

Sales & Operations Planning at:

Qubiqa A/S

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This case describes Qubiqa A/S's process as it participated in the project "Increased Competitiveness through the Implementation of Sales & Operations Planning" implemented from 2017 to 2018 with funding from The Danish Industry Foundation (see www.salesandoperationsplanning.dk).

The case is somewhat atypical, because of internal reorganizations and other important priorities, Qubiqa A/S chose to withdraw from the project before completion. Although the company ended the project early, Qubiqa A/S agreed to provide insight into the process and to describe the gains captured by participating.

The case describes the background of S&OP project participation, the project approach, performance results, and learning. It is important to note that despite the company's withdrawal, the project was far more complex than can be included in this case. The case therefore includes participants' key steps, reflections, and learning points.²

¹For 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.

²A big thank you is directed toward all the employees at Qubiqa A/S who participated in the project as well as for the positive approach in contributing to group processes, individual interviews, and reading and commenting on written material..



In 1945, Svend O. von Seelen established Qubiqa A/S as a forging subcontractor for various industries in Esbjerg under the name Seelen. In 1984, von Seelen sold the company to his son-in-law, Lars Schou, who launched a comprehensive technology development effort and expansion into new markets.

Today, the company focuses on customized logistics systems designed for customers worldwide. In 2006, Lars Schou sold Seelen to the Automation Group A/S, which in turn sold Seelen to the investment company BWB partners (former Odin Equity Partners) in 2010.

After the sale, Seelen merged with Univeyor A/S and Nordplan A/S. In 2011, the company changed its name from Seelen A/S to Qubiqa Esbjerg A/S, and Seelen's CEO Axel Manøe Jepsen became CEO of Qubiqa Group. In 2017, Axel Manøe Jepsen became Chairman of the Board, and Carsten Sørensen was appointed CEO. In 2018, the name was changed to Qubiqa A/S. In October 2018, Carsten Sørensen resigned as CEO of Qubiqa A/S, and Axel Manøe Jepsen joined as working chairman.

The sales and operations planning (S&OP) project began during Carsten Sørensen's tenure and ended when Axel Manøe Jepsen assumed leadership.

Qubiqa A/S is a project company that develops, designs, produces, and installs production lines and equipment. In addition, the company provides solutions for the insulation industry (mineral wool), board handling, and biomass/bioenergy handling. Qubiqa A/S offers management of entire projects, from development to installation and commissioning. The projects are often of high strategic relevance for customers; thus, projects are typically decided at the board level. The customer base comprises relatively few customers worldwide, which results in a strong focus on delivery. The delivery focus stems partly from a desire to maintain customer goodwill; therefore, even if an individual project has problems that make it less profitable than anticipated, it is part of the company DNA to deliver every time.

The size of projects and the decision-making level means it is often difficult for Qubiqa A/S to know when projects are locked and work can begin. Thus, it is difficult to forecast and manage capacity in terms of engineering hours and project resources. Over a year, the capacity load may be highly volatile.

In addition, some projects have a known curriculum while others are highly development-oriented. In the first type, it is relatively easy to control the capacity of engineering hours and hours in the workshop; the other type requires many development hours, making it more difficult to control capacity. This variance demands a highly flexible and agile organization.

Today, Qubiqa A/S employs approximately 200 people; about 100 are in Esbjerg and a few more than 100 work in Poland (Pila), which also has additional production facilities. The company is heavily weighted toward engineering: The technical department, located in Esbjerg, employs approximately 40 people besides project managers. Qubiqa A/S has about 40 million DKK in annual turnover.

Qubiqa A/S has adopted the following values:

Focus on customers and market

We work for and with our customers to improve their production and logistics processes.

Dialogue-based communication

Honest and relevant communication based on dialogue and value-adding conduct forms the basis for creating strong relations with our customers.

• Flexible and proactive environment

We stimulate and support a proactive working environment. We are motivated by potential and are proud of the dynamic and proactive response to change within our company.

Innovative development

We apply high technology and creative input (both internal and external), and we attract the best qualified employees in our constant efforts to strengthen Qubiqa's innovative capacities.

Proper and trustworthy behavior

Our work is based on the principle of trustworthy leadership, and we take pride in being a reliable and respectful partner

- toward customers, employees, and business connections
- and toward society in general.





2.1 RECOGNITION

Even before initiating the project, then-CEO Carsten Sørensen wanted more transparency among the sales pipeline and capacity management. This desire should be considered in light of the company's aggressive growth strategy. Company leaders saw the S&OP process as an opportunity to foster the desired transparency. Senior consultant Einar Scholte from Implement Consulting Group knew about the overall S&OP project at The Danish Industry Foundation and connected Qubiqa A/S's Executive Management Team with an SDU researcher from the project. After a presentation to the Executive Board and an additional presentation to key employees, it was decided to implement the S&OP project.

