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The 3 Forms of Workforce Management

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Workforce Management

“Workforce Management” is a self-defining term. The management of the workforce which, historically, takes up most of a manager’s time (thus the title “manager”) is comprised of three efforts (or phases) on the manager’s part: instruct, review and correct.

The manager *instructs* the worker on what to do.

The manager *reviews* the worker to see what they are doing and if they are doing it correctly and in a timely fashion.

The manager *corrects* the worker if they are performing slowly or incorrectly.

The manager can easily spend 80-90% of his/her time performing these three functions. As a result, managers like workers who, by their intelligence and behavior, reduce the amount of time the manager must spend instructing, reviewing and correcting. And will pay more for them. We’ll come back to this in a moment, but this is an additional financial driver for the 3rd form of workforce management known as workforce automation.



Probably more has been written about how to manage the workforce than any other operational aspect of running a business. Most writing falls under the **Classic Supervisory Model** and focuses on the manager’s hands-on approach to workforce management. Such writing often focuses on the manager-worker relationship and managing the workers’ behavior in the workplace in an effort to maximize the results of the manager’s instruct, review and correct efforts.

In the last few decades, some writing has shifted focus away from the manager-worker relationship and focused more on the nature of work, itself, and the need to document the processes that define the work so that the workers may have a better understanding of what it is that they must do. This **Management by Process Documentation** reduces the need for the manager to constantly instruct the worker and sets a benchmark for overall organizational improvement. This has resulted in the ability for the manager to offload most of the instruct effort to simply the statement: “Read the documentation.” However, the manager may still have to guide the worker on how to translate the rules specified in the documentation into the specific actions needed for specific customers, orders, cases, events, etc. Here again, the intelligence of the worker plays a role in minimizing effort on the manager’s part.

Finally, in just the last few years, the rise of organizational systems¹ have provided the generalized ability to automate the translation, delivery and monitoring of business process models allowing for greater separation of the manager from the worker. Relatively little has been written on the resulting subject of **Workforce Automation**².

Every workforce in existence today can be described as operating under one of these models with workforce automation being the ultimate form of workforce management, meaning *most controllable, most measurable, most consistent and most persistent*.

Here is a formal description of each:

1. **Classic Supervisory Model** – workers are trained in the various tasks they must perform. The workers rely on their memory, fellow workers and supervisors for guidance re the correctness and timeliness of their performance. In effect, *the business is in the head of the workers* (“...our employees are our greatest asset”), and as such, control over performance is inconsistent and there is little or no control over the evolution of processes. While traditional and still pervasive, this model can never get beyond CMMI/CoBIT maturity levels 0 to 1 (Chaos)³.

2. **Management by Process Documentation** – all tasks that workers perform are documented as processes and procedures. The workers are trained from the documentation and work by reference from the documentation until they have memorized the processes. The vagaries of different workers doing the same job differently are slightly reduced, a benchmark now exists against which to measure worker performance and control over business process evolution can now be centralized. However, as the processes evolve, the documentation must be kept up to date to reflect the processes, the employees must still “unlearn” the old process and learn the new, and the company is still entirely dependent upon the performance of managers to enforce adherence to procedures and policy. This model attains CMMI/CoBIT maturity levels 2 to 3 (Controllable).

3. **Workforce Automation** – all or most of an organization’s processes are documented and implemented into a system that detects triggering events occurring throughout the organization and then renders the documented processes as workflow to the workers on a task-by-task basis. The instructions within the workflow are automatically changed to reflect the data and conditions of the actual event instance. At this point, the actual behavior of the company and its centralized documentation are synchronized in a controllable fashion. This model results in CMMI/CoBIT maturity levels 4 to 5 (Repeatable, Measurable and Optimizable) and makes its practicing organizations ISO900x Quality Management certifiable.

¹ Organizational System – enterprise-wide system that manages the initialization, delivery, monitoring and escalation of all processes comprising the organization. QBOS® is an organizational system with tradespace capabilities.

² Coined by the author in the mid-nineties, ‘workforce automation’ reduces management’s direct interaction with the workforce by eliminating the need for management to interact with the workforce during the instruct and review phases of work.

³ http://en.wikipedia.org/wiki/Capability_Maturity_Model

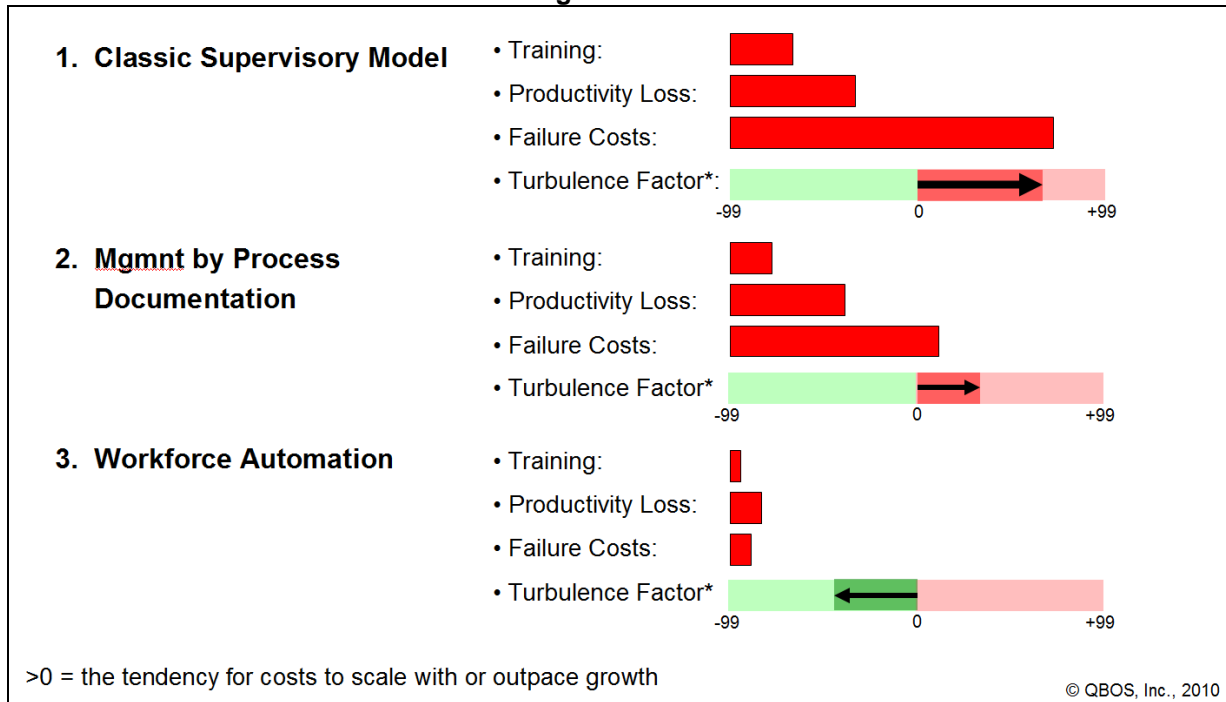
The line drawn between the 2nd and 3rd forms indicates a watershed point – a point at which the benefits provided by one method over the other are so significant as to represent a revolutionary change overall.

