

TECH TALK

“Get a little bit better everyday” through Value Stream Mapping and Standard Work

Value Stream Mapping (VSM) is a method of visually mapping a product’s production path (materials and information) from “door to door”. VSM can serve as a starting point to help management, engineers, production associates, schedulers, suppliers, and customers recognize waste and identify its causes. The process includes physically mapping your “current state” while also focusing on where you want to be, or your “future state” blueprint, which can serve as the foundation for other Lean improvement strategies.

The current state Value Stream is all the actions (both value added and non-value added) currently required to bring a product through the main flows essential to every product. The production flow from raw material into the arms of the customer or the design flow from concept to launch, doing a value stream perspective means working on the big picture, not just individual processes, and improving the whole, not just optimizing the parts. This same process used on the factory floor can be used to analyze and improve your order entry system, credit approval process, hiring of new employees or capital accusation process.

VSM is a pencil and paper tool that helps you to see and understand the flow of material and information as a product makes its way through the value stream. The meaning is simple: Follow a product’s production path from supplier to customer, and carefully draw a visual representation of every process in the material and information flow. Then ask a set of key questions and draw a “future state” map of how value should flow. Within the production flow, the movement of material through the factory is the flow that usually comes to mind. But there is another flow, the flow of information, that tells each process what to make or do next. You will map both of these flows.

VSM can be a communication tool, a business planning tool, and a tool to manage your change process. As a recap, the first step is drawing the current state, which is done by gathering information on the shop floor. This provides the information needed to map a future state. The final step is to prepare and begin actively using an implementation plan that describes, on one page, how you plan to achieve the future state.

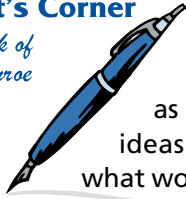
More and more organizations with successful shop-floor lean efforts are also applying VSM methods and lean principles to administrative areas. VSM provides a simple, yet thorough methodology that relies on relevant data analysis and display. It links reporting requirements, metrics, people, and lean tools to sustain improvement and promote process learning. It gives managers and employees the same tool and language to communicate.

Why value stream mapping is a good place to start your lean journey

- It helps you visualize more than just the single-process level, i.e. assembly, welding, administrative process, etc.
- It helps you see more than waste and it helps you see the sources of waste in your value stream
- It provides a common language for talking about manufacturing processes
- It makes decisions about the flow apparent, so you can discuss them
- It ties together lean concepts, techniques and helps you avoid “cherry picking”
- It forms the basis of an implementation plan
- It shows the linkage between the information flow and the material flow

President's Corner

*From the desk of
Paul MacEmroe*



It is tempting to use management fads and buzz words as an excuse not to consider new ideas. Often the hype can obscure what would otherwise be useful, logical tools which we could use to improve ourselves and our businesses.

It has been about a decade since major business schools began modifying their curricula in an effort to teach "soft skills" to their MBA students. Why? Because corporate recruiters were complaining that MBAs with technical skills often had weak "interpersonal" or "leadership" ability. Soft skills were seen as the solution to this problem. Soon MBAs could be found everywhere from military boot camps to climbing Andean peaks, all in search of those elusive soft skills.

It is not surprising that there is demand for better leaders with stronger interpersonal skills to create exciting, gratifying, successful work environments. Almost any business person will tell you that people are their companies' most important asset. This is not trite political correctness, it is reality in a period when finding, hiring and retaining skilled employees is becoming increasingly difficult. In Western New York, our universities and colleges graduate tens of thousands of students annually, yet many local companies are struggling to find talent and many expect the problem to get worse.

If these soft skills are the key to attracting and especially keeping people, as well as increasing company performance, then they must be a top priority for CEOs, presidents and senior managers. The question for these executives is, what are soft skills and how can they be obtained (without mountain climbing, if possible).

"Soft skills" may be vague and have the hallmarks of many management buzz words and fads. But, broken down into specific tools and/or skills, there is value to be had. Here are two powerful soft skills for senior managers, why they are important and how they can be developed.

Coaching

Management coaching can be defined as a one-on-one process designed to assist subordinates in identifying and resolving issues by guiding them to reach their own conclusions rather than providing "The Answer." This kind of coaching can improve problem solving, self-confidence, independence and empowerment for subordinates. Helping subordinates reach their potential will generate goodwill, improve team performance and ultimately free the Coach from always providing "The Answer." For CEOs and presidents, this means more time for studying external trends.

How can you become a good coach? Start coaching. Like any other skill, you have to practice it to improve. Remember your goal is to help with the thought process, not provide your own interpretation or direction. Ask open ended questions and avoid being drawn into providing "The Answer." Being coached yourself can be the most powerful training for coaching others, as well as an important personal and professional development tool.

Change Management

Now that your coaching has given you extra time to study external trends and formulate your business response, you can focus on change management. For business purposes, this can be defined as a structured approach to change in individuals, teams and organizations that enables the transition from a current state to a desired future state. Successful change requires the engagement and participation of all the people involved.

How can you manage change? Communicate, communicate, communicate. As a change agent, you must make the case for change by clearly defining and communicating why change is necessary. Once the organization understands why it must change, you must explain how. Describe the specific things that will change. Finally, you have to reinforce these changes with both words and actions. If you change your information system, for example, you should refuse to use data or information from the old system(s) to set an example and send a strong message. Throughout the process, you need to communicate progress to the organization while encouraging everyone (yourself included) that you CAN change successfully.

