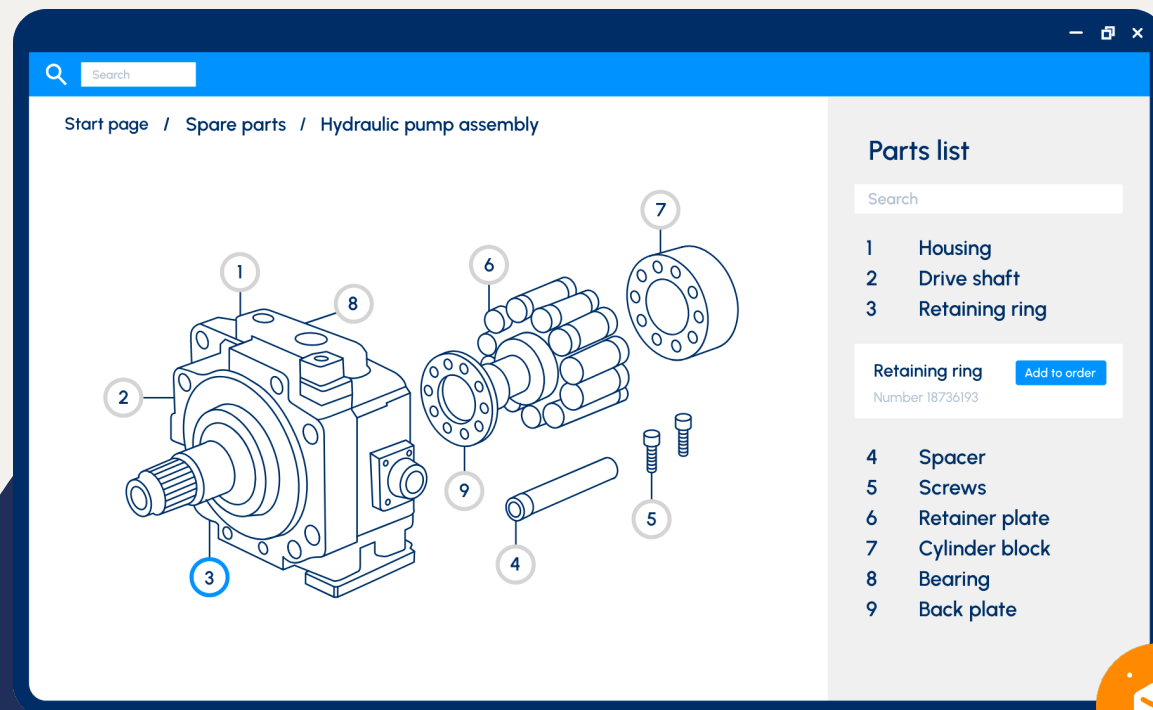


Digital Transformation for the Aftermarket: A People-Process-Technology Guide



Executive Summary

The aftermarket is one of the strongest and most resilient value streams for manufacturers. Yet many organisations remain constrained by fragmented systems, outdated documentation, and “good enough” processes that no longer meet customer expectations. In most enterprises, the contrast is stark: core product sales run on well-defined, integrated systems, while the aftermarket ecosystem still resembles a patchwork of ageing ERPs, disconnected CRMs, undocumented expertise, spreadsheets, legacy portals, and point solutions accumulated over years of incremental fixes.

The result is an architecture that works—but *only just*—making even routine activities such as parts lookup, service planning, warranty handling, and technical support unnecessarily slow, error-prone, and reliant on manual intervention. Manufacturers understand the urgency of digital transformation. What often stalls progress is not a lack of vision but the absence of a clear, achievable roadmap whilst managing legacy systems, departmental silos, and resistance to change.

This whitepaper presents a People-Process-Technology framework towards achieving digital transformation. It provides practical steps to modernise legacy aftermarket operations, improve data accuracy, leverage AI capabilities, and enable faster, more customer-centric service, highlighting the untapped potential in this space. It highlights common roadblocks, demonstrates how lasting momentum is built, and shows how Signifikant serves as a co-pilot in digital progress, helping manufacturers modernize aftermarket operations with confidence, clarity, and measurable results.

Rather than opting for wholesale replacement of existing systems, we advocate for strategic integration, incremental improvement, and sustainable change management. *The opportunity is substantial. The execution path is clear. Success requires the right co-pilot to navigate this digital transformation journey with confidence and strategic precision.*

The true challenge isn't knowing that digital transformation is needed. The real difficulty lies in mapping a clear and achievable step-by-step path forward.



