Ensuring Operational Excellence

USE A DAILY
MANAGEMENT
SYSTEM TO
MAINTAIN QUALITY
AND OPERATIONAL
EXCELLENCE
DURING A
TURNAROUND

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rastic changes and business turnarounds are an ongoing reality in most industries. In 2014, 2,869 mergers and acquisitions took place in Canada alone, for a total aggregate value of 238 billion Canadian dollars.¹ In each deal, success factors included the speed of the organizational integration, the turnaround strategy and the resulting work environment for employees and managers.² Uncertainty, job changes, skills upgrades and downsizing affect the daily behavior of everyone in an organization.

Technological progress also is a source of downsizing and employee profile reassessment. By 2020, robots and automation will cut labor costs by 24% in Canada.³ These perpetual changes trigger reactions that are at the root of Abraham Maslow's hierarchy of needs: the need for safety.⁴ Overseas outsourcing and centralization are other factors that reduce capital and headcount-related expenses.

All these turnaround activities are necessary for the survival of an organization. The dilemma lies in trying to manage these transformations successfully while ensuring high-quality products and services. These goals can be achieved by implementing a daily management system (DMS).

Turnaround

There is a lot to consider when an organization goes through a turnaround, such as:

- Some, if not all, of the organization's activities, including administrative services and production, must be phased out or transferred to another party.
- The supplies, components and services of the organization's supply chain must be phased out.
- Working capital and inventory must be reduced gradually.
- Capital equipment and buildings must be decommissioned, transferred and sold.
- IT and telecommunication systems must be shut down or the services transferred to another provider.
- Customer or patient records must be archived or reassigned.

In many cases, all of this must be done under the pressure of creditors and while respecting commitments and contracts.

The key ingredients to a successful turnaround include keeping a quality focus, creating discipline, driving accountability and a quick response mindset through a DMS.

Toyota Production System principles

Before explaining how a DMS is implemented, it is important to explain key Toyota Production System (TPS) principles because they are the foundation of a DMS. The TPS was elaborated by Taiichi Ohno between 1947 and 1962. Ohno needed to build a competitive, high-performance organization focused on quality and customer satisfaction. TPS principles and tools have influenced many industries, from automotive to banking to healthcare.

The root of the TPS is understanding what behaviors will lead to quality and customer satisfaction. It then focuses on execution: succeeding by doing. Instead

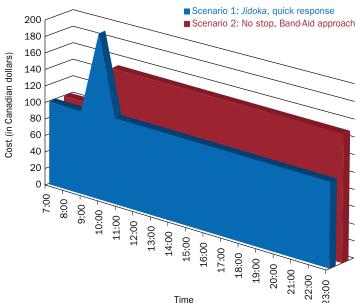
of trying to explain a culture, the TPS proposes an approach in which employees take action, participate and gain understanding of a process by seeing first-hand the results of their actions.

First, waste must be identified and eradicated. Waste is anything that does not bring value to a customer. Eradicating waste includes removing bugs from software, inspecting a product or waiting to be seen by a physician, for example. Although these activities might seem necessary, they are the results of nonperformant processes that do not provide the right result the first time. According to Ohno, "There must be a total understanding of waste. Unless all sources of waste are detected and crushed, success will always be a dream."

Autonomation and quick response must be implemented. *Jidoka* is Japanese for autonomation. It is automation with a human touch, the process of separating manual work from automated work, implementing mistake-proof devices and incorporating line stops before or when an abnormality occurs. Autonomation helps remove and eliminate waste from a process, which adds value to the product or service continuously throughout the process. Patient safety alert systems⁶ are an example of this autonomation and quick response in healthcare.

Stopping work when an abnormality occurs is only half of the solution. In the case of a line or service stop, there must be a process in place to fix the issue immediately. This entails having qualified people who can make a correct initial decision, and documentation and information available to make the initial decision.

Figure 1. Jidoka vs. no stop—impact on costs



The cost difference between the two methods is shown in Figure 1. Not stopping work would cause the hourly cost to rise for a significant time.

Action-driven leadership is necessary to drive improvement and the quick responses needed in the TPS. Lack of action can result in an assumption that things will get better by themselves or that someone else will take care of the problem. Being action-driven means that the leader asks questions, acts or delegates someone else to act, and makes decisions. This kind of leadership requires experience and training.

Habits and standard work are at the heart of daily execution and daily problem solving. This standard work, or standard operating procedure, applies to every employee, including management. This is referred to as the standard work for leaders. All key activities accomplished by those accountable—reviewing staffing, cleaning patient rooms, cleaning a work environment and monitoring sales levels, for example—must follow standard work.

