



Download The Digital MM-IoT Playbook:

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The Ultimate Mobile Machine – IoT Playbook



Build a Sustainable Mobile Machinery – IoT Solution

Intelligent IoT for Machines

About This Playbook

The Ultimate Machine IIoT Playbook is written for machine manufacturers, fleet operators, and machine users with distributed assets that are looking to build and sustain effective machine operations and management programs. A successful machine industrial IoT initiative is the result of clear goals and objectives combined with a best-practice approach to deployment, monitoring, management, and constant improvement.

This playbook is based on well over a decade of real world experience with mobile machine IoT solutions and over three decades of heavy equipment, machine, and industrial experience.

This playbook will help you avoid the most common pitfalls that leaders run into when implementing a solution and learn from the experiences of other machinery manufacturers, fleet operators, and machine owners. Whether you are deploying your first machine IoT solution or looking to improve an existing solution, this playbook will provide you with a roadmap you can use to make sure your new solution will help your organization realize your key objectives.



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Market Trends

12 Million

new IoT devices will be acquired every day in 2022

Gartner, The IoT Scenario: 3 Steps to Drive Strategic Impact

With so many new IoT devices coming online daily, having a strategic plan for your machine IoT is imperative for supporting and accomplishing your business goals.

61%

of enterprises show a high level of IoT maturity

Gartner, Internet of Things: Unlocking True Digital Business Potential

Many organizations are still working to mature their IoT initiatives. You can benefit from the experiences of those that have gone before you and leverage best practices that have been developed.

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More than 70 percent of companies find it difficult to implement and scale advanced technologies like IoT in a way that delivers significant improvement in return on investment or operational key performance indicators.”

McKinsey, Leveraging Industrial IoT and advanced technologies for digital transformation

HOW DOES YOUR ORGANIZATION MEASURABLY...?

- Increase productivity
- Decrease costs
- Drive revenue via new products and services
- Improve operations.
- Enhance the customer experience.
- Improve supply chain

Mobile Machine and Industrial IoT Challenges

Due to the lack of mature players in the market for industrial IoT, full end-to-end solutions are the exception, not the rule. As a result, costs, time, and reliability rank as the biggest Mobile Machinery Internet of Things (MM-IoT) challenges.

COST

Getting one solution that can work across many different machine types and brands is crucial to managing the cost of deploying and managing a successful MM-IoT initiative. Compatibility and integration with other enterprise applications is another cost-related challenge many machine OEMs and fleet operators are grappling with.

TIME

Making sure the data generated has practical value and is actionable, while also making sure changes and updates are fast and easy are important factors for an MM-IoT solution that supports business growth instead of constraining it.

RELIABILITY

Failures that interfere with obtaining timely data cause breakdowns in operational efficiencies. Connectivity for remote locations is critical and ensuring security of IoT devices and the machines they are deployed on is imperative.



Streamlining Distributed Machine Management

Get a fully integrated and operational MM-IIoT solution built for distributed fleets and OEM operations.

By the very nature of machines, they operate remotely in varying environments and locations – oftentimes across a large geographic area.

Managing distributed machine assets is a reality for OEMs and machine fleet operators. The benefits of having a centralized monitoring and management solution are difficult to ignore:

-  Lower Operational Costs
-  Improved Customer Satisfaction
-  Enhanced Performance & Utilization

TOP 10 FACTORS IN IMPROVING MACHINE OPERATIONS AND MANAGEMENT:

1. Asset tracking
2. Efficient routing
3. Operator safety
4. Maintenance tracking and scheduling
5. Automating replacement parts
6. Warranty tracking
7. Machine performance monitoring
8. Proactive alerts
9. Command and control
10. Over the Air Updates



Benefits of Mobile Machine IoT

Getting all the benefits of MM-IoT while simplifying distributed machine management doesn't need to be expensive and difficult to implement. Elevāt helps machine manufacturers and fleet operators develop an end-to-end approach for MM-IoT.

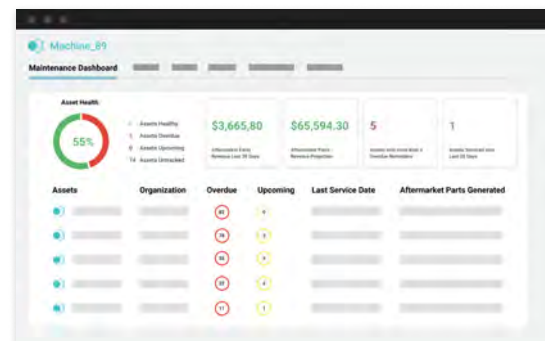
BENEFITS OF MM-IOT:

- Improved productivity
- Enhanced performance
- Sustainability
- Agility
- Speed-to-market
- Support for modern digital tools
- Integration across enterprise application
- Automation of manual processes

INTELLIGENT IOT FOR MACHINES:

Elevāt provides:

- Fast cloud access to all your machine assets.
- Increased uptime that keeps machines running smoothly.
- Optimized machine performance to maximize productivity.
- Reduced operating expenses to lower your total cost of ownership.



