



Integration of Ontology in Marketing Management Decisions: A Systematic Literature Review

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Abstract

This study aims to determine the role of ontology in determining marketing management decisions Design/ methodology/ approach - This study uses the SLR method to collect articles related to ontology in marketing management published between 2019 and 2024. This researcher uses Mendeley software. Of the 558 articles that were netted according to the keywords, exclusion was carried out according to the criteria that had been prepared, only 6 articles were considered and extracted. Findings – Ontology in marketing management decisions is used as a framework for managers to define their marketing strategies. Managers use the knowledge they already have with current market demand or trends. It can be said that in deciding on a marketing strategy, it takes things from within the manager, such as the manager's understanding and emotions, and things outside the self, namely market demand. In determining a decision, managers do not consider emotions but rational data. However, managers must still have the understanding and knowledge to be able to think about appropriate marketing strategies and be able to achieve organizational goals. Limitations/implications of the study – This study only focuses on the general ontology of marketing management, so there are not many articles found. Practical implications – With this research it can be used by marketing managers to consider creating a framework with an ontological foundation to decide on a marketing strategy in their organization. Originality/value – This research is related to the foundation of ontology in marketing management which can be explored more deeply, because there are still limitations in research on this subject.

Introduction

In this era, marketing is the main factor so that a product can be known by consumers. Marketing is a dynamic process that includes a variety of strategies and practices aimed at understanding and meeting consumer needs. Marketing is currently undergoing evolution and change with the existence of technology, namely digital marketing. Rapid technological advances affect consumer consumption activities which also affect strategies in marketing, as marketing prioritizes understanding consumer behavior and preferences, ensuring that strategies are aligned with customer needs (Czinkota et al., 2021). It takes marketing management that integrates various strategies and practices to effectively meet market demand and improve organizational performance.

Factors such as market share, potential markets, competitor analysis, and promotion strategies significantly affect marketing management outcomes (Nur Mastuti et al., 2024), in addition to marketing management is essential for organizational success, because relying solely on traditional marketing theories can hinder innovation in a rapidly changing market with

technological developments. Implementing new methods and technologies can provide a more adaptive framework for future marketing strategies, so an organization needs effective and strategic marketing management decisions to achieve organizational goals. Marketing management decisions are the process of determining actions in solving marketing problems (Terho et al., 2022; Aaker & Moorman, 2023; Suherlan & Okombo, 2023).

Marketing management decisions involve a variety of factors, such as market segmentation, product quality and design, distribution channels, company image, promotion, and pricing (Kotabe & Helsen, 2022). This decision also needs to consider several factors, namely the marketing mix, political and legal factors, and the existence of laws that regulate marketing, marketing competition, and consumer interests. In making decisions, a structured framework/frame of thinking is needed, so by integrating the ontology of marketing management decisions can be improved, because by thinking ontologists, managers understand the environment for complex decision-making (Soto, 2006; Sunyoto & Winarno, 2024; Hamrouni et al., 2021). By utilizing ontology, decision-makers can better analyze alternatives, understand the consequences, and integrate relevant information, ultimately leading to more informed choices, reducing subjectivity due to the proper information retrieval that allows exploration and consideration of various factors that can be used as managerial alternatives (Girase et al., 2017; Mansingh & Rao, 2014). So it can be concluded that ontology offers significant advantages so that good resources are needed to decide on a marketing strategy that is in accordance with the organization's goals. This study will analyze articles related to the application of ontology in marketing management decisions which can later be implicated on organizations and also the improvement and development of research related to the application of ontology in determining the main management decisions in marketing improvement.

Literature Review

Ontology is one of the branches of philosophy that studies the nature of reality. The ontology of science is basically about the "What", "How", and "Which" of a truth. If described, the ontology of science consists of the essence of science, the object of study of science, and the character or characteristics of science (Harianto, 2023). Ontology occupies an element of every science, or is the basis for classifying knowledge and at the same time the fields of science. There are four (4) ontological foundations for the development of science, namely supernaturalism, materialism, dualism, and pluralism. The ontological foundation is a scientific perspective on reality (Sianturi, 2023). This ontological foundation can be applied in economic management which is now increasingly important to be considered as a conceptual framework foundation to improve understanding and application in a variety of economic contexts by providing a structured way to analyze economic exchanges, values, risks, and competition, facilitating better decision-making and strategic planning within organizations (Porello et al., 2020; Porello et al., 2020).

