

The Lean Manufacturing of Information

Exposing the Hidden Factory



Introduction

All things evolve including information technology systems. Trends come and go with fads, gadgets, hype and the ever luring promise of the next generation. The pendulum of evolution has proved to be circular and we're about to come full circle.

What gave birth to the "Year of the LAN" in 1985 and the predicted demise of the mainframe? It was anything cheaper than a million dollar mainframe upgrade in the infamous glass house. The personal computer introduced productivity tools without the Data Processing department bureaucracy. It enabled distributed processing and off loading to lower cost client/server architectures - independent of any formal business organization. There were a few PC's and islands of departmental networks showed glimmering lights of hope. It worked, PC's reduced our costs and increased our productivity, so we built more - one on every desktop, e-mail for everyone and the enterprise PC network was born.

Now twenty years later there are millions of personal computers interconnected privately and via the Internet; costing businesses millions of dollars to maintain and upgrade - again. What the Data Processing department of 1985 thought to be a fad became a critical business tool for the production and distribution of information. New organizations, command and control centers, help desks and technical support staff now rule the kingdom of Information Technology - not from a glass house but rather a Hidden Factory.

In the early 1900's Henry Ford revolutionized manufacturing with the moving assembly line. Ford broke the tradition of craft production by devising mass production to take advantage of economies of scale. Mass production adopted large lot sizes and faster automation that focused on efficient use of individual machines and individual operators. To compete with US manufacturers in post WWII Japan, Toyota devised a new production system based on smaller lot sizes and just-in-time delivery. The Toyota Production System, now known as Lean Manufacturing, is sweeping the world as the next paradigm beyond mass production by focusing on value-added flow and efficiency across the entire value chain.

Lean manufacturing principles are migrating to every business function and 2006 will give birth to the "Year of Lean IT processes." *The Lean Manufacturing of Information - Exposing the Hidden Factory* links for the first time Lean Principles to Information Technology as a manufacturing process for the production, security, transportation and storage of non-structured data and communications.

A shift is occurring around the world – again
