

AI AND THE FUTURE OF PRODUCT MANAGEMENT

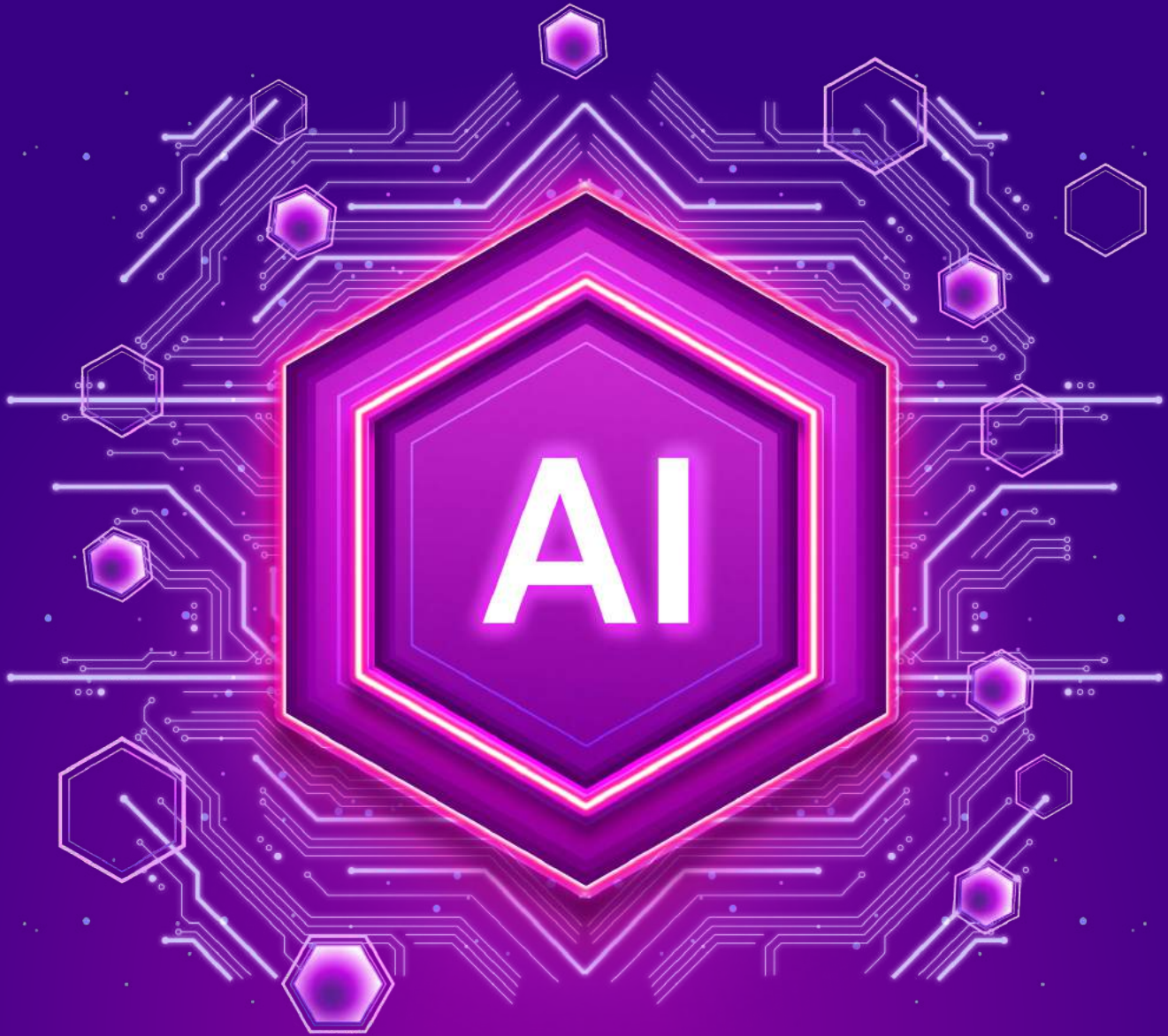


TABLE OF CONTENTS

1. Introduction	3
2. Why You Can't Afford to Ignore AI	5
2.1. Discover New Revenue Opportunities	6
2.2. Better Meet Your Customers' Expectations	6
2.3. Reduce Operational Costs	7
2.4. Don't Fall Behind the Financial Curve	7
3. How AI Will Change the Discipline of Product Management	8
3.1. AI to Gain Valuable Insights into Customer Needs	10
3.2. AI for Faster Product Iteration and Experimentation	10
3.3. AI for Smarter Strategic Decision-Making	12
4. Best Practices for Successfully Adapting to the Changes in the PM Role	13
4.1. Evolve Your Skills for an AI-Powered World	14
4.2. Educate Other Team Members on AI	14
4.3. Identify High-Impact AI Scenarios	15
4.4. Champion Agility and Experimentation	15
4.5. Manage AI Risks	15
4.6. Address Ethical Considerations	15
4.7. Use AI-Powered Product Management Software	16
4.8. Step into a New Role: AI Product Manager	16
5. The Risks and Challenges of Implementing AI	17
5.1. Data Security	18
5.2. Data Privacy	18
5.3. Ethical AI Practices and Bias Mitigation	19
5.4. Explainability	19
5.5. Accuracy and Performance	20