DMS

A DMS builds on the TPS and provides a structure to ensure that performance and quality of execution are achieved. The system encompasses leader standard work, visual controls and accountability (Figure 2), and these elements must co-exist and work together to sustain this approach.

- 1. Leader standard work. The first element of a DMS is leader standard work. The key activities that must be performed daily, weekly and monthly, for example, are identified. Quality control and quality assurance findings and metrics help prioritize which activities are key activities. Table 1 shows examples of key activities. They all link to key business processes and customer or patient satisfaction. A documented process must exist for all key activities. After the leader standard work is created, a routine is established to ensure that it is followed, which reduces surprises and ensures that abnormalities are detected easily and quickly.
 - 2. **Visual controls.** The second element, visual controls, ensures an immediate understanding of whether a situation is normal. These controls can be as simple as putting tape on the floor to show how many patient beds should be in an intensive care unit or how many carts of finished goods should be in a production area. In these situations, delimitation with color or a line is an obvious and

simple way to assess with objective criteria whether a situation is normal.

The same type of visual control can be extended in any office or operational environment to monitor execution of the leader standard work. Figure 3 (p. 20) is an example of such visual control. At the beginning of the week, all cards are turned to display the red side. As the activities are executed, the employees accountable for the activities, including management, turn their cards

to the green side. The entire team can see in an instant whether the situation is normal.

This may seem like a simple, insignificant example, but when this method is deployed to every function of an organization, the result is seamless visual management of all key activities.

Visual management can create awareness and identify and prevent situations in which an action must be taken. Linking these visuals to leader standard work is an efficient way to track them to closure.

3. **Accountability.** The element that binds these practices together is the daily accountability process. It ties levels and functions together and creates a communication highway.

Consider Triton Electronik, for example. The organization supplies design services, prototyping and short-run production for critical 911 systems, medical diagnosis equipment, telecommunication base stations, train and subway car control modules, and other products.

The organization's daily accountability model includes different levels of communication connected through visual management and focused on the key elements of the leader standard work (Figure 4, p. 20).

Each function of the organization holds an accountability meeting, called the Tier I meeting, at the beginning of every shift. The target duration of the meeting is five minutes, during which the supervisor reviews the performance from the previous day and listens to the problems or issues that employees foresee for the upcoming day or week.

These meetings take place in front of a visual board. The visual control ensures that the leader

Figure 2. Daily management system elements

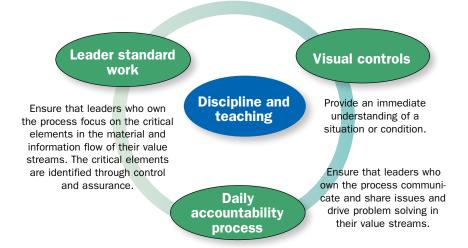


Table 1. Sample key activities

Role	Key activity example
Project manager	Cost trackingSchedule trackingOn-time tasks completion
IT manager	 Production and sales systems uptime Critical open requests escalation Projects completion review
Sales manager	Sales forecast Bookings review Customers credit and account receivable
Production/ service manager	Daily scheduleOn-time deliveryUnresolved quality issues review

standard work elements are performed, key performance indicators (KPI) are reviewed and new actions are written down. The KPIs focus on quality, on-time delivery and productivity, and the actions include a deadline and an owner.

After the Tier I meetings, supervisors review the visual boards with the team leads and note any action that requires their involvement. This information also is used as an input for the sales and operations planning meeting.

A second accountability meeting, the Tier II meeting, occurs in the afternoon between shifts. This meeting is facilitated by the site director and involves all functional directors or managers. The target duration is 15 minutes, during which the site director reviews performance through KPIs, identifies risks and issues, and reviews open key issues. Visual controls ensure that the leader standard work elements are performed at the management level. The KPIs at this level focus on external and internal quality, on-time delivery, resources, costs,

programs and sales.

Only abnormal situations are addressed in Tier I and Tier II meetings, which is key to keeping the meetings short and effective. They are stand-up meetings, which illustrate dynamism and action-driven behavior.

Figure 5 is an example of a three-tiered meeting structure for a hospital. The Tier I and Tier II meetings correspond to the Tier I and Tier II meetings described earlier. Note that the KPIs include errors, patient safety and other elements related to the key activities and key results. The Tier III meeting is a higher-level meeting with the general manager and, in this example, occurs weekly.

