

OUR VISION AT SOLVENTURE

Streamlining the Food Industry's Supply Chain Triangle: A Roadmap to S&OP Excellence



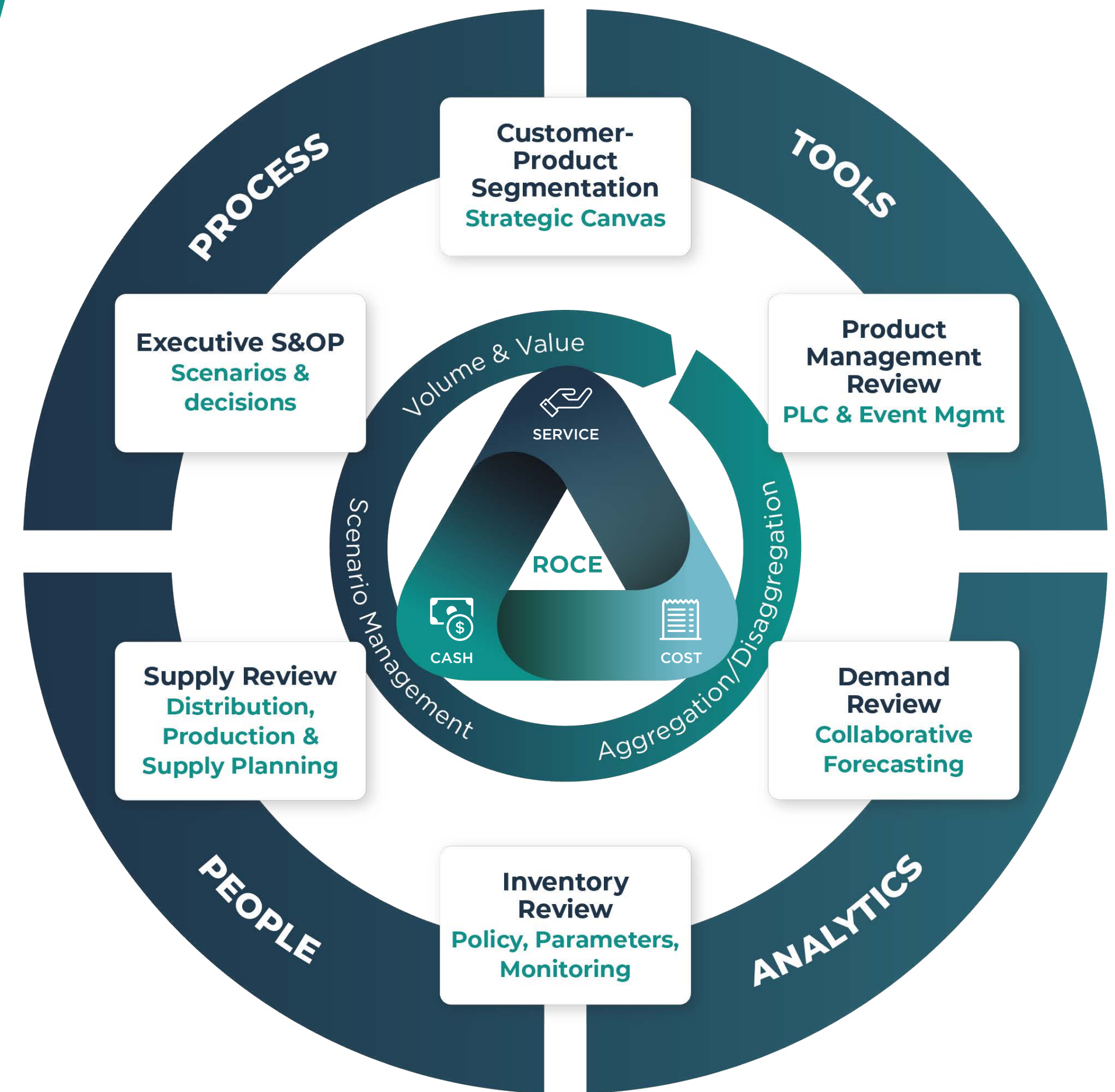
TABLE OF CONTENTS

The Supply Chain Triangle of Service, Cost and Cash	03	>
Balancing Service, Cost and Cash in the Supply Chain Triangle	04	>
A Traditional Organization Creates Tension in the Triangle	06	>
When Growth Stalls ... a Dangerous Catch-22	08	>
Case Hero	10	>
Creating Aligned Targets. Strategic Trade-offs	12	>
Case Perfetti van Melle	15	>
Inventory Turns as a shared KPI	17	>
Balancing the triangle is about optimizing the Return On Capital Employed	20	>
Case Wonderful Brands	24	>

THE SUPPLY CHAIN TRIANGLE OF SERVICE, COST AND CASH

At Solventure we take pride in being experts in designing and implementing Sales and Operations Planning. Companies that have a good S&OP process can't imagine how to live without it. It is the key instrument for the CEO to navigate the business along the budget towards its strategic targets. For a summary of our vision on S&OP, we refer to our position paper "[Sales & Operations Planning. Our vision at Solventure.](#)"

In this position paper we dig into the heart of S&OP to discuss what we believe is its true purpose: helping companies to balance service, cost and cash in the supply chain triangle.



BALANCING SERVICE, COST AND CASH IN THE SUPPLY CHAIN TRIANGLE

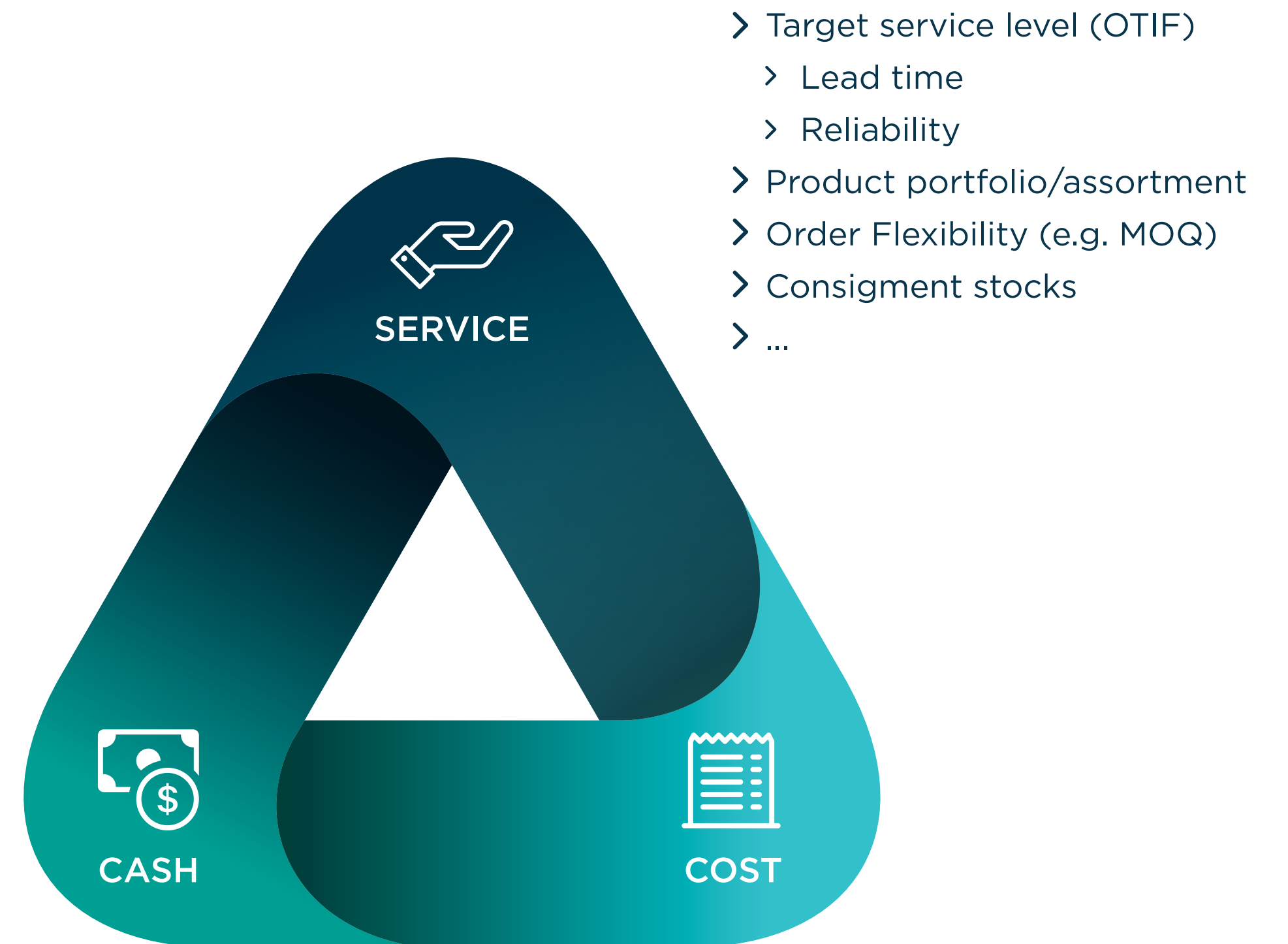
“Over the last 5 years I have seen many companies launching inventory reduction programs. A common reason is to generate cash. Cash that can be used for new investments, to pay back loans or to pay cash dividends to shareholders.

