



Lean Enterprise Institute

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IMMEDIATE RELEASE

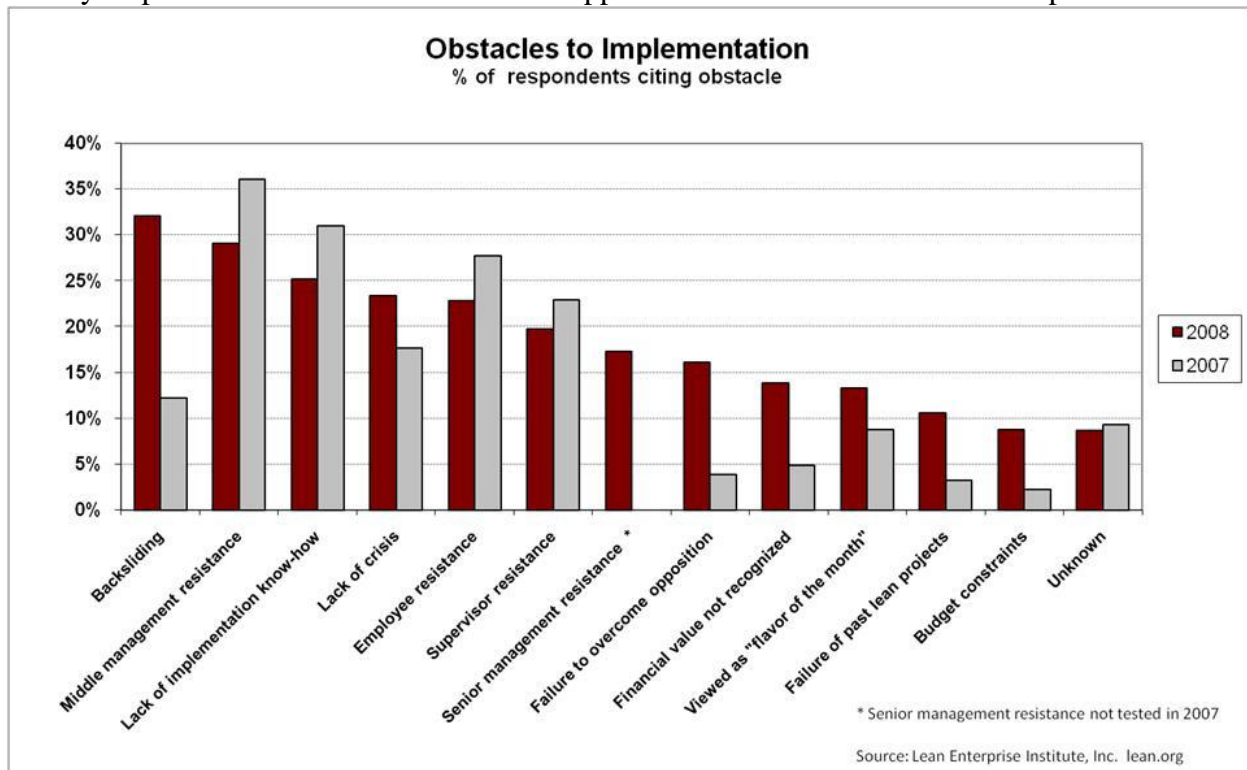
Backsliding is Back as the Biggest Obstacle to Lean Transformations

Companies, focused too much on individual lean methods, must replace traditional management with lean management, according to management expert James P. Womack.

Cambridge, Mass. Oct. 16, 2008 -- Companies implementing lean production techniques are struggling to sustain the gains, according to a new survey conducted by the nonprofit Lean Enterprise Institute (LEI).

Asked to identify the biggest obstacles to implementing lean principles, 32.1% of managers and executives surveyed recently selected “backsliding to the old ways of working” as number one, compared to just 12.2% in 2007. (See the [2007 survey results](#) in the Media Center at lean.org)

The number one obstacle cited last year, “middle management resistance,” to lean conversions fell to second place, dropping seven percentage points from 36.1% last year to 29.1% this year. Survey respondents were asked to select all applicable obstacles from a list of 13 possibilities.



“The reason companies are having trouble holding on to the gains is that they aren’t creating management systems to sustain the lean tools they are implementing, like kanban, kaizen, or value-stream mapping,” said Womack. Womack led the MIT research team that coined the term “lean” to describe the Toyota Production System as a new type of business system.

