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Determinants of Contractor Preferences in the Selection of Cement Dealers: An Empirical Study of Decision Criteria and Relationship Factors

Faizan Shah Aijaz Shah, Dr.Bilal Husain
[1]*Student,* [2]*Assistant Professor, Department Of Business Administration And Research,Shri Sant Gajanan Maharaj College Of Engineering, Shegaon*

Abstract: ***This study analyzes the factors influencing contractor preferences in selecting cement dealers. It examines both functional factors such as price, product quality, and delivery reliability, as well as relationship factors including trust, communication, service responsiveness, and after-sales support. Data was collected from 100 contractors through structured questionnaires and analyzed using statistical tools like descriptive analysis and regression techniques. The findings reveal that although product quality remains important, relationship factors have a stronger influence on contractor decision-making. The study concludes that maintaining product performance along with strong relationship management is essential for cement dealers to build long-term and sustainable relationships with contractors.***
Keywords: ContractorsPreferences,CementDealers,BuyingBehaviors

I. INTRODUCTION

Background and Significance of the Study

Cement is a key component of the most basic structure that is used in almost every type of construction project, be it a small residential house or a huge commercial building. Since cement is the main factor that influences the strength, durability, and quality of a building, contractors are the ones who decide what cement dealer they should buy from. One good dealer is able to time the supply well, maintain the product quality at all times, and ensure that the coordination is always going smoothly, hence, the selection of the dealer is a very crucial decision for construction industry contractors **(Ngam et al., 2016).**

Generally, while working on real projects contractors tend to examine a dealer through the lens of a few factors which include price, brand reputation, product quality, credit availability, and delivery reliability. They determine these parameters to be in their control in order to perform their work smoothly and keep the costs within the limits of the budget for their projects (**Ho et al., 2010**). Nevertheless, over the last few years, relationship-based factors have been weighed on the same side of the scale as well. Elements such as trust, communication, service responsiveness, and after-sales support have become very significant because construction projects require continuous and long-term interactions between businessmen and dealers. A dealer who communicates plainly, troubleshoots quickly, and keeps up a reliable relationship is always chosen rather than a person who only offers a pricing advantage (Singh & Kaur, 2019).

Most of the previous research studies have focused on the significance of cost, quality, and brand preference, particularly in big urban markets and affluent countries. However, there are only a few studies concentrating on Indian conditions where most of the contractors are engaged in projects of small and medium scales.

II. REVIEW OF LITERATURE

Theconstruction industry is a leading sector for the economic growth of any nation, the main functions are to provide the necessary infrastructure like residential and commercial buildings. Cement is one of the most vital components in building works since it is the main binding agent in concrete and other structural uses.

Choosing the correct cement dealer in the construction supply chain is a complicated decision-making process that is influenced by numerous factors besides the price and quality of the product. Manufacturer selection in the construction industry has been the subject of numerous research studies by the researchers, who have initially concentrated on aspects such as price competitiveness, product quality, service reliability, and dealer reputation.

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Recently, however, the researchers' attention has been focusing on the role of relationship factors such as trust, communication, and long-term interaction between contractors and dealers in the dealer-contractor relationships. The latter relationship factors are, in particular, the case in emerging economies where business relationships have a greater impact on operational performance and long-term collaboration than formal contracts. Although there is a growing interest in this topic, a systematic empirical review combining decision criteria with relationship factors is still very scarce, thus forming a research gap addressed by this paper.

A. Key finding of important

Authors Wu et al. (2022) conducted an investigation of the cement supplier evaluation through the utilization of FAHP CRITIC and VIKOR methods. They came up with quality, price, technology, reliability, service, and finance as the principal aspects most likely to be used for supplier selection. (Wu, Y., Zhang, X., & Li, J. (2022). Sustainable supplier selection for the construction industry using FAHP-CRITIC and VIKOR methods.

