

## Article

# Consensus-Based Measures for Improvement of Off-Plan Sales Program of Housing Units in Real Estate Market of Riyadh City

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**Abstract:** This study aims to review the off-plan sales program to identify the financial and marketing challenges being faced by such programs in Saudi Arabia and formulate consensus-based measures to overcome these challenges. The study implies an analytical descriptive method to achieve its objectives, based on the opinion of experts involved in the off-plan sales program and analyzing the data using the Delphi technique. Various statistical parameters were calculated to validate the obtained results. The study found several challenges being faced by off-plan sales programs, including financing challenges such as mortgaging on the land deed, as well as marketing challenges, including low turnout of the buyers due to the long duration of project implementation. The study concludes with several suggested measures, the most important of which is to find an alternative to the condition of mortgaging the land deed, such as putting insurance on the project or providing a financial bank guarantee. The study contributes to the improvement of the real estate sector of Saudi Arabia and would benefit the construction and development sectors as well.

**Keywords:** off-plan sale; consensus; marketing; housing unit; real estate market; Delphi technique



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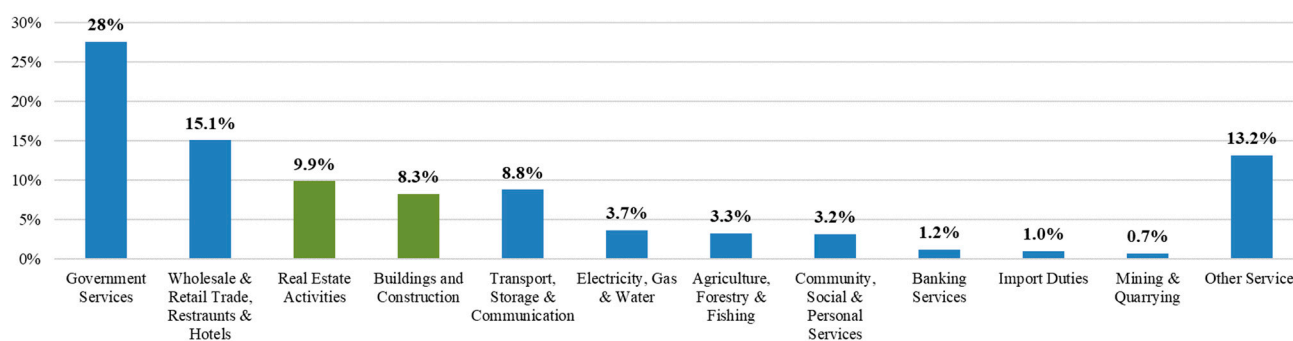
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## 1. Introduction

The real estate sector is one of the most important economic sectors for any country, as it plays an important role in driving growth, providing many job opportunities, as well as moving economic activity in many industries and other related activities, whether in the pre-construction stage (engineering consultancy, economic and marketing studies), in the construction phase (contracting, building materials preparation, construction), or even after the completion of the construction phase (operation and maintenance). Therefore, the prosperity and development of this sector mean an increase in the growth of these activities and industries. In Saudi Arabia, the real estate sector is considered an important axis of the comprehensive development that the country is experiencing in the current era, as it constituted approximately 18.2% of the non-oil GDP for 2019 (9.9% for the real estate activities and 8.3% for construction and building) according to the Housing Data and Observatory Center [1]. Figure 1 shows the contribution of the real estate sector and buildings and construction in Saudi Arabia compared to other activities, which confirms the importance of these sectors and their impact on other activities [1].



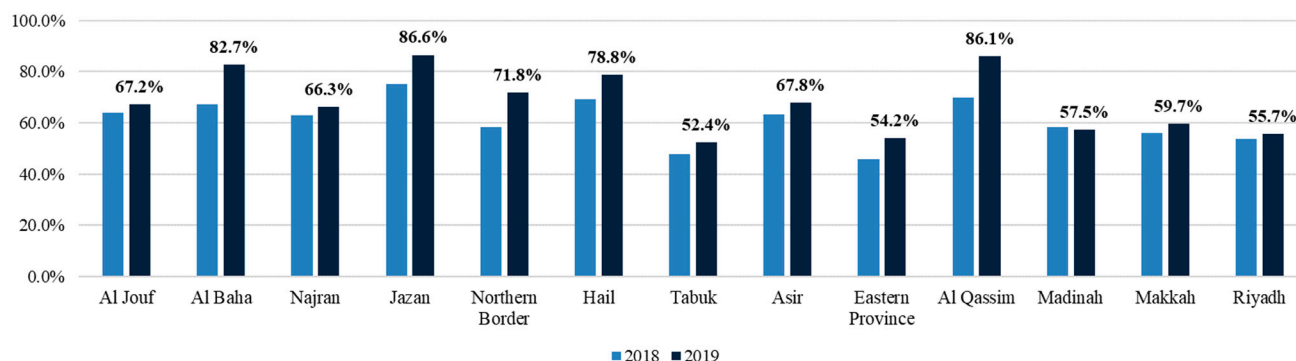
**Figure 1.** Contribution to Real Estate Activities and Construction in Saudi Arabia (shown in green).

Therefore, the real estate sector in the country has received great attention, especially in the field of housing, which is one of the largest areas of spending within the framework of the National Transformation Program (NTP) and the Saudi Vision 2030, with an allocated budget of approximately \$15.7 billion over five years [2]. This represents a stimulating step for the real estate sector in general and housing in particular, which represents a share of about 65% of the total real estate market [3]. The Housing Program within Saudi Vision 2030 aims to provide housing solutions that enable Saudi families to own the appropriate housing according to their needs and financial capabilities. This is accomplished by (1) providing supported and appropriate financing solutions; (2) increasing the supply of housing units at reasonable prices, high quality, and in record time; (3) developing the legislative and regulatory environment for the housing sector; (4) enhancing the economic impact of housing; and (5) creating an attractive environment for local and international investors and enhancing their confidence in the national economy [2]. Undoubtedly, this leads to the creation of more job opportunities and the prosperity of the economic situation of the country [4].

The private sector in Saudi Arabia has played an important role in the citizens' ownership of their first home through the various housing programs prepared by the Ministry of Housing, where the percentage of citizens' ownership of their homes increased to 62%, exceeding the target of Saudi Vision 2030, which stipulated an increase in the percentage of ownership to 60 % at the end of 2020, and this came in partnership with real estate development companies and financing agencies [1,2]. Figure 2 shows the housing growth in the regions of Saudi Arabia for 2019 compared to 2018 [1]. One of the most prominent housing programs is the sale of housing units before or during the construction or development phase so that the housing units model are designed in their final form after the construction process as display units, and the real estate developer is committed to implementing the models according to the agreed designs and specifications, or what is known as the "Off-Plan Sales" [5]. The off-plan sales program aims to: (1) reduce the cost of acquiring housing units compared to ready-made units from the market; (2) preserve the rights of buyers through systems and procedures that obligate the developer to abide by the completion of the project following the signed contracts and the project time plan; (3) develop and stimulate competition between real estate development companies through a developer qualification and classification system; and (4) put an end to speculative operations that negatively affect real estate prices and inflation [6].

According to the experiences of the countries that were reviewed at the "Wafix 2019" exhibition, the off-plan sales system is one of the methods of owning real estate that has proven successful in international experiences [7]. This is because it aims to finance real estate development projects before and during implementation by opening the door for sale to buyers during the project launch period. Thus, real estate developers can finance their projects through buyers' payments and without interest rates, unlike other financing methods, and this leads to a reduction in the cost of the project to the developer, while the buyer obtains residential units at a lower cost compared to ready-made units. However, this system at the local level is still new, as some banks do not provide financing to buyers due

to the high risks of construction, quality of implementation, and the high costs of building materials during the construction period; or the risks of using the financing amounts in a place other than the place for which they were given; as well as the inability and efficiency of the developer in completing all phases of the project as required in some cases [5].

