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## Theoretical Framework of Pre and Post Purchase Behavior for Material Handling Equipment in the Indian Auto and Auto-Ancillary Industries

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### Abstract

Material handling equipment (MHE) is necessary in the auto and auto-ancillary industries, where competitors rely on operational excellence to gain competitive advantage. Individuals will have to undertake capital-related decisions when acquiring this equipment, and it is therefore of great essence that the nature of behaviors that impact the organizational purchase processes before and after the acquisition process are completely understood. The theory formulated in the study is derived as a synthesis of practical decision criteria rationale as they apply to the domain of MHE buying and models of industrial buyer behavior, which are well established. Besides post-purchase aspects such as performance evaluation, customer analysis, and contractor interaction, the framework emerges as a strong priority on pre-purchase activities such as identification of need, evaluation of constituents, and involvement of stakeholders. To offer a guided prism through which to solemnly make a decision, a SWOT analysis will be incorporated to describe both internal and external factors that influence a behavior of purchasing. The proposed model contributes to the existing research by integrating behavioral, risk-related, and strategic implication theoretical frameworks into one approach. Due to its conceptual nature, the particular study will be based on theory and prior studies as opposed to actual facts to give the basis of subsequent studies. The final aim of the framework is to help auto and auto-ancillary companies make prudent procurements as well as to provide relevant information to MHE suppliers and manufacturers.

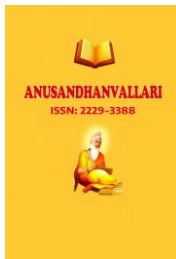
**Keywords:** Material Handling Equipment, Organizational Buying Behavior, Procurement Decision-Making, Risk Management, Behavioral Framework, Automotive Industry

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### Introduction

#### Importance of Material Handling Equipment (MHE) in auto and auto-ancillary industries

Since it supports efficient workflow, short production times, and minimized intra-logistic support, material handling equipment (MHE) is a vital necessity to the automotive industry as well as auto-ancillary industries.



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Long manufacturing lines are fundamental to the automotive sector, as any delay could lead to a mass waste of money. MHE increases productivity and lessens the loss of time as it promotes the ease of moving components, semi-finished products, and raw materials. Furthermore, all the applications of the recent MHE technologies, such as robots and autonomous guided vehicles, contribute to raising the degree of security, as well as reducing the risks involved, which are presented by manual control. The immediate benefit of MHE investment (yet achievable in the Indian market), with the booming automobile manufacturing sector, is the enhanced cost-effectiveness and product quality when lean manufacturing tools can be linked to global competitiveness. The relevance of MHE in achieving operational excellence owes to its integration with the concept of just-in-time production system (Marodin et al., 2018; Sawhney and Piper, 2002).

### **Need of the Study**

The move to purchase material handling equipment, with strategies in the automotive and auto-ancillary industries, influences its productivity, safety, and long-term competitiveness in the industry. The detailed understanding of buying behavior turns necessary because of the huge outlay of capital as a measure to decrease risks and maximize profits. The studies in the MHE procurement remain scattered in India, but most of the research permanently focused on operational effectiveness or on the behavioral and strategic aspects of procurement. I believe this study is needed due to the growing complexity of procurement that is affected by both external forces, such as supply chain disruptions, and swift technology changes, such as automation and integration of the IoT.

### **Objectives**

- To give a theoretical idea of how material handling equipment is acquired using behavior before and after the make of such purchase.
- To apply SWOT analysis to evaluate the opportunities, threat, vulnerabilities, and strengths that influence MHE buying decisions in the automobile and auto-ancillary sectors.
- To create awareness to understand relationship to the supplier, customer satisfaction, and post-purchase performance analysis.
- To deliver managerial performance indicators to suppliers, automakers, and manufacturers to this extent that procurement plans adapt to the long-range corporate goals.