Owuotey et al. (2020) researched consumer preferences for cement brands in Ghana. Their discovery was that product quality, brand image, and the number of years of establishment were the most decisive factors in the selection of a brand. (Owuotey, R., Danso, K., & Nyarko, E. (2020). Consumer preference on cement brands that are utilized in the production of concrete: The Ghanaian school of thought.

Mishra (2019) analyzedthe brand choice of cement in Nepal. The research found out that contractors and consumers focus on quality, price and brand image in their decision makingprocess.(Mishra, S. (2019). Evaluation of the consumer factors of influence in the decision of the cement brand.

B. Methodologies and Result

Wu et al. (2022) study employed the multi-criteria decision-making techniques (FAHP-CRITIC and VIKOR) and establishing a framework to evaluate the suppliers of cement.Owuotey et al. (2020) conducted a survey quantitative study involving 741 participants in Ghana. They questioned contractors and consumers to determine the way they rate cement brands. They were analyzed based on the survey.Mishra (2019) based on his results on survey and focus group discussions in Nepal and found out that customers tend to focus on quality and brand image rather than price.

C. Limiting or Gaps Identified

Most of the mentioned research have predominantly concentrated on the price and product quality with a low inclination to emphasize the significance of the relationship aspects of trust, communication, and long-term cooperation. Empirical research, which specially aims to examine the interplay of decision criteria and relationship determinants in the process of selecting cement dealers in the developing economy, is uncommon.

III. RESEARCH METHODOLOGY

A. Research Objectives

1) To recognize the main factors that lead the contractors to choose the supplyof cement by the dealers. For example, price, product quality, credit terms,and delivery reliability.

2) To measure the significance of relational factors (trust, communication,service responsiveness, after-sales support) in influencing contractorpreferences.

3) Toanalyze the impact of demographic and firm-level characteristics ofcontractors (size, experience, project scale) on their selection of cementdealers.

4) Tooffer real and valuable strategies to cement dealers in order to keep theircompetitiveness, deepen the contractor relationships, and increase long-termloyalty.

Scope of the Study:The study focuses on small and medium-scale contractors in India, particularly in urbanand semi-urban areas. It examines both functional factors (price, quality, credit, delivery) and relationship factors (trust, communication, service). Data was collected over a period of three months in 2025. Large government projects and cement production processes are excluded.

B. Hypotheses

H_{01}: Functional factors do not significantly influence contractor preferences.

H_1: Functional factors significantly influence contractor preferences.

H_{02}: Relationship factors do not significantly influence contractor preferences.

H_2: Relationship factors significantly influence contractor preferences.
H_{03}: Contractor characteristics do not affect dealer selection.
H_3: Contractor characteristics significantly affect dealer selection.

C. Data Sources

The study uses both primary and secondary data. Primary data is collected through structured questionnaires and interviews with contractors, while secondary data is obtained from research papers, journals, and industry reports.

D. Data Collection Methods

Data was collected using questionnaires and personal interviews to understand contractor preferences and experiences.

E. Sample Design

Sample Size: 100 contractors ,Sample Unit: Small and medium-scale contractors in residential and commercial projects

F. Sampling Technique:

Stratified sampling was used by dividing contractors based on project type and experience. Random samples were selected from each group to ensure proper representation.

G. Data Analysis Tools:

SPSS software was used for analysis. Techniques include descriptive statistics, factor analysis, and regression analysis to study relationships between variables.

IV. DATA ANALYSIS AND INTERPRETATION

A. Descriptive Statistical Analysis

The variables were measured on a 5-point Likert scale (1: Strongly Disagree to 5: Strongly Agree). The following tables provide the Mean (μ) and Standard Error (SE) for each question, along with the Aggregate Mean and Standard Deviation (SD) for each objective.