“As I walk the value streams in a variety of companies,” said Womack, “I see the same patterns all too often -- lots of good lean techniques tied to mass-production management systems. A company can’t have sustainable lean processes without lean management that connects the improved processes to how the company is managed.”

Womack said lean management is the successor to existing “modern management” systems descended from methods perfected by Alfred Sloan at GM during the 1920s. Lean management is the name for the revolutionary system created at Toyota in the 1950s and 1960s that transformed traditional approaches to product development, supplier relations, operations, customer relations, and the overall management of a company.

These changes were first described by Womack and his co-authors in the classic lean book, *The Machine That Changed the World*, (Free Press 2007/Rawson Associates, 1990). Womack subsequently co-authored with Daniel Jones, *Lean Thinking* (Simon & Schuster, 1996) that provided case studies of businesses making lean transformations; *Seeing The Whole* (Lean Enterprise Institute, 2001) that described value-stream mapping across multiple companies; and *Lean Solutions* (Simon & Schuster, 2005) that described how companies can work back from customers’ problems to provide complete solutions, not just goods and services.

For organizations to evolve beyond the current lean “tool age” focused on implementing individual methods to a new age focused on implementing lean management, managers and executives must think differently about lean, according to Womack. He said the key is to focus on the fundamental questions of Purpose, Process, and People:

- Purpose: What customer problems will the enterprise solve to achieve its own purpose of prospering?
- Process: How will the organization assess each major value stream to make sure each step is valuable, capable, available, adequate, flexible, and that all the steps are linked by flow, pull, and leveling?
- People: How can the organization insure that every important process has someone responsible for continually evaluating that value stream in terms of business purpose and lean process? How can everyone touching the value stream be actively engaged in operating it correctly and continually improving it?

“We all need to master and deploy lean tools, and our efforts of the last 10 years to do so are not wasted,” Womack said. “But just as a carpenter needs a vision of what to build in order to get the full benefit of a hammer, we need better management methods before we pick up our lean tools. Lean management is the key to doing this.”

Plan, Do, Check, Adjust

The need for lean management was illustrated by responses to two other questions on the survey. Business people were asked about their experiences using two lean management tools:

A3 Analysis <<http://www.lean.org/Bookstore/ProductDetails.cfm?SelectedProductID=246>> and Strategy Deployment <<http://www.lean.org/Bookstore/ProductDetails.cfm?SelectedProductID=156>>. Just 12% of respondents said they used A3 Analysis “extensively” and only 17% said they used Policy Deployment “extensively.”

A3Analysis, pioneered by Toyota, captures on one-sheet of paper a problem, analysis, corrective actions, and action plan. Strategy Deployment aligns strategic objectives with key initiatives horizontally and vertically. Both lean management methods are based on the scientific method of plan, do, check, adjust (PDCA).

LEI Communications Director Chet Marchwinski said “backsliding” has often been at or near the top of the obstacles list since LEI began surveying customers in 2003. It also was ranked number one in 2004 and 2006.

The results were based on 4,174 responses to an online survey questionnaire.

[What is Lean?](http://www.lean.org/WhatsLean/) <http://www.lean.org/WhatsLean/>

The term “lean enterprise ” refers to a complete business system for organizing and managing product development, operations, suppliers, customer relations, and the complete management system that requires less human effort, less space, less capital, less material, and less time to make products with fewer defects to precise customer desires, compared with traditional management.

Toyota pioneered lean management as the core of its business system after World War II. During the late 1980s, a research team headed by Womack at MIT’s International Motor Vehicle Program coined the term “lean” to describe Toyota’s system.

[About the Lean Enterprise Institute](http://www.lean.org/WhoWeAre/LEINews.cfm) <http://www.lean.org/WhoWeAre/LEINews.cfm>

The Lean Enterprise Institute (LEI) was founded in 1997 by management expert [James P. Womack](#), Ph.D. as a nonprofit research, education, publishing, and conferencing company with a mission to advance lean thinking around the world. We teach courses, hold management seminars, write and publish books and workbooks, and organize public and private conferences. We use the surplus revenues from these activities to conduct research projects and to support other lean initiatives such as the Lean Education Academic Network (www.teachinglean.org) and the Lean Global Network (www.leanglobal.org). For more information visit LEI at <http://www.lean.org>.

