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EVALUATION OF ADOPTION OF CROWDFUNDING PLATFORMS FOR REAL ESTATE INVESTMENT IN AKURE, NIGERIA

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ABSTRACT

Purpose: *The study identified the forms of real estate crowdfunding platforms in the study Akure; evaluated the level of their adoption and examine the factors influencing the level of adoption of different forms of real estate crowdfunding in the study area.*
Design/methodology/approach: *In order to achieve this, forty-seven (47) questionnaires were administered to registered estate firms (35) and estate developers (12) in the study area out of which twenty-five (25) and six (6) were retrieved respectively. Overall, a total of 31 questionnaires representing 66% general response rate was achieved and found adequate for further analysis. The questionnaires were analyzed using weighted mean score analysis, relative importance index (RII) and logistic regression analysis.*
Findings: *The study revealed that real estate crowdfunding platforms viz reward-based crowdfunding is the most recognized with the mean of 2.48 while the hybrid model has the least familiarity with a mean-score of 2.13. The study further revealed that debt-based, donation-based and equity-based crowdfunding platforms has the highest adoption rate with a mean of (2.39) respectively, followed by reward-based crowdfunding platform with a mean of (2.32) while the hybrid model offers the lowest mean of adoption (2.13). Finally, the study found that portfolio diversification has the most valued benefit with relative importance index (RII) of 0.741935 followed by passive income generation, real estate deals and quicker dealings while professional property management, less paper work, availability of prime real estate and lower entry barrier in terms of amount of investment are less beneficial to an investor amongst other findings.*
Research limitations/Implications*: The rapidly evolving nature of technology platforms like crowdfunding may limit the applicability of some findings over time. The contribution to knowledge is that the study provides insight that real estate crowdfunding platforms can increase real estate investment opportunities for a broader audience contributing to financial inclusion.* ***Practical implications:*** *Real estate crowdfunding platforms can be utilized by real estate developers/estate firms to diversify funding sources and thereby deepen risk sharing and diversification.*
Originality/value *:The study highlights strategies for promoting real estate crowdfunding platforms as a viable financing option for real estate development.*

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Keywords: Crowdfunding, real estate, investment, mean item score, logistic regression

1.0 INTRODUCTION

Real estate has generally been considered to be a safe mode of investment since it is possible to shield against inflation and economic fluctuations. It covers all types of assets which may consist of residential housing, commercial and warehouse buildings, offices, and land. Renting out the properties or selling them at the profit will help investors to generate income. Regardless of these prospects, the industry is capital intensive, which poses great entry barriers, and leads to increased mortgage defaults (UBS Global Real Estate Bubble Index, 2021). Individual investors therefore tend to concentrate on small scale business like purchasing rental apartments or taking up house flipping in which the profitability is determined by selling prices higher than their acquisition, renovation, and maintenance costs.

Traditional real estate financing mechanism has not been able to support the financing requirement of developers, especially in the emerging economies like that of Nigeria. The development of information and communication technology has greatly transformed the conventional business operational methods, and by approximately 2010, the real estate sector started to observe the emergence of financial technology corporations focused on real estate crowdfunding (Baum, 2017). Yasar (2021) noted that the development of alternative finance markets has altered the fundraising practices, since such markets allow capital to be raised outside the normal banking systems, financial intermediaries, and capital markets. Technological innovations, artificial intelligence, and digital platforms have led to the rapid growth of these alternative sources of financing over the last decade, in particular, following the global financial crisis. Fukuhara (2020) states that online alternative finance was first released on the basis of crowdfunding platforms and has since developed to cover such mechanisms as peer-to-peer lending and initial coin offerings (ICOs). Crowdfunding enables an individual or group of people, often known as the crowd to lend sums to programmers or purchase equity interests as joint venture partners (Adjakou, 2021). Crowdfunding through investments, especially in the real estate industry is very acceptable in most parts of the world. This model lowers investment entry barriers to investors and allows diversification of portfolio. Schweizer and Zhou (2016) have described real estate crowdfunding as a source of financing where developers are showcased on special online platforms that issue debt or equity instruments in an effort to find a wide group of investors to support the project. These platforms have assisted in filling financing gaps in real estate development which would provide alternative to the traditional sources of financing and may have greater returns. The availability of finance in real estate development has continued to be a thorn in the flesh with many developers left in a precarious situation. Lack of adequate real estate investment in Nigeria has been seen to be caused by ineffective institutional frameworks to allocate land, finance systems, mortgage institutions, and development of infrastructure (Ogbenjuwa *et al.*, 2018).

The financial crisis experienced in 2007-2008 left a gap in funding in the world, which impacted negatively on all sectors of the economy including real estate development, and greatly limited availability of real estate finance (Griffith-Jones and Ocampo, 2009). Although some of the lending limits that were enacted following the crisis have been slowly eased, small-scale real estate developers are still facing problems with access to financing (Milton, 2010; Anderson, 2016; IPF Research, 2016; Baldwin, 2017). To this, other financing options have come into the limelight to fill the gap caused by conventional banking providers (Stemler, 2013). Since small startups

typically have fewer options to use traditional funding sources, crowdfunding has become a credible and novel source of funds (Walthoff-Borm, 2018). Real estate crowdfunding is gradually becoming viable alternative which provides diverse opportunities with a range of platforms to finance residential and commercial properties with low interest rates. These platforms include Fundrise, RealtyMogul and Yieldstreet but some targets accredited investors with higher minimum investments. Despite being a relatively new trend with rapidly evolving changes, there is limited literature on what investing through these platforms currently entails but amid ongoing loan constraints, crowdfunding platforms emerged as a new financing method without traditional creditors' involvement (Ogundu, 2025). Several crowdfunding platforms are available in Nigeria ranging from various business ventures to personal projects and community initiatives, they include kickstarter, indiegogo, GoFundMe, NaijaFund, FarmCrowdy, Crowdyvest,
Fundanenterprise and Microventures. These platforms collectively provide a robust ecosystem for various types of fundraising in Nigeria for financing various projects and businesses. Despite the lack of regulatory frameworks and standardization, which have limited the growth of crowdfunding in Nigeria, it is gradually being deployed by developers who have no access to financing opportunities in conventional methods like financial institutions and institutional investors.
It is against this backdrop and the glaring paucity of relevant research in this area that this study assesses the adoption of crowdfunding platforms in real estate investment in Akure with a view to identifying factors influencing the level of adoption and highlight the benefit of crowdfunding in real estate investment.