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CHAPTER 01

Introduction

Aftermarket transformation is no longer optional. Customers expect immediate, digital-first interactions, even in traditionally manual domains like spare parts ordering, service guidance, and claims. For manufacturers, meeting these expectations is challenging when information is scattered across PDFs, spreadsheets, and disconnected systems.

The opportunity is substantial. The global industrial machinery market was valued at USD 714.5 billion in 2024, with the construction equipment aftermarket alone reaching USD 27.1 billion and projected to grow to USD 35.04 billion by 2028¹. At the same time, this highlights that companies with a strong aftermarket focus deliver materially higher total shareholder returns compared to peers. *This makes aftermarket modernisation not just a cost consideration, but a proven growth lever.*

Yet despite this awareness, transformation projects often stall. One common barrier is fragmentation. Aftermarket data is scattered across legacy ERP

systems, spreadsheets, and siloed databases, making it difficult to update catalogues or ensure accuracy. Another obstacle is resistance-as-routine. Employees are not deliberately opposed to change; they are accustomed to doing things a certain way. What looks like resistance is often routine, processes ingrained over years of habit.

Also, legacy documentation presents significant challenges for service teams. While no one intentionally relies on inconsistent part lists, teams often receive materials containing outdated or incorrect information. PDFs, printed manuals, and static documents are difficult to update centrally, so teams work with whatever version they have, even when it's no longer accurate. As these materials quickly become outdated, response times slow, and customer frustration grows. Transformation requires more than replacing platforms. It demands a shift in mindset, processes designed for today's digital customer, and systems that work in harmony. Meeting these expectations requires fundamental

shifts in how manufacturers approach service delivery whilst maintaining the quality and relationships that built their success.

Sources

- [1. GMI- Industrial Insights](#)
- [2. Market Data Forecast – Global Automotive Aftermarket Market Report](#)



