Strategy in the Supply Chain Triangle

Strategic choices affecting the Supply Chain

Prof. dr.
Bram
Desmet

No man is an island

This white paper is the second in a series explaining the different aspects of the Supply Chain Triangle concept. Each part can be read separately. However, it is best to read **'The essentials'** first. In this white paper we build further on the Supply Chain Triangle concept, showing how different strategies lead to different trade-offs in the Supply Chain Triangle. For the full story, including a host of practical examples, we recommend reading Bram Desmet's book **'Supply Chain Strategy and Financial Metrics. The Supply Chain Triangle of Service, Cost and Cash.'**

MORE INFO

Executive summary

For years now, transformation has been a hot topic. Not so surprisingly, since the market pace is changing lightning fast by a thorough digitalization and globalization. Today, to win the customer's heart, **organizations need to be constantly on the cutting edge.**

Organizations that want to transform are typically re-evaluating their mission and vision, and are questioning the strategic choices of the past and the future: should they deliver more services to the customer? Develop more of their own R&D to grow in specific niche markets? Or play on the cost-side, cutting in non-essential extras?

The **strategic choices made have a direct impact on supply chain strategy** and will lead to different supply chains. Different strategies will also result in different targets for supply chain metrics. **Corporate strategy and supply chain are increasingly intertwined** with each other.

There is no single 'right' strategic approach. However, what is prevalent in most successful transformations is that the supply chain and the overall company goals are aligned.

In this whitepaper we will take you on a journey, discussing the three strategic options according to Treacy and Wiersema's strategic model. Furthermore, we will explain how to use the Supply Chain Triangle of service, cast and cost to challenge the organization and ensure balanced decision-making. And we will formulate an answer on what can be a key question for one's business: **do we have to transform at all**?

Supply Chain plays a pivotal role in our whole transformation process.

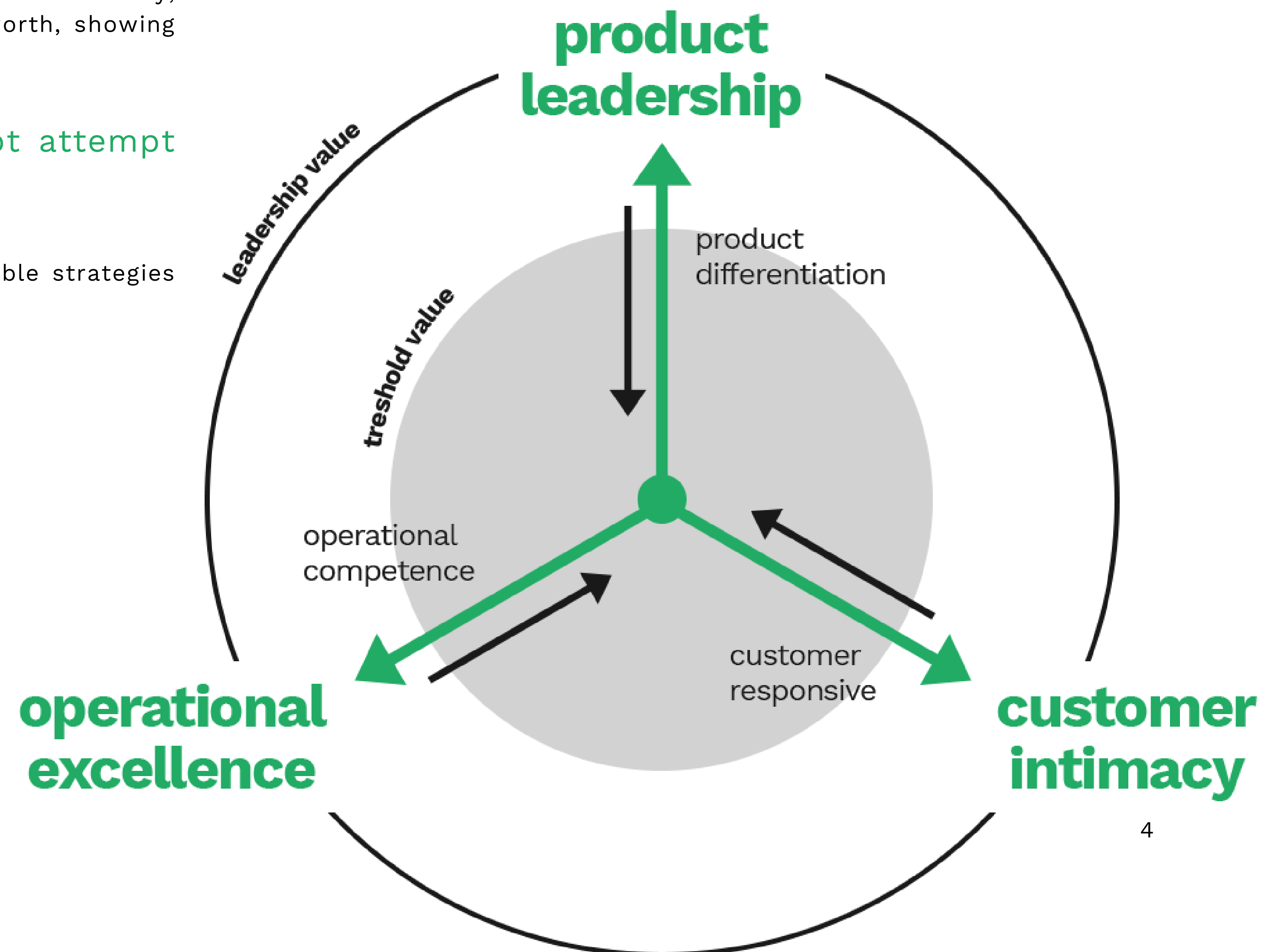
Johan Heyman, Senior Vice President
Global Operations, Barco.