2.0 LITERATURE REVIEW 2.1 Overview of Real Estate Crowdfunding

Crowdfunding has changed the process of how people and organizations acquire funds by utilizing the efforts of a significant group of people, mostly through the internet (Mollick, 2014). It is usually characterized as a way of raising capital on projects or ventures by soliciting comparatively low amounts of cash by a large group of individuals over the internet. The initial definition offered by Belleflamme, Lambert, and Schwienbacher (2014) indicates that digital platforms are core in terms of aggregating funds within a large and very diverse group of contributors. Their article sorts out a few general models of crowdfunding: reward-based, equity-based, debt-based (peer-to-peer lending), and donation-based, each with its goal and the target audience and specific goals.
Mollick (2014) used the data of Kickstarter, one of the most popular reward-based crowdfunding platforms to conduct an exploratory analysis. Using quantitative methods, the study considered the drivers of the success or failure of crowdfunding campaigns. The results determined the key success drivers that include the clarity and quality of project descriptions, the amount of funding targets, and the time to launch the campaigns. The importance of social media and personal networks, which is also highlighted in the study, is that the more the creators have strong ties, the higher probability they may reach their funding targets. Ahlers (2015) focused on crowdfunding based on equity, whereby participants get ownership rights in the funded enterprises. Based on the signaling theory, the study evaluated the influences of such indicators like the strength of business plans, experience of management teams, and financial commitments of founders on investor behavior. A study of European crowdfunding sites revealed that good and valid signals are important in creating investor confidence and defining investment decisions.
Moreover, Gerber *et al.*, (2012) took a qualitative study to examine the reasons behind the behaviour of people in funding their projects using crowdfunding programs. In the interviews and

surveys of project creators and supporters, the study managed to find such motivations as the support of creative projects, the possibility to receive exclusive rewards, and the chance to become involved in the community. It can be proposed that the outcomes indicate that emotional and social motivation together with the financial factor are powerful factors that affect the crowdfunding engagement.Lastly, Agrawal *et al.,* (2011) investigated the spatial aspects of crowdfunding through several platforms by analyzing the data on how the Internet technologies are diminishing the geographical boundaries to funding. Their results show that the traditional financing option usually relies on local networks when crowdfunding enables entrepreneurs to access an international community of supporters. This broad access has particularly been beneficial to entrepreneurs in areas where there is a weak access to traditional venture capital.

2.2 Forms of Real Estate Crowdfunding

There are various types of real estate crowdfunding with each having its own benefits. Broadly, there are four broad models of crowdfunding namely donation-based, reward-based, lending-based and equity-based crowdfunding. Crowdfunding through donations is the process of soliciting funds online to support a charity or social system, and the supporters do not anticipate any financial or material compensation (Aderemi and Ishak, 2020). In reward-based crowdfunding, a project participant can be rewarded with non-financial incentives to his/her contributions, which include recognition, gifts, or project-related products (Thaker *et al*., 2016).

Peer-to-peer lending, also called lending-based crowdfunding, is a replica of traditional lending schemes, but using digital platforms, people provide funds to others at interest rates set by the platform (Thaker *et al*., 2016). Crowdfunding based on equity gives investors an opportunity to receive financial gains in the form of ownership rights or shares contingent on the performance of the project in terms of revenues.

The choice of a proper crowdfunding platform and real estate project needs to be carefully considered on a variety of factors such as the nature of the property, the investor fees involved in the project, repayment period, credibility of the project, investor reviews and the measures taken by the platform to prevent fraud cases.

Equity crowdfunding involves capital investment in real estate projects with a partial ownership of the property on which the capital is invested. The model of this investment has potential large returns in case of appreciation of property value and it could also be benefiting in terms of taxation in case of depreciation. However, it comes at a greater risk, such as the risk of decreasing the property value and lack of liquidity, since investors are usually asked to invest their money in between three to ten years. Typically, equity-based crowdfunding can be described as a model whereby the investors (who tend to invest comparatively large sums) obtain ownership interests with the hope that they will share the future gains (Mollick, 2014). The examples of platforms that are run on the basis of this model are remarkable (such as Fundrise, RealtyMogul, or CrowdStreet). Equity real estate crowdfunding will enable investors to be shareholders in institutions which govern real estate developments and the investors will become co-owners of the real estate. Rental income or capital appreciation leads to the generation of returns in the event of the selling of the properties at an increased price. However, this type of investment may be quite profitable, but the results are based on uncertainty and cannot be predicted in advance, which is characterized by a relatively higher risk (Social Estate, 2022). Platforms like EvoEstate and Reinvest24 and Rendity also provide equity-based real estate crowdfunding.

Debt real estate crowdfunding has emerged as a novel way for individuals to invest in propertybacked loans, attracting attention from both investors and researchers. Various platforms

dominate the debt real estate crowdfunding space, including Fundrise, RealtyMogul, PeerStreet, Groundfloor, and CrowdStreet. The platforms are different with their peculiarities and priorities, accommodating various kinds of investors and real estate projects. Some research has been conducted on this phenomenon, and it has given some understanding on its nature, advantages, and the dangers it may have. The study of Schweizer and Zhou (2016) investigated the democratization of real estate investments through the crowdfunding approach. Their study indicated that these sites give smaller investors an opportunity to invest in property deals which were previously available to institutional or high-net-worth investors. The implication of this democratization effect is that there are potentially huge consequences to wealth distribution and investment opportunities. Montgomery (2018) discussed the profile of risk and returns of debt crowdfunding in real estate. In their platform data analysis, they found that returns may be competitive as compared to traditional real estate investments and have a higher likelihood of risk. This observation highlights the significance of a good due diligence and risk analysis to investors in this field. Borrero-Dominguez, Cordon-Lagares and Hernandez-Garrido. (2020) explored the determinants of the decisions investors make when using real estate crowdfunding sites. Their research that employed surveys and statistical models discovered that a composite of property features, loan conditions and reputation of the crowdfunding site influence investors. The study is very useful to both platforms in an effort to attract investors and individuals in making investment decisions. The quantitative approach was the dominant in these studies as they used data posted on crowdfunding platforms, surveys with the sample of investors and statistical model as tools to make conclusions. The method enables the sound analysis of trends and patterns of real estate crowdfunding investments. In spite of such valuable contributions, there are still a number of research gaps. The performance of the debt crowdfunding investments in the real estate in the long run remains to be not clearly understood, in part because the idea of a debt crowdfunding has been around comparatively recently. Also, regulatory effects of this new model of investments and sufficiency of protective measures of investors are other aspects that need to be explored. Finally, another avenue that future studies should focus on involves the effects of real estate crowdfunding on conventional property financing markets since such effects might have relevant consequences on the overall real estate sector. Since this area is still in its development phase, further research will be prominent in gaining a complete insight into the prospects and the shortcomings of debt real estate crowdfunding. This emerging type of real-estate finance will hold on due scholarly interest to the investors and policymakers.

