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AWARENESS OF PROFESSIONAL VALUES OF ESTATE SURVEYORS AND VALUERS ON INTEGRATION OF PROPTECH IN HOUSING PROVISION IN ABUJA F. C. T

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ABSTRACT

This research examined the awareness of professional values of Estate Surveyors and Valuers on integration of Proptech applications in housing provision in Abuja, F. C. T. Survey research was adopted as the research design, questionnaire administration was the instrument adopted to collect primary data via email addresses. The questionnaire's reliability and validity were carried out using the instrument's retest method and content validity respectively .The inclusion criteria encompassed being a member of Nigerian Institution of Estate Surveyors and Valuers in Abuja F. C. T. However, the harvested e-mail lists sampling method was employed in administering the questionnaires. The survey carried out revealed that ESVs' Firms in Abuja, F.C.T are majorly into property consultancy and the major types of properties they manage are residential properties. Also, major factors affecting the usage of real estate digital applications in the process of selling and leasing residential properties are time taken to get used operating the system, technical knowledge of advanced computer knowledge and experience and the cost of the digital tools.

Keywords: PropTech, Estate Surveyors and Valuer, Tenants, Prospective tenant and End-User

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INTRODUCTION

Background to the Study

Residential properties connote land and/or buildings employed to provide shelter to human beings, protect human beings, protect them from the influence and impact of weather, and secure the inhabitants from the immediate environment. They are housing units: considered to project more than just a mere shelter or somewhere to stay for people to live for habitation (UN-HABITAT n.d.; Busch-Geertsema, & Sahlin, 2007; Kothari, Karmali & Chaudhry, 2006). It encompasses all auxiliary and communal amenities required to provide people with a favorable environment for well-being. Ranked next to food in the order of priority of every man's necessity of life: even though food, shelter, and clothing are paramount to human living (Helms, Coleman-Jensen, Gray, & Brucker, 2020; Sabet & Mirvahedi, 2017) and deprivation of any of the trio makes life burdensome for any human being. Housing is a major capital investment in the life of individuals irrespective of their financial status and all other forms of ramifications (Guyer, 2015; Monetezuma, 2004).

Meanwhile, the provision of housing involves the construction works carried out to change the use of land to buildings for human habitation or of land with its buildings to more intense building or a re-establishment of existing use (Okafor, Sunmola, Samuel, Okolie, Udoma & Osagie, 2021; World Economic Forum, 2019). According to the Central Bank of Nigeria (2013) and UN Habitat (2008), housing provision is not adequately fulfilled until the provided housing units get to the predetermined group of people, for which the housing provision was initially aimed. In the United Kingdom and most developed countries, the housing sector is regarded as crucial for promoting economic progress. (Ajayi, 2013). It is recognized by the government that low-income earners make up the majority of those who are in demand of housing. These low-income earners are limited in their movement, and this could make them limited in accessing the available housing provided by governments, private organizations, or private investors.

However, the world has the most significant invention of the computer in the 20th century. This is an electronic device employable in every field of endeavour, functioning under the command of instructions encoded in its memory, with the capability of input (accepting data), processing it under predetermined rules, output (producing information), and storing the information for later use.

There has been an increase in technical platforms employed practically in every aspect of our lives because of the development of internet services and mobile telephony (occupations like relationships, houses, careers, education, health, leisure, and finances). The international shift in the use of digital technology or the 'fourth industrial revolution (Schwab2017), has facilitated a revolution in activities of information provision, transactions, and management and control (University of Oxford, 2020).

Among the benefits of computers in the real estate industry is the conception, creation and usage of PropTech (Property Technology), which is also known as RealTech. **PropTech connotes property technology that incorporates all the digital tools that real estate professionals utilize to streamline the purchasing, selling, researching, marketing, financing, and other aspects of the real estate industry. It contains a diverse set of online platforms and group(s)**

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of software tools employed in the property management industry by a variety of staff members, including the property owners, property managers, real property investors, real properties vendors, in addition to tenants, and prospective tenants in payment and collection of rents, distribution of property management data distribution.

