Sales & Operations Planning at:

Nissens Automotive A/S

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This case about Nissens Automotive A/S provides a general description of the company's participation in the project "Improved Competitiveness through the Implementation of Sales & Operations Planning," implemented from 2017 to 2018 with funds from The Danish Industry Foundation (see www.salesandoperationsplanning.dk).

The case gives the background for participation in the S&OP project, the project approach, the performance gains, and the learning achieved. It is important to note that the project was more complex than is possible to reproduce in this case. The case therefore concentrates on the key steps, reflection, and learning points of Nissens Automotive A/S participants.[2]

[1]*For a full overview of the tools see: Stentoft, J., Freytag, P. V. & Mikkelsen, O. S. (2019), Improved Competitiveness through Implementation of Sales & Operations Planning, Department of Entrepreneurship and Relationship Management, University of Southern Denmark.*

[2]*A big thank you goes to all the staff at Nissens Automotive A/S who participated in the project and for the positive contributions to group processes, individual interviews, and reading and commenting on written material.*

1. Introduction

Nissens is a Danish company founded in 1921 by Julius Nissen as a one-man business. Until 1958, it had only three employees. Since then, the company has evolved into a global player in its business areas. The first international offices opened in 1977 in Finland and Sweden. In 2005, the first factory outside of Denmark was established in Slovakia. In 2010, a factory opened in China, and in 2013, an assembly plant opened in the United States. Today, the Nissens Group consists of 22 companies worldwide handling sales, production, and distribution. Revenues in 2017–2018 were 1,676 billion DKK. In 2017-2018, Nissens employed approximately 1,300 employees; approximately 450 employees worked in Horsens, and the remainder worked in factories in China, Slovakia, and the United States.

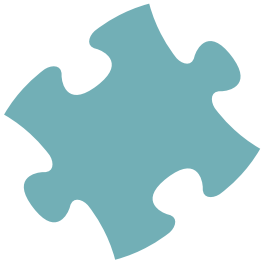
In 2016, Mikkel Krogslund Andersen took over as CEO from Alan Nissen, who was the fourth generation in the company. In fact, Nissens was family owned until May 2017, when Alan Nissen sold the majority share of the company to the private equity company Axel.

Nissens currently consists of two independent business units: Nissens Automotive A/S and Nissens Cooling Solutions A/S, which focuses on the automotive aftermarket and OEM industrial segment, as well as wind and renewable energy segment. Nissens Automotive A/S is the focus of this case. Nissens Automotive A/S is a leading global supplier of systems for engine cooling, air conditioning systems, and efficient emission components for the global aftermarket. Revenue for the automotive division at present is approximately 800 million DKK. The division employs approximately 500 employees and maintains more than 10,000 SKUs. Approximately 500 new SKUs are introduced every year. Decisions on cleansing and phasing out item numbers are made once or twice a year.

Workers at Nissens Automotive A/S follow the company's value of "delivering the difference" with social responsibility and sustainability. In Nissens Automotive A/S, promises to customers are fulfilled according to four core elements:

- 97% product availability.
- 24-hour delivery guarantee.
- Flexible delivery solutions (from express to full container loads).
- Constant cost optimizations (e.g., packaging, customer inventory management, etc.).

Summer is the high season; 50% of sales take place between May and August.



2. The starting point

2.1 RECOGNITION

For about six years, the sales and operations (S&OP) process in the company has consisted of six to eight employees and product managers looking together line by line at items to determine whether the item production should be increased or decreased. In other words, the company's approach has been largely operational, probably reflecting more of a forecast meeting than a real S&OP process. The meetings were held ad hoc, typically once a month.

Nissens has lacked a culture of cooperation; instead, managers have focused on functions and challenges rather than on the company as a whole. Sometimes Nissens has produced too many products, and sometimes too few. Leaders have made many pendulum decisions and held many futile discussions, hindering relationships and giving rise to finger pointing. At the same time, certain functions–for example, quality, purchasing, finance, and sales–have not been part of the process. Often, information about changes in the business (e.g., market and the supplier base) have been so short-sighted that reaction times have been very short. Meetings frequently have finished without leaders making decisions.

In short, Nissens needed to improve processes and dialogue and to include more people in the process.