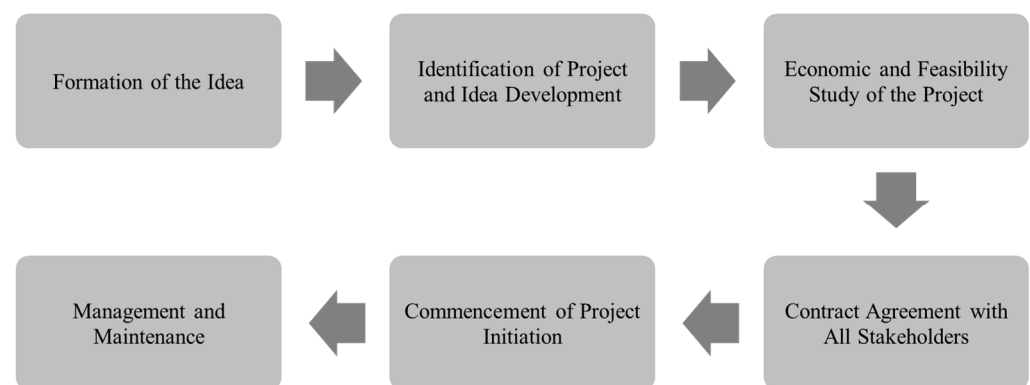


**Figure 2.** The Growth of the Number of Housing Units in Various Regions of Saudi Arabia.

However, despite the increasing demand for housing in the Saudi region, which amounts to 1.4 million applications (325 thousand applications in Riyadh alone), the number of off-plan sales contracts is still low compared to other types of housing contracts provided by the Ministry of Housing, such as ready-made housing, particularly in Riyadh [5,8]. In Riyadh, the number of off-plan sales contracts was only 204 out of the total number of contracts, which amounted to 26,012 contracts. This would confirm that there is a defect in the housing products offered by the real estate developers through off-plan sales programs, which do not keep pace with the increasing demand for housing in the country [9]. This defect could be attributed to many reasons, most significantly: the high cost and shortage of housing units; and the availability of housing units not being compatible with the social and economic characteristics of Saudi families [10]. Therefore, this study aims to identify the most significant challenges facing the off-plan sales program in Saudi Arabia and formulate consensus-based measures for addressing these challenges.

## 2. Literature Review

The real estate sector has become one of the most important economic sectors and has received great interest from investors. It is also one of the pioneering sectors in its rapid and striking growth, which has become an attractive factor for many real estate developers and even small investors. It can also be said that the real estate sector has become among the most important economic and investment sectors that have boosted the economies of many countries around the world and have become based on the real estate sector [11]. Real estate development has several concepts and is not only limited to projects intended for residential use only but also includes all projects for commercial, industrial, and tourist use and more. It is a process that aims to construct investment buildings, whether residential buildings, villas, or facilities, and prepare them for housing, commercial, industrial, or tourism purposes [12]. It consists of several stages that are linked to each other, starting with an idea and ending with the delivery of the real estate unit to the buyer. These stages include: studying the real estate market and its needs; choosing the project site and acquiring it; planning and designing the site; financing the project; establishing the project, and then conducting the project's marketing process [12]. Several methodologies explain the stages of real estate development, including Miles's method [13], which shows the stages of real estate development starting from the idea of the project until its management after the completion of its implementation, as shown in Figure 3.



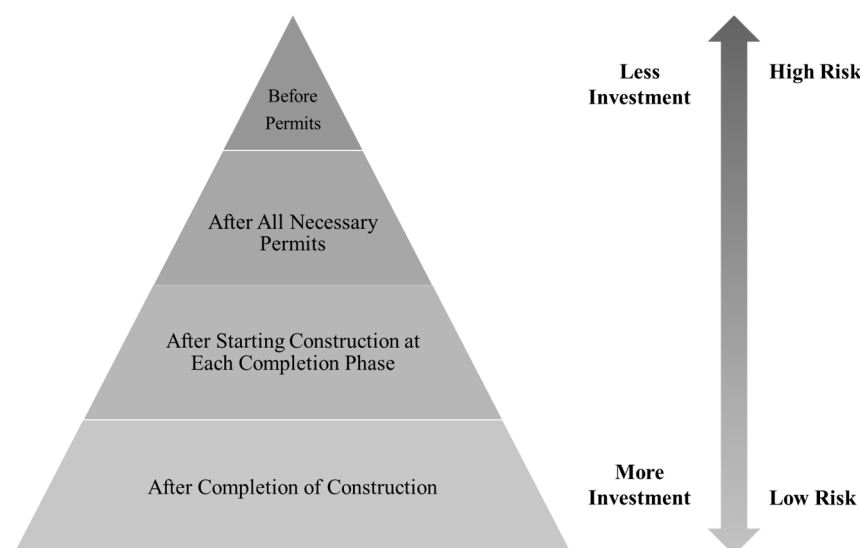
**Figure 3.** Stages of Real Estate Development.

Real estate development depends on several pillars, primarily financing and marketing. Real estate finance, in general, can be defined as providing the financial resources necessary for the implementation of investment projects to increase the production of goods and services [14]. While real estate marketing can be defined as a link between those who produce goods and provide services and those who buy and benefit from them, it aims to achieve the needs and desires of individuals, whether the property is land or housing, with the appropriate value and outstanding service to the customer [15]. During the past few years, the concept of real estate financing and marketing has developed significantly, and many programs have emerged that are aimed at developing the real estate sector, the most important of which is the off-plan sales program. The off-plan sales can be defined as selling a property with an approved design but has not yet been built or is still under construction, where the seller must complete and finish the implementation of the property, deliver it on time, and transfer its ownership to the buyer according to the contract signed between them [16]. It is also known as a netting contract in which the buyer owns a real estate unit with predetermined characteristics and specifications, whether it is existing or under construction, provided that the real estate developer is obligated to complete its construction according to the agreed period, in exchange for the buyer's obligation to pay the price, whether expedited or deferred [17,18].

Zhao and Zhang [19] describe an off-plan acquisition in China as buying a property before construction has started or been completed. The buyer can decide what to buy from the blueprints, plans, and computer-generated renderings of the proposed housing project. Before construction begins, the buyer can purchase the home by paying a down payment or by providing the developer with a letter of credit. The buyer then executes a contract with the developer and obligates him to pay the remaining amount in full or in installments according to the terms of the contract. According to Andrew and Larceneux [20], in a study conducted in France, the difference between an off-plan and a typical home purchase is that buyers of established properties could examine the property before consenting to the purchase. The buyer may acquire a feel for the property and decide if it matches their needs. Off-the-plan buyers are occasionally given a limited time to review promotional materials or a wish list provided by the developer. In these situations, the buyer must rely on the proven experience, skill, and reliability of the developer, as well as the terms of the contract, to ensure the job is completed on time and to the required standard. Michael Gapes [21] performed a study for Australia and stated that off-plan home buying might occasionally be preferable to buying an established home. Being able to buy a home at current costs while only paying the bulk of the purchase price is usually the biggest benefit a few months down the road. Developers' primary driving force is profit, while homebuyers' goal is to obtain decent housing at the lowest possible cost. When choosing the off-plan home buying approach as per [22], risk reduction on both sides is imperative. Furthermore, Larceneux and Guiot [23] developed a cognitive map of how experts and other stakeholders can see a specific risk management decision for the French off-plan housing market.

The real estate industry in Saudi Arabia is fundamentally cyclical, so an increase in construction activity triggered by rising demand may be followed by a decline a few years later [24–26]. Due to the different development of property values, and development costs, both tenant demand and development activity are cyclical [22,27,28]. When deciding to buy an off-plan unit, some investors do not create a budget or financial plan and end up in a challenging situation where they do not have enough amount to complete the purchase. In this situation, a trading financial professional often ends up passing the contract on to other speculators for absolutely no benefit [29], as observed in the United Arab Emirates. In the literature, there is broad theoretical and experimental evidence to support that poor site management and supervision, slow decision-making by the project team, customer-initiated changes, and unforeseen ground conditions can all lead to time overruns [23,30].

