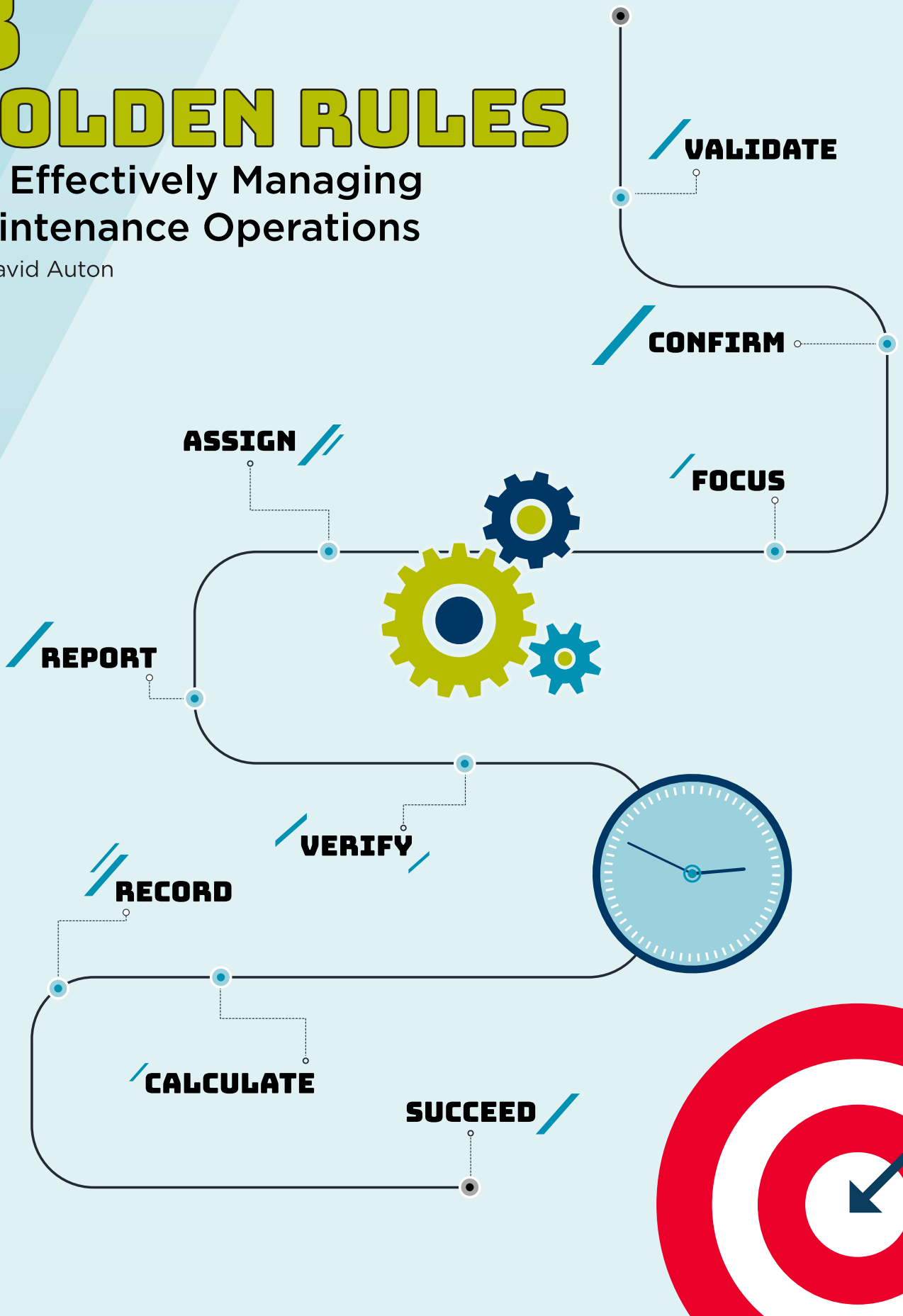
C&W SERVICES

8 GOLDEN RULES

for Effectively Managing Maintenance Operations

by David Auton



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Every facility has its unique culture, operational controls, and challenges. Relying on consistent performance from the facility maintenance team is critical. When focused on team capability management, several principles should be considered within the continuous improvement framework. The eight golden rules are simple guidelines to establish consistent performance and build a foundational maintenance framework that enables improvement.

1 All work is performed against a valid work order

It is impossible to measure work projects or tasks that are not documented. There should be a standard policy and procedure for all valid work performed through a CMMS (Computerized Maintenance Management System), to ensure all maintenance activity is tracked. Technicians should not begin work on tasks that cannot be captured and documented through the system. By assigning the work order to the maintenance technician, the CMMS can be leveraged to support different request priorities, such as an emergency response in lieu of routine tasks. As the work orders are executed, the ticket is recorded within the CMMS, then the reporting and analysis are conducted. Per Measurement System studies[1], if technicians are recording less than 90% of their technical activity, the probability of identifying true resource demand drops to unverifiable levels.