Table 1: Descriptive Statistics for Research Objectives

Objective	Question / Variable	Mean (μ)	Standard Error (SE)
Objective 1: Functional Factors	Q7: Product quality and consistency	3.1619	0.1462
(Overall Mean: 2.805)	Q8: Flexible credit terms	2.7060	0.1109
(Overall SD: 0.726)	Q9: On-time and reliable delivery	2.4903	0.0953
	Q10: Dealer reputation and goodwill	2.8727	0.1118
	Q11: Availability of stock	2.7943	0.1149
Objective 2: Relationship Factors	Q12: Frequent communication	2.8041	0.1179
(Overall Mean: 2.742)	Q13: Service responsiveness	2.8335	0.1078
(Overall SD: 0.710)	Q14: After-sales support	2.7452	0.1084
	Q15: Long-term loyalty advantages	2.5883	0.0989
Objective 3: Firm Characteristics	Q16: Influence of project size	2.6374	0.1067
(Overall Mean: 2.630)	Q17: Professional experience	2.7943	0.1141
(Overall SD: 0.735)	Q18: Digital platform convenience	2.5589	0.1019
	Q19: Rapid problem response	2.5295	0.0953
Objective 4: Strategic Factors	Q20: Reward/Loyalty programs	2.7060	0.1056
(Overall Mean: 2.782)	Q21: Technical advice and training	2.7158	0.1157
(Overall SD: 0.791)	Q22: Consistent quality assurance	2.7550	0.1166
	Q23: Frequent follow-ups	2.9512	0.1304

B. Hypothesis Testing

To validate the research framework, the study tested three primary null hypotheses (H_01), (H_02), (H_03). One-Sample T-tests were used for H_1 and H_2 to compare scores against the neutral value (3.0), while ANOVA was utilized for H_3 to identify differences based on contractor experience**.**

Table 2: Summary of Hypothesis Testing Results

Hypothesis	Statistical Test	Test Statistic	P-Value	Result
H_1: Selection Factors Influence Choice	One-Sample T-test	t = -2.7251	0.0076	Rejected H_(01)
H_2: Relationship Factors Influence Choice	One-Sample T-test	t = -3.6761	0.0004	Rejected H_(02)
H_3: Experience/Size Effect on Choice	ANOVA	F = 4.8682	0.0097	Rejected H_(03)

C. Interpretation and Discussion

1) Functional and Selection Factors (H_1)

The rejection of H_(01) (p = 0.0076) confirms that price, quality, and delivery significantly dictate contractor behavior. Product Quality (3.16) is the highest-rated individual factor in the entire study, suggesting it is a "non-negotiable" criterion. However, the significantly low mean for Delivery Reliability (2.49) indicates a critical pain point; contractors value delivery highly, but current dealer performance in this area is viewed as unsatisfactory.

2) The Supremacy of Relationships (H_2)

With the highest level of statistical significance (p = 0.0004), relationship factors were proven to be the strongest psychological drivers of preference. While functional factors get a dealer "in the door," relationship factors like Service Responsiveness (2.83) and Communication (2.80) are what secure the contractor's preference. The low standard deviation (0.71) in this section shows that contractors, regardless of their background, are almost universally in agreement that dealer communication and trust are vital.

3) The "Experience Gap" in Selection (H_3)

The ANOVA results (p = 0.0097) indicate that contractor selection criteria change with experience level. Veteran contractors (11–20 years) rely more on established criteria (mean = 2.82), while mid-career contractors (5–10 years) are more critical and less satisfied (mean = 2.29), making them more sensitive to dealer performance and more likely to switch. This suggests that dealers should use a segmented strategy—focusing on reliability for experienced contractors and offering better service and pricing for mid-career contractors.

4) Strategic Implications for Dealers (Objective 4)

The analysis of strategic factors highlights that Frequent Follow-ups (2.95) are significantly more effective than abstract Loyalty Programs (2.70). This implies that in the cement industry, "high-touch" personal selling and proactive engagement are the most valuable strategies for maintaining competitiveness and increasing long-term loyalty.

V. CONCLUSION

The study concludes that contractor preferences in selecting cement dealers are influenced by both functional and relationship factors. Product quality, price, and delivery reliability are important, with quality being the most critical factor. However, relationship factors such as trust, communication, and service responsiveness have a stronger impact on long-term dealer selection.