2.2 ANALYSIS AND DIAGNOSIS OF THE CURRENT SITUATION

At the launch of the S&OP project, a mapping of the process flow from sales to installation was implemented. To accomplish the mapping, a brown-paper session took place with a group of widely representative key employees (from sales to delivery). On red sticky notes, employees listed the challenges they

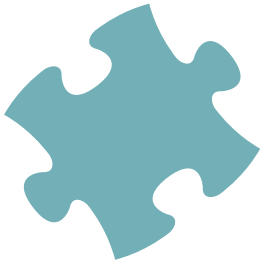
saw in the process flow. The notes were posted on the brown paper at the relevant places on the process flow map. Next, the same exercise was made with green sticky notes, on which employees identified Nissens Automotive A/S's strengths. The results of the session were transferred to a PowerPoint presentation, which was discussed with the participants. This discussion validated the material and ensured that all participants had the same understanding of the situation and that misunderstandings were removed. The outcome of the brown-paper session appears in Table 1.

In summary, before leaders launched the S&OP project, employees identified challenges in forecasting, communications, and silo thinking. However, on the positive side, the organization had a flat structure and dedicated employees with deep knowledge and high willingness to change.

Table 1: Summary of challenges and perceived strengths

CHALLENGES (RED STICKY-NOTES)		PERCEIVED STRENGTHS (GREEN STICKY-NOTES)	
1.	Forecast precision	1.	Flat organization
2.	Internal/external communication	2.	Good brand – well known and good reputation
3.	Capacity challenges (Nissens Automotive A/S and suppliers)	3.	Low level of bureaucracy
4.	Silo mentality (them and us)	4.	High focus on strategy – focus on execution
5.	Unclear process ownership	5.	Willingness to invest
6.	Lack of holistic understanding	6.	Change-ready employees
7.	Development of enhanced customer requirements	7.	Deep knowledge in the organization
8.	In- and out-phasing of products	8.	Good quality processes
9.	KPI structure and prioritization	9.	Dedicated employees
10.	Systems and tools	10.	Good dialogue with customers through sales and customer service
11.	Supplier management (price, quality, availability)	11.	Strong data and e-trade platform
12.	Supply chain network design	12.	Global attention

Source: Nissens Automotive A/S.



3. Implementation process

3.1 DEFINING THE NEW S&OP PROCESS

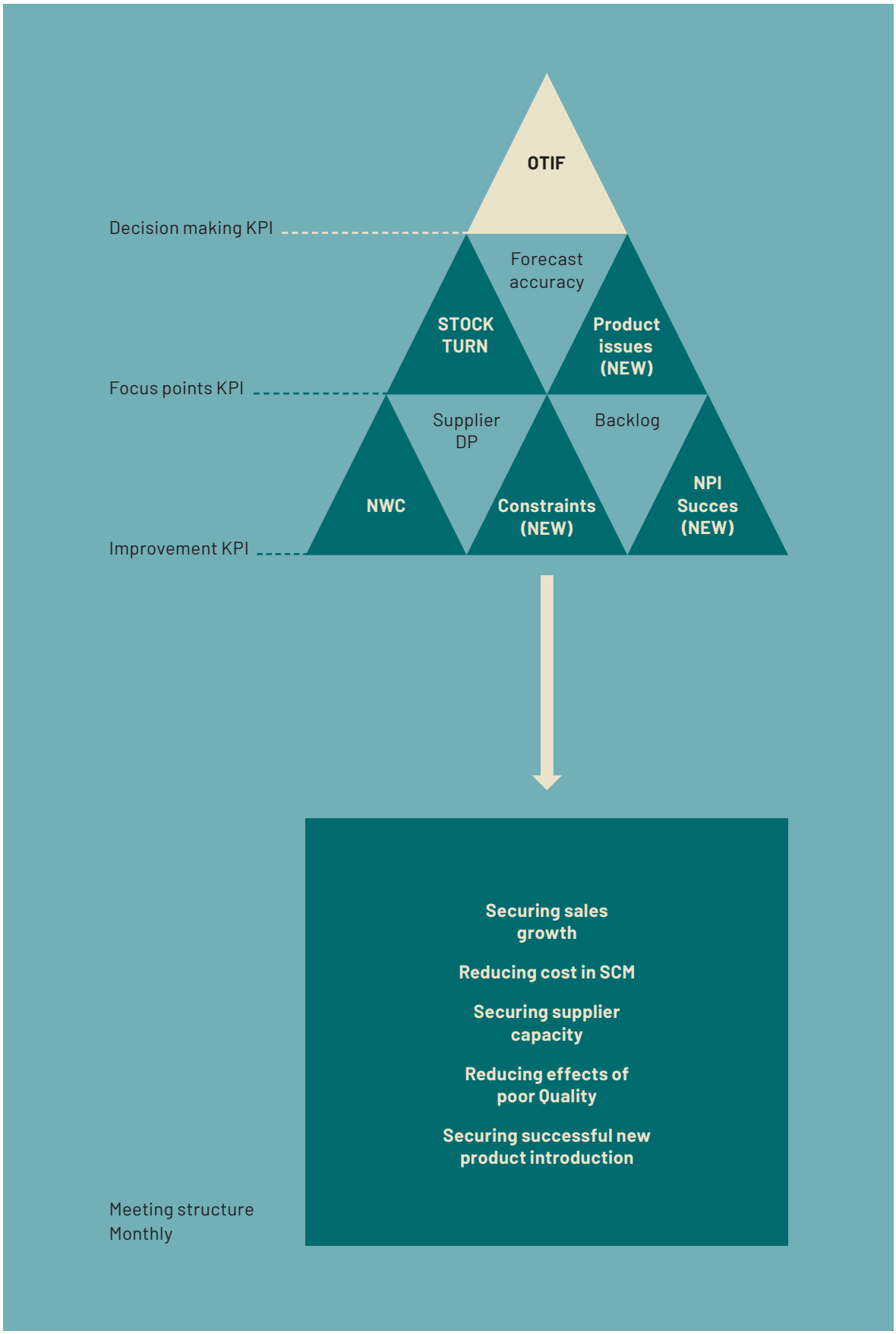
3.1.1 The technical part—"hard wiring"