There is a strong link between marketing management and decision-making. Both of these things are related to the formation of an effective marketing strategy based on a good decision-making process. Today's marketing managers face challenges that require activeness, innovation, and reflexivity in determining their decision-making (Nordin & Ravald, 2023; Lal et al., 2025). The existence of these challenges requires managers to adapt to changing market conditions and consumer preferences, by utilizing their data and knowledge to improve the quality of decisions (Wahab & Rahman, 2018; Putra et al., 2023). Marketing managers must respond to market changes, ensuring that strategies remain relevant and effective. Evaluating the effectiveness of management decisions is essential for maintaining competitiveness and customer satisfaction (Reshetko et al., 2021; Okeke et al., 2024; Olayinka, 2021).

Management thinking in determining a marketing strategy decision is the main factor in the marketing success of an organization. In decision-making, managers must have ethical standards, because the existence of ethical standards will guide managers to consider the moral implications of their actions. Especially now that the competition is increasingly complex, for example in international competition managers are required to attend proper training on ethical issues in order to work well in a culture different from their own (Chatterjee et al., 2021). Ethical decisions foster trust and accountability, which are essential for sustainable business practices, so managers must be able to combine data, knowledge, adaptability, and ethics to create an effective or appropriate organizational strategy in accordance with organizational goals.

Methods

The *Systematic Literature Review* (SLR) method is used in this study by reviewing the literature which aims to summarize the existing research related to marketing management decisions. SLR is a form of research that deals with existing publications and follows a systematic methodology for synthesizing data that has already been published (Kraus et al., 2020). It follows established guidelines such as PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analysis). The steps include identification, screening and included. Identification is carried out by identifying the literature in the Emerald Insight (<https://emeraldinsight.com/>) library source; Sage journals (<https://journals.sagepub.com/>); and Taylor & Francis (<https://tandonline.com/>). The three contributors are combined with the reason to know all kinds of articles about marketing management decisions by applying ontology as the basis for thinking to make decisions. The keywords included in each journal are ontology AND (philosophy) AND (manager) AND (management) AND (manager decision) AND (manufacturing) AND (marketing). The second step is to filter by eliminating articles that are not related to the topic of discussion in this article by determining the following categories:

Table 1. Article Screening Criteria

Inclusion Criteria	Research results in the fields of economics, management, business, finance, and industry Research results related to management decisions Research results related to marketing Year of publication of articles/journals in 2019 - 2024
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To help with screening, the study was assisted by Mendeley software. Furthermore, the third step is included. Based on the results of the screening, there are 6 (six) articles included and will be analyzed and synthesized articles. Here are the details of the screening process and the included articles:

Table 2. Article Screening Process

Bibliography	Taylor&francis	200	
	Sage	127	
	Emerald	231	
	Total Artikel	558	
Screening process	Duplicate	16	
	Filtered studies	542	
	Excluded studies	504	

	Studies are assessed according to the criteria	40	
	Excluded studies	32	There is no discussion about marketing (18); Not discussing managers' decisions (14)
	Studies included in the fist	6	

Results and Discussion

Here are the details of the articles included in this SLR:

Table 3. Article details are included in the SLR

No.	Heading	Research objectives	Results
1	Becoming a strategist: The roles of strategy discourse and ontological security in managerial identity work (Mantere & Whittington, 2021)	Identify the tactics used in the formation of strategist identities, explore the role of ontological security in identity work, and analyze the relationship between strategy discourse and identity.	Managers use three identity work tactics: self-measurement, self-construction, self-actualization. Strategic discourse affects managerial identity.
2	Business model innovation decisions: the role of group biases and risk willingness (Mueller-Saegebrecht, 2024)	Exploring the effects on BMI decision-making and identifying the key characteristics of BMI group decision-making.	Managers prioritize information over emotion in BMI decisions. The quality of decisions is influenced by managerial cohesion and conflict readiness.
3	Habit as a central concept in marketing (Tadajewski, 2019)	Exploring the process of habit formation in the context of marketing by highlighting the relational aspects of habits in marketing.	Habits are essential to the ongoing marketer-customer relationship. Marketing theorists state that their core commitment is to develop relationships and customer satisfaction, which creates habits.
4	Investigating Relational Ontologies in Macromarketing: Toward a Relational Approach and Research Agenda (Lucarelli & Giovanardi, 2019)	To assess relational ontologies in macromarketing and explore methodological discussions about relationships in macromarketing.	Macromarketing can be researched and assessed relationally and critically by considering the issue of "direct" adoption of various relational ontologies.
5	Japanese Cross-Cultural Management in Indian Business-to-Business Marketing Situations:	To analyze values, beliefs, and attitudes in marketing strategies and examine the customer satisfaction	Individual values significantly influence intercultural marketing actions.

