



Daily Management System as Corporate Culture for Organizational Sustainability

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ABSTRACT

This paper explores how organizations use the structured communication in daily management system (DMS) to drive strategic reforms and trigger changes in organizational behavior to leverage organizational performance. Specifically, analyses the application of the DMS in multinational company P in East Java Indonesia with the aim of highlighting Standard Work, Short Interval Control, Meeting / Circle Control, Communication Board and Independent Audit. The study through field observations, comparing various activities with their achievements and interviews with employees. Findings and suggestions for successful DMS implementation include: involvement of top management, daily management system methods, established learning processes and information and communication systems. This research enriches information/theory regarding optimization of daily management system implementation.

Keywords: Corporate Culture; Communication; Daily Management System; Sustainability.

1. Introduction

In an increasingly competitive business competition, each company is trying to strengthen its organization to be able to compete and maintain the company's sustainability. Reliability performance achievement on average 45% is too low and needs to be improved. Starting from strengthening existing resources and continuing to innovate in process management. Some companies have tried to optimize their management activities with the aim of achieving excellent performance for their organizations.

The Daily Management System (DMS) is a system that lets everyone in the organization or company know about what they have to do to make the organization run smoothly. This includes what must be measured and controlled to realize company goals.

The encouragement of a successful the DMS on the participation of all employees starting from the lowest level to managerial level and implementation of small, gradual, ongoing improvements that they can do in their own work environment.

The DMS is an activity that can be started by individuals, work groups, departments, or organizations. This can work optimally when the entire organization is directed to continuous improvement in its daily tasks. The DMS can be seen as the application of the PDCA Cycle for continuous improvement every day.

Part of the DMS at company P is Standard Work, Short Interval Control, Meeting / Circle Control, Communication Board, Independent Audit, and Lean Behavior.

The study was conducted to determine the role of DMS in facilitating management activities that can support the achievement of organizational goals. In this paper, we describe the whole case of implementing DMS in a manufacturing company that has multiple layers for reporting, in order to provide an understanding of the potential impact of DMS on the manufacturing side that will handle its operations. This paper is structured as follows. Section 2 provides an overview of the literature. Section 3 presents the DMS materials and methods. Section 4 presents the results and discussion of the key success factors for DMS and the final section presents the main conclusions of this paper.

2. Literature Review

Visual management is the key to daily management and usually includes the following elements: Process Control Board, Performance Tracking Board, Kaizen / Ideas Board (Dolcemascolo, 2017).

The Daily Management, if used correctly, generates several benefits. With it one can, for example, engage people to the necessary changes. It is which will take messages, goals and achievements for each level of the organization. Using it, can start a culture of continuous problem solving, as a source of learning for the organization (Gouveia, 2013).

The Lean Daily Management System is a set of standard procedures that provides a structure for work groups to continually improve their daily work. This is a core way of engagement that centers on short daily meetings in a main visual display containing metrics that the work group can control. Several components make up the complete system and are the most useful enhancement mechanisms available today (Timpson, 2017).

Daily management systems can be used to implement continuous quality improvement and engage employee engagement to empower staff to identify issues impacting quality or workflow and address them on a daily basis. With Daily Management System, everyone makes improvement their job every day (Maurer et al., 2018). Lean Daily Management System is one of the elements of the Lean Management System; how the individuals closest to the process identify and solve problems in their daily lives. The goal of Lean Daily Management System is to support daily operations at the front line (Taher et al., 2016). Daily management is the main business accountability subsystem which encourages a culture of continuous improvement to function more efficiently at the managerial level by reviewing and acting on root cause data and analysis (Zarbo et al., 2015).

The role of Lean Daily Management is to maintain and stabilize "standard" work as it is currently written. Lean Daily Management functions as a "check and balance" for standardized work, which acts as a wedge to help prevent organizational setbacks. Lean Daily Management is setting aside time every day to monitor this potential (Ponsford, 2019).