A demographic analysis, new in 2008, begins on page 4.

2008 Survey of the Lean Community

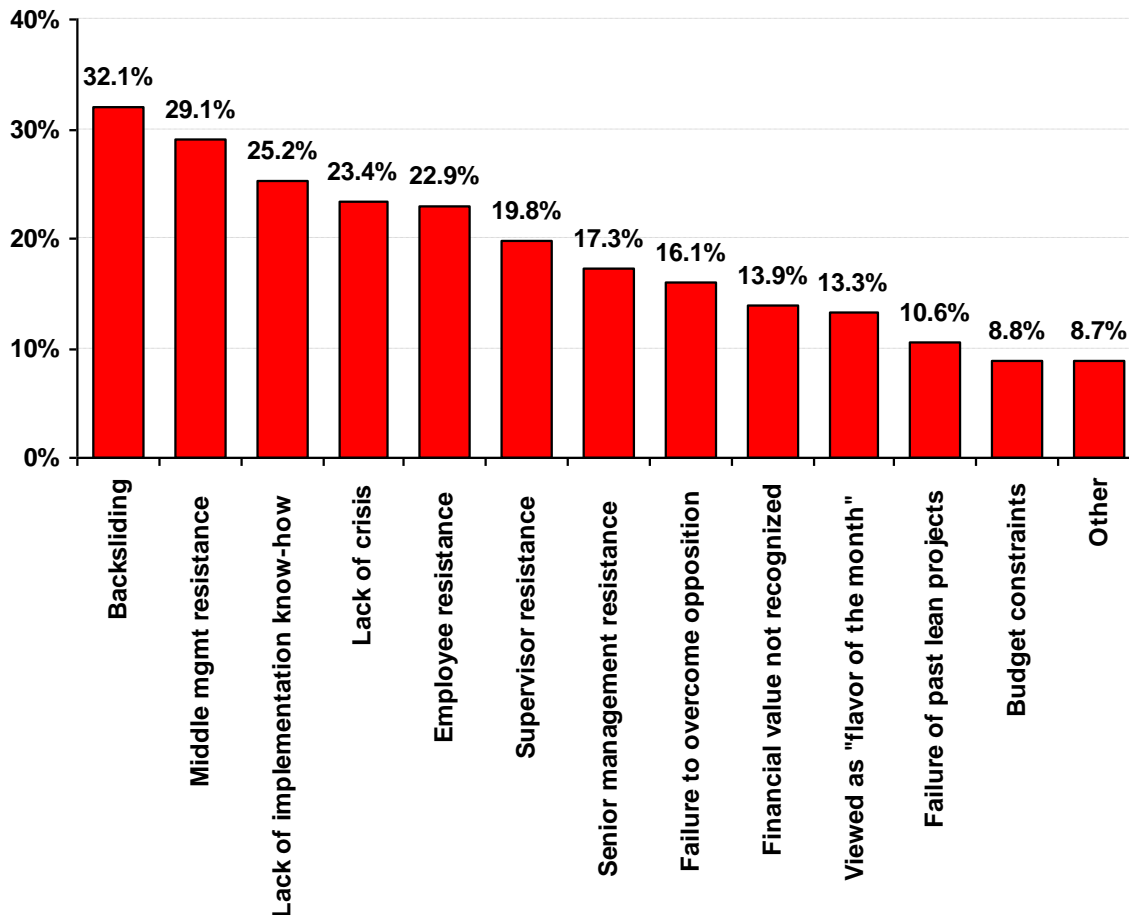
Demographic Analysis of Obstacles and Trends

Obstacles to Implementation Cited by Industry

Q: What are the biggest obstacles to lean implementation at your facility (select all that apply)?

