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Employers' Demand for Built Environment Professionals' Employability Skills in Nigeria: Content Analysis of Job Advertisements

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Abstract

The proportion of unemployed professionals in the built environment in Nigeria is alarming; yet there is an acute shortfall in skilled manpower in the construction industry, as employers continue to face recruitment dilemma due to paucity of applicants with the requisite employability-characteristics. This study, therefore, examines the job and person specifications required in job advertisements for professionals in the built environment. Conceptual content analysis was used to extract data from 500 job advertisements using quota sampling technique from a heterogeneous population, following which descriptive statistical methods were adopted for analysis. The study reveals the following in the built environment in Nigeria: Architects, Estate Surveyors and Quantity Surveyors are dominant job titles in advertisement for professionals; Lagos, Port Harcourt and Abuja are the major hubs for employment; job related employability characteristics include possession of B.Sc. degree/HND, with 3-5 years post qualification work experience, but without reference made to classification of degree or diploma; and dominant personal attributes required of applicants by employers are reliability, confidence and good attitude; Estate Management profession is highly sought after by employers. Therefore, to enhance graduates' employability, the study recommends mandatory one-year on-the-job industry experience as part of hard skill requirements; a balance in hard and soft skills, and increased budgetary allocation for education and further training of graduates in the discipline in high demand by employers.

Keywords: Built environment profession, employers' demand, employability skills, job advertisement, Nigeria

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1.0 INTRODUCTION

Globally, the construction industry is perceived as an employment generating sector. In Nigeria, the construction industry employs about 25 percent of the nation's workforce along its value chain, making it the highest employer of labour after agriculture (NBS, 2015). It also contributed 4.09 percent to real Gross Domestic Product (GDP), and about 70 percent Fixed Capital Formation in the first quarter of 2019 (NBS, 2019). However, despite the huge employment potentials and the contribution of the construction industry to national development, the professionals in the built environment in Nigeria face employment challenges. Recent official data on youth (age 15-35) unemployment in Nigeria shows that 29.7% of the youth are unemployed, and a further 25.7% underemployed (working below 40 hours a week). This comes to 55.4% (CNBC Africa, 2019; Mailafia, 2020). Adesina (2013) traces increased security challenges in Nigeria to the high rate of unemployment. Unemployed graduates tend to be more anxious, depressed and unhappy leading to increased rate of cybercrime, kidnapping, armed robbery and suicide among other social vices. This situation has negative implications on the economy, retarding the economic growth of many developing countries of which Nigeria is one (Akinyemi et al., 2012). Some of the unemployed professionals in the built environment have taken solace in pursuing higher academic degrees pending availability of employment opportunities. The authors observed that in 2018, over 600 candidates wrote the postgraduate entrance examinations into eight academic programmes in the built environment in the University of Lagos, which is one out of several tertiary institutions in Nigeria. The scenario may not be different in other universities offering related academic programmes in the built environment.

The built environment refers to the man-made environment, and includes both the buildings in which people spend their time (home, school, workplace, factories, etc), and their supporting infrastructures. The Built Environment Professions (BEPs) comprise several specialised disciplines in a bid to meet the changing needs of clients and cope with the complexities of modern construction. Professionals in the built environment include Estate Surveyors and Valuers, Land Surveyors, Civil/Structural Engineers, Builders, Mechanical and Electrical (M/E) Engineers, Town Planners, Architects, and Quantity Surveyors. Currently, there are 100 tertiary institutions producing thousands of built environment professionals annually for the nation's construction industry. This is made up of 47 Universities and 53 Polytechnics and a total of 502 approved academic programmes in built environment in Nigeria (Bolaji, 2020; JAMB, 2019).

Some scholars and commentators have argued that the average Nigerian graduate is not employable and therefore does not possess the characteristics needed by employers of labour for formal employment. Earlier studies identified causes of unemployment challenges among graduates. Akinyemi et al. (2012) attributed the high rate of unemployment among graduates to lack of requisite employability skills and competences. Awogbenle and Iwuamadi (2010), and Morphy (2008) opined that outdated school curricula and lack of employability skills are the root causes of unemployment among graduates. This assertion was corroborated in a study of employers' expectation of employability skills of Estate Management graduates in Nigeria (Ayedun et al., 2013) which revealed that employers expect certain basic skills from job seekers. Eldeen et al. (2018) established that employers in various countries including USA, Ireland, South Africa, Australia among others, expect graduates to possess skills other than mere subject knowledge skills. Saad and Majid (2014) blamed the educational system and practices in developing countries which focus on theoretical concepts rather than practical learning on the unemployment challenges, thereby reducing graduates' chances of meeting the demands of their employers. The lapse in these studies is that they were all based on survey with its associated weaknesses, including respondents' apathy. The gap to be filled in existing studies is to document Nigerian employers' views on employability attributes (hard and soft skills) required of built environment professionals, and to reveal the built environment discipline in high demand by employers. Another gap in the previous studies was the adoption of survey methodology which is here replaced with content analysis. The aim of this study, therefore, is to examine job advertisements in the Nigeria print and electronic media, with a view to identifying job titles, skills, and other employability characteristics that are in high demand by employers. Specific objectives are to: (1) identify employability skills required of built environment professionals by their employers (2) identify important non-job related requirements expected of professionals in built environment and (3) investigate the built environment professions currently in high demand by employers.