Strong daily management practices instill discipline throughout the organization, standardizing local practices which in turn provides the foundation for customer-focused breakthroughs and business innovation (Rana, 2011).

Policy Implementation and Daily Management are two important aspects in implementing Total Quality Management in a company. Most companies often face challenges and difficulties in ensuring a smooth transfer from the Policy Implementation plan into Daily Management activities (Sachdev & Agrawal, 2017).

Huddle also provides opportunities every day to see and communicate with people who need to be discussed. This process of uniting people to the crowd can contribute significantly to team building, coordinating efforts, and developing a culture of trust (Donnelly, 2014).

It can be summarized that the Daily Management system is a system that lets everyone in the organization or company know about what they have to do to make the organization run smoothly. This includes what must be measured and controlled to realize company goals. Company behavior is generated through Standard Work, Short Interval Control, Meeting / Circle Control, Communication Board, Independent Audit, and Lean Behavior.

3. Methods

This research methodology is a combination of action research and case study-based research. First, which studies the relevant literature to formulate a new approach in case studies. The case studies are carried out based on observations of real operating situations in Multinational Company P, data collection, analysis and, finally, identification of problems that need to be addressed and show in findings and suggestions for successful Daily Management System (DMS) implementation.

The real technical implementation of the DMS at production floors need some innovation depend on the condition, resource and maturity of the employees. Even expanding the activity to get more optimum result was needed. Parts of the DMS in company P are Standard Work, Short Interval Control, Meeting / Circle Control, Communication Board, Independent Audit and Lean Behavior.

A. Standard Work

Standard work is a visual daily performance management system that is proven through visuals, on time and encouraging action & learning.

1) Leader Standard Work

- Leader Standard Work example: Team Leader
 - ✓ Once daily activities: (a) Shift start meeting; (b) review and adjust labor plans; (c) monitor production start-up; (d) post KPI tracking sheets; (e) attend KPI board meeting in department; (f) set next day's labor plans.
 - ✓ Multiple times daily activities: (a) work on kaizen items; (b) update hourly production control board; (c) train operators needed; (d) monitor stop and start times.
- Leader Standard Work example: Group Leader
 - ✓ Once daily activities: (a) shift to shift communication; (b) monitor production start-up; (c) post KPI tracking sheets; (d) lead KPI board meeting in department; (e) attend KPI board meeting in value stream level; (f) audit standard work for one station; (g) Gemba walk with a team leader; (h) set next day's plans.
 - ✓ Multiple times daily activities: (a) walk through the department; (b) review visual boards and take action as needed; (c) coach team leaders as needed; (d) monitor stop and start times.
- Key Points for Leader Standard Work:
 - ✓ Check because you care - each level of LSW has some overlapping and redundancy to provide connections - make sure they are logical and meaningful to you.

- ✓ Learning by doing - excellence is about what is done rather than about what is known - and learning comes from actions - follow the LSW process.
- ✓ Improve standards—as the process changes and as people learn, Leader Standard Work needs to change with it.

2) Operator Standard Work

For activities that connect to the product, machine, process setting or inspection directly, it is necessary to hold the operator standard work. The standard work characteristics of the operator are to explain the sequence of activities that must be carried out in detail. It is recommended to use more pictures or photos to be easily understood.

B. Short Interval Control (SIC)

SIC is a method used to recognize abnormalities that seem to move in a negative sense towards the target during the process, it is hoped that corrections can be made immediately by the SIC, so that the gaps for the targets can be corrected immediately, consisting of: process and performance monitoring; out of control action plan (OCAP); escalation; practical problem solving. Short Interval Control is a simple procedure to drive the process of achieving targets by focusing on: process control and continuous improvement (Wahjoedi et al., 2020).

C. Control Circle

Why run a Daily Accountability Process?

- Are visual controls for highlighting errors and delays?
- Link information with action with a few brief meetings that day (repeated meetings).
- Accelerate the PDCA cycle into the shift period (end of working day).

