

Challenges Faced by Homeowners at the Planning Stage of House Construction

Abstract:

The planning stage of house construction plays a crucial role in ensuring a successful and efficient building project. However, it is often accompanied by various challenges that can significantly impact the outcome of the construction process. This research paper examines the personal, economical, and technical challenges faced by homeowners at the planning stage of house construction in two cities, Karnal and Hisar. The study aims to provide insights into the common challenges experienced by homeowners and compare the frequency of these challenges in the two cities. The data was collected through surveys conducted among 30 respondents in each city, resulting in a total sample size of 60 respondents. The challenges were categorized into personal, economical, and technical domains, and the frequencies of agreement, neutrality, and disagreement were recorded for each challenge. The research paper discusses the findings, presents the frequency percentages, and provides weighted mean scores (WMS) to compare the challenges between the two cities.

Keywords: challenges, construction, planning

Introduction

A house is more than just four walls and a roof—it is an extension of yourself, a reflection of your dreams, and a place where you can truly be yourself. A house not only provides a living space in it, but also has to deal with important aspects (Nawawi& Khalil, 2013). Building a house is an exciting endeavor, filled with limitless possibilities and the opportunity to create a space tailored to your unique needs and desires. (Azianet *al.*, 2020) mentioned that are social and physical components to housing. The physical elements are the homes, amenities, and utilities, while the social elements are the family, neighbours, and community. In addition, housing has an effect on people's health, education, employment, economic development and growth, environment, and social life, among other aspects of society. (Gouranga& Wilson, 2002) stated the most profound recent developments in construction are seen as: the increasing complexity of many of its projects and organizations, the increasing technological complexity of projects, more complex interdependencies and variations in the relationships between its organizations and institutions, and proliferating regulations from government. During the construction of a house, individuals encounter numerous challenges at various stages of the process. According to (Ogundeet *al.*, 2017), the building process can be categorized into three primary phases: the phase of conception/design, the phase of construction, and the phase of operation or use. Construction practice has also undergone a great deal of development in response to the dynamic nature of human needs and infra-structure (Anumbaet *al.*, 2008). The challenges

Comment [UoK1]: in ..?

Comment [UoK2]: size of sample may be considered to be small and may not represent the problem.

Comment [UoK3]: what are the significant and specific(%) findings?

Comment [UoK4]: stronger keywords need to be used.

Comment [UoK5]: the latest relevant studies need to be cited to recognize the gap in knowledge that is will be covered in the present study.

Comment [UoK6]: include extensive general discussions!

encountered were condensed into several key areas: resource allocation, scheduling, and budget management; ensuring compliance with quality and safety standards; managing complexity and organizational structure; handling change management; effectively managing risks and uncertainties; and establishing efficient communication systems (Alameri *et al.*, 2021). However, the path from envisioning your dream home to turning it into a tangible reality is not without its challenges, particularly during the planning stage. The planning stage of house construction is a crucial phase that sets the foundation for the entire project. It involves making critical decisions that will shape the design, functionality, and overall outcome of your home. During this phase, individuals and families often face various challenges, both practical and creative, that require careful consideration and problem-solving. However, the planning stage of house construction often presents a myriad of challenges that can test even the most prepared and enthusiastic individuals. From navigating complex regulations and permits to making critical design and budget decisions, the planning stage requires careful consideration and attention to detail. In this introduction, we will explore some of the common challenges faced by people at the planning stage of house construction, highlighting the importance of thorough preparation and offering insights into overcoming these obstacles. Whether it's financial constraints, architectural dilemmas, or logistical hurdles, understanding these challenges can help individuals embark on their construction journey with confidence and minimize potential setbacks along the way.

This research paper aims to shed light on the challenges faced by homeowners and compare their prevalence in Karnal and Hisar.

Comment [UoK7]: what is the question of the study?

