

Best Practices

Ten Lessons for Achieving World Class

So you want to achieve world class performance levels? Where to start, how to lead the change the process, and how to effect the change are key questions that must be answered. Tough questions, with no simple answers.

John Black thinks he has the answers. Black, former Director of Lean Manufacturing at Boeing who led that company's Lean effort, has distilled the learning he acquired during that process into what he calls Ten Lessons for World Class. Black's Ten Lessons are included in his book, *A World Class Production System* (Crisp Publications).

What is *world class*? According to Black, it has a very precise definition. "*World class* means you won't settle for any level of defects – it means zero as a target is achievable and you are going to marshal all of the resources of the enterprise to get there," says Black. "It is important if you want to stay in business forever. Context and metrics are simply Toyota's passion. They engage in the relentless pursuit of waste by focusing on how the work gets done – cost reduction by Kaizen everywhere and everyday, measured simply by quality, cost, delivery, safety and morale with these metrics visible from the top to the bottom of the organizational pyramid."

Black explains that world class can be measured. He says the overarching metrics are Inventory Turns (annual cost of goods sold/inventory), where the world class target is 20 or more; Asset Turnover (annual sales/total assets), where the world class target is 3.33 or more; Productivity

Ten Lessons for World Class

- Lesson 1: People are the key to world class, not technology.
- Lesson 2: If you are going uphill and taking one step at a time you are headed in the right direction.
- Lesson 3: Without the understanding and knowledge of the Toyota Production System, you are a small ship in a heavy fog without a reliable compass.
- Lesson 4: Employee involvement is the foundation. Without it in place, you can't build a world-class production system.
- Lesson 5: The methods, revolutions, and thresholds that must be crossed to compete in a global market can not be accomplished from the bottom up: they have to start from the top down.
- Lesson 6: The goal of a world-class production system can only be achieved with a JIT Promotion Office to help promote the process.
- Lesson 7: If you're not simple, you're not fast, and if you aren't fast, you can't win.
- Lesson 8: Hiring consultants to come to your company, collect data, and feed it back to you with a strategy that requires you to spend money, add people and buy expensive machines and equipment means one thing...you are really stupid.
- Lesson 9: In measuring progress toward the vision, metrics must be few, simple, meaningful, and directly linked to visual targets in the workplace.
- Lesson 10: The greatest opportunities to eliminate waste are in the corporate "waste" land: the office, the engineering floors, factories, and the service industry.

Source: John Black

(annual sales/employee), where the world class target is \$200,000 per employee. Department level metrics are Quality, Cost, Delivery, Safety, and Morale. Metrics at the Gemba (workplace) level come from Kaizen improvement and are usually space, inventory, lead time, quality defects, productivity, setup, cycle time and others. Top level metrics are deployed using Policy Management (Hoshin Kanri).

“All these metrics speaks to a different philosophy about Price, Cost and Profit,” says Black. “The traditional North American view is $\text{Price} = \text{Cost} + \text{Profit}$. In this equation Price is a dependent variable, and Profit is said to be a God given right. In the Lean view $\text{Profit} = \text{Price} - \text{Cost}$. Price is an independent variable determined by the customer, and Profit is a privilege earned by reducing costs through continuous improvement. Leaders of Lean organizations make Kaizen their weapon to use against competitors, and don’t whine about a level playing field.”

Black says the biggest obstacle to achieving world class in companies today is the over-reliance on short-term thinking. He points out that today’s leaders are too impatient to tackle the mundane but critical job of identifying and eliminating waste in their organization. He also says business leaders have to get beyond relying on technology to provide the answers to all of a company’s problems. “To get started on becoming world class, leaders must make a leap of faith and first believe that the competitive advantage to be gained in the marketplace comes from unleashing the creativity of people and not from promoting technology,” says Black.

Black’s Ten Lessons are derived from his experiences at Boeing. There, he worked with Lean sensei Chihiro Nakato of Shingijutsu Co. Ltd., a Japanese consulting firm comprised of Ohno disciples from Toyota, and saw first hand the impact and power of Lean thinking.

Working with Nakao and other Shingijutsu practitioners gave Black incredible insight into the power of the Toyota Production System (TPS), a truly Lean system. Shingijutsu’s approach to transforming Boeing was based on the notion of Kaikaku, or radical change. At Boeing, once the initial Kaikaku had been successfully implemented, the transformation process is sustained and improved via incremental improvements realized through Kaizen.

“Nakao teaches that radical change comes with the implementation of Lean which means the synergy of Kaizen ultimately dismantles the old and recreates the new over a long period of time. It is a concept not understood in North America because we are impatient,” says Black. “The process starts with point to point improvements, then connected, then expanded and then cubed in terms of flow and organizational structure. It is ‘pick and shovel’ work, not particularly fashionable or flashy, but substantive and not well understood. Organizations tend to ‘dabble in the process. The real benefits are known by leaders who understand that the significant, meaningful improvements come from the basic understanding of flow – they don’t originate in the board room.”

Black says Nakao identifies seven flows: the flow of people, information, equipment, engineering, raw materials, work in process and finished goods. He explains that the Kaikaku part of the Lean process takes place when you assemble a team of people who do the work to tackle in one week the seven flows as part of a redesign or a radical surgery of a proposed facility layout proposed by catalog engineers or brick and mortar architects.

The first of Black's Ten Lessons emphasizes the human side of world class, a fact which he says is often ignored in Lean transformations. Black explains that leaders must believe that TPS is based on a people building philosophy and that cost reduction isn't achieved by laying people off. "Leaders who don't believe that will never be able to experience the full impact of Lean Production. Companies must put in place a no layoff policy and this has simply never been the North American way," says Black.

Lesson 4 (Employee involvement) is another critical one. However, Black explains that it needs to be balanced with top-down leadership. "The plan for implementation must start by leading the start up efforts going on at the bottom of the organization and then continue to provide air cover to champions and others as Lean is implemented," notes Black. "Leaders have to stay engaged, not from the board room, but from the factory, office or shop floor. We say 'Wash Your Hands' five times a day – which means go where the waste is, get your hands dirty and search out waste like Colombo, not like Sherlock Holmes."

Companies interested in applying the Ten Lessons and moving towards world class should first acquire an understanding of the TPS, according to Black. Once they have done that, he says the next step will be for them to decide if they have the focus, drive, and stamina to move forward with a well thought out game plan that turns the entire organization into one which is horizontally aligned, people powered, and charged with a waste elimination culture that is sustainable over the long term.

Black says world class best practices are built not by applying programs or quick fixes, but by systematically applying the Lean principles of the TPS. "Too many leaders want a quick fix, the brand of the month, a way to move the organization forward without really getting engaged with the alligators," asserts Black. "Six Sigma, for example, is a point improvement tool that slowly improves quality while the organization is dying a slow death. Organizations don't have the time to wait; while they are waiting for the results of Six Sigma they will get their lunch eaten in the marketplace. They first must start with the concept of flow which leads them to all the tools, including Six Sigma."

Black's final piece of advice for companies wanting to implement best practices based on world class: get started now or you'll be too late. "If you are still thinking about implementing Lean today, it may already be too late," says Black. "A few healthcare organizations in America are moving forward because they have decisive leadership. But the overall list of successful companies in *Lean Thinking* by Womack and Jones is a short one, as is the list in *Good to Great* by Jim Collins. It is simply the case of who are you betting on, the tortoise or the rabbit – most bets are on the rabbit. Lean is not glamorous.

You will not win American Idol implementing it. To paraphrase Dr. Deming: 'it is not for the timid or fainthearted,' and sadly 'management does not really know what to do.'"