CHAPTER 02

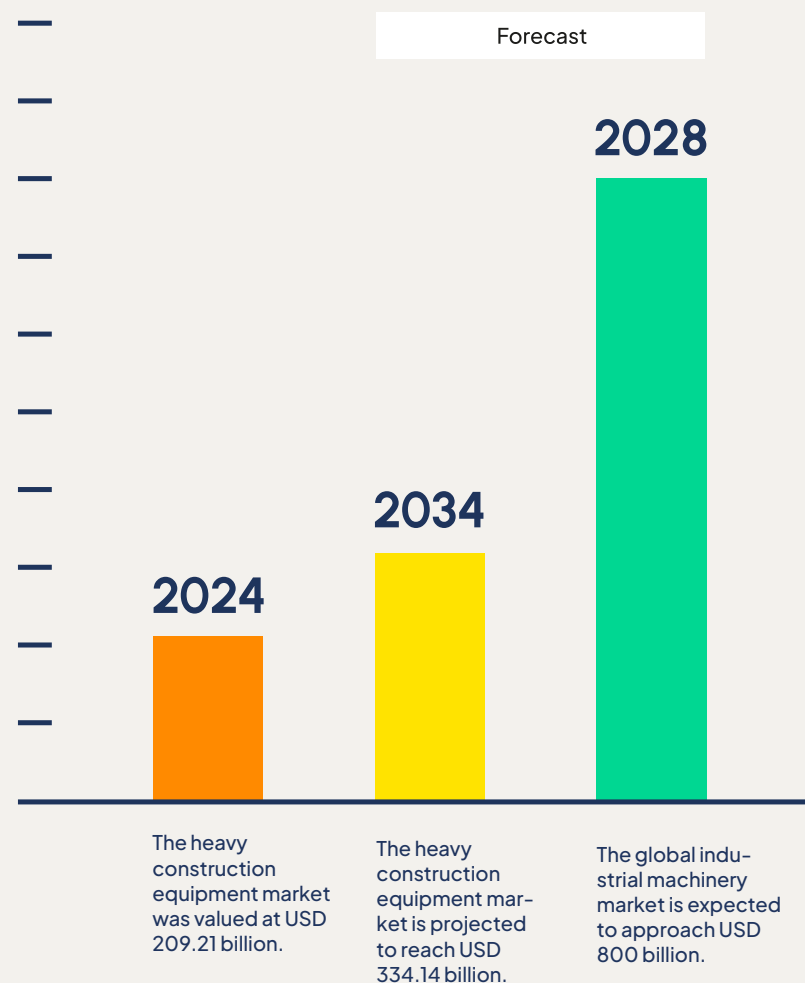
The Case for Change

Industrial manufacturers face a pivotal opportunity. Both equipment sales and aftermarket services continue to grow. The heavy construction equipment market reached USD 209.21 billion in 2024 and is projected to hit USD 334.14 billion by 2034³, while the broader industrial machinery market is expected to approach USD 800 billion by 2028⁴, creating significant potential for organisations investing in digital capabilities.

Within this expanding landscape, the aftermarket remains the most resilient and profitable stream. Services such as parts, maintenance, digital service contracts, and upgrades are growing faster than new equipment sales and consistently deliver higher margins: studies show average EBIT margins of 27% for aftermarket services versus 11% for equipment sales⁵. In many organisations, the aftermarket contributes up to 30% of revenues and over 50% of profits⁶, strengthening customer relationships and creating more predictable income.

Three forces drive this momentum:

- ▶ Customers continue to prefer maintaining and upgrading equipment over new capital purchases, given the substantial capital investment and decades-long equipment lifecycles.
- ▶ Outcome-based models emphasise uptime, reliability, and life cycle value.
- ▶ AI and digitalisation enable richer data, predictive maintenance, and enhanced service offerings.



CHAPTER 02

**Strategic Imperative**

As equipment lifecycles extend and customer expectations rise, aftermarket performance is now a major driver of competitiveness. Manufacturers that modernise their service operations achieve higher margins, deepen customer relationships, and secure more predictable revenue, positioning themselves for long-term advantage.

Why Projects Stall: Common Transformation Obstacles

Despite recognising aftermarket value, transformation projects frequently encounter unexpected obstacles that derail progress and erode stakeholder confidence.

▶ Competing Departmental Priorities

Sales teams focus on new equipment, while service teams manage immediate customer needs using established processes. These differing priorities make organisation-wide alignment challenging.

▶ The “Good Enough” Trap

Legacy processes once delivered strong results. Familiar tools, manual catalogues, Excel-based lists, and phone-based ordering create comfort zones that make change feel disruptive, even when improvements are needed.

▶ Integration Complexity

Manufacturers often worry about the effort required to connect new digital capabilities with existing ERP, CRM, and inventory systems. With a comprehensive integration strategy and a “think big, start small” approach, organisations can begin with low-risk pilots and build momentum over time.

The challenge lies not in recognizing the necessity of transformation, but in developing comprehensive change strategies that address the people, process, and technology dimensions simultaneously.

Sources

3. [Heavy Construction Equipment Market Driven by Urban Growth and Innovation](#)
4. [Trends in Machinery Manufacturing – Annual Roundup 2024](#)
5. [Aftermarket Services Drive Growth and Higher Margins for Industrial Manufacturers](#)
6. [Tacton – Reasons Why Aftermarket Sales Matter More](#)

CHAPTER 03

People, Process, Technology

Digital transformation in the aftermarket is often described as a technology challenge. However, a technology-focused approach alone frequently fails because it overlooks the human and operational dimensions that ultimately determine success. New systems introduced without addressing cultural readiness or process redesign create confusion, resistance, and underutilization, transforming what should be solutions into additional sources of frustration.

In reality, the People-Process-Technology framework serves as the "golden triangle" of successful transformation. Each element requires dedicated attention, yet its interdependencies create the foundation for sustainable change.

People: Beyond Resistance to Partnership

Employees aren't naturally resistant to change. In our experience, hesitation usually stems from established routines and workload concerns, not from active opposition. Sales teams focus

on growth. Service and documentation teams trust proven workflows. IT teams safeguard stability. Resistance is usually about priorities, not intent.

Deloitte's 2025 Smart Manufacturing Survey found that talent acquisition and skills gaps remain top obstacles for manufacturers⁷. McKinsey adds that only around 30% of large-scale transformations succeed, with engagement and people issues among the leading causes⁸. These insights underline the importance of early buy-in.

Practical steps include cross-functional listening sessions, where teams voice concerns and expectations. Identifying internal champions creates momentum. Ongoing training builds confidence, turning transformation from disruption into empowerment.

