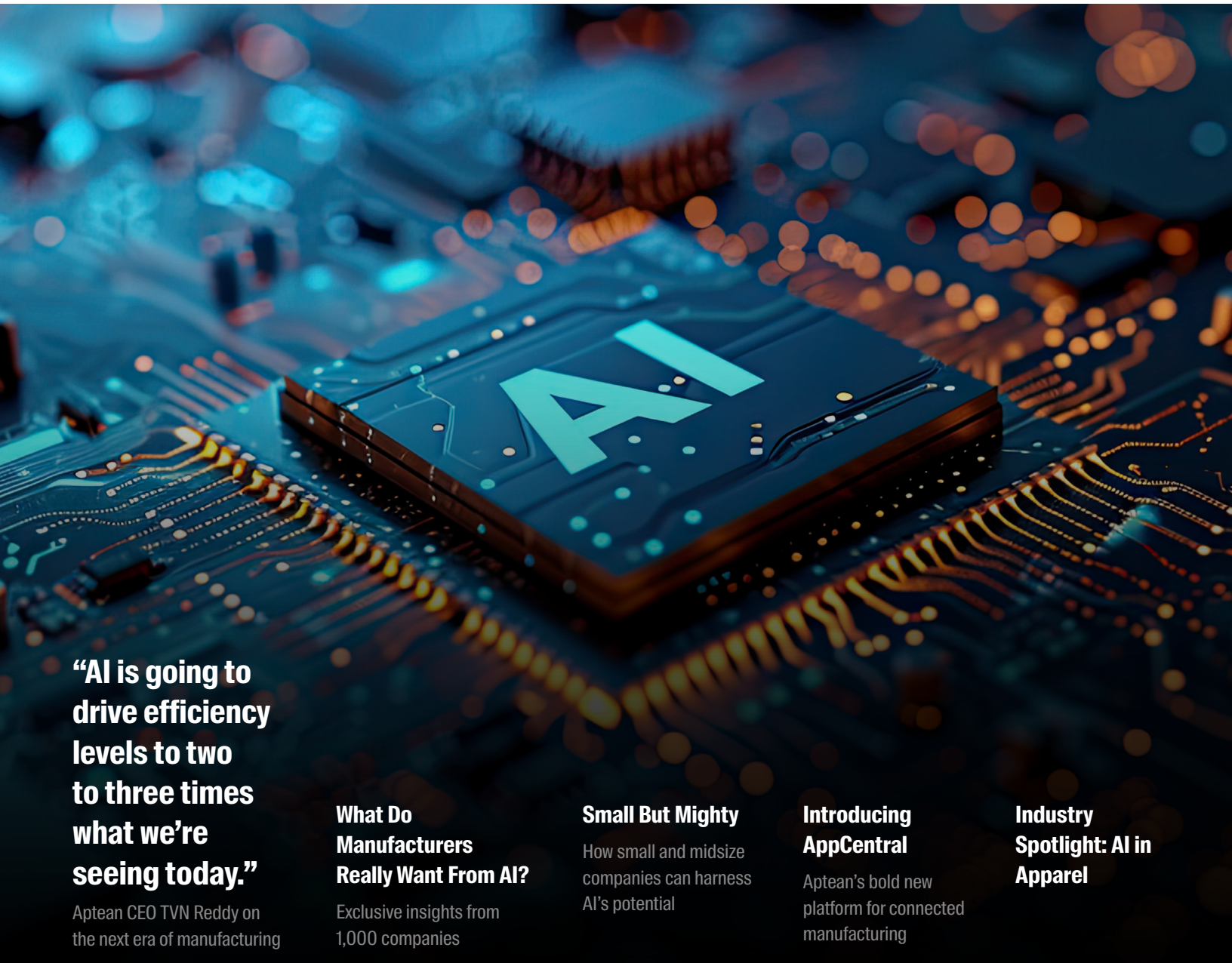
Issue #1 | May 2025

THE ALGORITHM:

What It Means to Be an AI-First Company



“AI is going to drive efficiency levels to two to three times what we’re seeing today.”

Aptean CEO TVN Reddy on the next era of manufacturing

What Do Manufacturers Really Want From AI?