The off-plan sales program is characterized by a combination of financing and marketing at the same time compared to other sales programs. The developer can obtain financing by selling real estate units before their construction without adding and bearing bank fees and interests that are reflected in the cost of implementing the project and lead to an increase in the prices of housing units. At the same time, developers market their products on the map and know the extent of the buyers' satisfaction and acceptance of those products [14]. Each developer usually follows a specific mechanism in selling real estate units in the off-plan sales system according to the market demand and needs, and each mechanism involves a set of stages with different risk ratios that the real estate developer must know and analyze. Al-Shaalan [31] divided these stages into four main stages, and each stage has a certain number of risks: (1) selling before obtaining permits; (2) selling after obtaining all necessary permits; (3) selling after starting construction according to the completion phase; and (4) selling after construction is completed. As illustrated in Figure 4, the degree of risk in the off-plan sales system decreases as the progress rates of completion in the project.



**Figure 4.** The Main Stages of the Off-Plan Sales Program Compared with Risk Levels.

The off-plan sales program offers various advantages, including reduced market value, ready-to-buy properties, the properties are usually in areas of demand that are easy to sell on, properties are complete and require no separate tradesmen to work on them, and housing units are new and therefore are energy efficient. However, it entails a few risks as well, which can be listed below.

- A developer may fail to deliver the project and may go bankrupt, and one could lose their deposit amount of money.
- The property may have architectural issues at the time of handing over.

- Excessive delays might mean the housing market falls, and one may lose money.
- Mortgage offers need to be updated and revised in case there is a significant delay in the delivery of the project.

Real estate developers also take the economic feasibility study into account to know and estimate the chances of success of the investment idea before starting its implementation. Al-Shaalan [31] stressed that the stage of the economic feasibility study is one of the most important stages of the real estate development process because it shows the real estate developer whether the project is economically feasible and achieves the desired goals or not. Additionally, the good marketing of the project reflects positively on the financial flows and increases the financial capacity of the real estate developer to implement the project with fewer financing risks, as the financial flows resulting from the buyers' payments contribute to reducing the interest resulting from borrowing to finance the project. However, there remain several obstacles that would increase the risk of financing in the off-plan sales program. Al-Shaalan [31] highlighted some of these obstacles, such as low prices of real estate products of all kinds; high annual interest rates; the high cost of building materials; economic stagnation; the bankruptcy of the real estate developer; and building and construction at a time of high prices.

As mentioned previously, the experiences of several countries have shown that the off-plan sales program is one of the methods of owning real estate that has proven successful in international experiences. Graham [32] studied off-plan sales in Australia, where the study touched on the most prominent risks and challenges facing developers in off-plan sales projects, such as the drop in the prices of housing units after the contract signing stage and before delivery, the difficulty of knowing the final form and the quality level of the building materials used, and the buyers' failure to pay the payments on due dates, which disrupts the real estate developer's financing sources. The study also emphasized the importance of reading all the details of the contract with the contractor executing the project, reviewing previous projects implemented by the contractor, knowing the final form of the project, determining the general location of the units, public parks, and future projects adjacent to the project.

Savage [33] reviewed the off-plan sales program in the United Kingdom (UK), where the study touched on the advantages and disadvantages of this program and also addressed the reasons for buyers' obtaining real estate units at lower prices compared to the prices of ready units, while at the same time exploiting payments by the developer to finance the project and obtain higher profitability. The study recommended those who wish to purchase real estate units with the off-plan sales program review the real estate market conditions and analyze the influencing factors to make the purchase decision at the most appropriate time. Stucklin [34] has prepared a study on the off-plan sales program in Spain, aimed at educating people who want to buy real estate units with the off-plan sales program and providing them with advice so that they do not fall into high-risk or unsecured projects. Stucklin's study concluded with several recommendations, the most important of which are verifying the legality of the company developing the project, making sure that the developer owns the land on which the project will be built, and reviewing the projects completed by the developer.

In the Middle East, Limuasa [35] studied the reality of the off-plan sales program in Algeria, which suffered from high unit costs due to inflation occurring in the country or due to the neglect of the real estate developer and an increase in the cost of implementation, which was reflected in the failure of projects and completion rates. The study identified the parties involved in the sale contract and the obligations of each party, in addition to the necessary permits that the real estate developer must obtain, namely: building licenses, retail licenses, construction certificates, in addition to a certificate of conformity. The real estate developer, upon receipt of the payments deposited by the buyers in the account of the Real Estate Development Operations Guarantee Authority, must spend them on completing the project and submitting it according to the agreed time plan, where the

guaranteed authority guarantees the financial amounts paid by the buyer, according to the completion percentages of the project.

In his study, AlSaidi [36] touched on the seller's obligations in the off-plan sales contract in the United Arab Emirates (UAE), starting from obtaining the license until the building is ready to perform the purpose for which it was established, noting that the construction and its completion should be based on what was agreed upon and on time and specified period. AlSaidi pointed out the importance of defining the property descriptions in sufficient and clear terms, and the developer must mention in the property contract the specifications that the property will have, such as the area of the residential unit, the number of bedrooms, the dimensions and windows, the type of doors used, balconies and corridors, and other specifications that the developer is committed to handing over to the buyer. Given the large number of development projects and the multiplicity of developers who have experience and multiple development strategies, the UAE is considered one of the first countries to implement real estate projects under the off-plan sales system [37].

In Saudi Arabia, the off-plan sales program is considered one of the systems that stimulate the real estate developer to implement projects and complete them within their implementation in the agreed period and with high quality. It helps developers in the speed of their marketing, which contributes to motivating them to constantly develop their real estate products and their commitment to the highest quality standards to gain the trust of the buyers. Off-plan sales contracts force the real estate developer to abide by the requirements, which contributes to providing integrated and distinguished services and shortening many procedures, which is reflected in an increase in trust between the real estate developer and the buyer. It is believed that the developers should take advantage of the opportunity to obtain financing through the off-plan sales program in light of supporting this program and facilitating the procedures for obtaining the necessary licenses and permits, which aim in its entirety to reduce the gap between supply and demand for housing in the country.

Based on a review of the literature on housing and an exploration of the local housing context in Saudi Arabia and Riyadh, in particular, through some preliminary interviews with practitioners in the housing market, the questionnaire in this study was mainly built around four key issues:

- (1) Financial challenges affecting the off-plan sales program in Riyadh.
- (2) Marketing challenges affecting the off-plan sales program in Riyadh.
- (3) Proposed measures to overcome financial challenges.
- (4) Proposed measures to overcome marketing challenges.

The questionnaire contained six main questions focused on these four key issues. These questions, as well as the characteristics of the experts participating in this study, were analyzed and discussed in depth during the following sections of this study.

### 3. Materials and Methods

#### 3.1. Study Area

The study is focused on Riyadh, the capital of KSA and the largest city in the country. It is located in the eastern part of the Riyadh Region, which lies in the middle of KSA as well as the center of the Arabian Peninsula at longitude 41°-28' East, latitude 20°-00' North, and about 600 m above sea level. Riyadh is characterized by its arid and hot climate, where the average temperature during the summer months reaches 45 °C [38]. In the past few decades, Riyadh has experienced significant demographic and physical growth and faced numerous issues in the process of urbanization. Indeed, it has witnessed a construction boom since the early 1970s following the oil boom, which increased the demand for housing units [39]. The population of Riyadh is estimated to be about 7.4 million in 2020, and it is expected to reach 10 million in the next few years, and they live in a total area of about 2435 km<sup>2</sup> [40]. In addition to its administrative importance and its large area, Riyadh was chosen in this study due to the small number of off-plan sales contracts in Riyadh compared to other products provided by the Ministry of Housing, despite the success of this idea

in many countries around the world, such as Australia, UK, Spain, France, and UAE, as mentioned earlier. The total number of off-plan contracts recorded in Riyadh was 204 out of the 26,000 contracts in the whole of Saudi Arabia [1].

### 3.2. Data Analysis and Delphi Technique

The feedback questionnaire received from the experts and specialists was analyzed using SPSS, a predictive analytics program. Likert scale data were processed to generate descriptive statistics such as standard deviations, standard errors, weighted averages, etc. Consensus is critical to Delphi analysis, and data interpretation means for mean, median, and type or degree of variation such as standard deviation and interquartile range. Most of the research prefers to use the median value of the Likert scale [25,41–43]. As a result, the steps given below are combined to assess the consensus in this study.