Elevāt Portal, Maintenance Dashboard

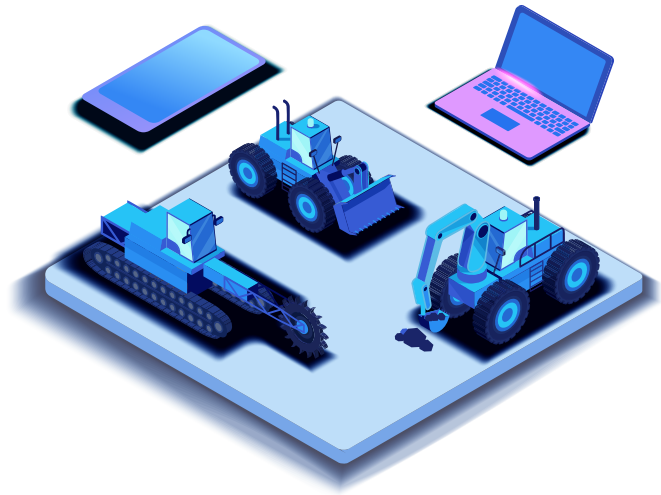
Learn More: www.elevat-iot.com

Managing the Cost of an Integrated Machine IIoT Solution

Is your current or lack of a MM-IIoT approach taking a bite out of your profits?

Reduce your operational costs by as much as 50% while delivering both an improved customer experience and enhanced machine performance.

The mobile machine IIoT market is growing at a feverish rate. Making sure your organization isn't simply jumping on the bandwagon is crucial. Ensure you have a clear set of objectives and identify opportunities to drive down the cost of your advanced MM-IIoT initiative.



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IIoT will be a \$500 billion market by 2025 as advances in its essential technologies drive up demand.”

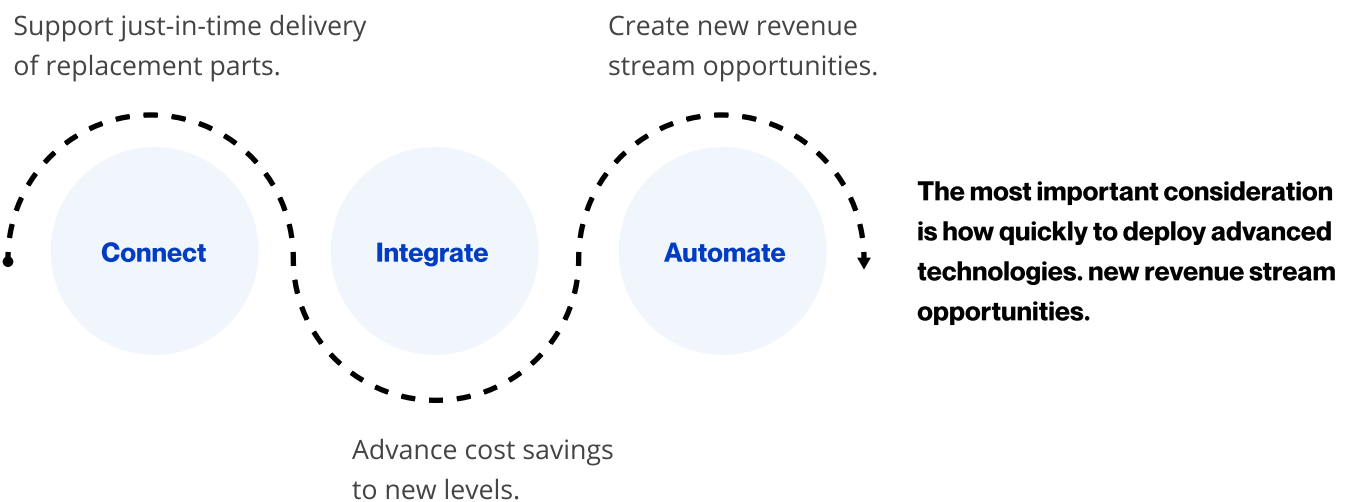
McKinsey, Leveraging Industrial IoT and advanced technologies for digital transformation

DRIVING THE COST OF ADVANCED IIOT DOWN:

- IoT sensor cost is coming down.
- IoT devices are becoming ubiquitous.
- 5G connectivity is proliferating.

