Timly

Maintenance Report 2026

How Europe Maintains Today – and
Wins Tomorrow

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Foreword:
From Repairing to Optimizing

Maintenance is no longer just a cost factor – it has become a strategic lever for success for companies across Europe. It ensures productivity, efficiency, and increasingly also sustainability, safety, and regulatory compliance. In industries, public infrastructure, healthcare, and logistics, uninterrupted operation of machines and buildings is **essential for business success**.

However, many companies still face **key challenges**:

Outdated Processes
Limited digitization of central processes

Skills Shortage
Growing lack of qualified personnel

Spare Parts Procurement
Difficulties in timely acquisition of replacement parts

Low Transparency
Poor visibility of critical assets

Reactive Maintenance
Lack of a proactive maintenance approach

European frontrunners – especially Scandinavian countries (Denmark, Finland, Sweden) and the Netherlands – are setting new standards by leveraging smart technologies such as AI, cloud, and IoT to automate, optimize, and sustainably manage maintenance processes.[1] This demonstrates that the strategic use of digital tools is now a **basic requirement for competitiveness and future security** – not the exception.

Objectives of this Report

This report includes:

- **A current state assessment**: Where do European companies stand today?
- **Typical maturity levels** in maintenance
- **Key trends and developments** for the coming years
- **Modern solutions** – for example, Timly – and how they help companies shift from reactive to predictive strategies
- **Concrete recommendations for decision-makers** to future-proof maintenance in their organizations

The aim is to provide guidance and foster industry dialogue. This report serves as a long-term foundation for strategic discussions and an invitation to take the next step together.
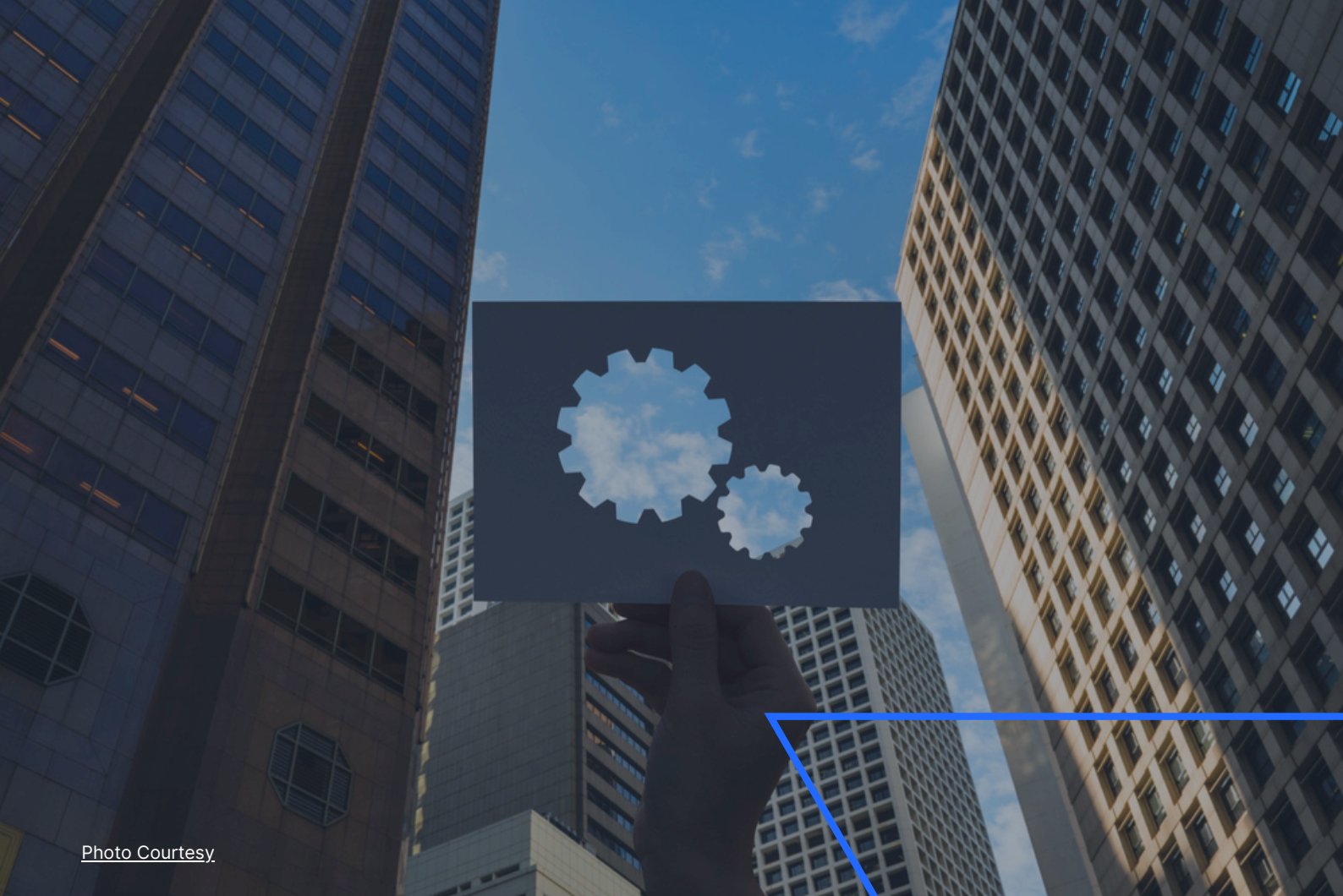
Maintenance as a Key to Business Success

Maintenance as a Key to Business Success

For a long time, maintenance was primarily seen as an operational necessity – a supportive function responsible for servicing and repairing machines, vehicles, or buildings. It **only gained attention when failures or disruptions occurred**.

This understanding is now outdated. The growing industrial market highlights this: the outlook for industrial machinery shows that **demand will rise significantly by 2031** – from $235 billion in 2023 to $362 billion in 2031.[2]

With the increasing demand for modern industrial machines, the strategic importance of reliable maintenance naturally grows – not just in industrial operations but across all sectors:

- **Manufacturing**: Predictive maintenance ensures equipment availability and minimizes downtime.
- **Logistics**: It guarantees the readiness of vehicles and infrastructure, ensuring smooth supply chain operations.
- **Healthcare**: Essential for operational safety of medical devices and compliance with legal regulations.
- **Public administration**: Crucial for preserving value, safety, and compliance in municipal infrastructure management.

Key principle:

Knowing your assets, documenting their usage, and planning maintenance systematically gives control and enables informed decision-making.

From this perspective, **maintenance becomes not only a technical discipline but a business-critical one**. It helps reduce costs, mitigate risks, and safeguard investments long-term. Companies that recognize this shift gain a strategic advantage, transforming a classic support function into a real value driver.

Rethinking Asset Management Software

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The Biggest Challenges
in Maintenance

The Biggest Challenges in Maintenance

Regardless of industry or company size, maintenance leaders face similar challenges today: keeping operations running with limited resources, increasing workload, and growing complexity.