6. Conclusion	21
About Chisel	22

CHAPTER 1

INTRODUCTION

Interest in artificial intelligence (AI) and machine learning (ML) is at an all-time high — and at this point, you’ve already heard plenty of discussion about AI. You’re probably tired of hearing about AI, with each new prediction about the future of AI being more grandiose than the last — some in favor of AI and some against (AI is going to be “bigger than mobile and bigger than cloud software,” AI will “save the world,” AI will have “unforeseen and devastating consequences”).

Regardless of which side of the argument one supports, we can agree that AI will change the world — even if one disagrees about what specific changes AI will bring, how significant those changes will be, and how fast those changes will happen.

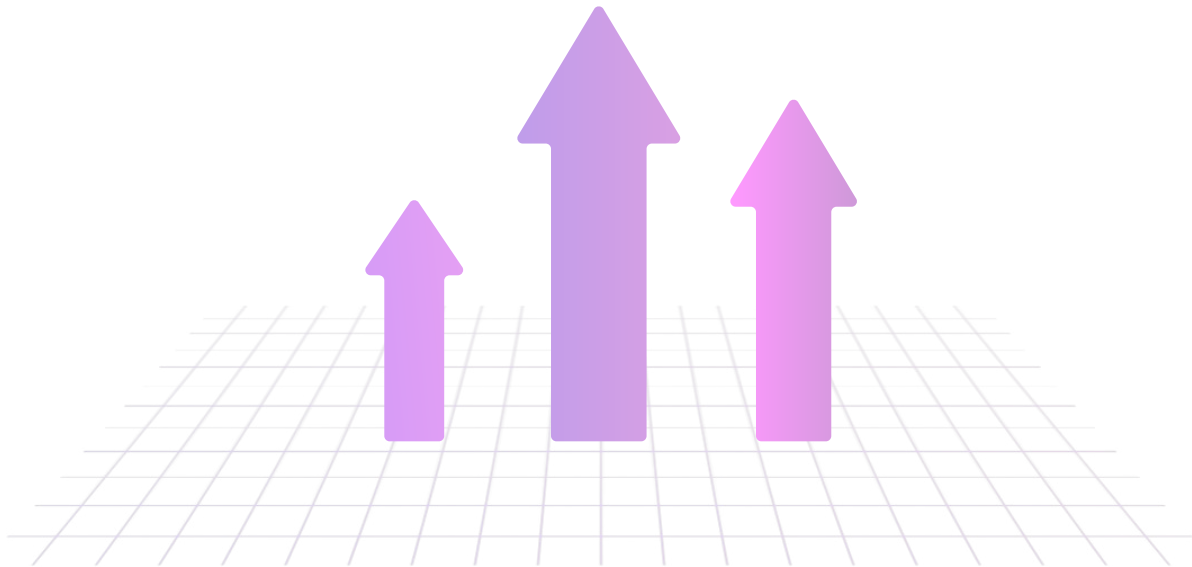
But setting aside the hype, the fact remains: AI is coming. And as it will for other jobs, AI will have a significant impact on our jobs as product managers (PMs). If PMs want to stay competitive, they will need to understand these powerful technologies and how they will impact the field of product management.