There are numerous models and texts that deal with change management such as ADKAR for Awareness, Desire, Knowledge, Ability, Reinforcement. These models can provide a framework for moving your organization through the change process. But the key is constantly communicating why you need to change, how/what to change and where you are in the process.

Soft skills may seem mysterious, vague or complex. It would be easy to ignore them, but it would be a mistake. Break them down into specific skills and don't be afraid to use them to improve your personal performance and the performance of your company.



Value Stream continued from front page

- It is much more useful than quantitative tools and layout diagrams that produce a tally of non-value added steps, lead time, distance traveled, the amount of inventory, and so on.
- It helps you “Think Green” about your business

The second practice, that will help you and your organization achieve a higher internal and external customer satisfaction, is the use of standard work practices.

Standardized Work, Process and Visual Factory

Standard work is a term used to systematize how a part is processed, and includes man-machine interactions and expected quality levels. Operations are safely carried out with all tasks organized in the best known sequence and by using the most effective combination of resources:

- People
- Materials
- Methods
- Machines

Using Training Within Industry (TWI) methods of Job Improvement (JI) and Job Instructions (JM), standard work can be developed to improve each operation that is performed. This is how the TWI method works.

- Employees, leaders and engineers break down each operation into small pieces, making certain that each worker is given all the tools to make the part quickly and with the highest quality.
- The process is documented in writing, with photographs and sometimes video, and examples of defective products nearby. This is done to eliminate errors that waste time and money, and ensure reproducibility from operator-to-operator.
- Employees are trained in the new method and

perform to that method until a better method is established through continuous improvement, either by the operators themselves or input by others.

Standardization can occur not only within the area, but across the entire organization as well. This can be accomplished with visual work place techniques i.e. paint and color standards for safety elements, equipment operation instructions, floor markings, building interior and exterior, material labeling, etc. By creating standards and defining procedures, there will be commonality across the entire organization.

Benefits

Successful standardization of work processes helps assure a high quality product, proud workers, satisfied customers, improved workplace safety, and strong factory cost performance. Reducing variation in the shop floor and administrative environment leads to remarkable productivity improvements.

Combining the practices of Lean Enterprise and Standard Work to form the beginning of a continuous improvement mind set will transform how you do business today in your plant, in your office and with your customers. Listen to all of them, try solutions, and “get a little bit better every day”. As you look back a year from now you should see a dramatic change in how your organization has performed, how your employees have developed and how your customer appreciates your efforts from their continued business.

Please feel free to contact Bill Heron at 315-793-8050 or email him at billh@mvatc.com with any Lean Enterprise and Training Within Industry (TWI) questions.

CLIENTS CORNER **Teaming Up To Develop a New Program**

Every business can experience a serious incident that can prevent it from continuing normal business operations, and this can happen at any time. This can range from a fire, flood, ice storm or explosion to a serious computer malfunction or an information security incident. The business management has a responsibility to recover from such incidents in the minimum amount of time possible. This recovery process requires careful preparation and planning.

MVATC solution providers are currently developing a Business Continuation Plan Program that will be offered to clients who are interested in the preparation and planning of their own recovery plan. American Standard, one of MVATC's clients, located in Central Bridge, Schoharie County has volunteered to work closely with us as we develop each of the modules for this project. American Standard manufactures propane exchange cabinets and

several other products for the propane industry.

Modules include: Initiating the Project, Assessing Business Risks and Impact Potential, Preparing for a Possible Emergency, Disaster Recovery Phase, Business Recovery Phase, Testing the Recovery Process, Training Staff, and Keeping the Plan Up to Date.

All modules will be tested, with the assistance of American Standard and the completed program should be ready by fall 2008.

Once available, MVATC solution providers will work closely with your organization team to assist in the completion of your Business Continuation Plan which will fulfill your needs in case of a disaster emergency.

Please look for more updates on this new program in future issues of Tech Talk.



Nagging Details

by David Albrecht

Have you ever participated in a meeting where at its conclusion, you leave and:

1. You don't have a clear sense of the next steps?
2. You are not sure of your responsibilities?
3. You are not sure why the meeting was called in the first place and
4. (worst case scenario) You are not sure what was just talked about?

Here are a few "pointers" to help get a meeting off on the right foot.

The first step is to Think and Pinpoint your goals for the meeting.

What do you need to decide?

What do you need to communicate?

Anticipate what others will say.

Your goals are the most important part of the meeting agenda.

Write down your goals and post in the meeting room.

Summarize meeting agenda into 3-5 main points.

Pass this out or post on white board so all attendees have the same "road map".

The main points on the agenda need to steer the meeting.

The meeting begins by clearly stating the goal.

Next review the meeting agenda.

The actual meeting follows the "road map" and allows discussion on each main point.

This will get you started. The running of the meeting is another topic.

Looking for meeting facilitators or assistance in meeting planning? Give MVATC a call for assistance anytime, 315 793-8050 or e-mail to davida@mvatc.com



MVATC

207 Genesee Street, Room 405
Utica, NY 13501
(315) 793-8050 • (518) 853-1800
Fax (315) 793-8057
1-800-MEP-4MFG
info@mvatc.com
www.mvatc.com

David S. Deering, *Chairman*
Paul B. MacEnroe, *President*
Tech Talk is based upon work supported in part by the New York State Office of Science, Technology and Academic Research

MVATC
Mohawk Valley Applied Technology Corporation
207 Genesee Street, Room 405
Utica, NY 13501

Non-Profit U.S.
Postage
PAID
Utica, NY
Permit No. 566