



Applica's New Edge

By Emily Adams, *Managing Times* Editor

When economists and everyday pundits discuss the miraculous economy of the late 1990s, they often fall into a common trap. They bandy about phrases such as *tech bubble* and *irrational exuberance* while forgetting the very foundation of the largest growth cycle in U.S. history: manufacturing.

It was manufacturers who slashed waste, cut inventories to find new capital and increased productivity every year – freeing the capital to be invested in new technologies and pay more for valued employees. The high-tech industry boomed in the wake of the hard work of scores of manufacturers.

At few places has this hard work been more apparent, more transforming, than at Applica Consumer Products, Inc. A fierce competitor in the small appliances industry, Applica has ignored much of the conventional wisdom of the past decade and taken chances that would make most executives gasp. Those risks have put Applica where it is today: a company growing leaner by the moment, uniquely positioned to dominate its industry in a way that most of its competitors never saw coming.

To understand the magnitude of change, we should begin in 1995, in the Black & Decker Household Products plant in Queretaro, Mexico. A colonial town in the middle of the country about two hours north of Mexico City, Queretaro is dominated by a 500-year-old aqueduct once constructed to carry water from nearby hills to a convent. Likewise, the plant was constructed on ideas that seemed, if not ancient, then at least creaky.

"When we first saw the plant, they were working on a four-second takt time, running two huge conveyor belts that were surrounded by inventory," Mark Oakeson, a founding partner of TBM recalled. "We knew they had to find a consistent flow that made sense."

Albio Espinosa, brand new manager of the plant, had his own marching orders. In November 1994, he had been given the job with this challenge: reduce warehouse inventory by 50 percent.

"The engineering director started laughing when he heard this. He said that was crazy," Espinosa remembered with a smile. That first year, Queretaro jumped in with 20 *kaizen* events and each one was like a minor earthquake.

"By this time, I had a real clear picture in my mind of

what I wanted the plant to be. I knew we could improve and turn this factory into something two or four times better than what we had. However, nobody believed it. Most of the older staff said I was crazy and would drive the factory into bankruptcy," Espinosa said.

There were fierce arguments on the factory floor and in the offices. They shut the factory down for two weeks in December to replace one big line with three working cells. Anxiety levels rose, but within 14 months, Espinosa had slashed warehouse inventory by 50 percent and incorporated most of the basic ideas of one-piece flow and lean manufacturing. He was ecstatic.

Over the next two years, Espinosa continued to push. More cells were put into place. Machines were rearranged to enhance flow; boxes and excess materials disappeared from the floor. Overall inventories had dropped by nearly 70 percent by 1998. And that's when the next bombshell hit.

Strategically, Black & Decker had decided to consolidate their three plants to one in the Household Products group. Executives took a close look at all three sites – Malaysia, North Carolina and Mexico – and it was Queretaro that came out on top. Now, the plant had to incorporate two other operations and an expanded product line, adding toaster ovens and coffee makers to irons and blenders. While other plants were misinterpreting the concept of lean and outsourcing everything, Queretaro was in-sourcing like mad – even while they were creating partnerships among suppliers, drawing them close and starting to get direct shipments to the factory floor.

"Asheboro was producing no more than 12,000 units per day at its old site. Right after the transfer, we were producing 14,000 per day – and this, after we shrunk their manufacturing area by 50 percent," Espinosa said.

While still incorporating elements of the other two plants, Queretaro leadership also started Phase II of their lean journey, concentrating on implementing Total Productive Maintenance, creating a machine-build group and strict quality metrics. In 1995, quality levels were right around 20,000 ppm (parts per million). By 1998, Espinosa's team had raised the level to 200 ppm, just by implementing one-piece flow, and he knew he could slash that number again. (Today, Queretaro is at 50-70 ppm and Espinosa is aiming at zero ppm, after launching a Lean-

Sigma Green Belt initiative.)

Just one year into Phase II, Black & Decker sold their turned-around property to the corporation that was becoming Applica, Inc.

Born out of the Windmere Corporation, which specialized in hair dryers and curling irons, made in the Durable Electrical Metal Factory in China, Applica was remaking itself with the addition of the Black & Decker brand. But when Applica executives understood what Queretaro could do, the newest acquisition became a standard bearer for the new corporation.

Leaders from the Durable plant visited Mexico, disbelieving, and came away converts. Since beginning, Durable has nearly doubled its production output while using 5,000 fewer workers and reduced manufacturing square footage from 2.5 million to 1.8 million. It didn't take long for leadership in the Miami corporate offices to decide to begin a lean journey of their own.

And here's where the plans became truly groundbreaking. After years spent in the trenches of an all-out price war with other small appliance makers, leaders like President & COO Harry Schulman knew that the strategy was nearly played out. Cost cutting was beginning to dead-end. To survive – to win – Applica needed to truly differentiate itself. In a senior management strategy session with TBM, Schulman and his team looked down the distribution chain and saw a new field of battle.

Schulman is now preparing for the end of forecasting as we know it. Intent on removing waste and excess inventory from the distribution lines – both in Applica's warehouses and in those of his top customers – Schulman and Espinosa are now sweeping out finished goods to prepare for the future. (Espinosa is now Managing Director of Applica Manufacturing.)

So far, they have excised more than \$80 million in finished goods inventory and are partnering with two major retailers to get new finished goods to store shelves as directly as possible, cutting out time spent in warehouses.

"Our speed to market saves our customers money because they don't have to go through weekly or bi-weekly replenishment or maintain large quantities of inventory to meet their shelf demand," Schulman said recently, ticking off the benefits on his fingers.

"If we can replenish their actual sell-through on a weekly basis, they don't have to predict or forecast. And then we can eliminate the need to sell-in. No more guessing. And we can eliminate markdown sales for old products. We can get new, innovative products to market more quickly – and that boosts the image of both the maker and the store."

Getting retailers exactly what they want on their shelves, in advance of the competition – this is the new gauntlet Applica is throwing down on the field of competition.