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Managing Lean Success:
A Warehouse Balancing Act (A)

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8 DECENT WORK AND ECONOMIC GROWTH

RSM

Introduction

It was nearing 11 am on a cold, grey day in January 2015. The mist softened the trucks' rumble as they drove through the expansive Borchwerf II business park and slowly pulled in to the loading docks of CEVA Logistics (CEVA) in Roosendaal, the largest of the company's operations centres in the Benelux (**Appendix A**). Michiel van Boxtel, CEVA's region manager South West Netherlands, waited in the front office for the arrival of Tadashi Yanai, CEO of Uniqlo, who was flying in that morning from Japan to see the new operations in person. Van Boxtel was nervous because of the importance of the meeting, but eagerly anticipated this visit. He wanted to show his biggest and most promising client that CEVA had survived the test of the winter high season and was ready to continue its production activities for Uniqlo.

Yanai arrived only slightly delayed by morning traffic near Rotterdam, and he and Van Boxtel greeted each other warmly. Both had high hopes that this new partnership would be a success. They agreed to first tour the warehouse, which had been set up specifically for Uniqlo production just eight months earlier, and then meet with the CEVA project team who would explain the current details of operations and take note of the CEO's feedback. Van Boxtel had prepared his speech carefully. He was proud to report that shop floor work had been standardised to fully meet the Uniqlo targets. As they walked out onto the warehouse observation deck, Van Boxtel happily began to point out the various activities taking place below them. However, he stopped mid-sentence as he noticed the CEO's expression, which was rapidly changing from open and expectant to frowning and disappointed. Yanai took two steps out on to the deck, stopped short and shook his head. Then he turned around and walked silently to the meeting room.

What was the matter, Van Boxtel wondered. What had Yanai seen in those two minutes on the warehouse observation deck that had made him turn around so quickly and walk out without a word? Surprised and confused, Van Boxtel followed close behind him.

This case was developed by Tao Yue and Deborah Sherwood under the supervision of Professor Rene de Koster at the Rotterdam School of Management (RSM), Erasmus University. The authors would like to thank Professor Rob van Tulder at the RSM and Stijn Groot, Cornelis van Dijk, Michiel van Boxtel, and Luc de Jong at CEVA Benelux for their comments and input.

This case is part of the RSM Sustainable Development Goals (SDGs) case series. It is based on field research and is written to provide material for class discussion rather than to illustrate either effective or ineffective handling of a management situation.

The Warehousing Industry in 2014

The Benelux (Belgium, the Netherlands and Luxemburg) was a hotspot for logistics services. The busy international seaports of Rotterdam and Antwerp handled a constant, heavy stream of import and export shipments. The region's excellent infrastructure network made it an easy departure point for transporting goods to the rest of Europe. Minimising transit times of materials to regional warehouses and on to distribution centres was important, to avoid product devaluation and to ensure that wholesalers and retailers could benefit from quick turnaround times.

The global logistics sector was highly competitive, and profit margins were small. To attract customers, companies applied various tactics. Some guaranteed the lowest cost, while others focused on providing high-quality service. Yet within this range, all logistics companies needed to implement strategies that provided value for their customers while keeping overall costs low. This required tight planning, constant innovation and a no-nonsense approach to operations and management. The largest logistics companies offered complete service packages (supply-chain management) that connected their customers' supply side with their demand side. Within these supply-chain systems, trust and information sharing between the partnering parties was crucial. Warehouses were an important part of these systems; they were the hub for inbound and outbound materials. Managing warehouse inventories and production processes was a highly complex undertaking.

Customers in this sector were very demanding and required that warehouses improve their processes every year on their behalf. Increasingly, the vast majority of customers also chose logistics providers based on the company's sustainability policies[1]. To be able to meet these demands and to maintain their profit margins, warehouses often rationed their improvements, keeping some for future years. Storage and handling was part of the regular contract, so improvements had to be made in other areas, such as inventory reduction, and was often determined by means of a point system. In many cases, customers were willing to split the costs and benefits for improvements with the contracting warehouse. Service contracts were short, usually one to three years. Yet once a customer had agreed to a contract with a logistics service provider and production processes were underway, it was difficult and costly to change provider (lock-in effect) because warehouse operations were tailored to the specific needs of the client. Setting up a routine for a new client was a process that took months and required intensive commitment from both parties.

