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Rapid Continuous Improvement and PDCA at HON

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Danny Jones provided a chronological accounting of HON's journey to Lean over the last 16 years, a conversion that continues today. In the late 1980's and early 1990's, HON, one of the largest producers of middle-market office furniture, was a company of strong financial performance, doubling in size every seven years. It seemed there was little need for change – business was good. But customers began to demand shorter lead times, complete and on-time deliveries, and higher-quality products and services. The perception at HON was that it would be costly to improve on delivery cost and product quality. How could it effect change and still maintain its strong financial position? In 1992, HON turned to Lean.

The company's conversion through Lean started with visits by top management to Japan, coupled with kaizen training and shop floor break-through events led by a consulting company from Japan. Just-in-time, jidoka, standard work, 6S were the Lean tools HON used to get started. Development of the HON Production System started at the same time. Jones suggested that getting a 6S program going first will help eliminate waste through cleaning and organizing a given area. Follow the 6S with standard work.

In 1994, HON instituted 'policy deployment', the company's method for focusing its factories, plants, and over 11,000 members (with 800 employed at the Cedartown plant) on what the objectives and goals are for the coming year. Key elements of policy deployment include formulating and deploying company views, turning policy and strategy into plans and actions, and rewarding the achievement of goals. HON's strategic planning spans three years at the Cedartown plant, with a one-year action plan developed from the strategic plan. Policy deployment measures are built around the one-year plan and what the plant wants to achieve (customer delivery improvements, productivity improvements, cost-lead time-WIP reductions are examples).

The Plan-Do-Check-Act cycle can operate within any time frame – one week, one month, or one year. HON tracks its metrics year-to-date against goals, with monthly reviews at corporate, plant staff, and factory member levels. Key to HON's strategy is to have as many people involved in the process as possible.

In 1995-1996, Hon's focus shifted to training and quality, with administrative/office kaizens and shop-floor events. Many of the shop-floor events were designed specifically around HON equipment that is designed and built in-house. 1997 saw the introduction of several concepts, including the 'three P process' – production preparation process, the member proposal system, rapid continuous improvement in distribution centers, and the focused factory management philosophy. The latter concept put a manager in charge of a factory line, with responsibility for profit/loss and policy deployment, overseeing anywhere from 40 to 100 people,

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including an engineering and maintenance staff. This was a big change from the 'normal' situation of a general manager for the plant with superintendents on each shift.

Jones started using value stream maps in 1999, commenting that he wished he had done so in 1992. Even though some managers are reluctant still today to use value stream mapping, Jones said they are the quickest way to help both managers and members understand where the opportunities lie. The value stream map is less for managers than for group leaders, supervisors, engineers, and people on the shop floor, to be able to see where inventory levels are high or where downtime is high. Knowing your current state and your future state can tell you where to spend capital and focus resources to fix issues in the line.

2000 brought benchmarking against other world-class companies (Toyota, Boeing, Johnson Controls and Merck) and a member suggestion program. In 2001, RCI rotation for shop floor members was instituted, where 3 to 8 members bid to spend 13 weeks in Jones' department for training and working on RCI events and projects.

Business simplification tools (electronic just-in-time) allowed the plant to put former cardboard carton storage space to work as manufacturing space. The visual factory gives HON a color-coded pallet system (vertical file drawers are red, lateral files are pink) and a color-coded kanban system. Production control boards are instrumental in providing feedback and corrective actions hour-by-hour so you know how your day is going before it has ended.

Hon's Japanese consultant pushed to ensure that nothing in the plant was over 5 feet high; members should be able to handle what they need without waiting on a forklift. For other hardware that may be needed, an hourly tugger cart is pulled through each factory by a shop floor member. Plans call for an AVG (automated guided vehicle) that will run off a laser system to replace the tugger cart.

If rapid continuous improvement had not been instituted, Jones estimated that HON would need at least twice the staff and space it currently has to do the work. His secret to success: develop a Lean culture by dedicating full-time resources, by dedicating time, and by ensuring each factory area owns a piece of the business - all through use of a policy deployment strategy.

Be motivated by shop floor results. It takes twelve events to understand the principles of RCI. Develop in-house champions by discovering early adapters (usually 3 to 5 percent of the workforce). By the same token, be aware of resisters and have a plan to get rid of them. Be prepared to deal with freed-up assets (no jobs have been lost at HON due to an improvement). The Lean journey requires time and people to make it sustainable.