Methodology:

The methodology for this study involved surveying respondents to identify the personal, economical, and technical challenges they faced during the planning stage of house construction. The sample consisted of 60 respondents who were at the planning stage of house construction, with 30 from each of the cities Karnal and Hisar. A survey questionnaire was used to collect data, and the respondents were asked to indicate their level of agreement or disagreement with each challenge. Frequency analysis was conducted to determine the number and percentage of respondents agreeing, neutral, or disagreeing with each challenge in each city and overall. Weighted mean scores (WMS) were calculated to assess the average agreement level for each challenge in Karnal and Hisar. The results were presented in tabular form, providing the frequency, percentage, and WMS for each challenge. This methodology allowed for a comprehensive understanding of the challenges faced by respondents during the planning stage of house construction in both cities.

Results and Discussion:

The challenges were divided into three categories: personal, economical, and technical challenges. The frequency percentages and WMS were calculated for each challenge within these categories. The results indicated the following:

The table1 provides insights into the personal challenges faced by respondents during the planning stage of house construction in Karnal and Hisar. The data reveals that a significant portion of respondents in both cities acknowledged facing a lack of information, difficulties in setting or knowing priorities, and in lack of proper research and feedback. Moreover, a substantial majority disagreed with the challenge of being indecisive to follow Vaastu Shastra. Unrealistic dreams and contradictory likings among family members regarding house attributes were challenges faced by a smaller percentage of respondents. The conflicting wishes towards house attributes appeared to be a concern for a sizable portion of respondents. Additionally, a considerable number of respondents in both cities admitted to a lack of proper research and feedback. The weighted mean scores further indicate the intensity of these challenges, with slight variations between the two cities. Overall, these findings highlight the common personal obstacles encountered during the planning phase of house construction, emphasizing the importance of addressing information gaps, establishing clear priorities, and conducting thorough research. Overall, prioritization and information gaps emerged as the key challenges faced by individuals during the planning stage of house construction in both Karnal and Hisar.

Comment [UoK8]: what are the significant conclusions?

Table 1: Personal challenges faced by respondents at planning stage of house construction

Sr. No.	Personal challenges	Karnal (n=30)	Hisar (n=30)	Total (N=60)	WMS (Karnal)	WMS (Hisar)
		Frequency (%)	Frequency (%)	Frequency (%)		
1.	Lack of information					
	Agree	12(40.00)	12(40.00)	24(40.00)	2.06	1.80
	Neutral	8(26.66)	12(40.00)	20(33.33)		
	Disagree	10(33.33)	6(20.00)	16(26.66)		
2.	In setting/knowning priorities					
	Agree	15(50.00)	11(36.66)	26(43.33)	2.23	2.06
	Neutral	4(13.33)	10(33.33)	14(23.33)		
	Disagree	11(36.66)	9(30.00)	20(33.33)		
3.	In decisive to follow vaastushastra					
	Agree	10(33.33)	7(23.33)	17(28.33)	1.66	1.66
	Neutral	0	6(20.00)	6(10.00)		
	Disagree	20(66.66)	17(56.66)	37(61.66)		
4.	Unrealistic dreams					

	Agree	5(16.66)	3(10)	8(13.33)	1.66	1.36
	Neutral	10(33.33)	5(16.66)	15(25.00)		
	Disagree	15(50.00)	22(73.33)	37(61.66)		
5.	Contradictory wishes towards house attributes					
	Agree	11(36.66)	9(30.00)	20(33.33)	1.66	1.93
	Neutral	18(60.00)	14(46.66)	32(53.33)		
	Disagree	1(3.33)	7(23.33)	8(13.33)		
6.	Lack of proper research and feedback					
	Agree	16(53.33)	11(36.66)	27(45.00)	1.73	1.76
	Neutral	6(20.00)	15(50.00)	21(35.00)		
	Disagree	8(26.66)	4(13.33)	12(20.00)		

Table 2 provides insights into the economical challenges faced by respondents during the planning stage of house construction in Karnal and Hisar. The table showcases four specific challenges: source of finance, fixed budget, access to loans from financial institutions, and affordability of land. In terms of the source of finance, around 50% of respondents in Karnal and 60% in Hisar agreed that acquiring adequate funds was a challenge. The fixed budget challenge saw a similar pattern, with 60% agreement in both cities. Access to loans from financial institutions was perceived as a challenge by approximately 47% of respondents in both locations. In terms of the affordability of land, 46.66% of respondents in Karnal and 53.33% in Hisar agreed it was a challenge. These findings highlight the significance of financial considerations, such as securing funds and managing budgets, in the house construction planning stage in both Karnal and Hisar. Additionally, the challenges related to loans and land affordability underscore the importance of accessible financing options and reasonably priced land for individuals undertaking house construction projects.

