
Value stream management (VSM)

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Foreword

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Introduction

The value stream management (VSM) method is an effective tool for the collection, evaluation and continuous improvement of product and information flows within organizations. The VSM methodology includes the analysis, design and planning of value streams. In consideration of an ideal state, the current state of the value stream is mapped according to the gathered data and subsequently analyzed to design a future state with less waste and a reduced lead time. Based on a variety of different VSM approaches, which have been developed in the framework of Lean Production primarily since the 1990s, there are communication and collaboration issues during the application of VSM in practice due to different value stream visualizations and associated calculation procedures. In particular, these challenges occur at the interfaces of departments, corporate groups or entire supply chains (see [Figure 1](#)). Therefore, the adherence of rules and guidelines in regard to VSM is required to ensure a common and standardized method for the collection, evaluation and continuous improvement of value streams within cross-enterprise value networks.

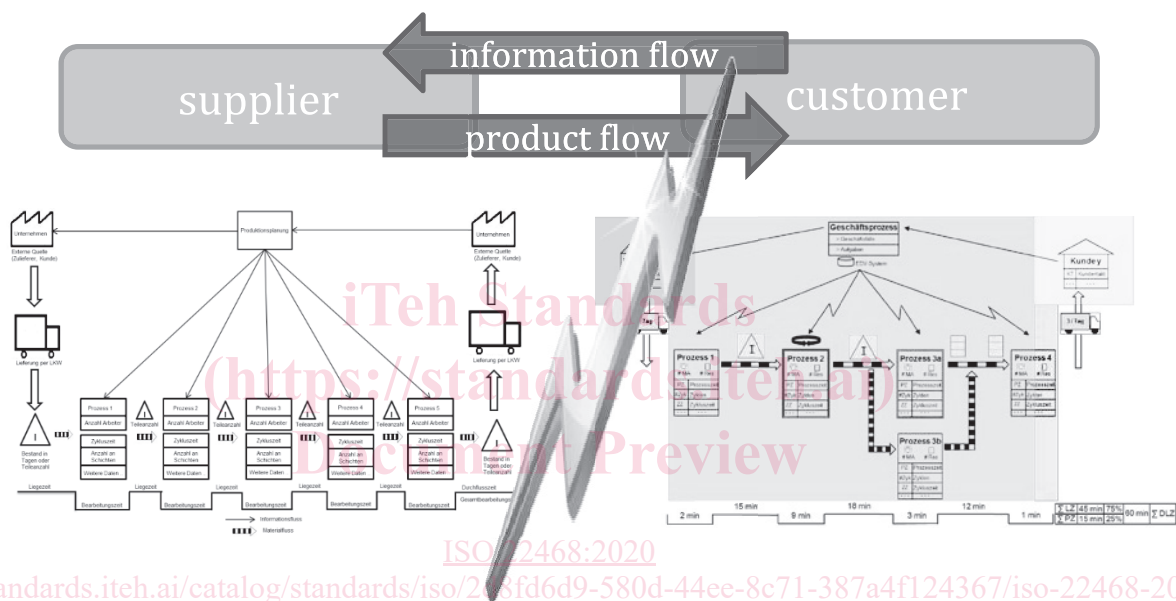


Figure 1 — Communication issues at supply chain interface

This common and goal-oriented application of VSM leads to a reduction or elimination of waste, e.g. unnecessary discussions or the multiple and thus redundant preparation of value stream data targeted to each contact person or auditor are omitted.

With the help of a defined procedure in terms of a unique VSM method, value streams of different sectors and process types are holistically improved. In addition, consistent product and information flows based on a unified VSM method enable a coordinated process planning (see [Figure 2](#)).