Universally, real property market transactions are local, and this makes the use of a specialist to be a necessity (Piasecka, 2017, Maliene, 2011). The era of PropTech has removed many bottlenecks (such as physical and manual scouting for housing types in a particular neighborhood, having an idea of the asking rent commanded by some specific housing units, the nature, and constituents of tenancies/leases of a particular type of housing unit, type of accommodation schedules, scouting for a specific type of housing in desired neighbourhood, seeking for Estate Agents or property agents in such an area of the situation of properties to transact in the real property market, etc.). Many organizations nowadays use PropTech's applications to improve their business's innovative products and services experience in housing provision (Siniak, Kauko, Shavrov & Marina, 2020). Some of the moulded PropTech of real estate and housing are not limited to artificial intelligence (AI technology), SaaS, big data, block chain technology, BIM, smart contracts, IoT, virtual and augmented realities (VR and AR), machine learning and robotics (Betzeki, 2020; Lizam, 2019; Sapkota, 2019) to improve their business's innovative products and services experience in housing provision.

However, each PropTech application is unique and requires a special skill from the user (being it an individual or an organization) to be adequate in technicalities and standards to ensure adequacy in the provision of housing units that will meet the need of housing needy in Abuja Nigeria. This must be free biasness in all ramifications and non-onerous, which is the basis of this academic research.

Statement of Research Problem

PropTech applications are sets of internet resources and software programs used by various employees in real property letting and retail business including real property investors, landlords, managers, vendors, as well as consumers like tenants and renters to gather, dispense, and share data about real estate brokerage. Artificial intelligence, SaaS, big data, virtual and augmented realities (VR and AR), machine learning, and robots are key advancements that have value in the buying and renting of real estate.

This academic work, however, identifies PropTech applications Estate Surveyors and Valuers use in selling and leasing residential properties in Abuja, Nigeria and assesses the degree of integration of these PropTech applications within the process of selling and leasing residential properties in Abuja, Nigeria.

Materials and Methods

Design and setting

The research design was adopted to evaluate the integration of PropTech applications in selling and leasing residential properties in Abuja, F.C.T.A set of questionnaire (with close-ended, open-ended and Likert-scale questions) was as the instrument for data collection. Electronic mail (email) survey research technique was employed because population of Real Estate

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Developers in Abuja, F. C. T are countable and hidden.

Source of data

Primary source of data was employed to evaluate awareness of professional values of Estate Surveyors and Valuers on integration of Proptech in housing provision in Abuja, Nigeria.The researcher used this method to ensure accuracy and confidence in the data acquired, even though it takes a lot of time and produces enormous volumes of data because it involves engaging with several people. This also made this research thesis original.

Sample/Participants

The target population included all members of Nigerian Estate Surveyors and Valuers in Abuja, Federal Capital Territory. This includes the Probationer members of Nigerian Institution of Estate Surveyors and Valuers, Associate members of Nigerian Institution of Estate Surveyors and Valuers, Fellow members of Nigerian Institution of Estate Surveyors and Valuers and Past Presidents of Nigerian Institution of Estate Surveyors and Valuers in Abuja, F.C.T.

According to Nigerian Institution of Estate Surveyors and Valuers (2023), Abuja branch of Nigerian Institution of Estate Surveyors and Valuers has 462 financial members, which forms sample frame for this research. However, 279 email addresses of NIESV members in Abuja were gotten from the Branch through collation and it is the sample size, which 60.39% of the sampled frame. The retrieved questionnaires were 168 out of 279, which represents 60.21% retrieval. They were administered questionnaires through sampling using harvested e-mail lists, toevaluate the integration of PropTech applications in selling and leasing residential properties in Abuja, F.C.T.The inclusion criteria encompassed being a member of Nigerian Institution of Estate Surveyors and Valuers in Abuja F. C. T.