The crowdfunding reward-based real estate has become a new form of investment whereby small investors can now invest in projects that they would not have been able to access by themselves. It is an unconventional method of investing where supporters will be rewarded with incentives that are not financial, in addition to the possibilities of making a profit. The recent studies in the area have mostly been the mixed methods research design. Montgomery (2018) study utilized survey data to examine the motivations of investors found that financial returns, opportunities of portfolio diversification, interest in the real estate market, and non-financial risks associated with the aspect of tangible value like exclusive access to property were influencing the engagement in the rewardbased real estate crowdfunding. In sum, the crowdfunding of property in the form of rewards is a rather recent trend in the sphere of property investment which may bring both enormous opportunities and significant challenges.

Crowdfunding through donation is a radical model of financing real estate projects using the goodwill of people as a collective force to finance projects without a payback. The model has been popular because it has been able to subsidize socially favourable projects which would otherwise fail to attract conventional funding. The dynamics of it have been discussed by different authors emphasizing its peculiarities, advantages and problems. As Agrawal, Catalini and Goldfarb (2015) note, donation-based crowdfunding utilizes the strength of the altruistic concept to enable donors to contribute to the crowdfunding project that fits their personal values and interests of the community. In contrast to other models of crowdfunding, donors in this model do not get any financial benefits or rewards. They instead find satisfaction in the good social contribution of their efforts. The model is especially applicable to projects where the social, cultural or communal values of a particular project are evident, i.e. building of community centers, schools, or parks. Mollick (2014) describes the communal involvement in the crowdfunding based on donations. The donors have a personal connection to the project and feel that they are contributing to the cause and their efforts can be physically felt. Such sense of community is essential to the effectiveness of the donation-based campaign because it both mobilizes funding and activism. The article by Belleflamme, Lambert and Schwienbacher (2014) considers the adaptability of crowdfunding as a source of financing through the donation. They observe that to the initiators of the projects, this model has made it easy to obtain capital without a requirement to pay any loan or provide any financial returns. This comes in handy especially in cases of non-profit making organizations and community projects which may not appeal to traditional investors. This elimination of the financial strain of the repayment will allow project initiators to concentrate on the social objectives of the project. Gerber, *et al.*, (2012) emphasize the efficiency of storytelling and transparency in effective crowdfunding campaigns that are based on donations. The communication regarding the objectives, effects and progress of the project should be effective to keep the trust and interest of the donors. The credibility can be promoted through regular updates and transparent reporting in the way of how the funds are spent to motivate further support. Such openness does not only create trust, but also facilitates the acquirement of new donors because they are certain of the integrity of the project.

According to Kuppuswamy and Bayus (2015), sustainability and long-term funding are some of the challenges that the crowdfunding based on donation presents. Given that donations are usually one-time donations, it is hard to achieve the recurrent funding. Having the community and ongoing interaction with donors, the initiators of the projects should keep the support on board. This is usually through the use of social media, hosting events and giving regular feedback as to the success of the project in order to maintain the interest of the community in the project. Ordanini *et al*. (2011) investigate the legislative and regulatory aspects of crowdfunding on a donation basis. Though this model has less regulatory difficulties than equity or debt crowdfunding, it also has to adhere to the legislation connected with fundraising and charitable contributions. Crowdfunding through donations has been used in Nigeria to help construct classrooms in the rural regions, develop community health centers and provide social leisure points. Such projects are very close to local communities and the diaspora as they are willing to support important causes. Another interesting project in Akure was the building of a health facility. The crowdfunding project emphasized the urgent nature of the problem of healthcare facilities in the region and attracted the attention of the local residents and the wider Nigerian diaspora. The campaign provided a great description of the intended services of the health center, testimonies by the community members about the facility and frequent updates on fundraising. This strategy brought in a lot of donations,

which demonstrates the potential of crowdfunding based on donation to solve urgent community needs. Although it has its benefits, there are challenges of donation-based crowdfunding. The first one is the establishment and the continuation of donor trust. According to Lehner (2013), transparency, integrity, and proper utilization of funds are the key to keeping the donors' trust. The initiators of the project should be clear and honest in their communication on how the donations will be utilized and give frequent reports on the project. This model has been popularized such that platforms such as GoFundMe, Crowdrise and JustGiving provide secure payment processing and social media integration and donor management features. These technologies make the donations easier, monitor the progress and communicate with the donors, making the operations efficient and keeping the donors confident. New technologies like blockchain and virtual reality are also making the transparency and donor interest better and offer new opportunities to demonstrate project impact and gain confidence. Lastly, knuckle-popping crowdfunding is an alternative and effective medium of financing real estate projects with high social or community returns. This model is able to offer collective goodwill and altruism to facilitate a broad selection of projects that would not otherwise be able to achieve standard investment. Although the issues of sustainability, compliance by the government and preserving the trust of the donors should be addressed, the advantages of community involvement, unrestricted funding and extended publicity make the donation-based crowdfunding an appealing alternative in numerous real estate initiatives.