It is hoped that this study would provide the relevant information for graduates in the built environment to enable them equip themselves with the required or appropriate employability attributes to join the workforce. The study would also be beneficial to employers of professionals in the built environment, since valuable cost and time required to be spent in retraining fresh intakes can be reduced if the right sets of qualified graduate are available to make immediate contribution to a business. Tertiary institutions will also benefit from the outcome by restructuring their programmes to meet industry employability requirements.

■2.0 LITERATURE REVIEW

2.1 Built Environment Professional Skills

Construction projects involve team work and, depending on the type and nature of construction operation, different built environment professionals are involved at various stages of a project (Owolabi & Olatunji, 2014). Prior to project initiation, the land surveyor and the Town/Urban planner play vital roles. The land surveyor is concerned with the size, topography, location, features on and beneath the land upon which any development is built, including issues related to land ownership and property boundaries (Anyanwu, 2013). No proper, effective and accurate planning, design and execution of building projects can be carried out without the input of the land surveyor. The Town/Urban planner's principal role on the other hand is that of development control which has to do with physical, social and economic planning of development within regions and sub-regions, layout plan, transportation plan, processing building plans for proposed projects among others (Waldigit, 2013).

From project initiation through procurement to handover, the Architect, Civil/Structural Engineer, and Mechanical/Electrical (M/E) Engineer are responsible for their respective designs, while the Builder/Construction Manager and Quantity Surveyor play managerial roles at the construction stage. The Architect helps the client to formulate his requirements in an understandable form, bearing in mind the statutory conditions that may apply, and prepare, detailed working drawings and specifications besides other roles. The Structural Engineer carry-out structural analysis to produce structural drawings of foundation, columns, and beams among other structural elements; specifications; schedules and other relevant data that may be required for the overall structural integrity of the project. Building services experts perform the mechanical and electrical engineering services in construction. Their roles essentially involve making buildings comfortable and safe for people to live, work or learn in. They work with the Architect and Structural Engineer to ensure a building is in the right temperature, and it is well-ventilated and well-lit among others thus ensuring functionality (Hussin & Omran, 2009). The professional at the heart of the physical construction of buildings is the Builder. Hussin and Omran (2009) assert that the builders' role in building development process in general is to translate designs, working drawings, schedules and specifications into a physical structure. According to Anyanwu (2013), the builder brings his production management expertise to bear on the necessary resources on the site for execution of building projects. The Builder's role in building development process starts from the planning/design stage but takes prominence at the construction stage. The Quantity Surveyor render essential services to the client as he is responsible for measurement of quantities, preparation of preliminary estimates, bill of quantities, procurement advice, contract administration and cost control throughout the construction process. The Estate Surveyor and Valuer is involved right from the conception stage of a project especially when the project is being undertaken for investment purposes, and it is necessary to conduct feasibility and viability study to protect the investment. He is also involved in land acquisition and land optimization prior to project initiation. His involvement also extends to the operational stage of a project, were he is involved in facilities management, and property valuation.

2.2 Employability Requirements of Built Environment Professionals

Job advertisements often contain job specifications, which describe what a job entails, minimum skills needed for a job, knowledge and abilities required to perform a certain job effectively. Those requirements are the attributes that determine the employability of a job applicant. The employer considers those requirements essential to satisfactory performance on the job. Job requirements may include specific skills, area and length of work experience, personal qualities, educational qualifications, professional certifications, or areas of knowledge (Doyle, 2019).

Employability skills can be classified into: transferable/functional skills (basic skills); personal traits/attitude (soft skills); and knowledge based skills (hard skills). Hard skills comprise formal education or training in a particular field of study, and work experience.