After defining the current process and identifying challenges, the focus turned to developing a future S&OP process for Nissens Automotive A/S. The work to define and set up an S&OP process took place with the support of senior consultant Ernst Kildegaard from 4IMPROVE Consulting Group. In connection with the design and development of the S&OP process, Nissens Automotive A/S developed an S&OP Key Performance Indicator (KPI) hierarchy, reviewed on a monthly basis. The most important KPI was on time in full (OTIF). The KPI hierarchy appears in Figure 1. The KPI structure increased participants' focus and provided a common understanding of several elements, including:

- Improved delivery performance (differentiated).
- Lower level of tied-up capital (net working capital).
- Lower obsolescence rate.
- Reduced delivery failures.
- Improved inventory turnover.
- Improved forecast reliability.
- Reduced backlog of supplies.

> *Anchoring the S&OP in top management, is a key success factor for the progress and results of the work on S&OP.*
>
> **Ernst Kildegaard, Senior Consultant, 4IMPROVE Consulting Group.**

Figure 1: **KPI hierarchy for Nissens Automotive A/S**



Source: Nissens Automotive A/S.

> *We have removed some of those 'corridor meetings' and got it into the process. We have created a forum where people can discuss the issues.*
>
> **Esben Jansen, VP Supply Chain, Nissens Automotive A/S.**

In the S&OP project, Nissens Automotive A/S has designed and developed a monthly process structure with the involvement of employees from customer service, sales, planning, product management, strategic purchasing, quality, and logistics. The process consists of data acquisition, demand planning, supply planning, alignment, and decision making. As of this writing, the process has been designed but not fully implemented and formalized. Today (February 2019), the process is about 80% in place. At each process step, leaders have defined the input, output, and the recipient of the output. In addition, participants have adopted fixed meeting agenda points to focus discussions regarding existing demand and supply constraints (e.g., storage capacity, supply capacity, quality, outbound). Another discussion point involves the impacts of recommendations on the chosen KPIs. When the S&OP process is fully incorporated, these points will be part of the alignment meeting.

