Logistics Association of Australia Ltd

VISIBILITY OF AN ORGANISATION'S SYSTEMS

In his third and final article, George Hodgson, winner of the 2006 Logistics Development Award, sponsored by CHEP Asia-Pacific, provides an insight into creating visibility of an organisation's system in order to add value. This article is based on a presentation by Mike Brooks of the energy company, Chevron, and the author's experience of implementing the suggestions provided in that presentation.

George Hodgson with Allan Murray at the CSCMP Conference

Over the last two articles for Dispatch I have provided a sample of interesting presentations relating to Lean and Collaboration, from the CSCMP Conference. Lean and Collaboration are concepts now applied to Australian supply chains, that I believe do provide a competitive advantage for an organisation. This third article focuses on how Mike Brooks of Chevron created visibility of the organisation's systems for the CEO. I see benefits of this approach being applied to supply chains as well as other aspects of an organisation to help add value.

Initially, I was unsure what to expect in Brooks' presentation, but I became really interested in the approach that this company had taken to provide visibility of their various systems and how it assisted the CEO to make decisions. I think this is an idea most of us would appreciate. Based on that presentation, I have implemented a similar, though much smaller visibility system to my organisation and so far, have found it extremely beneficial. Following is an overview of the CSCMP presentation, followed by some firsthand experiences of implementing a similar visibility system.

Mike's presentation first provided an introduction to Chevron, the second largest US integrated energy company. The company employs 59,000 employees and operates in over 180 countries with 21 refineries and 26,500 fuel outlets.

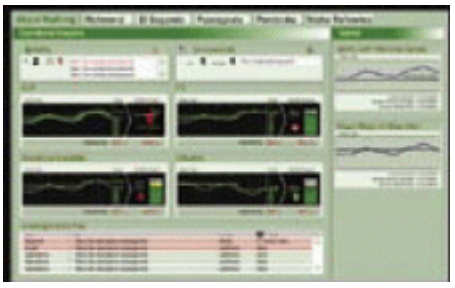
The key issue for such a large company was that the CEO believed they did not have visibility of what the company was doing at any given point in time. Factors to support this belief included information supplied being inconsistent in format, delivery and timelines. Information arrived by various means including

emails, faxes and phone calls and reports used different reporting timeframes – either weekly or monthly.

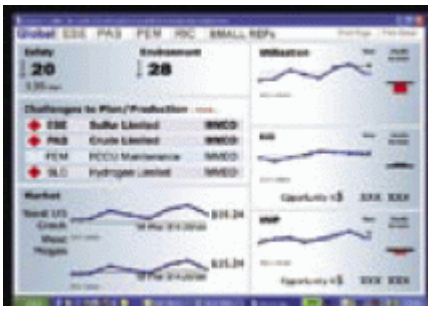
To help resolve these issues the CEO decided he required live operating data from eight of the company's prime refineries. The aim of the CEO was to obtain a clear and concise picture of the company to enable him to make decisions that would mitigate problems and capture opportunities.

Mike Brooks was given the task of improving visibility of Chevron's systems. He initially investigated the needs of the CEO and proposed solutions. Part of the brief by the CEO, was that the data needed to be accessible at all times, be able to be read in his office and easily understood. From this brief, it was decided that the CEO required a 40 inch LCD screen in his office to view the data at all times. Once the viewing format had been decided Mike and his team defined the key drivers of the organisation that needed to be presented to the CEO.

Identified drivers included operational summaries in near to real time for each refinery, including production status and key performance metrics and financial drivers. With the drivers defined, Mike wanted to make the visualisation clear and concise, and without it resembling a spreadsheet format. His aim was for a dashboard, similar to a car dashboard that provided near to real time information on the company's current position. His aim with the dashboard was to provide the 'big picture' at a glance and notify critical incidents and plan challenges or decisions to be made.



re were a number of versions that Mike and his m worked on before they found one that the CEO orsed. Early ones had poor information with the ect being very busy and lacking information. An y version is displayed right.



final iteration is displayed right, and as you can it does provide clear and concise information for CEO. As the saying goes, 'a picture paints a usand words'.

Some key features of the dashboard include tabs for each refinery to further drill down into the data with the global tab providing the 'big picture'. Graphs were used for good and bad performance along with traffic light colour

indicators. Acronyms were used to highlight production status and minimise narrative. Background and text colouring were selected to ensure it was clear from most angles and distances from the screen.

A key point that Mike made was that the information, provided when increasing visibility, needs to be actionable. A large number of KPIs highlight past performance but do not show near to real time performance or even predict future performance. From the project, Mike made the following observations to assist other organisations keen to implement a similar strategy.

- Pie charts do not work. They are visibly too large and do not show trends.
- Up and down arrows indicate nothing.
- Do not use lots of numbers. Easier to graph or visualise problems.
- Bar graphs are good for highlighting trends over a period of time.
- Don’t use percentages, they can be misleading, ie. a 10 % increase can mean $100 of $1000 or $10,000 of $100,000.
- Use acronyms to reduce narrative.
- Use colours, similar to the traffic light system to indicate good or bad performance.
- Importantly the dashboard needs to provide information and answers. – How is the company doing?

The presentation captured my attention and I believed I could apply a similar dashboard to my section upon my return. I work for the Australian Defence Force and, as you may imagine, Defence operates a large number of systems, all designed to capture information and provide various reports. My problem as an Integrated Logistics Manager responsible for logistics and engineering is having visibility of the various Defence KPIs, but more importantly having visibility of how we are currently performing in other aspects of the organisation.

Whilst I have very little influence on the type of systems used in Defence and the KPIs reported, at least I can improve visibility of what I have access to and use the information to make better informed decisions. Based on Chevron's experience, I started to create my own dashboard using Microsoft Excel as my medium, due to it being readily available and easy to use.

Currently my dashboard consists of bar graphs of the key seven KPIs reported over the last three months to highlight trends. HR statistics are also highlighted, such as how many days since leave was taken and status of projects and their progression using acronyms, and colour codes. I am constantly looking at how I can improve the dashboard to make it simpler and have gone through three iterations. I am also looking at making this a visual board in the section similar to that utilised by Lean thinking.

Some observations based on my experience of implementing a dashboard include the following.

• The majority of the data I require needs to be manually entered, which is time consuming. However, I am looking at ways to automate.
• The data is not near to real time and in most cases days or a week old. Unfortunately, this is something that cannot be easily rectified with the current systems.
• The visibility system uses Microsoft Excel which is readily available and is able to be printed out on an A3 sheet.
• I currently use my 19 inch computer monitor to view the dashboard which works well for me, though I could see benefits of it being projected on a large screen, especially if it were located in the section.

In summary, making a dashboard based on Mike Brooks' experience was easier than I thought. Most organisations have the key drivers at hand with the hard part being able to collate it into a visual dashboard. I am extremely satisfied with what I have produced and the information it provides me on all aspects of my current business. It is simple, clear and concise and I believe it has improved the way I prioritise and manage issues. I will continue to refine and improve readability as well as try to automate data input.

I believe that implementing a dashboard to enhance visibility of your organisation and seeing what results you can gain, is a worthwhile exercise. It doesn't have to be as high tech as Chevron in order to gain results. You may well be surprised by the benefits that a dashboard can provide to you and your organisation.