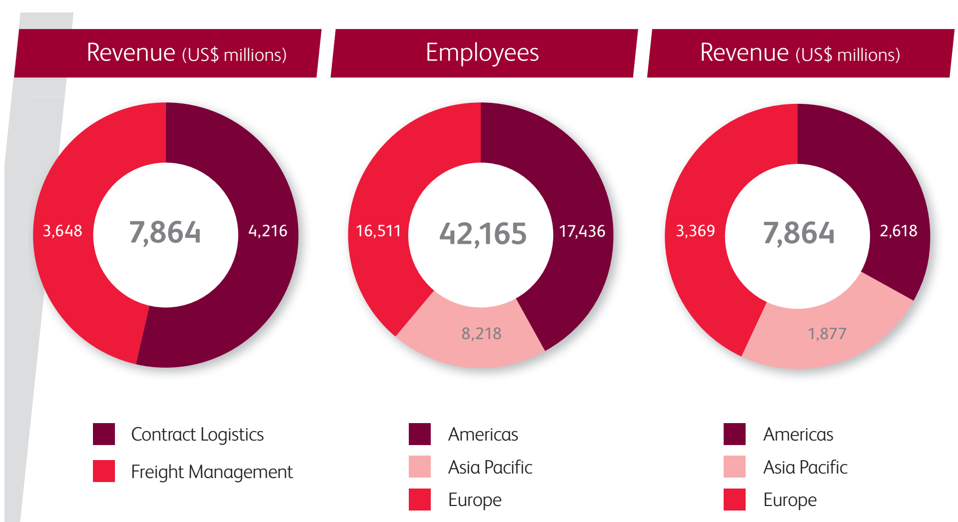
Another challenge warehouses had in common was the constant turnover of the work force. Shop floor work in warehouses was low-tech, manual labour. It involved long hours of repetitive, often physically demanding procedures. The work was dangerous, involving heavy machinery in close proximity to workers on foot. Injuries were common and fatalities occurred. Because warehouse volumes varied, warehousing companies relied heavily on temporary and flex workers; and because warehouses were often grouped in business parks outside main urban areas, there tended to be a lot of worker mobility between companies. Employee salaries were low, hovering at or just above minimum wage. Yet education levels and wages were high in the Benelux, and warehouse jobs in those countries were therefore often filled by foreign workers. In this environment, it was difficult to recruit and retain a high-quality labour force and to keep them motivated and engaged in the workplace.

About CEVA

In 2014, CEVA was a leading global contract logistics and freight management solutions provider. Its global head offices were located in the Netherlands. The renaming of Australian-originated TNT Logistics (Thomas Nationwide Transport) to CEVA in 2006, and its merger shortly thereafter with US-based EGL, Inc. (Eagle Global Logistics)[2], had immediately placed CEVA among the top global logistics companies. In 2013 CEVA was the sixth largest third-party logistics provider in the world (**Appendix B**)[3].

At that time, CEVA had more than 42,000 employees in over 170 countries, with the Americas and Europe being the largest regions (**Exhibit 1**). A large percentage of CEVA employees were flex workers. In the Benelux, for example, approximately 40% of CEVA employees were on temporary contracts.

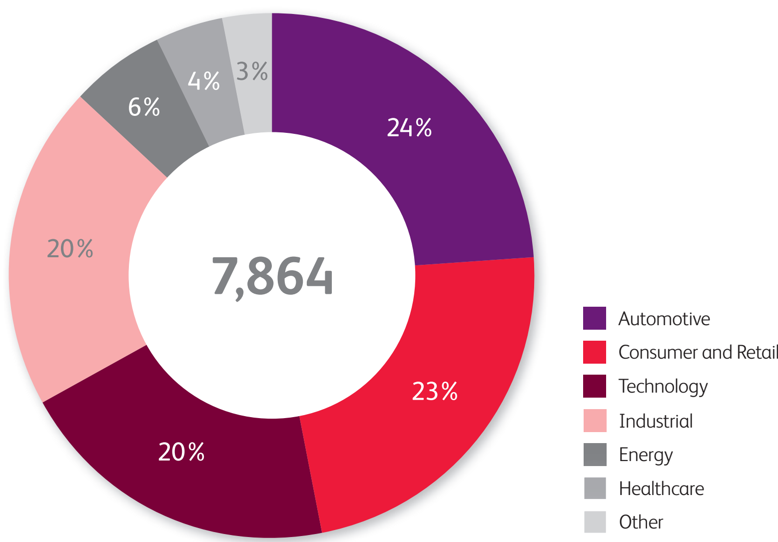
Exhibit 1: CEVA revenue and employees overview 2014