Comment [UoK9]: deep discussions of results need to be reported not just descriptions of results.

Table 2: Economical challenges faced by respondents at planning stage of house building

Sr. No.	Economical challenges	Karnal (n=30)	Hisar (n=30)	Total (N=60)	WMS (Karnal)	WMS (Hisar)
		Frequency(%)	Frequency(%)	Frequency(%)		
1.	Source of finance					
	Agree	15(50.00)	18(60.00)	33(55.00)	2.16	1.76
	Neutral	5(16.66)	5(16.66)	10(16.66)		
	Disagree	10(33.33)	7(23.33)	17(28.33)		
2.	Fixed budget					
	Agree	18(60.00)	18(60.00)	36(60.00)	2.33	1.76
	Neutral	4(13.33)	5(16.66)	9(15.00)		
	Disagree	8(26.66)	7(23.33)	15(25.00)		
3.	Access to loans from financial institution					
	Agree	14(46.66)	14(46.66)	28(46.66)	1.93	2.13
	Neutral	0	6(20.00)	6(10.00)		
	Disagree	16(53.33)	10(33.33)	26(43.33)		
4.	Affordability of land					
	Agree	14(46.66)	16(53.33)	30(50.00)	2.16	1.80
	Neutral	7(23.33)	8(26.66)	15(25.00)		
	Disagree	9(30.00)	6(20.00)	15(25.00)		

Comment [UoK10]: what is effect of each factor?

Table 3 presents the technical challenges encountered by respondents during the planning stage of house construction in Karnal and Hisar. Challenges such as finding suitable land in a good locality and accessing the land were agreed upon by a majority of respondents in both cities. The difficulty in finding the right architect was another notable challenge, with variations in agreement percentages. The permitting and documentation challenge encompassed sub-challenges such as bank loan approval, house plan approval, excess paperwork, and more time taken, each with different agreement percentages. Finding the right builder or contractor was a significant challenge, particularly in Hisar. Additionally, the decision between hiring a contractor or employing labor was also a concern. These findings highlight the technical hurdles faced by individuals during the planning stage of house construction in both Karnal and Hisar, emphasizing the importance of finding suitable land, hiring competent professionals, and navigating the complexities of permits and

Comment [UoK11]: the effect of each factor should be discussed deeply

documentation. The weighted mean scores provide a quantitative measure of the severity of the challenges, which can help builders and contractors address these challenges more effectively.

Table 3: Technical challenges faced by respondents at planning stage of house construction

Sr. No.	Technical challenges	Karnal (n=30)	Hisar (n=30)	Total (N=60)	WMS (Karnal)	WMS (Hisar)
		Frequency(%)	Frequency(%)	Frequency(%)		
1.	Finding suitable land in good locality					
	Agree	17(56.66)	19(63.33)	36(60.00)	2.36	2.46
	Neutral	7(23.33)	6(20.00)	13(21.66)		
	Disagree	6(20.00)	5(16.66)	11(18.33)		
2.	In accessibility of land					
	Agree	14(46.66)	17(56.66)	31(51.66)	2.20	2.36
	Neutral	8(26.66)	7(23.33)	15(25.00)		
	Disagree	8(26.66)	6(20.00)	14(23.33)		
3.	Finding right architect					
	Agree	11(36.66)	18(60.00)	29(48.33)	2.13	1.76
	Neutral	12(40.00)	5(16.66)	17(28.33)		
	Disagree	7(23.33)	7(23.33)	14(23.33)		
4.	Permitting and documentation					
	Bank loan approval					
	Agree	11(36.66)	15(50.00)	26(43.33)	1.93	2.20
	Neutral	6(20.00)	6(20.00)	12(20.00)		
	Disagree	13(43.33)	9(30.00)	22(36.66)		
	House plan approval					
	Agree	20(66.66)	18(60.00)	38(63.33)	2.56	2.30
	Neutral	7(23.33)	3(10.00)	10(16.66)		
	Disagree	3(10.00)	9(30.00)	12(20.00)		