Process: Respecting Legacy Whilst Enabling Innovation

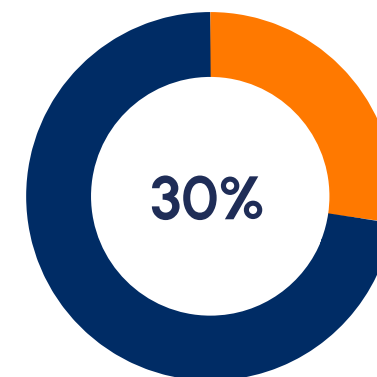
Legacy processes exist for a reason; they supported growth in the past. Yet they struggle with today's expectations. Customers want to identify parts

quickly. They expect seamless online ordering, like in B2C ecommerce, where they can view documentation, check part availability, review part lists, and complete purchases in a single integrated experience.

A diagnostic review should cover:

- ▶ Which activities directly improve the customer experience versus those that create delays
- ▶ Where legacy practices remain for valid reasons
- ▶ How processes align with customer expectations

Process optimisation focuses on eliminating unnecessary friction whilst preserving essential customer touch-points and quality controls that ensure service excellence.



of large-scale digital transformations succeed, according to Deloitte's 2025 Smart Manufacturing Survey

CHAPTER 03

Technology: Integration Over Replacement

Many manufacturers invest in new technology before understanding whether it will work with their existing systems. Choosing a platform too early, before assessing data readiness, integration needs, or how teams will actually use it, can create costly problems down the line.

Key readiness checks include:

- ▶ **Data preparation:** Can existing information build a business model for products and the aftermarket?
- ▶ **System harmony:** Does new technology integrate with ERP, PLM, and CRM systems?
- ▶ **Scalability:** Can solutions grow with business needs without frequent replacement?

Emerging technologies can accelerate progress. Digital twins, predictive analytics, and unified PIM systems provide scalable foundations.

Sources

7. Deloitte – 2025 Smart Manufacturing and Operations Survey

8. McKinsey – Losing from day one: Why even successful transformations fall short

AI can automate routine activities and enhance end-user efficiency. Moreover, AI capabilities are fundamentally dependent on data quality, making unified data management not just helpful but essential for effectively leveraging these advanced technologies. But they only succeed when integrated into well-prepared processes and adopted by trained teams.

The People–Process–Technology framework reframes transformation as a shared journey. It ensures that change is not driven solely by software selection, but by cultural alignment, process redesign, and thoughtful integration. When all three dimensions advance together, aftermarket transformation becomes not just possible, but sustainable.

In the next chapter, we'll show how the PPT methodology can ensure the success of the transformation of legacy aftermarket processes.



CHAPTER 04

The 5-Step Roadmap for Digital Progress

This systematic roadmap provides manufacturers with a structured approach to aftermarket transformation. Each step builds upon previous achievements whilst maintaining operational continuity and stakeholder confidence.

Step 1**Assess Reality Without Judgement**

Comprehensive assessment begins with mapping existing systems, processes, and stakeholder priorities without immediate problem-solving. This documentation creates a baseline understanding that informs all subsequent transformation decisions.

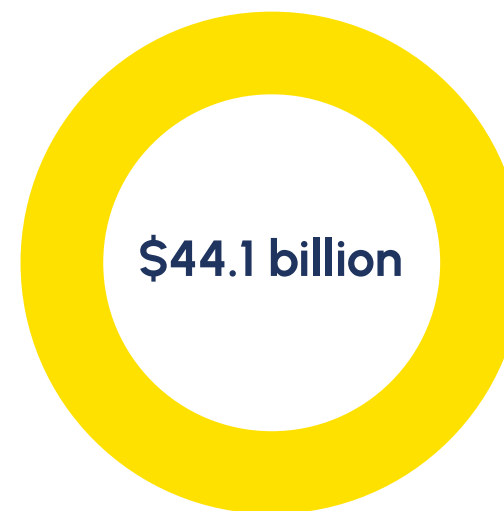
System mapping involves cataloging ERP and PLM systems, parts databases, customer management tools, and integration points. Many organisations discover unexpected dependencies during this phase that significantly influence technology selection criteria.

Priority assessment requires input from all departments that interact with aftermarket processes.