Hybrid real estate crowdfunding (RECF) models represent a developing and flexible financing model, a combination of key characteristics of other types of crowdfunding. These models will combine the elements of equity-based, debt-based, reward-based, and donation-based crowdfunding that will help create a comprehensive funding model that will be capable of drawing a big number of people to contribute. The main aim of hybrid model is to use strengths of both crowdfunding formats and minimize the weaknesses of both, so as to provide a powerful means of financing to the real estate developers and investors. As a matter of fact, hybrid real estate crowdfunding is a mix of financial incentives and altruistic ones. As an example, one project can give equity in a long run capital appreciation to investors, give fixed interest payments to more risk averse participants in the form of debt-like securities, and provide non-financial rewards or recognition to smaller contributors. Concurrently, the project can be backed by the community members by making donation-based contributions which are driven by developmental or social concerns. This stratified organization allows the project sponsors to have a variety of sources of capital, making them flexible and more appealing to investors. The functionality and advantages of hybrid crowdfunding models have been studied by a number of scholars. Ahlers *et al.*, (2015) assign high values to their strategic value as they remark hybrid structures are effective when it comes to responding to the needs of different groups of investors. These models improve the outcomes of the fundraising process and a more welcoming investment ecosystem since they offer a diversity of participation means. Such inclusiveness comes in handy especially in those projects that seek to generate both financial and social returns as it attracts both profit and social oriented investors. Hybrid models are also adaptable to the evolving market status and investor requirements and are able to deliver a risk-return profile that is well-balanced and suitable to a broader audience.

Lehner (2013) goes even further to note that the hybrid crowdfunding arrangements demand trust and transparency to be successful. These models are quite complex and thus need effective communication and management as a way of keeping credibility. Building and sustaining investor

confidence requires transparency in the use of funds as well as frequent reports on the project status. Ordanini (2011) dwell on the working dynamics of hybrid models, which are concerned with technology and logistics. This research study revealed that successful hybrid crowdfunding must have advanced platforms that can accommodate multiple funding sources besides addressing different regulatory measures. High technology is of great importance in the harmonization of various aspects of crowdfunding, ensuring safe money transfer, and ensuring open reporting. These platforms will play a crucial role in controlling the complexity of the hybrid models and also in achieving a successful project outcome as their operational efficiency is essential.

2.3 Level of Adoption of various forms Real Estate Crowdfunding Platforms

A middleman between investors and fund seekers is a crowdfunding site. Platforms for real estate crowdfunding allow investors to select from a wide range of property kinds, such as residential and commercial buildings, in various locations with varying estimated rates of return and investment durations. Around the world, there are a variety of real estate crowdfunding models and rules that are relatively stringent. Typically, a crowdfunding platform's capabilities are restricted to listing offerings and connecting creators with possible investors. Platforms are not in charge of investors' money or the success of their projects. Having been introduced in 2014, CrowdStreet is a private equity hub allowing investors to access directly the commercial real estate opportunity via an online marketplace. The platform gives users the opportunity to evaluate and choose investment projects that can meet their targeted goals, and it has become one of the biggest marketplaces of individual-asset commercial real estate transactions (CrowdStreet, 2024). DiversyFund is another online real estate investment site, which was also launched in 2014. It allows non-accredited investors including those with less than 1 million in investable assets to invest in private commercial real estates. DiversyFund is a fully automated investment platform and has a number of strengths, such as low minimum investment of 500 dollars, no management fees, automated investment management, and non-accredited investors can use it. Its drawbacks, however, are that it has a limited investment portfolio, only one REIT is offered with a concentration on the assets of three states, a minimum investment of five years is required, IRA is not provided, and the possibility of not receiving returns until assets undergo sales after the property (DiversyFund, 2024).

CrowdRealEstate, in turn, promises the constant return rate of 7% and offers extra benefits to investors, including huge discounts on purchases connected with funded projects, e.g., apartments or rooms in newly constructed hotels (CrowdRealEstate, 2024). Baum (2017) noted that despite the fact that the real estate sector has been stagnant over the past few years, the state of technological innovation is leading to a considerable change. In particular, real estate crowdfunding can avoid the existing intermediaries and the real estate financing arrangements (Cannon, 2014). Baum (2015) also observed that access to real estate investments has been traditionally limited to high-net-worth individuals and institutional investors, but these days ordinary people can now directly invest in real estate markets through the opportunities of crowdfunding resources. Instead of turning to bank financing, developers currently find it easier to raise funds with the assistance of online funding platforms aimed at collecting funds in a collective pool of investors via real estate crowdfunding solutions (Cannon, 2014). This category of investors (also known as the crowd) can invest either by way of debt instruments or equity involvement in joint ventures thus broadening the accessibility of funds to the developers. The growing popularity of crowdfunding in the form of debt is also a threat to the regular banking

arrangements (Hollas, 2013). The traditional financial institutions have become very unpopular with many investors and savers because they charge high fees, offer few investment options, and have long investment periods.

All in all, there has been a growing number of crowdfunding sites every year, and every site has its specifics that should be evaluated and compared closely. They are also useful as the source of information especially to potential investments. The investors choose the projects according to their preferences and, consequently, enjoy the returns and incentives thereof. Every project listing is usually provided with the structure of investment, risk level, anticipated rate of return, and the required sum of capital.

2.4 Factors Influencing the adoption of Real Estate Crowdfunding

The adoption of real estate crowdfunding is influenced by various factors, such as regulatory, technological, economic, and social ones. Of these, in particular, regulatory developments are at large at play. In the United States, to take one example, legislation sponsored by the Jumpstart Our Business Startups (JOBS) Act officially authorized and encouraged the use of crowdfunding by allowing the involvement of non-accredited investors. This law has created an explicit legal framework which improves investor protection and improves trust in the crowdfunding models hence promoting its adoption by more individuals (Stemler, 2013). The technological advances are also very essential. The creation of secure online platforms of transferring money, social media marketing tools, and of big data analytics has facilitated the process of linking investors to real estate projects. The infrastructure underpins efficient functioning and increases the availability of crowdfunding campaigns (Berndt and Mbassana, 2016). Another influential factor is the economic factors. Other alternatives to the investments are also a significant determinant in the market. Crowdfunding takes a more accessible and democratic approach to investing in real estate, offering those who are not in the upper income bracket the chance to open up their portfolio with a different type of investment (Mollick, 2014). The adoption is affected by the performance and track record of the crowdfunding platforms themselves. Investment platforms such as Patch of Land have proved to be very successful in a bid to raise funds on various projects hence creating confidence and inviting more investors and developers to join the platform. Patch of Land, for example, has successfully crowdfunded 986 real estate projects, raising a total of $443 million with an average loan size of $449,000 (Patch of Land, 2018). Cost-effectiveness and flexibility also make crowdfunding appealing compared to traditional financing methods. It often provides a quicker and less stringent process for accessing funds than banks and venture capitalists (Mollick, 2014).