Exclusive insights from 1,000 companies

Small But Mighty

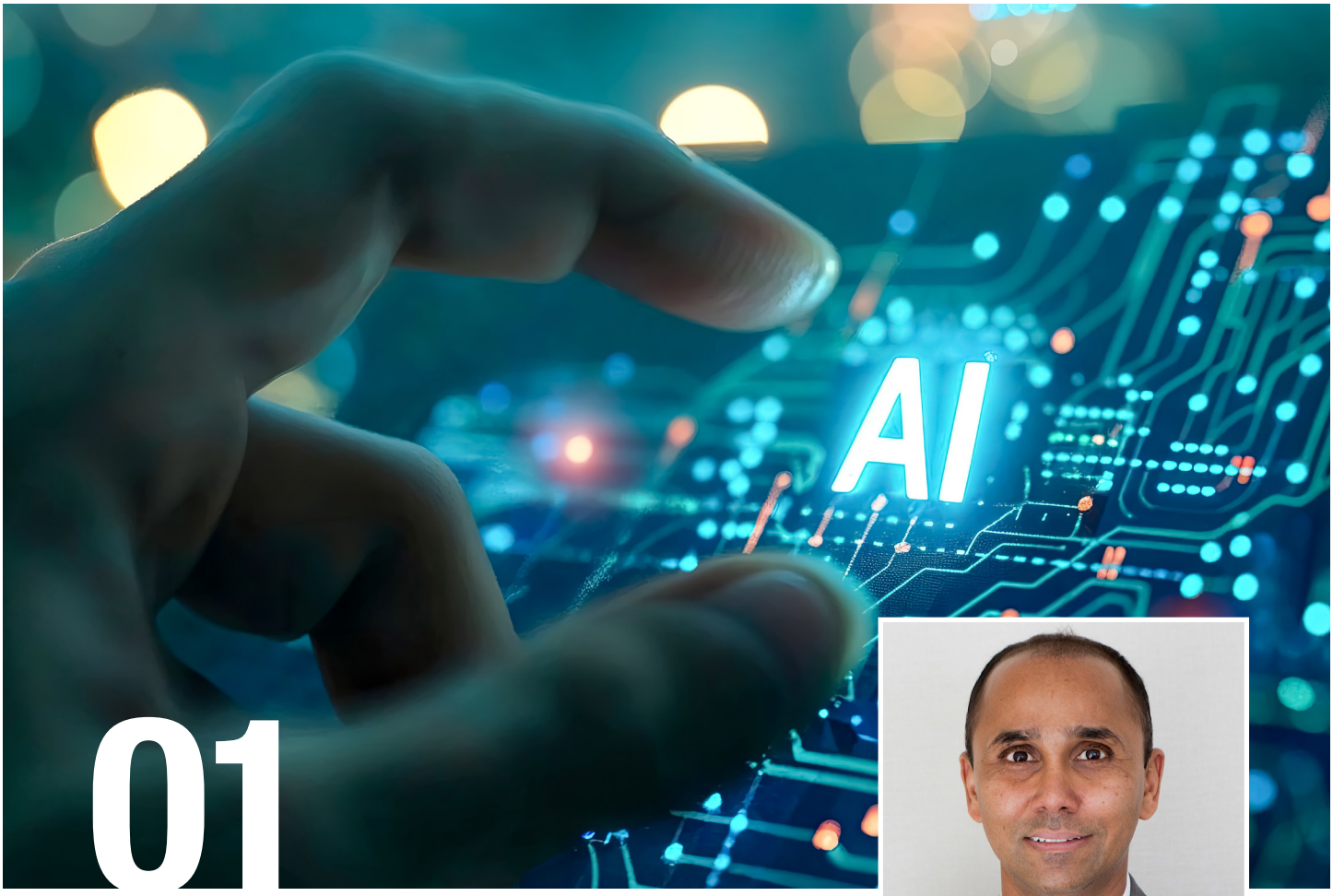
How small and midsize companies can harness AI’s potential

Introducing AppCentral

Aptean’s bold new platform for connected manufacturing

Industry Spotlight: AI in Apparel

In This Issue



01

The Manufacturing Sector Finds Itself at a Critical Inflection Point

We're moving beyond the hype cycle into a period where AI's real value is emerging. Yet, many manufacturers are struggling to bridge the gap between its potential and its practical implementation.

That's precisely why Aptean has launched this digital magazine: to provide a platform for sharing expert insights and real-world applications that can help manufacturers of all sizes navigate this transformation.

As you read through our inaugural issue, packed with original data and viewpoints from industry leaders, I encourage you to think about how these insights apply to your organization.

The journey to AI adoption isn't one-size-fits-all, but through shared knowledge and experience, we can all navigate this transformation more effectively.

TVN Reddy
CEO, Aptean

02 AI in Manufacturing: The Journey Has Begun

Artificial intelligence (AI) presents both a promise and a challenge for manufacturers. 97% of manufacturing companies are investigating or using AI, according to Aptean's international research study. Yet questions remain about how to implement AI for meaningful change, and what it means for the relationship between people, processes and technology.

To gain insight into these critical issues, we sat down with TVN Reddy, Aptean CEO, and Jenny Peng, Aptean CTO, to discuss how AI is reshaping the manufacturing sector and how businesses can navigate change.

Q: What stage have we reached with AI in manufacturing? What's the reality on the ground?

Jenny Peng (JP): At this stage, AI is more of an assistant. It gives information, helps analyze data and offers insights to help make better decisions. But as we get deeper into AI, there's a lot more we can do. There are a lot of natural language or even instructional prompts that can be used to make AI perform processes.

Q: Can you share some examples of how AI can optimize operational processes?