By automating scalable, repetitive tasks, AI can make it possible for PMs to provide personalized experiences to customers, analyze massive quantities of data, and predict customer behavior and needs.

PMs are the product experts and decision makers in their organizations. Their role is to develop and improve products, and as such they tend to be early adopters of new technologies.

Therefore, it's essential for PMs, now more than ever, to consider how AI can enhance user experiences and drive business value.

This ebook will help PMs understand the importance of AI, understand how AI will transform their work, and identify opportunities to lead in this swiftly changing environment. With the proper knowledge and approach, AI has the potential to change how we develop, deliver, and improve products to serve our customers better.



CHAPTER 2

WHY YOU CAN'T AFFORD TO IGNORE AI

If you're still thinking, "AI is just a buzzword," and that your company can take a "wait and see" approach — think again.

The businesses aggressively integrating AI today are laying the groundwork for significant competitive advantages that will be tough for late adopters to catch up on. The winners will be those getting their hands dirty right now — testing use cases, adapting models to their unique operations and using failure as an opportunity to learn faster.

Being slow to adopt on the AI front leaves you exposed to numerous risks. But even though an AI overhaul might seem daunting, adopting AI now can open up several opportunities for your organization.

2.1. Discover New Revenue Opportunities

Early adopters are already discovering new revenue streams and growth areas enabled by AI. 2023 has been a turning point in the adoption of AI at the enterprise level. A Gartner poll from October of more than 1,400 executives found that 55% of enterprise organizations are either piloting generative AI solutions or have already put generative AI solutions into production. This number is a major jump from a previous poll that Gartner conducted in March, in which only 19% of respondents were in piloting or production mode for generative AI.

More and more large organizations will reap the benefits of improved efficiency by adopting AI automation, analytics, and predictive maintenance. You need to stay at the same pace. Without these AI tools, your product management processes will become more inefficient and resource-intensive — and less affordable than those of your competitors. Delays and errors are already expensive, but the delays and errors caused by manual operations will become even more costly if your competitors are able to avoid them by adopting AI.

If you aren't prepared to educate yourself on the potential impact of AI on your organization or the opportunities that AI can open up for your products, you might find that your company will get usurped by someone who is prepared.

2.2. Better Meet Your Customers' Expectations

Losing customer satisfaction over time is one of the most significant risks to your business and can seriously threaten your business' bottom line. After all, keeping users loyal and content should be your top priority. AI enhances customer experiences through human-like conversations, personalized offers, and proactive service. Your client relationships may grow if you can keep up technologically.

According to a study from McKinsey, 71% of consumers expect companies to deliver personalized interactions. Brands that are able to meet customers' expectations around personalization thrive accordingly — companies that grow faster generate 40% more of their revenue from personalization than their competitors.

The ability to deliver personalized experiences to customers becomes increasingly difficult as customer volume increases. However, AI makes it possible to create individualized experiences for your customers at scale. AI algorithms enable the development of highly tailored products, services, marketing messages, and entire user interfaces. For example, ecommerce companies can use AI to

deliver customized product recommendations based on past purchases and similar users' purchases. AI can also facilitate hyper-targeted customer communications like marketing emails, texts, and push notifications with deals, content, and calls-to-action tailored for each recipient. AI can even be used to dynamically generate personalized website pages, app screens, or documents based on user profile details and their predicted preferences.