D. Communication Board

The communication Board is a media which is used to describe the current actual condition of an organization and as a central point for the implementation of the DMS. Consists of: communication board standard and management brief. In this process;

- Enables individuals to use their knowledge, creativity & experience, express their opinions, engage in decision making, to find out what's important to them and their customers so they can do their jobs well.
- Develops teamwork and shared ownership.
- Keeps everyone informed.
- Promote behavior that respects all team inputs.
- Promotes a standard way of working.
- Shares information and learning throughout the business.
- A proactive approach to managing teams.

E. Independent Audit

Conformance Cycle Audit is an internal audit system in the operational department to evaluate the conformance of implementation on established procedures by using the module checklist and rating system for continuous improvement. Consists of: audit board and audit summary.

4. Results and Discussion

A. Standard Work

Top management leads by example until everyone takes the process seriously

Keys for sustaining

- Strictly follow Leadership Standardized Work
- Define the process for updating LSW
- Maintaining Visual Controls
- Strict adherence to Control circle
- Faithfully conduct Gemba Walks
- Get and maintain Employee Involvement

- Regularly assess both process and progress

B. Short Interval Control

The process SIC was shown in below flow figure:

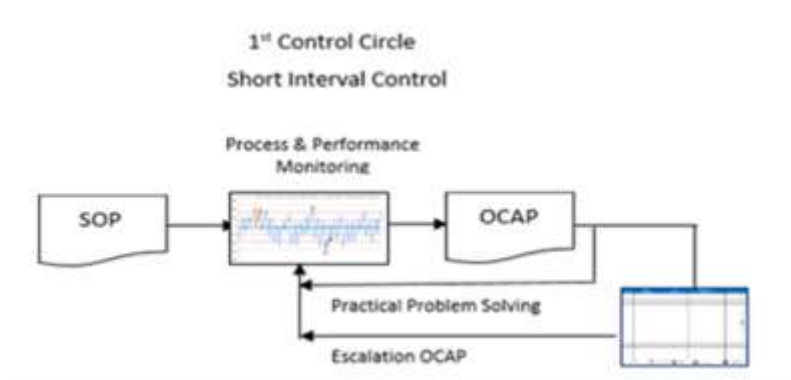


Fig. 1 - Short Interval Control.

Ways of working:

- Process and performing monitoring
 - ✓ Run the process according to SOP.
 - ✓ Check KPIs every interval log (every hour).
 - ✓ Put in graph by hand.
- Out of Control Action Plan (OCAP) and Practical Problem Solving.
 - ✓ Is it on target? If no:
 - Analyze and take action by using approach of 3C (Concern, Cause, and Countermeasure).
 - Use OCAP to analyses and take action.
- Escalation
 - ✓ Is it on target? If no:
 - Escalate into higher authority or stop the machine if the performance getting worst.

C. Control Circle

Control Circle consist of:

- Brief rarely more than 30 minutes.
- Stand up meetings at the workplace.
- The agenda is to review status of plans versus actions on the visual display boards control circle.