JP: There are a number of defined workflows that AI can perform for manufacturers. For example, creating a sales order. AI can create a sales document based on historical transactions. I can also ask AI to adjust my routing plan when I know that a specific vehicle is not available for the day.

Q: How will the development of AI-driven processes impact the workforce?

TVN Reddy (TR): The most important thing is driving productivity of the individual and eliminating a lot of the routine work they do. It helps to improve employees' job satisfaction, and hopefully that turns into top-line growth and greater efficiency.

JP: Humans are still very deeply involved in orchestrating actions. They're making decisions based on the information AI provides, and they're tasking AI to perform the process, so the human still has to make the connections and account for the cascading dependencies.

There's so much time that we can give back to our workforce so that they can focus on strategic efforts and value-added tasks. The operational side, the back-office activities, become autonomous with AI, so we can do so much more.

Q: What are the main barriers to realizing AI's full potential?

TR: As humans, we all want to think that we know better than everybody else, and that we know better than software and AI. So, it will be a journey for some people to give up that control in exchange for efficiency.

JP: We won't be able to truly maximize the value until AI becomes totally autonomous, figuring out for itself when there is a situation requiring certain actions to be performed and doing them without direction. This is where we're really flipping things upside down, so the human becomes more of an exception handler.

Q: Does size matter when it comes to AI adoption? Can smaller manufacturers anticipate the same benefits as larger companies?

TR: Where we are today is the beginning. As AI gets better and we start deploying it, it's going to transform the way our customers interact with software and how they do business. It's going to drive efficiency levels to two to three times what we're seeing today.

But a small manufacturer doesn't have the resources required to best utilize AI. They need a conduit like Aptean to allow AI to help with their end-to-end operations and take them to the next level.

03

What Do Manufacturers Really Want From AI?

In a recent survey of over 1,000 manufacturing organizations across Europe and North America, business leaders revealed their top expectations for AI. The data paints a compelling picture of how different companies envision AI's role, with distinct priorities based on their size and sector.

1. Enhanced Innovation Capabilities

Experience factor: While enhancing innovation is the top perceived advantage, companies already implementing AI are significantly more optimistic about its potential than those in exploration stages.

2. Improved Product Quality

Size matters: Larger enterprises ($250M+ revenue) are 1.5x more likely to believe AI will deliver quality improvements compared to smaller manufacturers.

3. Efficiency and Data Analysis

Technology synergy: Cloud ERP adopters are 35% more likely to value AI's data analysis benefits than companies staying with on-premises systems.

