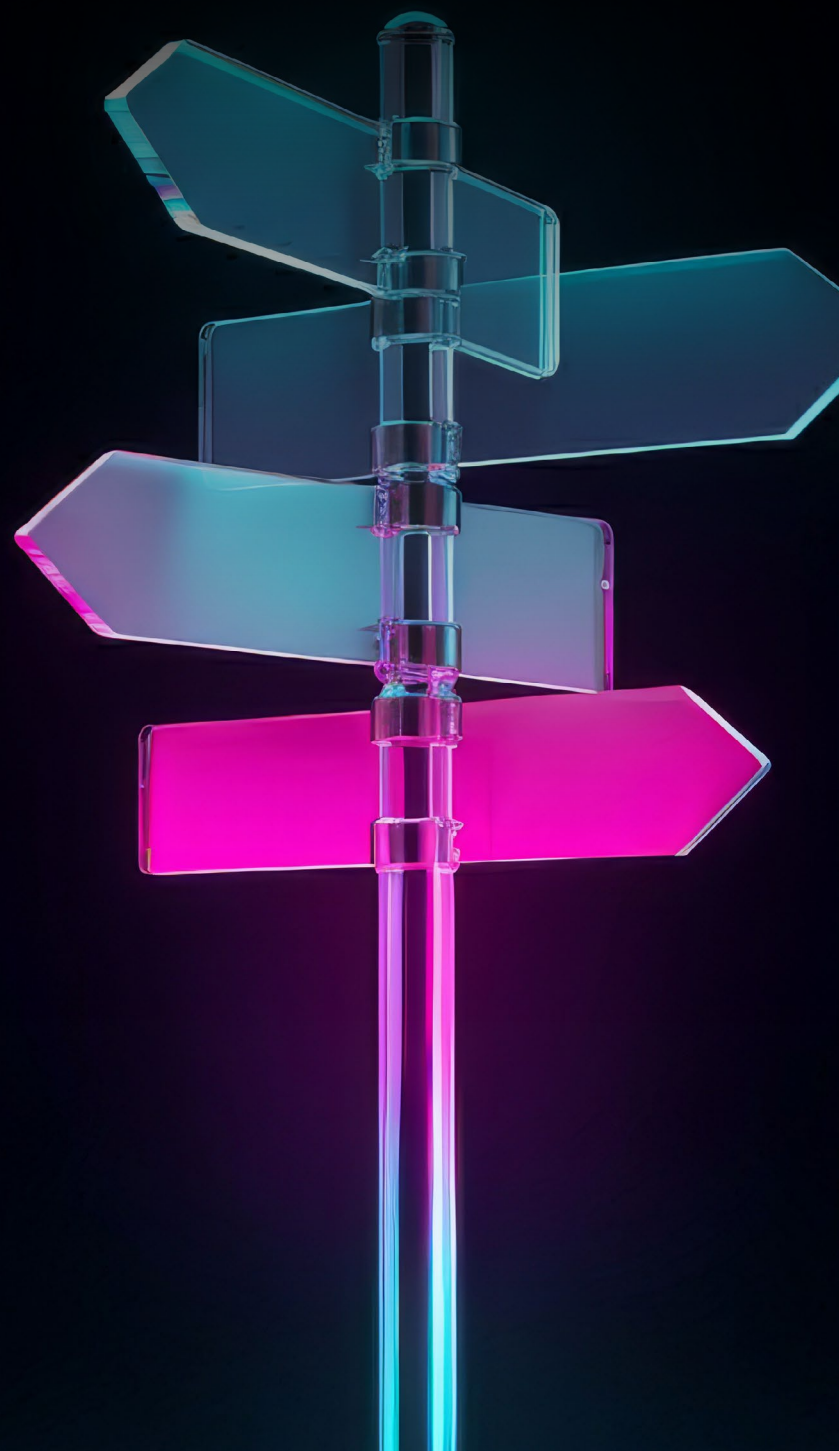
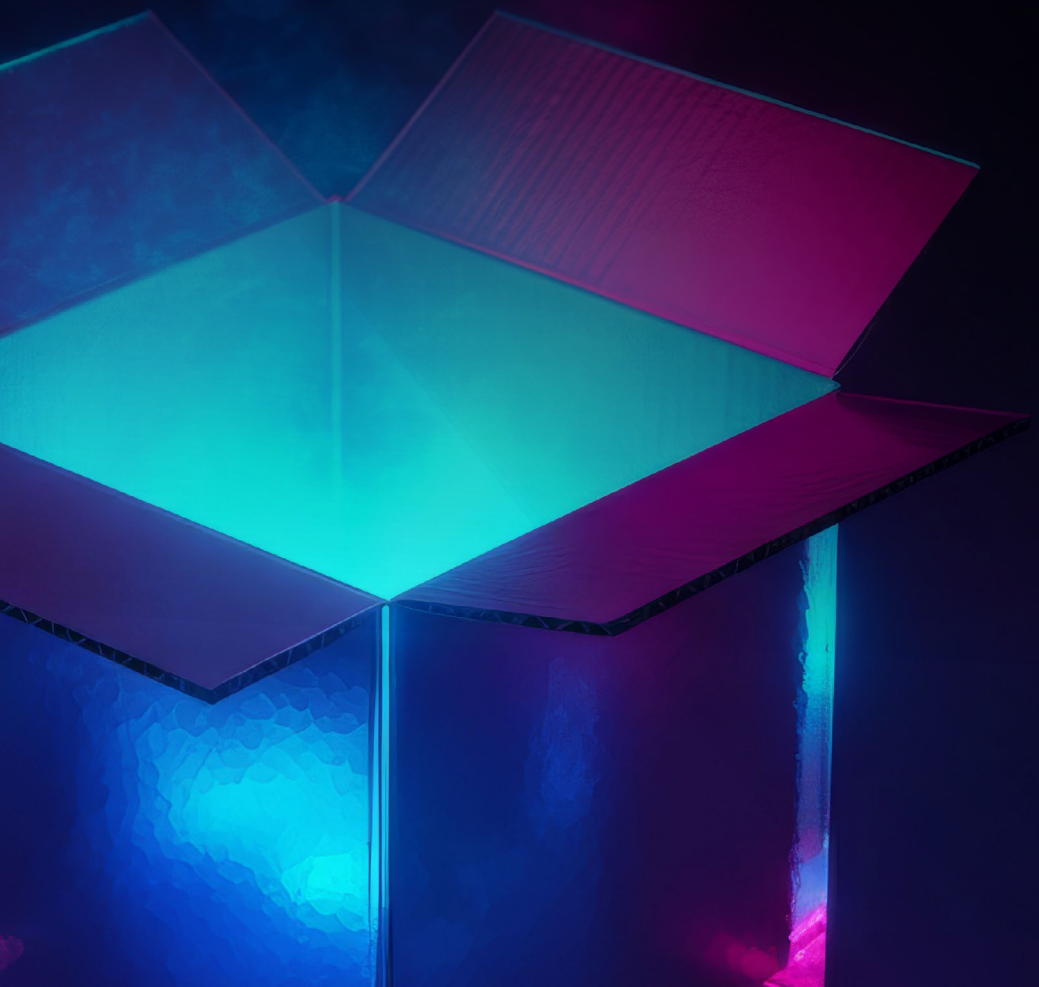
pendo