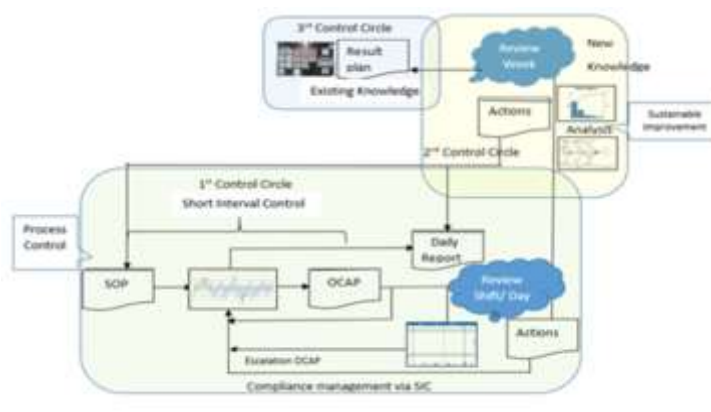


Fig. 2 - Control circle 1st to 3rd

- A series of daily accountability checks.
 - ✓ Circle 1 = team leaders + team members
 - ✓ Circle 2 = group leader + TLs + support staff
 - ✓ Circle 3 = area manager + support staff
 - ✓ Circle 4 = head of site + Operations Manager + functional managers
 - ✓ Plant Manager Review Recognition Gemba Walk Terms of Reference = head of site + Operations Manager + functional managers
- Ensuring communication between leaders.
- Tracks improvements, customer protection issues and problem response.
- The following examples are based on production areas but other functions must have their own circle of 1 – 3 meetings to plan the day, share information and resolve issues (other function: engineering; quality; maintenance; finance; etc.).

Control Circle will give:

- Participants bring up issues that require attention.
- Support staff participate in each appropriate circle.
- Leader of each control circle makes assignments, holds people accountable, and escalates if needed.

D. Communication Board

- Communication Board standard consists of People, Performance, and Continuous improvement.
 - ✓ In People column, the minimum contents are: safety cross; organization chart; term of reference; lean behaviors/skill metric; KPIs; 3C.
 - ✓ In Performance column, the minimum contents are: key performance indicators.
 - ✓ In a Continuous improvement column, the minimum contents are: deep analysis of the biggest problem; action plan.
- Management Brief. Management brief towards organization about the main activities of last week and the main expectation of this week: safety (accidents, near miss, audit result); quality (concern, Defect part per million, reject, audit result); delivery (ahead or behind plan); cost (concern improvement); project (progress); others.
- Standing meeting in front of communication board according to the term of reference (TOR).



Fig. 3 - Communication board

E. Independent Audit

Use 'Kamishibai' method:

- A simple card system used to review important items at workplace.
- Checks relate to standards for quality, cost, delivery, safety, productivity, etc.
- Leaders (Team Leader, Group Leader, and Area Manager) check one process per day.
- Choose card (randomly, or per standard work).
- Follow the instructions on the card (e.g., audit standardized work sheet of a process).

- Turn green side if ok/ turn off the red side if not.

