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A change for the
better

Alstom and TBM Consulting are showing how Kaizen thinking can bring significant benefits to the rail industry

**Leading procurement executives
reveal their supply chain secrets**

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A change *for the* better

**Alstom's Steven Clarksmith & Steve Hadfield, and
TBM Consulting's Richard Holland explain how Kaizen
thinking is bringing significant benefits to the rail industry**



Over the last two years Alstom has been working to improve the performance of the trains on the West Coast Main Line for Virgin Trains. Its focus has been on the areas of reliability and improving the efficiency of maintenance on the trains - in other words, to get an entire job done during downtime. To achieve this Alstom has implemented lean into its depots using a series of Kaizen events.

As Six-Sigma Black Belts and business

improvement managers for West Coast Traincare at Alstom, Steven Clarksmith and Steve Hadfield have played leading roles in establishing a programme to help achieve these aims. The pair were initially involved in arranging Kaizen events in Alstom's Birmingham factory, but upon this site's closure in 2004, they were asked to begin implementing some of these improvement principles into the service side of Alstom's business.

Initially working on a number of smaller projects, Steven and Steve brought some rapid improvements to various parts of the

business, and as a result were asked to develop a programme to encompass all of Alstom's service work for the West Coast franchise.

"At the outset we were asked to look at two key areas," explains Steven. "One was to arrange some training for the senior production managers and the other was to educate the directors about lean and Six-Sigma."

To achieve this second objective the pair took Alstom's MD and some of the other directors to a lean overview seminar arranged by TBM Consulting in April 2006.



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Richard Holland

"This event was entitled 'A Quest for the Perfect Ending' (QPE) and was really to get them to understand what is lean and how it could help the business before we started to progress into what the programme would look like. We felt that until we got the directors and the MD onboard we couldn't really take it any further," continues Steven.

"After that couple of days listening to senior speakers from TBM and mixing with MDs from other companies that were interested, they came back enthused and keen to do something. The next step was to give the senior managers and directors a greater understanding of the principles, and then to look at the biggest issues and try to formulate an improvement plan that was really focused on the key objectives of the business."

Key objectives

To assist in this process Alstom enlisted the help of Richard Holland, senior management consultant at TBM, who worked with the company to arrange two further three-day sessions. "This had a couple of objectives, one was to get all the directors who weren't on the QPE to understand what we'd been through; and to look at the key business objectives and to agree where we could use the tools and how we could drive a programme," says Steven.

"We came out with three to four areas that we believed were the key aims the business had to focus on over the next two to three years. On the back of that we developed 15 to 20 projects all linking to those key objectives, and then we asked the directors at the second session which of these projects would need some help from

myself or Steve, or the use of Kaizen events. This allowed us to develop a Kaizen calendar - a series of workshops that would really drive some change into those projects to help them, which in-turn would help to achieve the three or four key objectives that the business had to achieve."

Kaizen calendar

To build on this Alstom agreed to employ TBM once every six months for a week to return and conduct further sessions with the company's directors. "This also allows us to look at the previous six months Kaizen calendar - what we've achieved and how we've got on with that. That is as much to help Steve and I as business improvement leaders to make sure the Kaizen events work well."

The company ran one such session in November 2006 and also took this opportunity to look forward six months to establish what the future will look like. "So we now have a rolling programme and the next session is planned for July 2nd when we'll get back together off-site to review the previous six months and plan the next six," he comments.

Since this last session in November, Steven and Steve have organised around a dozen events to promote the programme across the business. These events have been spread across the four depots that service Virgin's Pendolino trains on the West Coast Main Line.

Steve adds: "We're also trying to develop people, so we've been sending staff on other events outside of Alstom to get the senior people, the key influencers, in the business to understand exactly what we're doing. These are public events where they get good experience in an environment where the host company has usually been running events for a number of years. So when they come back they are in a position to help us run some of our events."

A real impact

Of the senior managers in this part of the Alstom business, 14 have gone through the process with just eight left to complete the programme. Steve goes on: "One of the key factors that has helped us get off to a really good start on this programme is that we've now got the senior people that make a difference within the business understanding what we're trying, and having been on internal and external



events. They are Traincare managers, senior production managers and special projects managers - so every key influence within the business."