The ambitious product leader's guide to AI





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INTRODUCTION

Forward. Faster

The future is here, and product management is harder than ever. We know AI is here to stay, and we know it can be harnessed to improve efficiency and help product managers do their jobs.

But what leads to success in today's product world? How should product managers implement AI in their day to day so they can monitor, measure, and scale their software usage?

To be successful, product managers (PMs) must wield incredible influence within their organizations. They need unshakeable trust from engineering and the ability to easily guide leadership to the right roadmap decisions while staying tightly connected to customers.

"There's no question we are in an AI and data revolution, which means that we're in a customer revolution and a business revolution."

Clara Shih, CEO of Salesforce AI

Adding the intricacies of AI to organizations and workflows is no easy task.

Because while AI-powered software increases the quantity of digital tools available, it potentially lowers the quality. We've shifted into a build-first, think later mindset because of how quickly we can move with AI.

IF

97% **of IT leaders prioritize digital experience,**

AND

37% **of decision-makers use generative AI capabilities in their products today,**

WHY

are PMs spending

52%

of their time putting out fires?

Today, product management is the practice of software experience management (SXM), which requires treating software experience as a critical business driver. This means strategically planning, measuring, and improving SX over time. SXM will determine who thrives in the age of AI. Now and always is the right time to focus on experience.

AI has forced our hands. And as leaders, it's on us to focus our collective energies on building software that supports, enhances, and empowers the human experience.

How? By harnessing AI to accelerate users to those much-loved 'Aha' moments.

Invest in upskilling your team on AI literacy, so that they can collaborate effectively with data scientists and engineers. Promote responsible AI practices into your discovery and delivery: define guardrails for bias, establish feedback loops to tune models in production, and use the right tools to surface real user sentiment on your AI innovations.