When launching an inventory reduction program, companies should be aware that inventory, as a part of Cash, should always be balanced with Cost and Service.

The balancing of these three might be the essence of supply chain management. That’s why I’ve called the corresponding triangle the Supply Chain Triangle. “ - Prof. dr. Bram Desmet and CEO of Solventure.

Figure 1 is illustrating that Supply Chain Triangle. We will review each of the corners in somewhat more detail.

Figure 1 - Balancing Cash, Cost and Service.
The Supply Chain Triangle.



- > Target service level (OTIF)
 - > Lead time
 - > Reliability
- > Product portfolio/assortment
- > Order Flexibility (e.g. MOQ)
- > Consignment stocks
- > ...

- > E.g. Inventory
- > In general 'Working Capital'

- > Warehousing
- > Logistics
- > Manufacturing
- > Purchasing
- > ...



SERVICE

Typical supply chain aspects of service are the customer lead time, the service level, the product portfolio, the order flexibility, the payment terms, ...

Shorter lead times, a broader product portfolio and the use of consignment stocks can be extras from a service perspective. They can increase the inventory and as such require more cash.

We can also reduce lead times by providing excess capacity or by using faster transportation modes. This is increasing service by increasing cost.



COST

On the Cost side, we primarily think of operational costs like purchasing cost, manufacturing cost, logistics cost. Sourcing in Asia, the leveling of production and rounding to full trucks are measures that lower the cost but they increase inventory. When making decisions, e.g. low-cost sourcing from Asia, we need to look at operational costs, but also at the inventory costs.

The cost of inventory is based on 3 components: the rent, the room and the risk. The yearly carrying cost can range between 25-55% of the inventory value so it's significant. If by sourcing from Asia we double our safety stock, we also double the yearly carrying cost. We should account for these costs when making the business case.



CASH

Inventory is an important element of working capital. A reduction in working capital is freeing up cash. We see working capital reduction programs coming back every 3-5 years in companies.

The post-COVID recovery has led to global inventory shortages. Whether you deliberately lower the inventory or whether it is caused by external factors, it often is at the expense of Cost, e.g. by stopping production or cancelling orders from suppliers. Often also with an impact on Service, by not having the right product at the right time.

A TRADITIONAL ORGANIZATION CREATES TENSION IN THE TRIANGLE

Figure 2 shows a typical executive committee with a CEO, a CFO, a VP of Sales & Marketing, a VP of Supply Chain responsible for planning, customer service, logistics and inventory, next to a VP of manufacturing and a VP of purchasing.

We also show their typical KPI's. These are the metrics they wake up with. These metrics are linked to their individual bonus schemes.

Figure 2 - A traditional organization with corresponding KPI's

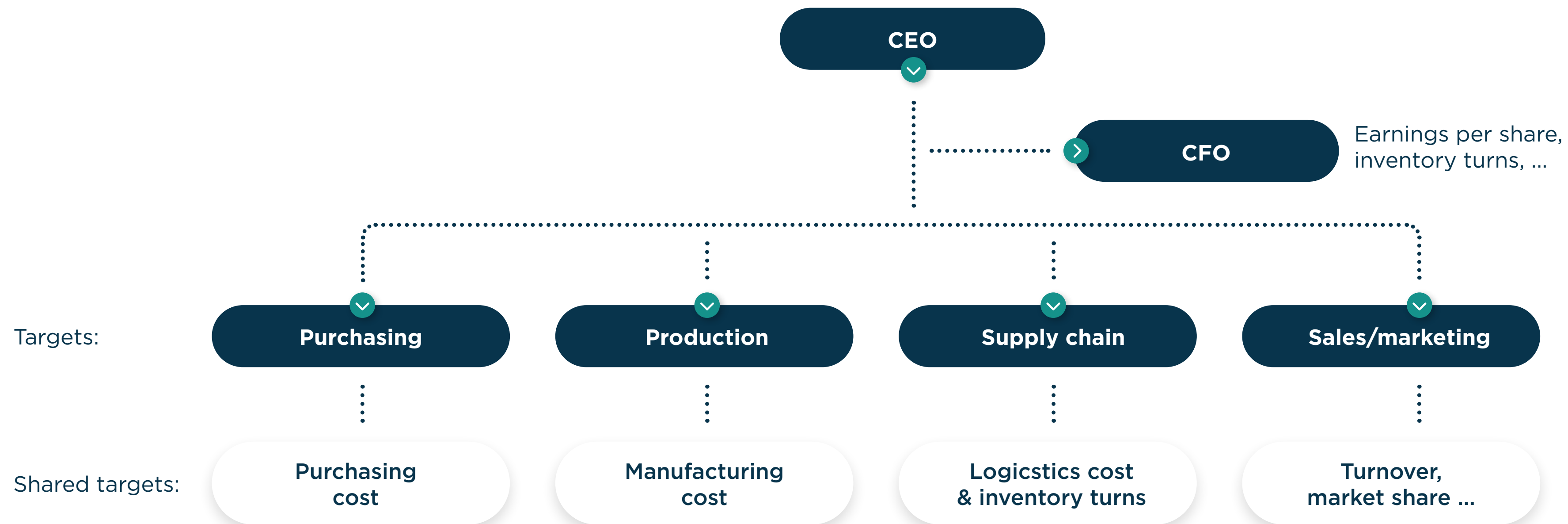


Figure 3 shows the resulting pressure in the Supply Chain Triangle from this traditional organization. As a VP of Sales & Marketing, my main interest is in metrics like turnover and market share. As a result, my primary interest will be in the service side of the triangle.

For the operational VP's, the main focus will be on the cost side of the triangle. The CFO may be the only one who is really concerned about the inventory, because of cash, or because of the non-operational costs like write-offs or financing¹.

In many traditional companies sales and operations are historically strong in the company. The VP Supply Chain may be the new kid on the block.

To prove himself and his role, he gladly accepted the challenge of improving the inventory situation, let's say reduce the inventories with 30%.

The VP of supply chain is playing the triangle in Figure 3. If he cannot change the dynamics in that triangle. He is unlikely to succeed.