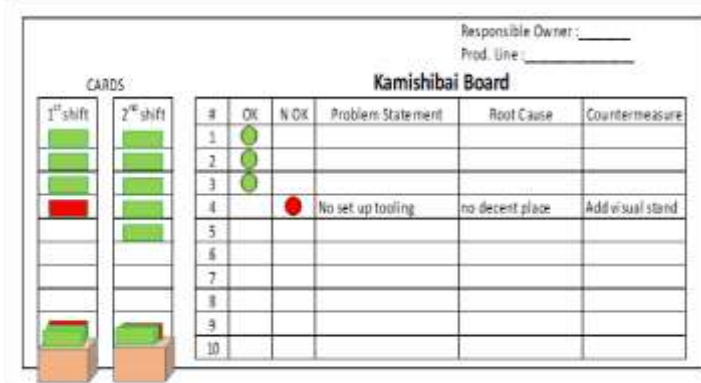


Fig. 4 - Kamishibai board

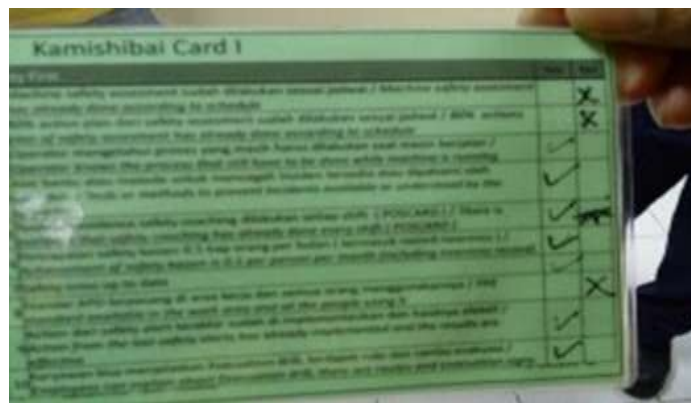


Fig. 5 - Kamishibai card

F. Performance of Production Unit

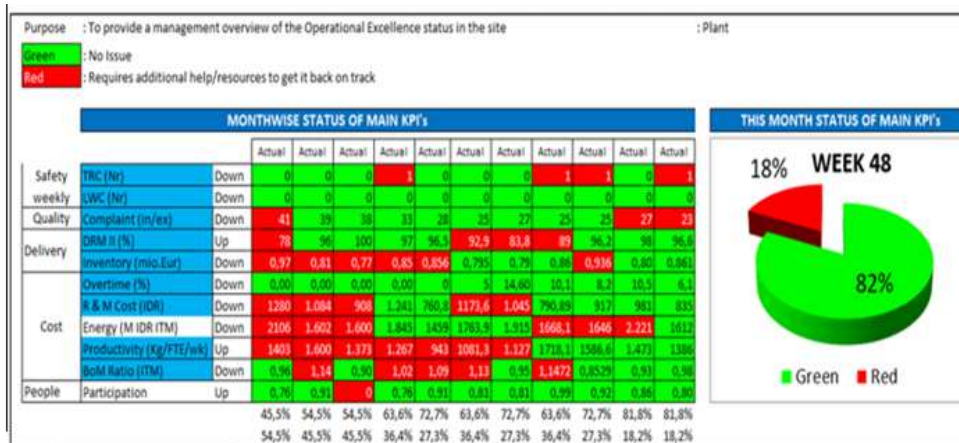


Fig. 6 - Key performance indicator

#	Indicator	Item	Unit Measurement	Better Value
1	Safety	Total Recordable Case (TRC)	# Number	down
2		Lost Workdays Case (LWC)	# Number	down
3	Quality	Complaint (int/ext)	# Number	down
4	Delivery	DRM	%	up
5		Inventory	Mio.Eur	down
6	Cost	Overtime	%	down
7		R&M Cost	IDR	down
8		Energy	Mio IDR ITM	down
9		Productivity	Kg/FTE/wk	up
10		BoM Ratio	ITM	down
11	People	Participation	%	up

Fig. 7 - KPI's item of production unit

From the 11 KPIs items, % of achievements vs. targets categorized as no problems (targets achieved) and require additional help (targets not achieved) are explained below.

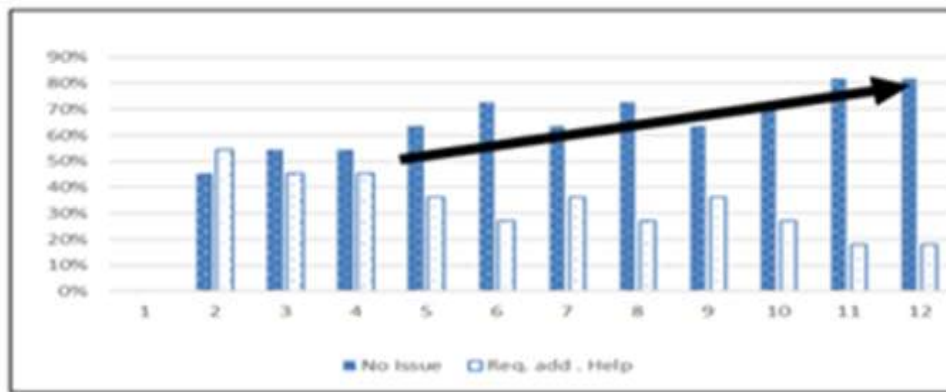


Fig. 8 - Trend % Of No Issue Vs. Require Additional Help (Monthly Basis)

From above figure, it can be seen that the % trend of KPIs no issue increasing means that operations are more reliable. The DMS contributes to better performance.

G. Findings and suggestions for successful DMS implementation

1) Top Management involvement.

The DMS is a top-down management activity, top management commitment is a key aspect in the successful implementation of the daily management system. Commitment not only means strong support by providing support resources for the daily management system, but also means personal involvement or participation in reviewing and controlling the implementation of the daily management system. Top management leads by example until everyone takes the process seriously. Top management act as the top level of reporting on performance and actions, which can ensure that each level of the organization is aligned with the company's strategy and ensures the input of resources in the improvement process.