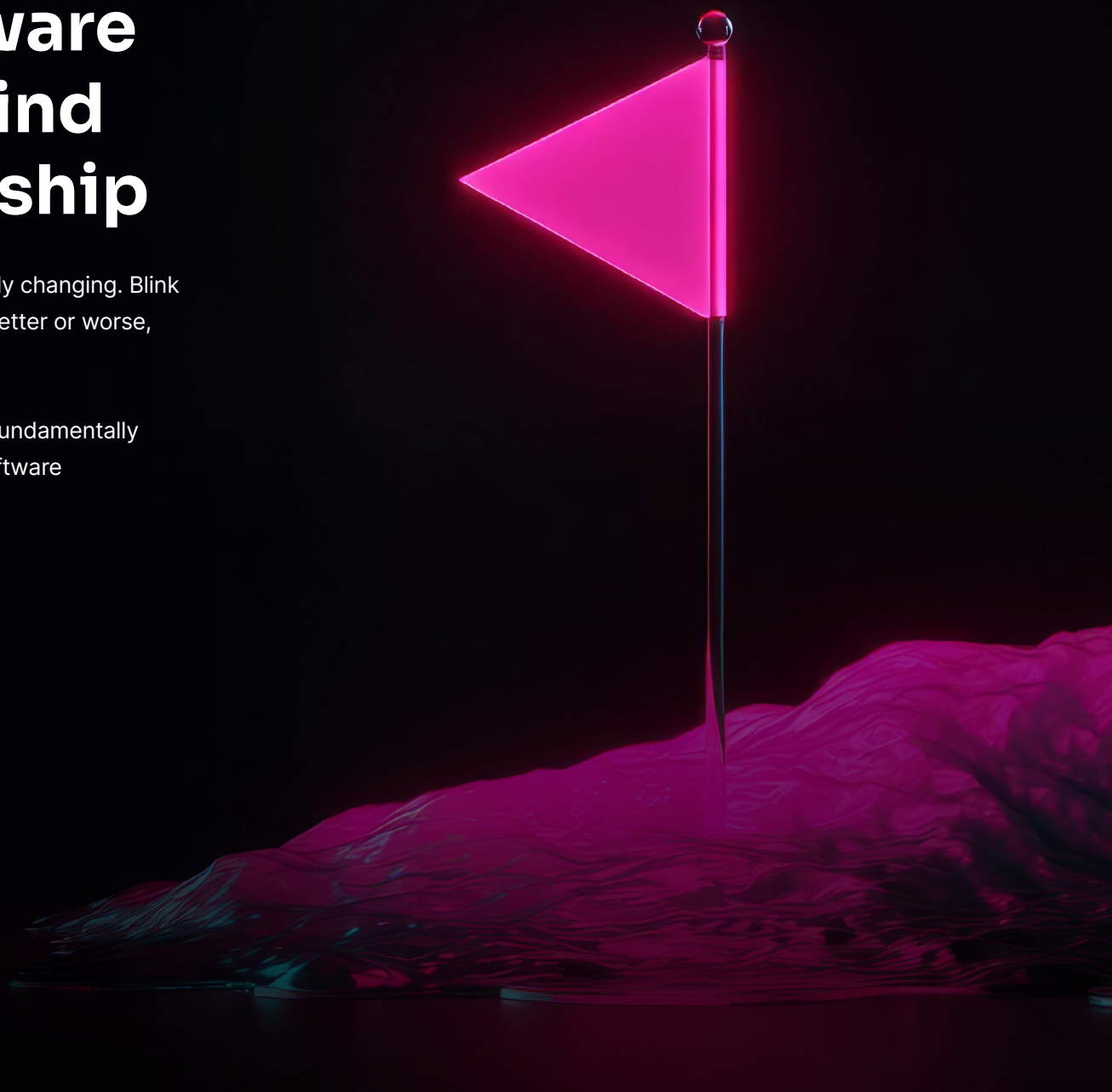
By pairing human judgment with machine speed, you'll not only stay ahead of the AI curve—you'll deliver smarter, more equitable product experiences that drive lasting value.

CHAPTER 1

Intelligence software demands a new kind of product leadership

With AI at its core, the product development world is rapidly changing. Blink and you're missing out. But whether all this change is for better or worse, that's up to us and how we embrace it and channel it.

This isn't about simply adopting AI as a feature. It's about fundamentally rethinking how you lead, build, and innovate across the software development lifecycle (SDLC).



The AI big bang

It's happened. It's here. AI is now a horizontal capability and the underlying layer, to pretty much everything we can, could, and will think of.

As a product leader, it's vital that you understand how AI shows up across and impacts your entire portfolio. How this irreversible big bang only intensifies the software experience crisis. How AI makes coding more accessible, leading to a rapid spread of digital tools often built without user experience in mind.

Without strategic software experience management (SXM), you risk more unused, disjointed, and frustrating applications. AI agents and digital assistants need access to data across many sources; if data remains siloed in poorly integrated software, you'll never realize AI's full potential.

AI is reshaping organizations, reshaping culture, reshaping velocity. Here's how.

- **Organizational structure:** Your teams have to be more cross-functional. With AI specialists, data scientists, designers, and engineers collaborating from the get-go.

- **Culture of experimentation:** AI development is iterative. Your teams must be able to embrace rapid prototyping, testing, and learning.

- **Velocity and iteration:** AI accelerates development, demanding faster cycles. As a leader, you must provide the tools and processes needed for rapid analysis, feedback, and deployment.

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5 AI risk factors you can avoid

For product leaders, the stakes couldn't be higher. Yes, AI offers immense opportunities for personalization, efficiency, and innovation. It's democratized software creation. It's made coding more accessible. But, while AI opens many doors, product leaders need to know which ones to walk through.

Beware of quantity over quality. AI-powered development tools are increasing the volume of software being created while simultaneously lowering the quality of software experiences. When anyone can spin up an application in hours, the temptation is to build first and think about user experience later.