Strategy:
Choose your battle

It was more than 20 years ago that Treacy and Wiersema wrote the classic bestseller 'The Discipline of Market Leaders', a reference book outlining tactics for any business striving to achieve market dominance. Today, their strategic model is still proving its worth, showing that organizations have to make choices.

Successful organizations do not attempt to be everything to everyone.

Treacy and Wiersema point to three possible strategies



Operational excellence

An operational excellence (opex) leader prevails through low-cost and hassle-free, no-nonsense, easy service. Therefore, **'lowering costs' and 'simplicity'** describe the prevailing management philosophy. But don't get it wrong, an opex leader doesn't give bad service. On the contrary, he focuses on delivering excellent service, but it's excellence in the basics.

A commonly used example is the Irish airline Ryanair. They focus on low-cost, but will equally ensure excellence in those service parameters to which customers are very sensitive, such as on-time departure.

Customer intimacy

Customer intimacy leaders succeed by having the **best knowledge of their key customers**, and by providing the best **total solution** for their challenges. They will proactively define the appropriate answers even before the customers have realized that the question was relevant to them. Since offering a total solution is challenging, customer intimacy parties commonly work with partners, offering complementary products or services.

An often-quoted company in this context is IBM. Their biggest success is definitely in providing a full range of IT solutions and being the trusted partner of the CIO.

Product leadership

A product leader stands out by having the newest and highest-specialized products, sold with a significant premium to early adopters and niche markets. Within product leadership organizations, the R&D investments are significant. In fact, with each new product, they are betting their business, as high volumes are required to cover the **heavy R&D and sales costs**.

A tempting example is Apple, though it’s not what we define as a typical product leader. Apple wasn’t necessarily the first on the market, nor did it have the best product in terms of having the highest specifications. Typically, product leaders are **niche players** with smaller volumes, but bigger margins. An example is the German organization Sea & Sun Technology, who develop products and solutions for water measurement.

We are our choices.

J.P. Sartre

Mapping strategy to the supply chain triangle

To develop a more thorough supply chain strategy, we can map the different organizational strategies defined by Treacy & Wiersema on our Supply Chain Triangle.

In short, the Supply Chain Triangle concept comes down to the fact that organizations deliver different types of **service** to their customers, which come at a certain **cost** and require a certain amount of inventory, or more generically, **cash**. We see the balancing of these three sides of the triangle as the essence of supply chain management.