Five central challenges impede sustainable development across sectors:

1. Aging Infrastructure and Equipment

Companies operate machinery, vehicles, or building systems well beyond their intended lifecycle. Often, structured information about asset conditions is missing. **Maintenance occurs under time pressure, and repairs are improvised, leading to unplanned downtime with serious economic consequences**: for the world's 500 largest companies, unplanned downtime now reduces revenue by around 11%.[3] In Germany, this amounts to €147,000 per hour.[4]
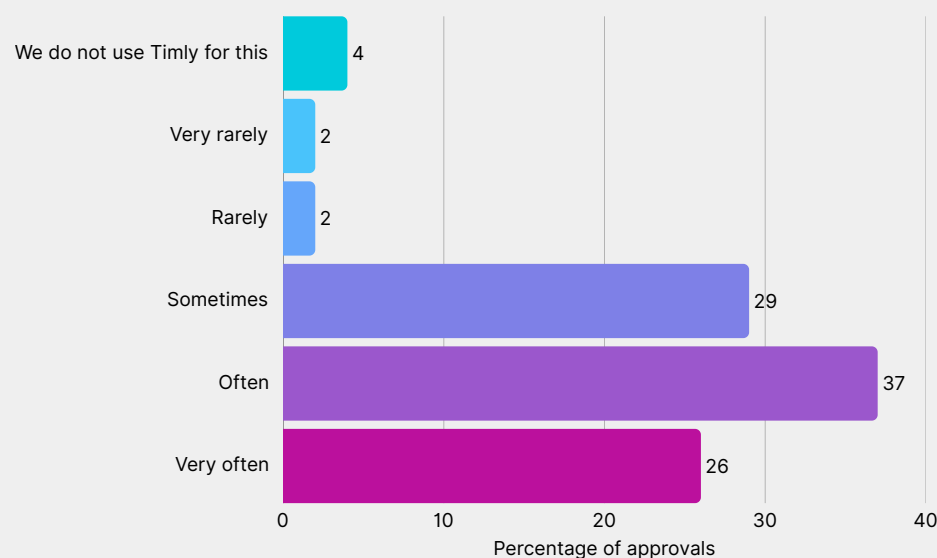
2. Skills and Knowledge Gaps

Demographic changes impact maintenance. Experienced professionals retire, and qualified newcomers are scarce.[5] In a 2023 survey, 63% of SMEs reported a lack of qualified personnel.[6] Additionally, much operational knowledge resides in employees' heads. When they leave, know-how is lost, affecting safety, efficiency, and quality long-term.

3. Lack of Digitization and Data Access

Many companies still plan and document maintenance in analog form – using paper forms, Excel sheets, or isolated systems, especially in mid-sized and traditional sectors. In 2024, 42% of small companies and 20% of mid-sized companies had not even reached basic digital intensity.[7]

Before using Timly: How often were you limited in your work due to missing information about the location, user, or availability of an asset?

Response	Percentage of approvals
We do not use Timly for this	4
Very rarely	2
Rarely	2
Sometimes	29
Often	37
Very often	26

Source: Timly Survey, Q3 2025

This leads to **lack of transparency, information loss, and increased daily effort**. Without reliable, centralized data, maintenance cycles cannot be efficiently planned, and strategic decisions cannot be based on facts. Digitization remains a key development topic in 2026.

4. Budget Pressure and Short-Term Thinking

Maintenance is often seen as a cost center, directly affecting available resources. Investments in modern tools, spare parts, or training are delayed or cut. Instead of focusing on long-term asset preservation, companies operate in crisis mode, incurring high downstream costs such as production stoppages, overtime, quality defects, and delivery delays. Some experts estimate that these indirect costs may be 2–10 times higher than direct maintenance costs.[8]

5. Fragmented Systems and Processes

In many companies, there is no comprehensive overview of all assets, maintenance activities, and responsibilities. **Accountability is unclear**, and information is scattered across different departments or systems. The result: processes are inefficient, **sources of error go unnoticed**, and the potential for automation remains untapped.

These challenges are not temporary; they have persisted for years and will remain highly relevant. Structured, digital, and sustainable solutions are therefore more important than ever.
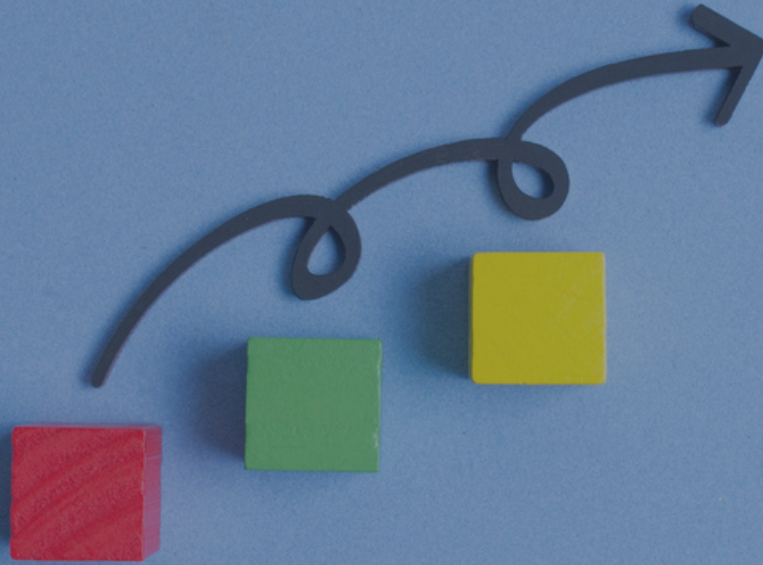

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Maintenance Maturity

Where Companies Stand Today

Maintenance Maturity

Maintenance in European companies is undergoing **dynamic change** — but not all organizations are moving at the same pace. While some are already using data-driven and connected systems, others are still operating mostly reactively.

Maintenance occurs mainly after failures.[9]

The shift from reactive to preventive and ultimately predictive maintenance can be visualized as a maturity model. The exact number and naming of stages may vary.

The 4-Stage Maturity Model

These stages describe how companies professionalize, digitize, and increasingly use maintenance processes strategically.

Key principle: **The higher the maturity stage, the more efficient, reliable, and strategic** the maintenance processes become, and the greater the benefits in cost reduction, asset availability, and data-driven decision-making.