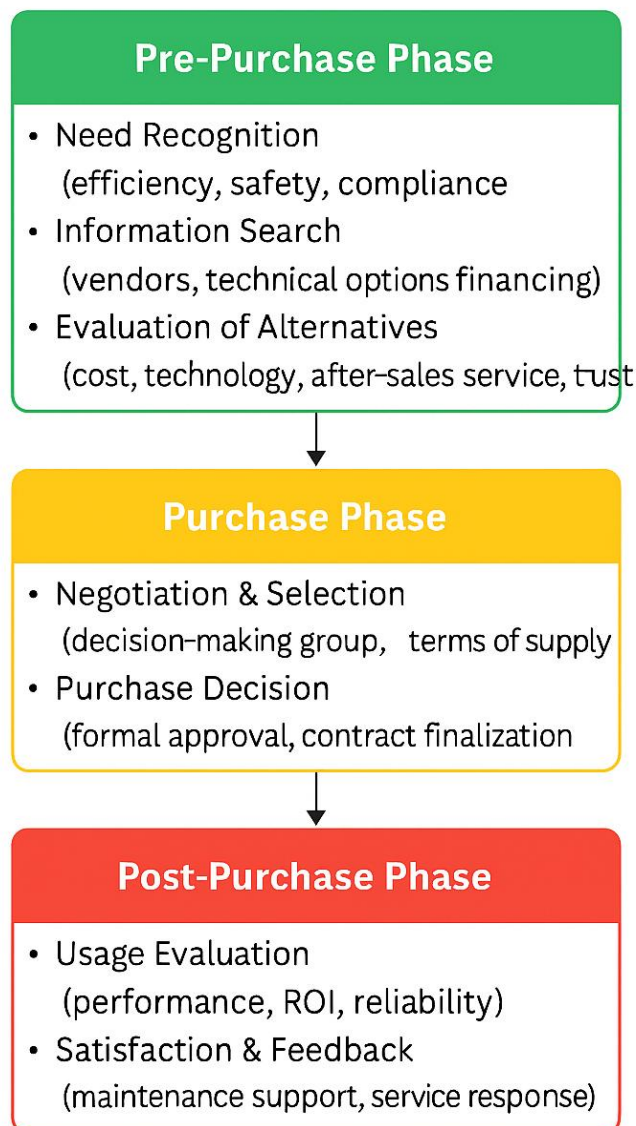
### **Literature Review**

#### **Methodology**

To be capable of integrating existing works, views, and theories that are relevant in corporate purchasing behavior, the current study uses a conceptual and theoretical approach. The approach relies on the extensive analysis and reading of familiar studies of the buying model, including the Buygrid and Howard-Sheth concept, and their applicability to the purchase of material handling equipment because the research does not involve any primary or secondary empirical data gathering. Indian auto industry and auto-ancillary industry General theories of organizational decision-making are adjusted to accommodate the specific conditions of the industry through a deductive process. So as to determine the benefits, drawbacks, opportunities, and risks associated with the MHE procurement decision options, the strategy SWOT analysis is also incorporated in the research study. Conceptual

models conceptualize the positive and negative ways of mapping the results of post-purchase activities (performance assessment, satisfaction, and supplier relationship management) into pre-purchase activities (need identification, evaluation, and stakeholder responsibilities). The method will ensure that the article is comprehensive and structured such that the writer does not require empirical validation to establish the new paradigm. The theoretical model developed in this paper could serve as the foundation of new empirical research whereby the proposed theoretical lessons could be evaluated and refined with real-world statistics.

Figure 1: Conceptual Model of Pre and Post Purchase Decision-Making for Material Handling Equipment  
(Adapted from Ferguson, 1979; Hunt & Pappas, 1972).

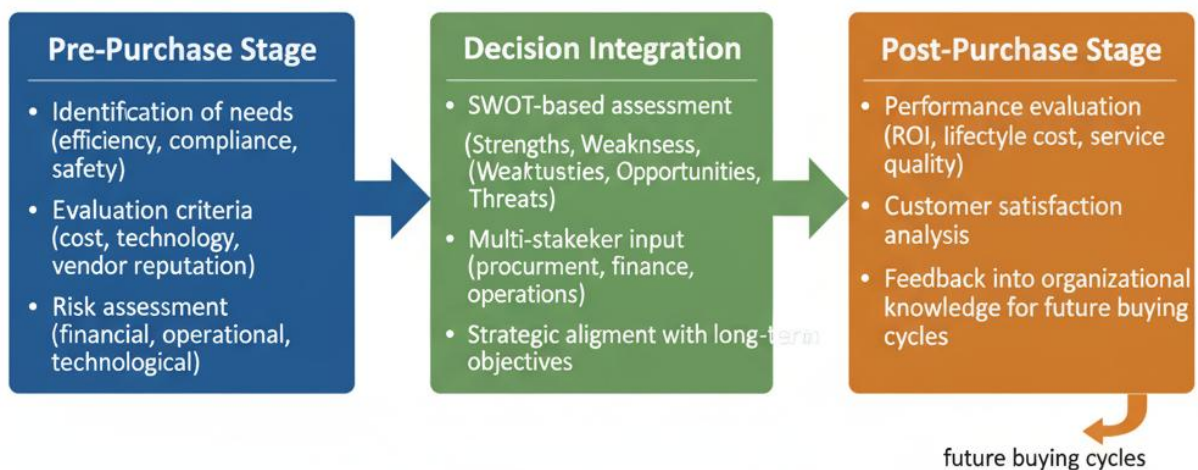


**Table 1: SWOT Analysis of MHE Purchase Decisions in Auto & Auto-Ancillary Industries**

Factor	Details
<b>Strengths</b>	MHE enhances operational efficiency by reducing handling time and minimizing human error. It improves productivity and ensures safety compliance in auto plants. These benefits lower accident risks and enhance throughput, making MHE a cornerstone of lean manufacturing (Soufi et al., 2021; Horňáková et al., 2019).
<b>Weaknesses</b>	High capital investment remains a barrier, especially for small and mid-sized ancillary firms. Dependence on vendor support for spare parts and maintenance can create vulnerability, as firms risk downtime if suppliers fail to deliver timely service (Telek, 2023; Qayyum, 2014).
<b>Opportunities</b>	Rapid technological advances in automation, IoT, and predictive maintenance open pathways to smarter, integrated MHE solutions. The growing demand from India's expanding auto sector provides opportunities for widespread adoption and scale efficiencies (Soufi et al., 2021; Mirnig et al., 2023).
<b>Threats</b>	Rapid technological obsolescence exposes buyers to high depreciation risks. Competitive pressures and supply chain disruptions further complicate procurement decisions, while overdependence on global vendors makes firms vulnerable to geopolitical shifts (Villena et al., 2021; Hunter, 1994).

