foundation theory and practice and that the entrepreneurship concept is deeply rooted in architecture. The challenge of this viewpoint is the possibility of introducing entrepreneurship into all programs without changing the traditional curricula. The realisation of this ambition is enormous and perhaps too demanding.

The second assumption: The initiative of this approach is to develop entrepreneurship teaching within the existing course syllabus. The actualisation of this initiative is to expand the course modules and increase teaching time for business related courses in architecture (commercial awareness, building economics, management and professional practice). The implication of this integrated approach is that the curricula remain practically unchanged but an expanded version of the related courses’ content is suggested. The integration of entrepreneurship into architectural design studio courses is possible through the commercialisation of the student’s designs and design briefs that focus on the economic reality of the day. The suggestions are more on the need to develop the related courses on the incorporation of design and build perspective (Build Operate and Transfer-BOT, development of commercial and residential projects as a developer and Private Public Partnership initiatives). In addition, expansion of the service related courses in the real estate management and tourism enterprise in the architecture programmes would be of importance to the Nigerian’s economic development.

The third assumption: This perspective on the introduction of entrepreneurship teaching into the architectural curricula is entirely revolutionary. This involves new vision and mission statements, innovative program objectives, a complete restructuring of the courses, course content and pedagogical approaches. The initiative to inculcate entrepreneurship orientation from inception to the end of an architect’s training is the key merit. The time factor of the entrepreneurship training will be appropriate. The rebranding of the architecture training and practice reorientation is achievable. The impediments to this approach are in the area of government policy, regulatory bodies, funding, human resources capacity and training, socio-cultural value and, the desire and readiness of the students in the various institutions of architecture.

In summary, none of the postulated approaches has merit without possible shortcomings. Therefore, we suggest all the possible alternatives without promoting one over the other. In fact, the choice of the path of integration depends greatly on the resources at the disposal of the institution and the quality of leadership available to effect the implementation. With this in mind, Nigerian policymakers have been known for their excellent white paper work but poor implementation. In this regard, the next section of the article outlines a brief assessment of the level of entrepreneurship teaching and potential barriers to its integration.

MATERIALS AND METHODS

Research participants: The research survey instrument employed to assess the level of entrepreneurship integration in some selected schools of architecture in Nigeria. The study population consisted of four public universities that offered degree programmes in architecture: University of Jos (UJ); Ahmadu Bello University (ABU); Abubakar Tafawa Balewa University (ATBU); Federal University of Technology Minna (FUTM). Purposive sampling technique used for the data collection from the 400 respondents target in the institutions mentioned above of architecture. From the critical literature review, the research's questionnaire was adopted from Khayri study. The structured questionnaire sectioned into two parts. The first part focused on how to achieve integration of entrepreneurship teaching into the architectural training of the graduating student while the second part was to identify the possible militating factors.

A total of 388 (97%) of the administered questionnaire were duly filled and returned. The questionnaire's scale of measurement was set on a five-point Likert scale ranged from strongly disagree 1-5 strongly agree. The reliability test for the research instrumentation was established with the calculated Cronbach's alpha (α). The data collected presented an acceptable test of reliability with the Cronbach's alpha of 0.76 and 0.91 for the two segments of the questionnaires. Statistical Package for Social Science (SPSS) Version 20 with the simple descriptive analysis employed to establish the level of the entrepreneurship awareness of the educators and students of architecture is the selected institutions.

RESULTS AND DISCUSSION

Respondents' demographic information: Of the 388 questionnaires received out of the 400 questionnaires administered to the population of 1568 undergraduate students and 134 educators in the surveyed four

universities. Out of the 388 respondents, the students constituted 328 (84.5%) while the remaining 60 (15.5%) were educators. Meanwhile, it only the first year students of architecture that participated in the compulsory entrepreneurship education programmes as stipulated in the current curriculum structure in the selected universities. In Table 1, respondents' demographic distribution is presented.

As Table 1, it was evident that the respondents were predominately male in the both groups (students and educators). The research sample's gender distribution was not unexpected because architecture profession is known to be a male-dominated discipline in practice. The students and educators quota for each institution was fairly even and this is to give the four institutions fair participation with little or no biased. The slight difference in the frequency distribution of ABU is because it is the pioneer school of architecture in the Northern Nigeria.

Students' entrepreneurship awareness: The purpose of the education of entrepreneurship in HLIs is to increase the students' entrepreneurial know-how and self-employment intention (Souitaris *et al.*, 2007; Nabi and Holden, 2008; Collins *et al.*, 2004; Matlay, 2008; Fayolle *et al.*, 2006). The research finding revealed that students' entrepreneurial awareness is predominately in the theoretical aspect of entrepreneurship understanding.

