

Daily Toolbox Visual Boards

For Operations and Maintenance

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Abstract

Operational teams often raise issues and challenges during toolbox meetings; however, without a consistent method to capture, visualise and track these issues, they are frequently left unresolved. The Toolbox Visual Boards initiative was developed to address this gap by providing a qualitative approach to capturing daily operational challenges and improvement opportunities. Implemented across Operations and Maintenance at SA Water, the Toolbox Visual Boards enable frontline teams to document issues, assign ownership, track actions and identify trends. This paper outlines the background, design, implementation and early outcomes of the Toolbox Visual Boards and discusses lessons learned and future opportunities for continuous improvement.

1. Introduction

Toolbox meetings are a critical mechanism for frontline engagement, safety discussions and daily planning. Historically, many issues raised during these meetings were verbal only, resulting in limited accountability, repeated discussions and little visibility beyond the immediate team. SA Water identified the need for a consistent and structured approach to capture and act on operational issues raised at the point of work.

The Toolbox Visual Boards were introduced to create transparency, improve ownership and enable data-driven improvement across operational teams. The intent was to empower frontline workers to have their issues heard, documented and actioned, while providing leaders with visibility of systemic problems and improvement opportunities.

2. Discussion: Background and problem statement

Prior to the introduction of the Toolbox Visual Boards, common problems arising from toolbox meetings included:

- Issues and challenges being discussed but not documented
- Lack of clear ownership of issues or follow-up actions
- Repeated issues with no data to support escalation
- Limited visibility of trends across depots and regions.

This resulted in disengagement from teams who felt their concerns were not being addressed and frustration from leaders who lacked reliable data to prioritise improvement work. Toolbox Visual Boards were designed to shift from a reactive, conversation-based approach to a structured, visual and action-focused process.

3. Discussion: Toolbox Visual Board design

The Toolbox Visual Boards are designed as a practical, visually accessible tool to support daily toolbox meetings at operational depots. Each depot is equipped with a large screen or monitor, with a laptop connected during the toolbox meeting to display the digital visual board in real time. This allows the board to be visible to the entire team while discussions are taking place, supporting shared understanding and engagement.

The visual board itself is a digitally developed solution; custom designed through Microsoft Forms and SharePoint Listing to meet operational needs rather than an off-the-shelf software package. The system was developed collaboratively by Operations and Maintenance, Data and Performance teams with guidance from our Operations and Maintenance staff. This approach ensured the design reflected frontline workflows and existing toolbox meeting practices.

At the start of an Operator's shift they click the link to the Microsoft Form and enter in their red or green day report for the previous 24 hours. During each toolbox meeting, a nominated person, typically the supervisor or team leader, opens the Power BI on the big screen. Data entry includes a combination of structured fields such as drop-down menus and tick boxes, as well as free-text fields to capture additional context. Information recorded includes daily issues, frustrations, causes, improvement opportunities, assigned actions and ownership. This structured format enables consistency while still allowing teams to capture locally relevant detail.

The boards are used live during the meeting, reinforcing accountability and ensuring issues raised are documented and visible. Data captured through the visual boards can then be aggregated and analysed to identify trends, recurring issues and opportunities for targeted problem-solving.

The development and implementation of the Toolbox Visual Boards leveraged existing organisational tools and internal capability, minimising external costs. Investment primarily related to staff time for design, development, training and continuous improvement of the system, rather than significant software or infrastructure expenditure.

The image shows a digital form titled "O&M Toolbox Visual Boards" with a blue header. The form contains several input fields: a dropdown menu for "Group", a date picker for "What date are you submitting for?", a dropdown menu for "Was your day a red or a green day?", a large text area for "Any further details regarding your selection? (Please provide detail of the type of Technology / App / Vehicle / Plant / Machinery if relevant)", a dropdown menu for "Any Safety hazards or concerns identified?", a dropdown menu for "Do you have any Actions that you would like to raise?", and a large text area for "Do you have any Positive Share moments, please comment below?".