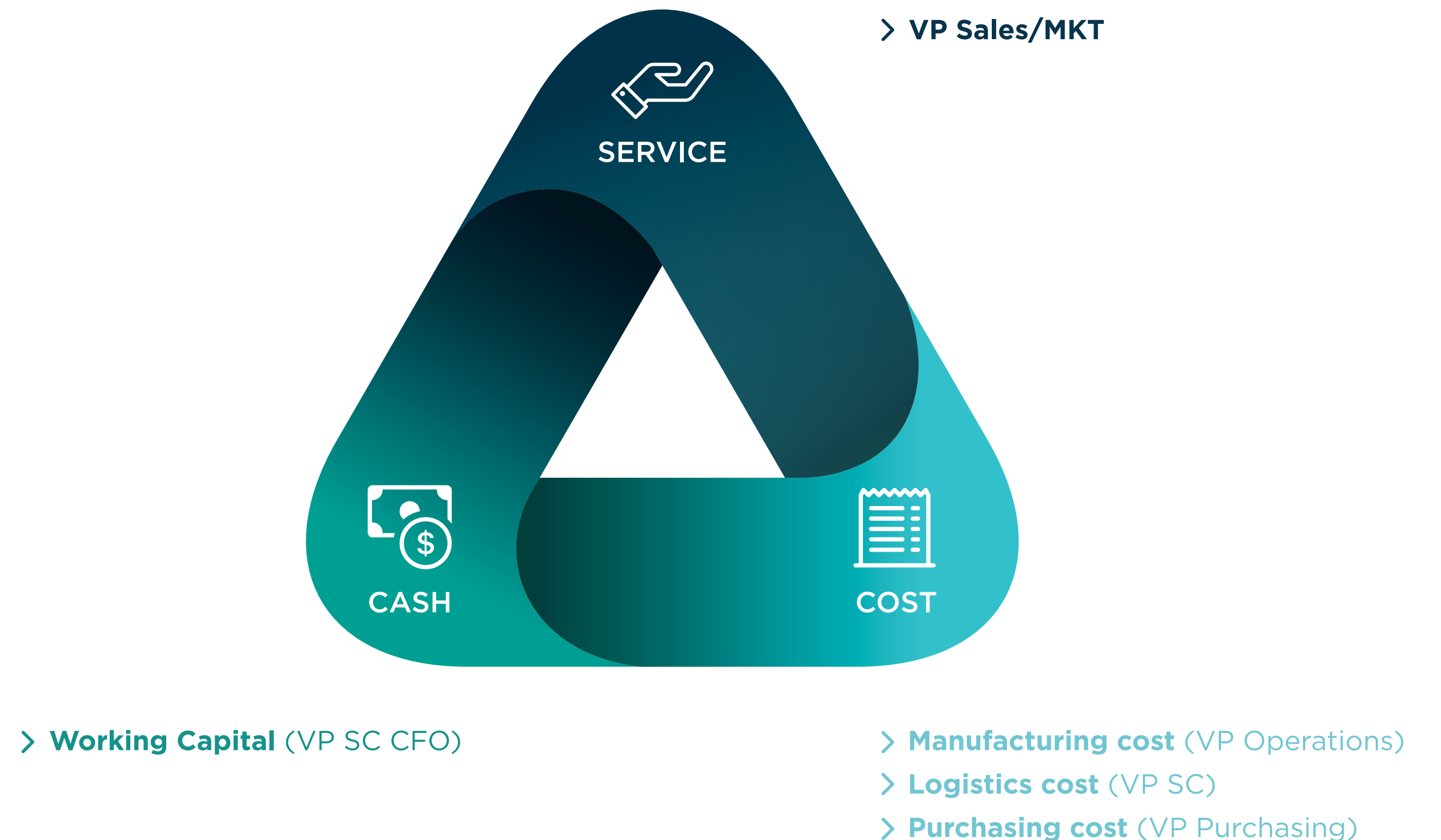


Figure 3 - Resulting pressures in the Supply Chain Triangle from a traditional organization

¹ As an example of the financing: the rent on a loan may depend on how good you put your money at use, e.g. measured by the cash conversion cycle.

WHEN GROWTH STALLS ... A DANGEROUS CATCH-22

When the company is growing year-on-year, has healthy profits, the lack of alignment in Figure 3 is likely to continue. There is little incentive for any stakeholder to change the rules of the game. It would only get more complex ... and since we're doing well, there is no driver for change.

The trouble begins when growth is stalling and margins are eroding. In a typical response the sales will increase the pressure on the service side. We desperately try to get in any order. We are willing to make any promise that helps, including shorter lead times, expedited shipments, changes in the payment terms, some safety stock at the customers site, ...

To sustain margins, operations will start a relentless focus on cost. To lower production costs we prefer big runs and limited changeovers. To lower the purchasing cost, we take more commitment to the suppliers, buying in bigger lots and increasing the inventory risk.



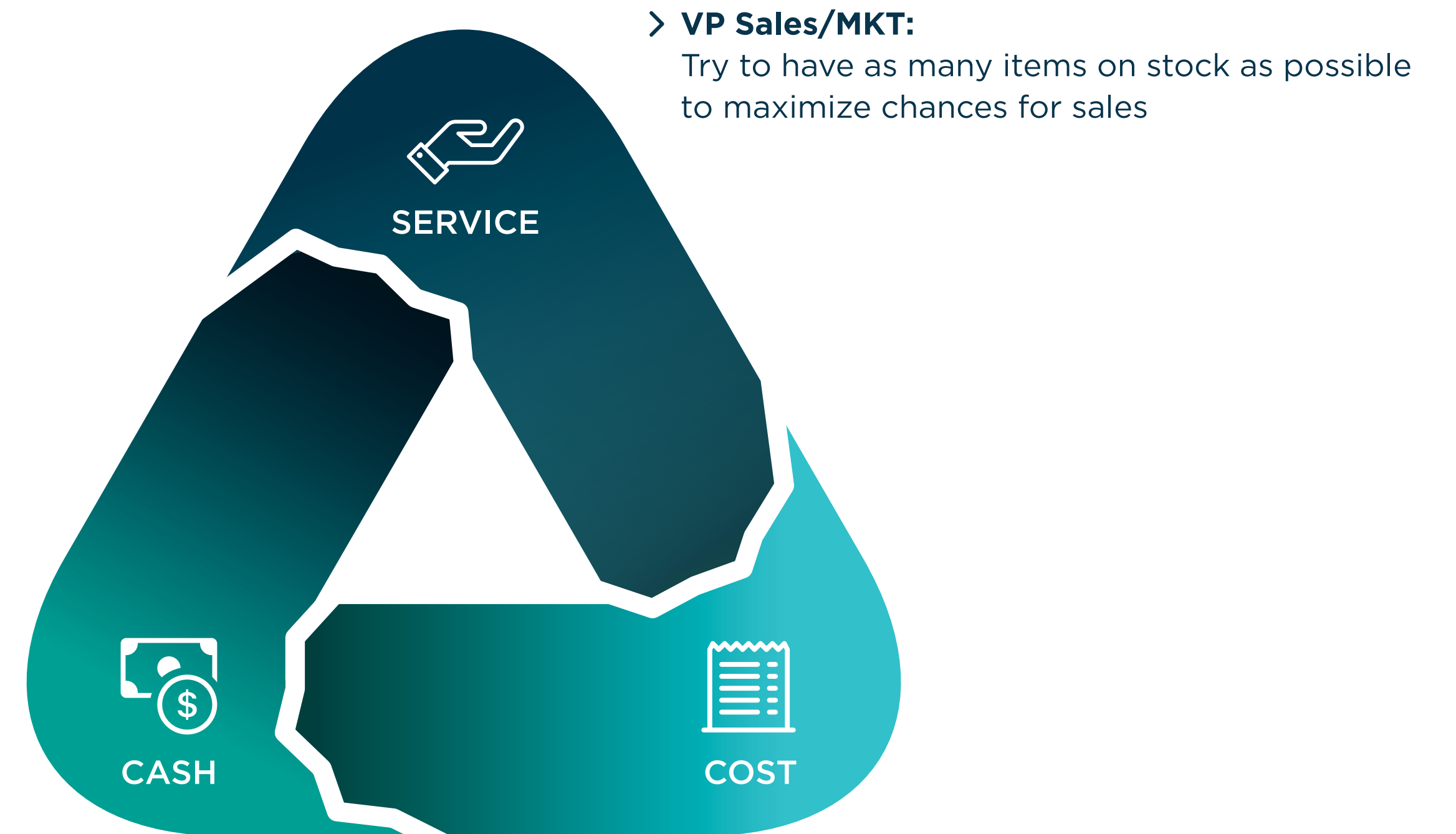
A business in trouble needs cash to turn around the situation. The cash may need to go into the development of new products, exploration of new markets, a rebranding, a take-over, ...

