Margarita Protopappa-Sieke Ulrich W. Thonemann *Editors*

Supply Chain Segmentation

Best-in-Class Cases, Practical Insights and Foundations



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Preface

Products, services, and customers have different requirements, and a one-size-fits-all approach can result in insufficient supply chain performance and service issues. A one-size-fits-all approach cannot meet all the varied requirements; companies therefore need to consider differentiated approaches to customers, products, and supply. Supply chain segmentation helps reduce the complexity of managing supply chains and enables companies to respond to varied customer needs in a timely and profitable manner. In this book, we provide practical insights for successful supply chain segmentation through best-in-class industry case studies from Gardena, Philips Luminaire, Siemens Healthineers, and Volvo Construction Equipment. Through industry examples, we discuss insights, recommendations, and solutions on how to define supply chain segmentation and set up and implement a transformation program.

Chapter 1 provides an introduction to the main industries and companies we discuss. We summarize the industry and company challenges along with their supply chain segmentation approach.

Chapter 2 is an overview of the segmentation frameworks from academic literature where we cluster the frameworks according to their choice of segmentation criteria. The existing frameworks can be categorized into three different approaches: market, product, and hybrid approaches.

Chapter 3 provides information on a more holistic and practical supply chain segmentation framework developed by McKinsey. This is a three-step approach where all relevant performance and cost drivers are analyzed, segmentation criteria are identified, and last supply chain strategies are defined for each segment.

Chapter 4 provides an overview of Philips segmentation journey. We discuss the specific challenges and the initial situation. We elaborate on the segmentation criteria and explain the supply chain strategies for each segment. Finally, we discuss the implementation challenges and key factors for success and summarize the benefits for Phillips.

Chapter 5 provides an overview of Volvo CE segmentation journey. Volvo CE used two broad categories to differentiate its supply chain: (1) Standardized

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machines characterized by short lead times. These products follow a make-to-stock (MTS) policy. (2) Customized machines characterized by longer lead times due to significant configuration possibilities. These products follow a make-to-order (MTO) policy. In practice, Volvo CE created a supply chain that serves MTS products in less than one month while MTO products can take up to four months to deliver.

Chapter 6 introduces Husquvarna Group main challenges and supply chain segmentation approach. Gardena has been a core brand of the Husqvarna Group since its acquisition in 2007 and generates 80–85% of its sales in Western Europe. Gardena faced several challenges regarding its supply chain performance: (a) *high sales seasonality* with volatile demand during the season and (b) a legacy *rigid supply chain structure*. To decrease the number of simultaneous virtual supply chains and thereby the supply chain complexity, the segments were grouped into three types of supply chains: *flexible*, *responsive*, and *efficient*.

In Chap. 7, we discuss Siemens Healthineers who is one of the world's largest suppliers of technology to the healthcare industry and a leader in medical imaging, laboratory diagnostics, and healthcare IT. This chapter describes the service parts supply chain segmentation initiative at Siemens Healthineers where we present the background of the company and the industry. We describe the initial situation and the challenges that lead to the segmentation initiative and discuss the segmentation criteria that have been defined.

Chapter 8 concludes with the main findings summarized from the previous chapters. We introduce the key success factors that underlie the segmentation process, starting with the development of the framework and continuing through implementation. We highlight the prerequisites for deriving a company-specific segmentation, describe the diagnostic phase, and provide recommendations for a practical, end-to-end segmentation approach.

Cologne, Germany Cologne, Germany

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Chapter 1 Introduction

Knut Alicke, Margarita Protopappa-Sieke, and Ulrich W. Thonemann

1.1 Introduction

These days, companies have realized that different customer value propositions require a differentiated supply chain strategy. Products, services, and customers have different requirements, and a one-size-fits-all approach can result in insufficient supply chain performance and service issues. Using the same transactional relationships for all products and demand types, the same manufacturing strategies or lead-times for all types of products, and/or the same forecasting intensity for all customers, markets, and products can result in excess inventories, long lead-times, poor service, and high costs. A one-size-fits-all approach cannot meet all the varied requirements; companies therefore need to consider differentiated approaches to customers, products, and supply.

Segmentation needs to be tailored and pragmatic, and add value to the supply chain without increasing complexity significantly.

Supply chain segmentation helps reduce the complexity of managing supply chains and enables companies to respond to varied customer needs in a timely and

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