

THE PROSPECT OF ADDRESSING PROPERTY MANAGEMENT CHALLENGES WITH INFORMATION AND COMMUNICATION TECHNOLOGY (ICT): A SURVEY OF MINNA METROPOLIS, NIGER STATE

S.O. Ganiyu^{1,*}, C.F. Essien², I.O. Alabi³, V.J. Ukam⁴

^{1,2,3,4} Department of Information and Media Technology, School of Information and
Communication Technology, Federal University of Technology Minna, Niger State
shefiu.ganiyu@futminna.edu.ng

ABSTRACT

Amongst all basic human needs, shelter happens to be one of the most essentials, hence acquisition and management of rental property by individuals become very important. Often, the process of advertising and securing rental housing is cofounded by some challenges on prospective tenants and property managers. Nevertheless, with current paradigm shifts in the World towards technology, the housing sector is presented with a new strategy to facilitate easy management of rental houses. In line with this, this study investigated the challenges faced by stakeholders in rental housing within Minna metropolis of Niger State and adoption of information and communication technology (ICT) by the stakeholders. Thus, the study adopted simple random sampling technique and data were collected through structured questionnaires. Based on our findings, the process of advertising and securing accommodation is not convenient for tenants. Likewise, agents are grappling with impersonation, financial crime etc. Again, ICT is underutilized for rental housing by stakeholders despite its availability. Therefore, this study craved for development of ICT platforms to ease the issues surrounding property management.

Keywords: *Property management, Rental housing, Rental Properties, Information and Communication Technology (ICT).*

1. INTRODUCTION

Shelter as one of the indispensable human wants, which gives protection to its occupants or against intruders and unwanted elements (Babalakin, 2004; Onu & Onu, 2011). Due to its relative immobile nature, it is therefore imperative for individuals to acquire one either by way of rent or purchase depending on one's purchasing power. Consequently, this leads to emergence of two classes of urban residents; the owner-occupier resident and the rented resident. In the latter, the property owner is referred to as the landlord while the occupant is referred to as the tenant. Under this arrangement, the tenant pays rent to the landlord for usage of rented apartment. The amount paid as rent depends on available facilities on the apartment.

In recent times, landlords have resulted to employing the expertise of property managers who serve as middlemen (popularly known as agents) between them and the tenants for effective management of their properties. Also, various tasks are involved in property management among which are: to achieve the set-out objectives of the property owner; to

maintain the investments in the property and to maintain the physical aspects of the property (Gilbert, 2016).

When managed by the agent, a lease or tenancy agreement is normally invoked. It is an agreement between a landlord and tenant which contains the terms and conditions of the rental (Akogun & Olatoye, 2013). It offers security to its stakeholders just on paper (Daniel, Okorie & Ojo, 2012).

With continuous demands for urban rental housing in Nigeria, the process of sourcing and securing a suitable rented apartment are under threats by actions quack agents and lack concerted drive to leverage the potentials of information and communication technology (digital divide) among stakeholders (Ibisola, Oni & Peter, 2015).

Basically, information and communication technology (ICT) provides the housing sector with novel strategy to facilitate easy management of rental housing (Gommans, Owange & Njiru, 2014). In view of this, the success of ICT implementation depends on well informed stakeholders. However, based on literature review conducted in this study, an empirical evaluation of the use of ICT in housing rental services in Minna metropolis is still limited.

Therefore, this study aims to probe the possibility of deploying ICT to problems of managing rental units in Minna metropolis. Therefore, to achieve this aim, the following objectives were formulated:

- i. To establish how tenants, housing agents and landlords managed information about rental property.
- ii. To determine the challenges of rental housing in Minna metropolis of Niger State.
- iii. To determine ICT access level of tenants, housing agents and landlords.
- iv. To evaluate ICT utilisation for advertising and securing property by tenants, housing agents and landlords.

In order to actualise the stated objectives, the following research questions were formulated:

- i. How do tenants, housing agents and landlords managed information about rental property?
- ii. What are the problems affecting rental housing business in Minna metropolis of Niger State?
- iii. Do tenants, housing agents and landlords have access to ICT facilities?
- iv. How do tenants, housing agents and landlords utilise ICT for advertising and securing apartments?