They are associated with competencies in a specialized area, analytical ability (ability to use appropriate tools and techniques) and academic knowledge. McMurray et al. (2016) study reports that employers value good relevant work experience. Work experience was also seen to improve soft skills, increase confidence, produce more rounded individuals and improve their connections to the labour market. Soft skills on the other hand are skills, abilities and traits that pertain to personality, attitude and behaviours rather than formal or technical knowledge. Majid et al. (2012) assert that soft skills are useful for social interaction as well as for career advancement while Swarna-Latha (2013) opines that soft skills provide and empower the young graduate with proper job etiquettes and abilities to get along well in the workplace. Soft skills can be broken into: job readiness skill (related to job preparation process); job searching soft skills and job keeping soft skills. Of all these types of soft skills, at recruitment stage, employers focus mostly on job preparation soft skills, which essentially involve skills that help an employee to make informed decisions, solve problems, think critically and creatively, communicate effectively and build healthy relationships. The top five important soft skills identified in Majid et al. (2012) are teamwork and collaboration, decision-making, problem solving, time management, and critical thinking skills. Akinyemi et al. (2012) listed other employability attributes to include verbal and written communication (basic skills), analytical and investigative abilities, entrepreneurship and managerial competencies, team work abilities, computer know-hows, time management capabilities, as well as drive and flexibility.

A combination of the different categories of skills is important for employability. Helyer and Lee (2014) highlight that more than half of the top graduate recruiters states that due to the very obvious benefits of work experience to an individual's skillset, graduates with work experience are prioritised in their selection processes. In a study carried out to determine employers' demand for business and management graduates in the Scottish workforce, McMurray et al. (2016) found that first degree, relevant work experience, personal attitudes, relevant employability skills, and classifications of degrees are considered most important to employers during recruitment. In a related study of employability skills of engineering and Information, Communication and Technology (ICT) graduates, Saad et al. (2013) reveal that problem-solving, tool-handling competency, presentation skills and team working skills feature highly as important skills demanded of applicants by employers.

■3.0 METHODOLOGY

3.1 Sample and Procedure

For the purpose of this study, the target population was the advertisements put out by employers of professionals in the built environment. The population was stratified into many sub-populations according to their disciplines and a quota sampling technique, a non-probability variant of stratified sampling technique, was employed to select a representative sample.

Each advertisement intended for analysis was broken down in coded units and then assigned to an already established category (skills, competence, qualifications etc) based on the objective of the study. Any phrase that did not fit into the established categories was discarded. All advertisements were carefully coded prior to commencement of analysis. A total of 967 job advertisements were collected between October 2017 and May 2018, from various sources such as company websites, professional institute journals, daily newspapers and top Nigerian online job recruitment and advertising agencies (jobbberman.com; hottnigerianjobs.com; jobguru.com.ng; myjobmag.com; among others). The advertisements were then scanned for duplicates (jobs appearing twice in different sources), contents and relevance to the aim of the study, thereby reducing the number to 832 from which a sample was drawn thereafter. To obtain the sample size for each stratum, proportional allocation method was used. This method usually keeps the sizes of the samples from the different strata proportional to the sizes of the strata.

$$S_a = R_a \times N \qquad (1)$$

where:
S_a = Number of adverts to be selected from stratum 'a'
N = Total experimental sample size
R_a = Proportion of population included in stratum 'a' to the total population 'P

i.e. $R_a = \frac{Pa}{P}$ (2)

Example: For Architects, $\frac{181}{832} \times 500$

$= 108.7740 \approx$ **109**

3.2 Data Analysis

The data collected from job advertisements placed in both print and electronic media by employers of professionals were first analyzed using conceptual content analysis, which entails establishing the existence and frequency of concepts within texts. The final analysis involved application of quantitative techniques. The coded data were put in a numerical form, and then entered into the computer for analysis using Microsoft Excel 2010. Descriptive statistics, such as frequency counts and simple percentages were used to analyse and summarise findings. The results were also further ranked to show order. For ease of clarity in communication and presentation of results, the results were presented through the use of charts and tables.

The major weakness of the research design adopted is the common problem associated with content analysis: that is, coding implicit terms in the process of abstraction of content from its context. This problem was minimised by using thesaurus and construction dictionary to reduce subjectivity in the coding process. Despite the limitations, content analysis, in comparison to questionnaire survey and interview, is the most appropriate tool for analysis of this type of data.

4.0 RESULTS AND DISCUSSION

4.1 Population and Sample Size

Table 1 presents the study population and sample size using the formula described in equations (1) and (2) in the methodology section. The population was first stratified according to the different professions. Sample size of 500 job advertisements was pre-determined and using the method of proportional allocation under each profession strata, the sample size of each profession was determined.