1. Response Percentage: The following equation determines the percentage selection of the scale categories 1 to 5 for each question. For the statement in the individual questions to be agreed upon, the proportion must be significantly higher than others.

$$\text{Response\%} = \frac{\text{No. of Responses to a Scale}}{\text{Total Number of Experts}} \times 100\% \quad (1)$$

2. Standard Deviation: The consensus level is determined using the standard deviation [42]. The standard deviation was evaluated using the following equation. To reach a consensus level, the value must be low.

$$\sigma = \sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n - 1}} \quad (2)$$

where  $n$  is the number of observations in the sample,  $\bar{x}$  represents the overall sample means, and  $x_1, x_2, x_3, \dots, x_n$  are the values of the sample elements.

3. Standard Error: The standard error of a statistic is the standard deviation of its sampling distribution or an estimate of that standard deviation. It shows the reliability of the data [28].

$$SE = \frac{\sigma}{\sqrt{n}} \quad (3)$$

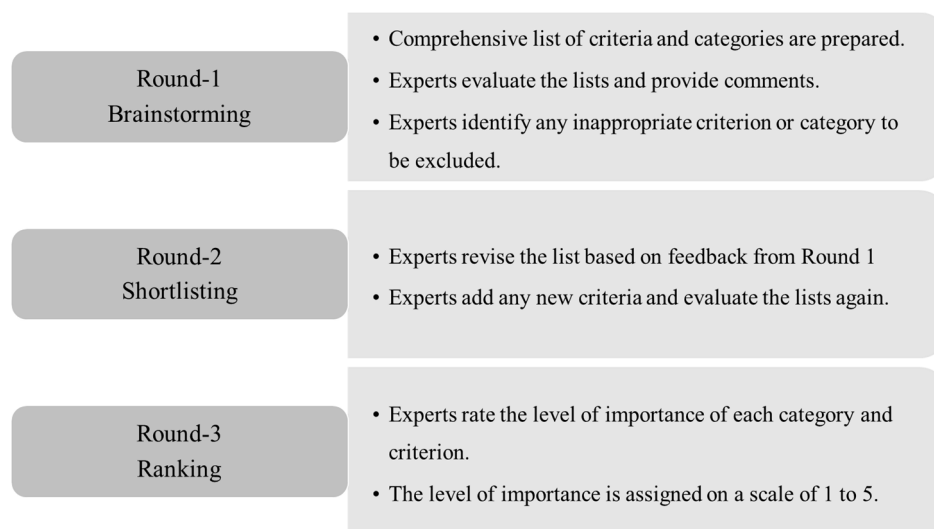
4. Weighted Average: Weighted average is a calculation that takes into account the varying degrees of importance of the numbers in a data set. In calculating a weighted average, each number in the data set is multiplied by a predetermined weight before the final calculation is made [28]. The weighted average of each factor was calculated by using the following formula.

$$A_w = \frac{\sum (Q_i n)}{\sum Q_i} \quad (4)$$

where  $A_w$  is the Weighted Average,  $Q_i$  is the number of respondents for a specific level  $n$  of the Likert scale, and the value of  $n$  ranges from 1 to 5.

The desktop study technique was used in this study to achieve the first purpose, which was to review the key related literature and global experiences and collect secondary data related to the off-plan sales program. The desktop study technique is considered one of the most widely used techniques for collecting secondary data and has been used in some similar studies [44]. The study used Google Scholar as one of the most popular search engines in addition to Science Direct to identify and collect the related literature by using keywords such as off-plan sale, mortgage, real estate, housing programs, housing in Riyadh, and off-plan sale in Saudi Arabia. Additionally, online sources such as published reports, journal articles, conference proceedings, and websites of international development organizations and government institutions were used. The study also used the Delphi technique, a consensus-based approach, to achieve the second purpose, which is to identify the most significant financial and marketing challenges facing off-plan sales programs in Saudi Arabia, with a focus on Riyadh, and formulate consensus-based measures to overcome these challenges.

According to Okoli and Pawlowski [45], the Delphi technique is a group decision technique that requires skilled experts with a deep understanding of the issue under investigation. The technique is derived from distributing the process into three rounds: (1) brainstorming; (2) narrowing down; and (3) ranking round, as illustrated in Figure 5, and it has been used in several scientific research projects [45–48]. In this study, it is believed that the Delphi technique is the most appropriate technique for such research compared with other consensus-based approaches such as Staticized and Interacting Groups or Nominal Group Technique (NGT). Indeed, the Delphi technique was realized to be a better approach in terms of comprehensiveness of the outcomes, although the study could be completed by employing a traditional survey approach. Studies using Delphi have richer data availability because of their numerous iterations and feedback, as the experts involved in these studies are mostly positive about follow-up interviews [45,49,50].

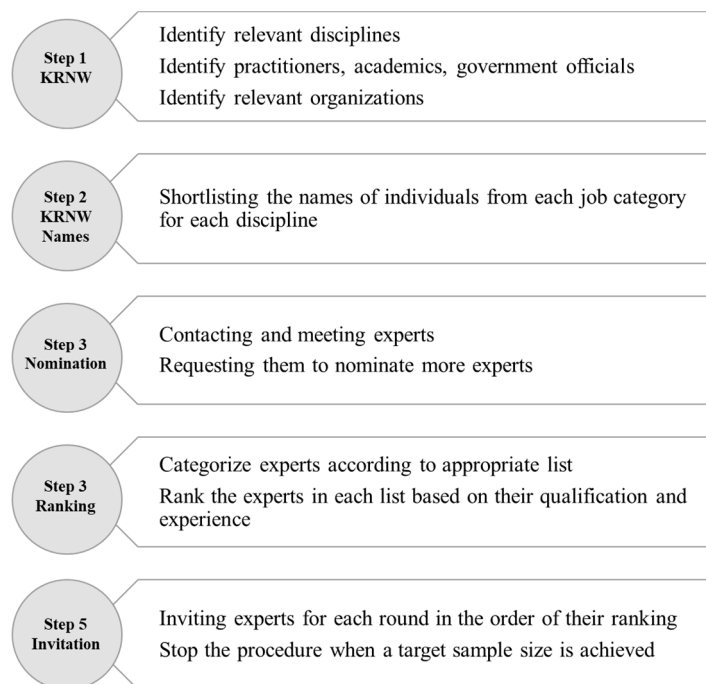


**Figure 5.** A Typical Delphi Technique Process.

The significance of Delphi experts has been emphasized by numerous studies [45,47,50]. This emphasis is because studies using Delphi rely primarily on team decisions rather than on a statistical sample that is representative of the entire population, and because of this, the team needs to have experienced experts with deep knowledge of the research area. Therefore, this study followed five main steps to select the experts based on the principles presented by Okoli and Pawlowski [45] and Schmidt et al. [50], as shown in Figure 6. The first and most significant step is the Knowledge Resource Nomination Worksheet (KRNW), which aims to avoid ignoring any certain group of target parties and helps classify the experts before they are recognized. The second step is to prepare a list of the names of the experts selected in KRNW and their contact numbers. The third step is to contact experts and ask them to participate in the study and nominate other experts. The fourth step is to categorize experts according to an appropriate list and rank them based on their qualifications, years of experience, achievements, etc. The final step is to invite experts to participate in this study.

The purpose of using the Delphi technique is to identify the most important financial and marketing challenges facing off-plan sales programs in Saudi Arabia, with a focus on Riyadh, to come up with the best measures that can be applied in the study area and to overcome these challenges. Consequently, while structuring the Delphi questionnaire, the study aimed to target the experts in the field of housing (e.g., professionals, real estate developers, and academics) from the public and private sectors as well as universities. Although it was possible to distribute hard copies of the questionnaire in this study, the online survey technique was used due to its being faster and more efficient [51–53]. The survey was conducted using QuestionPro, and the survey link was distributed to

KRNL's selected experts through email and social media. To reach the required sample size, the snowball sampling technique was used, which is one of the scientific sampling methods [54]. The questionnaire reached 54 experts, 38 of whom completed and submitted it. The Statistical Package of Social Science Software (SPSS) v26 was used in this study for the descriptive analysis of the data.