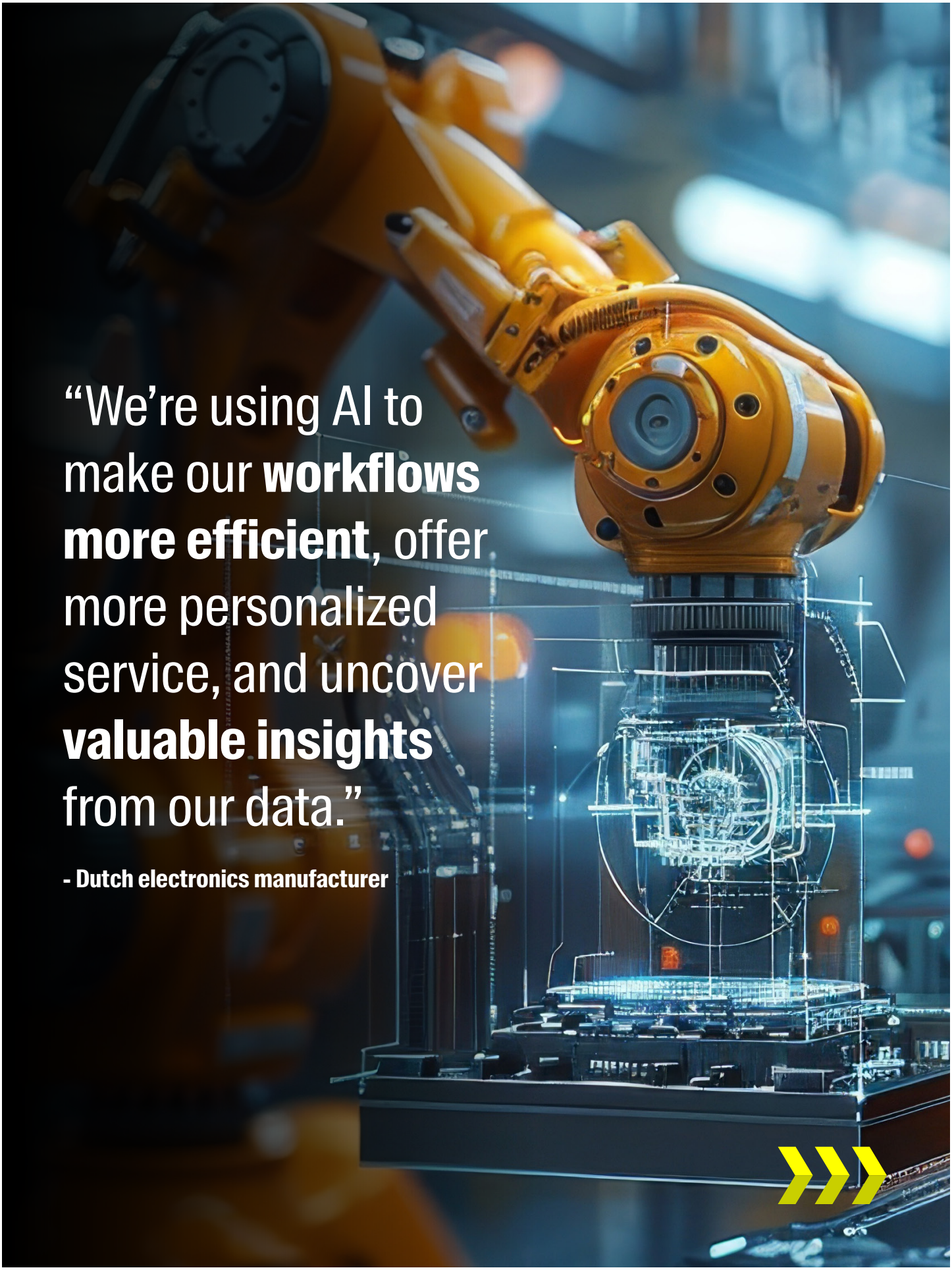
4. Automation and Customer Insights

Food's customer focus: Food and beverage manufacturers are 21% more likely to anticipate customer insight benefits than their apparel, industrial and process manufacturing counterparts.

5. Operational Cost Reduction

Mid-market optimism: Companies in the $100M-$249M range show the strongest expectations for AI-driven cost benefits.

These insights were extracted from an international research study commissioned by Aptean in H2 2024. The survey was conducted by B2B International.


“We’re using AI to make our **workflows more efficient**, offer more personalized service, and uncover **valuable insights** from our data.”
- Dutch electronics manufacturer

04

AppCentral: AI Without the Overhaul

Implementing AI in a way that delivers real value isn't easy, especially for smaller organizations.

AppCentral, a new AI-powered enterprise platform by Aptean, aims to solve this challenge by making advanced technology practical and accessible for manufacturers of all sizes.

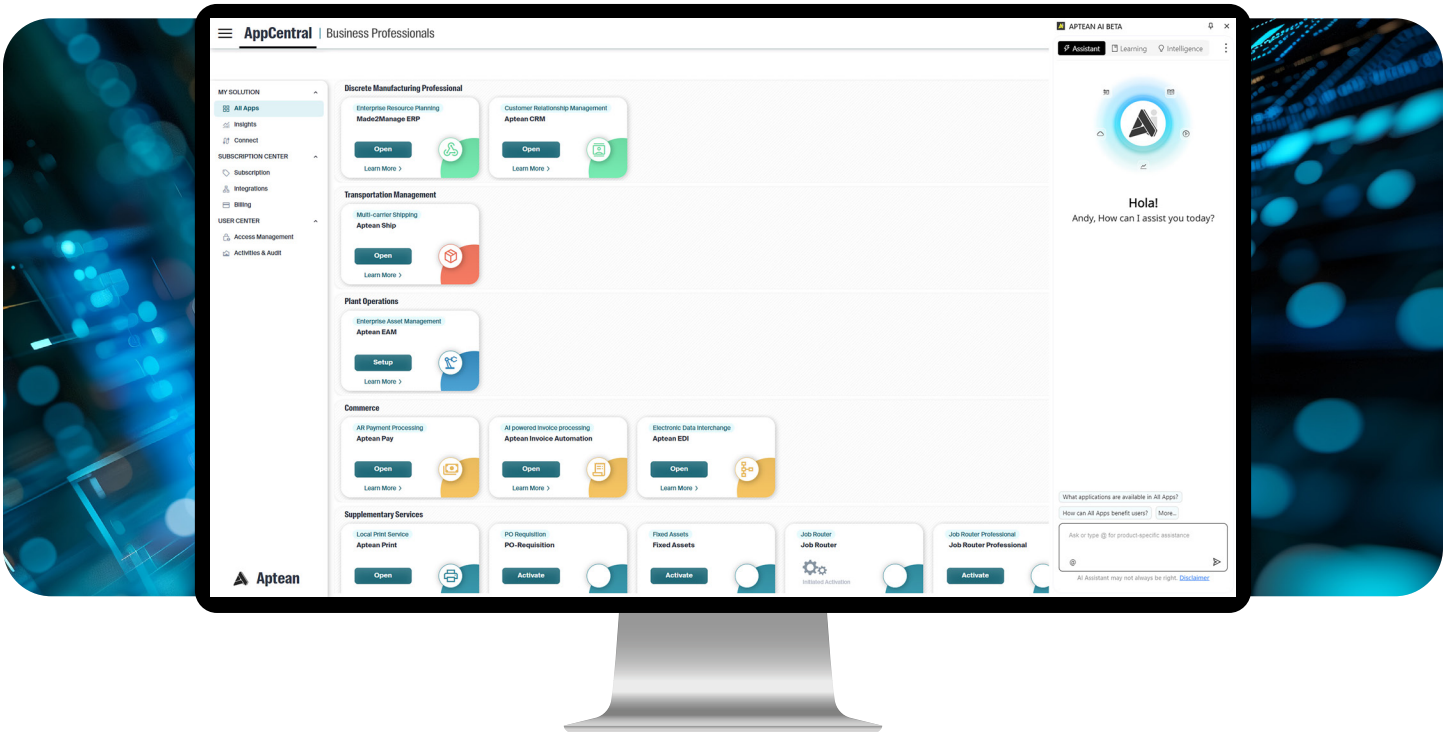
Breaking Traditional Barriers to Software Adoption

