

# Holistic leadership and reduced waste - cornerstones in Scania's success

There are several reasons why Scania over the past 20 years has more than doubled its efficiency, improved its quality and at the same time gained significantly healthier employees. Leadership and a continuous reduction of waste are among the main reasons why. CEO *Leif Östling* presented his experiences of Scania's development at a Sandholm Lean & Six Sigma conference.

**BEFORE SCANIA STARTED** implementing Lean seriously in the 1990's, the company had worked for a long time with quality and improvements.

– But we did not do this in a systematic way, Leif Östling told the audience at Sandholm Associates' Lean & Six Sigma Conference. Over the years, various methods have been trendy in the improvement area, but they must be put into their proper context. Otherwise, it won't work, he stressed.

Leif Östling has been part of the entire improvement journey within Scania.

He has been in the company for almost 40 years – 18 years as the company's CEO, and during 17 of these years as stock exchange CEO. This is very unusual. The average time for a Swedish Stock Exchange CEO is about 2.5 years.

## **Learned from Toyota**

When Scania became interested in Lean, executive management studied Toyota and looked, among other things, at their

site in Kentucky, USA. There, four times more vehicles were produced per year than at Saab in Trollhättan, Sweden. This was despite the fact that they had roughly the same number of employees and equivalent investments in production equipment.

At Scania, management decided to learn what the Toyota Production System was. Based on this understanding, they built their own Scania Production System, where the three core values are: the Customer first, Respect for the individual, Quality and Elimination of waste.

## **Holistic leadership is needed**

Leif Östling claims that organizations do not succeed in reducing different kinds of variation in a production flow and often suffer different time losses. Leadership has also long been characterized by a military model, and an attitude based on "them and us". This has led to the development of advanced systems for controlling flows, where we have assumed that there are no variations. The information has taken complicated routes back and forth between the management and the various sections in production. The information has been separated from the flow, and the management has consisted of giving orders.

But much of this information flow can instead be kept within production and be given a simpler control where you directly see what is happening. No advanced information system is needed to understand such a flow. According to Östling, a holistic leadership is needed, one where the leader is more like a teacher

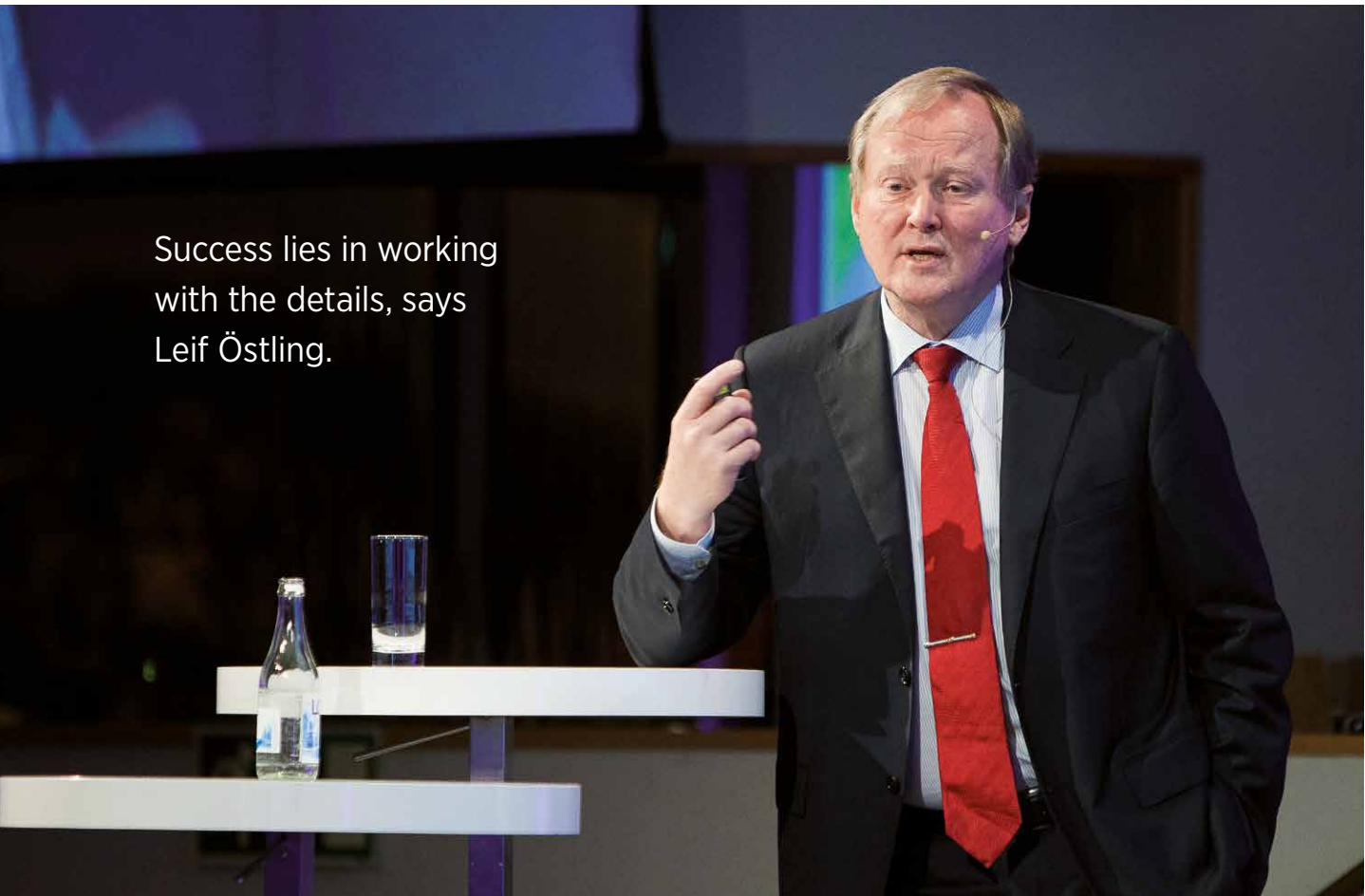
## **Less waste also gives higher quality**