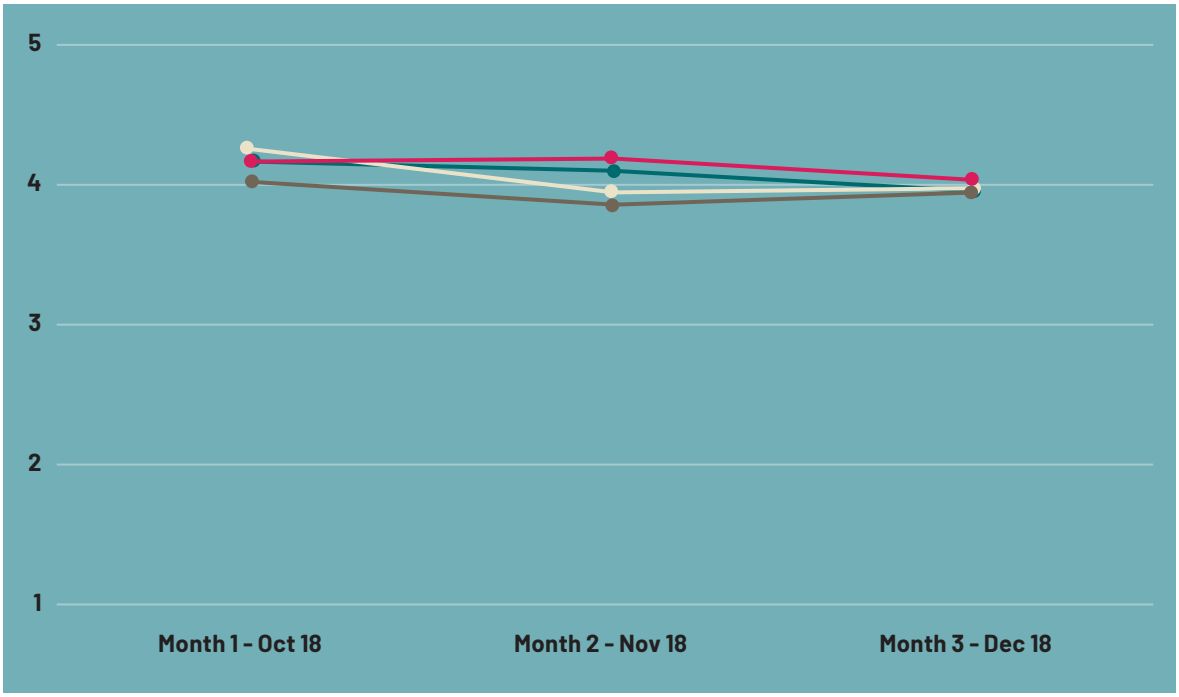
Today, Nissens Automotive A/S leaders work with a disposition and reaction horizon of six months and a 12- to 15-month nonbinding forecast horizon prepared by sales and product managers. These time horizons guide the alignment meeting discussions so participants can determine if there are concerns to be addressed for three time horizons: 0 to 6 months, 6 to 12 months, and 12 to 24 months. In addition, in the last year or so, when feasible, Nissens Automotive A/S has worked with statistically based forecasts. On new products, decisions are made based more on input from and expectations of sales and product managers. In connection with the pilot project, some changes in staffing have occurred. In the beginning, for example, all product managers participated; now only two participate. These two managers then coordinate with the rest of the organization.During the S&OP project, leaders decided to designate an S&OP manager, responsible for the process. However, the S&OP manager left the company, forcing Nissens Automotive A/S to hire a new manager, who joined in February 2019. Concurrently, other major challenges in the business have drawn attention. These setbacks have led to some loss of momentum in the development of the S&OP process. Therefore, although the process is designed, it still needs some attention before all meetings and activities are fully in place. It will be the focus going forward.

3.1.2 The behavioral part—"soft wiring"

Key Behavioral Indicators

For the project, all participants were analyzed for personality type in relation to Myers-Briggs Type Indicators (MBTI). The MBTI results have fostered awareness that people are different and should be treated and accessed differently. The S&OP participants find it challenging to work with personality types

Figure 2: Perceived relevance of KBIs



and discuss issues in the daily dialogue. However, they have started working with Key Behavioral Indicators (KBIs). The KBIs are not directly measured; instead, all meetings end with a five-minute discussion about the KBIs. For example, someone might ask, "Have we been visionaries today? Have we taken some decisions? Have we been brave today?" Participants have become better at listening to each other and thus have achieved improved dialogue.

Further, on a regularly basis, the participating employees have been asked about their perceptions of a set of predefined KBIs. Figure 2 shows the values over time, indicated as the average values based on a 5-point Likert scale ranging from 1 (very little relevance) to 5 (very much relevance).

> ***We have come far but we are not where we need to be yet. Now it is about to come in and run the process which we agreed upon. We must run, so we not just have a series of meetings, but also is structured within fixed frames. And then there is always something we can refine and adjust along the way. It will always be like that.***
>
> **Esben Jansen, VP Supply Chain, Nissens Automotive A/S.**