	Excess paper work					
	Agree	20(66.66)	19(63.33)	39(65.00)	2.56	2.40
	Neutral	7(23.33)	4(13.33)	11(18.33)		
	Disagree	3(10.00)	7(23.33)	10(16.66)		
	More time taken					
	Agree	17(56.66)	18(60.00)	35(58.33)	2.30	1.73
	Neutral	5(16.66)	4(13.33)	9(15.00)		
	Disagree	8(26.66)	8(26.66)	16(26.66)		
5.	Finding right builder or contractor					
	Agree	4(13.33)	20(66.66)	24(40.00)	1.80	2.60
	Neutral	16(53.33)	8(26.66)	24(40.00)		
	Disagree	10(33.33)	2(6.66)	12(20.00)		
6.	Should go for contractor or wages					
	Agree	3(10.00)	14(46.66)	17(28.33)	1.50	2.36
	Neutral	9(30.00)	13(43.33)	22(36.66)		
	Disagree	18(60.00)	3(10.00)	21(35.00)		

Recommended suggestions:

Based on the research study on challenges faced during the planning stage of house construction, the following recommendations can be made:

- Increase access to information about house construction.
- Provide support in setting priorities and making informed decisions.
- Promote realistic expectations and reduce contradictory wishes.
- Improve access to financial resources for construction.
- Streamline permitting and documentation processes.
- Encourage professional support and guidance.
- Consider regional-specific challenges and solutions.
- Foster continuous research and knowledge sharing in the field.

Implementing these recommendations can help individuals overcome challenges and achieve successful outcomes in their house construction process.

Comment [UoK12]: More detailing of the two groups should be presented. The suggestions to treat each defect may be proposed.

Conclusion:

The research paper provides valuable insights into the challenges faced by homeowners at the planning stage of house construction in Karnal and Hisar. The findings suggest that homeowners in both cities encounter similar challenges related to information, setting priorities, source of finance, fixed budget, and finding suitable land. However, variations exist in challenges related to decisive factors like following Vaastu Shastra and contradictory wishes towards house attributes. Technical challenges related to finding the right architect, permit and documentation processes, and the choice between contractors and wages also showed some differences between the two cities. The results of this study can aid homeowners, architects, and policymakers in developing strategies to overcome these challenges and improve the efficiency of house construction projects. Further research can explore additional factors influencing house construction challenges in different regions.

Comment [UoK13]: Specific(%) and significant findings need to be reported.

References:

- Alameri, A., Alhammadi, A.S.A., Menon, A.H., Rahman, I.A. and Nasaruddin, N.A.N. (2021). Assessing the risk level of the challenges faced in construction projects. *Engineering, Technology & Applied Science Research*, 11(3): 7152-7157.
- Anumba, C. J., Issa, R. R. A., Pan, J., Mutis, I. (2008). Ontology-Based information and knowledge management in construction. *Construction Innovation*, 8 (3): 218 – 239.
- Azian, F.U.M., Yusof, N. and Kamal, E.M. (2020). Problems in high rise residential building: From management purpose. *IOP Conference Series Earth and Environmental Science*, 452(1): 1-8.
- Gouranga, C.B. and Wilson, C.B. (2002). Issues & challenges for the construction community. *Proceedings of the 2002 American Society for Engineering Education Annual Conference & Exposition*, pp. 7.769.1-7.769.8.
- Nawawi, A. H. and Khalil, N. (2013). Performance analysis of government and public buildings via post occupancy evaluation. *Journal of Building Appraisal*, 4(9): 59-69.
- Ogunde, A.O., A folabi, O.A., Owolabi, J. and Ojelabi, R. (2017). Challenges confronting construction project management system for sustainable construction on developing countries: A professionals perspectives. *Journal of Building Performance*, 8(1): 1-11.

Comment [UoK14]: Number of the cited literature is not enough and the review of literature is not adequate to recognize the gap of the study.