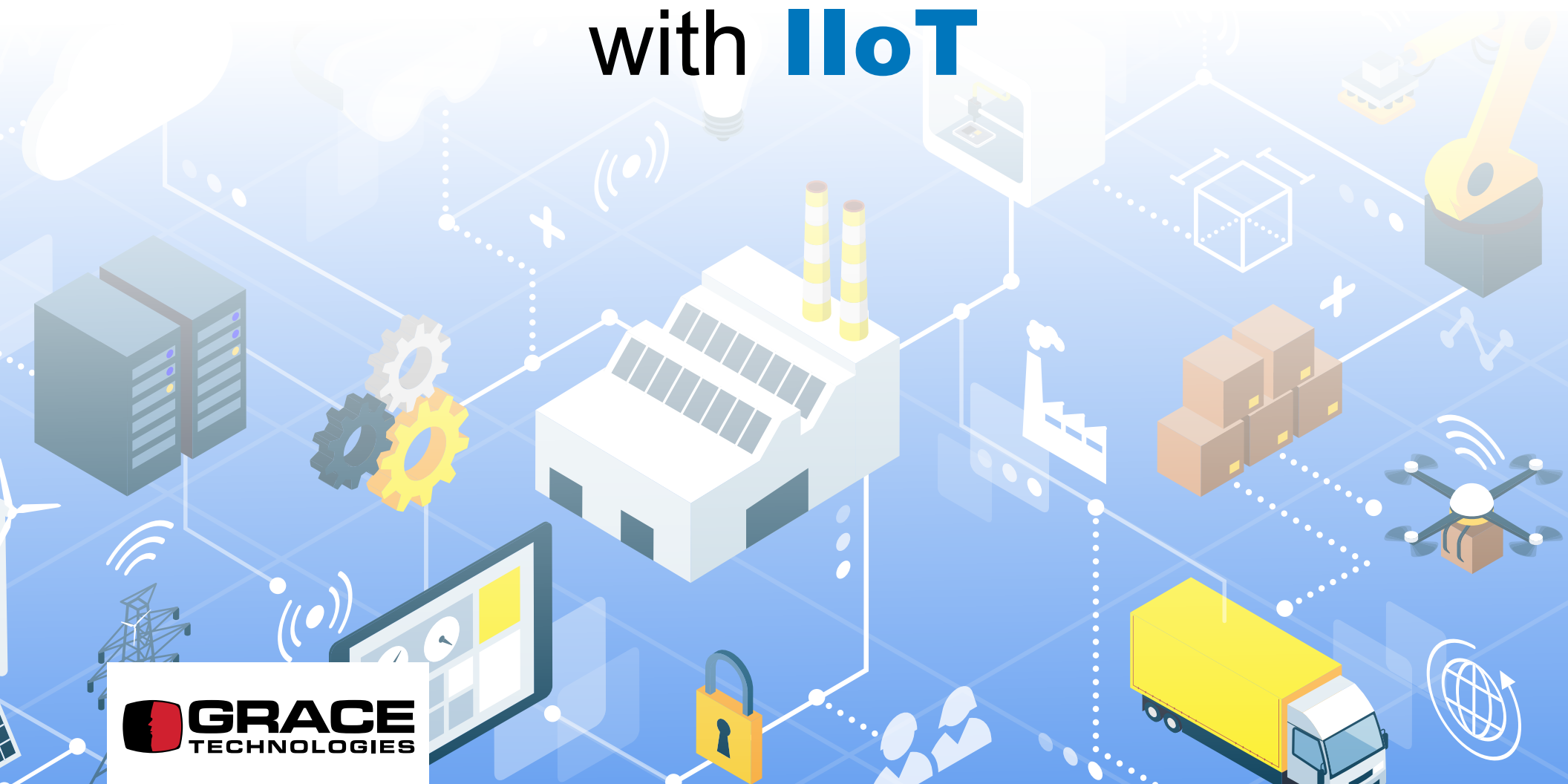


Transition from **Reactive Maintenance** to **Predictive Maintenance** with **IIoT**



Unplanned Downtime Poses Great Risk to Your Workforce and Costs Billions Annually