2 Confirm work orders are assigned and completely daily

It can be challenging to recoup specific details for tasks that were performed days, if not months ago, and how they were executed. Consistent daily use of a CMMS can help capture details and identify the most recent services performed. It's important to plan each shift and record the completed tasks at the end of each shift. This helps to refine the task details to be more effective and efficient. It also enables the reporting to provide further accuracy and details by contemporaneously communicating when they are assigned, completed, and confirmed. Confirming completed work at the end of each shift also helps one to understand weekly progress and determine whether additional work time is required to finish the planned work.

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3 Technicians should only handle work orders assigned by their supervisor

Each technician's individual contributions should be considered when a supervisor oversees and manages the maintenance requests. This supervisor must also be able to manage team efforts with minimal disruption and undocumented (uncaptured) work. Having the supervisor manage and streamline communications directly with the technicians results in an elevated way to support the client's needs in on-demand or emergencies. Managers can communicate the needs and priorities of the tasks, and the technician can submit the work assignment in a timely manner.

4 All technician labor is assigned to and recorded on valid work orders

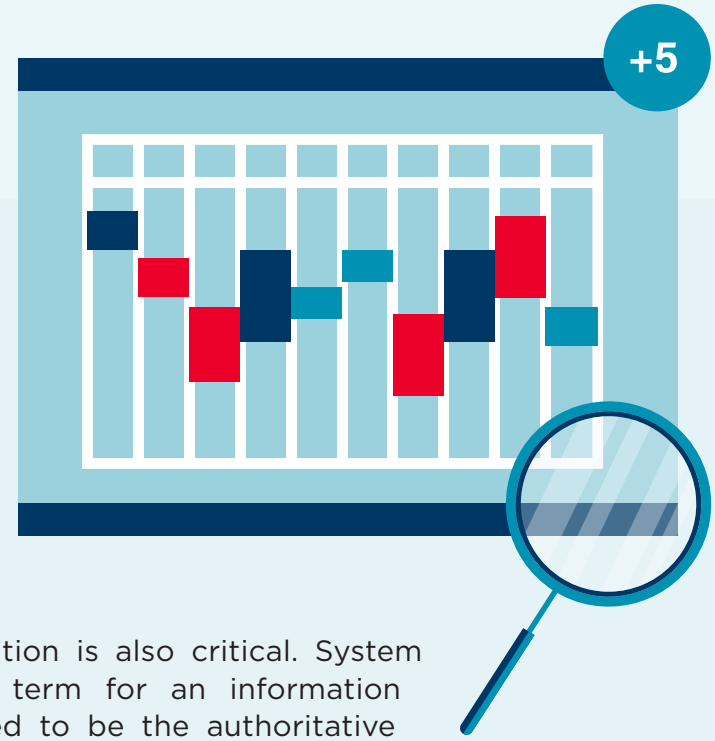
Documenting daily work tasks helps technicians validate every-day tasks, and duties performed. Examples of these tasks include work orders, training times, meetings, and more. When the task is assigned, the CMMS can help improve efficiencies. With technician tasks tracking in the system, our clients can be confident with the work performed and have demonstrated evidence of keeping their buildings safe and healthy.

5 Valid equipment, work type and technician actions are recorded on work orders

Analytics and reporting are only two of the areas that impact the quality of improvement programs like root cause analysis. Equipment performance metrics depend on the data quality that represents what work has been performed. Having accurate equipment history can enable a substantial payoff from improvement efforts. Working with technicians to ensure that they verify the task details such as equipment identifiers, locations, and other work order data contributes to accurate reporting. This allows for a robust reliability program that can identify gaps and provide solutions. Sharing the analysis and demonstrating how it leads to better planning and outcomes can demonstrate the benefits to the technicians for their efforts.