At the same time, this also means a greater investment in data analysis technologies and specialized personnel to not only collect but also interpret the necessary data for predictive maintenance. It should also be noted that **companies may apply different approaches for various systems and machines**, and can therefore be classified as hybrid.
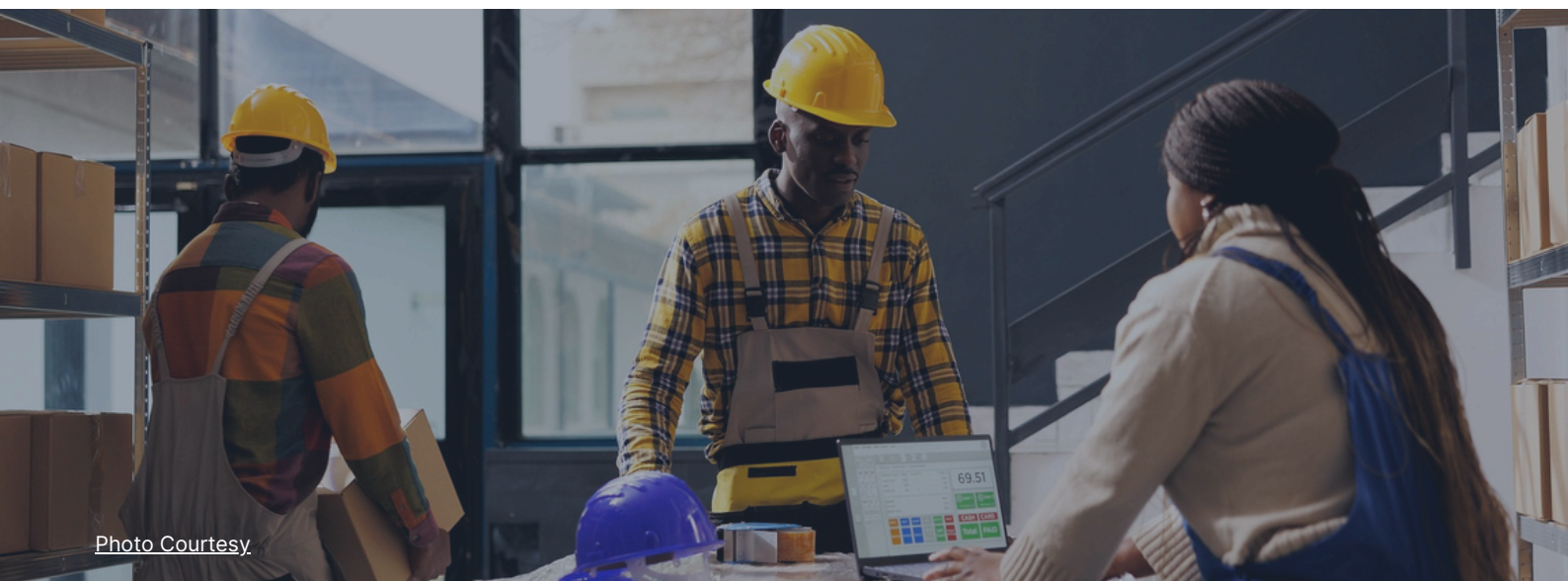

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Typical Maturity Stages

1. Reactive

- Maintenance follows the "firefighting" principle — repairs are only carried out **once equipment is damaged or has failed**, much like firefighters who only act once a fire has broken out.

- The goal is to fully exploit the lifespan of individual components.

- There is no overview of the condition or history of the equipment, making it **difficult or even impossible to set priorities effectively**. The result is usually long downtimes and higher, unpredictable repair costs.

2. Preventive (proactive)

- Maintenance intervals are planned according to **fixed cycles** (e.g., manufacturer recommendations). Initial documentation and maintenance plans are already in place.

- The **goal is to prevent failures through inspections and maintenance** (regardless of the actual condition of the equipment) to ensure machine reliability and minimize repairs.

- Planning is improved, but it is often still inefficient, as the costs for maintenance and inspections are frequently higher than necessary.

3. Condition-based (continuous)

- **Maintenance is based on current condition data** (e.g., inspections, sensor readings) that deviate from normal operating states.

- Maintenance actions are carried out only when deemed necessary, in order to reduce major repairs and equipment downtime.

- Maintenance logs and inventories are digitized.

4. Predictive (forward-looking)

- Data analytics, **AI, and IoT are used to predict failures**, allowing maintenance activities to be planned efficiently.

- High repair costs are minimized, and equipment availability is maximized.

- There is full transparency regarding assets and their maintenance history. Maintenance is viewed as a strategic management tool.

Maintenance Maturity

Where Do Companies Stand Today?

The maturity level of companies across Europe varies greatly. While progress can be seen in areas such as organization and IT, there is still **room for improvement when it comes to products, services, customer orientation, and environmental aspects**. In the field of maintenance, most companies are positioned between levels 1 and 3 — from reactive to preventive to condition-based — with the shift from reactive to preventive being particularly common among medium-sized industrial enterprises.

More advanced approaches, such as condition-based or predictive maintenance, are often still limited to pilot projects or are implemented mainly in large enterprises with a higher degree of digital maturity.

Industries with high asset value and stringent safety requirements — such as the pharmaceutical, oil and gas, chemical, automotive, and aerospace industries — are investing more strategically in modern maintenance strategies. In contrast, **public administration, healthcare, and smaller logistics companies still rely heavily on manual processes** and Excel spreadsheets in their daily operations.

Typical barriers that prevent companies from modernizing their maintenance practices are discussed in the next chapter.

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Typical Barriers on the Path to Modernization

The journey toward modern maintenance is often accompanied by structural and cultural challenges. These include:

- **Lack of data transparency:** Information about assets, their maintenance history, or condition is often scattered or not documented at all, resulting in an inconsistent decision-making basis and making the introduction of data-driven approaches significantly more difficult.

- **Technology skepticism and acceptance issues:** Many companies hesitate to adopt modern digital tools and cloud solutions due to a lack of experience or security concerns. In addition, employees are often critical of new approaches, which delays implementation.

- **Skill shortages and knowledge gaps:** Implementing predictive maintenance requires expertise in data analytics, artificial intelligence (AI), and digital technology. However, qualified specialists are in short supply, and systematic training programs are often lacking.

- **Investment barriers and budget limitations:** Maintenance is often not perceived as strategically relevant, meaning budgets and investments in sensors, software, and infrastructure remain limited, and pilot projects are not scaled up.

- **Lack of processes and integration:** Clear procedures and responsibilities for maintenance, data collection, and monitoring are often missing, making it difficult to integrate new technologies and build digital workflows.

Even more important, therefore, is that companies identify their individual maturity level and develop it systematically — step by step and tailored to their specific needs.

Test Your Maintenance Maturity Level

Answer the following quiz to gain a better understanding of your company's current maturity level.

For each area, answer the questions with one of the following options:

- ☑ "No" (0 Points)
- ☑ "Partially" (1 Point)
- ☑ "Yes" / Fully implemented" (2 Points)

Then, add up your points at the end.