To generate the cash, we assign the unlucky VP of Supply Chain with the challenge of aggressively reducing inventories, the 30%. He has his back against the wall. Simplifying the product portfolio will go against sales. Stopping production to control inventories will go against manufacturing. Supplier contracts have just been renegotiated, with a focus on cost instead of cash.

The result is shown in Figure 4. For a business in trouble, the pressure in the triangle further increases. A typical reflex is for each function to pull harder on their side of the triangle. The result is we'll remain stuck in the middle. We'll not manage to free up cash, we'll have a hard time to sustain service and top-line. We'll continue to struggle with profitability. We risk being divested or taken over, unless an act of God is changing the market.

In difficult times we badly need alignment in the triangle. It's the only way out. However, as we've seen there's limited incentive to create alignment when times are good. It's a dangerous catch 22.

Figure 4 - What happens to the tension in the triangle if the pressure increases?



> **VP Sales/MKT:**
Try to have as many items on stock as possible to maximize chances for sales

> **Working Capital** (VP SC CFO):
Try to squeeze inventory by:

- > pruning the product portfolio
- > stopping production in case demand less than supply
- > reduce MOQ batches
- > force suppliers into consignment & VMI

> **Manufacturing cost** (VP Operations):
maximize efficiency, smooth production & maximize production runs

> **Logistics cost** (VP SC)

> **Purchasing cost** (VP Purchasing):
buy larger quantities to get a lower price, take firmer commitments to ensure a lower price

CASE

SOLVENTURE AND HERO POWER UP TO HARMONIZE THE SUPPLY CHAIN

Hero Group is an international food company focused on making high quality, natural products that are easily available to consumers. Together with Solventure, the food company wants to improve, digitalize and align their supply chain data, systems and working processes to create one integrated, global ERP system. In this context, we asked Mark Kaelen, Supply Chain Director & Viona Vogelzangs, Director HR Supply Chain, Quality & CMO, how this Process Harmonization Initiative (PHI) is going.

Why did Hero Group choose to create the project PHI?

Mark: “It all started when Rob Versloot, our current CEO, envisioned the **transformation of Hero Group to a more focused, digital, and sustainable company**. That’s why we have strengthened our focus on strategic core business and drive our portfolio in that direction. Project PHI, a key building block in this transformation, will roll-out our **new supply chain planning processes and systems to drive efficiency and create our future ERP backbone**, which will, in turn, harmonize our company’s core processes.”

What has Hero Group accomplished up until now with project PHI?

Viona: “Up until now, we have focused on **creating awareness** within our organization for project PHI and all the benefits it has to offer to the daily activities of everyone working at Hero Group. To accomplish this, the supply chain team **closely involved the business colleagues and HR** to set up a **governance structure** from top to bottom in the company. All in all, we brought together 80 people from the executive board to key-users, who were in charge to create buy-in for the project, decide on its transformation plans and measure the impact of the entire endeavor.”



How has Solventure assisted Hero Group in this supply chain journey?

Mark: “Solventure has greatly helped us with the **governance and communication** around project PHI. Especially **Solventure** it’s [6 online training modules](#) supported us in aligning our overall supply chain processes by offering the same basic knowledge on supply chain planning to our entire planning community.”

Viona: “On top of the training aspect, the consultants from Solventure also helped us [build a business case](#) for project PHI. This business case was crucial **to prove the business value** of the supply chain transformation we were preparing, and even though the business case for the new global ERP system was small, it was still strategically very important for the future of Hero Group.”



Solventure it’s 6 online training modules supported us in aligning our overall supply chain processes by offering the same basic knowledge on supply chain planning to our entire planning community.



What are the next steps in your supply chain journey?

Mark: “We’ve now learned that there’s truth behind the cliché of ‘**change has to be carried by the entire organization**’. In order to roll-out a successful transformational project like PHI, you really need to involve your entire organization, get everyone aligned on the same messaging, and give everyone a specific role in the whole process. And that’s exactly where Hero Group’s ‘**Power of One**’ shines through: as an organization and a group of people, we’re all focused on supporting one story and integrating our combined strengths to reach one clear goal.”

Viona: “After this intense internal alignment on the project, the next step in our PHI journey is to **communicate our new approach to our customers**. In this, we want to be as transparent as we can about the technical changes, and **roll out our supply chain transformation externally** in a gradual manner over the coming years.”



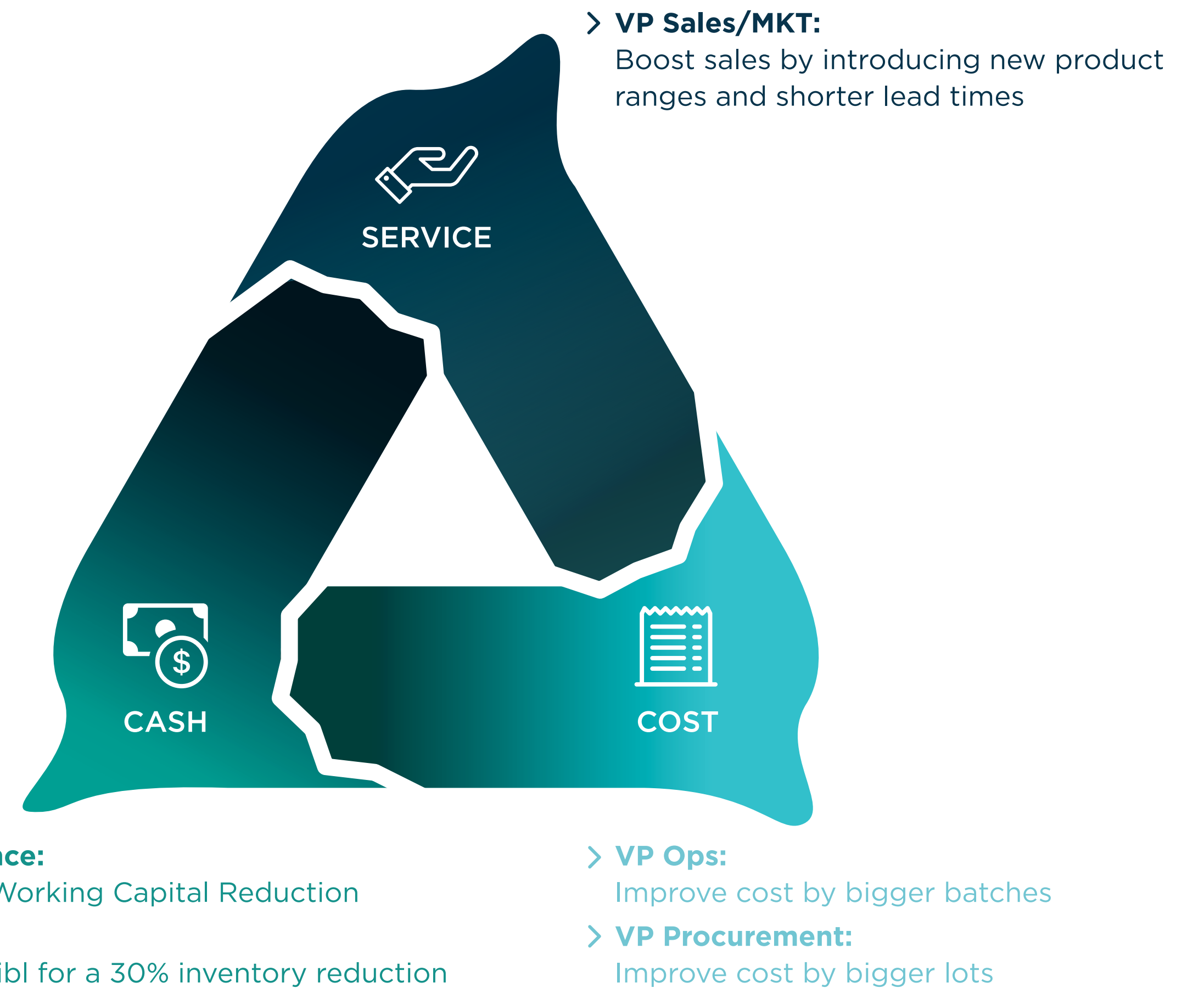
CREATING ALIGNED TARGETS. STRATEGIC TRADE-OFFS.