The remaining sections of this paper are arranged as follow: section two reviews related works, section three details the research setting, section four explains the research methodology and empirical analysis. Finally, section five summarises the findings and recommendations of this paper.

4. REVIEW OF RELATED LITERATURE

The operation of rental property market varies among regions and nations (Sani & Gbadegesin 2015). Majority of the researches conducted in the past focused on factors affecting rental housing. For example, Sani and Gbadegesin (2015) researched private rental housing business in Nigeria. The researchers observed that more males, more married people, more civil servants, more Christians and families with size range between 3-4 patronize the urban rental housing. Similarly, Eni and Danson (2014) studied the

private sector participation in urban housing supply in Calabar metropolis. The authors stated that housing supply by private sector are unaffordable to the low-income earners residing in the metropolis.

In addition, Oni (2010) examined the means of harnessing real estate investments through decision process for selecting tenants in Lagos metropolis. The study showed that amongst others, income of prospective tenants is most important criteria used by estate agents in selecting renters. In Akogun and Olatoye (2013), the causes and methods of tenant eviction in property management practice in Ilorin metropolis were examined. The study revealed that rent default constituted the major reason for tenants' evictions. Likewise, Yusuff (2011) found that the challenges associated with the sourcing and securing of accommodation among the students of Lagos State University influences negatively on their academic performances.

Likewise, Ibisola et al., (2015) investigated the relevance and application of ICT in estate surveying and valuation in Ogun State. Their study revealed that the stakeholders in estate management acknowledge the existence of ICT, but they are not utilising it in professional practices due to poor training. Similarly, Razali and Martin (2006) examined the implementation of ICT by property management company in Malaysia. The authors, confirmed that property managers in Malaysia are lagging behind in ICT adoption for property management. Again, a recent work by Gilbert (2016) examined rental housing from an international perspective. The author opined that there are no universal remedies to the problems facing rental housing in the world.

Therefore, the foregoing opinion presented by Gilbert (2016) and the findings made by Razali and Martin (2006) indicated the need for recent empirical researches to assess the level of ICT penetration in property management, especially in rental housing. Unfortunately, research in this direction is not receiving enough attention.

5. RESEARCH SETTING

In line with the aim of this paper, our focus is on Minna metropolis, the capital of Niger State in North-central Nigeria. The metropolis comprises of Bosso and Chanchaga Local Government Areas (LGAs). According to 2006 National Population Census, the population of people who are 15 years and above in Bosso and Chanchaga are 80,440 and 116,492 respectively (National Population Commission, 2010). Thus, considering this age group, the population of this study is 196,932.

Generally, majority of the populace in the State (85%) are farmers while the remaining 15% are involved in other vocations such as white-collar jobs, business, craft and arts (Niger State Bureau of Statistics, 2012). Interestingly, Minna being the State Capital is home to elites doing white collar jobs in private companies, as well as State and Federal Government Organisations. Thus, being largely an agrarian state, the property market in Niger is still growing. The high cost of erecting individual personal houses has triggered the need for rental housing.

6. RESEARCH METHODOLOGY AND EMPIRICAL ANALYSIS

This study adopted survey research design, it sought opinions of respondents on problems relating to rental housing and their ICT utilisation for rental needs. The population of the study is 196,932 and the sample size is 80. Based on the population, sample size and

confidence level of 95%, the sample size calculator (National Statistical Service, n.d.) estimated the standard error of the sample size against the population as 0.05625. Also, simple random sampling was used as sampling technique to administer structured questionnaire which served as research instrument. The instrument was administered on 80 respondents after initial validation by two experts. The sample comprised of 35 tenants, 30 housing agents and 15 landlords. Out of the administered questionnaires, 68 were returned, which represent 85% response rate.

Precisely, 33 respondents which represents 48.52% of the returned questionnaire were tenants, while 28 respondents representing 41.17% respondents were housing agents and 7 respondents representing 10.29% were landlords.