Customer and employee frustration. Clunky or unreliable AI experiences can increase churn and decrease productivity - frustrating the business and loyalty out of your customers.

Pay attention to ethical and compliance issues. AI introduces challenges like bias, explainability, and data privacy. You must establish robust governance, regularly consult with legal experts, and stay informed about new regulations that impact AI development and deployment.

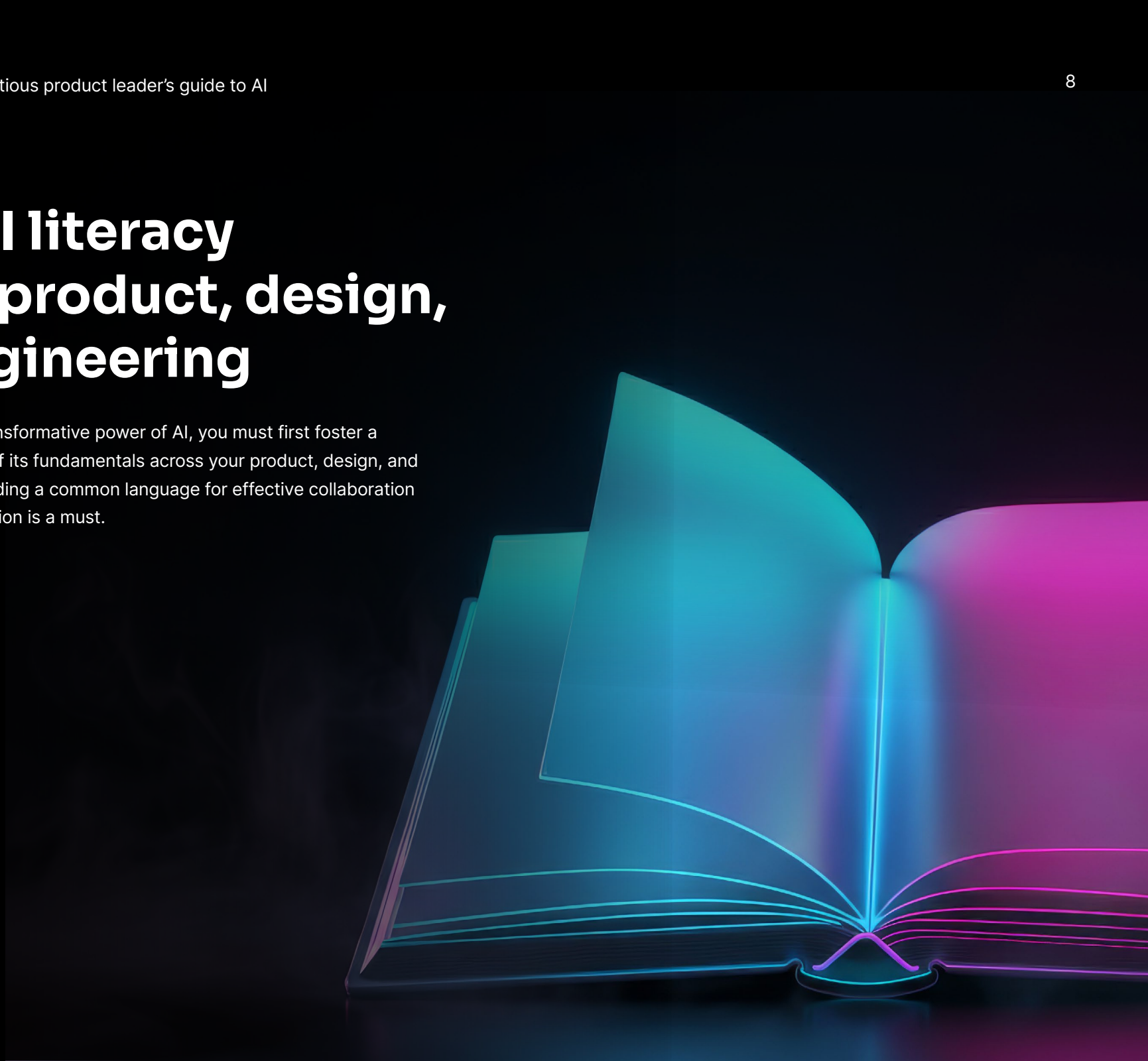
Measure AI tool adoption. We're already seeing that 80% of software features go unused, and nearly half of all business software sits idle, wasting $44 million monthly for the average enterprise. AI-accelerated development threatens to flood organizations with even more tools that employees won't adopt.

Ensure integrated data. The modern enterprise's disjointed, siloed software landscape makes it nearly impossible to use AI effectively. Agents, chatbots, and digital assistants only work when they can access all necessary data sources. If your essential data is scattered across dozens of software solutions, you'll never realize AI's full potential.

CHAPTER 2

Build AI literacy across product, design, and engineering

To truly harness the transformative power of AI, you must first foster a shared understanding of its fundamentals across your product, design, and engineering teams. Building a common language for effective collaboration and responsible innovation is a must.



Our new terms of reference (start with basics)

Before we deep dive, let's define the core AI concepts involved.