**Figure 6.** Procedure for Selecting Experts in Delphi Technique.

## 4. Results

### 4.1. Demographic Details of the Respondents

Table 1 shows the general characteristics of the experts involved in this study. Analysis of the characteristics of the respondents shows that most of the participants are male, representing 81.6% of the study participants, while 18.4% are female. Such low female participation is not unexpected in a patriarchal society, which is connected with the fact that local context and culture frown on women interacting with unrelated people. This low rate of female participation in Saudi Arabia has been reported in similar studies, such as 11% and 9% [55,56]. The analysis shows that most of the experts are highly educated, as the analysis indicates that a little over half of the respondents (55%) have a bachelor's degree, and approximately a third of them (29%) have postgraduate degrees, either a master's degree or a doctorate. The government sector is the main employer of this study's participants (63.2%), followed by the private sector (26.3%). The majority of respondents (47.4%) in this study have had years of experience in the housing sector for a period ranging between 11 to 15 years, followed by 5 to 10 years (26.3%) and 16 to 20 years (15.8%), while the participants with more than 25 years make up 5.3% of the total participants. Thus, it seems that most of the participants have enough experience to have a rational view of the financial and marketing challenges facing the off-plan sales program in Riyadh.

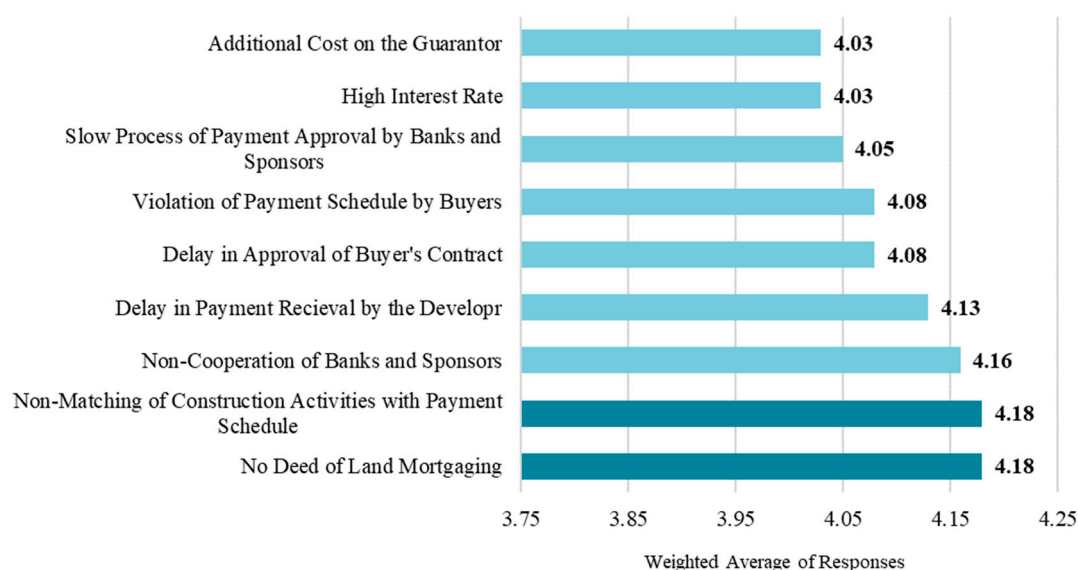
**Table 1.** Demographic Details of the Respondents.

Characteristic	Category	Absolute Value	Percentage
Age (Years)	25–34	9	23.7%
	35–44	14	36.8%
	45–54	11	28.9%
	55–64	3	7.9%
	65 Years or Older	1	2.6%
Gender	Male	31	81.6%
	Female	7	18.4%
Educational Level	High School	5	13.1%
	Diploma	1	2.6%
	Bachelor’s Degree	21	55.3%
	Postgraduate	11	28.9%
Employment	Government sector	24	63.2%
	Private sector	10	26.3%
	Unemployed	3	7.9%
	Retired	1	2.6%
Experience (Years)	5–10	10	26.3%
	11–15	18	47.4%
	16–20	6	15.8%
	21–25	2	5.3%
	More than 25 Years	2	5.3%

#### 4.2. Expert Opinion on Financial Challenges

The study participants were asked to indicate if they think the off-plan sales program in Saudi Arabia and Riyadh, in particular, is at risk of some financial and marketing challenges, and more than half of them (55.26%) answered in the affirmative, 15.79% answered no, and 28.95% did not know. Concerning financial challenges facing the off-plan sales program in Riyadh, several challenges were presented to the experts during the three rounds of the Delphi technique, and the outcomes of the questionnaire in the final round underline the significance of some of them. Experts ranked these challenges based on the influence of each challenge from their point of view and based on a five-point Likert scale, where five represented extremely influential, and one represented not at all influential. As shown in Figure 7, an analysis of the results shows that there is a consensus among experts regarding the influence of the presented financial challenges, with a weighted average of 4.03–4.18.

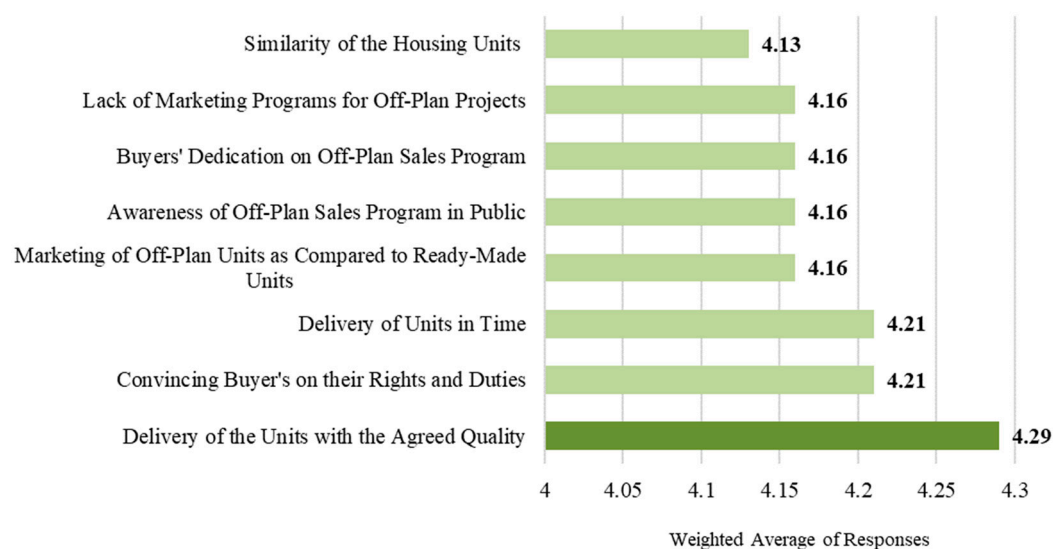
The “mortgage of the land deed” and “matching buyers’ payments with project implementation phases” came in the first place as the most influent challenges with a weighted average of 4.18, followed by the challenge of “not all financing agencies and banks recognize off-plan sales program” with 4.16 weighted average. The analysis shows the similarity of the influence level of the “delayed approval of the buyer’s contract” with the “buyers’ obligation to pay on due dates,” with a weighted average of 4.08 each. The challenge of “mechanism of work of financing agencies and bank” and the challenge of “high interested rate in the off-plan sale program due to potential risks (e.g., a default of the developer or buyer)” remained in the last positions with a weighted average of 4.03.



**Figure 7.** The Weighted Averages of Financial Challenges based on the Consensus of Experts.

#### 4.3. Expert Opinion on Marketing Challenges

Several marketing challenges were presented to the experts, and they were asked to rate them based on the level of influence from their point of view by using a five-point Likert scale, as with financial challenges, where five represented extremely influential, and one represented not at all influential. As illustrated in Figure 8, an analysis of the results shows that there is a consensus among experts regarding the influence of the presented marketing challenges, with a weighted average ranging between 4.13 and 4.29.