As presented in Table 2, items of theory on the basic business start-up concept and knowing the responsibility of entrepreneurs scored highest. In another word, it can be interpreted that students' theoretical understanding of entrepreneurship prevailed the practical/innovative skills

Table 1: Respondents distribution

Variable	Frequency	Percentage	CF	CP	Total (%)
Respondents					
Students	328	84.5	0	0	
Educators	60	15.50	388	100	
Gender	Students	Educators	F (%)		
Male	241	46	287/74	0	
Female	87	14	101/26	100	
Institutions	UJ	ABU	ATBU	FUTM	
Students	73	102	75	78	
Educators	15	15	15	15	388/100

Table 2: Architecture students' entrepreneurial awareness

Items of entrepreneurial awareness	Frequency	Percentage approximate
Theory on basic business start-up principles	169	100
Business planning concept	120	71
Business finance methods and approaches	109	65
Entrepreneurs' characteristic and responsibilities	107	63
Family business exposure	70	41
Market analysis for new business creation	52	31
Business idea development and innovation	38	23
Business problem recognition and solution develop	32	19
Business proposal writing	26	15
Business networking/e-ventures creation	11	7

Table 3: Educators' academic qualification and entrepreneurship experience

Qualification and experience	Frequency	Percentage
Bachelor degree	0	0
Master degree	46	76.7
Ph.D	14	23.3
Academic ranks		
Assistant lecturer	6	10
Lecturer I or II	36	60
Senior lecturer	9	15
Associate professor	7	11.7
Professor	2	3.3
Teaching experiences (years)		
1-5	20	33.3
6-10	28	46.7
11-15	6	10
Above 16	6	10
Areas of specialization		
Housing	24	40
Education	17	28.3
Technology	4	6.7
Sustainability	7	11.7
Entrepreneurship	2	3.3
Estate/Facilities management	5	8.3
Other area of specialization (specified)	1	1.7
Area of research publication and training	Yes (%)	No (%)
Have you conducted research in area of entrepreneurship?	2 (3.3)	58 (99)
Do you have publication on the area of entrepreneurship?	5 (8.3)	55 (91.7)
Do you have publication on business start-up project?	7 (11.7)	53 (88.3)
Do you involved in business idea development to building project?	42 (70)	18 (30)
Do you have training in the area of soft business skill?	29 (48.3)	31 (51.7)
Sources of knowledge-ability on entrepreneurship training	Yes	No
Private initiatives	26 (43.3)	34 (56.7)
Industrial attachment	60 (100)	0 (0)
Professional practice	37 (61.7)	23 (38.3)
National media/library	34 (56.7)	26 (43.3)
Conference/seminar	7 (11.7)	53 (88.3)
Hands-on workshop/training	4 (6.7)	56 (93.3)

inculcation aspect/approach of enterprise/venture creation which is the core value of entrepreneurship teaching in the HLIs. The finding of this research is harmonious with Gerba (2012) study.

By implication, the results of the analysis indicated that the reality of architecture students opting for self-employment and possible venture creation after graduation is not visible and practical in the nearest years to come. The empirical findings of this study show that there is a need to adopt/adapt and implement one of the proactive aforementioned three-point suggestions/assumptions to arrest this trend.

On a practical note, we suggested the third assumptions on the need to introduce a new model of entrepreneurship teaching into the architectural curricula that are totally revolutionary. Because, we believe that development of a new vision and mission statements, innovative program objectives and restructuring of the architecture program's courses and content and pedagogical approaches could only guarantee a sustainable inculcation of entrepreneurial culture among the students' of the Nigerians' HLIs, particularly, in the architecture professional advancement.

Educators' entrepreneurship awareness and knowledge-ability: Many scholars acknowledged the importance of the entrepreneurship providers that is educators' entrepreneurship competency (Matlay, 2008; Jones *et al.*, 2012). In fact, Fayolle *et al.* (2006) stated that educators' competency is the success factor for the entrepreneurship proclivity of the students of HLIs and architecture students are no exception. Given this, the research equally assessed the educator's qualification, competency, awareness and source of their knowledge-ability on the entrepreneurship knowhow. Table 3 presented the research findings on the educators' entrepreneurial capacities.

The outcome showed that educators' knowledge and competency entrepreneurship acumen is weak. More so, educators who are the provider of entrepreneurship development in the HLIs scored items on the practical training approaches for the development of entrepreneurship competency and skills enhancement less. Even though, several commentators stressed the significance of training (workshop, conference and publication) to the entrepreneurship development in HLIs (Matlay, 2008; Gerba, 2012).

Table 4: Impediments to the entrepreneurship process in the architectural training

Order of ranking	Impediments grouping	Frequency/Yes (%)	Percentage/No (%)
1	Funding problem	312 (80.4)	76 (19.6)
2	Curriculum structure (course content) problem	301 (77.6)	87 (22.4)
3	Government educational policies problem	296 (76.3)	92 (23.7)
4	Nature of the entrepreneurship (taking risk) problem	235 (60.6)	153 (39.4)
5	Educators as the entrepreneurship problem	223 (57.5)	165 (42.5)
6	Tangible and intangible resources problem	169 (43.6)	219 (56.4)
7	Trainee (student) problem	158 (40.7)	230 (59.3)
8	Societal and cultural problem	119 (30.7)	269 (69.3)
9	Regulatory bodies problem	76 (19.6)	312 (80.4)

The essential mechanism and approaches on how to advance educators' academic, practical entrepreneurship knowledge indicated a single digit percentage (4, 6, 4, 8 and 15%). The implication is that the educators have diminutive entrepreneurship knowledge-ability in the entire surveyed public universities and their training inclined more towards the profession-based as against the reality of the Nigerian's current economic dispensation that demand new age entrepreneurial-architects. This could create a serious challenge on the entrepreneurial inculcation on the students because educators are the gateway to HLIs' entrepreneurship success. The research finding is consistent with the past renowned scholars study outcomes (Ooi and Ali, 2005; Nkirina, 2010; Gerba, 2012).

