



Becoming an Operation and maintenance service provider – the transition of FLSmith

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Becoming an Operation and maintenance service provider – the transition of FLSmidth

This case was written by Melanie E. Kreye, DTU Management. It was compiled from primary research done with the case company and is intended to be used as a basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation.

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The typical silhouette of a cement plant was finally rising out of the morning mist in the distance after the two-hour journey from Cairo. Niels Sorensen¹ was on his way to the Ramliya plant. He started these regular trips with his work in Operations & Maintenance (O&M) when the plant was completed 3 year ago. He never used to come back to the plants once they handed over the keys to the client. As an Implementation Manager, he used to be part of the project team to erect and install the cement plant and then leave again. Once every part of the plant was connected and installed, he and his colleagues used to just pack up and leave again. Now, he came back regularly. This plant was particularly special to him – it was not only the first plant where he was in charge of the O&M business, but also where FLSmidth's journey of becoming an O&M provider began.

From product to service

FLSmidth² delivers sustainable productivity to the global mining and cement industries (see Exhibit 1 for an example of a cement plant including the equipment). FLSmidth sell high-quality equipment for cement production and erect and install their plants and equipment in Egypt and other countries. Their expertise extends to running a global business including a global logistics and distribution network, regional supplier connections for plant erection and installation. As the market-leading supplier of engineering, equipment and service solutions, FLSmidth improves performance, increases productivity, drives down costs, and reduces the environmental impact of operations. Product sales follow a typical cycle: seven good years followed by seven bad years where sales stagnate. Competition was growing fiercer as cheaper manufacturers of cement production equipment entered the market and sales stagnated even further. FLSmidth thus decided to extend their strategy to providing O&M services for their installed plants (see Exhibit 2 for a timeline of the organisational transition)

Egypt was a good starting point for the O&M business. Being one of the most populous countries in the Middle East and North Africa (see Exhibit 3 for a map), Egypt had significant cultural, political and military influence in the region. The Egyptian cement industry was rapidly expanding in the early 2000s, attracting many newcomers who saw the industry foremost as a worth-while investment. The newcomers brought the money to build the cement plant but lacked the expertise in operating and maintaining it. They thus formed a good customer base for FLSmidth's O&M business.

Changing the way we work

As one of the two "founding members" of the O&M service business in cement, Niels still remembered the early days. Back then, it was only him and Aarav, the Service Sales Manager. It

¹ The names and some specific events have been altered for the purpose of this case.

² <https://www.flsmidth.com/en-gb/company/about-us>

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was down to them, to formulate the strategy and make this new venture a strong pillar of FLSmidth's business. They needed to develop the business case for O&M, define their value propositions and establish the internal procedures for actually "doing" O&M. The company had no processes in place for recruiting, managing, even negotiating contracts or facilitating transport from and to the plant. He still remembers the excitement he felt on the day he became the Department Manager of O&M. No rules, no established procedures, and a lot of possibilities. They needed to identify their target customers and the sales approach. They also needed to build the local O&M organisation in Egypt from scratch.

Setting up the O&M business involved the creation of a local company - NLSupervision, who provided the technical management (see Exhibit 4). NLSupervision bridged the geographical gap between headquarters in Copenhagen and the customer in Egypt. To build a new organisation in a country like Egypt did not only involve the registration of NLSupervision as the local service provider, but also the hiring of administrative staff in all necessary functions: Human Resource (HR) management, accounting, and supply chain management. Many of these functions were filled by expats – people who had worked for FLSmidth in other countries before and needed to be relocated to Egypt. Convincing these highly qualified people to move themselves and their families to Egypt was a strong hurdle for Niels and Aarav. In the end, they filled some positions by relocating existing FLSmidth employees, other positions by hiring new international managers, and they hired many local employees in Egypt. The next hurdle was to get the O&M business going. Their first make-or-break decision was whether they could land the O&M contract at Ramliya. After months of negotiations they finally did.

Once the O&M contract for Ramliya was signed, the hands-on work started. Starting up O&M operations (see Exhibit 5 for the process of operating a cement plant) proved more difficult than expected. After hiring the 250 engineers and local managers they needed to staff the plant, Niels faced an even greater challenge: integrating Egyptian (local) working traditions and culture with Danish (company) working standards. Local engineers had different levels of skills and knowledge than engineers in Denmark. Particularly technical skills and safety standards were an area of concern in the early stages of the O&M business at Ramliya. Many engineers would not wear any of the safety equipment (safety goggles, steel reinforced shoes) and did not observe many of the safety protocols. This resulted in many incidents where production had to stop or engineers were injured. One day this even resulted in a casualty on site where one of the engineers fell from a 25-meter high platform because he did not observe the safety barriers. This was one of the most serious incidents on site and Niels could still recall the difficult conversations they had following this casualty. Not only did they have to fire the person who was responsible for this casualty but they also needed to establish much more strict procedures and guidelines internally.

