

Lean Adoption: What Are Canadian Manufacturers Not Doing?

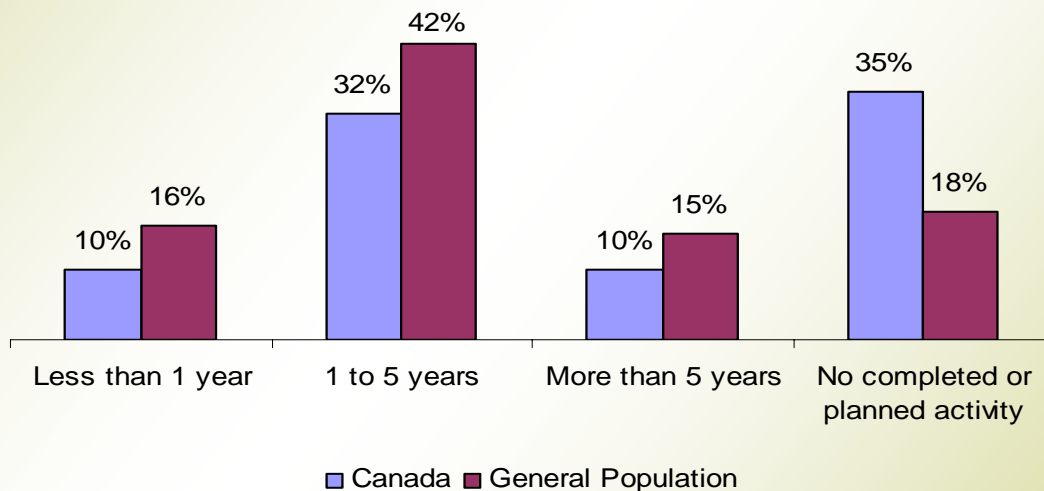
Market Segment

Results from the recent Aberdeen report "[Roadmap to Lean Success](#)" indicate that 35% of Canadian manufacturers do not have any activity planned for Lean adoption. While still early on in their Lean adoption journey, Canadian manufacturers need help from Lean consultants as well as technology to achieve their primary goals: improving operational factors and profitability, and sustaining Lean culture.

Analysis

Lean is a philosophy that espouses continuous improvement, the simplification and standardization of business processes, and the elimination of all forms of waste. The main goals for adopting Lean are to deliver what the customer wants, when they want it, at the least price, and with the best quality. Companies that are mature in this game are implementing Lean measurement and control programs to accomplish this goal.

Figure 1: Canadian Manufacturers Are Still Early In Their Lean Adoption Journey



Source: AberdeenGroup, February 2007

In the current competitive market, manufacturers are getting a tough message from the executives to “do more with less.” Canadian manufacturers are faced with a similar dilemma and are therefore moving towards the path of Lean adoption. However, the Canadian manufacturers are relatively new to this philosophy in comparison to their peers in other geographic regions. Results from Aberdeen’s survey of manufacturers with Lean strategies show that more than half the Canadian manufacturers have just started to adopt Lean in their supply chain, and across the enterprise. Even while measuring the general Lean adoption rate, statistics showed that Canadian manufacturers are relatively new to the Lean world (Figure 1)

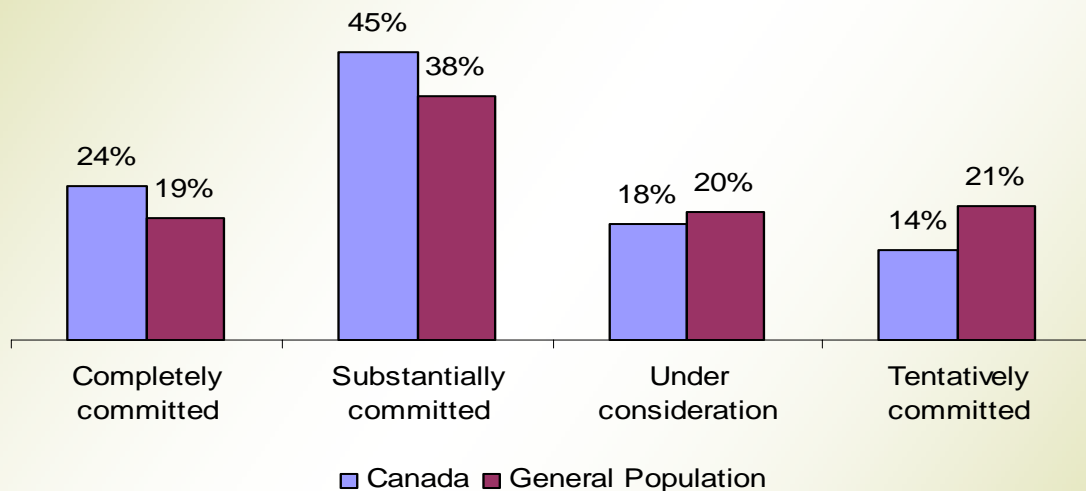
Get It from the Top

Although most of the challenges manufacturers are facing are similar, there is one specific challenge that has plagued Canadian manufacturers: They are 2.5 times more likely to face the challenge of *front line teams that are not willing to capture and share information* when compared to the general population. The step that Canadian manufacturers are taking to counter this challenge is to *gain management support*. They are twice as likely to follow this approach to answer the distinct challenge they are facing than their peers.