Quiz

1 Data & Transparency

Q. Are all assets and their master data centrally recorded and up to date?

Q. Is there a complete maintenance history for each system or machine?

Q. Is the current condition of all business-critical equipment documented and easily accessible?

2 Use of Technology

Q. Are digital tools (e.g., maintenance calendars, mobile apps) used for maintenance?

Q. Are there automated status reports or condition monitoring systems in place?

Q. Is there integration with other company systems (e.g., ERP, IoT platform)?

3 Qualification & Acceptance

Q. Is there sufficiently qualified staff available to implement and manage digital solutions?

Q. How high is the acceptance of new technologies and cloud solutions within the team?

Q. Are regular training sessions offered on new tools and methods?

4 Investment & Strategy

Q. Is maintenance regarded as a strategic area within the company?

Q. Is there a clearly defined digitization roadmap for maintenance?

Q. Are sufficient budgets and resources available for modern technologies and training?

5 Processes & Responsibilities

Q. Are maintenance processes, responsibilities, and workflows clearly defined and documented?

Q. Are maintenance activities planned and monitored in a standardized way (e.g., via digital maintenance cycles)?

Q. Are there objective key performance indicators (KPIs) to evaluate and manage maintenance?

Quiz

Depending on your total score, your company can be classified as follows:

Score (max. 30)	Maturity Level	Description
0-7	Reactive	Maintenance is performed in a "firefighting" manner and only when issues arise, without systematic documentation; high downtimes and unpredictable costs; no overview of equipment condition or history.
8-15	Preventive	Initial maintenance documentation and plans are in place; maintenance is carried out in fixed cycles; planning and reliability improve, but many processes remain inefficient.
16-22	Condition-based	Digital tools, sensors, and data analytics are partially used; maintenance is scheduled based on actual equipment condition; maintenance records are digital, and some processes and integrations exist.
23-30	Predictive	AI, IoT, and data-driven forecasting enable proactive maintenance; full transparency, integration, and strategic control; minimal unplanned downtime and highly advanced processes.

Future Trends & Strategic Developments

Digitization, data availability, and technological progress are closely intertwined with **growing demands for transparency, safety, sustainability**, and regulatory compliance. Each advancement in one of these areas acts as a driver for the others — while simultaneously creating new requirements for maintenance processes, technologies, and responsible personnel.

While many companies are still struggling with structural challenges and the stabilization of digital processes, clear development trends are already emerging that will shape the industry in the coming years. These include, for example, **mobile data collection, data-based analysis, cloud-based solutions, and AI-assisted maintenance**. These developments are not merely short-term optimizations, but rather **profound, long-term transformations with strategic impact**.

1. Digitization and Automation

The **consistent digitization of maintenance processes** is considered key to increasing efficiency and improving planning.

Since the introduction of Timly, 55% of respondents report that equipment is now rarely or very rarely affected by maintenance errors — a clear demonstration of the impact of digitalized maintenance processes.

Source: Timly Survey, Q3 2025

Digital tools enable the automation of routine tasks, **centralized and comprehensive documentation**, and the use of mobile devices for easy access to maintenance schedules, mobile data collection, and real-time automated notifications. This makes processes more transparent, traceable, and scalable. In many organizations, automation is no longer a future topic — it is a concrete lever to relieve personnel and minimize sources of error.

2. Artificial Intelligence and the "Internet of Things" (IoT)

Artificial intelligence (AI) and the Internet of Things (IoT) are transforming maintenance by advancing from reactive to predictive, data-driven methods.

Connected sensors continuously record condition data, while AI is used as a supporting tool to detect anomalies early, make maintenance planning more dynamic, and optimize resource deployment — always depending on the quality of the data.

Ways Artificial Intelligence Can Be Used as Support

- **Early Anomaly Detection:** Analyzing sensor data (e.g., vibration, temperature, power consumption) to identify issues before they cause failures.
- **Dynamic Maintenance Scheduling:** Adjusting maintenance cycles based on real-time and historical data.
- **Optimized Resource Allocation:** Prioritizing resources according to criticality, risk, and availability.
- **Predictive Maintenance:** Combining diverse data sources (e.g., sensors, cameras, historical records) to forecast maintenance needs.
- **Advanced Analytics with AI:** Using machine learning, deep learning, computer vision, and natural language processing (NLP) for precise pattern and trend analysis.

Users of IoT and AI benefit from **significant reductions in unplanned downtime as well as improved resource utilization**. Especially through the integration of AI methods, precise analyses can be conducted and automated decisions made, enabling predictive maintenance.

3. Sustainability and ESG as Drivers of Innovation

Legal requirements, such as the EU's **Corporate Sustainability Reporting Directive (CSRD)**[10], and societal pressure are making sustainable business practices mandatory — including in technical operations.

ESG-Standards

New ESG standards — **Environmental, Social & Governance** — set guidelines for assessing and managing sustainable and responsible corporate governance. In the EU, these standards hold many companies accountable for the societal and environmental impact of their actions.

Companies are increasingly required to demonstrate how they **reduce energy consumption, optimize material use, and extend the lifespan of their equipment.**

Additionally, the **EU Taxonomy and the EU Corporate Sustainability Due Diligence Directive (CSDDD)** play a central role: these regulations demand comprehensive and transparent documentation of environmental and social responsibility across the entire value chain. In maintenance, this means ensuring sustainable processes, energy-efficient operations, and complete traceability of all actions.

For these reasons, **maintenance becomes a key discipline**: it links technical processes with corporate responsibility, actively contributes to environmental protection, and **improves the ESG performance**. At the same time, this creates additional opportunities for cost reduction and innovation.

4. Mobile and Cloud-Based Solutions as the Standard

Access to maintenance data, checklists, or fault reports — anytime and anywhere — is becoming the new norm. Mobile devices combined with cloud-based applications **ensure that information is available exactly where it is needed**: on-site at the equipment, in the warehouse, or in administration. At the same time, they enable seamless collaboration across departments and locations — a decisive advantage for increasingly decentralized organizations.

5. Growing Demands for Safety and Compliance

Whether in healthcare, energy supply, or public administration, legal regulations and standards are becoming increasingly complex and binding.

International and EU-recognized **standards in maintenance and asset management — such as DIN EN 15341, ISO 55000, ISO 9001, VDE, and VDI** — apply across industries and provide guidelines for maintenance organization, documentation, and digitization of maintenance processes. They also often form the basis for internal and external audits.

However, individual countries may have additional specific regulations that further define and tighten maintenance requirements. Examples include Germany's **Betriebssicherheitsverordnung (BetrSichV)** and the updated **Hazardous Substances Ordinance**, both recently revised or newly introduced. Similar developments can be seen in other EU countries, such as new occupational safety laws in France (**Code du travail**) or stricter equipment inspection regulations under Austria's **Electricity Industry and Organization Act**.

Over time, the number of standards and legal requirements continues to grow, and existing ones are constantly updated. **Companies must continuously adapt and professionalize their maintenance processes** to ensure regulatory compliance and operational resilience. Incomplete documentation or unverified maintenance can not only create liability risks but also endanger operations. Precisely executed, **digitally supported maintenance is therefore essential** for meeting regulatory requirements and strengthening corporate resilience.

