

Prioritising production over maintenance & reliability – a false dichotomy



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As organisations adapt to unpredictability and tougher economic times, business opportunities need to be seized quickly and decisively. It is intuitive for many organisations to prioritise production during favourable market conditions to capture windfall opportunities at the expense of short-term compromises in maintenance and reliability (M&R) priorities. This strategy often results in increased safety and reliability risks with long term knock-on effects that may impact equipment end-of-life.

However, we have often seen that focusing on output at the expense of M&R can create a false dichotomy which negatively impacts operations in the long run. Production decisions that impose uncontrolled deviations to M&R programmes often result in negative impacts on safety, environment, quality and plant operational performance, thereby impairing future business agility and increasing operational risks.

Adopting a risk-based M&R programme delivers balanced performance across all strategic objectives

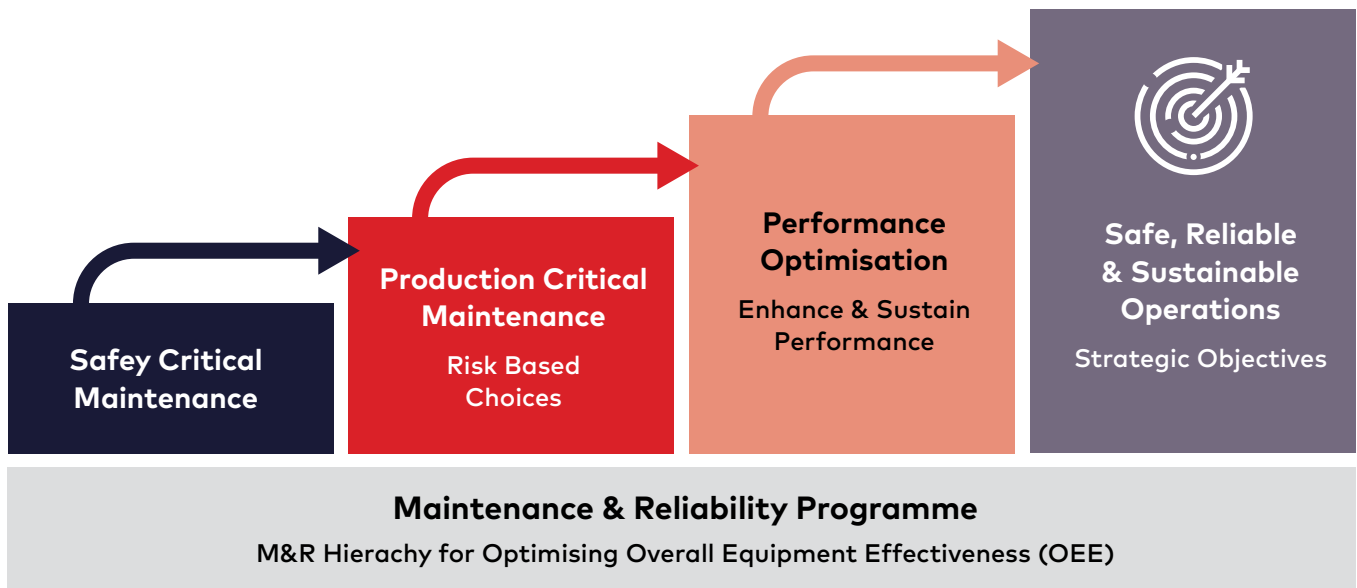
Taking a risk-based approach to M&R programmes to balance safety, operational, and reliability objectives

A risk-based M&R programme is an effective strategy and a leading practice: as a strategy, it protects operational assets and personnel from safety/process safety risks, and as a practice, it ensures that equipment meets or exceeds its nameplate production performance during its operating life.

Adopting a risk-based M&R programme delivers balanced performance across all strategic objectives such as safe and reliable operation, reduced planned or unplanned downtime, extended asset life and lower asset management cost, reduced production cost, improved production volume and asset uptime.

This can be achieved by clearly defining M&R strategic priority actions that pose uptime constraints, such as safety and regulatory requirements, and prioritising these actions to mitigate unqualified and disproportionate risks to the organisation. Additionally, by implementing a well-structured programme that prioritises non-safety critical tasks based on their risk levels, organisations can strike a balance between meeting M&R needs and achieving other business objectives. This approach not only helps to ensure safe and reliable operations and equipment conditions, but also enables organisations to optimise resources and maximise their return on investment.





A well-defined M&R programme comprise a combination of i) safety critical maintenance prerequisites, ii) risk-based choices, and iii) low risk tasks with operational flexibility through which leaders can navigate risks and opportunities with confidence

Considering the great benefits that a risk-based M&R programme may bring to an organisation, why is it that so many organisations struggle to maintain such a strategy effectively?

Our global experience indicates that one of the primary reasons is the objectives of such an approach represent multiple opposing factors that that need to be well understood and addressed strategically. For example, improved reliability may require more maintenance, leading to increased planned downtime and less output. This is where leadership has a critical role to play in ensuring that risk-based programmes are implemented strategically. Leadership needs to take a far-sighted strategic decision to compromise short term output for greater long term sustainable output.

Doubts in the M&R programme can cause resistance to carrying out actions and priorities, even if they are safety- or operations-critical.

Leadership has a critical role to play in ensuring that risk-based M&R programmes are implemented strategically

The leadership challenge in risk-based M&R programmes

A challenge to successful leadership support in the execution of risk-based M&R lies in the low levels of confidence in the programme's basis and design. Such doubts often lead to challenges in execution of M&R priorities and actions, even if they are identified in the programmes as safety- or operations-critical. This attitude towards M&R can result in unqualified variances in programme execution that negatively affect business objectives. To overcome this challenge, a twofold leadership strategy and approach is required: firstly, building confidence in the M&R programme, secondly, putting full leadership commitment behind the programme, especially in the execution of essential actions, such as safety-critical maintenance.

A robust, risk-based M&R programme can serve as a sound strategic lever when leaders need to consider trade-off decisions on production, capital loss risks, or deferral of expenditure from delayed maintenance tasks. On acknowledging the need for a robust risk-based M&R programme, any doubts about the technical justification of the programme should be challenged at the design phase, to increase leadership confidence and commitment to the programme.



An effectively implemented M&R programme allows leadership to avoid compromising downside risks, safety and regulatory compliance, while driving sustainable business performance improvements.

In summary, we believe that there is a false dichotomy between prioritising production over M&R. Holding these two essential operational priority levers in opposition can have a significant negative impact on long-term sustainable operations. A risk-based approach to M&R programmes can balance and integrate safety, reliability, and operational objectives. This is achieved by defining and prioritising safety-critical or production-critical maintenance actions whilst implementing a programme that considers the risk level of non-safety critical actions.

Whilst many organisations struggle to maintain a risk-based M&R programme due to conflicting objectives and low confidence in the programme's design, strong leadership is required to invest in a high-confidence, performance-driven programme by committing to essential actions, such as safety-critical maintenance. An effectively implemented M&R programme allows leadership to avoid compromising downside risks, safety and regulatory compliance, while driving sustainable business performance improvements.

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