- Middle management resistance
- Lack of a crisis to create a sense of urgency
- Senior management resistance
- Backsliding to old ways of working
- Lack of implementation know-how
- Employee resistance
- Financial value of lean methods not recognized
- Failure to overcome those opposed to change
- Budget constraints
- Supervisor resistance
- Lean is viewed as “flavor of the month”
- Failure of past lean projects
- Other, please specify

Obstacles to Lean Implementation - 2008



Composite Population Ranking:

- Backsliding = 32%
- Middle management resistance = 29%
- Lack of implementation know-how = 25%
- Lack of crisis = 23%
- Employee resistance = 23%

Baseline ranking for all Manufacturing and Service organizations:

	Manufacturing	Service
Obstacle #1	BACKSLIDING	BACKSLIDING
Obstacle #2	MIDDLE MANAGEMENT RESISTANCE	LACK OF IMPLEMENTATION KNOW-HOW
Obstacle #3	LACK OF IMPLEMENTATION KNOW-HOW	MIDDLE MANAGEMENT RESISTANCE
Obstacle #4	LACK OF CRISIS	LACK OF CRISIS
Obstacle #5	EMPLOYEE RESISTANCE	FINANCIAL VALUE NOT RECOGNIZED

Manufacturing by industry:

	Automotive	Aerospace and Defense
Obstacle #1	BACKSLIDING	BACKSLIDING
Obstacle #2	MIDDLE MANAGEMENT RESISTANCE	MIDDLE MANAGEMENT RESISTANCE
Obstacle #3	LACK OF IMPLEMENTATION KNOW-HOW	VIEWED AS “FLAVOR OF THE MONTH”
Obstacle #4	EMPLOYEE RESISTANCE	FINANCIAL VALUE NOT RECOGNIZED
Obstacle #5	LACK OF CRISIS	LACK OF CRISIS

	Durables	Electronics
Obstacle #1	BACKSLIDING	BACKSLIDING
Obstacle #2	MIDDLE MANAGEMENT RESISTANCE	LACK OF IMPLEMENTATION KNOW-HOW
Obstacle #3	LACK OF IMPLEMENTATION KNOW-HOW	FINANCIAL VALUE NOT RECOGNIZED
Obstacle #4	LACK OF CRISIS	MIDDLE MANAGEMENT RESISTANCE
Obstacle #5	FINANCIAL VALUE NOT RECOGNIZED	VIEWED AS “FLAVOR OF THE MONTH”

	Pharmaceuticals and Food	Diversified
Obstacle #1	BACKSLIDING	BACKSLIDING
Obstacle #2	LACK OF IMPLEMENTATION KNOW-HOW	FINANCIAL VALUE NOT RECOGNIZED
Obstacle #3	LACK OF CRISIS	LACK OF IMPLEMENTATION KNOW-HOW
Obstacle #4	MIDDLE MANAGEMENT RESISTANCE	MIDDLE MANAGEMENT RESISTANCE
Obstacle #5	SENIOR MANAGEMENT RESISTANCE	LACK OF CRISIS

Services by industry:

	Finance and Banking	Health Care
Obstacle #1	BACKSLIDING	BACKSLIDING
Obstacle #2	MIDDLE MANAGEMENT RESISTANCE	LACK OF IMPLEMENTATION KNOW-HOW
Obstacle #3	VIEWED AS “FLAVOR OF THE MONTH”	VIEWED AS “FLAVOR OF THE MONTH”
Obstacle #4	LACK OF CRISIS	FAILURE TO OVERCOME OPPOSITION
Obstacle #5	LACK OF IMPLEMENTATION KNOW-HOW	LACK OF CRISIS

	Retail
Obstacle #1	BACKSLIDING
Obstacle #2	LACK OF IMPLEMENTATION KNOW-HOW
Obstacle #3	FINANCIAL VALUE NOT RECOGNIZED
Obstacle #4	LACK OF CRISIS
Obstacle #5	MIDDLE MANAGEMENT RESISTANCE

Obstacles to Implementation Cited by Title

Title:

	Senior Management	Middle Management
Obstacle #1	BACKSLIDING	BACKSLIDING
Obstacle #2	LACK OF IMPLEMENTATION KNOW-HOW	LACK OF IMPLEMENTATION KNOW-HOW
Obstacle #3	LACK OF CRISIS	LACK OF CRISIS
Obstacle #4	MIDDLE MANAGEMENT RESISTANCE	VIEWED AS “FLAVOR OF THE MONTH”
Obstacle #5	FINANCIAL VALUE NOT RECOGNIZED	FINANCIAL VALUE NOT RECOGNIZED