4. Effect and learning

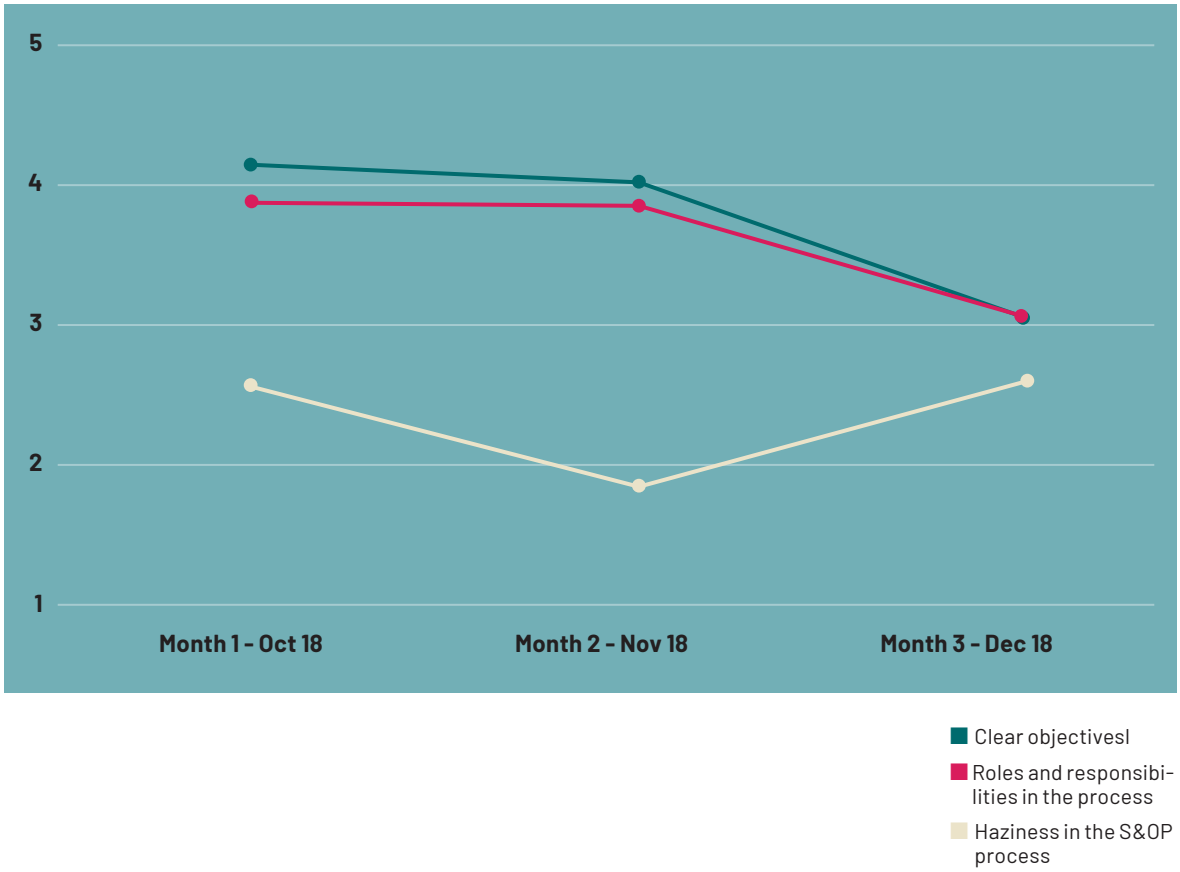
4.1 OBJECTIVES, ROLES, AND RESPONSIBILITIES

In addition, the S&OP team members have been asked to report how clearly they see the objectives, roles, and responsibilities. Again, participants answered on a 5-point Likert scale, where 1 = not very clear and 5 = very clear. The responses appear in Figure 3. As seen in Figure 3, there was a clear decline in clarity regarding goals and roles and responsibilities from October to November. Likewise, ambiguity around the S&OP process increased from the first to the second measurement but showed increasing clarity in the second measurement. The reason for these data is unknown; one possible explanation is that it was precisely during this period that the former S&OP manager left Nissens Automotive A/S. Therefore, the project was without a manager to drive the project forward. When there is no natural coordinator, it can create confusion about the project's objectives. Participants may not know who has what roles and responsibilities and thus lose their momentum. It is expected that the newly employed S&OP manager can create renewed momentum in the development of the S&OP process.

Further, the participants were asked how they perceived the readiness for change in top management, sales, operations, and for the S&OP manager. Results are shown in Figure 4.

As Figure 4 shows, there was a decline in the perceived readiness to change for all variables over time. However, the perceived readiness for change in operations increased in the first period before falling in the last period. One possible explanation for the decline in operations may again be that the S&OP manager left the company during this period. The departure of the manager may have led to some confusion about the objectives of the process and the role and responsibilities. Members of operations may have felt uncertainty and therefore focused on familiar practices instead of venturing into something new.