Table 1 Distribution of population and sample collected

Built Environment Profession	Strata	Sample size
Architects	181	109
Builders	203	122
Quantity Surveyors	121	73
Estate Surveyors	198	119
Town Planners	58	35
Land Surveyors	71	43
Total	832	500

4.2 Population Demographic Profile

4.2.1 Sectorial Distribution of BEPs Employment Opportunities

The study sought to know the percentage distributions of the total built environment employment opportunities that are in the various sectors of the nation's economy. The advertisements for built environment professionals were categorized into six sectors: Real estate, construction, civil service, oil and gas, academic and manufacturing, as shown in Table 2. The Real estate sector which comprises residential real estate, commercial real estate, industrial real estate and land is concerned with buying, selling and management of properties. The construction sector involves planning, design and construction of buildings. Civil (public) service is the agencies of government at local, state and federal levels essentially concerned with regulating the activities of the industry. Table 2 shows that the highest employment opportunities for built environment professionals are in the Real Estate sector, which accounts for 217 (43%) of the total job advertisements collected. This is followed by the construction sector with 205 (41%) job advertisements. The civil (public) service sector trail far behind with 39 (8%) job advertisements. The low number of advertisement by the public sector organization may not be unconnected with the lack of due process and transparency in the recruitment process in public service and the fact that construction is largely private sector driven. The least number of advertisements was from the manufacturing sector with five per cent, which is understandable as the built environment professionals have little roles to play in the manufacturing industry. Academics however attracts 2% of the total job advertisements, showing that there is little or no employment opportunity from this sector because of the higher degree (minimum of Master's degree with a registrable grade for Ph.D.) requirement. In addition, the internal policy of attracting young graduates with minimum of second class (upper) for on-the-job training and development in academia affect external advertisement for lower cadre professionals.

Table 2 Sectorial distribution of BEP employment

Industries	No of Advertisements	Percentage
Real Estate	217	43%
Construction	205	41%
Civil/Public Service	39	8%
Oil and Gas	22	4%
Academics	12	2%
Manufacturing	5	1%
Total	500	100%

4.2.2 Job Location Distribution of BEPs Advertisements

The locations of advertised jobs were also analysed. Nigeria comprises 36 states and the Administrative Capital (Abuja). Out of the 500 job advertisements analysed, 374 (75%) were located in Lagos state as shown in Figure 2. Port Harcourt and Abuja have 36 (7%) and 29 (6%), respectively. This makes Lagos state the highest employment destination for built environment professionals in Nigeria. This may be attributed to the huge economic potential and heavy construction workload in Lagos. Interestingly, majority of the construction organizations have their presence with either Head Offices or Branch Offices located in Lagos. Lagos and Port Harcourt are coastal cities. Whereas Lagos is adjudged the economic hub of Nigeria, Port Harcourt is significant for concentration of oil companies and its tourism potential. Abuja is the seat of government and the Federal Capital Territory. The totality of the remaining 34 states in Nigeria could only attract 61(12%) job opportunities out of the total advertisements collected. This sadly implies that economic activities in majority of the states in Nigeria are at low ebb.

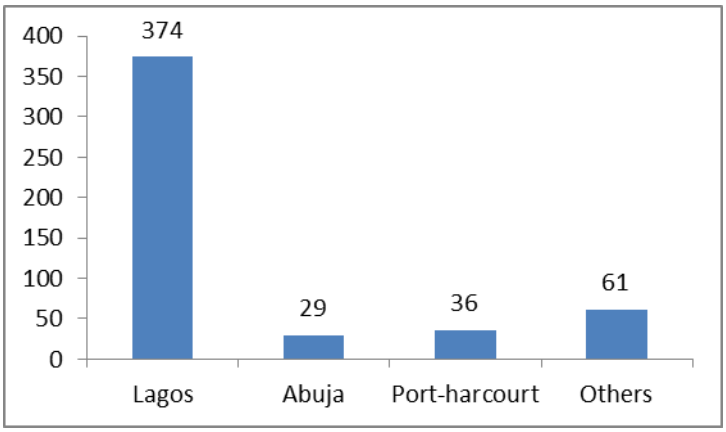

Figure 1 Location distributions of the advertisements

4.2.3 Gender Preference in the Job Advertisement

The construction industry is generally perceived as male dominated. It is no surprise, therefore, that the number of female professionals in the built environment is low compared to that of their male counterparts. However, there was no single advertisement asking specifically for male as opposed to the three (0.6%) advertisements asking specifically for female applicant. Overwhelming majority (99.4%) had no gender preference as shown in Figure 1. This implies that employers of built environment professionals give equal opportunities to both the male and female professionals, contrary to Ameh and Daniel (2017) report of bias in favour of males in Human Resource Recruitment practices in the Nigerian construction industry. The result is contrary to what obtains in the banking and entertainment industries where employment practice is biased towards females, particularly beautiful and attractive young ladies (Adenugba & Ilupeju, 2012).