4.1 Demography of Respondents

Table 1 presents the demographic information of respondents. As shown in the table, majority of the respondents (64.70%) were males, on the other hand, 35.29% of the respondents were female. Also, respondents' age indicates that most of the respondents (52.94%) were in the age bracket of 18–25. This group was followed by 17.64% representing respondents who were in the age category of both 36 – 45 and 26 – 35 years. Similarly, respondents in the age bracket of 46 – 55 years were accounted for 8.82%, whereas, 2.94% of the respondents were 56 years and above. Again, majority of the respondents (52.94%) had Bachelor degree as their highest qualification. Meanwhile, other respondents had one educational qualification or the other. This implies that they were all literates and should be able to appreciate the use of ICT in their daily activities.

Table 1: Demographic of respondents

Characteristics	Frequency	Percent age
Gender		
Male	44	64.70%
Female	24	35.29%
Age		
18 – 25	36	52.94%
26 – 35	12	17.64%
36 – 45	12	17.64%
46 – 55	6	8.82%
56 and above	2	2.94%
Educational qualification		
No Formal Education	0	0%
Primary School Certificate	0	0%
SSCE or GCE	23	33.82%
Diploma	9	13.23%

Degree	36	52.94%
Others	0	0%
Total	68	100%

4.2 Availability and Utilisation of ICT

Table 2 shows that most of the respondents (57.35%) agree that they have frequent access to internet services and most (58.8%) use mobile phones to access these services.

Table 2: Availability and Utilization of Information and Communication Technology

Questions	Frequency	Percentage
How often do you use the Internet services to get information?		
Do not utilise it	0	0%
Occasionally	12	17.64%
Frequently	39	57.35%
Very Frequently	17	25%
Which device do you use to access these services?		
Mobile phone	40	58.82%
Computer	16	23.52%
Others	12	17.64%
Total	68	100%

4.3 Analysis of Data from Tenant Respondents

Table 3 presents response provided by tenants that acquired rented apartments. As shown in the table, most tenants (73%) secured their current accommodation through housing agents. However, 55% of the tenants agreed that it wasn't an easy task to locate a legal housing agent. Almost half of the tenants (46%) agreed that they encountered some forms of difficulty during the process of securing the accommodation. Also, 73% of the responding tenants expressed general dissatisfaction with current system of securing and acquiring rental housing. Also, banners and posters (55%) are seen to be the major source of getting information about vacant apartments.

In the overall, most respondents expressed dissatisfactions with the present practice of acquiring rental housing information. This however, implies that they should be able to appreciate a more convenient process of acquiring such information.

Table 3: Tenant Responses

Questions	Frequency	Percentage
How did you secure your current accommodation?		

Landlord/Landlady	6	11%
Agent	24	73%
Transfer	3	6%
Others	0	0%
Through what means did you get information about available apartments?		
Website	0	0%
Friend	6	18%
Posters/Banners	18	55%
Others	9	27%
How easy was it locating an agent?		
Very easy	6	18%
Easy	9	27%
Difficult	15	46%
Very difficult	3	9%
How convenient was the process of securing the accommodation?		
Very inconvenient	3	9%
Convenient	6	18%
Very convenient	6	18%
Inconvenient	18	55%
Were you satisfied with the process?		
Yes	9	27%
No	24	73%
Total	33	100%

4.4 Analysis of Data from Agent Respondents

The data presented in Table 4a shows that most housing agents (89%) are estate surveyors and managers, but only 20% of them registered with relevant regulating bodies. Again, as Table 4b depicts, majority of the registered agents have less than ten years working experience. Still, while Table 4a shows that only 6 agents (21%) have functioning websites, Table 4c reveals that they less often got tenants from their websites and most of such agents (66%) used their websites for personal purpose aside property management. As depicted in Table 4a, most agents (71%) agreed that some problems exist with their current modulus operandi. Accordingly, these problems include scamming, transporting prospective tenants to inspect property and high cost of apartment as reflected in Table 4d. It is also pertinent to note that, financial capability (54%) was the major factor the agents consider in tenants' selection as shown in Table 4a.