Best Practices & Practical Solutions

The digitization of maintenance is not just a theoretical concept — it is already happening. Companies across various industries demonstrate how **maintenance processes can be successfully modernized**, which principles have proven effective, and which pitfalls should be avoided. **Cross-industry success factors can be identified** that are applicable regardless of company size or technical starting point.
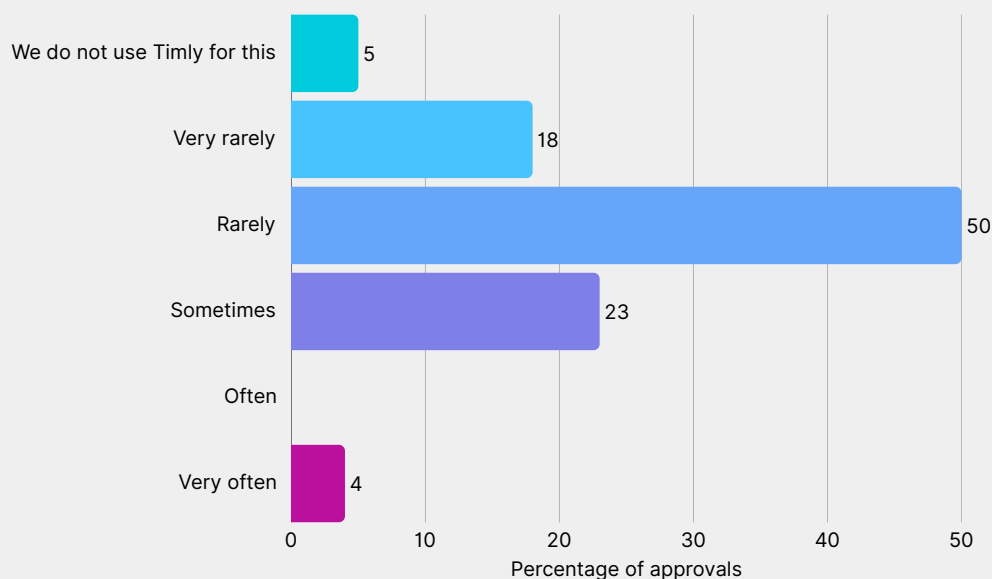
The **consistent application of these best practices** helps to:
- Increase the maturity level of the maintenance organization
- Continuously improve processes
- Strategically prepare the company for future challenges

1. Establish a Unified, Centralized Database

One of the most common bottlenecks in practice is the distribution of information across different departments, locations, or systems. Companies that break down these silos and **create a centralized database** — for example, using a cloud-based maintenance platform — benefit in two ways: they gain transparency and can automate processes.

Since using Timly: How often do you lack information such as the location, owner, or availability of an asset?

Category	Percentage of approvals
We do not use Timly for this	5
Very rarely	18
Rarely	50
Sometimes	23
Often	
Very often	4

Percentage of approvals

Source: Timly Survey, Q3 2025

A **centralized database thus becomes the foundation of any successful, future-ready maintenance strategy** — regardless of the industry. It enables tracking of maintenance histories, clear definition of responsibilities, and easier compliance with legal requirements.

❝ *"The quality of information has improved significantly. We now know exactly which equipment is in the warehouse and which is with our customers. With our previous system, we constantly faced problems. Thanks to Timly, we now have much more confidence in the information."*

TIMO ROGGE | CO-FOUNDER & COO SALTY LEMON[11]

2. Standardize Processes – Without Losing Flexibility

Many successful projects begin with a structured analysis of existing maintenance processes. Companies that unify and digitally map their workflows create a reliable foundation for scalability, efficiency, and consistent quality standards. **Standardized processes also make it easier to comply with legal requirements** and ensure auditable documentation.

Holzbau Bühlmann AG: A Success Story

A vivid example is **Holzbau Bühlmann AG**, a traditional Swiss timber company facing the challenge of achieving transparency over its machines and materials.

Equipment was lost or newly purchased, even though it had merely been misplaced. With the introduction of Timly, QR code labels, and a cloud-based inventory database, the entire stock was digitally recorded and clearly assigned within a few days.

Today, the team always knows where each piece of equipment is, its condition, and whether maintenance is due — all easily accessible via smartphone.[12]

At the same time, **good solutions allow room for individual requirements**, such as industry-specific inspection cycles or regulatory documentation obligations. This enables companies to combine standards with tailored adaptations, striking a balance between reliable organization and flexible practice.

3. Involve Employees Early

An often underestimated success factor is actively involving those who work with the solution on a daily basis. Whether janitors, technicians, or workshop managers, their practical knowledge helps map processes realistically. **Transparent communication of changes and proper training** not only increase acceptance but also improve implementation quality.

HAUSER Kühlmöbel und Kältetechnik GmbH: A Success Story

A good example is **HAUSER Kühlmöbel und Kältetechnik GmbH**.

During the presentation and testing phase of Timly, employees were motivated from the start: they could try out the solution independently ("experiment") and actively participate in shaping it. Staff scan QR codes directly with their smartphones, report defects on-site, and manage tools and deadlines independently — strengthening both responsibility and oversight.[13]

Additionally, **employee training and certifications are digitally maintained in a personnel file**. This allows the company to always know who holds which qualifications and when training is required, enhancing both efficiency and compliance.

By actively involving employees and providing digital support, companies can not only optimize processes but also sustainably increase motivation, accountability, and transparency within the team.

4. Small Steps Instead of Giant Leaps

Many pioneers adopt an iterative approach: rather than overhauling all processes at once, they start with a pilot area — for example, a specific equipment category or location. **Insights and user feedback from these pilot phases** are systematically incorporated into the company-wide rollout strategy, ensuring a practical and flexible implementation.

This approach reduces risks, promotes internal learning, creates quick wins, and increases team acceptance. Additionally, **continuous evaluation of pilot projects provides a solid foundation for a broader rollout and the sustainable optimization of maintenance processes**.

5. Integrate Instead of Replace

Successful companies do not replace everything existing but **intelligently integrate new solutions** into their current structures. This applies to both technical systems (such as ERP or CAFM) and organizational workflows. Interfaces and open APIs help prevent media discontinuities and protect long-term investments.

COBUS Systems: A Success Story

An impressive example is **COBUS Systems**[14], an IT managed service provider based in Rheda-Wiedenbrück, Germany. The company was already using Lansweeper for network and device discovery, but in addition to IT assets, office furniture, tools, and machinery also needed to be inventoried. Managing this mix through Excel spreadsheets had become increasingly confusing and error-prone.

With **seamless API integration between Lansweeper and Timly**[15], a smart technology mix was achieved: Lansweeper handles automated IT discovery, and this data can be transferred to Timly with just a few clicks, where it can be enriched with additional inventory data. This means the existing system continues to function without duplicating data — digitally enhanced by Timly.

During the initial integration, approximately 1,000 assets were imported, which eased the transition and made the process efficiently scalable.

Best Practices & Practical Solutions

In Timly, COBUS and its customers benefit from a centralized system that also offers features such as ticketing, deadline management, and digital signatures for equipment issuance. This significantly enhances traceability, accountability, and efficiency.

Thanks to this combination, **advantages develop across multiple dimensions**:

* **Proven tools retain their value** — existing solutions remain in use while new ones are added selectively.

* **Error-prone spreadsheets are eliminated, replaced by automated processes** — increasing stability and security.

* **The platform provides 360° inventory management**, covering IT assets as well as furniture and machinery, offering real-time visibility and control over all stock.

These **practical examples** demonstrate that modern maintenance is not a project but a continuous improvement process. What matters is not how digital a company already is today, but how consistently it is willing to take the next steps.

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Digital Maintenance as a Strategic Tool

Digital Maintenance as a Strategic Tool

The challenges in maintenance are well known — from incomplete documentation and lack of transparency to inefficient processes. **Digital solutions can address these issues by relieving companies, standardizing processes, and creating new opportunities for action**. The key is not the number of features, but the tangible value they provide in daily work.