Source: CEVA Holdings LLC Annual Report 2014

CEVA's main services were freight management and contract logistics, with the latter being slightly larger in revenues (**Exhibit 1**). The company's key operation sectors were automotive, consumer and retail, technology, and industry; of these the first two sectors were most important (**Exhibit 2**). In 2014 CEVA generated nearly US$8 billion in revenue, slightly down from 2013. The decrease in revenue had already started in 2012 and continued into 2013 and 2014 (**Appendix C**). Furthermore, higher financing expenses and exchange losses also hurt the bottom line. The labour and wage costs went up in those years, which created extra stress. Consequently, CEVA shrank its employee size by over 1876 people from 2013 to 2014, 1172 of those being in Europe.[4]

Exhibit 2: CEVA operation sectors 2014



Source: CEVA Holdings LLC Annual Report 2014

In distinguishing itself from its competitors, CEVA marketed itself as being the most flexible and customer oriented among its peers. Rather than aiming to be the least expensive, it focused on quality, safety, and social and environmental responsibilities. By tailoring production to the changing needs of the customer and making continual operational improvements, CEVA believed that in the long run it was in fact the cheapest for its customers. CEVA's goal was to provide specialised and value-added services to customers and to grow together with them. This set it apart from companies like DHL that aimed to create one-size-fits-all solutions and achieve cost advantages through standardisation.

Since 2014, CEVA began to fully engage in sustainable management[5], having established Centers of Logistics Excellence in Singapore, Florida, and the UK. Here, technology, innovation and collective knowledge could be brought together to facilitate dialogue on how to enact sustainable changes in all areas of their business. Throughout all their activities, the company's overarching objective has been to focus on People, Environment and Performance (**Exhibit 3**). This was done by aspiring to cultivate well-being for both workers and local communities, and encouraging respectful business behaviour towards the environment while ensuring strong financial results and continued customer satisfaction. Sustainability had been seen as the responsibility of everyone at CEVA. From the shop floor to top management, every individual was encouraged to contribute ideas and implement them.

Exhibit 3: CEVA sustainability approach

Source: CEVA Sustainability Report 2014

Investment in its people and the communities in which CEVA operated in was its management philosophy. The company strove to create a culture of employee engagement and collaboration, through recognising efforts and by offering opportunities for personal and professional development. A strong commitment to sustainable values and social responsibility also guaranteed employees a constant improvement in health and safety. After all, committed and motivated employees create a positive working environment.[6]

CEVA's worldwide employee-centric management started with workplace safety, as safety has a direct impact on people. The company had made efforts to protect safety and health through its Zero Harm, Zero Blame programme. Among others, CEVA believed in preventing injuries through good leadership (leadership by example). Site managers were required to have continuous health and safety improvement management in place. Due to these efforts, in 2014 CEVA had achieved a 32% reduction of injuries, and a 37% reduction of lost time due to injuries globally. It was the winner of three ROSPA Gold awards (Royal Society for the Prevention of Accidents).[7]

Commitments to the Environment, Social Responsibility and Governance

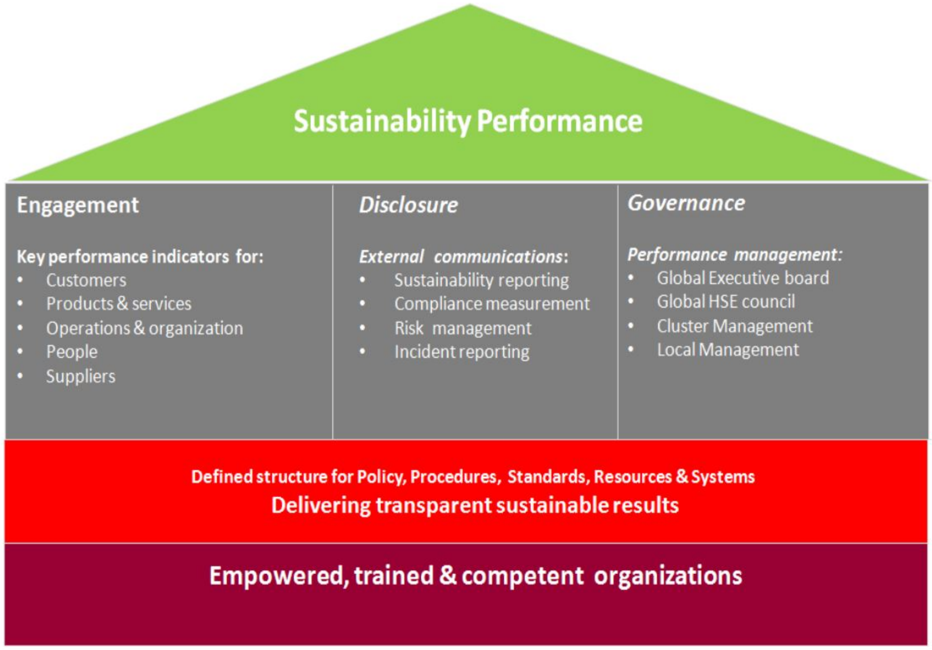
Safety and health of employees, along with a continuous improvement of environment-friendly work practices, were at the top of CEVA's list. Consultation and a shared responsibility between CEVA's management and stakeholders had ensured an improving performance in workplace health and safety as well as sustainable operating practices.