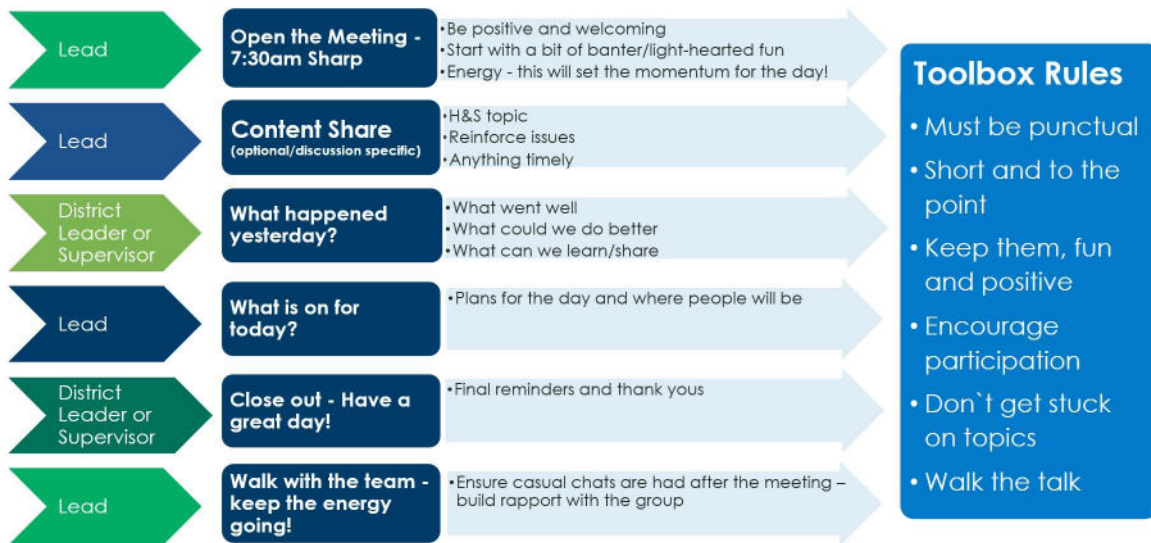
4. Discussion: Implementation approach

The Toolbox Visual Boards were rolled out across Operations and Maintenance from December 2024. Implementation included:

- Introduction of a standard toolbox meeting structure
- Training sessions and supporting materials
- Clear roles and responsibilities for teams and leaders
- Ongoing support from improvement facilitators.

A pilot approach was used to test and refine the process, recognising that uptake and maturity would vary across teams. Continuous improvement principles were applied to adjust the process based on user feedback and observed behaviours.