Historically, enterprise software has been characterized by lengthy implementation cycles that can stretch for months or even years. For manufacturers focused on producing and shipping goods, dedicating time and resources to these major implementations can be a significant challenge.

AppCentral tackles this problem head-on by rethinking how companies adopt and use technology. Rather than requiring businesses to pause operations for a massive software overhaul, the platform enables a more flexible approach.

The platform offers pre-connected applications, each purpose-built for our target industries, which companies can implement one at a time with minimal disruption. This step-by-step approach allows manufacturers to modernize their operations at their own pace, adding new capabilities as their business grows and evolves.

What makes this approach particularly powerful is how it opens up access to advanced AI capabilities. While many manufacturers might struggle to develop their own AI solutions, AppCentral provides a ready-made platform that puts AI power within reach of any sized organization.



Making Advanced Technology Accessible to All

Perhaps AppCentral's most important contribution is democratizing access to advanced technology. While large manufacturers are already experimenting with AI, smaller companies often lack the resources to build custom AI solutions or hire specialized teams. AppCentral levels the playing field.

The platform accomplishes this through practical features that work straight out of the box:

- A central data hub that pulls information from all connected applications
- Ready-to-use applications built specifically for manufacturing tasks
- Straightforward controls that don't require technical expertise
- Automated workflows that can be set up without coding

Giving Operations Gradual Autonomy

While today's version of AppCentral focuses on helping humans work better, its architecture points to a more ambitious future. The platform is built to eventually support autonomous workflows, where AI systems can handle routine operations independently, freeing up human workers to focus on strategy and handling exceptions.

Rather than pushing manufacturers to hand over control to AI systems immediately, AppCentral allows them to build trust gradually while maintaining oversight of critical operations.

This matters because manufacturing operations are becoming increasingly complex. The ability to automate processes like production scheduling, resource planning and supply chain management while maintaining precision and compliance could give manufacturers a significant competitive edge.