Modern maintenance software solutions — such as Timly — are therefore consistently designed around the real needs of technical departments, operations management, and maintenance teams.

Plan Maintenance Instead of Reacting

Digital maintenance software enables planning and documenting maintenance activities far beyond a simple calendar. **Digital maintenance schedules allow cyclical and condition-based inspections** to be systematically managed. Responsibilities are clearly defined, and all inspection deadlines are tracked, ensuring no maintenance activities are overlooked. Intelligent analytics help identify long-term trends, enabling proactive actions rather than simply reacting to failures.

Key Benefits:

* Reduced unplanned downtime

* Structured management of all inspections and maintenance

* Transparent and reliable workflows

Keep Assets in View – Across All Locations

Centralized inventory of all operational assets forms the foundation for informed decision-making. Modern maintenance software replaces cumbersome Excel sheets or handwritten lists, allowing digital recording and real-time access to locations, conditions, and responsibilities.

Whether machines, vehicles, tools, or buildings — **knowing what is deployed where, the condition of each asset, and when it was last maintained enables proactive planning and efficient action**. In large organizations or across multiple sites, this ensures transparency and a reliable data foundation.
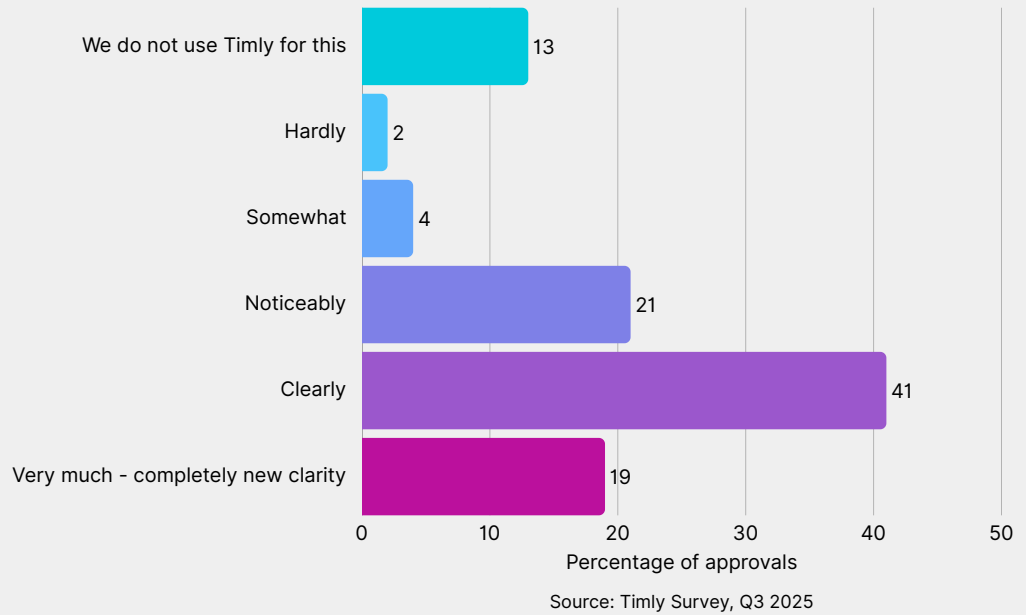
Key Benefits:

* Complete overview of all assets in real time

* Faster and better-informed decisions

* Efficient resource planning

* Secure and traceable documentation

Document Maintenance Securely and Transparently

Instead of paper folders or scattered Excel files, a digital solution provides a centralized, audit-proof repository. **Maintenance logs, inspection reports, operating manuals, and responsibilities are always accessible** — including mobile access on-site.

How much does Timly help you clarify who is responsible for each asset?

Response	Value
We do not use Timly for this	13
Hardly	2
Somewhat	4
Noticeably	21
Clearly	41
Very much - completely new clarity	19

Percentage of approvals

Source: Timly Survey, Q3 2025

A complete history simplifies both internal processes and external audits. Changes are recorded in an audit-proof manner and are thus visible to all users.

Key Benefits:

* Digital, audit-proof documentation

* Accessible anytime, anywhere

* Facilitates audits and compliance

Mobile, Intuitive, and Practical

Especially in technical environments, it is **crucial that software works where the work takes place — on the construction site, in the workshop, or in the field**. Mobile applications, offline functionality, and intuitive user interfaces ensure that data can be captured and used directly on site. **Data collection is accelerated** through QR or barcodes, and workflows can be mapped more easily.

These simplified daily processes increase employee acceptance and ensure that modern maintenance software is actively used.

Key Benefits:

* Usable everywhere, including mobile and offline

* High user-friendliness

* Promotes acceptance among users

Digital Maintenance as a Strategic Tool

Integration Instead of Disruption

Digital maintenance unfolds its full potential when it **integrates seamlessly into existing systems and processes**. Interfaces to ERP, CAFM, or ticketing systems, as well as open APIs, ensure continuous data flows — without media breaks or duplicate data entry.

Implementing maintenance software is not an end in itself. It is a strategic tool that helps companies overcome typical weaknesses and make their technical infrastructure future-ready. **Solutions like Timly demonstrate how this transformation can succeed** step by step — with a clear focus on value, transparency, and sustainability.

Key Benefits:

✳ Seamless process integration without media breaks

✳ Automated data flows

✳ Flexible adaptation to existing IT systems

Photo Courtesy

Recommendations
for Decision-Makers

Digital maintenance is not a short-term trend but a **structural transformation**. Successful modernization does not start with software, but with a **clear strategic mindset**. Companies that view maintenance not as a cost center but as a value driver secure the future readiness of their technical infrastructure, increase efficiency, safety, and resilience, and lay the foundation for sustainable growth.

The following recommendations provide guidance, regardless of industry or level of digital maturity.

1. Analyze the Status Quo – Identify Strengths and Gaps

Before introducing new processes or selecting systems, it is worthwhile to take a realistic look at the current state:

- Which assets are recorded — and where is data missing?
- How are maintenance processes currently carried out?
- Where do media breaks, duplicate work, or uncertainties occur?

This assessment provides the **foundation for informed decisions** and often reveals immediately implementable improvements.

> Once you understand what is working well in the company and what is not, the next step is to prioritize and identify targeted optimization measures where they are truly needed.

2. Do Not Treat Digitization as an IT-Only Project

The introduction of digital tools in maintenance should not be treated as an isolated IT project but integrated firmly into the company-wide strategy. It is **crucial to view digitization as a shared responsibility** that actively involves all relevant areas — from technical departments, procurement, and controlling to occupational safety and facility management — while considering their interfaces.

By **forming interdisciplinary project teams and involving the responsible specialists** early on, requirements can be efficiently consolidated, friction minimized, and acceptance increased. Additionally, the digitization initiative should be embedded in the corporate mission and strategic objectives to ensure it receives priority and is not perceived merely as an IT measure.

Clear communication of the benefits for all stakeholders, along with visible support from management and key departments, counters the impression of a separate IT project. In this way, digital maintenance establishes itself as a genuine value driver and an operational component of the entire organization.