3.0 METHODOLOGY

This study examined the introduction of the crowdfunding platforms in investing in real estate in the city of Akure, Ondo State. It identified the members of the Real Estate Developers Association of Nigeria (REDAN) and the Estate Surveying and Valuation firms in the state with a particular focus on the application of Real Estate Crowdfunding (RECF) in Ondo State. Akure was chosen because of its new real estate market and the growing attention to new ways of financing. The survey research design was used to evaluate the rate of adoption of various types of real estate crowdfunding by the developers and other professionals in Akure, what influence the adoption, and the benefits of crowdfunding in real estate investment in the study area. Structured questionnaire was used for data collection. The population sample consisted of the Estate Surveying and Valuation companies (Principal Partners will act as proxies) and real estate

developers in Akure, under REDAN. The sampling frame comprises of all the real estate developers and Estate Surveying and Valuation firms within the metropolis. In this research, the sample was used in the form of twelve real estate developers (Rentech Digital, 2024) and thirtyfive Estate Surveying and Valuation firms in Akure, which were accessed through unpublished lists of the NIESV Ondo State Branch (2024).

In this study, the sampling frame constituted the sample size and covers the total number of twelve (12) real estate developers (Rentech Digital, 2024) and thirty-five (35) registered real estate firms in Akure metropolis according to the unpublished lists of the NIESV Ondo State Branch (2024). The sampling frame is of a manageable size in line with Israel (2003) that a sample frame of 200 or less be adopted as the sample size. Therefore, a total of forty-seven (47) questionnaires were administered to Registered Estate Surveying and Valuation firms (35) and Real Estate Developers (12) in the study area out of which twenty-five (25) was retrieved representing 71% of Estate Surveyors and Valuers; twelve (12) questionnaires were administered to real estate developers and six (6) was retrieved representing 50% of real Estate Developers. Overall, a total of 31 questionnaires representing 66% general response rate was retrieved and found adequate for further analysis.

3.1 Mean Item Score

In order to have a quantitative measure of the average response of the respondents, the mean item score (MIS) was obtained in terms of a 4-point Likert scale. The rank of the highest MIS was put at 1 with the rest of the scores being ranked in decreasing order. The mean score of the item was calculated as per Equation 1, where 4 was the highest score and 1 the lowest score.

$$Mean = \frac{\sum i f w}{\sum f} \quad \text{..... } \textbf{\textit{Equation 1}}$$

Where Σfw connotes the sum of the product of all weights and the frequency of respondents opting for such weights, while Σf is the total number of respondents. Equation 1 can be further expanded as equation below

$$MIS = \frac{(5Xfs)+(4X4)+(3Xf)+(2X)+(1Xf)}{f5+f4+f3+f2+f1} \quad \text{..... } \textbf{\textit{Equation 2}}$$

Criteria for drawing inference from the mean score were established as follows:

$3.26 < MIS \leq 4.00$ = Very Popular; $2.51 < MIS \leq 3.25$ = Significantly Popular; $1.76 < MIS \leq 2.50$ = Less or Moderately Popular; $1.0 < MIS \leq 1.75$ = Not Popular

This method of data analysis was used to identify the forms of real estate crowdfunding platforms in the study area and evaluate the level of adoption of the various forms of real estate crowdfunding platforms in Akure.

3.2 Logistic Regression

This method was used to examine the factors influencing the level of adoption of different forms of real estate crowdfunding platforms in Akure. The dependent variable is the binary outcome variable "adopted" as 1 for individuals who have adopted real estate crowdfunding platforms, and 0 as “not adopted” for those who have not. The independent variables include various factors that are hypothesized to influence the likelihood of adoption. These factors include minimum investment amount, regulatory compliance, security of the platform, diversity of investment options, cost-effectiveness and flexibility, platform reputation, transparency of the platform, ease

of use, return on investment. Each of these independent variables were operationalized based on responses to survey questions, where categorical variables were encoded into binary or dummy variables for the logistic regression model. Continuous variables were used when they require normalization. The logistic regression analysis enabled the assessment of the likelihood that these factors individually and collectively predict the probability of adopting real estate crowdfunding platforms in Akure.

The formula for logistic regression is:

$$P(Y=1|X) = \frac{1}{1+e^{-(\beta_0+\beta_1X_1+\beta_2X_2+\cdots+\beta_nX_n)_1}} \quad \ldots\ldots\ldots\ldots\ldots\ldots \textbf{Equation 3}$$

Where:

P(Y=1|X) = the probability that the dependent variable Y is 1 given the input features X; e = the base of the natural logarithm (approximately 2.718); β_0 = the intercept term; β_i (where i =1, 2, . . . , n) = the coefficients for each feature Xi; Xi = the input features. The logistic regression is operationalized as follows:

Table 1: Variable Operationalisation

S/N	Variables	Variable Code	Measurement
1.	Minimum Investment Amount	MIA	1 for low minimum investment amount, 0 for high minimum investment amount
2.	Regulatory Compliance	REC	1 for ease of regulatory compliance, 0 for difficulty of regulatory compliance
3.	Security of the Platform	SOP	1 for secured platform, 0 for not secured platform
4.	Diversity of Investment Options	DIO	1 for wide range of diversification embedded in the platform, 0 for limited range of diversification
5.	Cost Effectiveness and Flexibility	CEF	1 for cost effective and flexible, 0 for cost ineffective and inflexible
6.	Platform Reputation	PRE	1 for good reputation, 0 for bad reputation
7.	Transparency of the Platform	TRP	1 for transparency in operation, 0 for untransparent operation
8.	Ease of Use	EOU	1 for ease of operation and navigation of platform, 0 for difficult to operate and navigate the platform
9.	Return on Investment	ROI	1 for good return on investment, 0 for bad return on investment

Authors, 2024

3.3 Relative Importance Index (RII)

Relative Importance Index (RII) is a statistical method of establishing the ranking of factors by importance based on a survey or questionnaire answers. Chan and Kumaraswamy (1997) state that RII is used to determine and rank the significance of factors based on the ratings done by

respondents. It is usually used to determine the degree of acquiescence or perceived significance of the different variables especially in the construction industry. This paper used RII in evaluating the advantages of the concept of crowdfunding in real estate investment in the study region, and the measurements of the responses were on a Likert scale (e.g., 1 = least important, 5 = most important).