	Supervisors	Tech Professionals
Obstacle #1	BACKSLIDING	BACKSLIDING
Obstacle #2	LACK OF IMPLEMENTATION KNOW-HOW	MIDDLE MANAGEMENT RESISTANCE
Obstacle #3	EMPLOYEE RESISTANCE	VIEWED AS “FLAVOR OF THE MONTH”
Obstacle #4	VIEWED AS “FLAVOR OF THE MONTH”	FINANCIAL VALUE NOT RECOGNIZED
Obstacle #5	FAILURE TO OVERCOME OPPOSITION	LACK OF IMPLEMENTATION KNOW-HOW

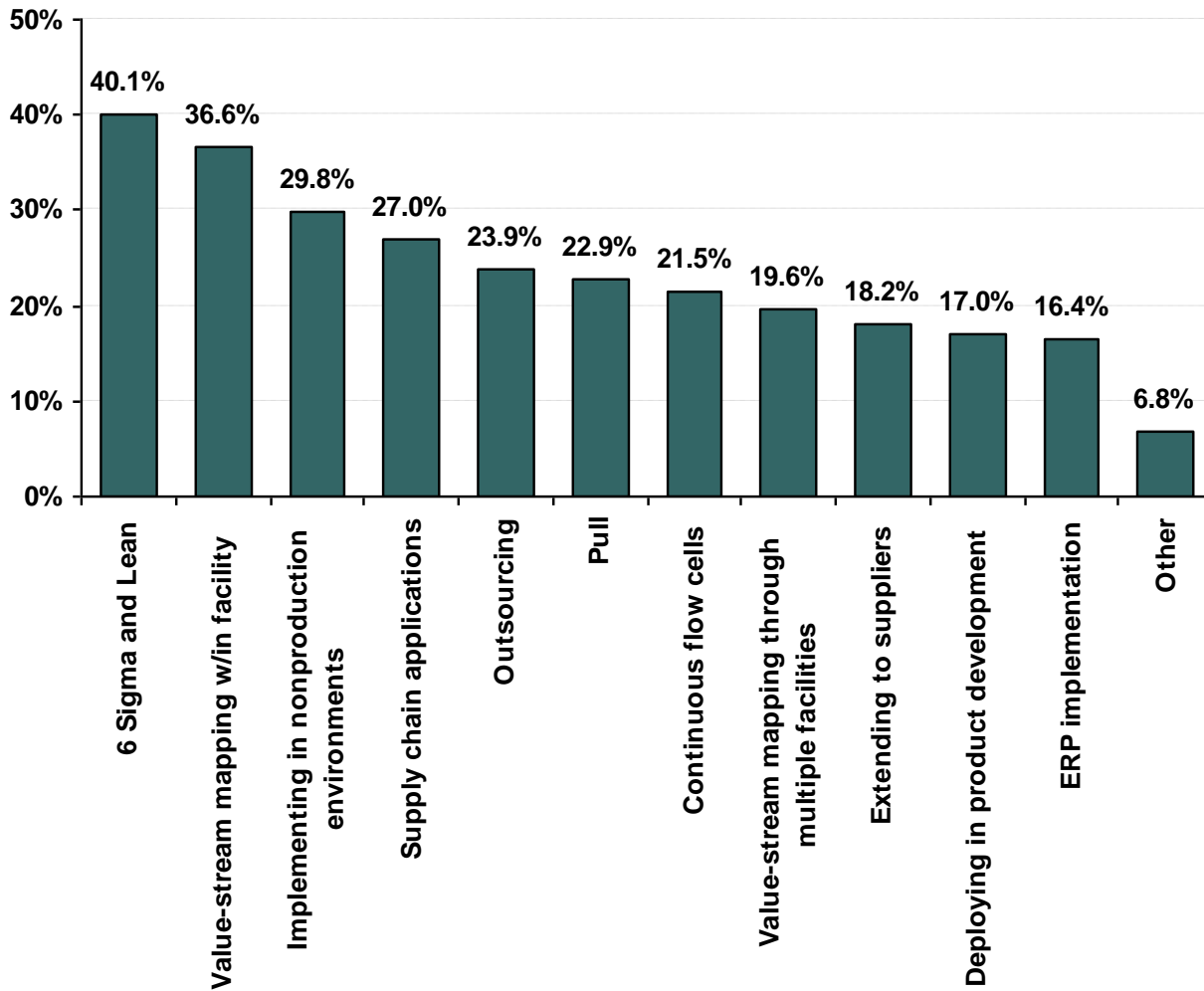
	Front Line	Support Staff
Obstacle #1	BACKSLIDING	BACKSLIDING
Obstacle #2	EMPLOYEE RESISTANCE	MIDDLE MANAGEMENT RESISTANCE
Obstacle #3	LACK OF IMPLEMENTATION KNOW-HOW	LACK OF CRISIS
Obstacle #4	VIEWED AS “FLAVOR OF THE MONTH”	LACK OF IMPLEMENTATION KNOW-HOW
Obstacle #5	LACK OF CRISIS	VIEWED AS “FLAVOR OF THE MONTH”

