

# **Process Management for Results Driven Success**

An Approach to Knowledge and Processes

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December, 2008

# Process Management for Results Driven Success

## Overview

At the core of any business or organization are the processes that are carried out each day by the employees and members of the organization. This includes everything from basic processes, such as reloading copiers and printers with paper, to complex processes, such as setting up a new facility or driving customer feedback improvements back into an organization. These processes transform raw goods into finished materials, turn ideas into services, and allow an organization to provide unique value to their customers. The intent of this white paper is to discuss why process management is important, and methodologies that can drive your improvement.

## The Need for Process Management

### Change

Change within an organization drives the need for process improvement. Today's business environment is a place of constant change. Organizational structure is in a constant state of flux as companies fight to stay ahead of competitors, maintain profitability, and provide quality service to customers. Organizational changes can affect individuals carrying out a process, the department that owns the process, or both. Without consideration to process, these changes may negatively affect performance.

Change in an industry also drives the need for process improvement. Just as organizations are constantly changing, so are the environments in which they exist. New regulations are established, causing a need for a different way of doing things. New customers or new suppliers require new ways of interacting with entities outside of the organization, and can require alternative methods for completing tasks. Without constant evaluation and continual improvement in processes, inefficiencies are introduced with each change.

Advancements in technology drive the need for process improvement. As technology changes, so do the processes and tools required to support those changes. A new machine on a production line might change activities upstream in a process, while eliminating downstream processes. A new software tool might change how the sales team manages sales opportunities. That same tool might require new processes in IT to support the tool, as well as new processes for the analysts that are reviewing and analyzing sales reports.

These and other changes can have significant affects on an organization's processes, if not properly managed and planned. Each change is a new opportunity for unwanted variation, waste and defects to enter into a process, rendering it less efficient or producing unwanted results. By properly managing processes, the impact of changes can be reduced or eliminated, while driving new efficiencies and productivity gains.

### Competition

Competition drives the need for process improvement. Competitors spend time and money to develop faster and better ways of doing what they do. What challenges will result if the

competition continues to implement process improvements and efficiencies while you continue with business as usual?

## **Goals of Process Management**

### **Standardize processes**

By properly managing processes, operations become more standardized. Processes are better communicated throughout the organization, and there is a clear understanding of how things are done.

### **Reduce impact of change**

The impact of internal or external changes to an organization can be properly addressed through process management. This includes understanding the impact of a change, making necessary changes to existing processes, developing new processes as needed, and communicating those changes out to the organization.

### **Improve efficiency**

Proper process management includes continual improvement, allowing for streamlined processes, reduced waste, and a decrease in the number of defects happening within the organization. This results in financial savings to the bottom line and availability of existing resources for reallocation to other projects, based on the gains in efficiency.

### **Improve customer satisfaction**

Better managed, more efficient processes translate into products and services being delivered faster with fewer problems. This means improved customer satisfaction, both internally and externally.

### **Variation and Process Improvement**

The general belief among many doing process improvement is that variation is undesirable and causes low sigma levels. In reality, this is not always the case. In many instances, "controlled variation" is a good thing. The kind of variation that is acceptable, as well as the time it is acceptable, differs between organizations and processes.

Understanding the roots of process improvement, it is easy to see why variation is seen as bad. On a manufacturing line, variation can mean parts are not produced consistently. When making ball point pens, you want every cap to look the same. You need every pen to write the same way. The pen is constructed in the exact same order every time. There is no need for flexibility in making pen parts in different order. Your goal is to produce the exact same thing hundreds or thousands of times per day. Any variation can mean you are unnecessarily producing product scrap or waste.

Processes are run under different environments with varying levels of control of variables. Imagine customers running around providing feedback to machine operators and assembly workers in a pen factory. Imagine these customers, in observing firsthand the blue ink being poured into the pen, shutting down the production line and asking the ink be switched to red. These same customers ask for a custom made cap with each pen and unique packaging based on the office each box of pens will go to. While this kind of environment sounds absurd in a factory, it is the environment in which many organizations operate. These environments require processes to have a certain amount of flexibility to handle variables that cannot be controlled or are intentionally uncontrolled in the name of customer service.