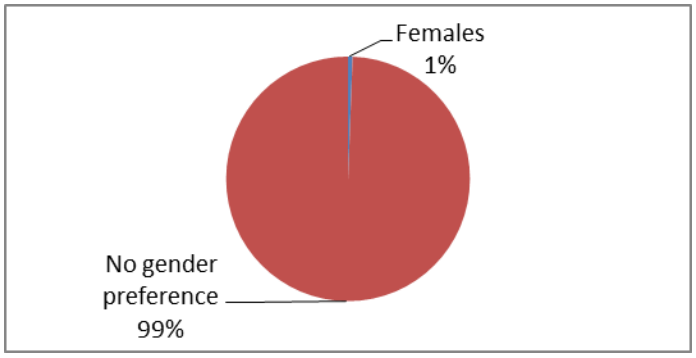

Figure 2 Gender preference in job advertisement

4.3 Built Environment Job Titles Advertised by Employers

The available job positions currently opened to professionals in the built environment were determined by analysing the job titles in the advertisements as shown in Figure 3. The top three job positions advertised were Architect, 59 advertisements; Estate/property manager, 58 advertisements; and Quantity Surveyor, 38 advertisements. Others include Builder, 33; Estate Agent/Officer, 21; Facility Manager, 27; Draftsman, 19; Site Supervisor, 21; Land Surveyor, 21; and the least being Lecturer with just 1 advertisement. This implies that, in Nigeria, job titles that appear in advertisements for professionals in the built environment are more of the profession of desired candidates rather than the job positions or competences. According to Jenkins and Wolf (2005), such tactics are used by employers to recruit more candidates from which the employers could make a better informed selection. This is misleading because of possible employers' ignorance of the core competences of the respective profession and bias toward public perception of certain profession. For example, there is a public perception that the architect, because of his pioneering role at the design stage, is the right person to be engaged for anything that involves building construction, whereas, the building code specifies the role of various professionals in the building process, from inception to completion and post occupancy period. Another reason why professions are inappropriate as job titles in advertisements is because of possible role conflict, and role ambiguity among built environment professionals. For example, there is a role conflict and role ambiguity between most consultants in the Nigerian construction industry in the practice of project management (Ameh & Odusami, 2014).

