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MOVING AS ONE

Exploring the role and characteristics
of good leadership

IN THIS ISSUE:

Developing leaders at Toyota: *Jeffrey Liker*, Professor at the University of Michigan, explains what real lean leadership is and how Toyota develops its people.

Do it yourself!: Does self-management work? *Joseph Ricciardelli*, director of Tecla Consulting, looks at how (and if) a leaderless company can function.

Managing maintenance: In this article, *Ian Tindle* and *Peter Watkins* talk about a new approach to maintenance that GKN's Rockford plant in Illinois successfully adopted.

A chat with Toyota: In our interview, Mark Adams, Vice President of purchasing at Toyota Europe, talks about automotive supply chain in UK and Europe and explains how Toyota recovered from the recall crisis and, later, the tsunami in Japan.

Winning Shingo bronze: *Noel Hennessy*, continuous improvement Director at Lake Region Medical, shares with LMJ the company's model for standard work, which played a big role in LRM achieving a Shingo Accreditation Bronze Medallion.

Coming clean: *Sandra Cadjenovic* shares the most recent progress in SCGM's continuous improvement programme in this month's Lean Diary



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Managing maintenance



Ian Tindle, Director at Sora Group, and Peter Watkins, Global Business Excellence Director at GKN, explain how a structured approach to maintenance improvement is helping to drive the desired maintenance leadership traits at GKN Rockford (which manufactures powertrain systems and components in Illinois, United States), and some of the key aspects required to improve operations.

Maintenance strategy and leadership is a topic of conversation on most manufacturers' lips. Yet, the most common maintenance strategy that we observe within businesses is "We fix it when it breaks," and whilst this often keeps the plant or equipment running, it means that a company is often trapped in 'firefighting' mode. A common concern linked to this state is that the leader "hasn't got the time." However, it's vital that they make time, and focus on where the department or site needs to be.

There's a number of well known improvement methodologies available such as TPM, RCM, and all are very effective, but only when used within the correct environment. It's therefore more important to develop a foundation of reliability to allow improvement tools to be embedded within the business.

We found Sora's approach to simplifying maintenance strategy very important and relevant to GKN. In particular, due to the diverse nature of our business units and sites, we needed something that could be easily translated, and understood. Our fundamental objectives were:

- If it breaks fix it quickly;
- Don't let it break again;
- Stop it from breaking in the first place;
- Have some resilience.

“Daily management is critical. It’s very important for the leader to have established a culture that allows an understanding of daily performance and issues as they arise, along with having a plan to address those issues”

Daily management is critical. It’s very important for the leader to have established a culture that allows an understanding of daily performance and issues as they arise, along with having a plan to address those issues. A robust feedback process is vital to ensure that issues are cascaded upwards and downwards through the different management levels. In summary, who is doing what, when and why.

At GKN Rockford, a key breakthrough in improvement has resulted from the enhancement of the daily management process. This approach has not only helped gain buy in and support from the technicians, it has also helped us to further identify improvement opportunities through our employee involvement teams. Additionally, the daily management process has helped with shift handovers and cross discipline problem solving.

BALANCE STRATEGIES WITH THE RESOURCES AVAILABLE

This may be a very obvious statement. However, it’s very common to see too much activity taking place, with no real results being observed. It’s therefore very important that the leader can understand what is needed, and then select the most appropriate method for improvement from there.

Self assessment is very useful, and at GKN we have used Sora’s maintenance and engineering assessment model to understand the following key areas of maintenance :