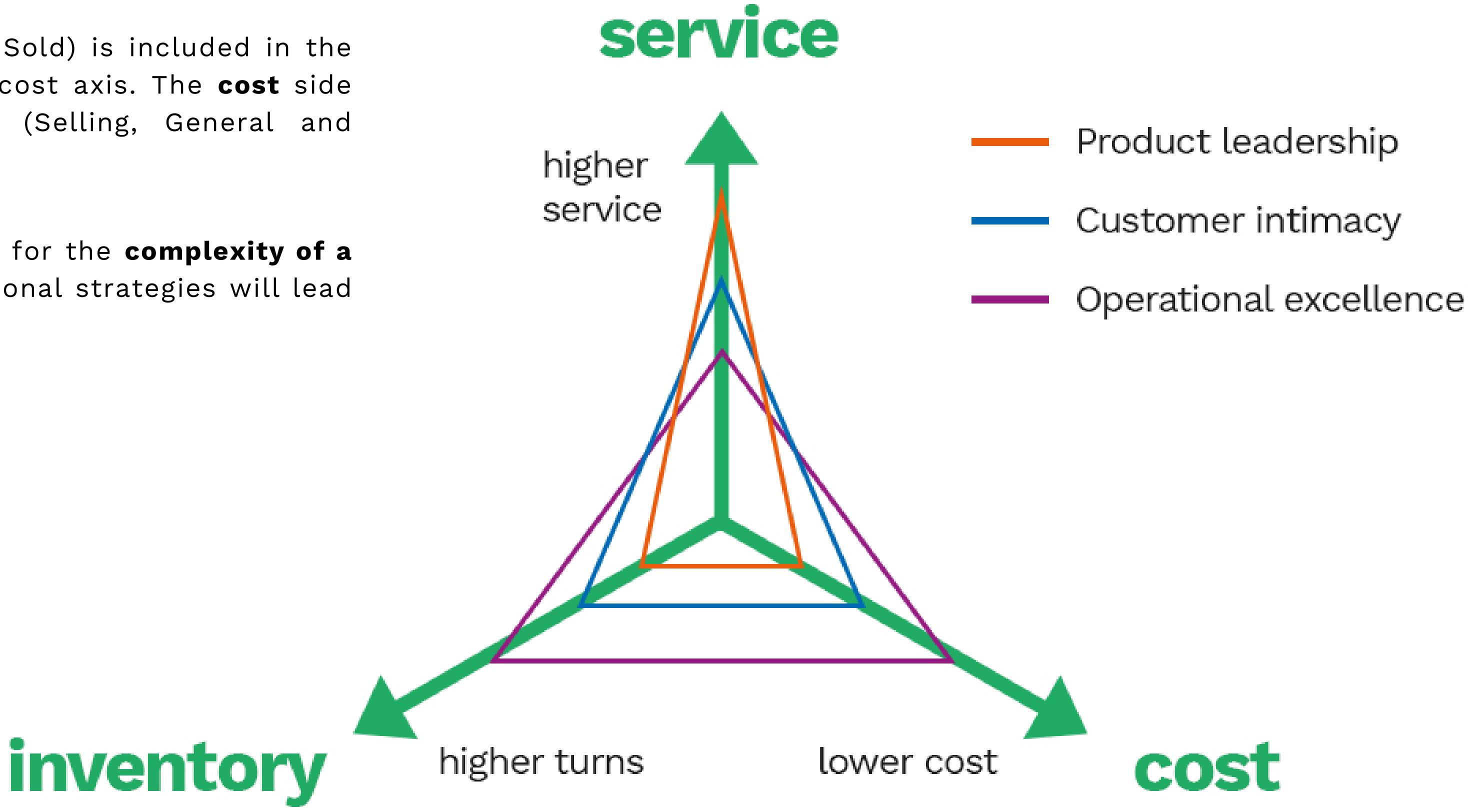
For a more detailed explanation of the concept, we refer to our whitepaper **'The Supply Chain Triangle concept. The essentials'.**

This figure shows the resulting profiles for the opex, customer intimacy and product leader. It makes visually clear that different organizational strategies will lead to different supply chain strategies. We will explain this in more detail below.