2.3. Reduce Operational Costs

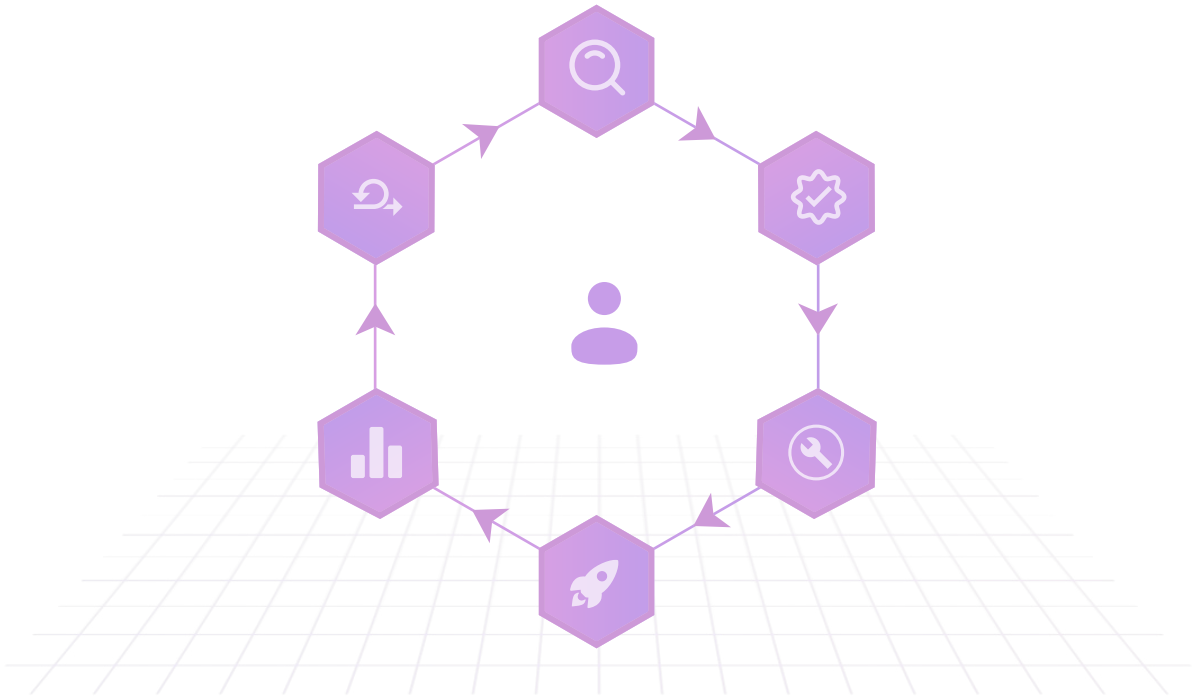
As in many other fields, AI will increase internal operational efficiency by automating repetitive processes and reporting and eliminating the types of busy work that are better performed by machines. Moving data from one silo to another silo; scheduling and rescheduling the same meetings over and over again: these are the kinds of time-consuming tasks that reduce PMs' capacity and prevent them from dedicating their time to high-level, strategic decision-making.

As AI improves operations by doing automation, analytics, and predictive maintenance, it will reduce operational costs for those organizations forward-looking enough to adopt AI. On the other hand, if you fail to adopt AI soon, your costs will remain higher without these tools. Competitive pressures will be intense without affordable operations.

2.4. Don't Fall Behind the Financial Curve

As new AI technologies increasingly influence business operations, it is in businesses' best interest to keep pace with the adoption of AI. Falling behind the curve on technological adoption can have serious financial consequences. Lost efficiencies, overlooked growth opportunities, and diminished customer satisfaction — these are just some of the ways in which failure to adapt to the changing technological landscape can negatively impact your business.

By starting the process of integrating AI now rather than later, you can gain advantages over your slower competitors and avoid financial fallout. Rather than shying away from challenges, focus on piloting promising use cases. Learn through experimentation and use failure as feedback to improve your approach. With a flexible, risk-taking mindset, you'll stay ahead of industry changes to come out on top in the long run.



CHAPTER 3

HOW AI WILL CHANGE PRODUCT MANAGEMENT

PMs are the product experts and decision-makers in their organizations. They are responsible for developing and improving the products that shape people’s lives — so it’s imperative to start preparing for the changes AI will bring to work.