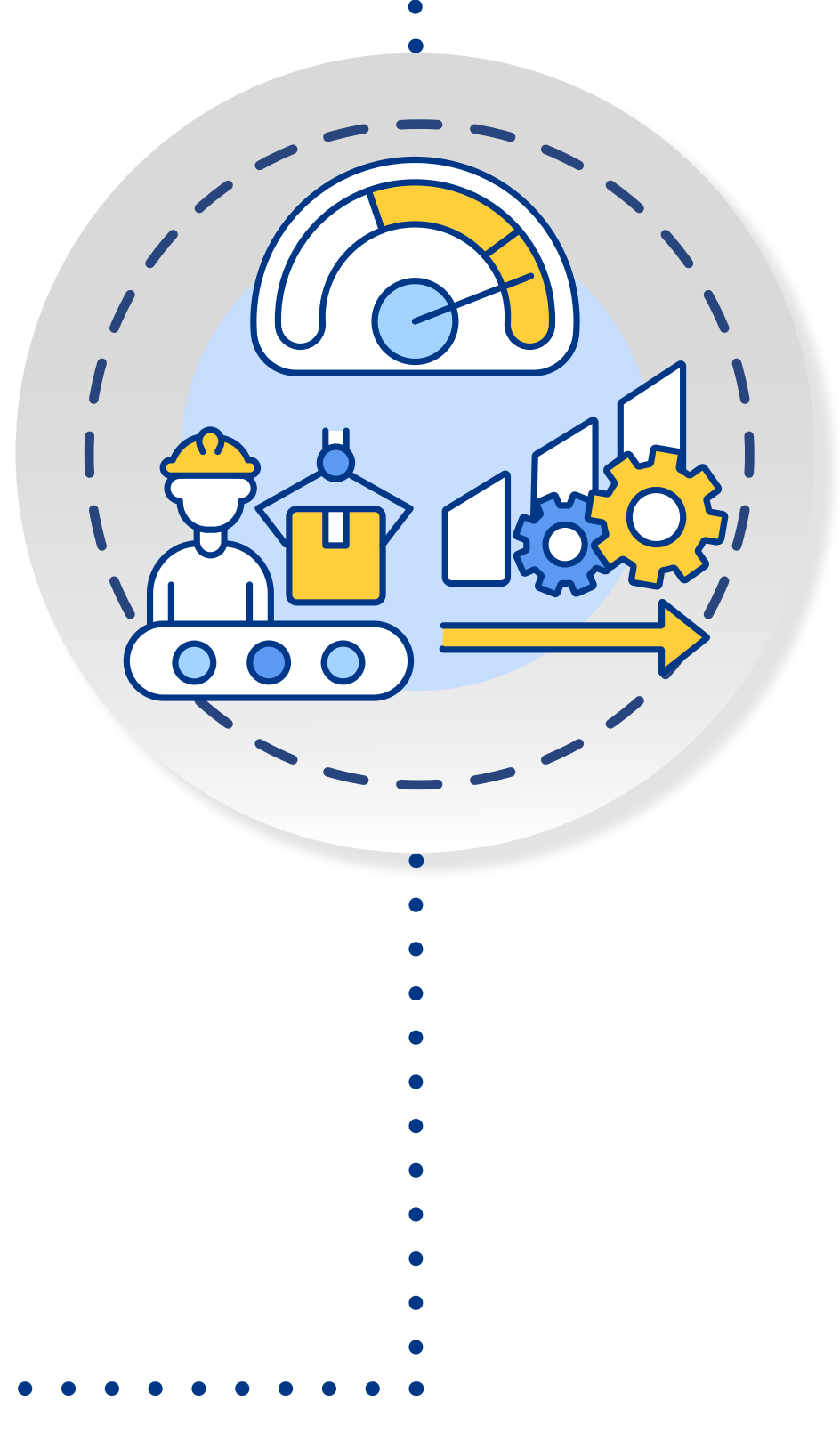
80% of equipment failures are unpredictable without condition monitoring solutions

70% of workplace injuries occur during reactive maintenance

Source: Condition Based Maintenance Strategy for Equipment Failure Prevention from Lifetime-Reliability

82% of companies have experienced unplanned downtime over the past three years, and this can cost an average of **\$260,000 an hour.**

Source: The Actual Cost of Downtime from IIoT World





Embrace the Digital Transformation for Maintenance Excellence

Maintenance strategies have seen a **24%** increase in utilizing Computerized Maintenance Management System (CMMS) since 2019. Today, **52%** of maintenance strategies in the manufacturing industry utilize CMMS, and **41%** use predictive maintenance with analytics tools.

Source: 35 Latest Maintenance Statistics for 2023: Data, Adoption & Strategies. Retrieved from Finances Online

Predict and Prevent Equipment Failures with GraceSense™

25 - 30% reduction in maintenance costs with predictive maintenance

Source: Boost ROI, efficiency with Predictive Maintenance from Rockwell Automation