Building Infrastructures for Specific Industries

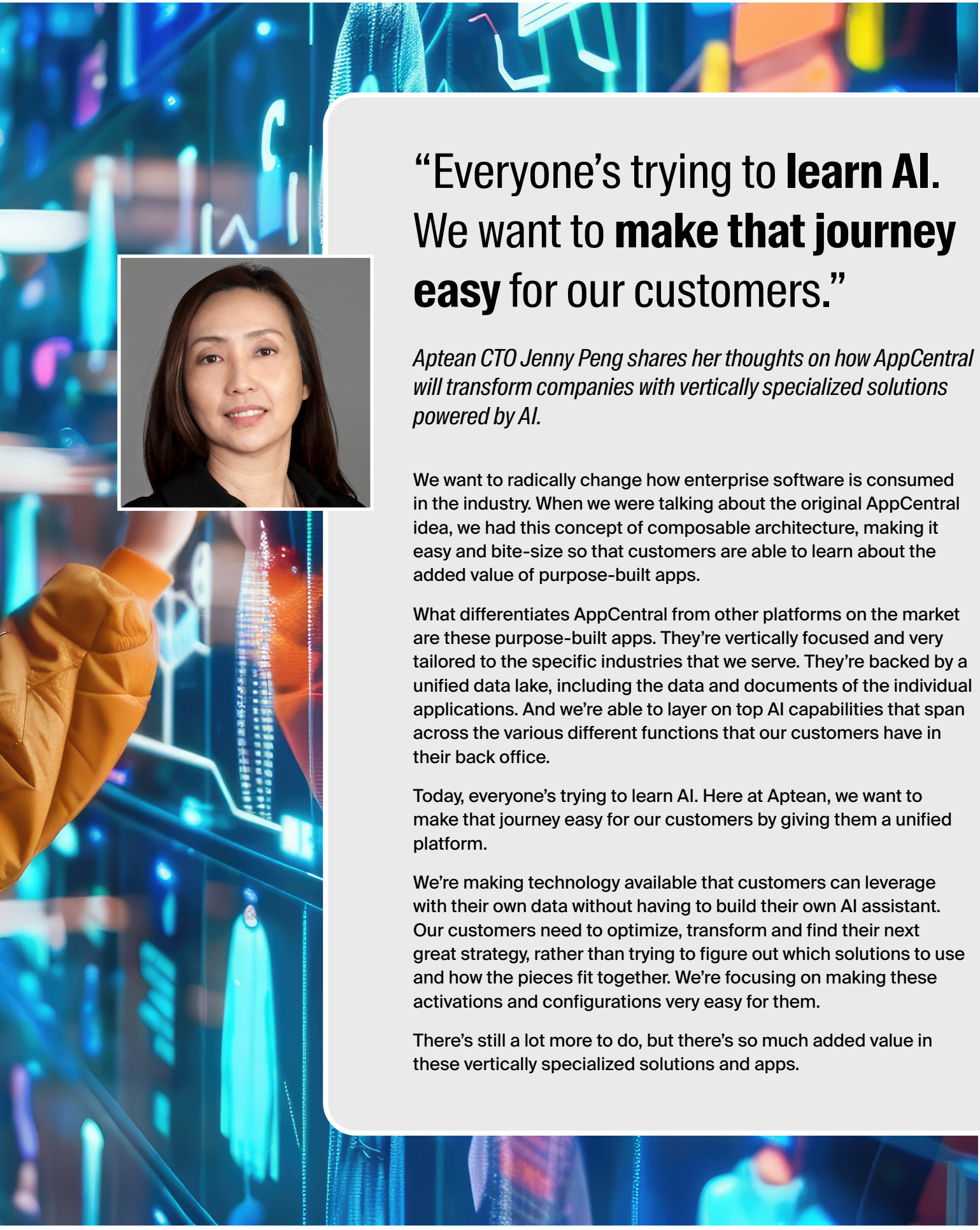
AppCentral stands out from other AI-enabled solutions by avoiding the one-size-fits-all approach to enterprise software. Instead of generic AI tools, it offers applications designed for specific manufacturing sectors. A food processor faces different challenges than an automotive parts manufacturer, and AppCentral's targeted approach reflects this reality.

Companies can choose applications that match their industry's needs, whether they're in discrete manufacturing; food and beverage processing, or apparel production. This ensures the AI capabilities directly address real operational challenges rather than forcing manufacturers to adapt their processes to generic software.

Putting AI's Potential Into Practice

The future of manufacturing will belong to companies that can effectively implement and scale their AI capabilities. Solutions that deliver these capabilities in an accessible, industry-specific format like AppCentral will be crucial in helping manufacturers bridge the gap between AI's potential and its practical implementation on the factory floor.

Learn more about Aptean AppCentral. ❯❯



“Everyone’s trying to **learn AI**. We want to **make that journey easy** for our customers.”

Aptean CTO Jenny Peng shares her thoughts on how AppCentral will transform companies with vertically specialized solutions powered by AI.

We want to radically change how enterprise software is consumed in the industry. When we were talking about the original AppCentral idea, we had this concept of composable architecture, making it easy and bite-size so that customers are able to learn about the added value of purpose-built apps.

What differentiates AppCentral from other platforms on the market are these purpose-built apps. They’re vertically focused and very tailored to the specific industries that we serve. They’re backed by a unified data lake, including the data and documents of the individual applications. And we’re able to layer on top AI capabilities that span across the various different functions that our customers have in their back office.

Today, everyone’s trying to learn AI. Here at Aptean, we want to make that journey easy for our customers by giving them a unified platform.

We’re making technology available that customers can leverage with their own data without having to build their own AI assistant. Our customers need to optimize, transform and find their next great strategy, rather than trying to figure out which solutions to use and how the pieces fit together. We’re focusing on making these activations and configurations very easy for them.

There’s still a lot more to do, but there’s so much added value in these vertically specialized solutions and apps.

Manufacturers with revenue **$10M-$19M** named enhanced innovation and development capabilities the primary benefit of AI.

05

Small But Mighty: Delivering Enterprise-Grade Power to Growing Businesses

Size has traditionally dictated attitudes to technology. Global manufacturers invest millions in cutting-edge systems while many smaller businesses still grapple with basic automation. But AI is rewriting this narrative.

As AI tools become more accessible and adaptable, they're creating opportunities for small and midsize manufacturers to compete at the enterprise level with enterprise-level resources.

The Size Myth

A 2024 research study by Aptean discovered that manufacturers with over $100M revenue are twice as likely to be using AI already than small or midsize companies.

AI Strategy Status	$10M - $19M	$20M - $99M	$100M+
Already using AI	28.2%	29.9%	43.8%
In process of implementing AI	42.1%	40.4%	30.2%
Investigating AI	25.4%	26.6%	24.4%
No plans to leverage AI	5.4%	4.1%	2.0%

Why is AI more embedded in larger organizations? Bigger teams and greater technology resources certainly make a difference. With skillsets already in-house, their IT departments can explore AI's potential alongside day-to-day tasks, rather than just keeping the lights on.