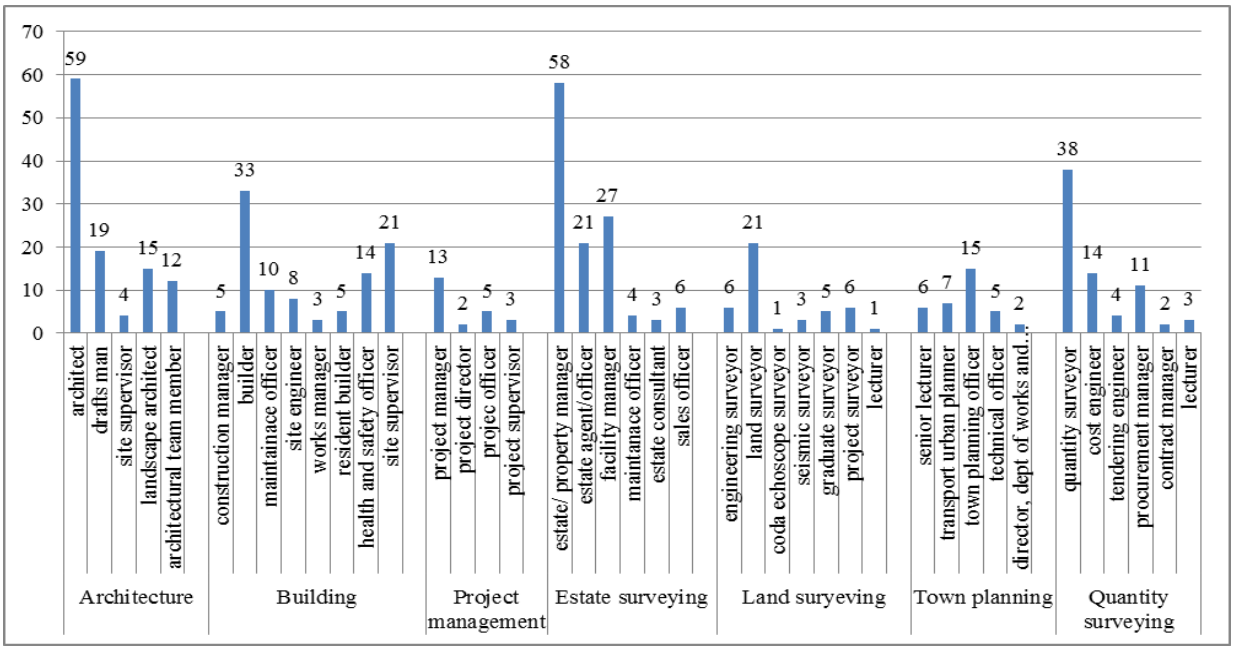

Figure 3 Available job titles under respective profession

4.4 Built Environment Profession in Highest Demand

The study sought to know the profession that is in high demand by employers in built environment by ranking the frequency of times each profession appeared on advertisements collected prior to sampling to remove any form of bias. Project management profession was treated as a distinct profession as any of the built environment professionals could take up the title. The result shown in Table 3 reveals that Estate Surveyors appeared 198 times (25%) in the job advertisements collected and ranked 1st, followed by Architects which appeared 181 times (23%). Builders (170 times) and Quantity Surveyor (121 times), representing 21% (3rd) and 15% (4th) respectively. Finally, Land Surveyors and Town Planners trail with 9% and 7% of the job advertisements respectively. This implies that the built environment profession currently in high demand is Estate Surveying.

This is not unexpected since the Real Estate sector, with the highest employment opportunities, would logically require professional expertise for preparation of valuation report, feasibility and viability studies, project management and general property management among other tasks which are within the purview of Estate Surveyors/Managers, especially in big cities like Lagos, Port Harcourt and Abuja. One would have expected that Builders would top the professions in high demand by employers because of the huge construction and conversion or renovation workload in the major cities, which is within the core competences of Builders. However, as the building industry in Nigeria is not structured, and there is role ambiguity among professions, besides weak enforcement of laws and ignorance on the part of employers in the built environment, what often result is the employment of Civil Engineers, Architects and Quantity Surveyors to do the work of Builders. There are instances where craftsmen posed as professional builders. The low demand for Land Surveyors and Urban Planners by employers is, perhaps, because their services are majorly required in the civil/public service sector where they regulate building practices, as well as enforce compliance with the Building and City/Town Planning Laws. Students seeking admission to study any of the less patronized professions are advised to look elsewhere to avoid being unemployed after graduation because the civil/public service sector provides very low employment opportunities. Furthermore, the number of such disciplines in tertiary institutions nationwide should be pruned so that the limited resources can be deployed to other disciplines within the industry.

Table 3 Built environment professional in high demand by employers

BEP	No of Advertisements	Percentage	Rank
Estate Managers	198	25%	1
Architects	181	23%	2
Builders	170	21%	3
Quantity Surveyors	121	15%	4
Land Surveyors	71	9%	5
Town planners	58	7%	6
Total	799	100%	

4.5 Hard Skills

4.5.1 Preference for Degrees

Table 4 shows that a total of 405, out of 500, advertisements by employers in built environment specified possession of certain academic qualifications as the minimum requirement for employment. The least number of the advertisements, representing 3% requested for a minimum of a doctorate degree (Ph.D.), 21% for a Master's degree (M.Sc.), 25% requested for Higher National Diploma (HND), and 51% of the advertisements requested for at least a Bachelor's degree (B.Sc.). This shows generally that possession of a degree is a prerequisite for employment in the built environment, with the first degree, (B.Sc.) being the most preferred. Table 4 also shows the distribution of the academic qualifications required for each profession in built environment. For the post of Architects, 35 advertisements requested for possession of masters (M.Sc.) degree (highest, compared to other professions), 29 requested for B.Sc., while 9 and 2 requested for HND and PhD respectively. This can be linked to the fact that a master's degree is the minimum academic qualification considered registrable by Architect Registration Council of Nigeria (ARCON). For the post of Builders, Table 4 also shows 43 advertisements requesting for B.Sc. and 36 for HND; highest, compared to other professions. This could be due to the practical nature of the training and exposure to the industry practice at varying stages of the programmes in polytechnic education which entails three (3) months of Students Industry Work Experience Scheme (SIWES) in the course of National Diploma (NDI) and a one (1) year SIWES training at the end of National Diploma (NDII) prior to registration for Higher National Diploma (HND). Similarly, for Estate Surveyors, Quantity Surveyors, Land Surveyors, the preference is for HND or B.Sc. and not Master's degree. In these fields, the minimum qualification required in advertisements for employment was usually stated as an added advantage. Doctor of philosophy Ph.D. is usually required from those in academia. These findings are consistent with that of McMurray et al. (2016).