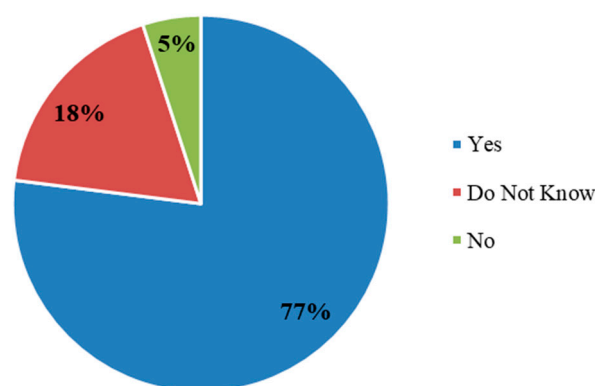


**Figure 8.** The Weighted Averages of Marketing Challenges based on the Consensus of Experts.

The “delivery of the units with the agreed quality” came in the first place as the most significant challenge facing marketing off-plan sales program with a weighted average of 4.29, followed by the challenge of “knowing buyers about their rights and duties” and the challenge of the “ability of the developer to deliver units on time” with 4.21 weighted average for each. The analysis shows the similarity of the influence level of the “knowing people about off-plan sales program”, “marketing units in off-plan compared to ready-made units”, “buyers’ conviction of the off-plan sales program”, and “lack of marketing

programs for off-plan sales” with a weighted average of 4.16 for each. The challenge of “similarity of the housing units” came in last place with a weighted average of 4.03.

After the most influential financial and marketing challenges were presented to the experts, they were asked to express their views on whether it is important, in their view, to find some measures and solutions to confront and overcome these challenges. As it is illustrated in Figure 9, more than three-fourths (77%) of the study participants answered in the affirmative, and about 18% did not know, while only 5% answered No.



**Figure 9.** Expert Opinion on the Importance of Proposing Measures to Overcome Challenges.

## 5. Proposed Measures to Overcome Challenges

### 5.1. Proposed Measures to Overcome Financial Challenges

Several proposed measures were presented to experts for overcoming the financial challenges facing the off-plan sales program in Riyadh and in Saudi Arabia in general, whether accelerating the procedures or standardization of the contracts, and they were asked to rate these measures. The rating was based on a five-point Likert scale, where five represented extremely important, and one represented not at all important. As shown in Table 2, an analysis of the results shows that there is a consensus among experts regarding the importance of all proposed measures to overcome the agreed financial challenges, with a weighted average of 4.18–4.34. The standard error of the mean (SEM) has been used to specify the statistical uncertainty; the determined standard error was less than 0.1 for all the proposed financial measures.

**Table 2.** The Weighted Average of Proposed Financial Measures Opted by Experts.

Proposed Financial Measure	Std. Dev.	Std. Error	Weighted Avg.
Reducing Total Cost while Maintaining the Same Quality	0.33	0.054	4.26
Standardization of Mechanism of Property Exchange	0.28	0.045	4.21
Standardization of Contracts	0.51	0.083	4.18
Active Participation of Banks and Sponsors	0.34	0.055	4.32
Offering Financing Plans to Buyers	0.27	0.044	4.34
Reconsideration of the Interest Rate	0.10	0.016	4.24
Follow-up of Applications Regularly	0.18	0.029	4.32
Alternate to Mortgaging the Land	0.51	0.083	4.29
Accelerating the Procedures	0.24	0.039	4.21

The choice of “Providing financing offers to buyers” came in the first place as the most important proposed measure with a weighted average of 4.34, followed by the choices of “Follow-up of applications regularly” and “More participation of bank and financing agencies” with 4.32 weighted averages for each. Analysis of results shows that there is consensus among experts that providing financing offers to buyers is one of the most important measures that will motivate people to consider buying their homes through the off-plan program and, consequently, the success of the program. The options of

“Accelerate the procedures” of the purchasing process through the off-plan sales program, “Standardization of mechanism of exchange among stakeholders”, and “Standardization of contracts” came in the last three places in the list of proposed measures to overcome the financial challenges facing the off-plan sales program in Riyadh, but it remains with a high weighted average of 4.21, 4.21 and 4.18, respectively.

### 5.2. Proposed Measures to Overcome Marketing Challenges

As with proposed measures of overcoming financial challenges, some proposed measures were presented to experts for overcoming the marketing challenges facing the off-plan sales program in Riyadh, whether Advertising the of-plan sales program through electronic marketing tools or making visual clips of the project in addition to the displayed unit, and they were asked to rate these measures. The rating was based on a five-point Likert scale, where five represented extremely important, and one represented not at all important. As shown in Table 3, an analysis of the results shows that there is a consensus among experts regarding the importance of all proposed measures to overcome the agreed marketing challenges, with a weighted average of 4.11–4.37. The option of “Quality of construction and design of housing units” came in the first place as the most important proposed measure with a weighted average of 4.37, followed by the option of “Advertising through social media” with a value of 4.34, a weighted average. The option of “Placing large advertisements in streets and on buildings” came in the last place in the list of proposed measures to overcome the marketing challenges facing the off-plan sales program in Riyadh, but it remains with a high weighted average of 4.11.

**Table 3.** The Weighted Average of Proposed Financial Measures Opted by Experts.

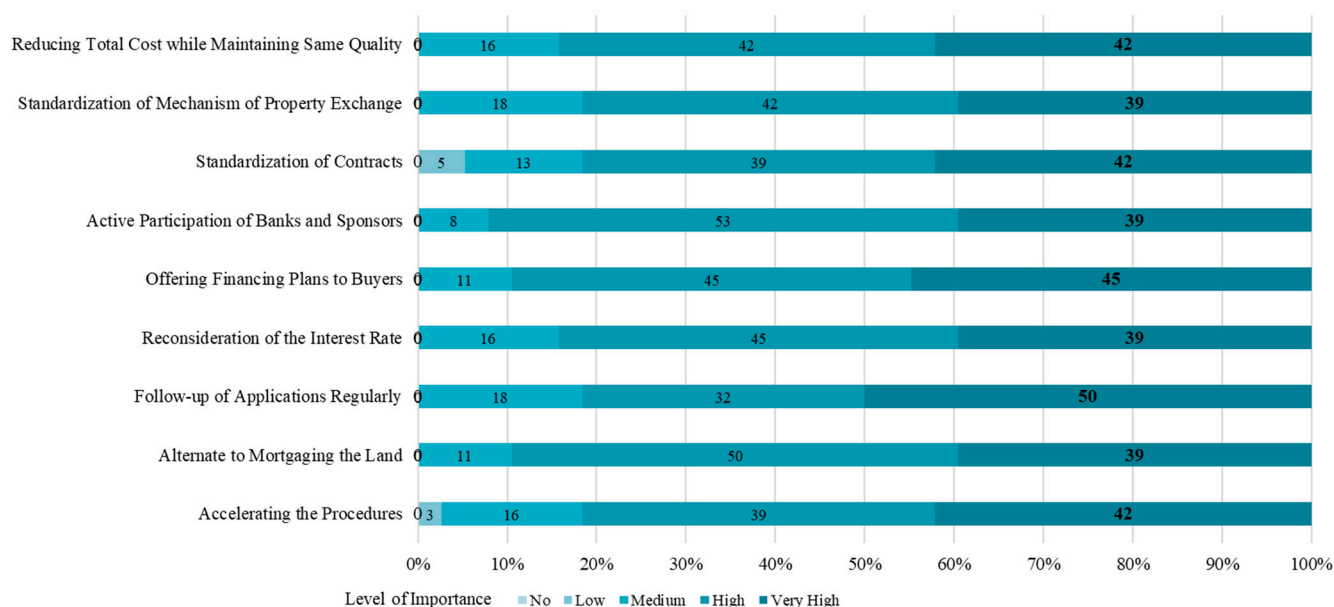
Proposed Marketing Measure	Std. Dev.	Std. Error	Weighted Avg.
Establishing Strong Marketing and Sales Department	0.47	0.076	4.26
Quality of Design and Construction	0.19	0.031	4.37
Competitive Prices of Housing Units	0.33	0.054	4.26
Highlighting the Prominent Services and Advantages	0.47	0.076	4.29
Creating Advertising Videos for Projects	0.34	0.055	4.32
Advertising through Marketing Applications	0.22	0.036	4.32
Advertising through Social Media	0.17	0.028	4.34
Large Advertisement Boards in Streets and on Buildings	0.44	0.071	4.11