Machine learning (ML): Systems learn from data to identify patterns and make predictions without explicit programming.

Deep learning: A subset of ML using multi-layered neural networks to learn complex patterns, powering image recognition and natural language processing.

Generative AI: AI that creates new content (text, images, audio, code) based on training data. Large language models (LLMs) are a key example.

How different teams use AI

Within your organization, each function has a unique and specific role in AI product development. Let's break them down.

- **Product:** Understand AI capabilities and limits to identify viable use cases and set realistic expectations. Evaluate AI performance beyond traditional KPIs.
- **Design:** Focus on prompt design and human-AI interaction (HAI), designing for transparency, managing user expectations, and mitigating UX risks like AI hallucinations.
- **Engineering:** Understand model types, infrastructure for deployment and scaling, and the importance of data readiness (quality, volume, ethical sourcing).

See you ~~later~~ never, silos

Seamless, cross-functional collaboration is liquid hydrogen and oxygen to high-powered AI product development. It won't take off without it. As a product leader, it's on you to break down silos and create, foster and fuel an environment that champions:

- **Create a shared understanding:** Where your teams use common AI language, reducing miscommunication.
- **Build iterative feedback loops:** Where designers, engineers, and product leaders align on data, limitations, and business goals that are regularly reviewed and updated.
- **Manage ethical considerations:** Where bias, fairness, and explainability are integrated into every development stage.

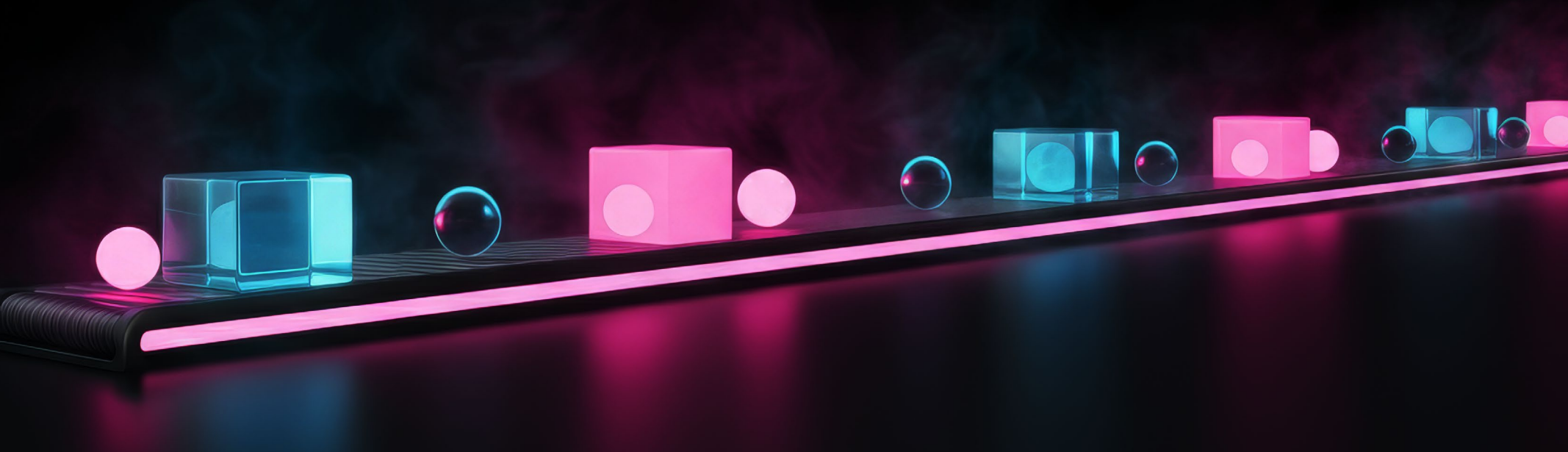
Pendo's integrated platform helps bridge these gaps with unified analytics and feedback tools, providing a shared view of user behavior and product performance for data-driven AI feature decisions.

CHAPTER 3

The product development process for our AI age

As we've seen, the traditional SDLC wasn't built for AI's speed and scope. This presents a unique opportunity to improve how we build software, but also carries risks.

The old SDLC leaves companies blind to necessary improvements. You need to adopt the modern SDLC, the iterative process for analyzing and acting on software data.



9 steps of the modern SDLC

Building great software experiences means deeply understanding your users. From discovery to optimization, stay closer to your users and deliver better experiences with this nine-step process:

1 Plan

Define project scope, goals, and timeline.

2 Discover

Analyze data to understand your users, then validate solutions based on feedback and data.

3 Design

Translate requirements into a development blueprint.

4 Implement

Create code from design plans.

5 Test

Make sure that software meets performance and user requirements.

6 Launch

Release software, often in stages.

7 Analyze

Monitor adoption, engagement, stickiness, and user sentiment.

8 Act

Fix vulnerabilities, resolve friction, and close feedback loops.

9 Improve

Continuously iterate and optimize software.

This is the modern SDLC way. Agile and user-centric. Perfected for dynamic AI product development.

