

# EXECUTIVE BRIEF

Unexpected system failures result in substantial financial losses and operational disruptions. This brief proposes a predictive maintenance solution to mitigate these risks. By leveraging Minitab's predictive analytics capabilities, you will develop a model to forecast system failures based on health data and historical maintenance records. Proactive maintenance scheduling, enabled by accurate predictions, will significantly reduce downtime, improve system reliability, and optimize resource allocation. The anticipated benefits include cost savings, enhanced operational efficiency, and increased customer satisfaction.



## THE PROBLEM

Traditional reactive maintenance strategies are proving increasingly inadequate in preventing costly system disruptions across industries. While the financial implications are staggering—with an average of \$100,000 per hour of downtime and figures as high as \$260,000 in manufacturing—the repercussions extend beyond monetary loss. Production delays, compromised product quality, and safety hazards are direct consequences of unplanned equipment failures.

## THE SOLUTION

Preventative maintenance is designed to address the issue of unplanned equipment failures. To enhance system reliability and reduce operational costs, we can implement a predictive maintenance strategy. Minitab's Predictive Analytics Module equips you with the tools to optimize maintenance schedules, allocate resources effectively, and extend equipment lifespan, ultimately driving significant cost savings and operational efficiency.

# THE VALUE

- **Reduced downtime:** By identifying potential issues before they become critical, organizations can schedule maintenance during non-peak times, minimizing disruptions to operations.
- **Increased equipment lifespan:** Regular maintenance helps to extend the life of equipment by preventing wear and tear.
- **Lower repair costs:** Early detection of issues often leads to less expensive repairs compared to those required for catastrophic failures.
- **Improved safety:** Preventative maintenance can identify potential safety hazards before they result in accidents or injuries.
- **Optimized resource allocation:** By predicting equipment failures, organizations can allocate maintenance resources efficiently.
- **Enhanced productivity:** Consistent system performance, resulting from preventative maintenance, contributes to increased productivity.

## KEY NEXT STEPS

Early adoption of predictive maintenance positions organizations as leaders in infrastructure management and risk mitigation. By implementing a predictive maintenance strategy powered by Minitab, your organization can significantly enhance their operations, optimize component reliability, and reduce costs.

Don't let unexpected system failures disrupt your business. Contact Minitab today to discover how predictive solutions can transform your operations.



You have data. We have solutions. Imagine the possibilities.

**Talk to Minitab Today!**