Recommendations for Action

- √ Increase the adoption rate of Lean tools (such as Kaizen, Kanban, and total productive management [TPM]) to increase efficiency in the manufacturing process.
- √ Utilize web based applications to facilitate real time comparison of production data with KPI.
- √ Get help from Lean consultants to decrease the learning curve.

Figure 2: Strong Management Commitment



Source: [AberdeenGroup](#), February 2007

Canadian manufacturers have been successful in following the approach that they have taken. This can be seen in the increased commitment from their top management for their Lean initiative (Figure 2). In fact, Canadian manufacturers are 25% more likely to have their top management completely committed and actively engaged in their Lean initiative.

Tracking Lean Performance Indicators

The key for success in Lean adoption lies in two important factors. The first is process standardization and the second is continually looking for ways to improve. To get to both factors, it is imperative that manufacturers have the ability to measure, set standards, and work towards improving performance through those standards.

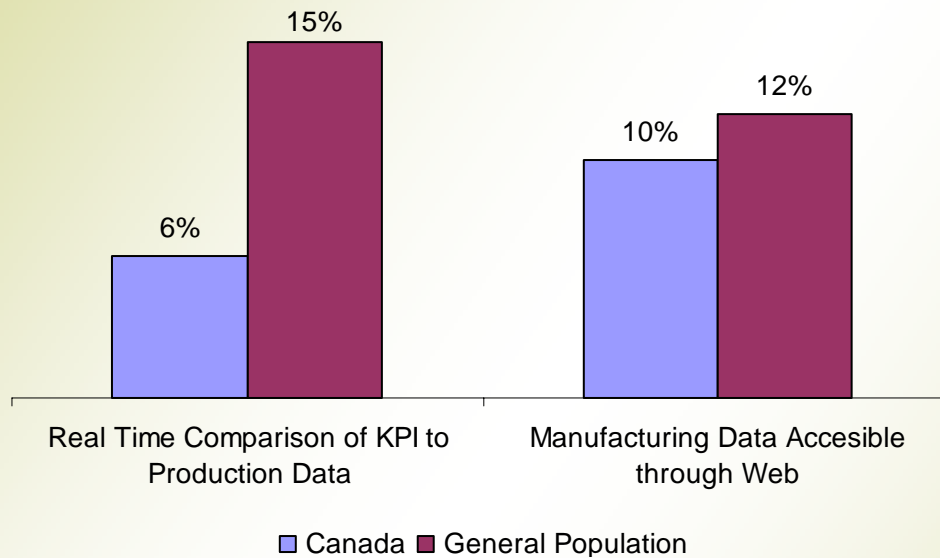
Canadian manufacturers are more likely to measure Lean metrics when compared to the general population. In fact, they have taken a lead in measuring the following Lean metrics:

- OEE (Overall Equipment Effectiveness)
- Cycle Time

- Days of Inventory
- Cost per Unit

But the question here is whether they are able to convert the best practice of performance measurement into tangible advantages for their manufacturing process. Measuring performance is one thing and using that measurement to drive improvement in the process is another. While the Canadian manufacturers are successfully able to follow the first step, they are facing challenges in using the metrics for process improvement.

Figure 3: Utilizing Technology for Measuring Performance Metrics



Source: [AberdeenGroup](#), February 2007

One of the major reasons for this shortcoming is the lower adoption rate of technology (Figure 3). The ability for manufacturers to access real time data could be very crucial when it comes to comparing the actual production data with the established standards. A manual approach can be a real bottleneck to keeping track of the performance improvement of the manufacturing plant. Canadian manufacturers are 2.5 times less likely to use real time technology for comparing key performance indicators (KPIs) to the production data. Closely connected to this factor is the use of web based applications to access manufacturing data. Web based communication is a primary way for manufacturers to get access to real time data from the shop floor, and across the enterprise. Canadian manufacturers are also 20% less likely to use web based applications to access manufacturing data.