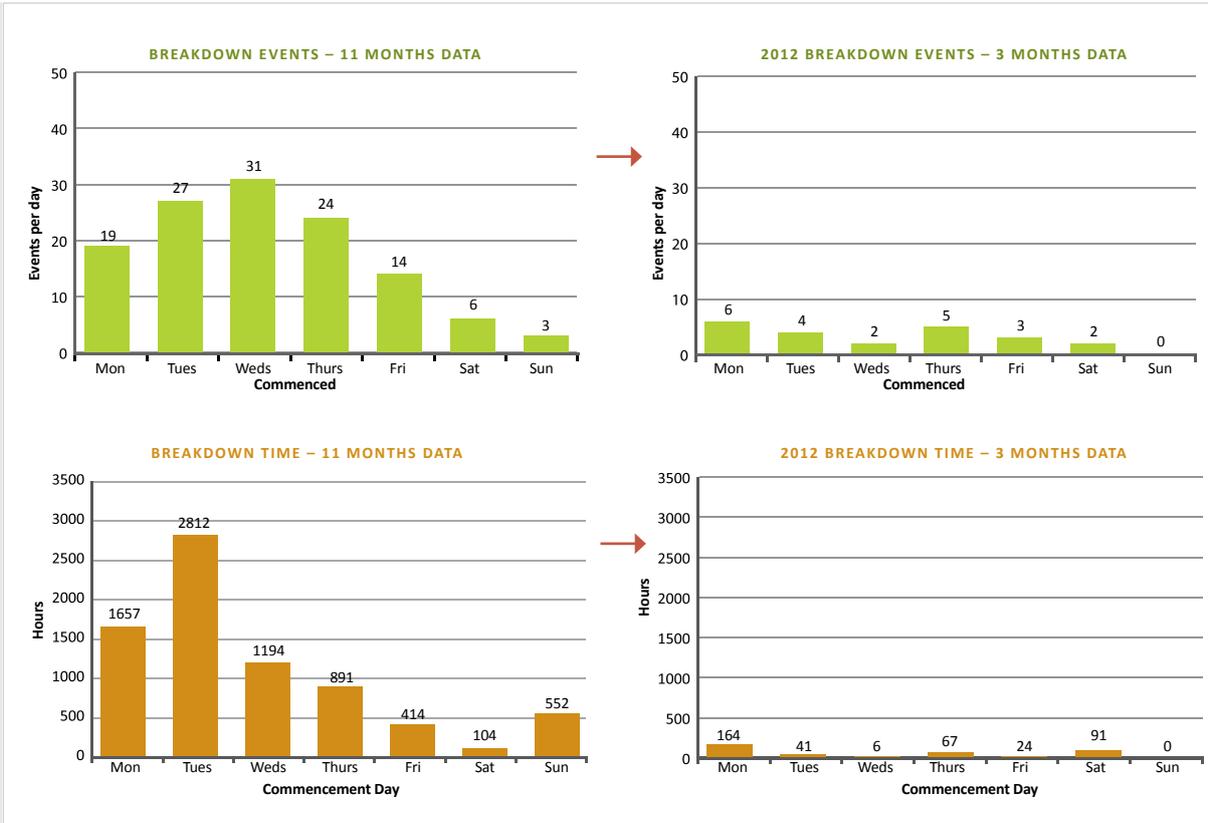
1. Breakdown reduction;
2. Spare parts and stores management;
3. Planned maintenance;
4. Maintenance skill improvement.

It’s imperative that the focus is on the right area, otherwise a lot of effort and resource could be wasted on the wrong things – very frequently maintenance departments run with a “stores improvement” project. This typically involves laying out stores, assigning stock, and in some cases running lean projects to reduce lead times of spare parts from suppliers. All of this is good work; however, the approach we have guided is to understand why. It’s very important to focus on getting to the root cause, so instead of focusing efforts in improving supplied lead times, we would much prefer to see a focus on stopping the breakdowns, and not needing the parts.

UNDERSTAND AND UTILISE THE RESOURCE YOU HAVE AVAILABLE

We find most technicians have the skills and attributes to be very effective at finding root causes. However, the culture in education, training and daily business means that we develop exceptional fault finders and don’t nurture the skill of the technician. Finding a root cause and finding a fault are two entirely different concepts, and the maintenance leader must be aware of this, and drive the identification of root causes on a routine basis.

Figure 1: GKN Rockford – Example improvement



“We find most technicians have the skills and attributes to be very effective at finding root causes. However, the culture in education, training and daily business means that we develop exceptional fault finders and don’t nurture the skill of the technician”

PRODUCTION IS KING

This may sound strange coming from a maintenance perspective, but the leadership team must be clear on what it is trying to achieve - most commonly profitable production. We see in some cases that a mindset change is required, to help technicians and engineers see that their job is “to make parts,” and not to “fix equipment” as commonly observed. This helps drive a culture of improvement, but only when used as part of a joined up strategy.

An initial benefit that GKN identified was that by aligning production and maintenance at both a management and technician level, remembering “If it breaks fix it quickly” was a very easy idea for people to grasp, whilst also being mindful of the necessity of not “letting it break again.” We saw, as a result, a 78% reduction in downtime in the six months we have been working together. We saw a significant reduction in the number

of breakdown events, too, but also a major reduction in the length of these breakdowns (see figure 1 – an example of improvement at GKN Rockford).

This system can break down very easily: a good maintenance leader should have a strong handle on the current condition (including the attitudes and abilities present within the team), but also know where the department/site/group is heading. In simple terms:

1. Where are we now?
2. Where do we need to be?
3. How are we going to get there?

In summary, as leaders we have truly undervalued maintenance as part of our overall strategic plan. Leadership thinking and behaviour towards maintenance as a strategic driver is starting to change: we have driven productivity improvements, which will contribute to GKN’s five year divisional strategic growth plan.

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