

from large batch production five years ago during the telecom boom to small batch high value-add service today.

Their short initial presentation introducing the tools they were using and their considerable impact on Profit before Interest & Tax, quality and inventory, provided background to an in-depth and visual tour of their facility. Well of course a tour would

light was flashing, the siren sounding and literally within seconds had two support staff at his side helping to solve his problem. Two or three minutes later the problem was solved and the line was running again. Their “Meccano” approach to everything from racking to trolleys was interesting too – if you need a trolley to address a particular need then we’ll make it quickly and then improve it further in



**Worth noting! Solectron staff had detailed answers to even the most searching questions.**

be visual wouldn't it? The company had obviously put a lot of thought into setting up the tour route, it was well rehearsed and invaluable display boards at every stage of the production process displayed clarity of the manufacturing steps and associated key metrics, making the visual impact especially strong.

There were lots of simple ideas that they introduced to help them remove waste. One was their “supermarket” concept. No ready meals on offer but an easy access shop floor store of parts that aimed to allow complete part picking within seconds. Not happy with this though, they are soon to move to several “mini-markets” distributed throughout the site. We also saw their red flashing “andon” lights bought from a local disco equipment shop, they certainly got people moving – an operator had hit the help button, the

the hours and days that follow. And finally their move from brainstorming to “try-storming” – don't just talk about it in a room but go and try it and see if it works!

Their closing presentation summarised the work they had been doing and the recognition they had received, even winning the Baldrige award wasn't enough and now Lean is taking them further forward with the ‘Voice of the Customer’ at the core of business improvement. They explained how their work on lean had delivered dramatic improvements in flow and right first time, but that their lean working was not simply to remove waste, but to be able to prepare to compete in new markets. They have also introduced their Scottish Enterprise supported Supply Chain Improvement Programme, this is moving the improvement focus outside the factory walls.

They were all enthusiastic and encouraging. They wanted 25 members to take away the ideas and try them in their own companies. They joked about the slogan “Copied with pride” and how some companies had taken the Toyota Production System book and replaced Toyota with the name of their company! They summarised the key lessons from their work as:

- Customer first
- Bold leadership
- Involvement and acceptance
- Continuous really does mean all the time
- Cultural change

For me their collective vision was summed up during the question and answer session at the end when the management team was responding to questions but unnervingly they were finishing each other's sentences!

I'm going to embarrass myself by missing people's names off this list or spelling them wrongly but here goes ... thanks Mark Cummings, Brian Martin, Simon Baxter, Darren King, David Matthews, Audrey Smith, other staff involved in the two tour parties and everyone else whose way we got into during the tour! And not forgetting Douglas Kent from eKNOWtion for providing the support to set the event up.

**Peter Ball, MIOM**

## Midlands

### On Time in Full

**IOM HQ, Coventry  
24th November 2005**

A dozen of us gathered at IOM Headquarters in Coventry to hear Alastair Ross and Dave Carter present a new improved version of their presentation given at the IOM Supply Chain Conference. Alastair and Dave, from Supply Chain Analytics Ltd, chose an interesting and effective way of communicating their views on a number of key supply chain issues that almost any

company would recognise. Obviously hankering after missed career opportunities on the stage, over six Acts, they role-played the key supply chain positions in a fictitious company, Terminal Manufacturing Ltd. Avoiding the perennial line about names being changed to protect the guilty, it was clear that their experiences were nonetheless derived from real experience and as they explored the development of better supply chains in Terminal there were numerous examples which very much struck home to the audience.

Act 1 started with a company under the usual current pressures - cheap foreign imports, lack of control, poor customer service etc. Clearly a company lowly ranked in World Class terms and thoroughly ignorant of what they needed to do. Fortunately the management of Terminal Manufacturing were prepared to look objectively at the problem, which probably sets them apart from many companies in similar situations. So the story unfolds in Act 2 where the company undertakes a 360 degree review, that is a complete look at the supply chain from suppliers through Terminal itself to the customers.

In Act 3 the company set out both action plans as well as KPIs (Key Performance Indicators) to measure the progress made. For example, and hence the title of the presentation, On Time in Full (OTIF).

Act 4, set six months later, told us of significant improvements in the KPIs including OTIF, but something was felt to be missing. Visibility was not adequate and the assorted and separate systems in use across the supply chain made it very difficult to get an overall view at top level in order to make effective operations management decisions. What was required was a way to pull together the key data from the separate systems and to then present it in a suitably summarised form. The approach taken was to implement a Data Warehouse to hold all the detailed data and to front-end



**Alastair Ross (left), and Dave Carter**  
from Supply Chain Analytics Ltd

this with a Digital Dashboard. The latter simply presents a single screen summary of the KPIs critical to the success (or otherwise) of the supply chain. The dashboard uses effective visual indicators such as traffic lights to indicate areas needing investigation and the data warehouse allows drilling down to the detail behind each KPI.

Act 5 showed how Terminal, now with a “visible but not connected” supply chain, was able to see that collaboration in planning and execution was the next logical step and initially went for a Demand Planning system. This, by forecasting and planning demand across the supply chain, coordinates demand from customers right back to suppliers. Central consolidation of the process ensures everyone is “singing off the same hymn-sheet”.

Finally Act 6 rounded off the presentation with a look at the lessons learnt over some 18 months:

- Proper assessment of the initial situation undoubtedly acted as a catalyst for change.
- Focusing on key practices leads to performance improvements
- Setting goals and strategy works best with involvement of the people concerned
- The importance of an integrated supply chain
- Recognising the power of visualisation – the Digital Dashboard
- Use of collaboration technology to build effective partner relationships

All of which led to measurable benefits in KPIs such as OTIF, stocks, responsiveness and operating costs.

Did Terminal succeed? There was

no doubt that the company made giant strides in terms of management of the supply chain and in achieving KPI improvements. Has the company survived? Well of course this is a fictional story, so you can make up your own ending. As a part of an overall set of business strategies, supply chain improvement is as critical as any other aspect. Without it undoubtedly the company will struggle to survive, however supply chain improvement on its own cannot guarantee survival.

As the presentation proceeded, there was a tendency to concentrate on the undoubtedly fascinating technology available to develop ever closer and more effective Supplier/ Company/Customer chains. However, interesting enough, the basic principles still came through and we were absolutely clear on the fundamental benefits of the digital dashboard.

Three letter acronyms abounded as always, but most were eventually explained for us lesser mortals. I am still completely bemused by some of the interface protocols, which, if I understood correctly, could seamlessly link the internet to the message carried on the left leg of our company carrier pigeon.

Those of us who fought our way through wintry weather and the rigours of Coventry rush hour traffic were rewarded with a thoroughly entertaining and informative evening. Thank you to the presenters and also to IOM Headquarters for hosting the event.

**John Waizeneker, MIOM**

#### **EDITORS NOTE:**

##### **Erratum**

Note there was an error in The Lean and Sigma in the Back Office Branch Report (Vol 31, No.7). The names listed at the bottom of the first column on page 11 should have been Vodafone, Hutchison 3G, not Vodafone Hutchinson.