Table 4a: Agent Responses

Questions	Frequency	Percentage
Are you an Estate Surveyor and manager?		
Yes	25	89%
No	3	11%
Are you registered?		
Yes	8	20%
No	20	80%
Do you have a website?		
Yes	6	21%
No	22	79%
Do you think there are problems encountered in the process of securing rental residential properties?		
Yes	20	71%
No	8	29%
What factors do you consider in selection of tenants?		
Financial capability	15	54%
Family size	6	20%
Religious background	1	4%
Employment status	5	18%
Social background	1	4%
Total	28	100%

Table 5b: Registered Agent Responses

How long have you been in practice?		
Below 10 years	6	75%
10 – 20 years	2	25%
30 years and above	0	0%
Total	8	100%

Table 4c: Agent having Website Responses

How often do you get prospective tenants from your website?		
Rarely	2	33%
Often	3	50%
Very Often	1	17%
What do you use the website for?		
Apartment advertisement	1	17%
Leasing out apartment	1	17%
Personal	4	66%
Others	0	0%
Total	6	100%

Table 4d: Problems Encountered by Agent Responses

What are they?		
Impersonation	3	15%
Scam	5	25%
Mobility	5	25%
Rental value (price)	6	30%
Others	1	5%
Total	20	100%

4.5 Analysis of Data from Landlord Respondents

Table 5 reveals that most of the landlords (57.14%) built their properties less than 10 years ago. Also, majority of the landlords (85.71%) prefer to lease their properties to managing firms for effective management. Thus, it implies that they should be able to appreciate a system that informs them of how effectively their properties are being managed.

Table 5: Landlord Responses

Questions	Frequ ency	Percent age
How long has your property been in existence?		

Under 10 years	4	57.14%
11 – 20 years	2	28.57%
Over 20 years	1	14.28%
Who is in charge of the management and maintenance of the property?		
Landlord	1	14.28%
Managing firm	6	85.71%
Other Tenants	0	0%
Total	7	100%

5. DISCUSSION OF FINDINGS

The result of this study revealed that majority of tenants and landlords still engaged in conventional approach of seeking apartment by going through posters prepared by agents. Furthermore, agents remained the main source of advertising and securing rental housing, not only because tenants lack capacity to directly approach landlords to secure rented apartments, but landlords equally preferred to engage agents for proper management of their properties. Consequently, as most of the residential apartments were built less than 10 years ago, landlords will opt for services of property managers to assist in realising their investments in good time, couple with proper maintenance of their properties. Thus, Minna metropolis is a worthwhile location for property managers and investors.

Though, most of the agents are property managers by doing, but locating the few legitimate agents is an issue, because only few among them actually register with professional body regulating property management in Minna metropolis. Therefore, they are not adequately prepared to tackle problems like impersonation, scamming, tenants defaulting in paying rents etc, which are associated with tenants. In addition, transporting prospective tenant to inspect apartment is often additional challenge to agents. Relatedly, most tenants agreed that searching for accommodation under current method, causes some inconveniences and left them with unsatisfied experience. Probably, these challenges could be one of the reasons that make landlords to engage the service of agents.

Interestingly, majority of the respondents have regular access to internet and internet-enabled devices. Mostly, the mobile device is the prevalent devices through which they access internet. The possible reason for this level of ICT utilization, is that the metropolis is host to two higher institutions of learning (Federal University of Technology Minna, and Niger State College of Education). Also, this assumption is corroborated by the highest number of respondents who were within the age bracket of 18-25 years and about 34% of the respondents have secondary school certificates as their highest degree.

Despite the impressive ICT utilization among the respondents, tenants still preferred posters over ICT platforms as source of getting information about vacant apartments. This could be as a result of few websites dedicated to property management in Minna metropolis. Even, most of the websites owned by agents are used for personal activities. Hence, the agents do not get patronage through their websites often. This attitude of possessing ICT, but not it for professional practices is similar to conclusion drawn by Ibisola et al., (2015).