Note that we will measure the **service** corner of the triangle by looking at the **gross margin**. The gross margin compares the selling price to the cost of the goods. The higher the premium the customer is willing to pay, the higher the service.

Given that the COGS (Cost Of Goods Sold) is included in the service side, we exclude it from the cost axis. The **cost** side involves costs like **R&D and SG&A** (Selling, General and Administrative).

In its turn, **inventory** is a good metric for the **complexity of a business**, whereby different organizational strategies will lead to different levels of complexity.



Mapping Treacy & Wiersema to the Supply Chain Triangle - resulting profiles

Opex player: lowly mapped

As stated before, opex players excel in the basics. They are low-cost firms, which results in a **low gross margin** per product sold. If we look at the cost side, they will make serious efforts to **cut costs** throughout their supply chain. Only then will they be able to sell at the lowest price in the market. Furthermore, since they strive for simplicity, they will have the **highest inventory turns**. They do their utmost to avoid complex products and slower moving products.

Service captain: medium mapped

Customer intimacy players are in an intermediate position between the opex player and the product leader. While it's quite straightforward to map opex organizations on the supply chain triangle, the position of customer intimacy and product leaders is more debatable. Nevertheless, we map customer intimacy players on the cost axis in the middle, since they **deliver a premium** in comparison with low-cost firms, but can charge less than the real product innovators.

Developing the best total solution requires time and expertise, or in other words, **big sales costs**. However, they don't have to invest heavily in R&D.

The complexity of customer intimacy players lies in the **broader product portfolio**. Most companies have found a way to cope with this, e.g. by segmenting customers and products and having a good forecasting process.

Product leader: highly mapped

Product leadership players rank highest on all the axes. Thanks to the superiority of their products, they have little or no competition and will be able to charge a **significant premium**. This will result in a high gross margin.

Product leaders will typically develop complex products, which require a lot of explanation in the presales phase. Moreover, they have **huge R&D costs**. Therefore, they are also ranked highest on the cost axis.

Their high position on the inventory axis can be explained by being forced to work with **niche suppliers** due to the innovative nature of their products and by mainly attracting **niche customers**. Working with a wide range of suppliers can lead to more product changes, thus leading to obsolete stock, longer lead times and high minimum order quantities. Focusing on niche markets, the volumes sold may be small compared to the mass market players. Besides, the success of new product launches is difficult to predict and can easily lead to write-offs in inventory.

quick-win tip

Did you know that there is **good and bad complexity**?

In most organizations, the product portfolio tends to grow in an almost natural way: Sales colleagues want to win a customer or keep an existing customer happy with excellent service and a broad product portfolio. However, Sales often isn't aware of the cost impact of satisfying customers without limitations. A broad product portfolio creates complexity, and thus extra costs on the inventory and production side.

Ideally, the product portfolio should be evaluated at least once a year

But how can you decide which products to keep? In brief, when the customer premium is higher than the extra production cost (e.g. more changeover time) and inventory cost, the product complexity can be perceived as good. If the premium is smaller than the extra production cost and inventory cost, then adding complexity is a bad thing.