The commitment to people also extended outside the company, as CEVA aimed to be an industry leader in governance by working on projects that improved the quality of life and economically developed the communities in which the company operated in. For instance, in a region of Lombardy in Italy, CEVA invested heavily into economic development to reduce its environmental footprint. It increased recycling, switched to hydroelectric and solar power, and implemented more flexible transport by rail[8]. This had in turn helped to strengthen CEVA's reach to wholesalers in the area. In other countries, such as the United States and the UK, large investments were made to improve the load-carrying capacity and reduce the carbon emissions of its truck fleet, and safety and fuel efficiency courses were given to drivers to further improve their performance[9].

CEVA had been working on increasing transparency of their corporate business practices, and set up a sustainability governance structure in 2013. Senior management teams together with the Executive Board of the company and its Health, Safety and Environment (HSE) Council would oversee the development, implementation, and monitoring of sustainability provisions, which were then integrated into day-to-day processes and decisions[10] (**Exhibit 4**). The provisions focused on standards of regulations and law, contracts of customers and suppliers, company policies, sustainability performance, and sharing of best practices[11] (**Exhibit 5**). The key areas to improve included: carbon emission reduction programmes, sustainable warehouse facilities, supply chain optimisation, fleet and driver efficiency, recycling and better use of resources, and certifications and carbon footprint reporting[12]. The company's managers were required to continuously implement improvements in order to achieve zero incidents that could negatively impact health, safety and the environment.

CEVA's commitment to sustainability was aimed to reduce waste and environmental impact across their entire supply chain. In 2014 for example, together with 20 customers, a 10% carbon emission reduction initiative was implemented in all warehousing and transportation operations in Brazil[13]. Carbon emissions were recorded across all logistics operations, and the data was made accessible to CEVA's customers. Examples of other actions taken included an increase in the recycling of packaging materials, reducing office supplies and energy consumption, and lowering commute travel so that employees could work more efficiently[14]. That year also saw the company's implementation of their Global Pandemic Response Plan, through which advice or services could be provided to customers or others when needed in order to minimise risks and ensure business continuity[15].

Exhibit 4: CEVA sustainability practices



Source: CEVA Sustainability Report 2014

Exhibit 5: CEVA global sustainability governance management

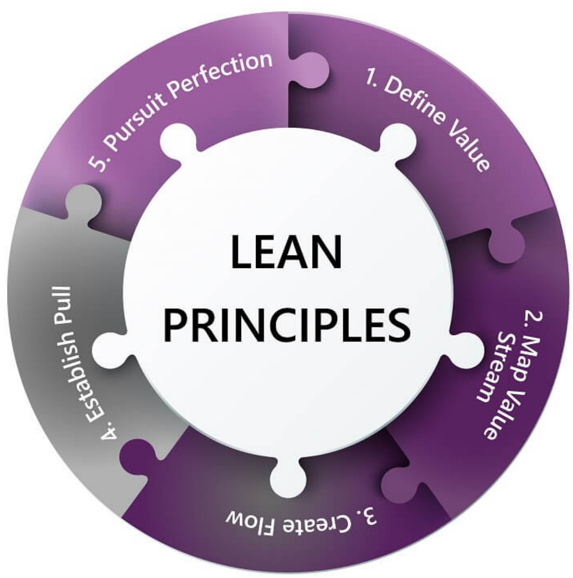
Source: CEVA Sustainability Report 2014

Lean Management

In its sustainable efforts, CEVA's goal was to provide services to its customers that would respect people, the environment, and offer economically valuable long-term results. Warehouse business, however, also had short-term goals and was productivity driven. Meeting customer demands and service goals would require having smooth and efficient production practices. Therefore, many warehousing companies adopted 'lean' practices to minimise 'waste'.

