Overview of Value Stream Mapping

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Introduction

VSM (value stream mapping) is a lean tool that uses a flowchart to describe each phase of the process. VSM is seen by many lean practitioners as a critical tool for identifying waste, reducing process cycle times, and implementing process improvement. VSM is a workplace efficiency solution that integrates material processing steps with information flow, as well as other relevant data. VSM is a critical lean tool for every company looking to plan, implement, and enhance its lean journey. VSM assists users in developing a good implementation plan that will help them utilise their existing resources and make optimal use of materials and time.

Description

The VSM system's "value stream" section focuses on how value can be added to a product or service by modifying the market form or function to fit the expectations of the client. This includes adding features and functionality to a product or service that benefit the client without increasing the company's waste of time and materials (also known as muda in Japanese). A value chain diagram offers an overview of all operations within a corporation, whereas a value stream map represents a fundamental business process that adds value to a material product. "Value stream diagrams" and/or other types of diagrams that show business processes that create and use data can be used to represent different business activities.

The goal of value-stream mapping is to find and eliminate or decrease "waste" in value streams, hence boosting a value stream's efficiency. Waste removal aims to boost productivity by making operations more lean, which makes waste and quality issues simpler to spot. Supporting methods for value-stream mapping are frequently used in Lean contexts to analyse and design flows at the system level (across multiple processes). Value-stream mapping is commonly linked with manufacturing, but it is also utilised in logistics, supply chain, service-related businesses, healthcare, software development, product development, and administrative and office activities. Waste removal activities can be divided into three categories [1-3].

NVAs (non-value-adding operations) are acts that should be avoided, such as waiting. NNVA stands for "necessary but non-value adding," which refers to actions that are wasteful but required by present operating practices. Value-adding (VA) is the human conversion or processing of raw materials. Current state and future state value stream maps are the two types of value stream maps. The current state value stream map is used to determine how

the process now looks, while the future state value stream map is used to establish how the process will ideally look after the value stream has been improved. The present state value stream map is built by observing the process and tracking the information and material flow before the future state map is created. The main goal of a value stream map is to show you where you may enhance your process by showing both valuable and wasteful processes. Value stream mapping is gaining traction in knowledge work because it allows segregated teams to see and collaborate more effectively. Individual contributors can get a bird's eye view of the team's efforts. The assembly line isn't the only place where value stream mapping – sometimes known as "visualizing" or "mapping" a process – can be used. Because it promotes greater team communication and collaboration, lean value stream mapping is gaining popularity in knowledge work. The handoffs (or wait time) between team members, rather than the procedures themselves, account for much of the waste in knowledge work [4,5].

Conclusion

Value stream mapping aids in the identification of waste and the streamlining of the manufacturing process. Both the product and customer delivery flows can be mapped using value stream mapping. Product flow is concerned with the processes that must be taken to optimize product delivery and completion. The customer flow focuses on the actions necessary to meet the needs and expectations of end users.

References

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How to cite this article: John, Peter. "Overview of Value Stream Mapping." J Ind Eng Manag 11 (2022): 349.

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