Variation allows for informal process improvement. By allowing some level of variation and not dictating highly detailed process steps, process executors may figure out better ways of doing things without needing to do official process improvement projects. Imagine a complex process such as designing and deploying a server implementation. In an organization that requires a large number of servers, this kind of process happens multiple times per week. There exists a team of engineers that interact with the customer to design the implementation. This design includes the number of servers needed and the kind of servers to be deployed. This usually involves completing design documents and approval forms, and a whole slew of other activities, as well. By giving these highly skilled engineers freedom in how the process is done, the team is allowed to develop more efficient ways of completing the design process. Monitoring metrics around each of the engineers, such as cycle times and defect rates, will allow the process owner to identify who is working efficiently and who could use more coaching. Methods being used by more effective engineers can be passed on to others, making the process more efficient through shared learning without an official process improvement project.

Variation allows for innovation. Some process improvement methodologies are constantly criticized for limiting innovation, and it is easy to understand why. When processes are documented in a very detailed fashion with no allowed variation, where is the opportunity for creativity or innovation? By allowing controlled variation, there is more flexibility to innovate as the processes are carried out.

Variation allows for autonomy. Many times, a new or changed process that is too detailed becomes a roadblock. It creates a feeling of micromanagement, resulting in people doing whatever they can to *not* follow the process. By including controlled variation, a higher level of autonomy is maintained, along with the other benefits already mentioned. This autonomy is important to getting process buy in and seeing that the process is accepted by everyone.

### **Tool Selection and Process Improvement**

Imagine you are a contractor put in charge of repairing a dilapidated house. The house is in terrible shape. Everything from the carpets to the roof is in some state of disrepair. You need to fix the most critical damage first, but you are not sure what your biggest problem is at this point. Maybe water pipes are leaking or the roof has a hole, allowing the potential for even more damage to the structure. Perhaps a gas line has a hairline crack, causing a safety issue.

As you get ready to start taking inventory of what needs to be fixed, your boss hands you a toolbox with a hammer, a screwdriver and a level. She tells you to fix whatever you can with the toolbox. Since you have been tasked with fixing what you can with three specific tools, you fix a nail sticking out of the floor, a loose door handle and the unlevelled washing machine, leaving the broken water pipes, a hole in the roof and a leaky gas line because you were not given tools to fix these issues. The house falls to pieces because you chose a job for the tool you had, instead of the right tool for the necessary job.

*Always remember—*

*let the issue define*

*the tool selection;*

*not the tool to define*

*the issue to address.*

As ridiculous as this sounds, similar logic is used regularly in process management and improvement programs. Often times, companies use tools to drive job selection, as opposed

to letting the job dictate the tool to use. Six Sigma programs get built around certification programs and employees identify Six Sigma as the best and only tool to use, fitting problems into the tool set instead of prioritizing problems and picking the right tools for the most pressing problems. Goals are set to make a certain number of Lean improvements in a quarter and organization members spend time trying to find issues for the tools instead of tools for the issues.

A proper process management program will work to get a basic understanding of all of the process issues, identify and prioritize issues causing the most pain, and then employ process improvement efforts to address and solve issues that cause the most pain or have the highest return. Always remember—let the issue define the tool selection; not the tool to define the issue to address.

## **Elements of Process Management Success**

### **Executive support**

Like most initiatives, without executive support, process management will not be successful in the long run. This includes support of an ongoing process management program, as opposed to support of a process improvement project here or there. Without executive support of process management, any efficiency gains or other improvements will be sporadic and short lived.

### **Defined process owners**

Processes must have an identified and accepted single owner. This owner should take accountability for the processes he or she owns and ensure that they are followed properly. The owner works closely with the process management team to ensure process stability, address any process issues or problems, and push for continued process improvements.

### **Ongoing process improvement**

Process improvement does not stop after one project or one gain. As long as there are changes in organizations, environments and competitors, processes will need to be effectively managed and improved to stay focused on project and organizational success.

### **Managed process repository**

The best process documents in the world do not serve stakeholders if no one can find them. Likewise, all of the best process improvement projects in the world are meaningless if no one can find the resulting recommendations.