2008 Survey of the Lean Community Trends Cited by Industry

Q: What are the biggest trends in your industry now (select all that apply)?

- Value-stream mapping within a facility
- 6 sigma and lean
- Value-stream mapping product flow through multiple facilities
- Continuous flow cells
- Outsourcing
- Extending lean to suppliers
- Deploying lean in product development
- ERP implementation
- Supply chain applications
- Implementing lean in non-production environments
- RFID
- Pull
- Other, please specify

Current Industry Trends - 2008



Composite Population Ranking:

- 6 sigma and lean = 40%
- Value stream mapping within a facility = 37%
- Implementing in nonproduction environments = 30%
- Supply chain applications = 27%
- Outsourcing = 24%

Baseline ranking for all Manufacturing and Service organizations:

	Manufacturing	Service
Trend #1	6 SIGMA AND LEAN	NONPRODUCTION ENVIRONMENTS
Trend #2	VALUE STREAM MAPPING W/IN FACILITY	6 SIGMA AND LEAN
Trend #3	SUPPLY CHAIN APPLICATIONS	VALUE STREAM MAPPING W/IN FACILITY
Trend #4	PULL	SUPPLY CHAIN APPLICATIONS
Trend #5	NON-PRODUCTION ENVIRONMENTS	OUTSOURCING

Manufacturing by industry:

	Automotive	Aerospace and Defense
Trend #1	6 SIGMA AND LEAN	6 SIGMA AND LEAN
Trend #2	VALUE STREAM MAPPING W/IN FACILITY	VALUE STREAM MAPPING W/IN FACILITY
Trend #3	PULL	NON-PRODUCTION ENVIRONMENTS
Trend #4	CONTINUOUS FLOW CELLS	SUPPLY CHAIN APPLICATIONS
Trend #5	SUPPLY CHAIN APPLICATIONS	OUTSOURCING

	Durables	Electronics
Trend #1	VALUE STREAM MAPPING W/IN FACILITY	6 SIGMA AND LEAN
Trend #2	6 SIGMA AND LEAN	VALUE STREAM MAPPING W/IN FACILITY
Trend #3	NON-PRODUCTION ENVIRONMENTS	CONTINUOUS FLOW CELLS
Trend #4	OUTSOURCING	SUPPLY CHAIN APPLICATIONS
Trend #5	PULL	OUTSOURCING

	Pharmaceuticals and Food	Diversified
Trend #1	6 SIGMA AND LEAN	6 SIGMA AND LEAN
Trend #2	VALUE STREAM MAPPING W/IN FACILITY	VALUE STREAM MAPPING W/IN FACILITY
Trend #3	SUPPLY CHAIN APPLICATIONS	SUPPLY CHAIN APPLICATIONS
Trend #4	OUTSOURCING	NON-PRODUCTION ENVIRONMENTS
Trend #5	VALUE STREAM MAPPING MULTIPLE FACILITIES	CONTINUOUS FLOW CELLS

Services by industry:

	Finance and Banking	Health Care
Trend #1	NON-PRODUCTION ENVIRONMENTS	VALUE STREAM MAPPING W/IN FACILITY
Trend #2	6 SIGMA AND LEAN	6 SIGMA AND LEAN
Trend #3	OUTSOURCING	NON-PRODUCTION ENVIRONMENTS
Trend #4	VALUE STREAM MAPPING W/IN FACILITY	SUPPLY CHAIN APPLICATIONS
Trend #5	VALUE STREAM MAPPING MULTIPLE FACILITIES	VALUE STREAM MAPPING MULTIPLE FACILITIES