Sampling using harvested e-mail lists was employed. The email addresses collected from domain of Nigerian Institution of Estate Surveyors and Valuers. According to Fricker, (2008), this is a technique for finding research subjects, in which sampling error, error of coverage and measurement error are avoided. Also sampling using harvested e-mail lists became inevitable as subjects used in evaluatingawareness of professional values of Estate Surveyors and Valuers on integration of Proptech in housing provision in Abuja, F. C. T because numbers of Estate Surveyors and Valuers in Abuja, F. C. T are countable and hidden. Also, the offices of those Estate Surveyors and Valuers in Abuja, F. C. T are enormous, widely far apart and cannot be easily traced. Similarly, the method assisted in avoidance of time wastage.

Data collection

Pilot survey was conducted to ensure data reliability and data validity. Data reliability was conducted using retest method of 10 questionnaires. In this retest method, five (5) questionnaires were first administered to Nigerian Institution of Estate Surveyors and Valuers executive members in Abuja branch, while the same five (5) executive Nigerian Institution of Estate Surveyors and Valuers members were re-shared another new questionnaires the identical content to the earlier ones after 1 (one) month the earlier identical questionnaires were retrieved. These questionnaires comprised of open-ended questions, which gave the researcher the opportunity of discovering the responses and suggestions that are new to the researcher (Foddy,

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1993). In ensuring accuracy and meaningfulness of inferences of the questionnaire used as instrument for data collection, the researchers made four (4) copies of the proposed questionnaire available to four (4) professionals in the field of Real Estate Management and Valuation in Kaduna State University to assess the worthiness of the questionnaire before pilot survey and research survey. All the observations were effected before the questionnaire was administered for the pilot and field survey. All the observations were effected before the questionnaire was administered for the pilot and field survey. Ethical concern was also given a priority by ensuring that data gotten were strictly for academic purposes, avoidance of ambiguous questions and none of the administered questionnaires has means of identity, which makes all respondents remain confidential and anonymous throughout to avoid any problem that may be detrimental to the sampled Estate Surveyors and Valuers in Abuja, F. C. T.

Statistical analysis

Data were analysed via Statistical Packages for Social Sciences (SPSS) version 25 using descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistics (correlation).

Results and Discussion

A Series of information and statistical data obtained from retrieved questionnaires are presented and analyzed in this section via frequency distribution tables, percentages, mean scores, and ranking.

Table 1 shows that out of 279 (two hundred and seventy-nine) Estate Surveyors' and Valuers' in Abuja, F.C.T emails that questionnaires were sent to, only 168 sent back their answered questionnaires to the researchers, which is 60.21%.

Table 1: Administered and retrieved questionnaires

Questionnaire	Frequency	Percentage (%)
Administered	279	100.00
Retrieved	168	60.21
Non-Retrieved	111	39.79

Table 2: Practices that Estate Surveyors' and Valuers' Firms are Known For

What Firms are Know With	Frequency	Percentage (%)
Sole Estate Agent	2	5.56
Joint Estate Agent	5	13.89
Both Sole and Joint Estate Agents	3	8.33
Property Managers	5	13.89
Project Developers	1	2.78
Valuers	5	13.89
Property Consultants	8	22.22
Sole Selling	5	13.89
Others	2	5.56
Total	36	100.00

Source: Questionnaires Administered (2023)

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Table 2 analyzed the practices Estate Surveyors' and Valuers' Firms in Abuja, F.C.T were known for. Estate Agents' Firms that practice Sole Estate Agent are 2 respondents, Joint Estate Agent are 6 respondents, Both Sole and Joint Estate Agents are 3 respondents, Property Managers are 5 respondents, Property Developers is 1 respondent and Valuers are 5 respondents, which represents 5.56%, 13.89%, 8.33%, 13.89%, 2.78%, and 13.89% respectively. Also, Property Consultants are 8 respondents, Sole Selling are 5 respondents and others are 2 respondents, which are 22.22%, 13.89%, and 5.56% respectively. However, the property consultants are the majority.