3. Clearly Define Responsibilities and Processes

Transparent responsibilities are crucial for sustainable change. Companies should explicitly define roles and responsibilities:

- Who is responsible for maintaining asset and machine master data?
- Who regularly analyzes maintenance KPIs and derives concrete actions?
- Who makes decisions in case of deviations or improvement needs?

To implement this effectively, all **relevant tasks should be documented** in clear job descriptions and process documents. Digital tools can help visualize responsibilities and workflows, ensuring smooth handovers during personnel changes.
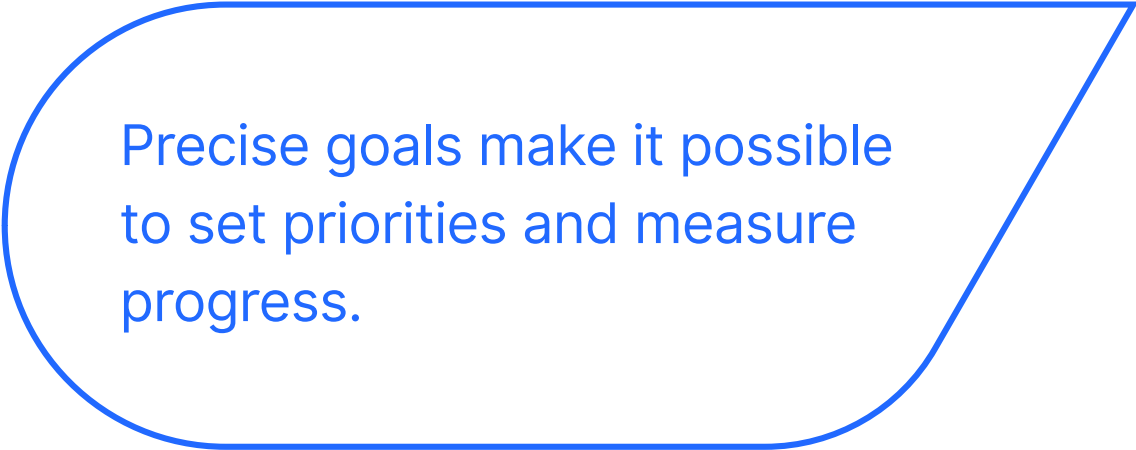
At the same time, **process documentation should serve as binding procedures** and checklists — for example, for maintenance of each asset, managing unplanned disruptions, or regular KPI evaluations.

Standardized templates and digital maintenance logs ensure that processes are consistently executed, regularly monitored, and adapted when necessary. It is recommended to review processes at least annually and jointly identify weaknesses with the team. This creates a **reliable foundation to preserve knowledge, maintain accountability, and continuously improve**.

4. Start with a Clear Vision and Establish Framework Conditions

The path to digital maintenance is a **continuous process**. Rather than immediately implementing individual measures, it is recommended to start with a compelling vision as the foundation.

A **clearly defined target**, such as "100% digitally documented maintenance across all locations by 2027", helps leaders and teams stay oriented and ensures that all stakeholders move in the same direction.

> Precise goals make it possible to set priorities and measure progress.

Once the goal is defined, it is equally important to establish the right framework conditions: **allocate resources, clarify responsibilities, and set up scalable project management**. Only then can a pilot project be launched to gather experience and develop success criteria. In this way, the original vision evolves into a concrete roadmap, enabling the sustainable scaling of digitization with a strategic guiding principle.

5. Define the Right Key Performance Indicators (KPIs)
Maintenance is measurable – but only if the right KPIs are defined.

Examples of KPIs

- **Planned vs. unplanned maintenance**
  - *Example*: 80% of maintenance activities should be planned in advance. This provides structure while allowing for some flexibility.
- **Downtime per asset or location**
  - *Example*: Maximum 5% unplanned downtime per year to ensure operational stability.
- **Average response time to malfunctions**
  - *Example*: Initial measures should be initiated within 30 minutes of reporting.
- **Maintenance costs per asset**
  - *Example*: Annual maintenance costs should not exceed 10% of the asset's acquisition value.

It is crucial to **align KPIs with your company goals** and define them so they can be clearly and continuously measured and evaluated. This makes success controllable and progress visible, providing meaningful insights for optimizing processes, budget allocation, and resource management.

Regularly communicating and jointly analyzing the results strengthens maintenance's position as a value-adding and strategically important area within the company. For maximum impact, it is recommended to focus on a few, highly meaningful KPIs that directly contribute to business success and drive concrete improvements.

6. Plan Training and Change Management

Technological change only succeeds with the people driving it. Therefore, it is not enough to train teams solely on technical aspects — cultural and emotional support through change management is equally important. **Employees should be actively involved in the transformation process**, their concerns and questions taken seriously, and their ideas encouraged. Trainings and videos can convey knowledge, while regular team discussions provide space to share experiences, thoughts, and concerns.

> Effective change management addresses not only the social but also the emotional aspects of transformation.

It helps tackle uncertainties, reduce resistance, and **build a shared understanding of the benefits of digitization**. Gradually, this fosters an open and motivating team culture, enabling sustainable transformation.

Photo Courtesy

Vision & Outlook

The Future of Maintenance

The maintenance of the future will be much more than repairing defects or completing maintenance schedules. It is evolving into a **strategic field of action** — for companies, departments, and every individual professional.
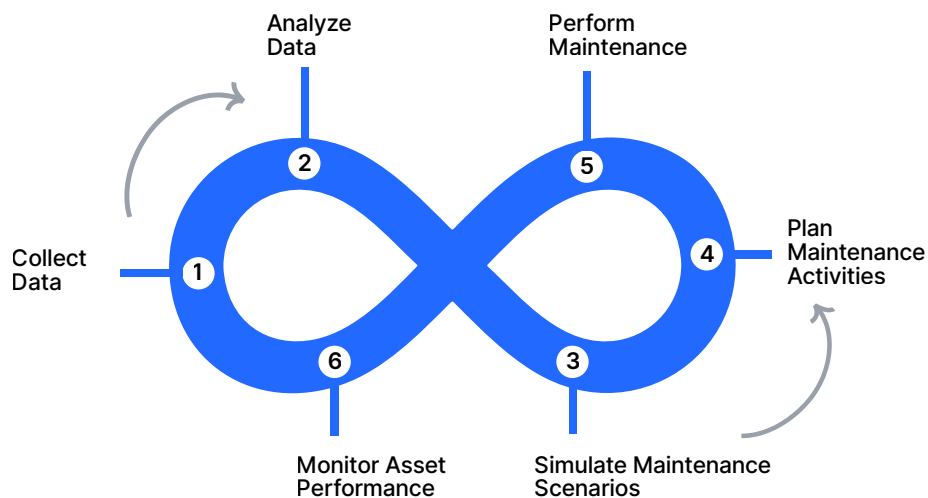
FOR COMPANIES

In the coming years, companies will **make decisions not based on estimates but using real-time data and precise forecasts**. Production equipment will automatically report when a component shows signs of wear, and investment budgets will no longer be distributed broadly but allocated strategically where they have the greatest impact on availability, safety, and efficiency.