The lean principles included *value, value stream, flow, pull*, and *perfection*. Value is always defined through the customer. Once value has been established, each and every step and process taken to meet that value is mapped as the value stream. After waste has been eliminated from the value stream, a company achieves process efficiency, or flow. Reducing waste in the value stream and improving flow enables a company to shorten the manufacturing process and implement 'just in time' delivery, in response to pull from the customer. Continuous improvement by incorporating lean thinking into the corporate culture leads to perfection (**Exhibit 6**).[16]

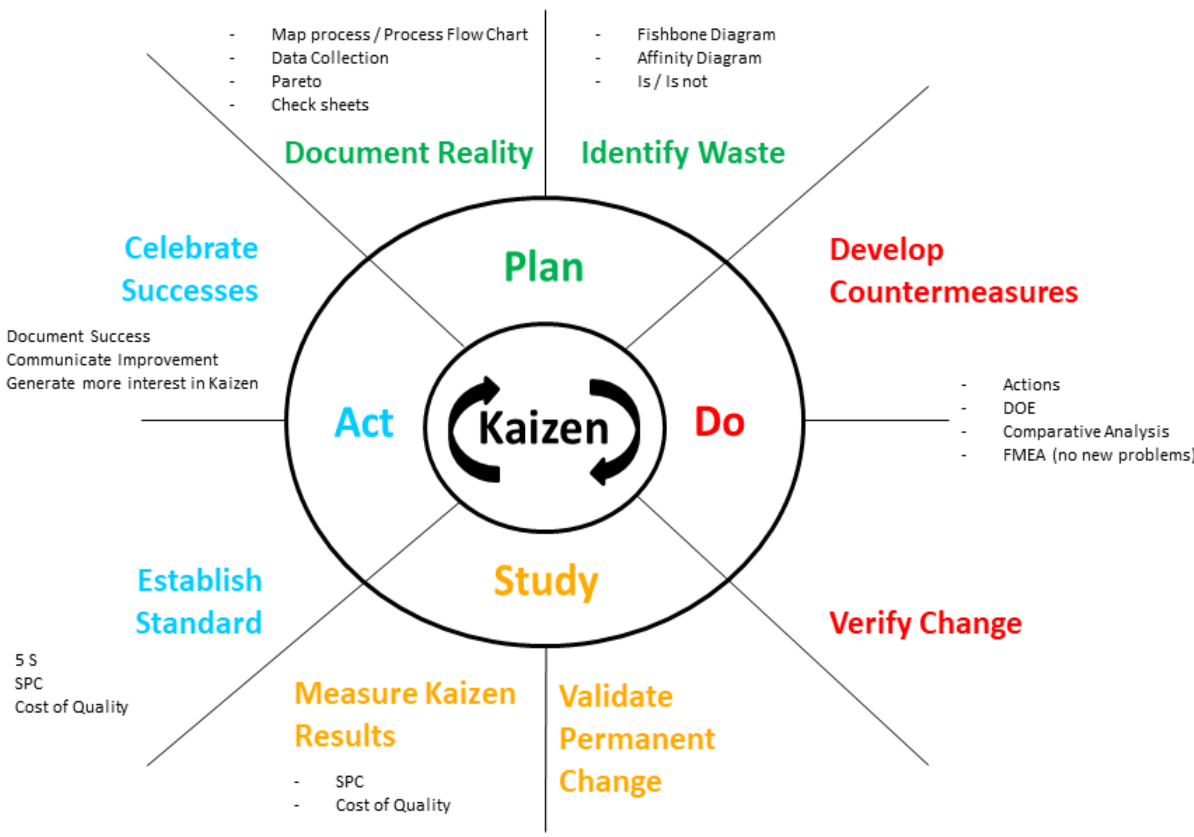
Exhibit 6: Lean principles



Source: FPC (assessed from https://www.fpc-beyondpackaging.com/en/lean-packing-5-eye-openers/)

Lean management is based on the highly successful business principles that were originally introduced to the manufacturing industry in the 1980s by the Toyota company. There are many different tools that companies can use to implement lean principles. One of the tools is JIT (just in time), used to minimise inventory storage times. Another is the system of *kaizen* (in Japanese, *kai* = change + *zen* = good, which together means improvement). Kaizen is a continual process which uses the cycle of plan-do-study-act, meaning that employees play an important role in pointing out inefficiencies or safety hazards and suggesting ways to improve (**Exhibit 7**). Kaizen contains 5S – the five essential steps: 1) Sort (*Seiri*), removing all unnecessary items from the workplace; 2) Set In Order (*Seiton*), creating a specific location for everything; 3) Shine (*Seiso*), cleaning the work area; 4) Standardise (*Seiketsu*), standardise the best practice within the workplace; and 5) Sustain (*Shitsuke*), never slip back into the old ways[17].

