

# Digital Transformation in Supply Chain

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**Abstract:- The digital network has become reliable in many sectors. One of the major sectors that have embraced the digital network is the supply chain. The relationship between digital transformation and supply chain management has become common across industries and organizations to ensure sustainable production and distribution to consumers.**

## I. INTRODUCTION

The evolution of modern technology has resulted in many sectors relying on the digital network to carry out their services including processing, manufacturing, and distribution. The emergence of the digital network has enabled many organizations to utilize it in undertaking these services and distributing their goods to their products. Digital transformation has contributed to the efficiency of service providence while ensuring that the goods distributed meet the consumers' preferences. This transformation has been consistent in supply chain management considering the high use of the internet by customers; something that has largely influenced their buying behavior such as ordering goods online and reliance on home delivery. This has resulted in supply chain managers coming up with alternatives including digital transformation to ensure their services align with consumers' purchase behavior and demand pattern.

## II. LITERATURE REVIEW

Supply chain management involves efficient management of the end-to-end process starting from the design of the product or service to the time when it is sold, consumed, and finally disposed of by the consumer (Lauren Xiaoyuan Lu, 2015). With the emergence of digital networks, supply chain management has adopted the digital network to make it more efficient for consumers. The digital supply chain has been defined as "a set of processes that uses digital technologies to manage stakeholders' function effectively in terms of sourcing suppliers, procuring raw materials, estimating demand, making the final product, arranging logistics and sales channel and finally enriching visibility of orders to reach end users (Vikneswaran, 2023).

Digital transformation in supply chain management has been influenced by both internal and external factors. Internal factors include corporate strategy in terms of sustainable development whereby digital transformation is considered a strategy for reducing the political and environmental impact

on the whole supply chain cycle (Han Li, 2023). According to Imadeddine Oubrahim et al. (2023), a sustainable supply chain benefits the environment and society and can improve a company's long-term financial performance through cost reductions and increased efficiency. Another internal factor is improving supply chain performance whereby digital transformation is embraced by organizations to improve their operational performance in terms of evaluating sales (Han Li, 2023). External factors, on the other hand, include customer demand in terms of their behavior, and competition in the global market with the iteration of e-commerce influencing digitization (Han Li, 2023).

## III. BENEFITS OF DIGITAL TRANSFORMATION IN SUPPLY CHAIN

The benefits of digital transformation in the supply chain, according to Vikneswaran (2023), include: -

- Optimization of production lead time within an organization.
- Reduction in supply chain waste with limited need for maintaining freight work.
- Enables the monitoring of production performance to help track down unexpected downtime.
- Helps in tracking and monitoring the goods in both production and delivery processes thus enhancing transparency.

## IV. CONCLUSION

The evolution of technology has enabled different sectors, including supply chain management, to make their services more efficient. Different factors, both internal and external have influenced digital transformation in the supply chain. This has been associated with various benefits for organizations.

## REFERENCES

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