Building products in the agentic era doesn't just call for a new approach or new steps. It demands an entirely new mindset and ways of thinking.

Flip the switch: A new mindset for AI-driven product development

Building products in the agentic era doesn't just call for a new approach or new steps. It demands an entirely new mindset and ways of thinking.

- → **You have to start with exploration, not fixed requirements.** AI capabilities often emerge through experimentation. Explore broad problems and potential AI solutions.
- → **You must redefine MVPs for AI.** An AI MVP might be a "minimum viable model" or a "Wizard of Oz" prototype to quickly validate AI utility and gather feedback.
- → **You need to think in models, not just features.** AI products are driven by evolving models. Consider their lifecycle: data pipelines, training, retraining, and monitoring for drift.
- → **AI for onboarding.** The "interface" includes conversational flows and AI responses. Focus on intuitive, transparent, and trustworthy interaction experiences.

Pendo's integrated SXM platform supports and supercharges this modern, iterative approach.

With our unified analytics, communication tools, session replays, and feedback management, we give you real-time data and actionable insights to continuously analyze, act on, and improve AI-powered experiences. So you can quickly identify user struggles with new AI features, guide them, and gather feedback for future iterations.

CHAPTER 4

AI roadmap planning 101

Now, let's look at how you can craft an AI roadmap that effectively balances innovation with practicality, the right initiatives with realistic expectations.

You need to choose the right AI use cases

Contrary to popular belief, not every problem needs AI. So prioritize AI use cases with the greatest potential impact:

- **Feasibility:** Do you have the data, expertise, and infrastructure? Start small to build capability.
- **Impact:** Will AI genuinely solve a significant user problem? Will it create substantial business value? Focus where AI offers unique benefits.
- **Strategic alignment:** Does the AI initiative align with your company's strategy and competitive advantages?

Contrary to popular belief, not every problem needs AI. So prioritize AI use cases with the greatest potential impact.

Chartbeat × pendo

Does your team spend hours grooming data to pull out insights? This is a perfect use case for AI to step in, do the manual work for you, and deliver insights in a fraction of the time. Chartbeat used Pendo to significantly reduce manual data work.

Challenge
Chartbeat wanted to standardize product data across multiple business units to better understand user behavior.

Pendo'ing it
Using Pendo Analytics, In-app Guides, Session Replay and Listen, Chartbeat consolidated its tech stack and saved time combing through data.

Results
Chartbeat now has one single platform for all product data and reduced time spent data grooming by 86%.

Pendo's portfolio optimization tools help you quantify and optimize software spend, ensuring AI investments deliver measurable ROI. And by understanding usage and adoption, you can make data-driven decisions on AI initiatives and resource allocation.

Balance AI-native versus AI-enhanced experiences

It's likely that your AI roadmap will include:

- **AI-native experiences:** Products or features fundamentally reliant on AI (e.g., generative AI writing assistants).
- **AI-enhanced experiences:** Existing products improved by AI (e.g., AI-powered search).

You need to strategically balance these. Start with AI-enhanced experiences to gain experience and demonstrate value before you move on to more complex AI-native projects.

You need to validate build versus buy decisions in the AI stack

The AI ecosystem offers many pre-built models and platforms. As a product leader, you face a critical build versus buy decision:

- **Build:** Developing AI models in-house offers customization but requires significant investment. Best for core, differentiating AI capabilities.
- **Buy:** Leveraging third-party AI services accelerates time to market and reduces costs. Suitable for non-differentiating AI or quick hypothesis testing.

Real-time insights into user behavior and feature adoption can inform your decision making, helping you fully understand and appreciate how users interact with existing features. This data will help you assess whether an AI enhancement (buy) or a new AI-native solution (build) is best for user needs and adoption.

Set expectations around AI "bets"

There's always going to be an element of uncertainty in AI development. That comes with the territory. So, set realistic expectations with your stakeholders. Be clear, be honest. Acknowledge that not every AI initiative will bring immediate or predictable results.

Try framing AI projects as "bets" requiring continuous learning and adaptation. This transparency manages risk and fosters experimentation. That's a win for everyone.

CHAPTER 5

Scaling and governing AI products ethically and effectively

As AI products move to widespread deployment, robust governance and ethical guardrails are crucial. As a product leader, you must ensure AI scales responsibly, mitigating risks like bias and ensuring compliance.

Establish AI governance guardrails early on

This is mission critical. AI governance must be embedded from early development stages. You'll need to define policies for:

- **Data management:** Ensuring high-quality, representative, and ethically sourced data for AI training.
- **Model development:** Establishing standards for model validation, testing, and documentation.
- **Deployment and monitoring:** Continuously monitoring AI models in production for performance degradation or unexpected behaviors.

Address bias, explainability, and compliance everywhere

These are critical for AI products:

- **Bias:** AI models can amplify biases from training data. You'll need to implement strategies to identify and mitigate bias, like diverse data collection and fairness metrics.
- **Explainable AI (XAI):** For sensitive AI applications, understanding why an AI made a decision and how it got its result is crucial. You should push for explainable AI solutions to provide transparency.
- **Compliance:** AI products must comply with regulations (e.g., GDPR, CCPA). Poor software experience can lead to compliance errors and fines, as seen with British Airways' $20 million GDPR fine linked to inconsistent security feature use.