Exhibit 7: Kaizen



Source: Quality One International (assessed from https://quality-one.com/kaizen/kaizen-support/)

At its inception in 2006, CEVA adopted the lean management principles held by its predecessor TNT Logistics, and it continued to apply them throughout its value chain. The management team of CEVA all had lean training. They learned about the thinking and tools, passing these on to employees and encouraging them to use the tools in day-to-day operations.

A Tough Start with Uniqlo

In May 2014, CEVA began a 3-year supply-chain service contract with Japanese fashion chain Uniqlo, whose name is a combination of 'unique' and 'clothing'. Started in Hiroshima in 1984, Uniqlo's business model was to deliver 'high-quality, innovative, functional and affordable'[18] clothing for men, women and children. It was a quickly-growing chain, with stores in Asia, Europe and the US.

Similar to CEVA, Uniqlo also shared a concern for conducting business in an environmentally responsible way, with a focus on the planet, people, and community[19]. The Japanese company was very satisfied to have found a service provider with a good and stable reputation that offered such high quality, knowing that CEVA's strong emphasis on sustainability and lean principles gave it an excellent likelihood of long-term success. Uniqlo was pleased to have learned that CEVA even used the same Japanese words in their management, such as *kaizen*.

CEVA, however, quickly discovered how different Uniqlo was from its US and German customers. In 2014 CEVA's largest customer was Terex, the US-headquartered global manufacturer of lifting and material processing products. Whereas Western customers like Terex valued speed and quality, Uniqlo wanted perfection in every aspect. To make sure things were perfect, Uniqlo performed more check-ups than Western customers and even negotiated regularly with CEVA on how operations should be done after the contract was signed. Because of Uniqlo's size and growth potential, CEVA recognised it as a very important client and was ready to do its best to meet these high demands.

In light of this initial confidence, Uniqlo's first operations visit to CEVA in September 2014 was painful. Managers from both companies had worked together in May, during the start-up phase, to craft a set of standard procedures that were workable and efficient. When these procedures went 'live' and operations began in earnest, things seemed to be running smoothly. But within a month of go-live it was clear that CEVA had a real challenge on its hands. The originally agreed upon procedures were not flexible enough to keep up with product volumes, which had unexpectedly skyrocketed from day one and had kept increasing at a rate that was good news for Uniqlo but extremely alarming to CEVA.

Scrambling to prepare for that first operations visit, and desperately wanting to show Uniqlo that CEVA could live up to the contract agreements, the warehouse managers panicked. Trying their best to keep lean practices alive, but not always successful due to the pressure of having to meet production targets, shop floor supervisors and production managers constantly re-evaluated and adjusted the standard procedures – sometimes weekly – in their attempt to keep up with the pace. Shop floor staff were obliged to work very long hours, and their usual rotation of tasks had been scrapped for reasons of time efficiency. Even the daily 5-minute kick-off meetings had been eliminated. During the September visit it was clear that employee morale was extremely low, and that production was at its maximum. With the high season of November and December just around the corner, Uniqlo naturally questioned whether CEVA was up to the job.

That September had been a frightening wake-up call to CEVA. Uniqlo's disapproval was a clear sign that CEVA needed to make some radical changes in its operations. Although the contract between the two parties, signed that May, was for three years – the longest Uniqlo ever made – it did stipulate that the contract could be broken at any time if targets were not being met.

After many hours of close observation and still many more hours of deliberation, the project team came to the conclusion that the most probable reason for the untenable situation on the shop floor was the continual changing of the procedures. Employees were confused and sometimes didn't remember which procedures to follow. They made mistakes, causing production errors and costing precious time. Furthermore, they were tired from the long hours and disgruntled that they had to perform the same routine tasks for days or weeks on end. They missed having the opportunity to have a chat with their supervisors and tell them about how things were going. The loss of the daily meetings also meant that questions, complaints, and even safety issues went unanswered. The high quality that CEVA had promised was not being delivered.