2) Daily Management System method

The DMS method is one of the key elements to maintain a consistently implementation of reporting, control & change management. The daily management system method consists of Standard Work, Short Interval Control, Meeting / Control Circle, Communication Board, Independent Audit and Lean Behavior that involves all levels of employees in the company. The standard work and reporting structure from the lowest level to the highest level provides complete information to help management make the right decision. Whereas controlling the highest level of management activities through the control circle and internal audit will be able to direct the achievement of optimal performance. Many cultural changes, including everyone's behavior by introducing lean behavior.

3) Well-established learning process

The uniqueness of implementing the DMS is based on meeting reviews at all levels. In the review meeting, the commitment to recommendations for corrective actions recorded in the 3C (daily case list form) is the result of a problem-solving approach and very good for the team learning process. In a management brief on the organization about the main activities of last week and the main expectations of this week: safety; quality; delivery; cost; project; the other triggers an action learning process too.

4) Information and Communication system

Information and communication systems can also be considered as an important element of the DMS implementation. Successful implementation of the DMS requires reliable data collection on current conditions and performance analysis. An established information system provides online data collection of the performance conditions of each department. And the DMS also develops continuous improvement activities and places them on the communication board to monitor progress instantly.

5. Conclusion

The Daily Management System is a system that lets everyone in the organization or company know about what they have to do to make the organization run smoothly. This includes what must be measured and controlled to realize company goals. And also, to maintain a sustainable implementation of reporting, control & change management. Some structure of management controls and reporting systems specifically in a short interval control/ control circle that give high value to guide the operational. Will get the optimum results as expected through the involvement of all employees and strong involvement of top management.

References

- Dolcemascolo, D. (2017). Putting It All Together: Lean Daily Management. <https://www.meddeviceonline.com/doc/putting-it-all-together-lean-daily-management-0001>
- Donnelly, L. F. (2014). Daily management systems in medicine. *Radiographics*, 34(2), 549–555.
- Gouveia, R. (2013). Hoshin Kanri and daily management from the perspective Lean. <https://www.leanti.com.br/artigos/39/hoshin-kanri-and-daily-management-from-the-perspective-lean.aspx>
- Maurer, M., Browall, P., Phelan, C., Sanchez, S., Sulmonte, K., Wandel, J., & Wang, A. (2018). Continuous improvement and employee engagement, part 2: Design, implementation, and outcomes of a daily management system. *JONA: The Journal of Nursing Administration*, 48(4), 209–215.
- Ponsford, E. E. (2019). A Different Kind Of Rounds: Lean Daily Management. <https://www.leanvets.com/2019/02/a-different-kind-of-rounds-lean-daily.html>
- Rana, I. A. (2011). Daily Management to Breakthrough Management–.
- Sachdev, A., & Agrawal, J. (2017). Application of Policy Deployment and Daily Management in service sector. *International Journal of Quality Innovation*, 3(1), 1–17.
- Taher, D., Landry, S., & Toussaint, J. (2016). Breadth vs. depth: How to start deploying the daily management system for your lean transformation. *Journal of Hospital Administration*, 5(6), 90–96.
- Timpson, J. (2017). Lean Daily Management System. <https://www.kaufmanglobal.com/lean-daily-management-system/>
- Wahjoedi, T., Harjanti, W., & Kesumawatie, M. I. (2020). Management Control & Reporting System For Sustainability Organization Manufacturing Industries In Surabaya. *International Journal of Scientific & Technology Research*, 9(03), 1761–1765.
- Zarbo, R. J., Varney, R. C., Copeland, J. R., D'Angelo, R., & Sharma, G. (2015). Daily management system of the Henry Ford Production System: QTIPS to focus continuous improvements at the level of the work. *American Journal of Clinical Pathology*, 144(1), 122–136.