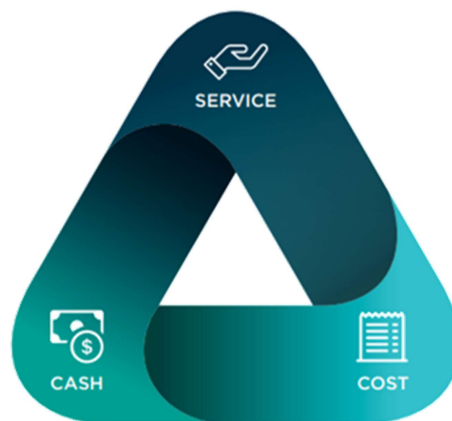


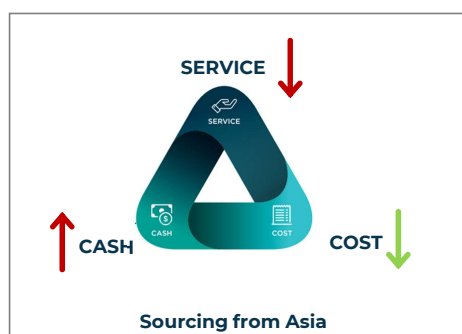
The supply chain triangle, strategy, and S&OP

Professor Bram Desmet is a distinguished scholar with extensive experience in academia and industry. He has held positions at Vlerick Business School since 2010 and Peking University since 2010. He works to bridge the gap between academia and industry, as exemplified by his current role as CEO of Solventure since 2009. Solventure helps companies align supply chain operations with strategy, finance, and sustainability. Bram is also the author of several articles and books, including “Supply Chain Strategy and Financial Metrics” (2018), “The Strategy-Driven Supply Chain” (2021), and “Rethinking Supply Chain” (2024).

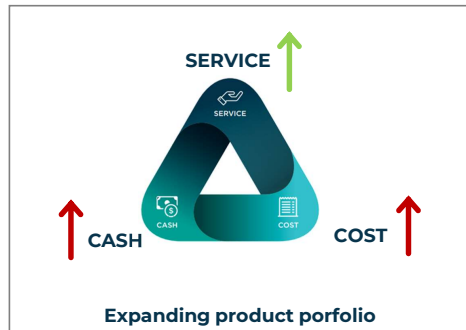
The lecture’s primary focus was on the topics introduced in the first book titled “Supply Chain Strategy and Financial Metrics.” The book introduces the supply chain triangle, which comprises service, cost, and cash. Contrary to a conventional perception of supply chains focusing on coordination of processes and actors to deliver goods or services, Bram’s central message emphasises the trade-offs between the three elements in the supply chain triangle. Service is exemplified by various aspects such as service level (e.g., on-time delivery), assortment (e.g., the number of products in your portfolio), and order flexibility (e.g., minimum order quantities, delivery frequency). Costs are exemplified by warehousing costs, logistics costs, and manufacturing costs, while cash is exemplified by working capital, including capital tied to inventory.



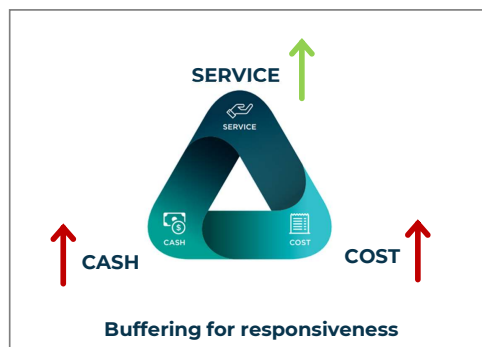
In the lecture, we examined several practical examples of how the supply chain triangle can be used to understand trade-offs. Let’s say that you want to outsource operations to a lower cost country in, e.g., Asia. The driver for this is typically the cost of manufacturing. However, longer lead-times will impact both service levels and cash (i.e., capital tied to inventory). Service will likely go down, as order flexibility is reduced. At the same time, there is need for more capital tied to inventory due to the longer lead-times.



An expanding product portfolio, in turn, leads to better service. Remember that service encompasses a broader range of factors, including the number of products in your portfolio. As service becomes better, it often results in higher costs and a need for more working capital (i.e., more cash, as capital is tied to inventory). In practical terms, this means, e.g., that a larger product range necessitates more time-consuming product transitions in production and disperses inventory across more products.



A classic example of a trade-off within the supply chain triangle is when you increase service to achieve better supply chain responsiveness. This typically requires higher safety stocks and more responsive operations that, in turn, lead to higher costs and more capital tied to inventory.



There are obviously a lot more of these examples going beyond what we covered in the lecture, but the basic principle remains the same: simultaneous improvements in all three areas remains elusive. So, why is this important? First, there is a tendency in many organisations to try to do just that, simultaneously improve all three aspects. Typically, you have sales who push for improved service, finance who drive improvements to working capital (“more cash”), and operations who wish to push down operative costs. This is a recipe for failure and neglects the inherent trade-offs in the supply chain. Second, there is a need to establish principles for how to prioritize between these trade-offs.

That raises an important question: how can this be done? Bram suggests that strategy should lie at the core of decision-making to prioritise either service, cost, or cash. He uses a model by Treacy and Wiersema in their book “Discipline of Market Leaders” (1995), where they note that market leaders are very focused on either a) operational excellence (a focus on achieving the best total cost), b) product leadership (having the best product), or c) customer intimacy. The last one is more difficult to conceptually grasp, but it involves companies that typically do not have the cheapest option, nor the “best product”, but instead companies that focus on customer retention while offering a good total solution (as an author’s note, Kesko in the Finnish retail market would fit in this category, while Lidl would be in the operational

excellence category. Product leadership in retail would be speciality stores and perhaps Food Market Herkku).

In other words, strategic choices that are broadly understood and accepted should drive prioritisation between service, cost, and cash in the supply chain triangle. However, these choices need to be operationalised, that is, implemented in practice. Here, Bram suggests that this is a key decision-making criterion in the Sales and Operations Planning (S&OP) process. One tool for conceptualising this in the S&OP process is to monitor and maximise Return on Capital Employed (ROCE). Bram ties this to the supply chain triangle through three constructs. First, he notes that service typically drives revenue. Revenue combined with cost equal earnings that we can combine with capital employed (i.e., “cash”) to form ROCE.

In summary, there are inherent trade-offs in supply chains that need to be understood; prioritisation is needed between service, cash, and cost, and strategy is guiding us in how to prioritize. The S&OP process is a forum for implementing a prioritisation, whereas ROCE can be used to track whether we maximise our “bang for the buck”, that is, ensure the best possible overall result for the company.

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