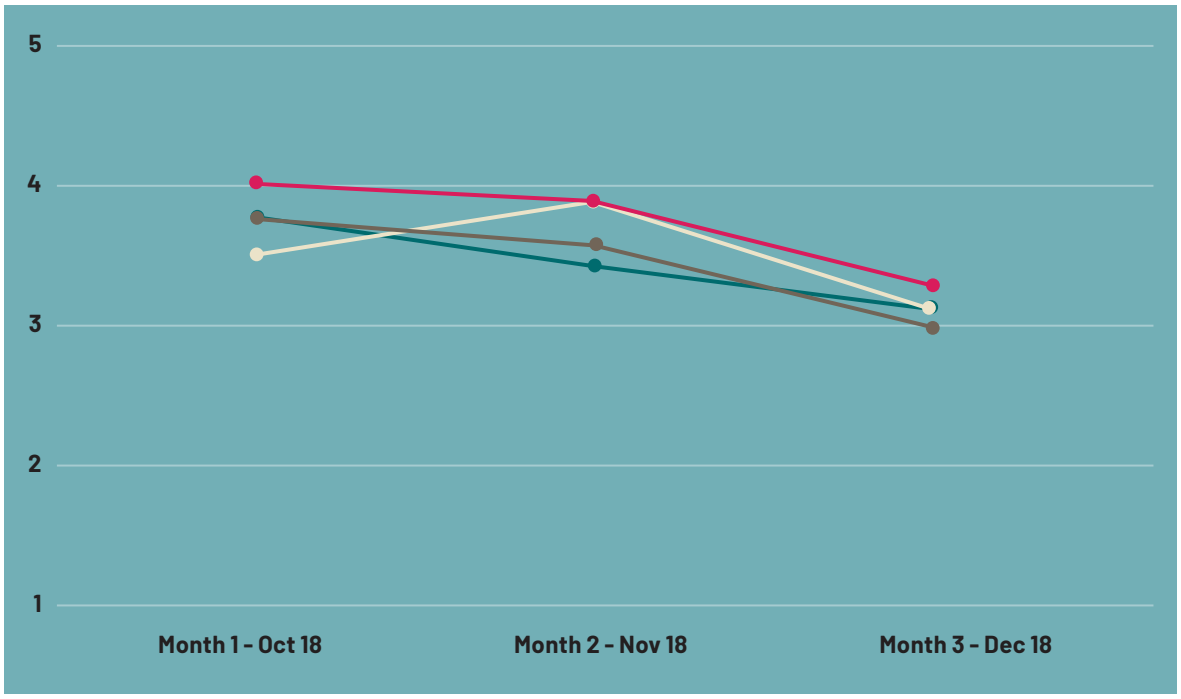
Figure 3: Development of the challenges with the clarity and perception of roles and responsibilities of the objectives



4.2 ACHIEVED RESULTS

- Clear KPI structure.
- Designed S&OP process.
- Increased decision making that is more fact-based.
- Increased cross-functional understanding and sharpness–the silos have been shaken.
- From having islands of information and decisions, it has been more formalized and thus more holistic decisions are made.
- Increased understanding and transparency of the effects of local decisions on the whole.
- better at seeing and understanding the dilemmas of other functions and taking responsibility.
- Developed a process that helps addressing possible constraints with a longer reaction horizon.
- Improved dialogue, collaboration and atmosphere–listening more to each other and giving more space.

Figure 4: Development of perceived readiness for change



4.3 LEARNING

From Nissens Automotive A/S's experience, implementing an S&OP project requires commitment from top managers. Without leaders' commitment, the project cannot succeed. In addition, knowledge sharing throughout the project is important.

Further, it is important to focus on finding root causes of problems. If employees act only on symptoms, they cannot eliminate the real causes; they will continue to act on the same mistakes. In addition, employees must think holistically and not only in terms of the individual elements of the project.

Employees should begin with qualified and quality-assured forecasts. Leaders should communicate benefits of the project to members of the individual functions, so employees can see "what's in it for me." This approach will help make the process somewhat easier. The same approach should apply to the whole project. Leaders should always keep objectives in mind.

Likewise, there must be room for participants to learn and experience learning loops. Setbacks may occur in varying degrees, and there must be room for that. Beginners must crawl before they can walk. However, at the same time, leaders must apply some pressure. Leaders should be action-oriented. If direction comes only from information meetings, the desired effect will not appear.

Finally, the efforts and progress of participants should be recognized, and successes should be celebrated (this recommendation could be a KBI).