To ensure it is organising successful Kaizen events that will have a real impact on the business and its people, Alstom has developed a 12-week cycle for each event that it runs. This begins six weeks prior to the event itself when a sponsor is assigned, the objectives are agreed and a team leader is identified. This team leader is then prepped over the following weeks so that two weeks before the event he is able to make his presentation to the weekly management meeting.

"This team leader is someone who we have been training internally and externally and who is now in a position to say to the core management team 'I want to run this event in two weeks time, this is the objectives of the event, this is the team I want to run, and these are the actions I've done to prepare. We see this as a key stepping stone prior to running a successful event,' comments Steven.

Rapid benefits

Despite still being in the very early days of the programme, the benefits of lean thinking across the service depots are already hitting home in a big way. Understandably the customer has been one of the first to notice, and has been extremely impressed, as Steve explains: "Virgin actually came and participated in one of our public Kaizen events on the back of the performance improvements that they've seen on the West Coast Main Line.

"The key concern for them is that we have to have a certain number of trains available each day - 47 out of 53 - which is a very high proportion. So we have to be very effective when we have a train stood-down especially as there are a number of jobs where the task time is actually longer than the time we have overnight to do the repairs. Therefore most of the Kaizen events have been working on trying to eliminate the need to stand trains down by getting the time to do the task down to less than three hours. With almost all the events we've achieved 30 to 40 per cent productivity improvements and have been hitting this three hour target. So it's been much more about productivity than cost."

These remarkable improvements have also been noticed across the Alstom

organisation, as Steve explains: "Alstom is a French company, and every week now there is a delegation from Paris coming over to see the Manchester depot. So they're actually coming into the depot at about 8pm for the start of the night-shift to see all the vehicle management that goes on and the planning behind making a successful night-shift happen."

As Steven mentioned earlier, TBM Consulting, and in particular Richard Holland, have played an important role in supporting Alstom's work. "Fundamentally what these guys are trying to do is apply the same thinking that goes into Formula-One pit-stop strategies to trains," explains Richard. "So instead of having to take a train out of service for a week they're trying to get all the repairs and maintenance carried out when the train comes in for its overnight stop."

He continues: "In terms of how we at TBM have assisted in this, we have provided a lot of the training to help get the management teams fully up to speed, and also provided some facilitation for putting the plans together. In addition, we've also recently run an event for them."

Richard believes that Steven and Steve's experience in running projects of this nature has been vital to the success of the programme: "They are very capable and have been able to run this whole process, while we've just been in the background providing some of the training that they needed to get done because there's only two of them and it's a large business," he adds.

A common plan

"The two of them have been through this process more than once so they know what they're doing and where they're going, and they've worked with us for some time so we're all talking a common language, which is crucial. It's really a case of just providing the support where they need it for their future direction. They've got good ideas of where they're going and since we created a common plan Alstom has done an extremely good job of getting the whole management team aligned around that plan."

Once Steven and Steve have completed their work with the senior managers and Traincare managers at Alstom, the next step is to take the production managers through the process. "We need to start to build this into how we do our daily work and at the beginning of next year we'll begin to involve



the production managers far more to drive that down to the next level."

Steve adds: "We've also got to get the Traincare managers to take ownership of their improvement plans at their own depots and be more self-sufficient at running their own improvement activity. There's only me and Steven, but there are four depots plus we've also got the mass transit side of the business to be aware of, which is the Jubilee and Northern Line contracts on the London Underground. Therefore we need to delegate some accountability to people who can take what we've been doing and move forward with it."

In terms of targets from the customer going forward, Virgin is demanding increasing performance figures throughout the life of the contract. To meet these challenging targets Alstom and TBM are continually reviewing the programme, as Richard explains: "We have planned up to 2012, but as we get closer to that we'll start looking beyond that, and will never stop looking at ways to improve the business. In my opinion Alstom is definitely at the forefront of this kind of Kaizen thinking in the rail industry. There are competitors but I'm not aware of a company that's had the amount of success in this area that Alstom has achieved."

Echoing Richard's thoughts, Steven concludes: "It's really just the beginning of the journey and there are substantial opportunities out there for us to make further improvements."

If you would like to know more about Alstom and TBM Consulting's Kaizen journey, Steven Clarksmith and Richard Holland will be amongst the key speakers at this year's Railway Strategies Supply Chain Conference -

'Driving towards sustainable change.' ■



* Alstom is hosting a Kaizen Public Event for TBM from 18-22 June 2007 and will be running four different events throughout the week. To find out more call TBM Consulting on 01332 367378.