What is this change?

It is the removal of a need for an operational paradigm⁴ in the minds of the workers. Workforce automation removes the need for the worker to hold a model of the overall process(es) in his/her head. This fundamentally removes the need for management to instruct and review with the worker as the system is guaranteeing specific and accurate instructions to the worker on a case-by-case basis. It also means that the intelligence of the worker plays less of a role in the productive throughput of the worker as the system is no longer relying on the worker to interpret rules for each particular case.

These strong effects that can only be achieved through workforce automation result for the organization in a fundamental change in costs and exposure (see chart below).

Relative Costs of Different Workforce Management Models



Training – Costs associated with training are removed in direct proportion to the number of processes in the organization that are converted to a workforce automation

⁴ The model that workers must carry in their heads of the processes by which an organization operates; not to be confused with domain knowledge. See, “Beware the Operational Paradigm”

format as the worker no longer needs to know or understand the processes that they are actively participating in.

Productivity Loss – Especially in service-oriented businesses, the greatest savings in productivity losses occur only when the workers no longer have to interact to perform their functions. One of the core features of a workforce automation system is its ability to take over all hand-offs between workers. As a result, the workers have less opportunity to interact during the work effort, resulting in a far lower conversion of productive behavior to recreational (chit-chat, etc.) behavior. Behavior conversion represents a significant portion of the 3+ hours of lost productivity per worker per day and until it is eliminated, productivity losses remain high. Thus, simply conversion from the classic supervisory model to management by process documentation has little or no impact on productivity loss.

Failure Costs – While failure costs are reduced through management by process document, they realize their greatest reduction in a workforce automation environment. Failure costs are either a result of having to repeat an operation or pay a penalty due to failure or poor performance of the operation the first time, or they result from the loss of opportunities due to inefficient use of resources. While management by documentation may decrease the likelihood of failure or poor performance of an operation, it will not eliminate it, nor will it have much impact on loss opportunities as good resource utilization requires the elimination of hand-offs between the resources (see Productivity Loss above). However, in a workforce automation environment, job coordination errors are completely eliminated, task delivery is monitored automatically and can be escalated should any fall behind. Processes can be refined to isolate and eliminate poor performance resulting in a ratcheted reduction of overall failures.

Turbulence Factor – This metric indicates the tendency for positive feedback loops to grow in an organization's inefficiencies as the organization grows in operations. This manifests financially as the growth in costs outpacing the growth in revenues with the result being that the organization reaches a point beyond which it simply cannot afford to grow. This is an issue in both of the earlier workforce management models and is directly related to productivity loss. However, the turbulence factor is a result of what happens when a company with productivity losses experiences growth – all other things in the organization being exactly the same, the productivity losses will still actually grow as a percentile. A close-up, simple example of this is the worker ("John") who has to hand off his task to another worker ("Bill") after he has done his part in it. Say, for example, that John has on average six of these tasks a day and therefore interacts with Bill six times a day to hand off each task. And Bill's role in these tasks may require only fifteen minutes of his time per task (Bill has other tasks he is performing throughout the day as well). Each time John interrupts Bill to hand off a task is a distraction for Bill from whatever task he was doing. After John leaves each time, Bill takes on average ten minutes to get back to the state of focus he was in before John approached. Bill is losing an hour a day to non-productive behavior. At best, he is providing seven hours a day of productive behavior. Now as the company

grows and John hands off more tasks to Bill, Bill's efficiency actually decreases. For example, if John were to start handing off twelve such tasks a day, Bill would be losing two hours instead of one to non-productive behavior. This is an example of positive turbulence factors due to growth. Workforce automation is the only workforce management method that can guarantee a negative turbulence factor.



If we look at any organization as a collection of processes whereby the organization manages cash flow, provides whatever services and/or products it may, manages its resources and relationships and any other task that may be deemed a part of that organization's operations, we can quickly see that a majority of these processes describe the work being performed by the rank and file workers of the organization. How the workers are made to follow these processes is a matter of the three different styles of workforce management described in this paper. And these three different style represent an evolution of workforce management from the classic supervisory model to complete workforce automation. Achieving a workforce automation environment is not an overnight accomplishment, but in and of itself an ongoing process.

For more on Workforce Automation, read, "Effective Risk Management through Workforce Automation".