I often see companies defining targets on each of the corners without cross checking their compatibility. Figure 5 gives a typical example. Each of the VP's is drafting up 'his' plan to turn around 'his part' of the company. The result can be conflicting.

Pushing these targets and plans into the organization will simply create chaos. The one who pushes the hardest will get the best result. But the overall result is unlikely to satisfy the overall business need.

Figure 5 - Setting unaligned targets to turnaround the company

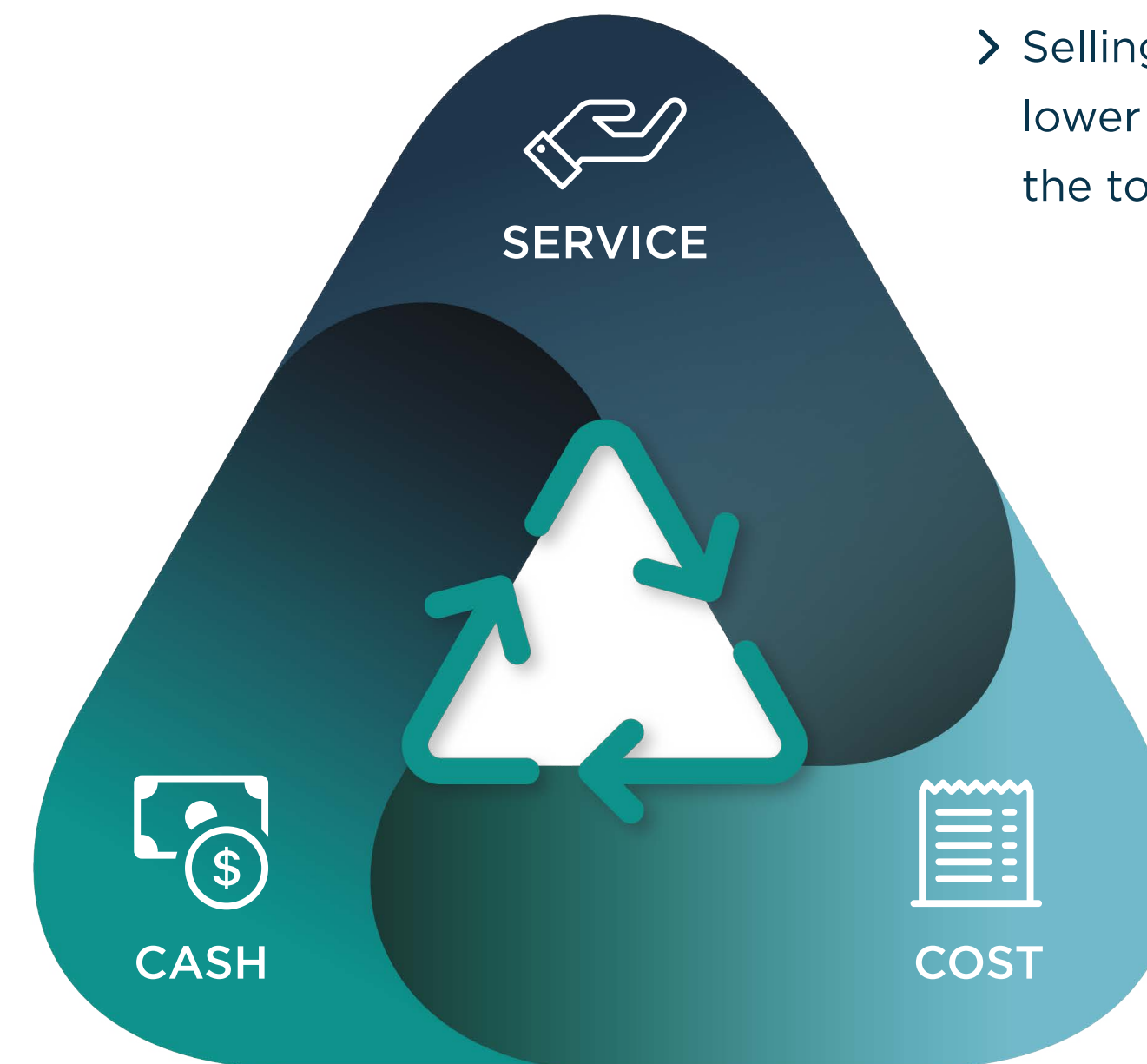
Ask each VP to come up with his plan



An example of balanced targets is shown in Figure 6. After some discussion, the company has found a way to satisfy improvement on all of the angles. A breakthrough product will sustain both top-line and bottom-line and allows getting rid of older, less performing products. This is a silver bullet.

Figure 6 - Setting aligned targets to turnaround the company

E.G. sustain top-line by replacing an old range of products with a new product that has a higher spec and a lower cost



› Selling a higher spec product at a lower cost will definitely support the top-line

› The new product will allow phasing out families of older products and lower inventory

› The lower cost will also support to bottom-line

E.G. looking for balance in the absence of a silver bullet

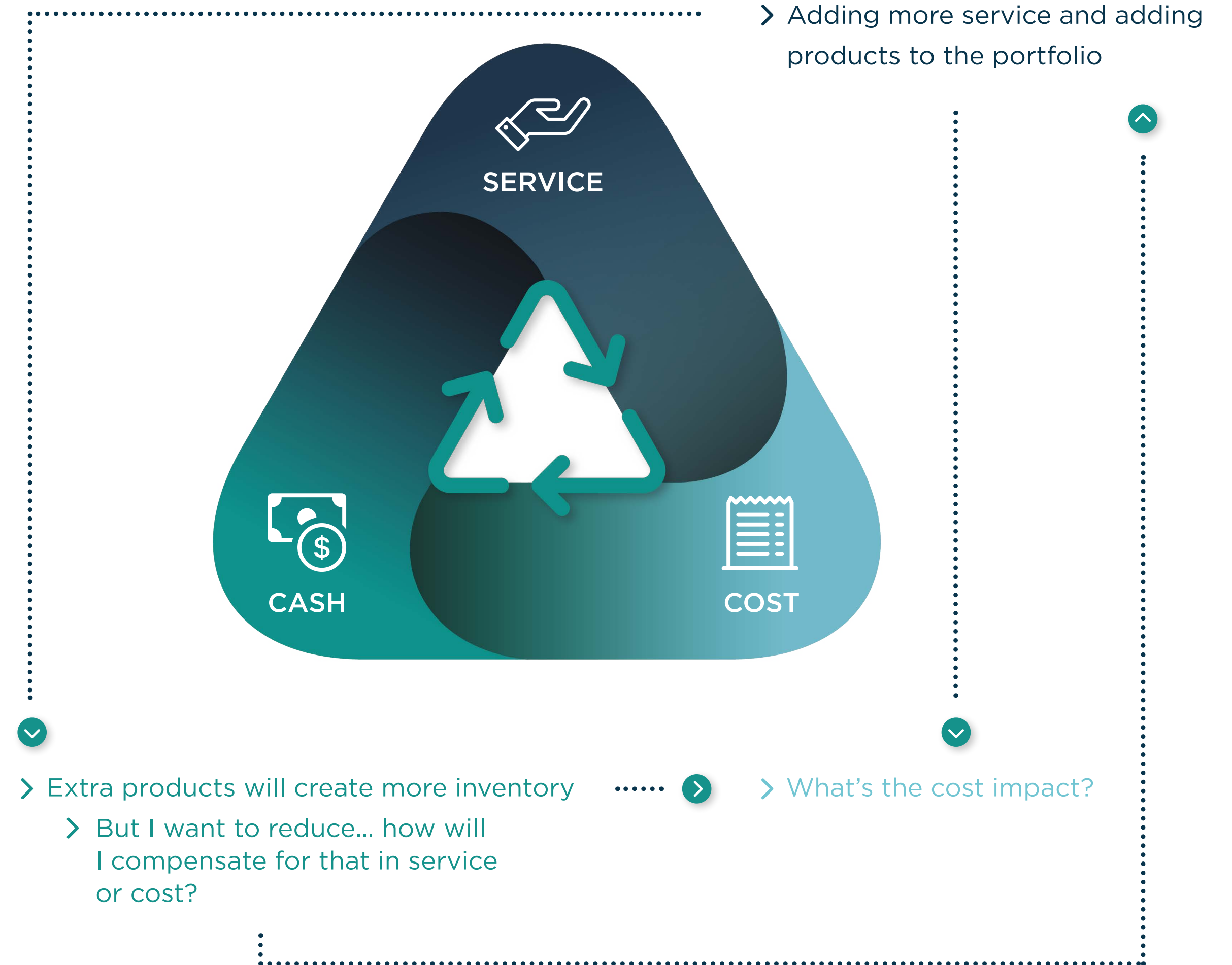
You may not have that silver bullet. In that case you'll need iterations to come to a feasible plan. If sales want to add more service and products to sustain the topline, assess the cost impact.