### **Complete communication plan**

As the major driving force behind process management and process improvement is change, keeping individuals in the organization up to speed on process changes is critical. As new processes are rolled out or changes to existing processes are made, it is imperative that they are communicated properly to the organization. Without this communication step, processes will fail to take hold within the organization and will not be adopted.

### **Involve the “doers”**

In working with processes, it is imperative to involve the people that are doing the processes day to day. This involves people at each stage, from the initial documentation of processes to running improvement projects and making process changes. By involving those who manage the processes day in and day out, the “doers” are much more apt to buy into changes.

Leaving them out of any process initiative will lead to resentment over the feeling that management does not listen, and rejection of changes that stem from the initiative. Without this important buy in, efforts to standardize and improve processes will fail.

## **Methodologies Applied for Continuous Improvement**

### **Six Sigma Projects**

Six Sigma is a process improvement methodology focused on root cause analysis. Six Sigma tools and philosophies are used to tackle complex problems that require advanced analysis and problem solving techniques. A DMAIC approach is used to address defects with currently existing processes while a DFSS approach is used to develop new processes. Both approaches rely on industry standard tools such as Failure Modes and Effects Analysis, Pareto Analysis, Pugh Matrices, House of Quality, and 5 Whys. At VMC, the Six Sigma certification program is done in house by VMC's parent company, Volt, and consists of varying certification levels including Yellow, Green and Black Belts.

### **CAPA Initiatives**

Our implementation of CAPA is based upon industry best practices and strongly incorporates Six Sigma methods and tools. Incorporating PMI based methodology ensures our CAPA initiatives and activities to be embedded within a sound project management approach. CAPA Containment Actions are immediate remedial actions that prevent a problem from spreading or continuing to occur. These actions are typically carried out by the operations team or project team members. The CAPA Implementation process strongly aligns with the Improve and Control phases of a Six Sigma DMAIC project. The goal of the Improve phase is to identify and implement solutions to eliminate the process defects. The CAPA Effectivity Review process is the final process within CAPA. It uses data gathered via the process control scheme and concludes with renewed process capability measurement, verifying process improvement.

### **Blitz Events**

Blitz Events are conducted with three sessions, where representatives from all groups involved in a process get together to develop a new, more efficient process. Planning for a Blitz Event follows a similar path to the Define, Measure and Analyze phases of a Six Sigma project. The first session of the event is spent reviewing the current state of the process while identifying value-add and non-value-add steps. The second session focuses on developing a new process that maintains the value-add steps from the current state and eliminates as much of the non-value-add as possible. The third session is spent doing a gap analysis to identify an action plan to get from the current state to the desired future state. At the end of the third session, each representative walks away with a list of action items that they are responsible for implementing in the next two to four weeks. A control plan is also developed to ensure execution of the action plan and adoption and maintenance of the new process changes.

### **QuickValue Events**

A QuickValue Event (QV) is designed to address an already identified problem or a specific inefficiency within a process. The scope of a QV is very narrow and usually focuses on a single problem or addresses one specific improvement objective. For example, a QV might be used to redesign a form that has been identified as problematic, or to define criteria used to identify different stages in a sales cycle.

## **Approach Strategy**

### **Documentation**

Process management begins with getting processes documented. This includes creating process diagrams and narratives that outline the process the way it is happening today by those who are actually doing the processes. These process documents provide an understanding to everyone in the organization on how a specific process works. They serve as a foundation for standardization and ongoing process improvement. Additionally, these documents will identify owners for each of the processes documented.

### **Identification of Issues**

As processes are documented, inefficiencies and problems will begin to surface. Those individuals who are providing information on how a process works today will generally have very good insight into what some of the challenges are, and where break downs in the process are occurring. Depending on the problem and level of understanding of root causes, different tools and techniques will be utilized to highlight these issues. If an issue is identified and well understood, a QuickValue improvement project might be kicked off to address the issue immediately. If the problem is complex or not well understood, a more advanced approach, such as a DMAIC, may be used.

### **Execution of Process Improvement Projects**

As the issues are identified, specific process improvement projects will be spun off to address the problem areas and alleviate process pain. Different tools will be used, depending on several criteria including severity of the problem, current understanding of the problem, data availability on related metrics and priority of the issue.

