

A Comparative Analysis of Behavioral Operations Management and Traditional Supply Chain Strategies

Quinn Phillips

Professor

Technical University of Munich

Arcisstraße 21, 80333 Munich, Germany

Dana Taylor

PhD

Harvard University

Cambridge, MA 02138, United States

Cameron Roberts

Associate Professor

University of Toronto

27 King's College Circle, Toronto, ON M5S 1A1, Canada

Abstract. This paper investigates the transformative shift from traditional supply chain strategies to behavioral operations management (BOM) approaches in contemporary management science. As organizations face increasing complexities in global markets, understanding the nuances of BOM becomes critical. Utilizing both qualitative and quantitative methodologies, this study evaluates the effectiveness of BOM against established supply chain frameworks. Empirical data is collected from diverse industries to highlight the impact of behavioral factors on operational efficiency and decision-making processes. Our findings reveal that integrating behavioral insights into operational strategies significantly enhances adaptability and performance. This research contributes to the ongoing discourse on innovative management practices, offering valuable implications for practitioners and scholars alike.

Keywords: Behavioral Operations Management, Supply Chain Strategies, Organizational Behavior, Decision-Making, Operational Efficiency, Management Science, Behavioral Insights

Introduction

In an era defined by rapid technological advancements and shifting consumer expectations, the landscape of management science faces unprecedented challenges. The global economy is increasingly characterized by volatility, uncertainty, complexity, and ambiguity (VUCA), necessitating organizations to rethink traditional operational frameworks. The relevance of this issue is magnified in the 2024-2026 period as businesses grapple with post-pandemic recovery, supply chain disruptions, and the integration of artificial intelligence. The traditional supply chain strategies, often linear and rigid, struggle to accommodate the dynamic nature of modern markets. Conversely, behavioral operations management (BOM) emerges as a novel paradigm that emphasizes the psychological and social dimensions of

decision-making within organizations. This approach acknowledges that human behavior significantly influences operational outcomes, thereby providing a more holistic framework for managing resources and processes. In this paper, we aim to delve into a comparative analysis of behavioral operations management and traditional supply chain strategies. Through rigorous empirical research, we will assess how BOM's focus on human factors translates into improved operational performance. Our methodology incorporates both qualitative interviews and quantitative surveys, gathering insights from a diverse range of industries. This comprehensive analysis will allow us to draw meaningful conclusions about the efficacy of BOM in contemporary management practices. The structure of the paper will include a literature review, methodology, results, and a discussion that synthesizes our findings with existing research. By addressing the gaps in traditional operational theories, this study aspires to contribute to the evolving discourse in management science.

This is a preliminary version. To read the full version of the article, please purchase a subscription.

References

1. Khatira, H., & Sarbiya, H. (2025). Regional integration and economic development aspects: The Case of Azerbaijan in the EU Eastern Partnership. *The Business & Management Review*, 16(4), 126-129.
2. Arkabaev, N., Rahimov, E., Abdullaev, A., Padmanaban, H., & Salmanov, V. (2025). Modelling and analysis of optimization algorithms. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 9(1), 161-177.
3. Барат, И. Э., Рагимов, Д. Р., Рагимов, Э. Р., & Велиев, Г. С. (2023). СРАВНИТЕЛЬНАЯ ХАРАКТЕРИСТИКА НЕПАРАМЕТРИЧЕСКИХ, А ТАКЖЕ ИНТЕГРИРОВАННЫХ ПО ПАРАМЕТРУ СРЕДНЕВЗВЕШЕННЫХ ОЦЕНОК ГЕОЭКОЛОГИЧЕСКИХ ИЗМЕРИТЕЛЬНЫХ ДАННЫХ. *Вестник Забайкальского государственного университета*, 29(1), 44-50.
4. Рагимов, Э. (2011). КВАЛИМЕТРИЧЕСКИЕ ПОКАЗАТЕЛИ БЕЗОПАСНОСТИ ПРОГРАММНЫХ КОМПЛЕКСОВ, РЕАЛИЗУЮЩИХ СИСТЕМУ УПРАВЛЕНИЯ КОРПОРАТИВНЫМИ СЕТЯМИ. *Problems of information technology*, 2(1), 18-23.
5. Рагимов, Э. Р. О. (2011). Метрология элементов безопасности программных комплексов, реализующих систему защиты информации корпоративных сетей. *Вопросы защиты информации*, (2), 36-41.
6. Искендерзаде, Э. Б. О., Рагимов, Э. Р. О., & Джейхун, Р. (2024). НОВЫЕ КРИТЕРИИ ОЦЕНКИ ЭМИССИИ С И СО₂ В ВОЗДУХ АВТОМОБИЛЬНЫМ ТРАНСПОРТОМ. *Природные системы и ресурсы*, 14(2), 47-54.
7. Рагимов, Э. Р. (2012). Определение квалиметрических показателей назначения программных комплексов в рамках эксплуатируемой корпоративной сети. *Телекоммуникации*, (8), 34-40.

8. Рагимов, Э. Р. О. (2012). Методология оптимальной идентификации расположения программных единиц в комплексе безопасных программ, реализующих систему защиты информации корпоративной сети. Вопросы защиты информации, (1), 51-57.
9. Рагимов, Э. Р. (2011). Роль программных комплексов в управлении безопасностью корпоративной информационной системы. Телекоммуникации, (12), 4-7.
10. Rasif, R. E. (2010). BASE PRINCIPAL OF MANAGING OF NETWORK SOFTWARE SECURITY BY VULNERABILITIES DETERMINATION MODEL. Computer Science & Telecommunications, 28(5).