6. CONCLUSION AND RECOMMENDATION

Currently, stakeholders in property management within Minna metropolis still engaged in conventional practice. Exclusively, advertising and securing rental accommodation within Minna metropolis is a viable business, though, with some problems relating to scamming, impersonation, mobility of tenants to property location amongst others. Actually, tenants and agents are yet to take advantages of ICT to alleviate these challenges despite its commendable adoption by these stakeholders. Again, housing agents who are mostly unregistered remain the link between house owners and prospective tenants have not pay enough attention to contributions of ICT to property management.

Consequently, there is need for synergy between ICT professionals and property managers to evolve viable ICT platforms that would improve tenant's search experience for rental housing. As an example, web or mobile application could be introduced to assist prospective tenants with detailed textual and 3-dimensional pictographic information about rental housing units thereby reducing cost of transportation for inspection of apartment. In addition, these platforms would assist in electronic management of such properties in terms of finance, maintenance, monitoring and reporting scandalous tenants etc. Also, such platforms could integrate a module that provides statutorily recognized property managers in the metropolis, thereby, eliminating the activities of fraudulent agents.

REFERENCES

- Akogun, I. T., & Olatoye, O. (2013). Tenant eviction in property management practice. *Journal of Economics and International Finance*, 5(4), 139–145. <http://doi.org/10.5897/JEIF12.088>
- Babalakin, W. (2004). Key constraints to real estate development in Nigeria. *Babalakin & co.*
- Daniel, D. I., Okorie, A., & Ojo, O. (2012). An Examination of the Tenancy Agreement as a Shield in Property Management in Nigeria. *International Journal of Business Administration*, 3(4), 54–66. <http://doi.org/10.5430/ijba.v3n4p54>
- Eni, D. D., & Danson, T. P. K. (2014). Private Sector Participation in Urban Housing Supply in Calabar, Nigeria. *American International Journal of Contemporary Research*, 4(8), 130–141.
- Gilbert, A. (2016). Rental housing: The international experience. *Habitat International*, 54, 173–181. <http://doi.org/10.1016/j.habitatint.2015.11.025>
- Gommans, H. P., Njiru, G. M., & Owange, A. N. (2014). Rental House Management System. *International Journal of Scientific and Research Publications*, 4(11), 1-24.
- Ibisola, A.S., Oni, A.B. & Peter, J.N. (2015). The relevance and Application of ICT in Estate Surveying and Valuation in Ogun State. *International Conference on African Development Issues (CU-ICADI) 2015: Information and Communication Technology Track*, 112-120.
- National Population Commission. (2010). 2006 Population and Housing Census. Priority Table Volume IV (Population Distribution by Age & Sex). Available online: <http://population.gov.ng/wp-content/themes/expo18/documents/Pr%20Vol%204%20Age%20Sex.zip>

- National Statistical Service (n.d.). Sample size calculator. Available online:
<http://www.nss.gov.au/nss/home.nsf/pages/Sample+size+calculator>.
- Niger State Bureau of Statistics (2012). *Fact and Figures about Niger State*. Available online:
<http://www.nigerianstat.gov.ng/pdfuploads/Niger%20State%20Statistical%20Year%20Book%202011.pdf>
- Oni, A. O. (2010). Harnessing Real Estate Investment through Decision Process for Selecting Tenants in Nigeria. *10th African Real Estate Society Conference*, Kenya, 1–19.
- Razali, M.N. & Martin, D. (2006). Assessing Implementation of ICT among Property Management Companies in Malaysia. *International Business Information Management Conference (7th IBIMA)*, Brescia, Italy.
- Sani, K. S., & Gbadegesin, T. J. (2015). A Study of Private Rental Housing Market in Kaduna Metropolis, Nigeria. *Journal of Resources Development and Management*, 11(Stone 1993), 1–12.
- Yusuff, O. S. (2011). Students Access to Housing: A Case of Lagos State University Students – Nigeria. *Journal of Sustainable Development*, 4(2), 107–122.
<http://doi.org/10.5539/jsd.v4n2p107>