Seamless Integration of GraceSense™ into Existing Maintenance Programs

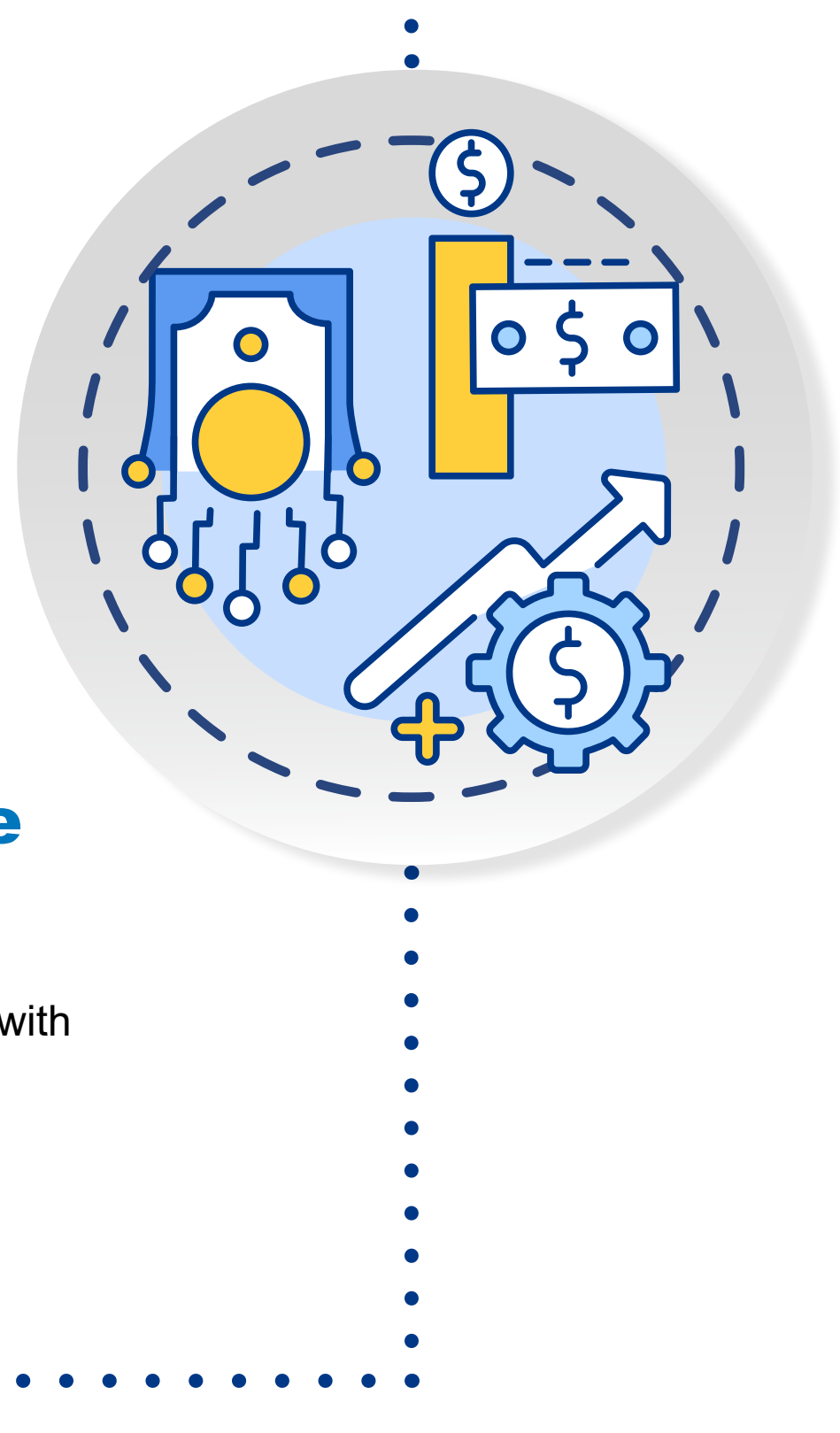
40% decrease in unplanned downtime with predictive maintenance

Predictive Maintenance Cost Savings: Reduce Your Maintenance Costs from LLumin

Maximize ROI with GraceSense™ Predictive Maintenance

70-75% reduction in equipment breakdowns with predictive maintenance

Source: What is Predictive Maintenance? from Fiix



Superiority of GraceSense™: A Smarter Choice for Predictive Maintenance

While wired sensors have been traditionally used, wireless sensors offer numerous benefits that can revolutionize your maintenance strategy including:

- Flexibility
- Cost-Effectiveness
- Scalability
- Real-Time Data
- Mobility



Defect Classification: Categorizing equipment anomalies based on severity and impact

- **Data Collection:** Real-time sensor data from vibration and temperature
- **Data Analysis:** Advanced algorithms and machine learning techniques
- **Defect Classification:** Assigning classifications based on severity and potential impact
- **Prioritization and Action:** Allocating resources based on defect severity
- **Maintenance Planning:** Insights into recurring patterns and common failure modes





Shaping the Future: The Evolution of Predictive Maintenance

Predictive maintenance market
expected to reach **\$10.84 billion** by **2026**

Source: Global Predictive Maintenance Market (2021 to 2026) - Real-Time from PR Newswire

Unlocking the Potential of Machine Learning and Artificial Intelligence

Machine Learning (ML)	Artificial Intelligence (AI)
Predictive Analytics: Analyze vast amounts of historical and real-time data, identify patterns and anomalies, and enable predictions with higher accuracy.	Anomaly Detection: Continuously monitor sensor data, automatically detecting deviations from normal operating conditions, and trigger alerts for proactive intervention.
Condition Monitoring: Analyze sensor data in real-time, detect subtle changes in equipment behavior, and provide early warnings of potential failures.	Prescriptive Maintenance: Recommend optimal maintenance actions based on analyzed data, help maintenance teams prioritize and plan their activities effectively.
Continuous Improvement: Both ML and AI models learn from historical data and maintenance outcomes, continuously improving their predictions and recommendations over time.	