With the help of AI, PMs can make more accurate and data-driven decisions, create products that are more attuned to customer needs, and ensure their innovation efforts are aligned with the most promising avenues for growth. As AI brings more and more changes, PMs will need to be leaders by focusing on competencies like critical thinking, problem-solving, and creativity. AI will handle more of the routine analysis and data processing, which means people will spend more time leveraging our unique human abilities on strategic challenges.

A Sneak Peek of the AI Future for PMs

Here's a quick overview of some of the ways AI will change the discipline of product management:



More powerful analytics tools: Advanced algorithms can identify patterns that humans might miss to give deeper insights into customer behavior.



Accelerated ideation capabilities: AI tools can generate ideas and suggest new features based on patterns in customer feedback.



Optimized roadmaps: With AI analyzing product cycles, support issues, sales patterns, and more, PMs can create more accurate roadmaps.



More scalable iteration and testing: AI can enable PMs to perform A/B and other forms of user testing at a scale that wouldn't be possible with human effort alone, by tweaking thousands of variables to find the perfect variations.



Increased personalization opportunities: As AI gets more competent at understanding individual customers, PMs will be able to offer more granular customized experiences, optimized for each user's needs.



Streamlined operations: Between auto-generated docs, meeting assistants, and tools doing grunt work, AI will free up PMs' schedules for higher-level strategic thinking.

Are you ready to embrace these changes? The future demands a blend of technical savvy and strong leadership. Rise to meet the challenge! Start looking for AI-powered product management software. The opportunities are endless when we partner with new technology instead of fearing it.

3.1. AI to Gain Valuable Insights into Customer Needs

The foremost responsibility of the PM is to understand the customer. But when you have thousands or even millions of customers, gleaning high-level customer insights becomes a superhuman task.

AI unlocks the ability for PMs to effectively analyze these massive amounts of customer data at scale.

By analyzing vast troves of users' behavioral and transactional data (including surveys, support transcripts, usage patterns, and much more), AI can reveal patterns and nuances in behavior, preferences, and trends that would elude humans.

Categorize at Scale

A human can't categorize tens of thousands of feedback tickets in seconds. AI tools, however, can. An AI-powered PM platform (like Chisel) can use AI to automatically classify external and internal feedback with relevant tags to organize product insights at scale.

3.2. AI for Faster Product Iteration and Experimentation

Iteration allows PMs to optimize product designs, content, and features. But with many potential avenues to explore, deciding what prototypes and tests are worth pursuing can feel overwhelming. Fortunately, AI can help in every stage of the experimentation process.

During the ideation phase, AI can help PMs zero in on the most high-signal testing scenarios for maximum learning, by systematically analyzing thousands of ideas and features based on predicted impact on metrics like customer lifetime value, engagement, or sales.

How Big Pharma Uses AI to Save Billions on Product Discovery

The pharmaceutical industry is one example of an industry that is already adopting AI to reduce the length and cost of the product discovery phase. Massive pharmaceutical companies like Pfizer have collaborated with tech giants like IBM to ramp up the use of AI in drug discovery processes. Boston Consulting Group estimated that the use of AI for de novo drug discovery could deliver time and cost savings of at least 25-50% — no small feat when it costs nearly \$2.3B, on average to bring a single new drug to market.

AI not only greatly increases the rate at which PMs can conduct experiments, it also increases their capacity to conduct experiments at scale. For example, traditional A/B testing involves manually deploying just 2-3 variants, limiting the number of hypotheses tested. AI allows for the instantiation of thousands of variations programmatically.

Pricing experiments are one area that can particularly benefit from AI-powered testing. AI can detect price elasticities and how customers respond to different promotional tests, helping set prices that maximize profits while maintaining affordability and satisfaction.

And once the experiments are completed, AI can automatically cycle the most critical insights from those experiments back into its model — meaning its predictive capabilities will only get better over time.

AI can even be used to derisk product experimentation: AI simulations can generate realistic synthetic user behavior data to model the impacts of potential changes before launch, which reduces risk compared to directly testing on real customers.

3.3. AI for Smarter Strategic Decision-Making

As technologies and customer expectations evolve rapidly, it gets harder for companies to predict what's coming next. But AI gives insight into shifting demands, empowering PMs to make smarter decisions about where to focus energy and resources.