Formula for RII:
The formula to calculate the Relative Importance Index is:

$$RII = \frac{\sum(W)}{\times N} \quad \ldots\ldots\ldots\ldots\ldots\ldots \textbf{Equation 4 } A$$

Where: W = Weight assigned to each factor by respondents (e.g., 1 for "least important" and 5 for "most important")
A = Highest weight (e.g., if you use a 5-point Likert scale, A = 5) N
= Total number of respondents.

4.0 PRESENTATION AND DISCUSSION OF RESULTS

This section outlines and explains the analysis of data collected.

Table 2: Identifying the forms of real estate crowdfunding platforms in Akure

Crowdfunding Platforms	Mean	Rank	Standard Deviation	Skewness	Kurtosis	%	Remark
Reward-Based	2.48	1	0.890	0.052	-0.596	63.0%	MP
Equity-Based	2.45	2	0.810	0.569	-0.173	61.3%	MP
Donation-Based	2.32	3	0.871	0.265	-0.421	58.0%	MP
Debt-Based	2.23	4	0.920	0.065	-0.951	55.8%	MP
Hybrid Models	2.13	5	0.991	0.604	-0.521	53.3%	MP
Total Average Mean	**2.32**						**Moderately Popular**

Source: Field Survey, 2024

Table 2 analyzed the types of different real estate crowdfunding platform types and ranked based on their level of popularity amongst developers and real estate professionals based on survey responses. The analysis is based on five key platforms which includes reward-based, equity-based, donation-based, debt-based, and hybrid models. Each platform is ranked according to its mean score, which reflects the average rating given by respondents on a scale of 1 to 4, where 1 is the least popular and 4 is the most popular. The standard deviation measures the spread or variability in the responses, while the skewness and kurtosis provide insights into the shape of the distribution, indicating how symmetric the data is (skewness) and whether it is more or less peaked than a normal distribution (kurtosis). The percentage column will put the average score in a percentage of the potential maximum score which gives an easier perspective of the popularity ranges in an easy-to-understand format.

Reward-based platforms have the highest mean score (2.48), translating to 63.0% popularity, indicating that respondents are moderately familiar with this type of platform. Following closely are equity-based platforms, with a mean score of 2.45 (61.3% popularity), also indicating moderate awareness. Donation-based platforms have a mean score of 2.32 (58.0% popularity), showing that respondents are fairly aware of this model, while debt-based platforms score slightly lower at 2.23 (55.8% popularity), suggesting moderate but slightly lesser popularity compared to the others. Lastly, hybrid models are the least popular, with a mean score of 2.13, which translates to 53.3% popularity, indicating that respondents are somewhat familiar with this type of crowdfunding platform. In terms of the distribution of responses, most of the skewness values are close to zero, indicating fairly symmetrical distributions, except for the hybrid models (skewness = 0.604), which show a right-skewed distribution, meaning more respondents gave lower rankings. The kurtosis values are all negative, suggesting that the distributions for each platform are flatter than a normal distribution (platykurtic), meaning the responses are more spread out around the mean. Overall, the table indicates that reward-based and equity-based platforms are the most popular to respondents, while hybrid models are less well-known, and the consistency of responses varies slightly across the platform types.

Table 3: Evaluate the level of adoption of the various forms of real estate crowdfunding RECF platforms in Akure

Crowdfunding Platforms	Mean	Rank	Standard Deviation	Skewness	Kurtosis	%	Remark
Debt-Based	2.39	1	1.054	0.045	-1.182	59.75%	MA
Donation-Based	2.39	1	0.803	0.394	-0.093	59.75%	MA
Equity-Based	2.39	1	0.803	-0.019	-0.358	59.75%	MA
Reward-Based	2.32	4	0.748	0.403	0.403	58.00%	MA
Hybrid Models	2.13	5	0.718	0.379	0.407	53.25%	MA
Total Average Mean	**2.32**						**Moderately Adopted**

Source: Field Survey, 2024

Table 3 indicates a moderate level of adoption across all platform types, with Equity-based, Debtbased, and Donation-based models having the highest adoption rates, each with a mean score of 2.39 (approximately 59.75% adoption). This implies that the three models have an equal appeal by the respondents. The Reward-based model comes closely with an average score of 2.32 (approximately 58%), whereas the Hybrid model has the lowest adoption with the average score of 2.13 (approximately 53.25%). The standard deviation in most categories (between 0.718 and 1.054) is rather low, which means that participants have quite a moderate range of answers around the mean, which demonstrates a similarity in the perception of the adoption level among the respondents. The Equity-based, Reward-based and Hybrid models have all skewness values that are to the positive indicating that more respondents reported having lower levels of adoption than the average but skewed towards having higher levels of adoption. The Debt-based, and the

Donation-based models, on the other hand, have little or negative skewness, which means that the distribution is more symmetric or slightly left-skewed. The kurtosis of all the models is close to zero and therefore the distributions are relatively normal, though the Debt-based model has a more flattened distribution (-1.182 kurtosis), suggesting a more spread distribution. In general, the analysis demonstrates that the Equity-based, Debt-based and Donation-based platforms are marginally better adapted compared to the Reward-based and Hybrid models with the slight but significant difference between the rates of their adoption by different types of platforms. The homogenous nature of the data indicated by the low skewness and kurtosis indicates that the perception of these platforms is similar among the respondents.