## 6. Discussion on Key Findings

Through this study, the importance of the off-plan sales program has emerged as one of the most important key programs for the provision of housing units which must currently be considered by the relevant stakeholders. Indeed, the literature review, as well as the global experiences in the field of housing delivery, have a great role in shedding light on the significance of such a program. The reason for this is that the off-plan sales program can provide buyers with housing units at a lower cost compared to ready units and helps put an end to speculation that negatively affects the prices of housing units. Like other housing programs, the off-plan sales program in Riyadh and Saudi Arabia, in general, faces some financial and marketing challenges. In this study, the experts had the opportunity to review some of the financial and marketing challenges facing the off-plan sales program in Riyadh at present through the three rounds of Delphi technology, where the results of the final round confirmed the importance of some of the proposed measures to overcome such challenges.

As illustrated in Figure 10 and Table 2, experts stressed the extreme influence of both the mortgage of the land deed and matching buyers’ payments with project implementation phases as the most significant challenges, with a weighted average of 4.18 for each, followed by the challenge of not all financing agencies and banks recognize off-plan sales program with 4.16 weighted average and length of time taken to deposit the amounts in developer’s accounts with a weighted average of 4.13. The majority of experts participating in this study

indicated that the requirement to marginalize the land deed in the off-plan sales system is mainly to preserve the rights of all parties and to ensure that the real estate developer does not dispose of the land when signing contracts with the buyers. However, some experts also indicated that this requirement is accompanied by some negatives that may affect the progress of the project, such as the delay in issuing building and marketing licenses in addition to the fact that landowners avoided entering their lands for off-plan sales projects, thinking that this requirement would make them lose control of the land. Therefore, some experts consider this requirement as one of the financing challenges facing real estate developers in off-plan sales projects. Additionally, experts highlighted that the requirement to marginalize the land deed has contributed to increasing the financing burden on the real estate developer, especially if the developer wants to mortgage the land and obtain financing, and according to Australian and UK experiences that were previously reviewed, this requirement is not applied due to the presence of other guarantees protect the rights of the buyer, including insurance on the project and its implementation, in addition to the presence of governmental control bodies that supervise withdrawals from the guarantor's account, according to the payments agreed upon in the contract and the percentages of completion in the project.

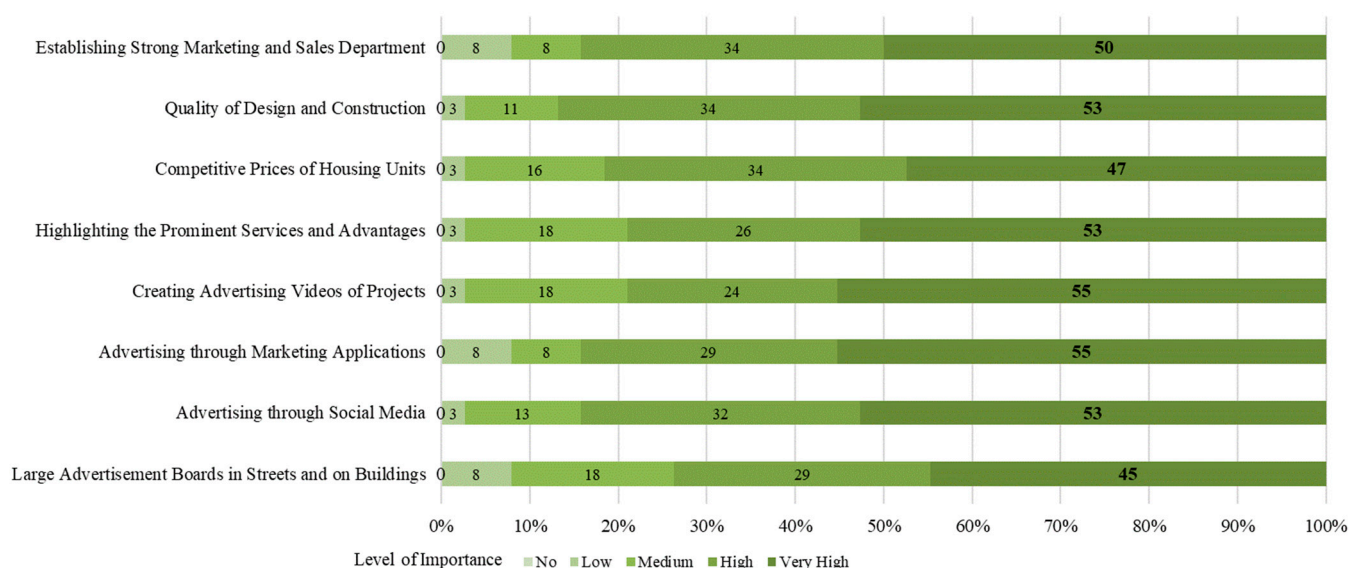


**Figure 10.** Response Percentage for each Proposed Financial Measure.

The results also shed light on one of the most important financing challenges facing the off-plan sales program, which is that many banks still do not recognize the financing of real estate projects using the off-plan sales system, which reduces the options available to buyers when making a purchase decision. The study found that despite the buyers' commitment to pay the installments according to the project completion rates and according to the plan set by the off-plan sales committee "Wafi", some banks still do not adhere to this plan, in addition to the delay in depositing the amounts of payments after receiving them from the buyers in the real estate developer's account although the developer has achieved the required percentage of completion. The finding shows the similarity of the influence level of the delayed approval of the buyer's contract with the buyers' obligation to pay on due dates, with a 4.08 weighted average for each. This finding is consistent to some extent with the literature, where some similar studies [31,32] have emphasized the significance of the buyers' failure to pay the payments on due dates, which disrupts the real estate developer's financing sources. The challenge of the mechanism of work of financing agencies and banks and the challenge of high interested rates in the off-plan sale program due to potential risks (e.g., a default of the developer or buyer) remained in the last positions, but it remains with

a high weighted average of 4.03 for each. The additional cost of the guarantor's account came in the last place on the list with a weighted average of 4.03. The findings confirmed that the guarantor account does not constitute any additional costs to the total cost of the project if the relationship between the real estate developer and the financing agencies is good to motivate and attract customers. Conversely, if the developer does not have any prior dealings with the financing entity, additional fees will be charged upon disbursement and receipt of payments.

As illustrated in Figure 11 and Table 3, the study found that among the most influential marketing challenges facing the off-plan sales program is the delivery of the housing units with the agreed quality, with a weighted average of 4.29. Most of the experts stressed the difficulty of convincing people of a product that does not exist on the ground. This, of course, may be attributed to the fact that when people see the housing unit and like it, they want to move to it directly and not wait for a period that may increase due to many reasons. The finding shows the similarity of the influence level of knowing buyers about their rights as well as duties and the ability of the developer to deliver units on time with a 4.21 weighted average for each.



**Figure 11.** Response Percentage for each Proposed Marketing Measure.

In this study, the experts touched on the fact that many buyers are still ignorant of the reality of this program and are not aware of their full rights and duties, in addition to their fears of not receiving their unit on time and according to their initial perception of the unit. Additionally, experts indicated the significance of the ability of developers to deliver the agreed housing units on time as one of the main reasons for the reluctance of some buyers to purchase housing units through the off-plan sales program and emphasized the importance of looking at the name of the developer, his real estate reputation, previous experience, and the after-sales services provided by the developer. The findings determined that the project implementation period is one of the main reasons for the buyers' reluctance to purchase residential products under the off-plan sales system, especially if the agreed period is exceeded, due to the multiplicity of their financial obligations (e.g., paying rent), which places a heavy burden on the buyer.

