

Lean Manufacturing is more than 5S

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In a recent court case in the high court of New Zealand I was engaged as an expert witness on Lean principles. It became clear from the evidence given, that the lean facilitator of the carpet company which was the subject of the class action, who was to provide leadership to the New Zealand operations failed to understand the simplest of the Lean concepts. He believed that if you practiced 5S then this was enough to ensure continued growth and success.

From early 2000 to April 2002, the improvement in the company performance using lean principles when I was leading the team of General Managers and senior staff, was outstanding. The finished goods inventory as reduced by in excess of A\$11Million at the same time as the on time deliveries were improved from 31.6% to 99% for the top 20 customers and 95% overall. The company withstood a 6 week strike since the \$11M provided a very timely and useful financial buffer.

In April 2002 the company elected to change the way it was administering the New Zealand operations and I was told my services were no longer required and the leadership of the program was transferred to an internal facilitator. Unfortunately he was a trained accountant and could not grasp the major principles of how the program had worked during 2000 2001 and up to April 2002. In court, the facilitator claimed that the original program had reached a point of diminishing returns. How wrong he was.

The successful program designed and implemented in 2000 involved a strong focus of practicing rule number 4 as discussed in detail in “Competitive Manufacturing Management....Velocity” which is available as a free download from my website www.blakemore.com.au.

The table below illustrates the possible further improvements in the performance of the company for the manufacture of Synthetic carpet if the facilitator had understood the simple rules of Lean as defined on page 44 Table 2.1 of the above publication and the improvements possible are summarized below in the following table.

Staged Improvement in Performance in Lead-time Reduction and Working Capital Reduction for Synthetic Carpet

	Start 2000	April 2002	Forecast Possible	Forecast from Int Stage
Planning Days	42	7	1	1
Production Days	21	10	5	2
Shipment Days	2	2	2	2
Total Lead Time	65	19	8	5
WC\$ Reduction	0	\$11million	\$15Million	\$18Million

After April 2002 the momentum was lost and the facilitator decided that 5S was enough. This narrow view contributed greatly to the ultimate failure of the company in 2007. With the correct leadership and understanding and facilitation the company would still be trading as a successful entity but instead the bank withdrew its support as the company abandoned its policy of maximizing the made to order component and minimizing lead-time. The loss of focus and understanding meant that the response time for customer demand increased and this combined with a policy of forward dating accelerated the demise of the company as the working capital increased. All this was avoidable if the facilitator had been strong, understood the principles and showed strong leadership.

The principles of Lean Manufacturing are often misinterpreted as are terms like kanban and obeya. The original concepts resulted from the work of Dr. Deming and Toyoda following Dr. Shewhart. American car manufacturers were very slow to pick up the principles despite the fact that Dr. Shewhart and Dr. Deming were both Americans. These principles can be applied universally.

The real power of Lean is maximizing the value added part of the process and system with an assiduous focus on quality and decreasing lead time by harnessing the creativity and innovation of all the staff. The process never ends. It is all about Velocity, speed with vision and direction.