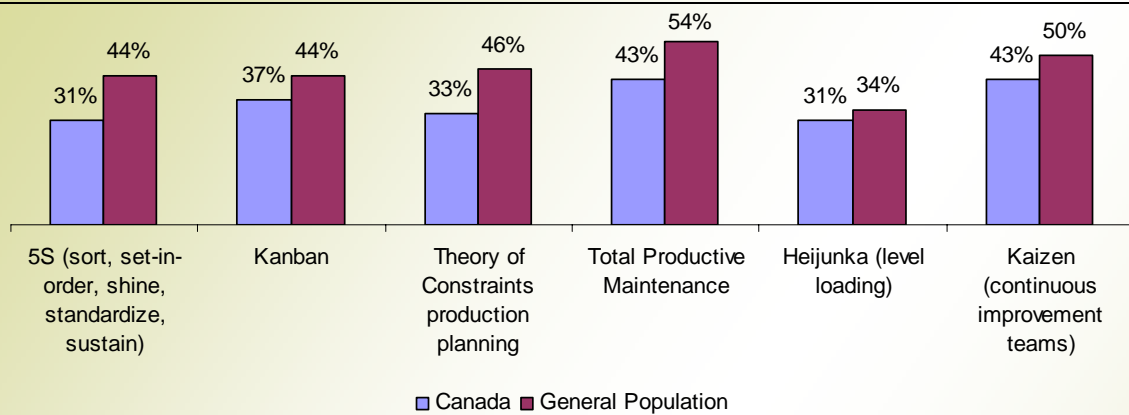
Bombardier Aerospace

"Bombardier Aerospace has an extensive Lean Manufacturing program and is also implementing ERP across its supply chain. We see both initiatives as complementary. The challenge is to plan our resources and integrate our processes using ERP then to execute with minimal waste using Lean techniques. This requires applying new thinking to some of our traditional supply chain approaches."

*Verner Baird, Vice President ERP,
Bombardier Aerospace*

Adding to the agony of lower technology rates comes one additional problem: slow adoption of Lean tools. Manufacturers in other geographic regions have taken a good lead in using Lean tools (such as 5s, Kanban, TPM, and Kaizen) in their manufacturing processes (Figure 4).

Figure 4: Lean Tool Usage

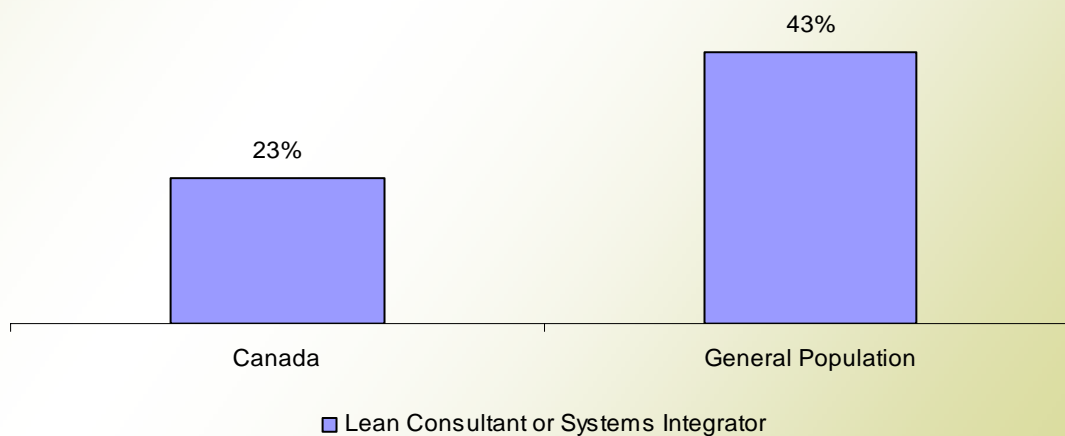


Source: AberdeenGroup, February 2007

Manufacturers Use External Domain Expertise

While being relatively new to the Lean initiative, it is going to take some time for Canadian manufacturers to increase the technology adoption rate. Another option for Canadian manufacturers is to use external help. They are in ideal position to pursue this strategy, taking into consideration the increased commitment from the top management. On the other hand, the data paints a different picture: Canadian manufacturers are 87% less likely to use help from Lean consultants when compared their peers (Figure 5). Getting somebody with suitable domain expertise in Lean to work with the internal workforce can significantly decrease the learning curve for the employees, and can also help to develop a Lean culture around the organization.

Figure 5: Call for Help



Source: AberdeenGroup, February 2007

Conclusion

While still early in their Lean journey, Canadian manufacturers are following the right path by getting top management involved in the Lean process and tracking Lean performance metrics. But, Canadian manufacturers still have a long way to go before achieving efficient and optimum performance. Canadian manufacturers should use the help of Lean consultants to speed up their pace for adopting Lean, and should use more Lean tools in the manufacturing process.

Related Research

[*The Lean Supply Chain Benchmark Report*](#),
September 2006

[*The Lean Benchmark Report: Closing the Reality Gap*](#), March 2006

Upcoming Research

Shop Floor Data Integration, February 2007

Benchmarking Manufacturing Execution
Systems, March 2007

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