2.2 ANALYSIS AND DIAGNOSIS OF THE CURRENT SITUATION

First, the process from sales to installation was mapped, followed by a brown-paper workshop. The workshop was conducted with key staff from sales, product development, finance, and operations. On red sticky-notes, employees listed the challenges they saw for Qubiqa A/S in relation to the process flow. Participants posted the red sticky-notes on the brown-paper to mark the locations of challenges on the process map. The exercise was repeated with a focus on Qubiqa A/S's strengths. The workshop outcome showing the red sticky-notes appears in Figure 1.

After the brown-paper session, challenges and strengths were summarized in a PowerPoint document, which was presented to the participants to ensure that everyone had the same understanding of the output of the session, as well as to correct any misunderstandings. A summary of the perceived

challenges and strengths appears in Table 1.

In summary, the participants characterized Qubiqa A/S's two main challenges as a lack of a portfolio overview and a chronic shortage of resources. Conversely, participants noted Qubiqa A/S's strengths as pride and not letting customers down.

Figure 1: Brown-paper map made at the workshop

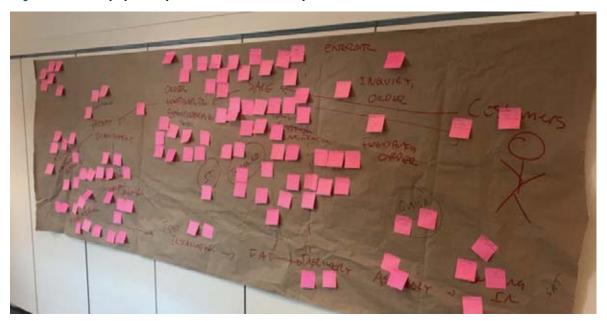


Table 1: Summary of the challenges and perceived strengths

CHALLENGES (RED STICKY-NOTES)		PERCEIVED STRENGTHS (GREEN STICKY-NOTES)	
1.	Lack of portfolio overview	1.	No barriers between departments/ functions
2.	Management too much involved in daily operations	2.	We do not let the customer down
3.	Lack of resources	3.	We have a large standard program
4.	Training/tools: on-boarding of new employees	4.	Our quality is at level our customers expect
5.	Programs not ready, when machine is ready → compliance with deadlines	5.	A lot of smart, proud, and hard-working employees
6.	Quality in the flow can be improved	6.	Calculation of standard projects
7.	Internal upstream communication can be improved	7.	Skilled sales people, technically strong
		8.	Close customer contact
		9.	Offer preparation (sales layout, animations, offer, pictures) → quick response
		10.	Agility/flexibility

Source: Qubiqa A/S.



3.1 DEFINING THE NEW S&OP PROCESS

3.1.1 The technical part—"hard wiring"

The actual process of defining and establishing the S&OP process took place with the support of senior consultant Einar Scholte from Implement Consulting Group. The former Qubiqa A/S COO anchored the project as process owner. Among the team members participating in the S&OP process, the strongest buy-in came from members in operations. It was difficult for people in sales to see the benefits because they had been trained to sell without specific regard to production and capacity. Members of the sales department thus saw the new process as a limitation. The first meeting of the S&OP team focused on defining the tools to be used in the S&OP meetings. The S&OP process ran only three to four times. However, Qubiga A/S did establish the five-step model (data collection, demand, supply, preliminary meeting, and decision meeting) before the project was halted before completion. Operations members were clearly positive toward the process. Some of the tools developed are still currently in use at Qubiqa A/S. Several tools have been further developed—for example, a resource sheet for engineering resources and a production load overview tool. In addition, project participants in operations made the tools more communicable, and the quality was adjusted.

3.1.2 The behavioral part—"soft wiring"

Key Behavioral Indicators (KBIs)

Qubiqa A/S completed two all-day workshops with Mercuri Urval based on the Myers-Briggs Type Indicators (MBTI) analysis (Broegger & Bohnsen, 2011). The test and the workshops gave rise to a dialogue about personalities. The first workshop focused on learning the theory behind the MBTI types and understanding group composition based on the different profiles. Exercises provided constructive feedback. The second workshop focused on Key

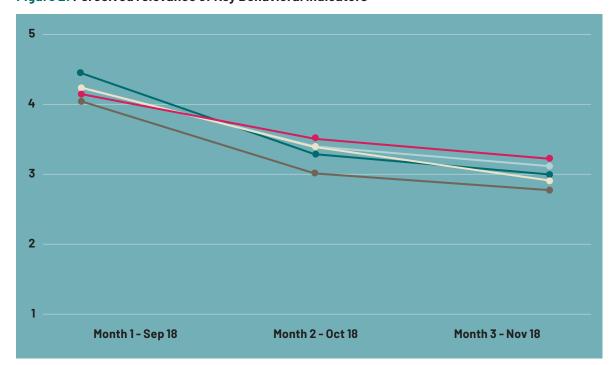


Figure 2: Perceived relevance of Key Behavioral Indicators

Behavioral Indicators (KBIs), including behaviors that supported working more effectively with team members.