Östling also points out the importance of taking care of all the information that is



Photo: Scania, Göran Wink

Success lies in working with the details, says Leif Östling.



embedded in the flow. It is also important to clarify the normal flow and to focus on waste.

– You should not make a map of what things should be like, but what they actually are like. We have learnt to focus on mapping the reality.

The internal reaction within Scania has often been astonishment at what reality really looks like. For example, in the case of uneven workload. There are very large losses in such areas, says Östling. Reducing these losses in the flow is important for several reasons. Waste and quality are two sides of the same coin.

– Low losses through reduced waste not only provide high efficiency, but also high quality. Low quality, conversely, means huge losses and having a poor understanding of what you do.

Time is money in several ways, in the form of labor costs, capital, depreciation of machines, etc. Loss of time is something that customers are not prepared to pay for, says Östling.

Learning to see waste is very important. Waste can represent a very large amount of time and effort spent in vain.

– When we took a closer look at this,

we found that up to 50-70 percent of the time spent was of no use to anyone, neither to the employee, nor to the company and least of all to the customer.

Examples of such waste are waiting times, unnecessary transportation, storage, overproduction, unused skills and so on.

#### **The details are important**

Scania Production System is based on four levels that are all interconnected: values, principles (ways of thinking), methods (working methods) and results. The basic parts are production, leadership and employees. When it comes to production, it is central to have standardized processes, to make waste visible and to help employees develop the working procedures. In addition to giving clear priorities, the leadership of the company must focus on developing work on reducing waste.

Concerning employees, it is important that everyone is committed and empowered, and feel involved in the job, which also contributes to the absence and employee turnover being low.

There is a tremendous amount of knowledge among workers. It is impor-

tant to log in to all that, says Leif Östling.

Scania's leadership principles emphasize building know-how through continuous learning and engaging employees through participation. Leadership is also about coordinating and taking responsibility, as well as both acting now and thinking long-term. Another important leadership principle at Scania is to work with details and really understand the context.

– Success lies in working with the details. The more you focus on details, the better quality and less waste you will have. And there are no alternatives.

#### **Stability delivers quality**

A central part of the Scania Production System is a strong focus on continual improvements. But the basis for Scania's way of working is to always keep track of the flows, says Leif Östling.