Results of DMS implementation

A DMS was implemented at Triton Electronik at a time of accelerated expansion of technologies and manufacturing processes. The DMS helped set the pace for introducing changes and ensuring that key activities were executed and every employee was involved. The ongoing transformation was successful, with a continuous focus on customer quality and delivery. The KPIs showed regular improvement and a reduction in defects.

A few months after the DMS was implemented and the significant expansion and acquisition activities were completed, Triton Electronik went into bankruptcy protection status because of cash flow problems. Employees had to keep delivering quality products and services to customers for months at an organization with an uncertain future.

At the time, there was talk of stopping the DMS. On

Figure 3. Sample visual control

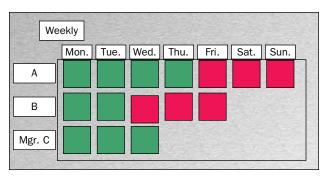
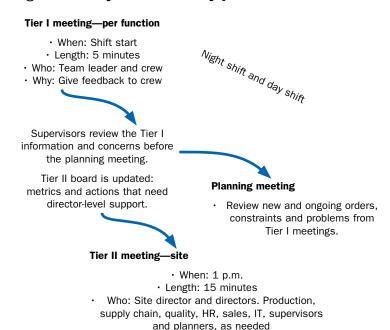


Figure 4. Daily accountability process at Triton Electronik



· Why: Feedback, priorities of the day

the one hand, the organization needed to operate with fewer resources. On the other hand, it had to be more flexible regarding its commitments. The organization decided to keep the DMS in place and find out how it would help the employees adapt to the new work environment. This dilemma is shown in Figure 6. It is a situation that organizations face in any turnaround, merger or acquisition.

Within a few days of the bankruptcy protection announcement, employees progressed from denial to indifference. Through the DMS, a constant communication link was already in place. Employees could express themselves and were heard by management. Ongoing news about the organization's future also was communicated to them with high frequency.

The relationship between the organization's success, and product and service quality and delivery was clear to everyone. Quality and delivery levels continued to progress. Some recurrent concerns were raised in a Tier I meeting related to résumé preparation coaching and job fairs in case employees lost their jobs. These concerns were brought up at the Tier II meeting as actions and feedback about the arrangement was communicated to employees.

When the organization's closure was announced with four months' notice, job fairs and résumé coaching sessions were unveiled at the same time, which was a relief for many employees and a sign of the next

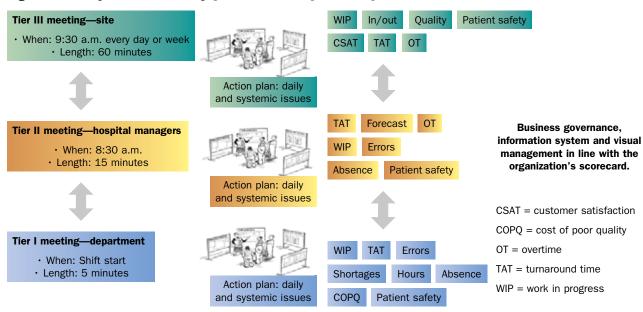


Figure 5. Daily accountability process example—hospital environment

steps ahead for their careers.

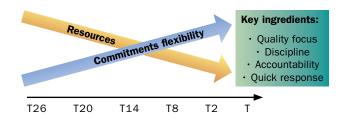
Proactive issues, such as upcoming customer requests, were raised by employees in the Tier I meeting. Preventive measures were taken by many employees who volunteered to help at their level without escalating the issue. From the day Triton Electronik's closure was announced to the day it closed, on-time deliveries improved by 18% and quality improved by 23%.

In good times and bad

Though still in its infancy in terms of implementation in North America, DMSs are used in many service call centers and healthcare, financial, logistics and manufacturing organizations to drive quality and performance not only during good times, but also during turnarounds and drastic changes. It has proven to be an effective management system for stable or thriving organizations.⁸

Implementing a DMS involves identifying key activities, translating them to leader standard work, establishing visual controls to support the key activities and

Figure 6. Commitments vs. resources



linking them through a daily accountability process.

The Triton Electronik example shows how this practice—taken from the TPS—helps keep a quality focus, create discipline, and drive accountability and a quick response mindset.

During this process, an organization is learning by doing and understanding the relationship between its tasks and the overall results. The discipline and accountability that are the foundation of quality assurance and quality improvement become a daily preoccupation through execution. Learning about the impact one person has on the entire value chain becomes an ongoing reminder and pulls in a sense of belonging, which leads to a culture of change.

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