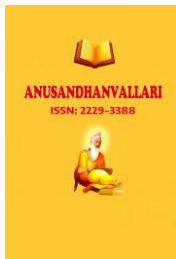
**Figure 2: Proposed Framework for Pre and Post Purchase Decision-Making in MHE**

(Adapted from Makkonen et al., 2022; Dubey et al., 2020)



### Managerial Implications

MHE providers and manufacturers can tailor their model products and services using data on customer pre-purchase and post-purchase behavioral information. Suppliers can develop competitive packages to address consumer requirements based on understanding of assessment considerations such as lifespan cost and technical innovation. Staffed after sales services and online integration also enhance customer retention. Dependability and transparency should be placed on the strategic elders, leading to long-term trust which implicates immediate



impact on repeat business (Gunasekaran et al., 2020). The suppliers are also supposed to choose a position as efficiency (instead of product) partners by incorporating consumer feedback into their innovation procedures (Queiroz et al., 2021).

Procuring practices will align with the proposed framework to ensure systematic examination and reduction of risks related to capital-intensive outlays of the auto and auto-ancillary companies. In attaining a balance between the technical and financial considerations, cross-functional decision-making policies have to be put in place to bring in the contribution of teams that deal with manufacturing teams of the organization, financial teams, and logistics groups. An attitude of accountability can be institutionalized by largely focusing on scrutinizing a supplier based on post-purchase results such as ROI and reliability. SWOT analysis should also be included in the supply chain planning to address supply chain disruption and changes in technology (Bag et al., 2021). Moreover, owing to the current dynamic nature of the auto industry, the introduction of sustainability-based procurement can serve to enhance competitiveness (Dubey et al., 2020).

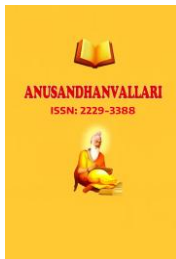
### Research Gap

Models like the Howard-Sheth model and Buygrid model have been exhaustively researched in the literature about the industrial buying behavior in correlation to organizational buying. Nevertheless, most studies emphasize products consumed by the M or general industrial machinery with scant regard to material handling equipment fertilized by capital (MHE) specific to a particular industry such as the auto/auto-ancillaries industry. Integration of post-purchase behavior, especially as it involves ROI, dependability, and supplier relationships, is an unexplored area, although some studies have identified pre-purchase features such as the evaluation of requirements and vendor selection. Besides, the bulk of studies are conducted in developed economies with little emphasis put on emerging economies such as India against supply chain instabilities, reward sensitivity, and rapid, fast-paced technology advancement, where all these challenges pose a major difference in making decisions. Another gap is the absence of unified models that would integrate internal and external forces in procurement through integrating behavioral perspectives and strategic instruments such as the SWOT scenario. Their high weakness is the lack of a comprehensive theoretical framework that would carefully explain the buying trends in the MHE context in the Indian car industry. By sealing this void through the synthesis of concepts, the business ventures, where making capital-intensive procurement decisions in a highly competitive field is the sole business and worry, can be guided by both the theoretical and practical suggestions.

### Conclusion

In the context of establishing a joint response with the SWOT analysis, this study presented a theoretical perspective on the study of behavior and post-purchase behavior in MHE procurement. In the synthesis, it is stressed that the subsequent phases are accompanied by systematic requirements and risk judgement focus in the pre-purchase phase due to the dominance of consensuality of post-purchase phase performance and satisfaction. By incorporating SWOT, companies can offset the external threats and opportunities with internal strengths and weaknesses. This centralized model can help car and auto-ancillary businesses make more informed purchasing decisions.

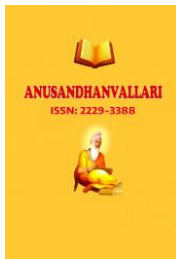
To establish that this paradigm is applicable, empirical tests of this paradigm of auto and auto-ancillary industries of India should be carried out as a part of future research. The contribution of feedback loops to subsequent buying policy may be measured through longitudinal studies. A study of Indian and foreign companies might also reveal differences in structure and culture in the purchasing behavior of India. Finally, it would be appropriate to call on



sustainability and digitalization perspectives as the 4th-generation industry topics, being included in the framework to make it more difficult to apply to the observed economy and industrial sector situation.

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