PMs can use AI to evaluate the probability of success for new product opportunities, allowing them to make more informed decisions about which product opportunities to deprioritize or pursue. The predictive power of AI for strategic decision-making is relatively well-established in the pharmaceutical field. One advanced ML algorithm was able to accurately predict clinical phase success of new drugs with an accuracy of 80%, outperforming even expert analysts.

By identifying which new features or improvements will resonate most with customers and drive maximum business impact, PMs can also create more optimized roadmaps. Predictive analytic tools can synthesize massive quantities of data to understand each path's expected returns, risks, and resource requirements at a high level. AI can also quickly reroute strategies in response to changing conditions.

Evaluate New Product Opportunities

Manually identifying new product opportunities from customer feedback tickets becomes increasingly more time-consuming and infeasible as the quantity of feedback increases. An AI-powered PM platform can empower PMs to synthesize tens of thousands of feedback tickets on similar topics, to identify new features or user stories.

PMs can also leverage AI to track market changes in real time, by analyzing engagement signals and retention rates. Research shows that AI recommendations can improve a company's targeting by around 25%, boosting conversions. With hyper-relevant product placements and messaging, PMs can seize emerging market opportunities.



CHAPTER 4

BEST PRACTICES FOR SUCCESSFULLY ADAPTING TO THE CHANGES IN THE PM ROLE

As AI opens up new opportunities for more strategic and efficient product management, PMs will have to figure out how AI will change the ways in which they do their work.

The most straightforward change AI will bring is that PMs will be able to use AI to automate away rote busywork. By improving operational efficiency, AI has the potential to free up PMs' time and mental bandwidth. The question then becomes: what will the most effective PMs do in order to capitalize on this additional capacity?

4.1. Evolve Your Skills for an AI-Powered World

In order to thrive in this new environment, responsible PMs will need to be open to constant learning and self-improvement. Adapt accordingly: allocate more of your time to ongoing self-education on AI and ML.

The increased demand to incorporate AI into products in every industry and vertical means there will be a greater demand for AI-savvy product managers. Even if you, as an individual PM, are still skeptical about the value of AI, enterprise companies increasingly do believe that AI will be a game-changer — and are investing accordingly. From 2022 to 2023, the number of S&P 500 companies discussing AI in their quarterly earnings calls increased by 80%.

Product managers who understand how to incorporate AI into their products to deliver value for their customers will have a significant competitive advantage.

4.2. Educate Other Team Members on AI

As early adopters, PMs are well positioned to take their expertise and use it to help their organizations get ahead of the competition. In addition to educating themselves on the benefits of AI, PMs will also need to learn how to become effective advocates for AI within their organizations.

Accordingly, PMs will need to budget more time to educate other team members and evangelize the power of emerging technology, and to create internal alignment between team members and executives on the importance of AI-focused initiatives.

4.3. Identify High-Impact AI Scenarios

PMs will then need to use their AI expertise to aggressively identify how they can harness AI to help their organizations get ahead of the competition — and to solve their customers' pain points better. Savvy PMs study customer needs with an AI lens, determining whether the contextualization, personalization, and automation capabilities enabled by AI can effectively address customer pain points.

4.4. Champion Agility and Experimentation

Seemingly, every day brings breaking developments in technology, many triggered by advancements in the field of AI, e.g., the latest generative models, innovative new applications of AI, or upcoming AI-related government regulations. Given the swift pace of change, rapid iteration and agile development methodologies will become even more critical for PMs' success.

4.5. Manage AI Risks

As with any emerging technology, AI carries more associated risks when compared to traditional or “proven” technologies. The best PMs are able to balance the two sides of the risk/reward dichotomy, so be sure to have good risk mitigation plans in place well before anything goes wrong. We will go into more detail about the types of risks you can expect from AI implementation in Chapter 5.

4.6. Address Ethical Considerations

As technology evolves, ethical considerations surrounding data privacy, security, and responsible AI usage will become paramount. Product managers must navigate these ethical complexities while also driving innovation. For more on the ethical considerations of AI implementation, read on to Chapter 5.