The finding shows the similarity of the influence level of (1) marketing units in off-plan compared to ready-made units; (2) knowing people about off-plan sales programs; (3) buyers' conviction of the off-plan sales program; and (4) lack of marketing programs for off-plan sales with a 4.16 weighted average for each. Experts participating in this study determined that one of the marketing challenges facing the off-plan sale program is the lack of financial capacity of some real estate developers to carry out marketing programs that

are commensurate with the size of the project. The study found that some buyers are still unfamiliar with the concept of the off-plan sales system. The study also found that some are ignorant of their rights towards the real estate developer and financing agencies, which leads to their non-acceptance of buying a product that does not exist on the ground. This is attributed to the weak marketing campaigns of the off-plan sales projects. The findings highlighted that although the off-plan residential units are less expensive compared to the ready-made housing units, this difference is not a great motivator for the purchase decision compared to other incentives, such as the location of the project and the reputation of the real estate developer, which confirms the great role that marketing plays in the success of such projects. Last but not least, the challenge of the similarity of the housing units in the off-plan sale program remained in the last position of the marketing challenges rating list, but it remains with a high weighted average of 4.13.

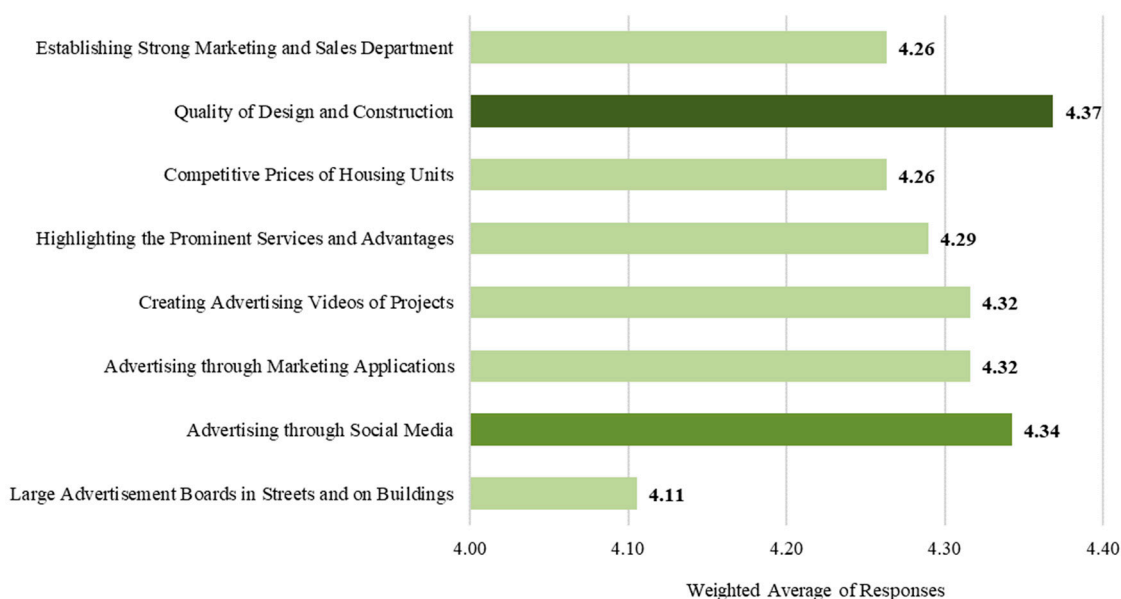
The findings of the study stressed the need to set several measures to overcome the financial challenges that are facing the off-plan sales program nowadays and enhance the current situation of the program not only in Riyadh but in Saudi Arabia as a whole. As illustrated in Figure 12, the most important proposed measure is the provision of financing offers to buyers with a weighted average of 4.34. This, without a doubt, will greatly encourage people to consider the off-plan sales program as one of the ideal options for buying their homes. The follow-up of applications periodically is also another important proposed measure that can help to accelerate the procedures within the off-plan sales program with a weighted average of 4.32. With the same level of importance, experts agreed that more participation from banks and financing agencies is urgently needed. The standardization of contracts came in the last place on the list of proposed measures to overcome the financial challenges, but it also remains with a high weighted average of 4.18.



**Figure 12.** Consensus-Based Financial Measures as Proposed by Experts.

The findings of the study also underlined the necessity to propose several measures to overcome the marketing challenges that are facing the off-plan sales program at present and enrich the program. As illustrated in Figure 13, the most important proposed measure is the quality of the construction and design of housing units in the off-plan sales program, with a weighted average of 4.37, followed by the advertising of the off-plan sales program and its products through the social media with a weighted average of 4.34. Experts agreed on the same level of importance for both advertisements of off-plan sales projects through electronic marketing tools and making visual clips of the off-plan project in addition to the displayed unit, with a weighted average of 4.32 for each. Placing large advertisements

in streets and on buildings came in the last place on the list of the proposed measures to overcome the marketing challenges, but it also remains with a high weighted average of 4.11.



**Figure 13.** Consensus-Based Marketing Measures as Proposed by Experts.

## 7. Conclusions

During the past few years, the real estate sector in Saudi Arabia has received a great deal of attention, especially in the field of housing, which is one of the largest areas of spending within the framework of the National Transformation Program (NTP) and the Saudi Vision 2030. This represents a stimulating step for the real estate industry sector in general and housing in particular, which represents a share of about 65% of the total real estate market. From this study, it is very clear that the off-plan sales program is considered one of the most prominent housing programs that need to be supported. Based on the analysis of the opinions of 38 experts using the Delphi technique, this study argues that there are several financial and marketing issues facing the off-plan sales program in the country. Therefore, the purpose of this study was to review the off-plan sales program and the most prominent goals for which it was set and to identify the most significant financial and marketing challenges facing the program in Saudi Arabia, with a focus on Riyadh and formulating consensus-based measures to overcome these challenges.

The literature on the off-plan sale program and the expert's point of view had a great role in shedding light on the most significant financial and marketing challenges facing the off-plan sales program in Riyadh at present. For instance, regarding financial challenges, the findings underlined the importance of reconsidering the condition of marginalizing the land deed and finding alternatives that protect the buyer's rights and, at the same time, do not hinder the developer in completing the implementation of the project. Among the proposals is to ensure the implementation of the project through real estate insurance companies to ensure that the costs of the project default are incurred by all parties involved in the implementation, or the developer provides a bank guarantee with a certain percentage of the cost of the project, which will be returned upon completion of the project. The results also showed the importance of matching buyers' payments with project implementation phases and linking contracts electronically between real estate development companies and financing agencies and between the buyers to facilitate and expedite the completion of procedures, which is reflected in the progress of the project implementation.

Regarding the marketing challenges, the finding highlighted the importance of providing introductory programs by the Ministry of Housing about the off-plan sales program for the buyers to clarify the parties involved in this program and the most prominent

rights and duties of the buyer and the real estate developer, as well as clarify the methods used to preserve the rights of all parties, which enhances the confidence of the buyers and increases the desire to buy residential products in the off-plan sales program. The real estate developer could also build several display housing units to give the buyer a perception of their future home, especially since some buyers do not feel the spaces drawn in the architectural plans. Moreover, providing basic services in the project, such as schools, parks, and other services, is important due to their significant impact on the marketing of housing units and influencing the purchase decision of the buyer.

Finally, this study included a series of fundamental phases to achieve the main purpose, starting with a review of the concept of an off-plan sale program and ending with a discussion of the key financial and marketing challenges. The study aspires to contribute to presenting some of the proposed measures to overcome the financial and marketing challenges facing the real estate developer in Riyadh and in Saudi Arabia in general while preserving the rights of all parties in the contractual process. Similar studies in this field are limited, making this study one of the pioneering attempts to investigate the reality of the off-plan sales program in the country. However, although the buyers' opinions are very important, they have not been addressed in this study because of the time limitation. Therefore, future research could focus on evaluating the off-plan sales program in Saudi Arabia based on the buyers' opinions to receive a better understanding of the program.

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