But there's a deeper issue here that needs to be addressed. Many small and midsize manufacturers have a misconception that AI is only for larger organizations, which couldn't be further than the truth.

Democratizing Access to Big Tech

Yes, global enterprises are using AI for radical change. At the 2025 Consumer Electronics Show (CES), Toyota announced completion of the first phase of its Woven City; a “living laboratory” where AI, sensors and data converge to develop smart city technologies in real-world conditions.

But these use cases are outliers. Where AI can deliver its greatest value to manufacturers right now is democratizing access to enterprise technology.

Traditionally, software can demand months or years of implementation time. AI is changing this timeline. New AI-driven platforms are emerging that let manufacturers modernize step by step, without specialized teams or custom development. These platforms come with manufacturing-specific features ready to use, from production scheduling to resource planning.

Smaller manufacturers don’t need the vast IT resources of global organizations to start benefiting from AI. Instead of pausing operations for a major technology overhaul, they can begin with focused applications that address their specific challenges, making gradual but noticeable changes.

The Incremental Advantage

Starting simple is the key to dispelling industry misconceptions, so more small and midsize manufacturers have the confidence to use AI. Success will come from shifting focus away from sweeping transformations toward practical, targeted improvements.

By starting with specific operational challenges—whether that's increasing supply chain visibility, improving quality control or moving to a predictive maintenance model—manufacturers can use AI to deliver new value without disrupting operations.

The data suggests this approach is already gaining traction. Over 65% of manufacturers with revenue under $100M are either exploring AI or in the process of implementing AI tools.

Rather than going it alone, these manufacturers are partnering with technology providers who understand how daunting AI can be. They recognize that sweeping change isn't practical for smaller manufacturers, instead using AI to enhance specific everyday processes. These partners let manufacturers modernize at their own pace and comfort level while maintaining full control of their operations.

Start Small, Think Big

Any manufacturer can use AI to their advantage if they find the right start point. When companies focus on practical improvements over radical transformation, they discover that small changes can deliver mighty results.

It might not grab headlines, but strategic deployment matters more than scale. AI is fundamentally changing manufacturing's competitive dynamics and closing the gap between what small and large manufacturers can achieve.