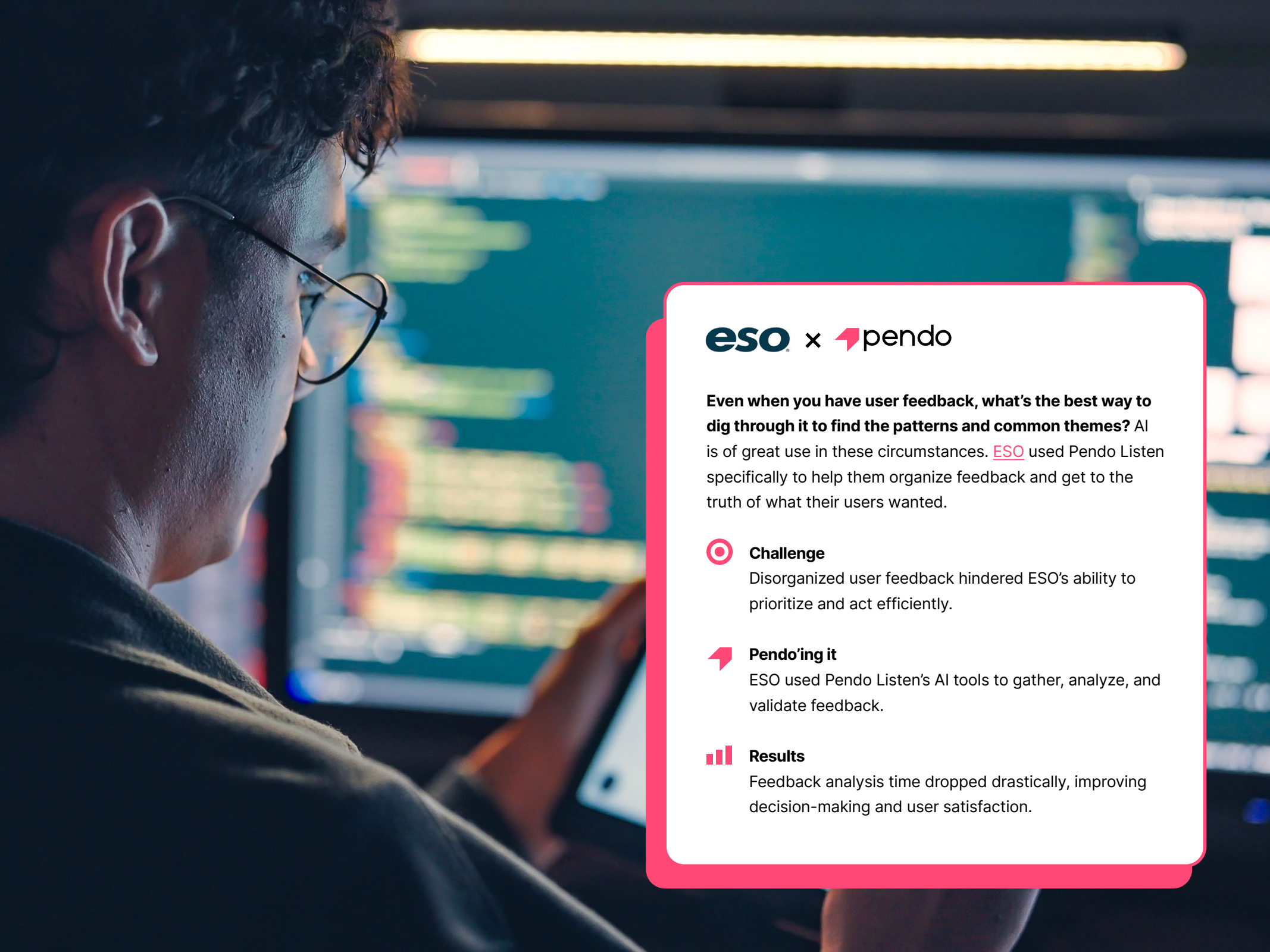
Again, Pendo's analytics and session replays are invaluable here. By observing user interactions with AI features, you can identify unintended behaviors or confusing outputs, allowing for rapid correction.

Create feedback loops and escalation paths for users

Responsible AI needs robust mechanisms for users to report issues and for organizations to respond quickly and effectively.

- **Establish clear feedback channels:** Make it easy for your users to give feedback on AI interactions through in-app surveys or support channels.
- **Define escalation paths:** Create clear processes for escalating reports of potential user harm or ethical AI issues.
- **Close the loop:** Clearly communicate how user feedback improves the AI product, building trust.

Keeping your AI interactions grounded in user feedback helps keep the proper guardrails on a project.



eso × pendo

Even when you have user feedback, what's the best way to dig through it to find the patterns and common themes? AI is of great use in these circumstances. ESO used Pendo Listen specifically to help them organize feedback and get to the truth of what their users wanted.