– It is only when you know what the workflows look like that you can start to improve. Some try to improve production without seeing the flows, but that is just campaigns that sooner or later will die.

Östling also emphasizes that one must assume that there are always variations in all processes, in all flows. ►



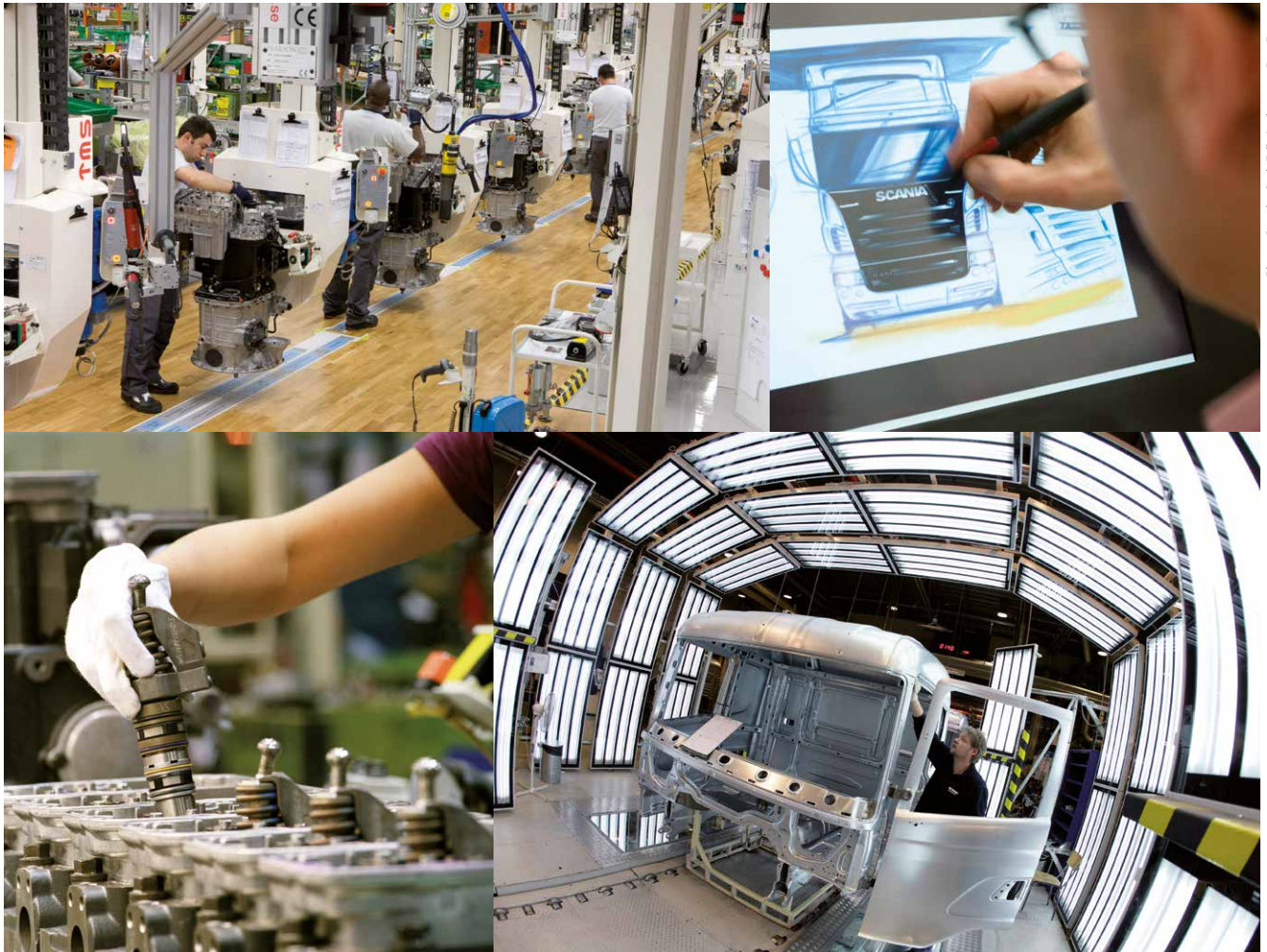


Photo: Scania, Carl-Erik Andersson, Dan Boman

► – When the variations are too big, this interferes with the entire subsequent flow. An enormous amount of work and time is spent on fighting such fires. It is important to get variations within levels that you can control, and then challenge and improve step by step.