Table 4: Examine the factors influencing the level of adoption of different forms of real estate crowdfunding platforms in Akure Logistic Regression Model

Variable	Score	Df	Sig.	%	Rank
Minimum Investment amount	6.906	1	0.009	99.1%	1
Regulatory Compliance	1.538	1	0.215	95.0%	5
Security of the platform	1.044	1	0.307	86.4%	7
Diversity of Investment Options	1.877	1	0.171	82.9%	4
Cost-effectiveness and Flexibility	2.222	1	0.136	78.5%	3
Platform reputation	3.833	1	0.050	73.2%	2
Transparency of the platform	1.228	1	0.268	69.3%	6
Ease of Use	0.786	1	0.375	62.5%	8
Return on Investment	0.411	1	0.521	47.9%	9

Source: Field Survey, 2024

Table 4 shows the binary logistic regression analysis that is aimed at investigating the factors that affect the level of adoption of the various types of real estate crowdfunding platforms in Akure. The findings indicate that various important variables have significant levels of influence on the adoption of such platforms by the developers/Estate Surveyors and Valuers. The most important factor is the Minimum Investment Amount, which has a p -value of 0.009 and significance level of 99.1%. This implies that an entry-level cost of investment serves as a decisive factor of platform adoption in Akure since investors are likely to allocate funds to the platform in cases where the minimum required to invest is favourable. The second most important variable is Platform Reputation with a p-value of 0.050 and 95.0% level of significance. This implies that the reliability and the credibility of the platform have a significant effect on the rate of adoption as probable investors may attach preference to platforms that have a strong reputation. The Cost-effectiveness and Flexibility ($p = 0.136$, 86.4% significance) and Diversity of Investment Options ($p = 0.171$, 82.9% significance). These variables suggest that those platforms that provide them with a range of investment opportunities and a flexible pricing model are of moderate importance to users when deciding on a crowdfunding platform. In the same way, Regulatory Compliance ($p = 0.215$) and Transparency of the Platform ($p = 0.268$) reveal that these factors are also relevant, but not as important as the minimum of the investments or reputation in the decision-making process. All other factors are less significant and include Security of the Platform ($p = 0.307$), Ease of Use ($p = 0.375$), and Return on Investment ($p = 0.521$). These factors might still be influential but seem

to be less significant in the adoption of the crowdfunding platforms in real estate investment by the users.

In general, the discussion demonstrates that economic factor, including the cost of entry and platform reputation, rank the highest in determining the adoption whereas ease of use and platform security rank lower during the decision-making process of potential investors in Akure real estate crowdfunding platforms.

Table 5: Examine the benefits of crowdfunding in real estate investment in the study area.

Benefits	Mean	Std. Deviation	RII	Rank
Lower Investment Threshold	2.48	1.061	0.620968	8
Portfolio Diversification	2.97	0.875	0.741935	1
Access to Prime Real Estate	2.65	1.018	0.661290	7
Passive Income Generation	2.74	0.930	0.685484	2
Transparency in Real Estate Deals	2.74	0.945	0.685484	2
Reduced Paperwork	2.68	0.945	0.669355	6
Faster Transaction	2.74	0.855	0.685484	2
Professional Property Management	2.71	0.864	0.677419	5

Source: Field Survey, 2024

The table of the analysis of the importance of benefits related to crowdfunding in real estate investment is presented in table 5, and it is noticeable that some of the benefits have a stronger focus than the others. The greatest importance is the portfolio diversification with a mean score of 2.97 and Relative Importance Index (RII) of 0.741935, which is the first. This means that the investors in the area of study highly appreciate the fact that they can diversify their investments and invest on a variety of properties, mitigating the risk of the investments, thus, increasing the prospective returns. The standard deviation is relatively low (0.875) indicating that there was a big agreement between respondents as to the importance of this benefit. The second position is shared by passive income generation, transparency in real estate deals and faster transactions which have a mean of 2.74 and RII of 0.685484 respectively. These advantages are indicative of how investors wish to have a hands-off strategy that will still give them reliably regular income, the necessity of transparent and understandable deals and effective transactions. The standard deviations have quite small differences (0.930 passive income, 0.945 transparency, and 0.855 faster transactions) showing uniform appreciation of the factors among the respondents. Professional management of property, which has a mean of 2.71 and the RII value of 0.677419 with a ranking of fifth. Investors have found it convenient to have experts handle their properties, manage maintenance and their relationships with tenants among other operations. This is the advantage as they are not preoccupied with day-to-day managerial tasks; hence, they can concentrate on investment strategy. Standard deviation of 0.864 implies that there is a moderate agreement between the respondents. Fewer paper works with a mean of 2.68 and RII of 0.669355 is ranked sixth. It is an advantage that

is appreciated in the ease of documentation and legal procedures that usually accompany buying and selling of real estate. This is one of the significant benefits of the crowdfunding business model to investors because it enables transactions to be easier and faster to accomplish. Nonetheless, the standard deviation of 0.945 implies that there is a certain fluctuation in the way in which this advantage is perceived. The seventh one is access to prime real estate with a mean of 2.65 and an RII of 0.661290. This aspect allows investors to take part in quality real estate investments that would have not been available in the conventional medium. The standard deviation of 1.018 is higher, which indicates more variance in the opinion of investors about the presence of such prime assets.

Finally, a reduced threshold of investments that is usually mentioned as an advantage of real estate crowdfunding is the last to be listed in this research with a mean of 2.48 and an RII of 0.620968. This implies that investors in the region of study are less concerned with the fact that they are able to invest smaller amounts as opposed to other benefits. The greatest variation in responses is of 1.061, which means that although some investors may find it important, it is not a universally important quality.

In summary, the results suggest that investors are drawn to real estate crowdfunding primarily for its potential to diversify portfolios, passive income generation, transparency in real estate deals and faster transaction leverage it provides while the professional property management, reduced paper work, access to prime real estate and lower entry barrier in terms of quantum of investment are less of a priority.

5.0 CONCLUSION AND RECOMMENDATIONS

This section provides an overview of the main findings as applied to the background and literature review of the study.

The findings indicate that reward-based Crowdfunding is the most recognized model among respondents in Akure, while Hybrid Models are the least familiar. This finding is in accordance with the world trends in the literature. According to Mollick (2014) and Belleflamme, Lambert, and Schwienbacher (2014), reward-based crowdfunding is the simplest and most popular type of crowdfunding because of the easier entry-barrier and its popularity across the creative and entrepreneurial industries. It is so popular because of the physical incentives and the feeling of community involvement that it creates, which could be why more respondents in Akure were aware of it. On the same note, Gerber, Hui and Kuo (2012) highlight that emotional and social incentives contribute to involvement in reward-based campaigns that adds to its recognizability on new markets.