Linking Strategy to financial metrics

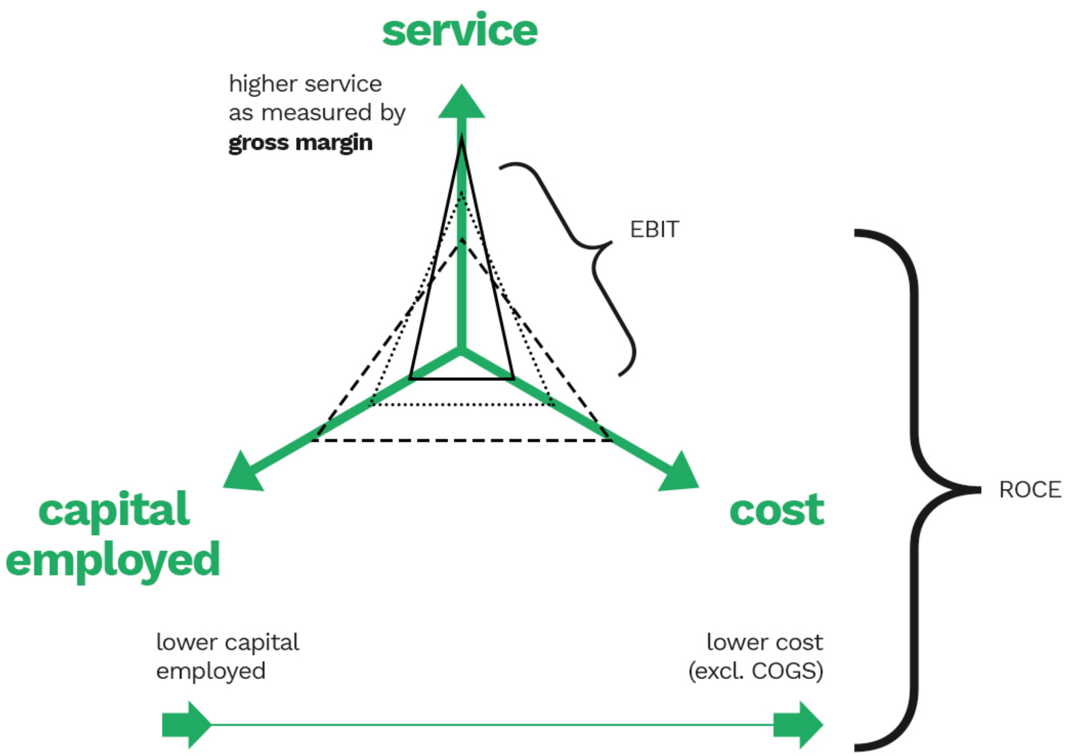
When **setting targets** or comparing across companies, it's vital to account for strategy. Different strategies are different paths to create profit. What organizations get in return for every invested dollar is expressed as the ROCE (Return On Capital Employed).

The above seems obvious, but many companies are blindly benchmarking inventory turns without accounting for the balance with cost and service, and without **accounting for the chosen strategy**.

This figure shows how we can link the three strategies to financial metrics, and more specifically, to the ROCE.

- In a first instance, inventory can be extended to capital employed. This is the financial term for the sum of fixed assets and working capital (inventory plus the accounts receivable, minus the accounts payable).
- We can combine the service and cost sides of the triangle into a profit metric, like EBIT, the Earnings Before Interest and Taxes.
- To also include the capital employed, we calculate the ROCE, which equals the EBIT generated over the capital employed.

It's no problem to accept a lower EBIT for a lower capital employed in more commoditizing markets where you need to play on cost. Or vice versa, to accept a higher capital employed for the more high-end niches, but in return for a higher gross profit and a higher EBIT.



Different strategies lead to different ways of generating ROCE

As the fundamentals of supply chain are being redefined by the digital revolution, it's absolutely necessary for supply chain executives to become much more proficient with the financial metrics of supply chains to assess the benefits and costs of those technologies. Metrics beyond cost, like cash, are going to define the future evolution of digital supply chains and change current practices dramatically.

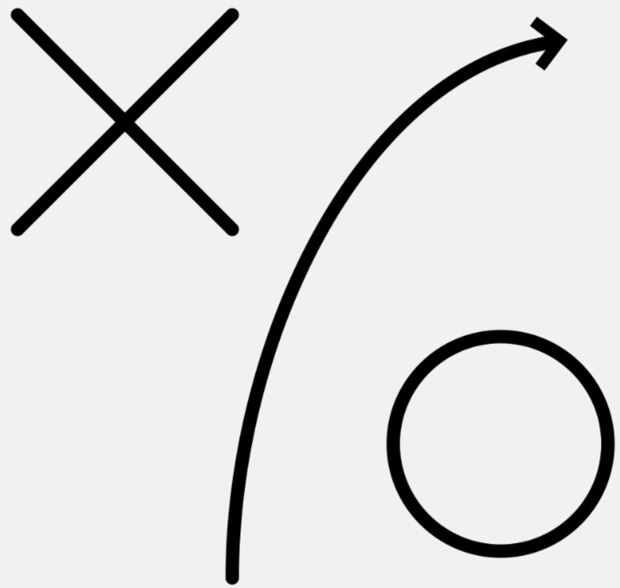
Prof. Dr. Carlos Cordon, LEGO Professor of Strategy and Supply Chain Management, IMD

To change or not to change?

