Selected Research Topic: *The use of Dashboards in current business practice for supply chain management.*

Real – Time Operational Dashboards for Monitoring Supply Chain Activates – Literature Review Outline

Introduction

Supply chain management is a complex and integral part for businesses that deal with tangible goods. Dashboards simplify this by overviewing key metrics through data analysis and visualization. When these dashboards are integrated with logistic management, operations and inventory levels, they become a strategic tool that provide comprehensive performance indicators of the entire supply chain (Magnus & Rudra, 2019).

Literature Review Outline:

1. **Audience**

   Targeted towards supply chain and IT professionals who aim to digitize and improve operational management.

2. **Focus & Aim**

   This literature review aims to answer the followings questions:

a. What is the important role of real-time operational dashboards in supply chain management (SCM)?

b. What are the most significant KPIs that can enhance SCM efficiency and strategic decision making?

c. What is the impact of AI, IoT, and big data in supply chain monitoring?

3. Framework

a. Defining operational dashboards and their role in SCM.

b. Understanding key metrics for real-time dashboards (Zimmermann & Brandtner, 2024):

i. Efficiency Metrics.

ii. Operational Performance Metrics.

iii. Risk Metrics.

iv. Financial Metrics.

4. Literature Review Methods

a. Identifying industry related reports and source selection techniques.

b. Identifying existing research that examines strengths, weaknesses, and trends in dashboard design.

5. Findings

a. Strengths of existing industry related dashboards and benefits such as automation, real-time visibility and predictive analytics.

b. Challenges and limitations with data integration and data processing.

c. Findings on the impact of AI and big data on dashboard usability and accuracy.

d. Findings on industry's most significant KPI's that enhance dashboard usability.

6. **Conclusion & Recommendations**
    a. Key insights on major dashboard impacts and metrics.
    b. Key KPI's that optimize dashboards for better decision making.
    c. Future directions suggesting improvements in dashboard design, AI integration and data accuracy.

Given the extensive data needed in supply chain, building a dashboard requires a clear understanding of critical supply chain performance and supply chain management metrics. Additionally, dashboards require intensive considerations such as clarity in the visualization, responsiveness and data integration to ensure the specific needs of an organization is achieved (Nabil, et al., 2023). That said, selecting the right platforms and tools to build a robust dashboard helps ensure smooth data integration and operational efficiency.

References

Magnus, M. S. & Rudra, A., 2019. *Real-time Operational Dashboards for Facilitating Transparency in.* Perth, SCITEPRESS.

Nabil, D. H., Rahman, M. H. & Chowdhury , A. H., 2023. Managing supply chain performance using a real time Microsoft Power BI dashboard by action design research (ADR) method. *Congent Engineering ,* 27 9.10(2).

Zimmermann, R. & Brandtner, P., 2024. From Data to Decisions: Optimizing Supply Chain Management with Machine Learning-Infused Dashboards. *Procedia Computer Science,* Volume 237, pp. 955-964.