Members of both sales and operations expressed interest in the MBTI analysis. In fact, the MBTI work was individually focused, showing no clear bias toward either sales or operations. Although Qubiqa A/S managers have not attempted to work in depth with the KBIs, the process has provided increased respect for and insight into the idea that people are different and therefore should be treated and accessed differently.

Through an online questionnaire, participants were asked how they perceived a number of predefined KBIs. The questions were the same from month to month. The answers appear in Figure 2, given as the average of a 5-point Likert-scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Because of the early termination of the project, it was possible to collect data only for three months, ending in November 2018. As seen in Figure 2, all KBIs were relatively high at the beginning of the project, showing values ranging between 4.1 and 4.6. In particular, ratings for meetings held as scheduled and constructive dialogue were high in the beginning. The former CEO and COO expressed great enthusiasm for having meetings finish before scheduled end times. This improvement in meeting length occurred because managers separated the roles of chairperson and notetaker. In addition, all KBI ratings decreased over the three months of the project. Unfortunately, it was not possible to discover the reasons for this decline; however, the decline in ratings was likely attributable to the participants in the S&OP being informed that the process would end before the final measurements were completed.

- Meetings are held as planned
- The necessary openness exists between the meetings participants
- Dialogue takes place at a constructive listened level 2
- Debates and discussions are primarily based on facts and not feelings
- There is a reflection about the process and whether the debated themes really grasp the core challenges (listened level 3)







Figure 3: The development of the objective clarity and understanding of the roles and responsibilities

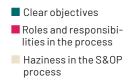
4.1 OBJECTIVES, ROLES, AND RESPONSIBILITIES

The project participants were asked about their perceptions of the development of objectives, roles, and responsibilities in relation to the project. Again, participants answered the same questions from month to month using a 5-point Likert scale ranging from 1 (very low degree) to 5 (very high degree). The feedback is provided as an average in Figure 3.

As seen in Figure 3, initially the project participants perceived clear objectives, roles, and responsibilities in the project. However, at the same time, some ambiguity was evident in relation to the process. It is interesting that in November, a large decline in ratings occurred for both clarity of objectives and for roles and responsibilities. Reasons for the decline were not apparent. However, one obvious explanation could be that in this period, participants discussed the continued existence of the project.

In addition, ratings were collected in which participants could respond to statements about change readiness in sales, operations, top management, and process owner. Again, participants rated the variables on a 5-point Likert scale from 1 to 5 (from strongly disagree to strongly agree). Results appear in Figure 4.

As shown in Figure 4, there was a perceived change readiness among participants; mean values for the four variables ranged between 3.5 and 4.0 in the beginning of the project. Over three months, perceptions of change readiness declined somewhat. In particular, perceptions of top managers' change readiness fell in November. Again, investigating the underlying cau-





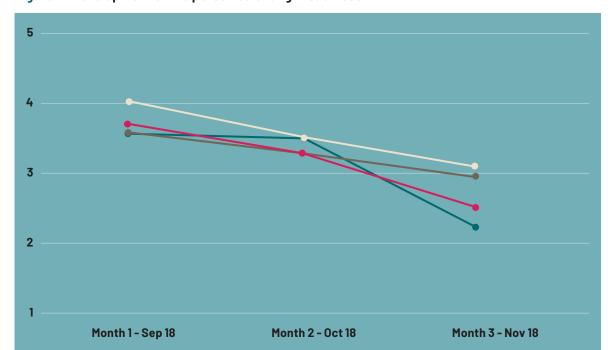


Figure 4: Development of the perceived change readiness

- Change readiness of top management
- Change readiness of operations/supply chain
- Change readiness of sale
- Change readiness of S&OP process manager

ses was not possible. However, one obvious reason could be that in the same period, a new CEO assumed management of the company, and priorities had to be adjusted.

4.2 RESULTS ACHIEVED

Even though Qubiqa A/S did not participate in the entire project, participation nevertheless yielded some gains. Some of the gains included:

- Increased holistic understanding.
- ▶ Improved dialogue, respect, and understanding for others' dilemmas.
- Increased transparency.
- Improved tools and tool development.
- Increased information sharing, including a more formalized group in Microsoft Yammer.
- Increased awareness of available information.
- Increased communication both to sales and from sales.
- Increased awareness that local information could be used by others.
- Greater awareness of the value of being fact-driven.
- Visibility of the bottleneck that Engineering faced with demands for the shortest response time and the smallest scalability.

4.3 LEARNING

In a process such as S&OP, which involves multiple parties, it is important to teach project beneficiaries about the existence of the parties and the roles they play. It is also important to ensure that project participants are constantly informed about the current stage in the project. In a business challenged with many other tasks and projects, this approach can help managers obtain greater focus. Finally, it is important to highlight the benefits for all stakeholder groups in the S&OP process. This case indicates that members of operations saw the greatest benefits. Members of sales found it harder to see the benefits and thus were less motivated. The process was ultimately about working more effectively with others.



5. Reference

Broegger, B. & Bohnsen, L. (2011), *Which Type are You? Jung-Based Type Analysis®*, Broegger Organizational Psychologists, Aarhus.