The total for aftermarket ecommerce is projected at \$44.1 billion in 2024⁹, indicating a substantial market opportunity for manufacturers who successfully digitalise their aftermarket capabilities. Challenge identification involves documenting current pain points whilst respecting the historical context that created existing approaches.

Step 2**Enable People Through Strategic Partnership**

People enablement extends beyond traditional training programmes to encompass change management, communication strategies, and on-going support systems that sustain transformation momentum.



Projected total aftermarket ecommerce in 2024.

CHAPTER 04

Cross-disciplinary conversations create opportunities for departments to understand how aftermarket improvements benefit their specific objectives. Service teams appreciate faster part identification, whilst sales teams value enhanced customer retention through improved service experiences.

Solution champions within each department become internal advocates who translate transformation benefits into language that resonates with their colleagues' daily challenges and priorities. Training programmes require ongoing adaptation as new capabilities are introduced and user proficiency develops.

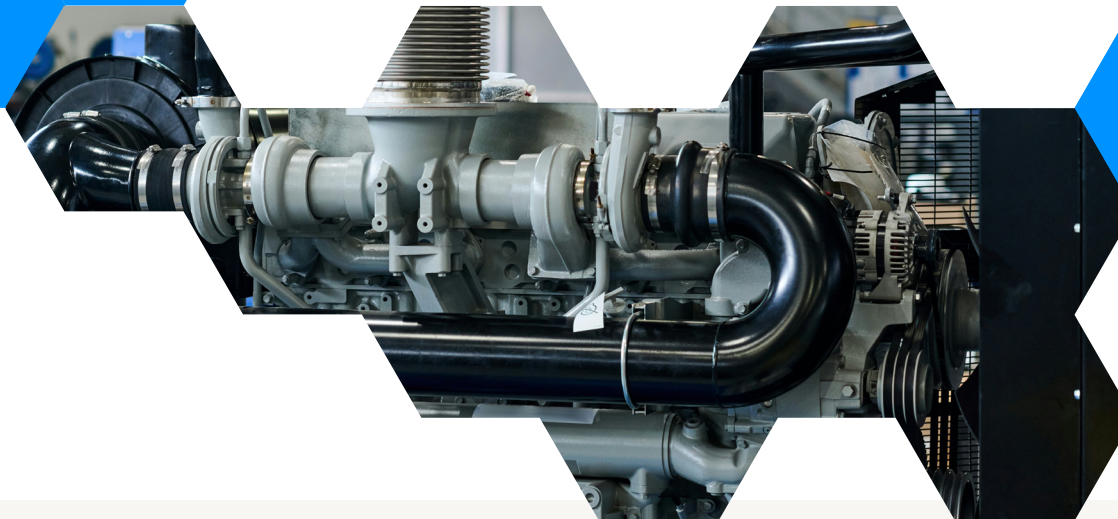
Communication strategies should highlight successes across organisational levels, ensuring that transformation benefits receive visibility and recognition that sustain stakeholder support throughout implementation phases.

Step 3

Optimise Processes for Digital Customer Expectations

Process optimisation begins with understanding modern customer expectations and working backwards to identify necessary operational changes. Automation Aftermarket Services Market is anticipated to expand from USD 10 billion in 2024 to USD 20 billion by 2033 at a CAGR of 8.5%¹⁰, demonstrating growing market demand for streamlined service experiences.

Friction point identification reveals opportunities for automation, self-service capabilities, and improved information accessibility that reduce customer effort whilst maintaining service quality. Digital customer expectations include instant part identification, real-time availability information, transparent pricing, and streamlined ordering processes.



CHAPTER 04

Redesigned processes maintain essential quality controls and customer touch-points whilst eliminating unnecessary steps that create delays or confusion. Timeline expectations should allow 3–6 months for process mapping and redesign before technology implementation begins.