	A Study of Evolving Intra Asian Differences in Cultural Values (Ashta, Stokes, Hughes, & Visser, 2024)	orientation of Japanese executives in India.	Long-term relationships with customers are prioritized by respondents.
6	Object-oriented marketing theory Paolo (Franco, Canniford, & Phipps, 2022)	Exploring the impact of object-oriented ontology on marketing research. Considers the role of humans in markets and consumption and investigates the hidden features of objects in the context of consumption.	Researchers are advised to consider hidden objects in marketing research, and with the framework in place helps in understanding market formation and consumption.

Articles were obtained from reputable journals based on Scimago Jr. Here are the details of the journals included in this SLR:

Table 4. Journals included in the SLR

Journal	Journal Rankings (SJR)	Amount
Journal of Macromarketing	Q2	2
Marketing Theory	Q1	2
Journal of Business-to-Business Marketing	Q2	1
Strategic Organization	Q1	1
Management Decision	Q1	1

Marketing management decisions are increasingly influenced by complex environments, requiring innovative frameworks and tactics that take into account consumer emotions and habits. The integration of ontological approaches improves decision-making by providing structured methods for diverse directions in accordance with current market conditions. Marketing managers must adapt quickly to changing market conditions, utilizing real-time data for informed decisions. In this research article used in SLR research, ontology is a framework for managers. An ontological framework assists organization in the decision-making process, which can be applied to respond to the challenge of immorality to achieve organizational goals. An ontology-based system in marketing management improves product recommendations using relational data, namely by taking into account user preferences and product relationships (Alsobhi & Amare, 2022). Relational ontology provides a framework for understanding consumer culture and market interactions, emphasizing the importance of relationships in shaping marketing strategies. This is as stated in the research by Lucarelli & Giovanardi (2019) with ontology used as a framework, managers can find out strategies that are in accordance with market demand and interests on a macro basis. Likewise, research by Franco et al. (2022) understands the formation of markets and consumption. This ontological foundation for management can also be used by researchers as a framework to identify hidden marketing strategies, this research reveals (Franco et al., 2022)

Understanding emotional responses to marketing tactics can significantly influence consumer habits and preferences. However, according to research by Mueller-Saegbrecht (2024) managers prioritize information over emotion in BMI decisions. While a focus on structured decision-making and emotional engagement is essential, some argue that rapid technological

advancements can lead to an over-reliance on data, potentially hindering creativity and intuition in marketing strategies. Balancing data-driven decisions with human insights remains a crucial challenge in the evolving marketing management landscape. In research by Mantere & Whittington (2021) in determining managerial decisions using self-measurement tactics, self-construction, and self-actualization. Self-measurement, self-construction, self-actualization, ontology, and management are interconnected concepts that shape the development of individuals and organizations. Self-measurement in managers, especially in marketing management, involves assessing and improving the managerial abilities and marketing maturity of the organization. Furthermore, self-construction, includes the ability of managers to rely on their own judgment and abilities, which can improve decision-making and strategic planning in the context of marketing. Finally, self-actualization is an important aspect of human development, which reflects the realization of one's potential. The factor of social constructivism affects self-actualization, namely the transformative ability of individuals to achieve self-actualization through cultural products and consumption (Sergeevna & Ivanovich, 2020). Of these three tactics, as is the case in research by Ashta et al. (2024) and Tadjewski (2019), what exists in managers affects decisions, namely the habits of individual values affect intercultural marketing actions.

Conclusion

Marketing management decisions are influenced by a complex environment, requiring innovative frameworks and tactics that take into account consumer emotions and habits. The integration of ontological approaches improves decision-making by providing structured methods for diverse directions in accordance with current market conditions. Self-measurement, self-construction, self-actualization, are things that need to be used as a basis for deciding on managers' decisions. Self-measurement in managers, especially in marketing management, involves assessing and improving the managerial abilities and marketing maturity of the organization. Furthermore, self-construction, includes the ability of managers to rely on their own judgment and abilities, which can improve decision-making and strategic planning in the context of marketing. Self-actualization is the realization of one's potential. With an ontological basis, a marketing management decision is made with a framework consisting of the manager's ability to be able to analyze market demand, both micro and macro markets with the aim of providing satisfaction to consumers which will ultimately affect consumer habits to consume a product. The implication in this study is to provide an overview to managers in determining marketing decisions by considering the foundation of ontology in thinking. With ontology, the existence of something will be known based on systematic cause and effect and relationships, that is, with the knowledge possessed by the manager and market demand, a marketing strategy will be formed. In this study, it can also be known that by applying the foundation of ontology in marketing management, it will provide a benchmark or can be investigated for other objects that may be able to influence the decision of the marketing manager which can be studied more deeply by further research.

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