Review together with sales, how you will still get to the lower inventories. It may require a double reduction on some of the existing products. That iterative approach is shown in Figure 7.

The main conclusion here is: never accept an inventory reduction target in isolation. If the question is no more than "reduce the inventory with 30%", say NO. Start the discussion, and look for the balance with other targets.

Only when you feel that the targets on each of the angles are aligned and add up to a realistic plan, then you commit to the inventory part!

Figure 7 - Looking for a target alignment in the absence of a breakthrough



CASE

PERFETTI VAN MELLE CENTRALIZES GLOBAL SUPPLY CHAIN PROCESS

With widely known chewing gum and candy brands such as Chupa Chups, Mentos and Fruittella Perfetti Van Melle focuses on product leadership while making the transition from a country based demand planning to a centralized EU supply chain approach. The company based in Italy and the Netherlands is now working together with Solventure to make this switch in perspective and optimize their entire supply chain. We talked with Willemien Broeders, Global director Logistics at Perfetti Van Melle to see how this partnership is going.

Why did Perfetti Van Melle choose Solventure for this Supply & Operations Planning (S&OP) journey?

Solventure knows what kind of company you are and how to make the most out of your unique strengths and market position. Even if you have diverging supply chain systems in different countries, they have the experience to tune this complex and international S&OP to the same frequency.

How do you use the Supply Chain Triangle to optimize your supply chain process?

Apart from our focus on product leadership, we heavily invest in the service side of the supply chain triangle. So, we created shared objectives for the sales and supply chain team based on the service levels, stock levels and forecast accuracy. To keep track of these objective, we built a clear traffic light follow up system (the objective is a green light, but red means going back to the drawing table). This way of working was a real eye opener and it made us evolve from a pure arm wrestling contest to proper teamwork in order to score a green traffic light.



Which challenges have you solved while working together with Solventure?

Since 2007 we have grown a lot as a company, not only in size, but also in regional variety. As more and more countries - and work cultures - joined Perfetti Van Melle business unit Europe, our organization and demand management grew to new, and complex, dimensions. The Arkieva S&OP software implemented by Solventure helped us to segment our supply chain and focus on the most important products in our portfolio. The supply chain learnings from one country can also be easily translated to another to create a seamless S&OP regionally.

Which benefits have you attained with the improved supply chain process??

Thanks to the clear view we now have on our forecasts, we were able to reduce the stocks of our top sellers (such as Frisk and Mentos) from a 3 week to a 2 week safety stock, without any danger of running out of stock. This improved forecasting also makes the discussions with our customers go a lot smoother. Furthermore, it is now a lot easier to achieve an SLA (Service Level Agreement) score of 98.5% for all of our articles, even during the pandemic.



What are the next steps in your supply chain journey?

We want to drive our supply chain and long-term demand planning from one central unit, instead of having different teams in each country. We're now in the middle of this transition, which is being led by the Netherlands, as they have the most mature supply chain business unit. Meanwhile, Solventure is supporting us to create a European-wide demand forecast for all of our factories, as they have the experience and best practices to make this into a success.

36

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99

INVENTORY TURNS AS A SHARED KPI

When looking at 'inventory ownership' we have seen different solutions. Within companies it can even be a pendulum. Maybe supply chain was responsible until there were service issues. Then sales became responsible but the inventory ran out of control with too many write-offs.

The CFO then defined a target and we had split responsibilities for Raw Materials, WIP and Finished Goods. The targets were based on benchmarking and turned out unrealistic.

While any of the above functions can be in charge of managing or reducing inventory, none of the functions can do it alone. We firmly believe that inventory turns should be a common KPI shared by all the members of the executive team.

That will make it part of the target setting and improve alignment. Share inventory as a KPI (inventory turns, % write-off, ...) but assign a single process owner for 'inventory improvement', cfr. Figure 8.



INVENTORY TURNS AS A SHARED KPI

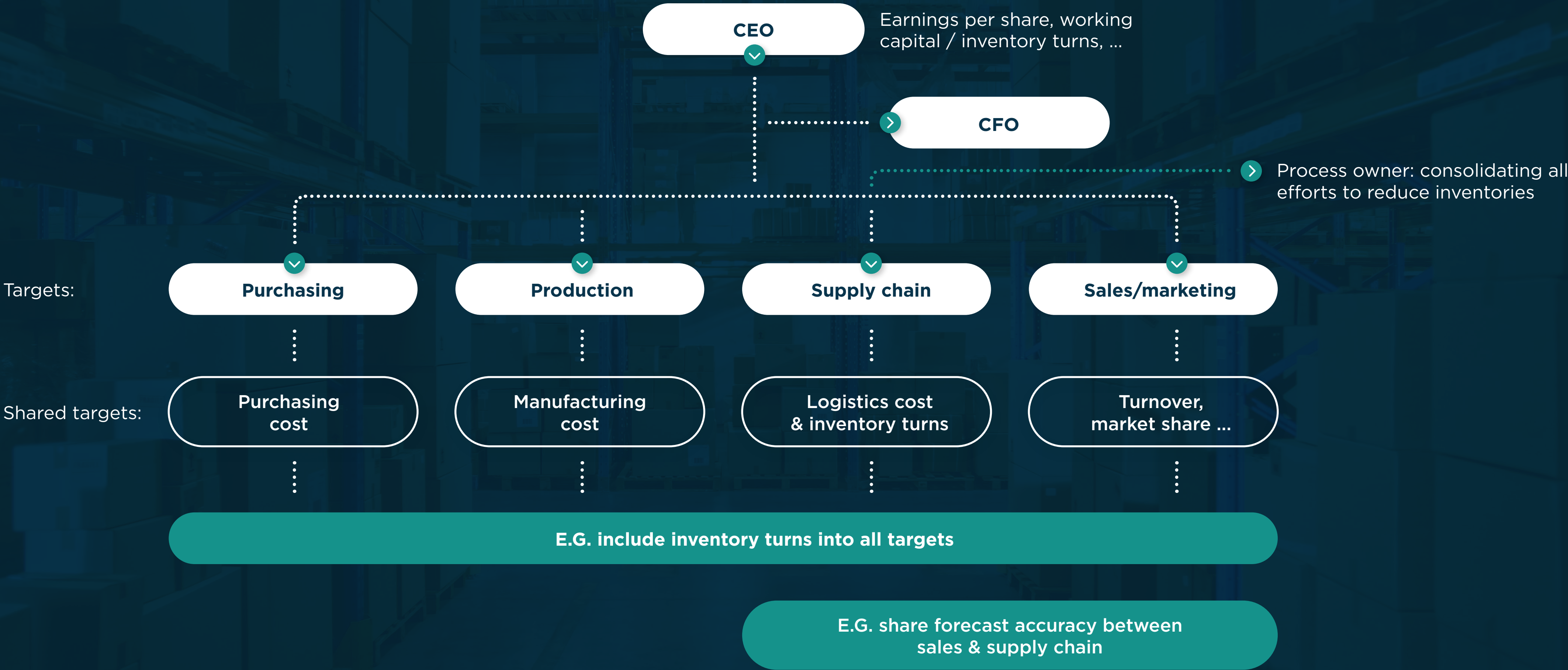


Figure 8 - Inventory Turns as a shared target, with 1 function as the process owner

As long as inventory is a shared KPI, any function can take the role of the process owner. Of all functions we believe that the Supply Chain function is best placed to do so.