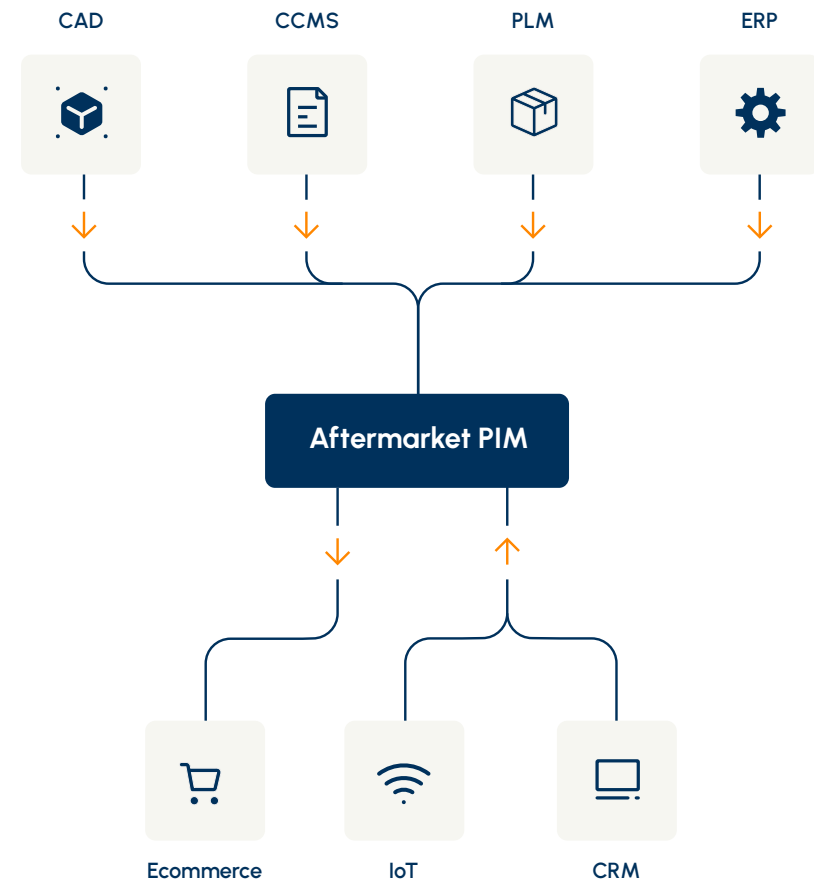
Step 4**Select Technology for Integration and Scalable Growth**

Technology selection criteria prioritise integration capabilities, scalability potential, and user experience quality over feature abundance or lowest initial cost. The integration assessment evaluates how potential solutions integrate with existing ERP, CRM, and inventory management systems.

Modern platforms offer API connectivity, focus on data quality, and data synchronisation capabilities that preserve existing investments while enabling enhanced functionality and building a foundation for AI. Usability considerations ensure that selected technologies align with user skill levels and daily workflow requirements.

Complex solutions with extensive capabilities may not deliver value if adoption barriers prevent effective utilisation. Scalability planning anticipates future growth requirements and ensures selected platforms can accommodate expanding product lines, geographic markets, and service capabilities without requiring wholesale replacement.

Budget allocation should include implementation, training, and ongoing support costs that extend beyond initial software licensing fees.



CHAPTER 04

Step 5

Implement Through Controlled Pilots and Systematic Scaling

Implementation strategy emphasises controlled pilots that demonstrate value whilst minimising operational disruption and stakeholder risk. Pilot programme design focuses on specific use cases with measurable outcomes that build confidence in transformation approaches.

Successful pilots become proof points that support broader organisational adoption whilst enabling learning and refinement before larger-scale deployment.

Measurement frameworks track improvements in accuracy, enhancements in speed, and customer satisfaction metrics that demonstrate the tangible value of transformation.

Scaling strategies build upon pilot successes whilst adapting approaches based on lessons learned during initial implementation phases. This iterative approach ensures transformation initiatives deliver sustainable value across the entire organisation.

Timeline planning should allow 2–3 months for pilot implementation, 3–4 months for evaluation and refinement, followed by phased scaling over 6–12 months depending on organisational complexity.

Sustaining Transformation Momentum

To ensure lasting progress beyond initial implementation, organizations should:

- ▶ **Celebrate incremental achievements:** Recognition motivates employees and reinforces commitment to transformation goals.
- ▶ **Establish feedback loops:** Frontline staff should regularly share insights to refine processes and systems based on real-world usage.
- ▶ **Refresh skills and training:** Ongoing education ensures teams remain confident and capable as tools and processes evolve.
- ▶ **Highlight customer benefits:** Improvements in service speed, accuracy, or satisfaction are more compelling than internal efficiency metrics alone.