Table 4 Certificate preference by built environment employers

Built Environment Profession	HND	BSc	MSc	Ph.D.
Architect	9	29	35	2
Builder	36	43	8	0
Estate Surveyors	17	40	8	2
Land Surveyors	4	17	6	1
Project managers	4	1	18	0
Town Planners	6	13	3	7
Quantity Surveyors	25	53	7	0
Total	103	206	85	12
Percentage	25%	51%	21%	3%

4.5.2 Classification of Certificates

The study sought to find out if employers in the built environment have preference for any class of degree/diploma. Results presented in Figure 4 show that overwhelming number of employers (88%) did not mention any specific class of degree/diploma in their advertisements. Only a few (12%) specified the class of certificates in their advertisements. It is worthy of mention that, out of the 12% advertisements that specified class of degree/diploma, none requested for either first class or third class certificates. However, 21(4%) and 37(7%) specifically requested for a minimum of second class (upper) and second class (lower) respectively. The result is similar to Feng and Graetz (2015) who found sizeable and significant effect for second class (upper) certificates and positive but smaller effect of first class certificates on the probability of working in a high-wage industry and on expected wages. This implies that measured performance at tertiary institutions does not affect the outcome of employment of professionals in the built environment, unlike in other industries where sizable number of employers used classification of certificates in their hiring decision. Classification of certificates is, however, used by Universities to screen applicants to postgraduate programmes.

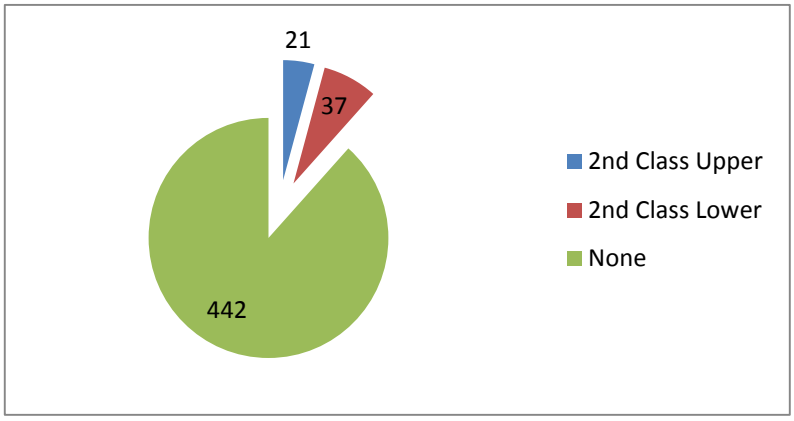

Figure 4 Employers' preference for class of certificate

4.5.3 Work Experience

Figure 5 shows work-related experience requested by employers. 21% of the employers wanted a built environment professional with 1-2 year(s) of work-experience; 36% requested for 3-5 years' work-experience; 18% demanded for 6-10 years' work-experience, while an insignificant few (7%) requested for above 10 years' work-experience. Compared to a majority of 88% who were silent about class of degree/diploma, just a pintsized (18%) failed to specify any work experience. It is known that a key resource for the development of competence and wider employability skill was the consideration of work experience. The majority of employers considered work experience to be vital, as also reported in Kinash et al. (2015), where multiple stakeholders stated that the most employable graduates are those who have a broad-based experience among other attributes. This is also in tandem with Davies et al. (1999) who opined that work-experience was seen to improve skills, increase confidence, produce more rounded individuals and improve their connections to the labour market. The result also agrees with Helyer and Lee (2014) who reported that, top graduate recruiters prioritise work experience in their selection process. Weiss et al. (2014) while arguing that pre-graduation work experience has no significant long term effects on occupational position or wages, affirmed that only field-related and voluntary work experience has positive effects on labour market integration. To meet the demand for work-experience by employers, students in the built environment disciplines must do other things besides studying for certificates. They have to engage in voluntary work or paid work in order to be more rounded. Graduates of disciplines in built environment need more practical experience than theory, as first-hand experience or exposure leads to more realistic expectations. This is the rationale behind Student Industrial Work Experience Scheme (SIWES) where students are exposed to industry while still in school.