From Treacy & Wiersema we learn that being successful requires explicit choices. You need to take it all the way. Once you've made those choices, they're hard to revert later, as every fibre in your organization has to be realigned to your renewed positioning.

For an opex player, for example, the targets are related to efficiency and zero-defect quality and service, and the key operational processes are all the operations, such as purchasing, manufacturing and logistics. Support processes are focused on automation and efficient information flows. The control is centralized, based on detailed metrics, and very hierarchical. The dominant culture promotes centralization and continuous improvement.

Building such an organization takes years. Once in place, it's nearly impossible to change.



Changing strategy will cost you at least five years, and will not necessarily deliver more value.

If you're an opex player and you're under pressure, there's only **one alternative: try harder**. When you choose to fundamentally change your strategy, then be aware of the fact that you're heading down a road you've never been before. This lack of experience will cause mistakes, and mistakes destroy value.

A closer look: Casio customer story: from opex player to product leader

Casio is a Japanese company, producing watches, calculators, data projectors, cash registering systems, labeling systems and even synthesizers. Their dominant strategy since the 1950s was to **deliver quality at low cost**.

During the financial economic crisis, the company decided to take a different course, which was even referred to as 'The Rebirth of Casio' in their annual report of 2008. It wanted to focus more on **cutting edge innovations** which nobody else could match, more properly formulated in the annual report as 'creating new strategic businesses.'

A shift from operational excellence to product leadership should provide a big shift in gross margin. As gross margin increases, this creates more room for spending on R&D and SG&A. The Japanese manufacturer always had smart R&D, but may have underinvested and been weak in Marketing and Sales. On the inventory side, we may expect a decrease of inventory turns, as the overall complexity will increase.

The numbers speak for themselves: Indeed, the average **gross profit increased** from 29% to 42%, the **R&D spending remains** constant, and the **SG&A spending increases** dramatically from 19% to 30%, while the **inventory turns decrease** from an average of 3.5 to 1.3.
The numbers for the figure are derived from the publicly available annual reports of Casio.

	2004-08	2009-12	2013-16
Gross profit %	28.66%	29.10%	41.87%
R&D spending %	2.82%	2.60%	2.38%
SG&A spending %	19.15%	26.39%	30.32%
Inventory turns	3.48	2.27	1.31

	2004-08	2009-12	2013-16
EBIT, in mio Yen	39.094	(1.047)	30.039
EBIT %	6.69%	0.11%	9.18%
Capital employed, in mio Yen	299.587	277.782	270.894
ROCE %	13.13%	-0.40%	10.97%

When we switch from opex player to product leader, we expect that the EBIT% will significantly increase, but as the complexity increases we need to employ more capital. In this case, the EBIT% increases with 2.5%, but the ROCE decreases 2.1%.

At first sight, the spending on SG&A seems heavy, negatively impacting the ROCE. At the same time, looking at the inventory turns, the runs seem below par, even for a product leader. This may be a signal that they have let go of complexity too much, putting a stretch on the capital employed.

Reestablishing the balance in the Supply Chain Triangle after a renewed positioning isn't an easy thing to do, and requires continuous effort.

For more compelling examples, we refer to Bram Desmet's book **'Supply Chain Strategy and Financial Metrics. The Supply Chain Triangle of Service, Cost and Cash.'**

Key takeaways on strategy in the Supply Chain Triangle

- ✓ According to Treacy and Wiersema's strategic model, there are three possible strategies to choose from: operational excellence, customer intimacy and product leadership.

- ✓ The strategic choices made have a direct impact on the supply chain strategy, and will lead to different supply chains.

- ✓ When setting targets or comparing across companies via financial benchmarking, it's vital to account for strategy.

- ✓ Making the choice on where to go with EBIT versus capital employed strongly depends on your strategy.

- ✓ Changing organizational strategy is tempting and popular. However, it often does not lead to extra value, or at least it requires great effort to renew the organization in a successful way.

Sources:
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Prof. dr.
Bram
Desmet

www.bramdesmet.com