There was no time for lengthy processes. Together with the shop floor supervisors, the management team agreed that it was necessary to decide on a single set of procedures, explain them carefully, once and for all, to the staff, and then stick with them no matter what. The confusion was causing too much trouble. They figured it was better to have a plan that didn't always fit the situation than to not have a plan at all. They needed to at least get through the upcoming high season intact. And it worked! By November production was once again standardised. Best of all, CEVA succeeded in making it through the high season and was able to give its employees a generous year-end bonus. By early January they were out of the danger zone. Van Boxtel felt like a survivor and was proud of his team.

An Unexpected Reaction and a New Choice to Face

Van Boxtel had been so eager to discuss this success with Yanai, to see the CEO's satisfaction and to regain his approval. The blow was thus all the harder when he was not given that chance. Instead of praising CEVA for its achievement, Yanai sighed heavily and pointedly asked how Van Boxtel was planning to deal with the next jump in product inventory.

He told Van Boxtel that he had been surprised out on the observation deck. He had heard such praise of CEVA's production processes from his Uniqlo colleague who visited the Roosendaal warehouse. He assumed that CEVA understood Uniqlo's way of working. Yet now that he was here himself, he had seen in less than two minutes a number of things which required improvement. Forklifts zoomed around, sometimes dangerously close to workers on foot. In a back corner there were some boxes lying in the designated footpath, and one colleague had even had to shout to get the attention of another, who had an earbud in one ear. Perhaps the most disappointing of all was that two people were standing around with nothing to do, apparently waiting to be assigned their next task. Where was the leadership? Why did the workers not take care of these dangers and inefficiencies? Yanai said that these things would never occur under Japanese management.

Van Boxtel listened patiently, seeing the situation through the eyes of the Uniqlo CEO. He remembered how CEVA's lean management principles had been such a selling point in helping CEVA to win the contract. He also thought back to the safety awards that CEVA's warehouses had earned, and how leadership by example had played such an important role there in ensuring that safety practices were upheld. Admittedly, during the past few months when they were scrambling to keep production levels high enough to meet its service goals for Uniqlo, they had neglected the lean principles and day-to-day operations had sometimes lapsed into chaos. Now that the Christmas and New Year peak had calmed down, they had a window of opportunity in which to restore the lean principles before the next peak kicked in. But would they run into the same problem when volumes picked up again? How could they embed the lean principles and especially flexibility in day-to-day operations on the shop floor? Similarly, how could they ensure that the warehouse could take on an increase in productivity while maintaining care for their employees and without compromising the company's larger sustainability commitments?

One solution might be to do what CEVA had always aspired to, namely to engage and motivate employees. But from his experience over the past few months, Van Boxtel drew the conclusion that to handle the huge workload the management had to give firm, consistent orders to people. Should they stick to this top-down approach and try to instil lean principles in employees, or should they try to inspire them and let them adopt the principles proactively? If they chose the latter, would CEVA be able to handle the next peak season? And would this productivity increase not come at a cost to CEVA's sustainability provisions, which it not only wished to keep in its facility, but also keep improving? What were the other risks he had not foreseen?

It was clear that CEVA had to achieve even higher productivity in order to stay on top of competition. Van Boxtel also knew that it was important to keep to the company's overall goals of higher worker retention, lower accident occurrence, higher quality, better processes, lower costs, and environmental and social responsibilities. If CEVA decided to go with further employee engagement, what concrete measures could it take in order to reach higher productivity as well as all of the goals?