| Real-Time Data |
| Accurate Forecasts |
| Targeted Investments |

➤ **Foundations of Corporate Strategy**
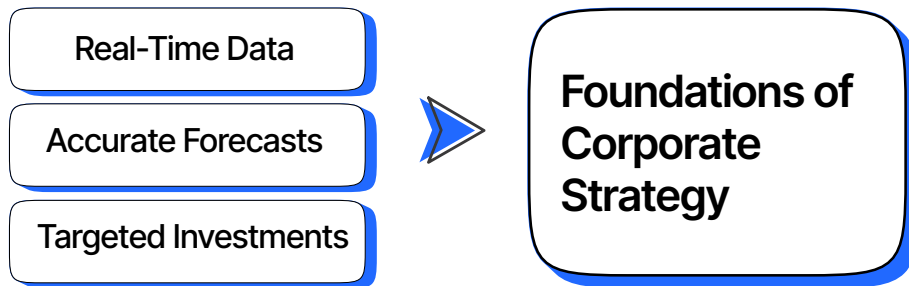
FOR MAINTENANCE TEAMS

For maintenance teams, this represents a fundamental shift in roles: **moving away from a reactive "firefighting" approach** toward planning maintenance and repairs based on digital data and analytics. Digital twins or virtual models will allow teams to simulate different scenarios — for example, the impact of rescheduling maintenance on energy consumption or the lifespan of equipment. Rather than searching for faults, teams will proactively secure operations, thereby sustainably safeguarding competitiveness.

**Decision-Making Basis for Professionals
in Maintenance Strategy**

- 1 Collect Data
- 2 Analyze Data
- 3 Simulate Maintenance Scenarios
- 4 Plan Maintenance Activities
- 5 Perform Maintenance
- 6 Monitor Asset Performance

A FIELD OF OPPORTUNITY FOR PROFESSIONALS

The daily work of individual professionals will also change: instead of painstakingly searching through folders or reconciling Excel sheets, all relevant information will be available on mobile devices and in context. **AI-supported recommendations will no longer be novel** but regularly used to aid decision-making. In this way, the role of maintenance personnel will shift from reactive problem-solvers to active designers of equipment performance — becoming a clearly visible success factor within the organization.

Decision-Making Basis for Professionals in Maintenance Strategy

Mobile Access to Information

AI-Supported Recommendations

Proactive Asset Performance

Furthermore, **maintenance will become a central lever for sustainability**. Longer asset lifecycles, more efficient use of resources, and optimized processes will not only reduce costs but also improve ESG performance. **Companies that invest early in this area will strengthen their resilience, enhance social acceptance, and gain economic advantages.**

Timly's Vision

Timly views this development as an **opportunity to redefine maintenance**. The vision is a future where companies always have a clear, reliable, and intelligent overview of their assets — **serving as the foundation for smart decisions, sustainable operations, and a resilient organization**. Timly positions itself not merely as a toolbox, but as a partner: guiding the transition from reactive maintenance to strategic, data-driven management.

Closing Statement

The coming years are crucial. Those who recognize the importance of maintenance today and actively promote it not only gain a competitive advantage but also make a significant contribution to sustainable and safe development.

The question is not whether this transformation will happen — but how prepared companies will be.

![Timly logo]
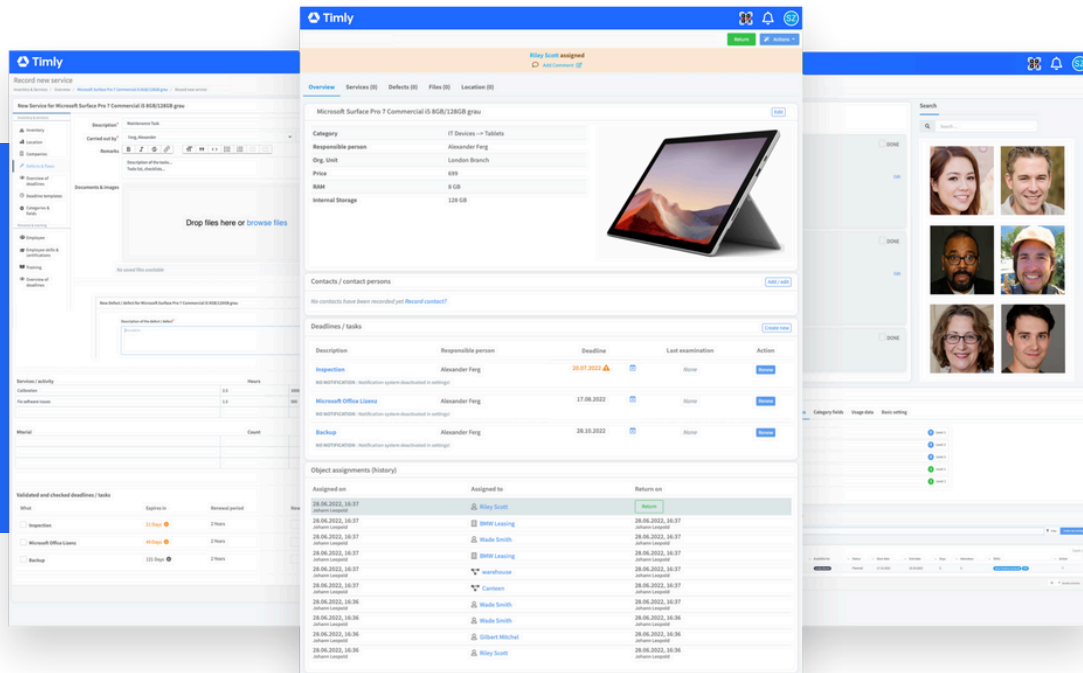
About Timly

Timly is a cloud-based software solution for inventory and maintenance management. Our goal is to **help companies of all sizes achieve full transparency over their resources — from machines and tools to vehicles and IT assets.**

With Timly, companies can digitize their maintenance and inspection processes, simplify documentation and compliance, and increase day-to-day efficiency. Thanks to QR code integration, a mobile app, and open interfaces, assets can be managed anytime and anywhere — easily, securely, and future-ready.

Rethinking Asset Management Software

Never lose track of your assets again with intuitive **asset management software** that evolves with you.

SCHEDULE A TOUR   *(No credit card required.)*

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Sources & Methodology

The content of this whitepaper is based on a combination of current industry data, research findings, our own experience in maintenance, customer projects, as well as selected success stories and testimonials.

The analysis relies on desk research, interviews, and expert discussions with users and stakeholders from maintenance projects to derive practical insights and recommendations.

For questions regarding content, methodology, or specific case studies, please contact:

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contact@timly.com

SOURCES

[1] Statista
[2] The Insight Partners
[3] Siemens
[4] ABB
[5] Europäische Union
[6] RKW Kompetenzzentrum
[7] Bundesnetzagentur
[8] Factory Innovation
[9] Atos
[10] Bundesministerium für Arbeit und Soziales
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[13] Timly Software AG
[14] Timly Software AG
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