### **Ongoing Maintenance of Process Documents**

After a process improvement project is completed, process management does not end. The foundation of highly successful process improvement programs, such as Toyota's TQM, is that process improvements are continual. One word often associated with process improvement is "Kaizen" which signifies "continuous improvement" in Japanese. Process documents should be reviewed periodically to keep them current and to seek out more efficient ways of working.

### **Pace of Change**

It is important to note that change takes time. It is imperative to change only as fast as the members of your organization are able to adapt to the change. If you move too fast, changes will not be well internalized by those managing the processes. Changes will be dropped as employees try to keep up. If change is too slow, opportunities can be lost to competitors. Additionally, members of the organization will lose faith in the ability to change, which can affect morale and increase attrition.

## Case Study

### Situation

A leading technology company deploys servers as a routine process in their data centers. On average, this process takes about 12 weeks from the initial request to the server going live in the data center. In addition, highly paid engineers spend many hours for each request, filling out forms and performing repetitive administrative tasks. The company called on VMC to determine how to eliminate wasted engineering time and shorten the overall cycle time of new server deployment.

### Solution

VMC began by documenting the current state processes, to get a better grasp of the situation. It was determined that holding a blitz event would be the most ideal method for developing more efficient processes. Once the process analysis and preparation were completed, a three day event was held involving representatives from the engineering team, management, data center operations and telecom and hardware vendors. The team focused on a few key areas that had been identified during the documentation and analysis phase, which included eliminating unnecessary documents, reducing the back and forth communications between the engineering team and the other teams, and reducing the number of approvals required throughout the process.

By rearranging a few steps in the existing processes, VMC helped the company to eliminate much of the back and forth interaction between the engineers and other teams during the design stage of new server deployments. A design meeting was also added, which brought all of the different teams together for an hour to discuss the details as a group, saving valuable engineering time.

All of the documents required to complete the server design and deployment were changed, as well. Documents were revised to a more user friendly format, eliminating some of the potential errors that had been experienced in the past, which were causing engineers to spend extra time on paperwork. One of the documents was completely eliminated, as it was discovered during the process analysis phase to be redundant.

A new position was created to take the administrative load off of the engineers and allow them more time to provide consultation on server requests. This new Junior Engineer position increased internal customer satisfaction and provided a more cost effective means of completing the required administrative work. It also allowed the company to create a pipeline for recruiting entry level candidates, offering them training and a career path toward becoming a Senior Engineer.

### Success

The result of these efforts enabled the technology company to realize a number of improvements in the way new servers were deployed.

- The average time needed to deploy a new server from the request to “go live” was reduced from 12 weeks to 8 weeks—a 33% reduction.
- The average time required by senior engineers to complete a new server deployment went from 80 hours to 20 hours—a 75% reduction.
- Customer satisfaction increased by 20%, based on customer satisfaction surveys measured before and after the project. Internal customers felt like they had more of

an engineer's time after the improvements were made, even though engineers were spending less time on each deployment.

As a result of this effort, those requesting servers were able to get their servers on average 33% faster. This allowed the applications targeted for those servers to be utilized sooner, which led to a cascading effect of other benefits based on those applications and their intended purposes. The time needed by engineering to complete the tasks associated with design and deployment of servers was cut in half, and 20 of the remaining hours needed under the former process were passed on to junior engineers instead of senior engineers, resulting in a more than 60% reduction in engineering labor costs.

## **Conclusion**

All organizations have processes for conducting their operations. For some, every process is contained in highly detailed documents, while others have no documentation whatsoever and all processes are maintained as tribal knowledge in the heads of the employees. Regardless of the organization's current state of process documentation, all organizations can benefit from improved process management. By ensuring a few key elements are in place, the process management program can lead the way for efficiency gains and cost savings within any organization.

## **About VMC Consulting**

VMC is a technology consulting company providing flexible and scalable development and integration, IT outsourcing and customer care solutions to businesses, offering a competitive advantage through the effective application of people, processes and tools. Using an integrated PMO methodology and world-class talent and resources, VMC delivers targeted solutions for the unique needs of our customers.

By tailoring solutions to address specific business challenges, VMC becomes a true partner for reaching high performance goals. VMC is positioned to help through both consulting and outsourcing that delivers results. Our value is in our blend of proven experience, skilled expertise and defined thought leadership.