The implication is that the educational architecture stakeholders in the surveyed institutions are required to establish training and re-training programs for the architectural education educators in the domain of entrepreneurship development.

Impediments to the entrepreneurship process in the selected schools of architecture: From the literature, considerable number of impediments emphasized by several commentators and all were grouped under nine key points as outlined in Table 3. Hence, the respondent's scores of the major hindrances to the process of the entrepreneurship teaching and development in HLIs tabulated in Table 4.

As scored in the collected respondents' (students and educators) questionnaires, categorically, the provider of the entrepreneurship education in the capacities of funding, curriculum structure, government educational policy as well as risk taking and educators issue were ranked highest on the impediment's score list. The government funding, course content and curriculum structure ranked uppermost as the fundamental challenges to the development of entrepreneurship education in the HLIs were not surprising. The reason is that they are primary formulator, curriculum designer and administers of the entrepreneurship teaching in the HLIs.

They are the gateway for entrepreneurship career development. If the educators have the diminutive entrepreneurial know-how then no/less meaningful progress could be achieved in the rebranding and repackaging of the graduating students of HLIs, particularly, architecture students are no exception.

In fact, the entrepreneurial proficiency of the educators unswervingly impacts their students' entrepreneurship reorientation as supported in the studies of notable researchers (Fayolle *et al.*, 2006; Matlay, 2008; Liebenberg and Mathews, 2012; Gerba, 2012). In the same perspective, it is evident from this research finding that incompetent human resources capacities and inadequate entrepreneurship training initiatives for the HLIs' educators would have a grievous implication for the graduating students' entrepreneurship transformation for sustainable job creation and employment prospects in the future.

CONCLUSION

The architects' roles in the current competitive economic dispensation are very exigent. In fact to be successful as an architect, the reality is to develop a solid understanding of the economic climate and the principles of business and management strategy for the architectural organisations' productivity and sustainability. More so, it entails the application of SWOT analysis (strength, weakness, opportunities and threats) of the competitors, their products and services and their operational strategies. Architects understanding of the major change agents in the Nigerian business environment would provide a competitive advantage for their architectural practice.

The explicitness of architects' role in the contemporary knowledge-age economy is not unique to technical know-how only. Essentially, an architect must focus on a paradigm-shift for entrepreneurship-architectural practice, if not he/she may as well change profession. The guarantee for success in this new age is for the new breed of architects to be techno-entrepreneurial creative thinkers. That is, architects who will champion in the current Nigerian economic uncertainty, market globalization and

socio-political insecurity must develop capacities in creating cutting-edge enterprises by integrating the concept of art, business and technology.

RECOMMENDATIONS

Based on the researcher's experience, critically reviewed of literature and analysis of research findings for the integration of entrepreneurship teaching into the architectural education, we propose an outline of the possible recommendations to promote entrepreneurship orientation.

At the national level, the government's education policymakers should review the university's curriculum to embrace entrepreneurship orientation at all level of education. Media initiatives (TV and radio, the internet and news magazines) should be used to promote entrepreneurship rebranding programs. Also is the establishment of entrepreneurship skills acquisition centres nationwide.

At the university level, the university's curriculum design and course content developers should review and introduce enterprise course content into both studio and non-studio courses (business, management and economic principles) based on the aforementioned assumptions. Undeniable provision of compulsory/voluntary and periodic entrepreneurship training programs for the architecture educators in the Nigerian HLIs. It is important to develop inter-faculties integration and linkages for the entrepreneurial cross-fertilization of professional programs in the Nigerian HLIs.

Development of universities-industries collaboration with the purpose of establishing research and entrepreneurship commercialisation is vital for students' job placement and employment creation.

The regulatory bodies such as NIA, ARCON, AARCHES and ACA Nigeria should provide intellectual (tangible and intangible) supports to enhance the future architectural training and practice within the techno-entrepreneurial perspective. For instance, the accreditation exercise should emphasize on the curriculum integration of entrepreneurship course content into the architecture programs. Also, Architects' Professional Examination and Registration Council should incorporate entrepreneurship and commercial innovation into their professional assessment criteria for membership and yearly meritorious awards.

Lastly and most importantly, funding is a critical factor in the realization of the Nigerian economic transformation, particularly, Vision 2020. Therefore, adequate funding from all arms of Nigerian government (federal, private and non-governmental organisations) and judicious allocation and monitoring of the same from the universities' administrators to programmes/research that focus on entrepreneurship development is essential.

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