In response, FLSmidth developed a training programme where every employee identified areas for further personal development together with their line manager. Particularly important were safety and technical skills. FLSmidth offered courses internally, allowing many Egyptian employees to travel to the head office in Copenhagen, Denmark, to be trained on new

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equipment with the technical leads in the field. Niels remembered the weeklong workshops with some of his colleagues he knew from Egypt. These were always special events where his colleagues were able to see his home turf rather than the other way around. In addition, it was special for the Egyptian colleagues – they were able to travel and see Copenhagen.

Besides this internal training, FLSmidth also tackled the skill-set of potential new hires by starting collaboration with the local Engineering University: Helwan University. Together, they established the FLSmidth Helwan Cement Institute³, where they trained Egyptian students on cement processing together with the university staff. Students learned about cement production, health & safety procedures, and technology in the class room and then visited the Ramliya plant for practical training. This proved a work-intensive but very rewarding endeavour as the first set of Cement Engineering Diploma students graduated and started their work in the local cement industry. Many came and worked on the Ramliya plant, while others worked at competitors and other organisations.

Successes and new challenges

Niels was very proud of what they had achieved. Since 2007, the total service business of NLSupervision had grown to an annual production of 16 million tonnes of cement⁴ and they operated in six different countries in the Middle East and North Africa. Especially the business in Egypt was the cradle for the O&M business. Here, they learned the tools of the trade and established a working organisation with defined processes and documentation. After the Ramliya O&M contract, they had expanded further – they had now three O&M contracts in Egypt alone, and further ones in Libya and Iran. And they had just started negotiations in Tunisia and Angola. Ramliya was still the flagship, which they used to demonstrate their good work to new clients. It was the success story in their service venture.

³ <http://cement.flsmidth.com/articles/world-s-first-postgraduate-cement-plant-engineering-degree>

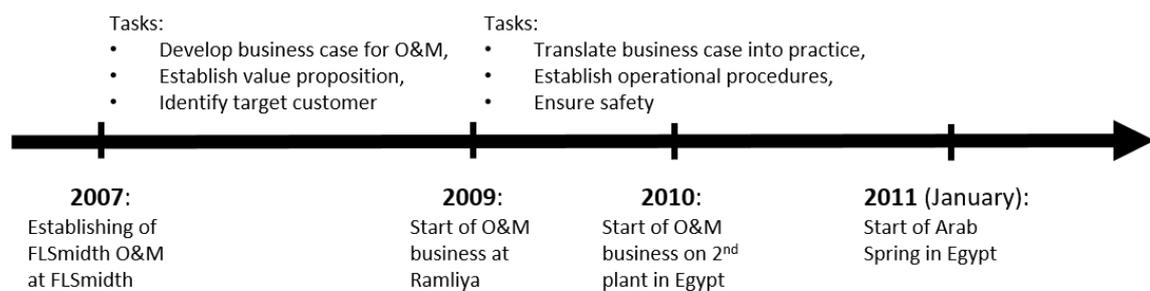
⁴ According to FLSmidth's annual report for 2013

Appendices

Exhibit 1: Cement plant of FLSmidth



Exhibit 2: Timeline of the transition of FLSmidth towards an O&M service provider



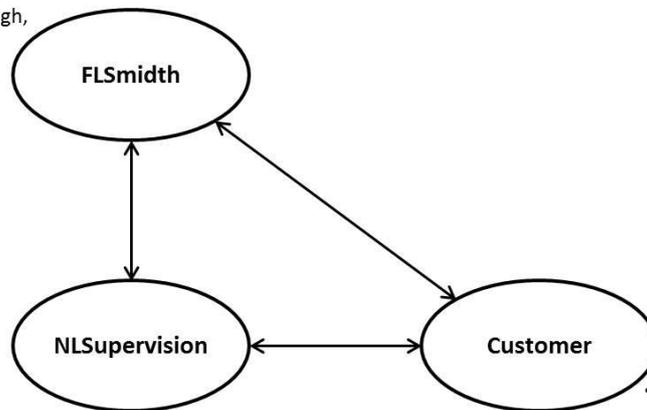
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Exhibit 3: Map of countries in North Africa and the Middle East⁵



Exhibit 4: The relationship between the three O&M partners

- Situated in Denmark
- Plant manufacturer
- Back-office functions such as central administration and contract negotiation
- Service support through, e.g. remote services



- Situated in Egypt
- Provider of front-office O&M service,
- Staffed mainly with Egyptian staff with Expats in key management positions

- Situated in Egypt
- Plant owner
- Provides supplies such as raw materials for cement production
- Sells cement to end customers in Egypt

⁵ Source: <http://www.eia.gov/countries/mena/>

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Exhibit 5: Cement processing chart and focus of NLSupervision's activities

