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Blog

Smarter uptime minimizes unplanned downtime

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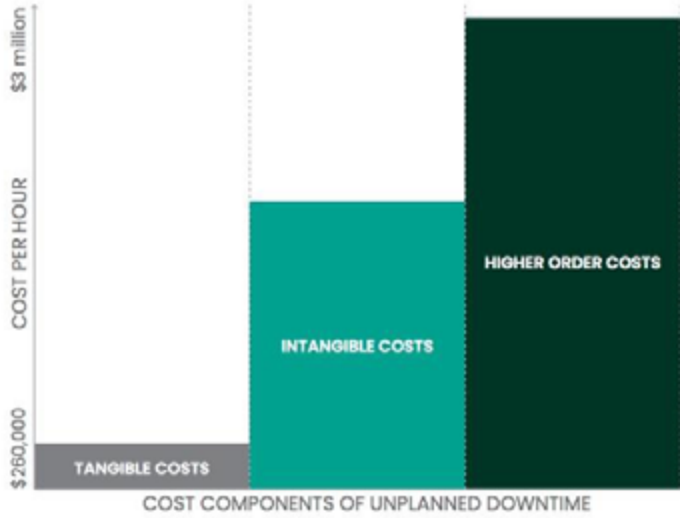
A comprehensive study among 450 field service and IT decision makers found that of the **82 percent** of companies that have experienced unplanned downtime over the past three years, those outages lasted an average of **four hours** and cost companies an average of **$2 million**. It's important to understand that there are several components that drive up that cost and may do so slowly over time, adding to the negative impact of emergency events.

When unplanned downtime occurs, recovery is often hindered by reactive urgency together with a dearth of operational insights to make critical decisions, elevating risk and costs. The best disaster recovery plan is made before disaster(s) strikes, resulting in smarter uptime. You should consider utilizing a digital control platform that monitors, collects and analyzes machine performance data (in real-time), and offers a comprehensive unified view of your operations, as the first step toward preventing and minimizing the impact that downtime might have on your operations.

Cost components of unplanned downtime

When unplanned downtime occurs in the industrial sector, a ripple effect begins that can continue generating direct and indirect costs for days, weeks, months, and potentially years to come. Compounding the problem is the fact that as many as 80% of industrial facilities aren't able to accurately calculate the true cost of downtime. This is due to the fact that are still many factories that haven't embraced 4IR and are therefore "offline," with no way to collect or analyze plant-wide operational data.

The costs associated with unplanned downtime can be broken down into three categories:



COST COMPONENTS OF UNPLANNED DOWNTIME

Tangible costs: lost revenue, regulatory penalties, lost productivity, and more

Intangible costs: brand damage, industry exclusions, legal ramifications, and more

Higher order costs: human safety, environmental impact, and more

Without intelligent, next generation control systems in place, these costs, outlined in greater detail in our **infographic**, can quickly escalate to unmanageable levels.

Create smarter uptime to prevent and minimize downtime

Many industrial teams (and a stunning 70% of the respondents in the aforementioned study) don't know when their operational systems need to be serviced, upgraded, or replaced. Despite the fact that unplanned downtime is a major concern for organizations, outdated and time-based maintenance strategies that are not effective at predicting or preventing system failure are still being used. Furthermore, when unplanned downtime does occur, teams are responding reactively since there is minimal data available to understand root cause of outages.

With the right tools in place, it is possible to intelligently lower the number of outages that occur and minimize the fallout of those events when they do. For industrial industries, there are three key components to minimizing downtime:

1. **Automated control** for smarter uptime
2. **Data diagnostics** for insight and rapid recovery
3. **Safety systems** to boost protection

A next generation distributed control system (DCS) provides a comprehensive view of operational health from a single unified platform that integrates all three components listed above. Automated control systems pull data from machines throughout the plant and use powerful analytics to alert plant operators when systems fail to operate under normal conditions. Plant operators are able to make critical decisions before an unplanned outage occurs. When unplanned events do occur, historical data can be quickly accessed and leveraged to allow swift and accurate reactions.

Operators are able to precisely make online changes to the application system logic that controls plant operations from a unified software environment. This capability optimizes the amount of time necessary to correct the situation without having to rely on the manufacturer.

If you want even more insights about the latest and greatest in DCS and Safety Systems, we also have a comprehensive guide available to download. **You can get the guide here**.

With the right next generation control system in place, plant operators are empowered to reduce risk, control costs, and minimize unplanned downtime by increasing visibility into the lifecycle of assets, improving troubleshooting, and simplifying programming.

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