Sources

9. [Aftermarket Automotive Industry Size](#)

10. [Automation Aftermarket Services and Outsourcing Services Market Insights](#)



CHAPTER 05

Signifikant's Approach & Solution Spotlight

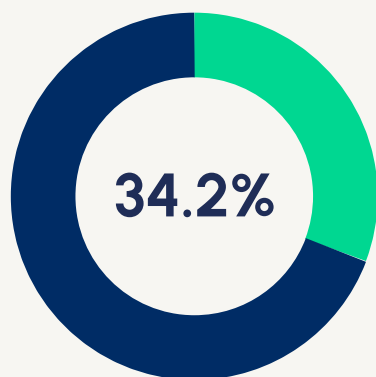
Signifikant positions itself as a strategic transformation partner rather than simply a software provider. Our consultative, step-by-step deployment methodology aligns with the People-Process-Technology framework while delivering measurable business value.

Consultative Transformation Partnership

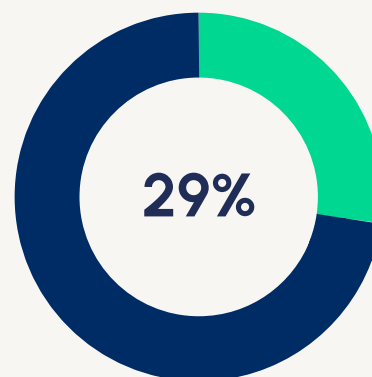
Our approach begins with a comprehensive assessment of systems, processes, and stakeholder requirements. Rather than prescribing predetermined solutions, we work collaboratively to identify opportunities that deliver maximum value within operational and budget constraints.

Regular meetings with key customers who are industry leaders provide ongoing feedback that drives product evolution and ensures our solutions address real-world challenges. These sessions also serve as forums for sharing best practices and identifying emerging market trends.

The digital twin market is projected to grow at a **34.2% CAGR between 2023 and 2027¹¹**. Meanwhile, **29% of global manufacturing companies have already implemented digital twin strategies¹²**. Signifikant helps clients capitalize on market momentum through integrated aftermarket solutions that leverage AI capabilities to deliver tangible value.



Digital twin market growth projection between 2023 and 2027



Global adoption of digital twin strategies in manufacturing

CHAPTER 05

Transformation is about progress, not perfection. Small, consistent improvements create the confidence and energy needed to keep moving forward.

Solution Evolution Through Customer-Driven Development

Our platform development prioritizes customer needs over theoretical feature requests. The initial focus on digital spare parts catalogues has evolved into a broader suite, including e-commerce integration, serial number tracking, asset management, and claims handling.

This customer-driven approach ensures that new capabilities address genuine challenges rather than adding complexity without value. Pilot programs allow controlled testing of new features with selected clients before broader release.

Regular updates incorporate client feedback and address shifting market requirements. This ensures that Signifikant solutions remain current, competitive, and aligned with aftermarket realities.

Strategic Focus: Enabling Holistic Transformation with AI

Signifikant's value proposition extends beyond software functionality. We combine strategy development, implementation support, and continuous optimization to ensure sustainable results.

Our unified data management approach, with a focus on building a joint business model for the aftermarket, resolves fragmentation challenges that frequently derail aftermarket projects. By creating a single source of truth from disparate data, we lay the foundation for AI applications, which are fundamentally dependent on accurate data, while improving decision-making and customer experiences.

Integration capabilities ensure that our solutions complement existing systems.

This reduces disruption, limits operational risk, and strengthens stakeholder confidence during transformation.

Signifikant recommends that customers think big but start small. While ambitious transformation roadmaps are essential for long-term vision, actual implementation should begin with small, measurable initiatives that demonstrate value quickly. This phased approach is tailored to each organization's digital maturity level and allows for controlled scaling based on proven results.

Integration capabilities ensure that Signifikant's solutions complement existing systems. This reduces disruption, limits operational risk, and strengthens stakeholder confidence during transformation.

Sources

11. [GVR Report- Digital Twin Market Size, Share, & Trends Report](#)

12. [EY- Tech Trend 04: Digital twins: Creating intelligent industries](#)

CHAPTER 06

Recommendations and Next Steps

For many manufacturers, the biggest barrier to transformation is not a lack of vision—it is a lack of execution. The aftermarket is clearly a source of growth, but legacy systems and cultural inertia often slow progress. The key is to start small, listen closely, and build momentum over time.