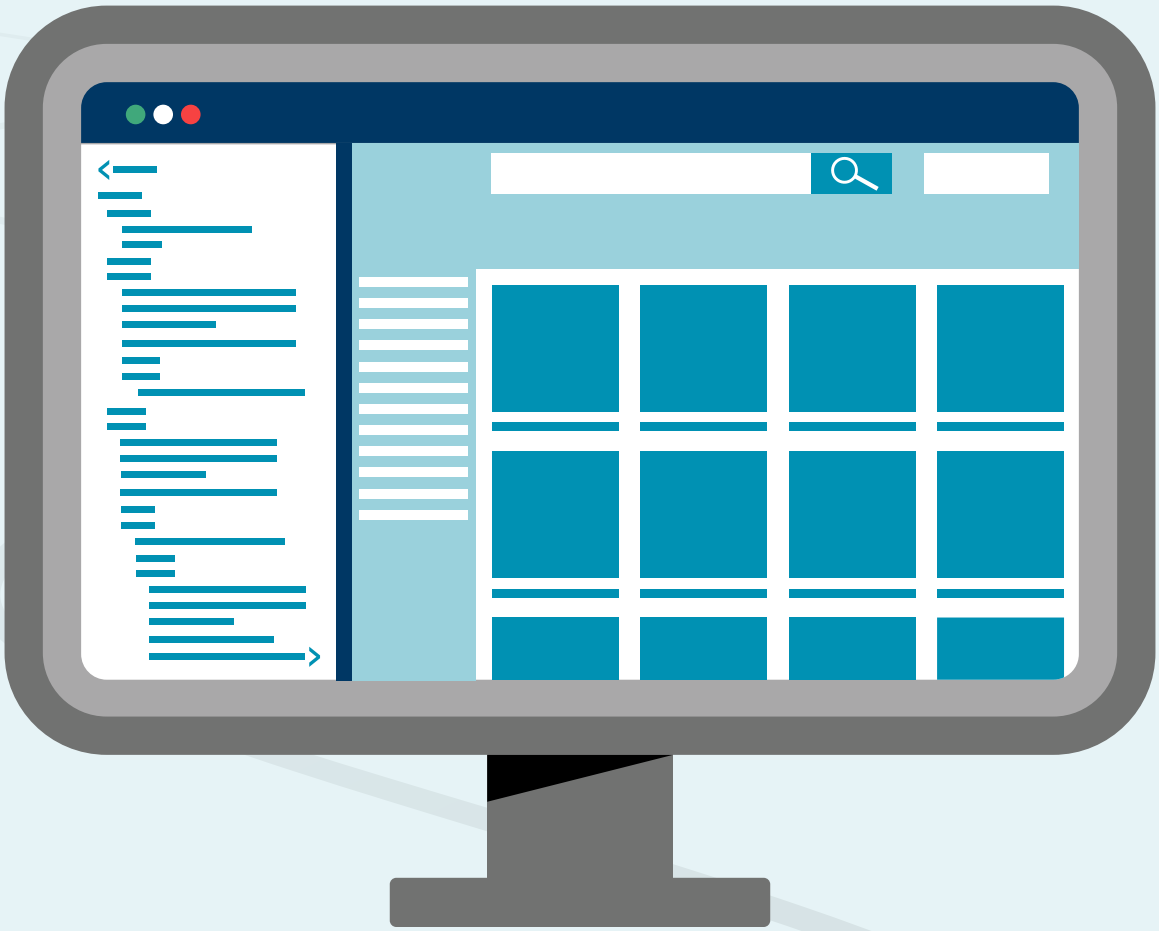
6 Ensure work orders have verification for accuracy prior to closing

As noted earlier, having good data enables identifying the root cause and developing substantial improvements. Having trained supervisors review work data for accuracy and quality will help identify gaps and develop the technicians' competency. It may be easiest to assign data quality reviews to the supervisory team to have another set of eyes review. Periodic quality audits, or a formal job step, will help move completed work from a preliminary "work completed" status to a "work order data verified" status. It is best to process map the audit plan for minimal extra resource requirements. Immediate feedback and course correction will quickly stabilize to an effective process.



7 All technician work should be recorded in a CMMS

There should now be no doubt that having accurate data is important, but in addition, having a defined data solution is also critical. System of Record is a data management term for an information storage system that has been agreed to be the authoritative data source. The organization should have a detailed data management policy that defines the authoritative source for recording equipment repair data; typically, the CMMS, as it best captures technician activities and equipment related data. By having a policy stating the CMMS is the system of record, uncertainty and debate are eliminated. Many emotions can surface when discussing work effectiveness and resource allocation. By ensuring all work is recorded in the agreed system of record, the data is the data. If the task or activity is not recorded, then was it really performed and completed? Utilization of resources and justification of maintenance costs can be validated by having an agreed data solution.



8 Maintenance KPIs are driven by CMMS data

With a solid data policy and a defined system of record, calculating performance and measurements of delivery is straightforward. The key is the data collection program containing the data needed for the KPI (Key Performance Indicators) calculations. For example, can the raw data from the system of record be used to calculate agreed upon KPIs? The calculations may take some minor math formulas in a spreadsheet or summarized in a pivot table, but the information should be transparent. Any special manipulation should be avoided. A robust discussion around the KPIs and how they will be calculated is recommended. Most KPIs are top-down, meaning the leadership decides what performance criteria are critical. The staff must then develop a measurement solution. To produce unbiased metrics, the data must flow bottom-up. The best approach is to ensure the KPIs and data align from the agreed sources.

The 8 golden rules for effective work execution management can be adopted for any organization looking to use maintenance data to drive improvement in their facility service program.

References

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