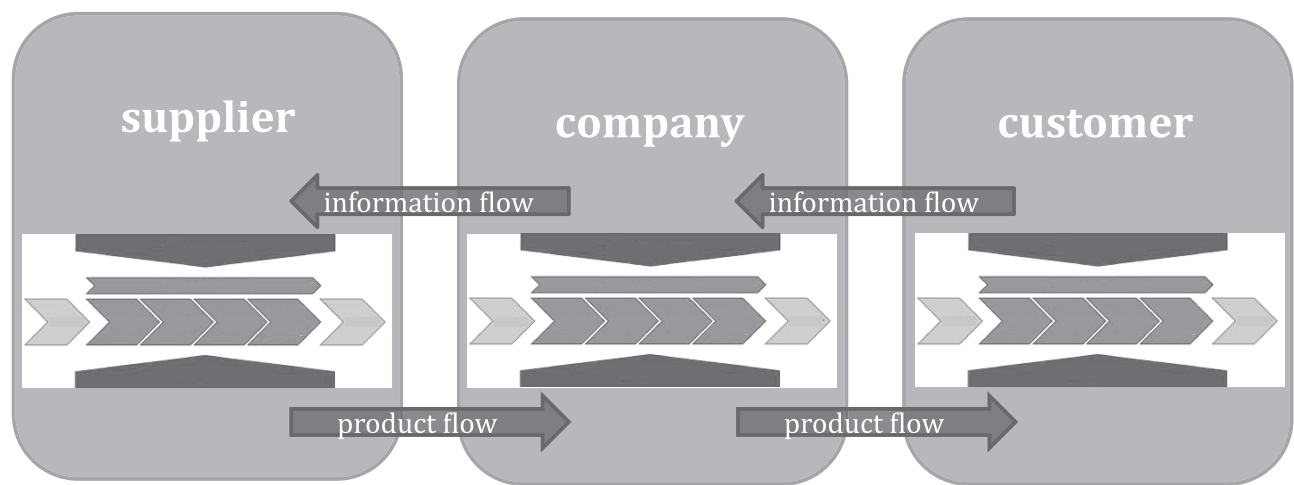


Figure 2 — Integrated supply chain

A common understanding of value streams enables organizations to streamline their internal and external processes. In this regard, the standardized VSM method ensures a unified collection, visualization and calculation of value streams, first within companies or corporations and consequentially along supply chains.

All information or requirements within this document can be transferred to any process type. Figure 3 shows a suitable scheme for the structuring of different process types[2].

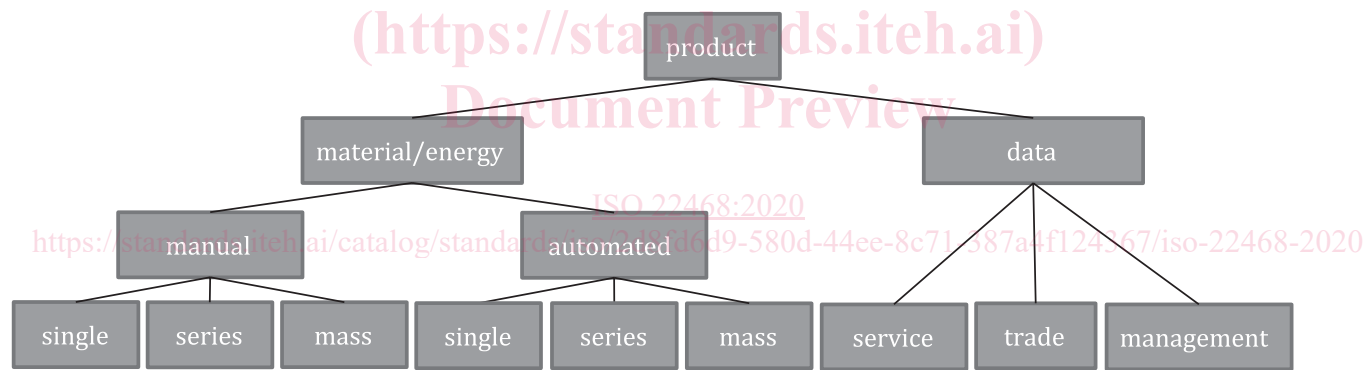


Figure 3 — Main process types

The downstream-oriented product flow in Figure 2 can be generated by material-, energy- or data-related processes. The material- or energy-related processes can be further separated in manual or automated processes of either single, series or mass production. The data-related processes comprise service, trade or management processes.