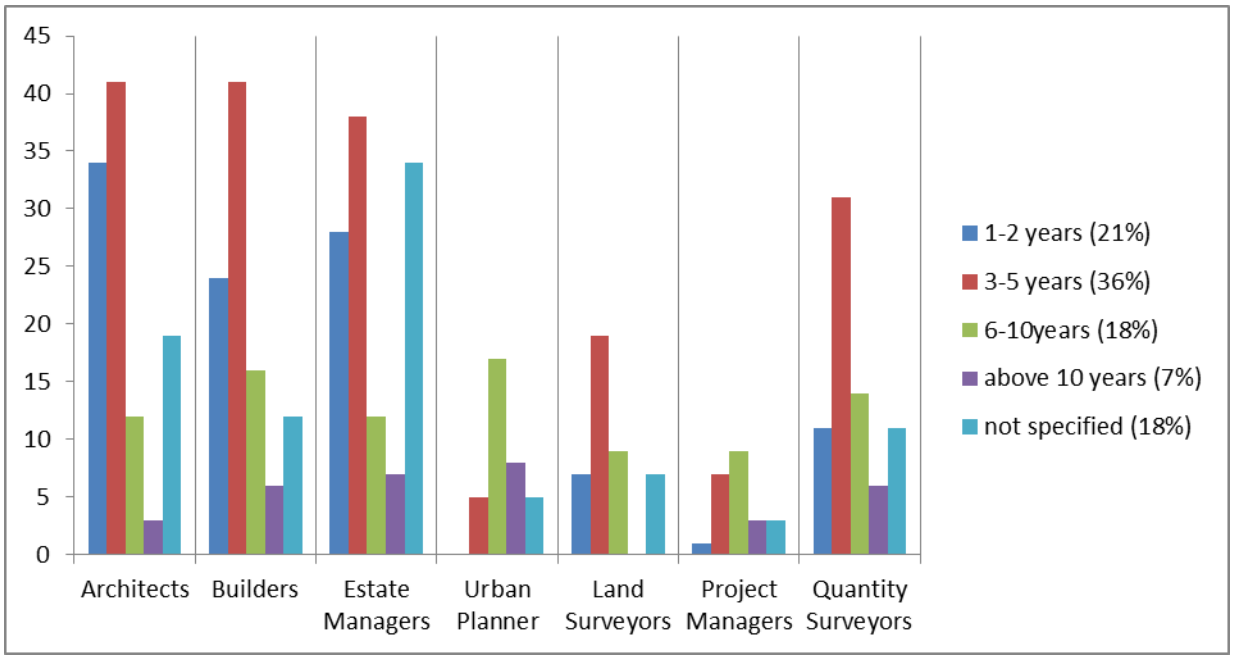

Figure 5 Employers demand for work experience

4.6 Soft Skills

Table 5 shows personal attributes not directly connected to job specification. Reliability (41%) tops the list of desirable attributes in advertisements for built environment professionals and was mentioned by nearly half of the employers. This was closely followed by confidence (39%) and good attitude (35%). Integrity and work ethics are ranked 5th (33%) and 6th (31%) apiece. Amongst the least but valued attributes are punctuality, flexibility and smartness with 11%, 14%, and 16% respectively of the job advertisements. Such personal attributes, according to Kinash et al. (2015) contribute to overall employability of any job applicant. This finding contradicts the study carried out by McMurray et al. (2016) to determine demand for graduate business and management skills in the Scottish workforce, where employers ranked 'personal attitudes' the highest when asked to rank soft skills considered to be important when recruiting. The peculiarity of the job and environmental factor may account for this disagreement. The disagreement could also be due to the fact that the study by McMurray et al. (2016) was carried out for business and management environment which is different from what obtains in the built environment that is technical in nature. Poon (2012) asserted that it is necessary for universities to embed soft skills awareness in the curriculum of studies in order to enhance employability of graduates.

Table 5 Personal attributes required in employment advertisement

Personal Attributes	Frequency	Percentage	Rank
Reliability	205	41%	1
Confidence	201	39%	2
Good Attitude	184	35%	3
Integrity	179	33%	4
Work Ethics	162	31%	5
Commitment/Dedication	137	25%	6
Open minded	106	19%	7
Smartness	91	16%	8
Flexibility	82	14%	9
Punctuality	73	11%	10
Total	500		

5.0 CONCLUSION

The study set out to examine recruitment and peculiar attributes of professionals in built environment profession by employers. Conceptual content analysis was adopted in analysing data collected from job advertisements. The results reveal that the highest employment opportunities for built environment professionals are in the real estate and construction sectors. The top three job positions advertised are Architects, Estate/Property Managers, and Quantity Surveyors, with Estate Surveyors in highest demand by employers. Hard skills preferences are: at least a Bachelor's degree (B.Sc.) with no specific preference for the class of degree, but with three to five years' work experience. Reliability, confidence, and good attitude were some soft skill attributes expected of built environment professionals.

Based on the above, there are implications for both theory and practice. There is need for increased budgetary allocation towards education/training for professions in high demand in the industry. Students should be given opportunity to interact with the industry for at least one year prior to graduation to gain necessary experience. There should be a balance between academic learning and character development; therefore, it is necessary for tertiary institutions to embed soft skills awareness in curriculum in order to enhance employability. There is also the need to diversify the economy to make other states of the federation economically viable for employment.

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