Your Roadmap – Connect, Integrate, and Automate

Industry 4.0 has promised to take business to new levels, particularly when implemented across the entire supply chain, ushering in unlimited potential to:



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The speed of adoption of technology has shown to be the variable that puts distance between front-runners, followers, and laggards, with front-runners being the earliest adopters. **Front-runners**, meaning those that have adopted AI technologies, can expect a cumulative **122 percent cash-flow change**, while **followers** may see only a **10 percent cash-flow change**. Worse yet, **companies that do not adopt AI** over the five-to-seven-year horizon are expected to see a **negative cash-flow change of 23 percent.**”

McKinsey, Leveraging Industrial IoT and advanced technologies for digital transformation

Where Does Your MM-IoT Initiative Stand?

Ask what stage you are at:

1. Establishing strategy and tactics, but not implemented yet.

2. Basic level, experimenting at the business unit level.

3. Building a cross functional center of excellence and identifying champions in IT and the BU.

4. Already established a cross-functional center of excellence, obtained core lessons from initial IoT projects, and driving the next wave of projects.

Gartner, Internet of Things: Unlocking True Digital Business Potential

Once you determine where you stand today, you will know where to start in building out your MM-IoT program. Read on to learn how machine OEMs, fleet operators, and users are implementing modern machinery solutions and the real world benefits they are realizing.



MM-IoT Solutions

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The global market for IoT fleet management alone is expected to reach nearly 17 billion by 2025.”

Grand View Research, IoT Fleet Management Market Size Worth \$16.86 Billion By 2025

SETTING THE BAR

Organizations implementing MM-IoT solutions are realizing increased efficiencies in their operations while reducing their expenses.

- Machine tracking
- Fleet analytics
- Fuel management
- Predictive maintenance
- Remote diagnostics
- Operator performance

ADVANCED MM-IOT SOLUTIONS OFFER EVEN MORE:

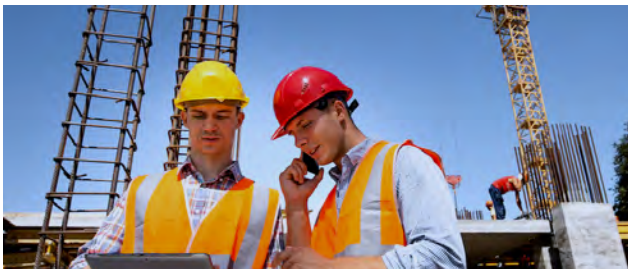
- Virtual technician capabilities to remotely diagnose and troubleshoot machines.
- Command and control for communicating instructions to machines in the field.
- Automating replacement parts ordering to avoid preventable downtime and failures.
- Proactive telematics alerts delivered via email and/or text directly to any device.



Outcomes – Real World Experiences in Connected Machines

Building a Better Future

Construction managers of a mixed fleet simplified maintenance of their machines. Automatic communication of each machine's needs through constant and reliable reporting helped minimize inefficient communication while maximizing time and resources.



Fewer Failures

A pile driver manufacturer saw big pressure spikes on their deployed machines and realized operators were throwing the machines into full reverse once the prescribed depth was reached. Having this data, the manufacturer improved their design and added safety features that reduced failures and decreased warranty calls.



Higher Yields from Woodchippers

Once a wood chipper manufacturer began working with clients to replace the blades more frequently, the consistency of product improved, delivering higher acceptable yields while increasing profitability.

A Competitive Edge

A cement trowel company realized they could reduce the engine size of their machines and create a hybrid product line. This company is now completely changing the industry with hybrid electric machines.

Automation Delivers Concrete Results

A cement mixer manufacturer helped cement contractors eliminate the error and variability of the final cement product while delivering a more advanced machine.

Pumping Up Growth

An agricultural pump operator implements a solution that remotely manages, monitors, and optimizes pump station operation for better crop yields and product quality.

Learn More: www.elevat-iiot.com/use-case/industries

Elevāt Solutions for Mobile Machine - IoT

Finally, a machine IoT solution that pays for itself.

Get full functionality machine IoT that pays for a full month of service with the first day's fuel savings.



Increase Uptime

Keep machines running smoothly



Maximize Productivity

Optimizes every machine asset



Reduce Operating Expenses

Lower your total cost of ownership

Learn More: www.elevat-iot.com/products/ez



Maximize Profits

More revenue from every machine



Enhance Customer Value

Big picture insights across deployed machines



Deliver Advanced Innovation

Insights that drive next generation development

Learn More: www.elevat-iot.com/products/machine-connect

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