Toolbox meeting agenda & rules

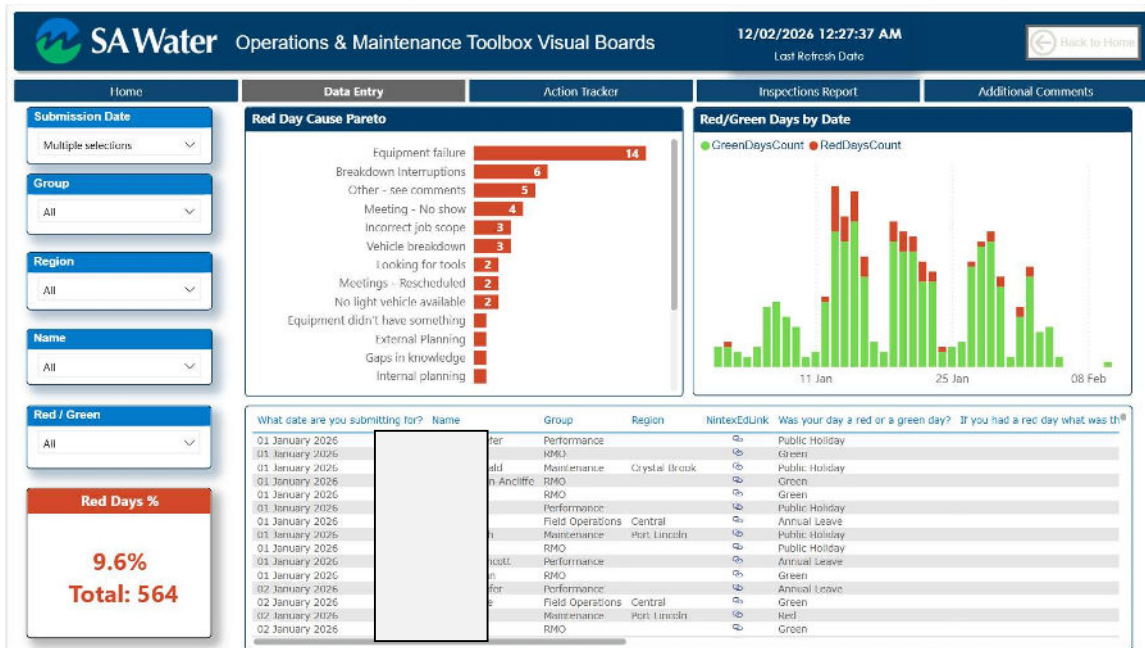


5. Discussion: Outcomes and benefits

Early outcomes of the Toolbox Visual Boards include:

- Improved documentation and visibility of frontline issues
- Increased accountability through clear action ownership
- Identification of recurring issues and systemic constraints
- Data to support problem-solving sessions and improvement projects
- Greater engagement from teams who can see actions being tracked.

Data captured through the Toolbox Visual Boards have supported targeted improvement initiatives and informed leadership decision-making across Operations and Maintenance.

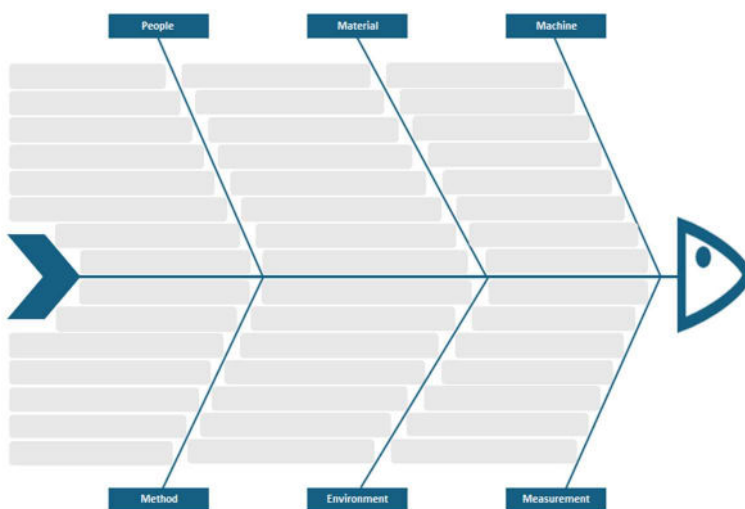


Example: Mini case study box (Fishbone)

Mini case study: Identifying and addressing recurring delays

During daily toolbox meetings, one operational team consistently recorded ‘red days’ on the Toolbox Visual Board due to waiting on information and return visits to jobs. By capturing these issues over several weeks, the team was able to identify a recurring pattern linked to unclear job scoping.

The data captured through the visual board was used to support a targeted problem-solving discussion, resulting in changes to how job information was prepared and communicated prior to work commencing. Subsequent toolbox meetings showed a reduction in the recurrence of this issue, reinforcing the value of documenting and tracking issues raised at the point of work.



Use a Fishbone problem solving tool for

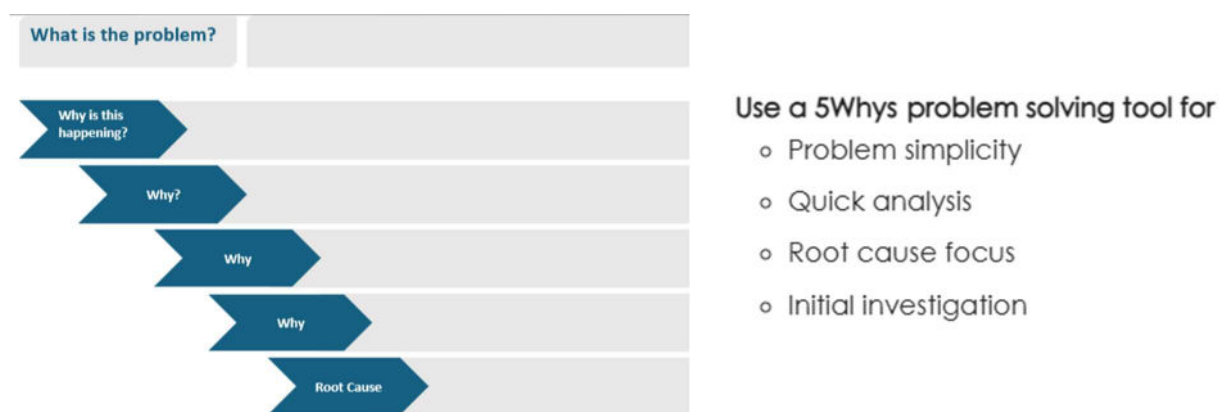
- o Complex problems
- o Detailed analysis
- o Visual representation
- o Team involvement