4.7. Use AI-Powered Product Management Software

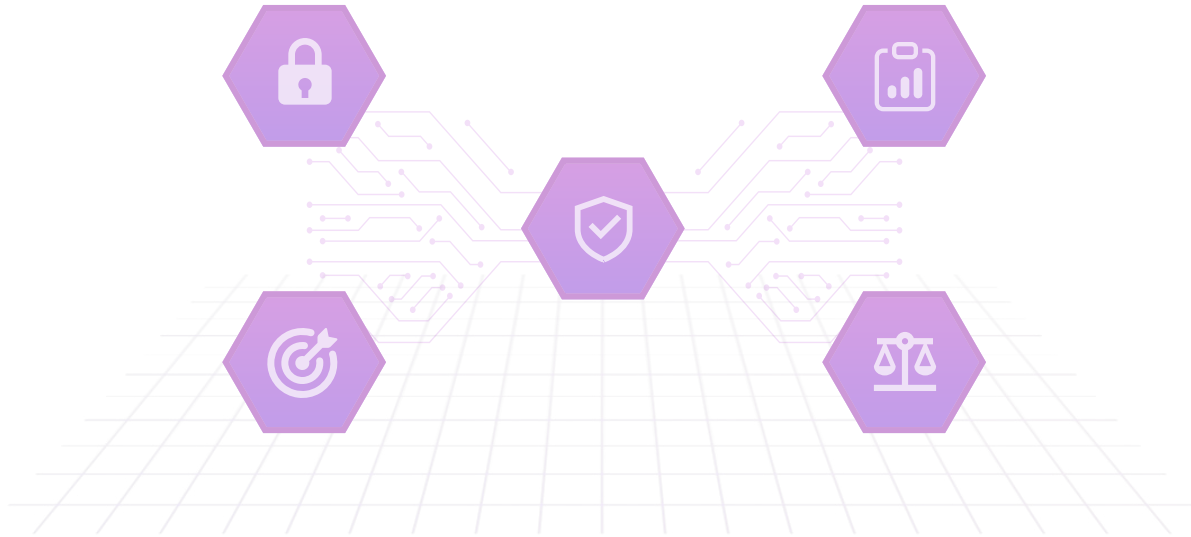
AI will reshape the ways that product managers perform their day-to-day work. But, AI is only as useful as the underlying data powering it. This means that PMs will need to drive innovation in their product management systems of record to create higher confidence roadmaps and prioritization that also include detailed customer and internal feedback. These systems of record will form the foundations of the data layers that power more advanced product management workflows.

A unified PM platform (like Chisel) enables you to bring all of your customer feedback, roadmaps, and team alignment data into a single system of record, greatly accelerating product management workflows.

4.8. Step into a New Role: AI Product Manager

As a fundamental understanding of AI becomes table stakes for PMs, more and more organizations are creating a new role: the AI Product Manager. With a foundation of user empathy and a growth mindset around emerging tech, these leaders ensure AI augments human skills — rather than replaces them — for the benefit of their organizations.

Since the discipline of AI product management is so new, not all organizations use the term “AI Product Manager” in the same way. But generally, an AIPM is either a PM who oversees the launch and development of AI products, or a PM who uses AI/ML technologies to enhance, improve, create, and shape existing products. In either case, being an AIPM requires a solid understanding of the capabilities and limitations of AI.



CHAPTER 5

THE RISKS AND CHALLENGES OF IMPLEMENTING AI

For PMs, the potential benefits of adopting AI are clear. However, as is the case with implementing any new technology, integrating AI into your products brings potential challenges and some amount of risk. Failure to consider security, privacy, or ethical concerns ahead of time could lead to major problems in the future.

Thoughtful preparation and governance will help you unlock AI's full potential for your products.

5.1. Data Security

Security breaches negatively affect customer trust and your business's bottom line. A report from IBM found that the global average cost of a data breach reached \$4.45 million in 2023. Fortunately, AI can also be responsibly implemented in a way that aids breach identification and containment: the same study also found that organizations extensively using AI and automation experienced a data breach lifecycle that was 108 days shorter than organizations that have not deployed AI.