Through collaborative processes such as S&OP it has a privileged end-to-end view. It makes an easy spokesperson across functions. Supply Chain is often responsible for Planning. The planning process is key in avoiding the wrong inventories. Setting inventory targets requires analytical skills.

In general, these analytical skills are more readily available in the Supply Chain function.

To conclude for the VP Supply Chain: Dare to say NO, if inventory is not a shared KPI, tied into the objectives of the executive team. Don't go there alone!



Claim the process ownership for the inventory improvement. Don't allow parallel tracks. The challenge is big enough to pool all the resources and create a single initiative.

BALANCING THE TRIANGLE IS ABOUT OPTIMIZING THE RETURN ON CAPITAL EMPLOYED

Though people from different backgrounds - supply chain, finance, sales, marketing - recognize the tension in the triangle, the dominant thinking is that the tension is “unavoidable” and “this is how companies work”.

I do get questions like “won’t there always be conflicting objectives between sales, operations and finance?” and “isn’t the conflict a source of creative energy?”, “isn’t that exactly what keeps companies going”? Though rightful questions, I believe the answer is no, and the answer lies in taking an investors perspective. Figure 9 shows that service is a driver for revenue. As we mentioned before, marketing and sales are primarily service driven as they are, in many companies, primarily top-line driven.

Most companies have growth objectives. In the absence of breakthrough innovations, it will be tempting to stimulate growth by increasing the services offered to the market.

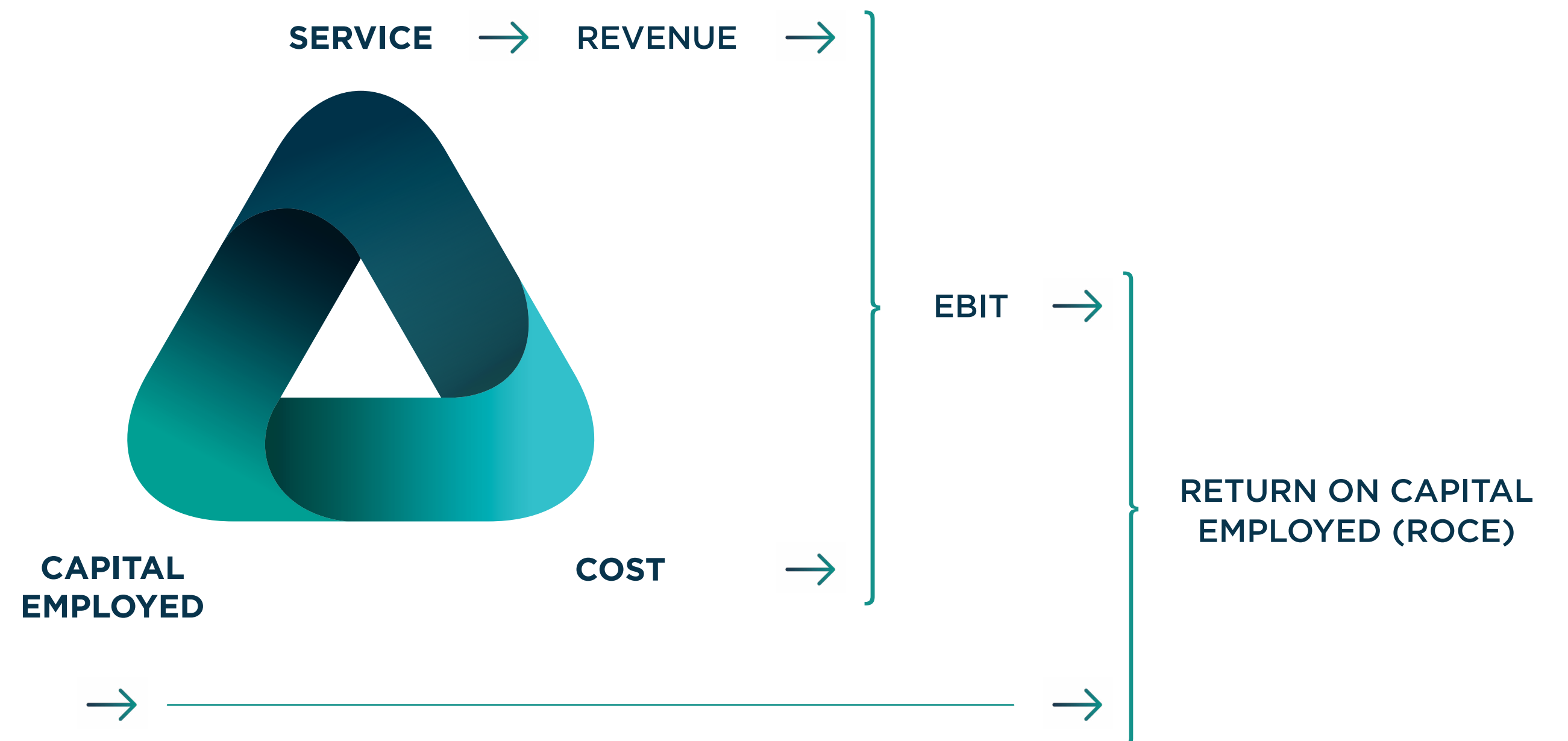


Figure 9 - Aligning the triangle is about optimizing the Return On Capital Employed (ROCE)

Though growth is good, it most often is not a goal in itself. As an investor, I would like to see a profit, at least in the long-term. Figure 9 shows as well how we can combine the service and the cost side of the triangle into a profit metric like the EBIT, the Earnings Before Interest and Taxes.

But as an investor, I am concerned with more than EBIT. If I have 2 companies generating 100Mi of EBIT, but the first requires 2Bi of capital and the second only 1Bi, then I'd rather do the second investment twice. As an investor I am most concerned with the EBIT you generate over the capital employed, which is the exact the definition of the Return On Capital Employed or the ROCE. It's OK if your EBIT is a bit lower as long as you need less capital. Or vice versa, it's OK if you need more capital as long as your EBIT is higher.

As an investor I will judge you by the **“bang-for-the-buck”**, the EBIT you generated, over the capital employed. That is again illustrated in Figure 9.



Bang for the/your buck:
More value for one's money,
a greater return on an investment.

Let's revisit some of the examples from Figure 5 with the ROCE principle in mind. Expanding the product portfolio will increase the inventory, it may also require extra investments to be able to produce the extra new products. So what to do? Is it worthwhile to pursue? The dominant thinking in companies today is 1. Growth, 2. Profit and 3. Capital Employed.

Some companies are so focused on growth, that any initiative supporting growth will automatically get approved. In general, companies have become more concerned with profit. Many companies will assess the impact on profit, and in case these are promising, they will go with the expansion of the product portfolio.

In only limited cases, companies ask the question what the impact is on their working capital, and what will it do with their return on capital employed. Companies typically do reflect on the fixed assets, as these may simply be a necessity to buy or install to get to their planned extension.

In the quest for growth, companies over the years add complexity to the service corner. They offer more products, they offer them faster, they get more flexible in honoring customer specific requests. Again, adding service will create value for the customer and support the top-line and your market share.

As a result, when supply chain managers try to reduce inventory by pruning the product portfolio, it is typical to get pushback from marketing and/or sales saying, "you can't cut this product, it's critical to customer A and B, I know it's not profitable but we will lose these customers if we no longer have it".