Appendix A: CEVA Logistics in Roosendaal

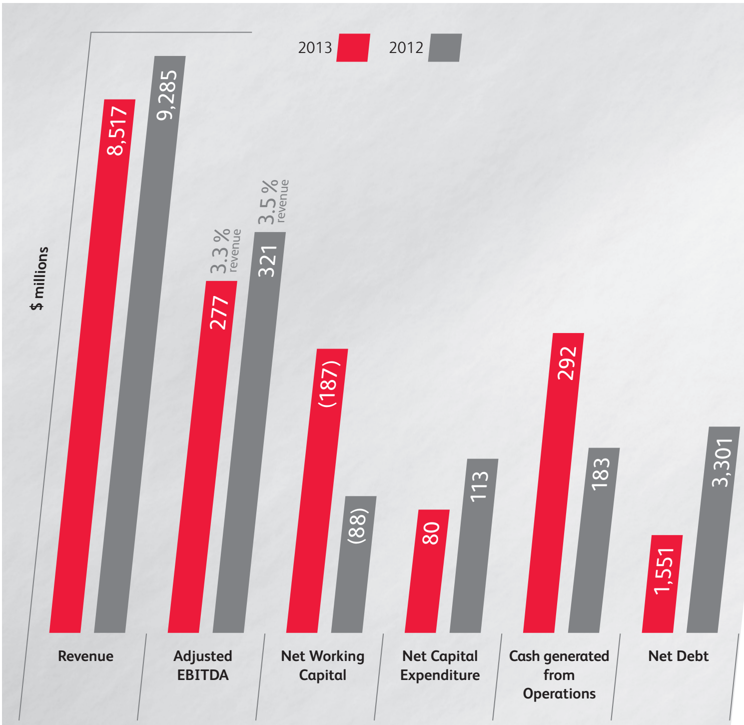
Source: CEVA

Appendix B: Top 10 global third-party logistics providers in 2013

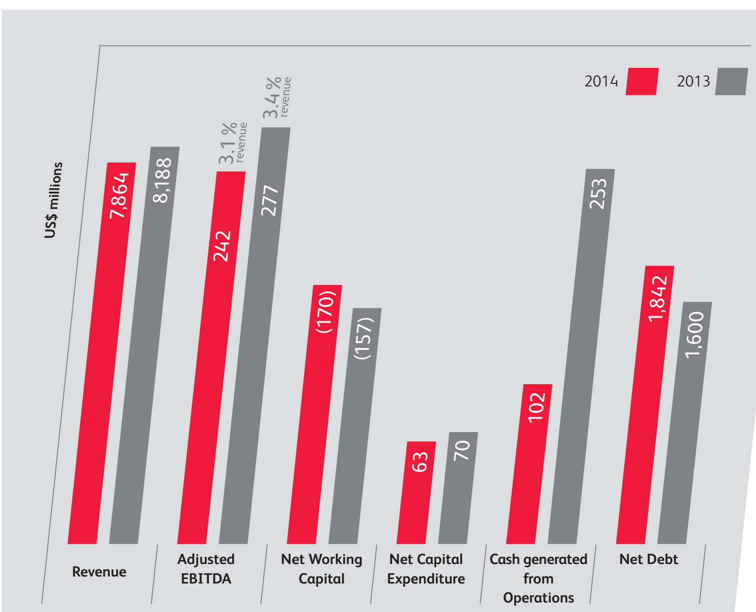
Third-Party Logistics Provider	2013 Gross Logistics Revenue (USD Millions)*
1. DHL Supply Chain & Global Forwarding	$31,432
2. Kuehne + Nagel	$22,587
3. DB Schenker Logistics	$19,732
4. Nippon Express	$17,317
5. C.H. Robinson Worldwide	$12,752
6. CEVA Logistics	$8,517
7. DSV	$8,140
8. Sinotrans	$7,738
9. Panalpina	$7,293
10. SDV (Bolloré Group)	$7,263

Source: Armstrong & Associates (accessed from https://www.supplychain247.com/article/2013_top_50_global_top_30_domestic_3pls)

Appendix C: CEVA key financial results 2012-2013



Source: CEVA Holdings LLC Annual Report 2013



Source: CEVA Holdings LLC Annual Report 2014

Endnotes

[1] From CEVA's customer survey in 2014: '78% indicated that environmental sustainability is a key decision making factor when selecting a logistics provider. 89% see sustainability as an initiative that generates financial return on investment.' Source: CEVA's 2014 Environment, Social Responsibility and Governance report, page 9
[2] https://www.cevalogistics.com/index.php/about-us/our-history
[3] https://www.supplychain247.com/article/2013_top_50_global_top_30_domestic_3pls
[4] CEVA Holdings LLC Annual Report 2013 and 2014
[5] CEVA Sustainability Report 2014
[6] From CEVA 2014 Sustainability Report
[7] Ibid.
[8] CEVA's 2014 Environment, Social Responsibility and Governance report, page 15-16
[9] ibid. page 17-18
[10] ibid. page 11-12
[11] ibid. page 13
[12] ibid. page 13
[13] ibid. page 9
[14] ibid. page 12
[15] ibid. page 10
[16] Source: Not Just for Manufacturing — Lean Techniques for Water and Wastewater Utilities, *September 8, 2017. https://tataandhoward.com/2017/09/not-just-manufacturing-lean-techniques-water-wastewater-utilities/*
[17] http://www.kaizenworld.com/what-is-5s.html
[18] http://www.uniqlo.com/sg/corp/ourstory.html
[19] https://www.uniqlo.com/en/sustainability/