Challenge
Disorganized user feedback hindered ESO's ability to prioritize and act efficiently.

Pendo'ing it
ESO used Pendo Listen's AI tools to gather, analyze, and validate feedback.

Results
Feedback analysis time dropped drastically, improving decision-making and user satisfaction.

AI responsibly: Embedding responsible AI values across your organization

Responsible AI is a shared responsibility. As a product leader, you can embed these values through:

- → **Training and education:** Provide ongoing training on AI ethics and responsible development.
- → **Cross-functional collaboration:** Foster a culture where ethical considerations are discussed across teams.
- → **Leadership buy-in:** Secure executive commitment to prioritize responsible AI.

By integrating these practices, you can make sure that you're developing and delivering AI products that are innovative, trustworthy, and beneficial. AI products that drive opportunities for competitive advantage while reducing complexity and risk.

CHAPTER 6

The future-ready product organization

Our new AI-driven agentic world offers up immense opportunities. But there are and always will be challenges.

The escalating costs of poor software experiences—wasted investments, diminished productivity, and high churn—are a critical drain on enterprises.

The problem of unused software and the rapid growth of AI-driven tools highlight the urgent need for a strategic shift in managing digital assets.

SXM is a fundamental business imperative. It's the strategic discipline that enables organizations to treat software experience as a core driver of productivity, innovation, security, and profitability.

By adopting a modern, iterative software development lifecycle grounded in user understanding, businesses can move from reactive problem-solving to proactive optimization.

This ongoing strategic discipline is essential for sustained competitive advantage in an evolving digital landscape.

The problem of unused software and the rapid growth of AI-driven tools highlight the urgent need for a strategic shift in managing digital assets.

Go AI-native

You need to be an AI-native product organization. You know you need to be AI-native. But what does that look like? How do you show up as an AI-native enterprise?

AI-native means prioritizing user experience
You recognize that AI success hinges on user interaction, making SXM a core competency.

AI-native is embracing data-driven decisions
You use quantitative and qualitative data at every stage of the AI product lifecycle.

AI-native is actively fostering cross-functional collaboration
You break down silos to build AI responsibly and effectively.

AI-native means that you're committed to ethical AI
You integrate governance, bias mitigation, and explainability into your organization's core values.

AI-native is agile and iterative
You adopt a modern SDLC for rapid experimentation and adaptation.

Evolve at the pace of tech

Pendo is the leading integrated SXM platform, uniquely positioned to address these challenges.

We give you the definitive holistic view of the entire software experience lifecycle. By unifying analytics, communication tools, session replays, feedback management, and AI-powered insights.

Our seamless integrated approach directly counters the "five horsemen of the software apocalypse". By enhancing adoption, mitigating security risks, boosting productivity, fostering innovation, and reducing customer churn.

Pendo's proven ability to deliver a remarkable 396% ROI, with a reduction in support tickets in less than six months, demonstrates its tangible financial impact.

LAWVU × pendo

LawVu reduced their prep time for quarterly VoC reports by 70% by using Pendo Listen's AI-generated summarized insights derived from feedback coming from key sources including NPS, CSAT, and customer reviews.

keap × pendo

Keap uses guide analytics to accelerate new feature adoption, and saw a 1000% increase in feature usage after publishing a single guide.

So if your organization is looking to maximize software ROI, drive adoption, eliminate waste, and improve outcomes, then it's time to embrace SXM with Pendo as a strategic imperative.

There's no doubt in our minds, the future of enterprise success depends on delivering exceptional software experiences.

As product leaders, now is your time to take command and unlock your digital ecosystems' full potential. Start sharpening your software with SaaS and AI – with Pendo.

Request a demo today

Over 14,400 companies across 163 countries use Pendo to make their software smarter, smoother, and easier to use.

Pendo is built for scale and trust in the agentic AI era

AI GRADE PRIVACY STANDARDS

- ✓ Explainable and transparent modeling,audit trails, clear governance frameworks
- ✓ Robust anonymization, and data segregation
- ✓ Data minimization and purpose limitation

ENTERPRISE-GRADE GOVERNANCE

- ✓ Privacy and security training for all employees
- ✓ Data encryption and access tools
- ✓ Role-based permissions (SCIM | SAML | SSO)
- ✓ Resilience and uptime

Pendo is the only integrated software experience platform

Pendo gives you every tool for better software experiences. From SaaS and mobile to AI and agentic workflows, over 14,400 companies across 163 countries use Pendo to make their software smarter, smoother, and easier to use.

Request a demo today

Pendo helps you prove and maximize the ROI of your software

You've invested millions in software - but if people don't use it, you don't get the value. Pendo gives you visibility and tools to drive adoption, reduce waste, and improve outcomes.

Return on investment (ROI)

396%

Benefits PV

$3.8M

Net Present Value (NPV)

$3.0M

Payback

<6 months

In 2025 Forrester conducted a TEI analysis of Pendo. The results were conclusive. Pendo delivers a large, positive return, quickly to companies who invest 396%. Expect a more efficient product team, increased adoption, less support tickets, and time savings.

Request a demo today

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