McKinsey reports that **70% of large-scale transformations fail due to a lack of clear goals and insufficient adoption**¹³. Statista adds that **more than 70% of digital initiatives fall short of expectations worldwide**¹⁴. These figures highlight that success depends as much on alignment and clarity as on technology choices.

To move forward, manufacturers should follow a disciplined sequence of actions:

- ▶ **Set clear goals:** Define measurable outcomes, whether reducing catalogue update times, cutting down time, or improving customer satisfaction.
- ▶ **Engage key stakeholders:** Involve service, IT, sales, and leadership to ensure alignment across departments.
- ▶ **Start with a pilot:** Test new catalogues, integrations, or claims handling in one product line or region.
- ▶ **Clean and organize your data with AI:** Unified, accurate information is the foundation for every digital step forward, and AI can help by speeding up data cleansing and identifying inconsistencies at scale.
- ▶ **Choose scalable technology:** Select platforms that integrate with existing systems and can adapt to future needs. Use AI to enhance data quality and automate data management tasks.
- ▶ **Track results and adapt:** Measure accuracy, fulfillment speed, and satisfaction, then refine based on real-world feedback.

Each step creates a proof point that builds organizational confidence. Small wins demonstrate value, secure leadership support, and motivate teams.

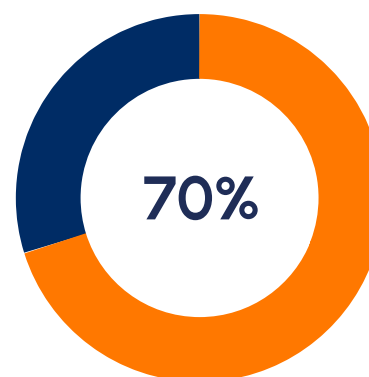
The path forward is not about massive disruption; it is about steady, disciplined progress.

By following these steps, and by using AI where it meaningfully accelerates execution or improves accuracy, manufacturers can turn the aftermarket into a sustainable engine of revenue and customer loyalty.

Sources

13. [McKinsey – Why do most transformations fail?](#)

14. [Statista – Share of digital transformation projects that fail](#)



of large-scale transformations fail due to a lack of clear goals and insufficient adoption

CHAPTER 07

Conclusion

The aftermarket is no longer an afterthought. It is a strategic driver of revenue, resilience, and long-term customer trust.

The challenge is not awareness; every manufacturer knows digital transformation is essential. The challenge is execution: mapping a clear path that aligns people, process, and technology.

Fragmented data, ingrained routines, and outdated documentation stand in the way. What is required is not a leap into the unknown, but a roadmap that balances people, process, and technology, anchored by unified data management. AI now plays a supporting role in this journey by automating routine tasks and improving information accuracy, making aftermarket transformation more efficient and scalable.

This whitepaper outlines how unified data management, paired with a step-by-step roadmap, makes transformation achievable. Progress comes not from disruption, but from pilots, feedback, and small wins that build lasting momentum.

Signifikant provides more than just a technology partner. We assist teams in shaping strategy, evolving solutions, and sustaining progress. As your co-pilot in digital progress, we help you modernize step by step, with clear goals, clean data, and a scalable foundation.

Glossary

Aftermarket:

The market for spare parts, services, and customer support is after the sale of original equipment.

AI (Artificial Intelligence):

Technologies that enable machines to perform tasks requiring human intelligence, including data analysis, pattern recognition, and decision support.

Resistance-as-Routine:

A concept describing employee reluctance to adopt new processes, not out of active opposition, but because existing routines are deeply ingrained.

BOM (Bill of Materials):

A structured list of components required to build or service equipment.

S-BOM (Service Bill of Materials):

A BOM tailored for service activities, derived from the manufacturing BOM.

Digital Twin:

A virtual model of equipment that accurately mirrors real-world performance, enabling predictive maintenance.

ERP (Enterprise Resource Planning):

A system that integrates finance, operations, and inventory into one platform.

PLM (Product Lifecycle Management):

Tools and processes for managing a product from design through its entire lifecycle, including retirement.

PIM (Product Information Management):

A centralized system for managing and distributing product information.

Unified Data Management:

The consolidation of fragmented data into a single, validated source of truth.

People-Process-Technology

Framework: The People-Process-Technology model for aligning cultural, operational, and technical aspects of transformation.

Change Champions:

Employees who advocate for and support transformation initiatives across the organization.