	Retail
Trend #1	SUPPLY CHAIN APPLICATIONS
Trend #2	PULL
Trend #3	NON-PRODUCTION ENVIRONMENTS
Trend #4	VALUE STREAM MAPPING W/IN FACILITY
Trend #5	VALUE STREAM MAPPING MULTIPLE FACILITIES

Trends Cited by Title

Title:

	Senior Management	Middle Management
Trend #1	6 SIGMA AND LEAN	6 SIGMA AND LEAN
Trend #2	VALUE STREAM MAPPING W/IN FACILITY	VALUE STREAM MAPPING W/IN FACILITY
Trend #3	SUPPLY CHAIN APPLICATIONS	NON-PRODUCTION ENVIRONMENTS
Trend #4	NON-PRODUCTION ENVIRONMENTS	SUPPLY CHAIN APPLICATIONS
Trend #5	OUTSOURCING	PULL

	Supervisors	Tech Professionals
Trend #1	VALUE STREAM MAPPING W/IN FACILITY	6 SIGMA AND LEAN
Trend #2	6 SIGMA AND LEAN	VALUE STREAM MAPPING W/IN FACILITY
Trend #3	SUPPLY CHAIN APPLICATIONS	NON-PRODUCTION ENVIRONMENTS
Trend #4	PULL	OUTSOURCING
Trend #5	CONTINUOUS FLOW CELLS	SUPPLY CHAIN APPLICATIONS

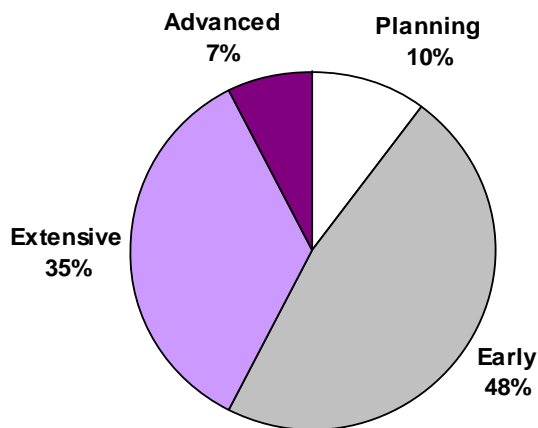
	Front Line	Support Staff
Trend #1	VALUE STREAM MAPPING W/IN FACILITY	6 SIGMA AND LEAN
Trend #2	6 SIGMA AND LEAN	VALUE STREAM MAPPING W/IN FACILITY
Trend #3	NON-PRODUCTION ENVIRONMENTS	SUPPLY CHAIN APPLICATIONS
Trend #4	VALUE STREAM MAPPING MULTIPLE FACILITIES	NON-PRODUCTION ENVIRONMENTS
Trend #5	OUTSOURCING	OUTSOURCING

Level of Lean Implementation

Lean Thinkers were asked the current level of lean implementation in their organization with the following results based on four defined categories:

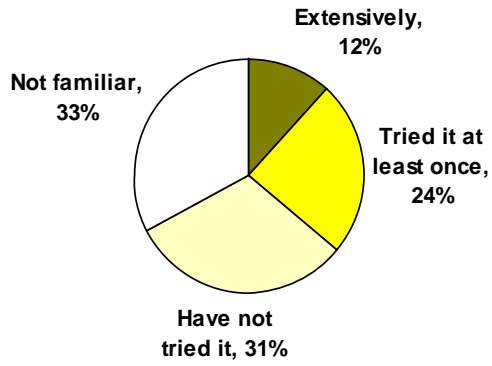
- **PLANNING:** no implementation
- **EARLY:** starting to implement in pilot areas -- some progress being made
- **EXTENSIVE:** implementation underway -- many areas of the business applying many lean tools -- solid progress being made in many areas
- **ADVANCED:** Lean has become standard way of operating -- employees, supervisors and managers understand and use lean concepts -- lean being extended to strategic suppliers

Level of Lean Implementation - 2008



In 2008, people were asked if they had used A3 reports or Strategy or Deployment Matrixes in their businesses:

Experience with Toyota-pioneered A3 Report



Strategy or Policy Deployment Matrix