The findings also show that contractor characteristics like experience affect their decision-making behavior. Overall, the study highlights that a combination of good product performance and strong relationship management is essential for cement dealers to attract and retain contractors.

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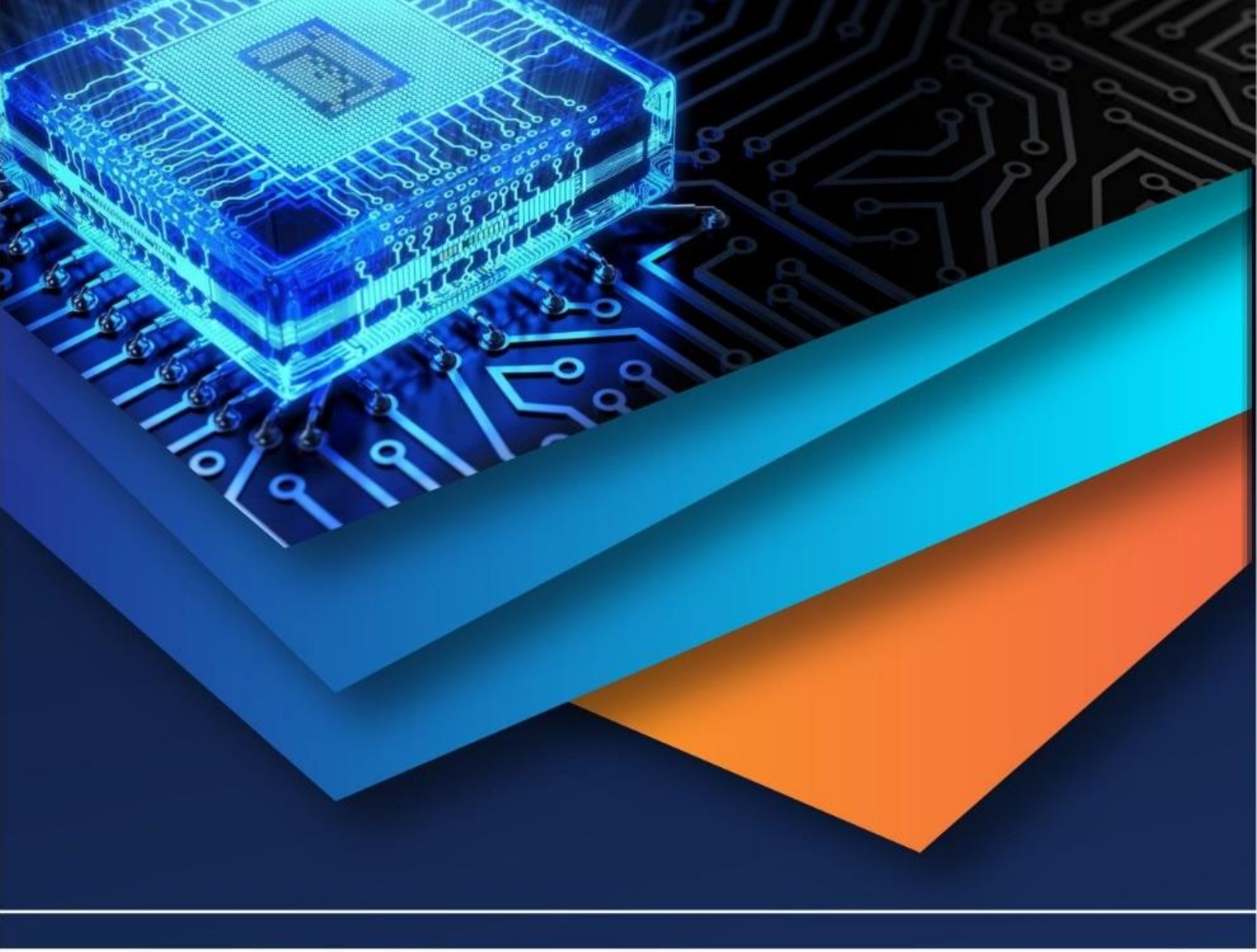

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