Mini case study: Identifying meter reading constraints

Through daily toolbox meetings, meter reading teams consistently recorded issues on the Toolbox Visual Boards relating to delays and inefficiencies in meter reading activities. These included

challenges such as access issues, unclear job information and repeat visits to sites. By capturing this information over time, the visual boards highlighted recurring patterns that were not previously visible beyond individual teams.

The data collected through the Toolbox Visual Boards was used to support focused discussions and inform targeted improvement initiatives related to meter reading processes. This enabled teams and leaders to better understand underlying constraints and prioritise actions to address common issues impacting daily meter reading operations. This has now led to business wide change in investigating Smart Meter and the impact that would have on customers and the business.



6. Discussion: Challenges and lessons learned

Key lessons from the implementation include:

- Consistent leadership support is critical to sustain usage
- Teams require time and reinforcement to embed new behaviours
- Visual simplicity is essential to avoid over-complication
- Feedback loops must be closed to maintain trust and engagement.

Adoption varied across teams, highlighting the importance of ongoing coaching and management support to drive success and reinforce the purpose and value of the Toolbox Visual Boards. It's expected the boards could be embedded into a business unit within 3–9 months in a meaningful, sustainable way, with the exact timing depending on leadership consistency, team size, and how disciplined the reinforcement is.

An example of the challenge to embed Toolbox Visual boards was observed in teams where consistent leadership support was not present following the initial introduction of the boards. In this case, the boards were introduced during toolbox meetings, however limited follow-up or reinforcement occurred once the initial rollout period concluded. As a result, use of the visual boards became inconsistent, with issues either recorded sporadically or not revisited in subsequent meetings.

Without visible leadership engagement such as reviewing actions, closing feedback loops, or reinforcing expectations, teams perceived that issues captured on the boards were not leading to

meaningful outcomes. Over time, this reduced confidence in the process, and the visual boards were viewed as an administrative task rather than a tool to support improvement. This highlighted the importance of ongoing leadership involvement to reinforce purpose, support accountability and sustain behavioural change.

7. Discussion: Future opportunities

The Toolbox Visual Boards are evolving as a core enabler of frontline-led continuous improvement at SA Water. As the approach matures, several future opportunities have been identified to strengthen impact, insight, and sustainability.

Identified future opportunities include:

- **Strengthening data analysis and reporting capability**
Improving how data from Toolbox Visual Boards is captured, analysed, and reported will enable clearer insights into behavioural trends, operational risks, and improvement effectiveness.
- **Linking Toolbox Visual Boards data to broader continuous improvement frameworks**
Integrating board outputs with existing continuous improvement, safety, and operational excellence frameworks will improve alignment and reduce duplication, ensuring frontline insights inform enterprise-level decision-making.
- **Using trend data to proactively identify risk and improvement priorities**
Analysing trends over time will support earlier identification of emerging risks, recurring issues, and systemic improvement opportunities, shifting the focus from reactive response to proactive prevention.
- **Further standardisation while allowing local flexibility**
Continued refinement of standard elements (structure, core measures, and language) will support consistency and comparability, while maintaining flexibility for business units to reflect local context, risks, and priorities.

8. Conclusion

The Toolbox Visual Boards have provided SA Water with a practical, structured approach to capturing and acting on frontline issues. By making problems visible and actionable, the Toolbox Visual Boards support safer, more efficient operations and empowers teams to contribute directly to continuous improvement. Continued focus on leadership support, feedback and refinement will be essential to realising the full long-term benefits of the initiative.