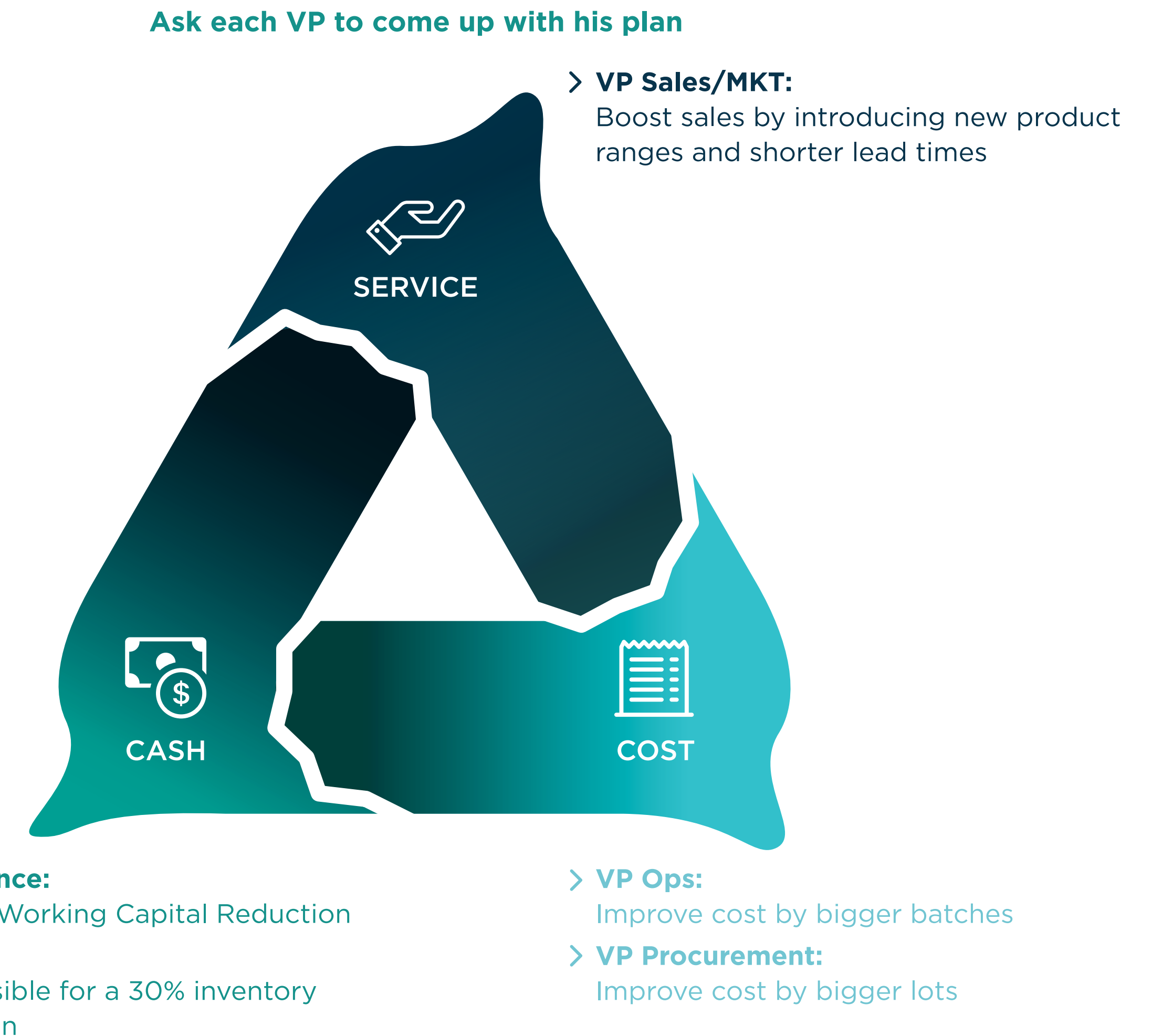


Figure 5 - Setting unaligned targets to turnaround the company

So how to solve this? Start by recognizing that yes, if you stop certain products, it will negatively impact the top-line. If it was possible to stop certain products without impact on the top-line you'd be in really backward situation!

The question you need to ask is what it will do with your ROCE. In general, as products get to the end of their life, volumes are decreasing, and because of low cost competition profits are eroding even faster.

At the same time, delivering good service will proportionally require more inventory, or inventory turns will be going down. This negatively impacts the “bang-for-the-buck”! I get less profit for more investment. That's not something I want! If I look at my product portfolio it will be clear that some products and customers are positively contributing to my ROCE, where others are lowering it.

In supply chain terms, people often talk about ‘good complexity’ versus ‘bad complexity’. Bad complexity lowers our ROCE and should be taken out. But not all complexity is bad.

A lot of supply chain people often like to simplify the service side as to minimize the cost. This is a step too far. Some of the complexity will be adding value and can be classified as good.



CASE

THE S&OP GROWTH STORY CONTINUES AT WONDERFUL BRANDS

Three years ago, we shared a [Wonderful blog](#) about the Sales Operation Planning (S&OP) at **Wonderful Brands**, a division of the Wonderful Company. It showed that within the same organization there can be various S&OP needs in different divisions or over time. The S&OP trajectory of [Wonderful Brands](#) was, and still is, a great example of the **interaction between S&OP and revenue growth** and illustrates how both can reinforce each other.

The Wonderful S&OP story so far

Back in 2018, [Heidi Vanderswalmen](#), Supply Chain Director at Wonderful Brands, told her inspiring story of Wonderful Brand's first steps in the EMEA region. This **regional growth** was initially strongly driven by customer demand and the supply chain in the U.S., but eventually the EMEA organization set up their own S&OP process. It quickly became clear, however, that relying solely on Excel wouldn't cut it, so Wonderful Brands called in the help of Solventure. Based on the criteria Wonderful Brands defined - affordability, flexibility, planning on item level, fast implementation and quick results - we implemented the [Arkieva One Plan S&OP Software Suite](#).

Since then, their **S&OP process matured significantly** over time. The biggest advantage was that the Arkieva software supported the company to make the **switch from volume-driven to value-driven** decision-making. After the upgraded S&OP contributed greatly to Wonderful Brand's financial and regional growth in its first couple of years, Heidi now shares the next chapter in her supply chain growth story.



The next chapter: streamlining supply chain meetings

Since Wonderful Brands implemented Arkieva in 2018, we started to **optimize our S&OP** based on the clear reports that were available via the tool. On the one hand, the data made our supply chain meetings more efficient and created some information overlap between those meetings. That's why we returned to the design board to **create structured meeting templates** and determine which supply chain data we want to discuss in the corresponding supply chain meeting. We defined clear inputs and outputs from each meeting, and who should attend them, to avoid information overlap.

By structuring our S&OP even further, we could make time for other **supply chain deep dives**. One example is an ABC classification of our customers and products based on (absolute and relative) margin and volume. This estimate helps us prioritize certain items within our range of products. We regularly pull other **detailed supply chain metrics and financial KPIs** from Arkieva, such as forecasts, volume deviations or Profit and Loss (PnL), to structure our process and assess the outlook for the rest of the year.

Over the last three years, we are able to **perfectly predict what our end-of-year results would be**. This meant we could proactively adjust our budget and, for instance, scrap promotion budgets or increase them, if possible.



IN SUMMARY

Supply Chain Management is all about balancing your Service, Cost and Cash as is captured in the concept of the Supply Chain Triangle. Balancing the triangle is about optimizing the Return on Capital Employed, or as the Americans say, the 'bang-for-the-buck'. S&OP is your key to balancing this Supply Chain Triangle and generate shareholder value as a result!



ABOUT SOLVENTURE

As Solventure we challenge you to rethink supply chain thinking. We help you to transform your supply chain from an obstacle into a competitive edge. Stop regarding your supply chain in purely operational terms and start aligning it with your business strategy instead. This shift in perspective, which we firmly stand for, is the best way to tackle supply chain issues and to provide a more agile way of fulfilling demand in the fast-evolving world around us. It's the key to driving value, on all business levels.

WATCH OUT FOR MORE! Check www.solventuregroup.com or our more in-depth position papers on “[Segmenting customer in B2B environments](#)”, “[Effective Demand Planning](#)”, “[Including Product Management in your S&OP cycle](#)” and many more.

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