Large fluctuations also come from customers and the market, for example in terms of variation in demand, specifications, customer service and so on. It is important to try to include these fluctuations within a range of variations that you can control.

### Standardized working methods promote creativity

A large and important part of Scania's operations is product development. Even here, it is central to have standardized working methods and flow orientation.

– Standardized work in R&D does not kill creativity, which some believe. The more standardized the work is and the more you have control over the intellectual flows, the more creatively people can work. There will at the same time be less of what might be called “hobby

work”, which is something the customers don't want to pay for.

R&D every day checks the state of each project. Boards are used to visualize how the total work time can be balanced in a way that makes it possible to deliver on time.

– There is an incredible amount of time to gain.

R&D at Scania is closely linked to the company's other functions and also includes the suppliers. It is important that suppliers are included in the flows, as they have the same interest in achieving efficient flows.

### Reduced fuel consumption

An important area of improvement that Scania is working hard on is reducing fuel consumption for customers. Among other things, Scania has its own testing center with about 20 vehicles where they optimize the vehicles and test everything, including different driving styles. There are opportunities to significantly reduce fuel consumption and carbon dioxide emissions, which is important for customers both in terms of emissions and economy.

– The more the customer earns, the more we earn, says Leif Östling.

### More than doubled production per employee

The strong improvement focus in Scania over the past 20 years has really given results, among other things in efficiency. In 1990, approximately 3 vehicles were produced per employee and year, in 2010 the number was 7 vehicles, and the vision for 2015 is 15 vehicles per employee and year.

– The strange thing is that the possibility to find waste never ends. At the same time, quality just keeps getting better and better, says Leif Östling.

– We have also seen a steady increase in employees' attendance, which has increased by almost 7 percentage points since 1990 and now stands at about 97 percent. It proves that we do not wear out our employees. This is an expression of the respect we have for people and the fact that employees think that working with us is fun. Motivated people make a good business.

# Important to have a committed board

The importance of the board and the CEO working together with quality and improvement work cannot be exaggerated. At the Lean & Six Sigma 2011 Conference, both this point and leadership at large were discussed with SKF's CEO Tom Johnstone and Scania's CEO Leif Östling, who is also chairman of SKF's board. Here are some of the comments and advice that came up:

- If you are to succeed in quality and improvements, you must have the full support of all levels, and it starts with the board. In SKF, this is a standing point at the board meetings. Without support from the board, the organization will not have the right focus.
- Interaction with the board is important, not least when it comes to setting reasonable goals. The board has valuable knowledge and experience from other businesses.
- Important as it is to have the support of the board, it is still the CEO who should run the business. It is actually more important that the employees applaud than the board. It is also crucial to have the management team on board.
- It takes courage to start, set goals and provide support to quality and improvements. Have patience! Cultural changes take time.
- Have a clear vision and make sure others understand it. Figure out how you yourself can contribute to the goal. Provide your co-workers with tools to reach the goals, have good people around you and follow up on the results.
- Listen to people, work with them and be prepared to change your mind a bit.
- Reduce the mental gap between management and employees.
- Walk the talk. Explain, talk to people and show an active interest. The motivation factor is huge when the top management spend time being out in the organization. Managers can get more direct information walking on the gemba/shop floor, while information from middle managers often is more filtered.
- Spend a lot of time in the organization and on the floor, otherwise you lose contact with it and the development might then go in the wrong direction.
- Show employees that people do not lose their jobs when becoming more effective. The purpose is to have more people in value-creating activities, not to reduce staff. You can't do this kind of work if your employees are suspicious.
- Middle management may think that information is a power tool that one does not want to give away. Change that attitude. Empowerment is self-supporting and gives more from the employees. It makes for less conflicts and stress and for a better atmosphere.
- Keep in mind that information on improvement boards is for the employees, not for the management. Avoid overly aggregated numbers.
- Celebrate success - it's important. But also set new goals. Set tough but realistic goals.
- Leaders also have one mouth and two ears. Use these in the same proportion.