Conversely, the inadequate knowledge of Hybrid Models in Akure can be linked with the results of Ahlers, Cumming, Gunther, and Schweizer (2015), who noted that hybrid models are still new and complicated and involve multiple funding processes that need a more significant understanding of the investor. Lehner (2013), also noted that hybrid crowdfunding needs high transparency and platform management which is in most cases restricted in emerging markets. This complexity and disproportional exposure are indicated in the high standard deviation (SD = 0.991) of responses on Hybrid Model awareness. Therefore, the present evidence can be compared to

those of earlier researchers, which implies that the awareness of the types of crowdfunding depends on the simplicity, visibility and maturity of the model in the market.

Another observation of the study is that adoption of real estate crowdfunding is moderate in Akure and all models except the debt-based, the donation-based and the equity-based crowdfunding and displaying slightly higher adoption means. This average rate of adoption is in line with the trends observed in the research of Mollick (2014) that concluded that reward-based and equity-based crowd funding prevails because they offer tangible benefits in the form of non-financial rewards or ownership stakes that are attractive to the early adopters.

The reduced use of Hybrid and Debt-Based Models confirms the results of Montgomery (2018) that these modalities are more sophisticated and need investor trust because of the risk-associated outcomes and the complexities involved in regulation. Schweizer and Zhou (2016) further claim that although the debt-based models make real estate more accessible to the masses, their adoption is limited due to the default risk and uncertainty of regulatory structures by investors.
The discussion of the aspects of real estate crowdfunding (RECF) adoption in Akure indicates that the minimum investment amount is the most influential factor that low investment levels are strongly triggering adoption. This is in line with the research conducted by Agrawal, Catalini and Goldfarb (2011) that discovered that access to finance and low entry barriers are essential facilitators to crowdfunding involvement, particularly in those areas with low access to venture capital. Schweizer and Zhou (2016) or Baum (2015) also emphasized that democratization of investment in terms of reduced investment barrier was a major adoption motivation.

Besides, platform reputation is fairly important, and this indicates that a reputable platform can make a difference. This supports the findings of the study by Ahlers et al. (2015) that emphasised that the team experience and open communication were clearly the credible signals and trustworthiness needed to attract investors. Conversely, the discovered non-statistical significance of regulatory compliance and transparency is in contrast with Stemler (2013) where regulatory frameworks provided by the authority are crucial in legitimizing the existence of the crowdfunding markets. This difference might be a consequence of contextual differences, in that developing markets such as Akure might attach more value to practicable entry barriers than to regulatory specifics, which are less salient to retail investors. Other aspects like regulatory compliance, security, variety of investment, cost-effectiveness, transparency, convenience and profitability, however, do not include a significant influence on the adoption. On balance, financial barriers and platform credibility are the key elements that need to be reduced to increase the RECF adoption in Akure.

The paper also analyses the advantages of crowdfunding within the real estate investment sector disclosing the preferences among investors in the region. Portfolio diversification is the most appreciated advantage. The research determines portfolio diversification as the most desirable advantage amongst the respondents then passive income generation and transparency. This goes hand in hand with the fact that Ang (2014) had reported that real estate crowdfunding results in better diversification, as it provides low-correlation assets with the result in a low aggregate portfolio risk.

By and large, the study on the adoption of the crowdfunding concept in the field of real estate investment in Akure provides useful information related to the extent of awareness, perception, and acceptance of different models of crowdfunding such as the Reward-Based and the EquityBased Crowdfunding, however, the fact that the lesser-known models, especially, the Hybrid Model, have a low level of awareness shows that more educational efforts are required to increase investor awareness and interest. The analysis shows that although the adoption rates of all the models of crowdfunding are moderate, the focus on minimizing financial barriers and enhancing the credibility of the platform are crucial to increase the adoption of RECF in Akure and the facet of ease of use and platform security is not a critical factor in determining the choice of potential investors in the real estate crowdfunding platforms of Akure.

The results also highlight the crucial values of crowdfunding, in particular, portfolio diversification and passive income generation, which are core values among investors aimed at reducing risks and getting consistent returns. Nevertheless, lower investment threshold, even with all its benefits, is not the major driver to adopt the approach which suggests that investors have other priorities.
On the whole, this study highlights the necessity of specific educational campaigns and outreach programs to increase awareness and enhance the knowledge concerning different crowdfunding models. Conducting the research to fill the current gaps of knowledge and create an atmosphere conducive to crowdfunding in real estate, the stakeholders will be able to increase investor trust and involvement, which will eventually lead to the further development of the innovative form of investment in Akure.

In order to increase the use of crowdfunding in real estate investment in Akure, special education and awareness programs should be created to inform the intended investors of the different types of crowdfunding models existing, with specific emphasis on less known models such as Hybrid and Debt-Based Crowdfunding. The key to increasing the awareness and knowledge of these investment opportunities is through the use of digital platforms like social media, blogs and websites to share content that is interesting in the form of success stories and case studies.

Also, a partnership with local organizations, including university and real estate associations, can establish a strong ecosystem of crowdfunding by offering common outreach programs. It is also important to increase the credibility of the crowdfunding platforms; the platform should improve its image by including transparent operations, strong security systems and communicating the risk and returns of investment to win investor confidence. In addition, the provision of flexible investment opportunities at a reduced threshold can support different classes of investors and expand participation. The promotion of favorable regulatory policies will help in protecting investors and have a healthy crowdfunding environment. A periodic collection and examination of feedback about investors can aid platforms to enhance their products and better assist the community. Through marketing campaigns that highlight the advantages of crowdfunding like portfolio diversification, passive income generation, transparency of real estate transactions and speed of transactions will entice more investors.

Lastly, community-based real estate development can be used to create an interest and support of the concept of crowdfunding, which makes the investors feel ownership of the business. With the following recommendations at hand, stakeholders will be able to increase the knowledge and

engagement of real estate crowdfunding to an extent that will result in a more secure and diverse investment environment in Akure.

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