Table 3: Major Types Properties of Estate Surveyors' and Valuers' Firms Manage

Property Type	Frequency	Percentage (%)
Residential Properties	14	38.89
Commercial Properties	11	30.56
Industrial Properties	4	11.11
Public Properties	2	5.56
Agricultural properties	2	5.56
Vacant Land	3	8.33
Total	36	100.00

Source: Questionnaires Administered (2023)

Table 3 shows the frequency and percentage scores of major types of properties managed by Estate Surveyors and Valuers in Abuja, F.C.T. ESVs manage residential properties are 14, which is 38.89% of the respondents. Those managing commercial properties are 11 respondents. Industrial Properties are 4 respondents, public properties are 2 respondents, Agricultural properties are 2 respondents and vacant land are 3 respondents which are 30.56%, 11.11%, 5.56%, 5.56%, and 8.33% respectively.

Table 4: Factors affecting the usage of real estate digital applications in the process of selling and leasing residential properties

Factors	Mean	Standard Deviation	Rank
Time is taken to get used to the systems	3.4348	1.22297	1st
Technical knowledge of advanced computer knowledge and experience	3.4211	1.27632	2nd
Cost of the digital tool	3.4130	1.40754	3rd
Agency has not done enough to promote and integrate digital applications	3.2609	1.23711	4th
Lack of motivation	2.9565	1.21026	5th

Source: Questionnaires Administered (2023)

Table 4 shows the mean score affecting the usage of real estate digital applications in the process of selling and leasing residential properties in Abuja, F.C.T. Time taken to get used to the systems has a mean score of 3.4348 and a standard deviation of 1.22297. Technical knowledge

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of advanced computer knowledge and experience of Estate Surveyors and Valuers has a mean score of 3.4211 with a standard deviation of 1.27632. The cost of the digital tool has a mean score of 3.4130 and a standard deviation of 1.40754. Agency has not done enough to promote and integrate digital applications and has a mean score of 3.2609 and a standard deviation of 1.23711, while Lack of motivation has a mean score of 2.9565 with a standard deviation of 1.21026.

Discussion

From the survey carried out, the majority of ESVs' Firms in Abuja, F.C.T ranked property consultancy as the 1st of all activities their Estate Firms are known for. Joint Estate Agent, Sole Selling, and Others were ranked together as 2nd while the duo of both Sole and Joint Agents was ranked 3rd. This is not the same as the result of Maryland Realtor (n. d.) that stated that the Estate Agents get involved as seller(s') agents, buyer(s') agents, dual agents, or intra-company agents. However, the research finding is sustained.

Meanwhile, the major types of properties that ESVs in Abuja, F.C.T manage are residential properties. This is followed by commercial properties, vacant land, and industrial properties. This negates the findings of Kimmons (2019) who ranked the most managed real properties by Estate Agents to be vacant land as the 1st, commercial properties as the 2nd, and residential properties as the 3rd. Nonetheless, the result of the research is adjudged.

Data analyzed from retrieved administered questionnaires revealed that factors affecting the usage of real estate digital applications in the process of selling and leasing residential properties are time taken to get used operating the system, technical knowledge of advanced computer knowledge and experience, cost of the digital tools, Agency has not done enough to promote and integrate digital applications and lack of motivation, which were ranked 1st, 2nd, 3rd, 4th and 5th respectively. These are not the same as the findings of Ullah, Sepasgozar, and Wang (2018) that factors considered before the adoption of the use of Technology Adoption Model (TAM) in real property management are the behavioral intention to use, actual use, perceived ease of use, and perceived usefulness. Also, Aihie (2019) pointed out that the problem Estate Surveyors and Valuers faced with PropTech remains the high rate of cost, which is limiting many in the real estate to employ it.

Conclusion

This research evaluates the awareness of professional values of Estate Surveyors and Valuers (ESV) on integration of Proptech in housing provision in Abuja, F. C. T. The research discovered that Estate Surveyors and Valuers in Abuja, F. C. T. are aware adopt of PropTech applications in provision of residential apartments to prospective tenants in the study area.

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