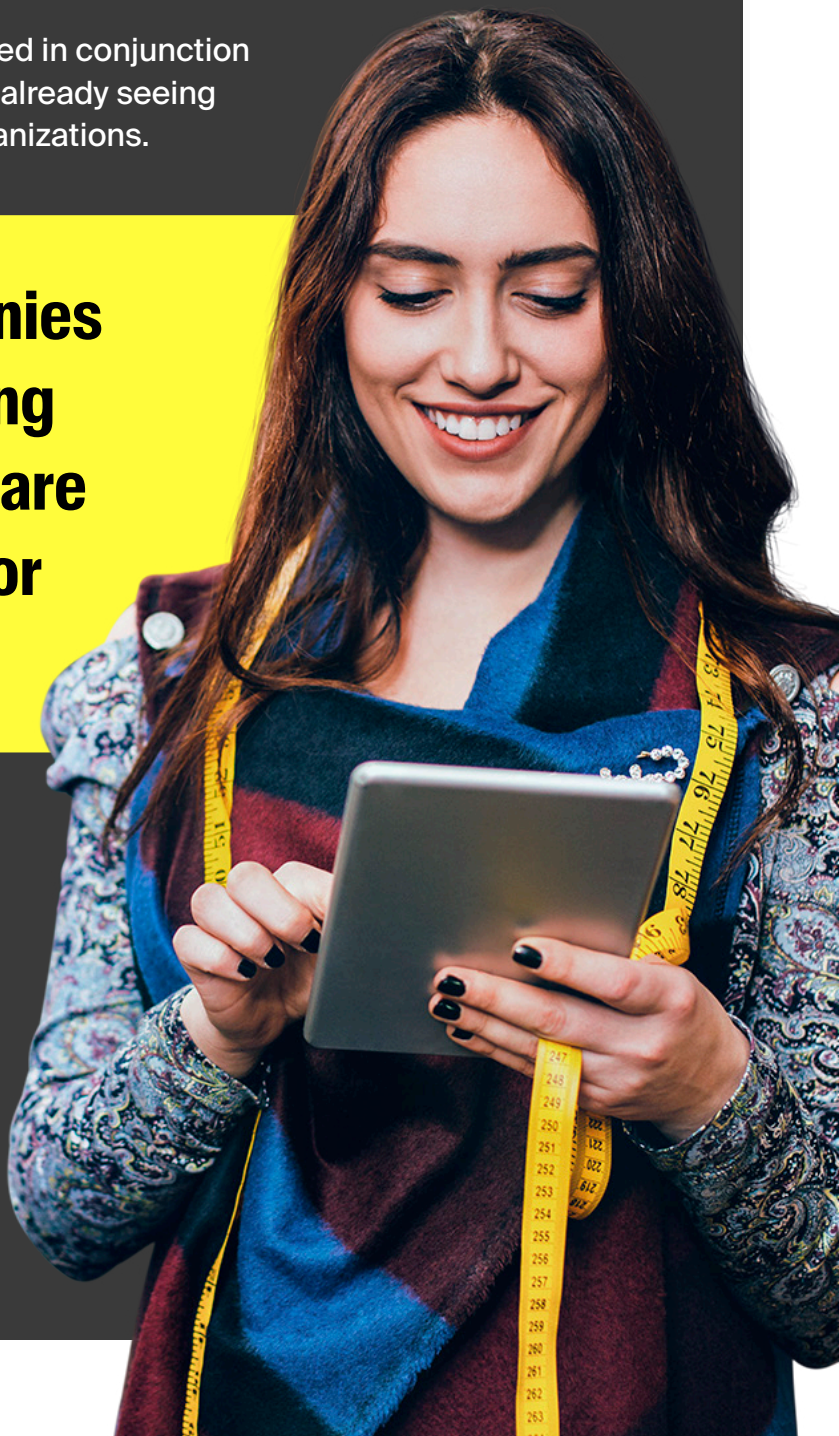

Success will come
from shifting focus
away from sweeping
transformations toward
**practical, targeted
improvements.**

06 Industry Spotlight: AI in Apparel

The Fabric of the Future: How AI Is Reshaping the Apparel Industry

Aptean's recent research report, conducted in conjunction with B2B International, revealed that AI is already seeing widespread adoption among apparel organizations.

98% of apparel companies are at least investigating AI, and more than 70% are already implementing or using AI.

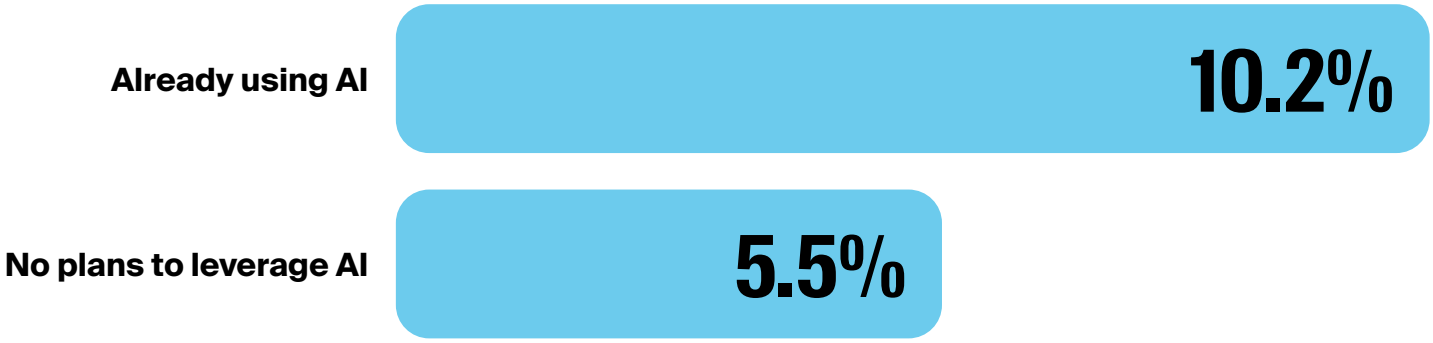


Top Identified Benefits of AI in Apparel

- Enhanced innovation
- Improved product / service quality
- Personalized customer experience
- Competitive advantage
- Enhanced decision-making

Generative AI is estimated to add up to **$275 billion** in operating profits for apparel, fashion and luxury companies over the next 3-5 years. Of those brands already using AI, they report higher profit growth compared to those that have not implemented AI.

Annual Profit Growth



Industry Voices

"AI is essential for **improving our customer service and engagement**. We deploy AI-powered chatbots to **give consumers immediate and personalized replies**, delivering a smooth and efficient support experience."

- **Procurement and Purchasing Manager**, NA Fashion and Apparel Brand

"We primarily use AI to **analyze sales data, seasonal changes and market trends to help forecast demand**, thereby optimizing inventory management and reducing excess stock."

- **Procurement and Purchasing Manager**, NA Fashion and Apparel Brand

Learn more about Aptean's **apparel solution suite**.

All statistics in this asset are from an original research survey conducted by Aptean and B2B International in Q3 2024.

Coming Up in Our Next Issue

Navigating the ethics of AI adoption

Real-world application: Industry leaders discuss their AI strategies

Spotlight AI in food and beverage manufacturing

aptean Ready for What's Next, Now®

About Aptean
Aptean is a global provider of industry-specific software that helps manufacturers and distributors effectively run and grow their businesses. Aptean's solutions and services help businesses of all sizes to be Ready for What's Next, Now®. Aptean is headquartered in Alpharetta, Georgia and has offices in North America, Europe and Asia-Pacific.

To learn more about Aptean and the markets we serve, visit **www.aptean.com**.