As with any system, your AI systems should be designed to protect data from unauthorized access, use, or disclosure. AI technology also brings its own new types of security vulnerabilities, like "data poisoning" (a type of attack that involves introducing bad data into a model's training set) or "model extraction" (a type of attack that extracts the data on which a model was trained).

Most PM teams will develop AI workflows using third-party vendors. So, before implementing any external AI tools into your workflows, be sure to audit their security practices thoroughly. For vendors, evaluate: Which models do they use? What access do they have to your sensitive and proprietary data, and what are they permitted to do with it?

5.2. Data Privacy

Data is the lifeblood of any AI system, and it can be tempting to collect as much customer data as possible. However, any system that handles customer data raises potential data privacy risks, and AI models are no exception.

Mitigate potential privacy risks by understanding the specific purposes for which you're collecting data, and ensuring that you only collect the data that you need. Product leaders must vet vendors

thoroughly to ensure that any customers' Personally Identifiable Information (PII) remains private and encrypted, and that proprietary organizational information remains confidential.

Be aware that some AI tools from third-party vendors have, written in their terms and conditions, the ability to store and use your organization's data to train its own models. This can create serious data privacy risks if you provide these third-party tools with sensitive data.

5.3. Ethical AI Practices and Bias Mitigation

AI uses data to learn and make decisions, so if AI is trained on inadequate data sources, it can exacerbate societal biases rather than reduce unfairness. When developing products with AI, PMs need to align effective data governance practices with AI ethical standards and ensure data quality, accuracy, and transparency.

Biased models can lead to biased output. PMs will need to work in diverse teams to vet models and adjust for underlying biases in datasets. Cognitive and cultural biases can influence the data we choose and the importance we place on specific types of data, so be sure to include varied voices when reviewing AI output.

The good news is that there are existing frameworks for data ethics that you can look to when developing your own guidelines. The Organization for Economic Cooperation and Development (OECD) and the Institute of Electrical and Electronics Engineers (IEEE) are just two organizations, among many others, that have guidelines and principles related to data ethics.

Ethical AI implementation isn't a one-off project, but an ongoing commitment. Organizations should continually monitor AI applications against standardized metrics and KPIs, regularly evaluate the ethics of their AI usage, and be willing to make necessary adjustments.

5.4. Explainability

A lack of transparency in AI implementation can create mistrust in stakeholders and customers. Your team will need to be able to explain why AI made certain decisions or recommendations, and just saying "Because the algorithm said so" isn't sufficient.

Customers and stakeholders should all be clear on what AI models are being used, how those models are being trained, as well as what data is being collected and stored (and why). Decisions made using AI should be straightforwardly explainable so that individuals can understand why

those decisions were made. Standardized policies and documentation for data collection and usage can help establish a solid foundation for AI transparency.

5.5. Accuracy and Performance

As with any new technology, the ultimate question when it comes to implementing AI is: Does it actually work? PMs need to ensure that the models they're using are effective and perform according to expectations. Inadequate or low-quality data can create inaccuracies in output, jeopardizing the product experience. Models may also fail to perform according to expectations when in real-world settings and ingesting real-world data.

The best defense against performance risks is to have clear benchmarks for AI success, and to continually evaluate model performance against those criteria.

CHAPTER 6

CONCLUSION

As product experts, PMs are uniquely well-positioned to identify where new technologies can be used to improve business outcomes, and to identify where these new technologies can be incorporated into their own products.

The unrelenting pace of AI innovation brings new opportunities every day: Forward-thinking PMs will leverage AI to drive additional revenue, improve customer satisfaction, reduce costs and drive innovation. They will also use AI to gain valuable insights into customer needs, drive faster product iteration and experimentation, and propel smarter strategic decision-making. At the same time, PMs will need to manage the potential risks posed by this new technology while also adapting to changes in their role caused by this technology.

Even with all the changes AI will bring, humans will still play a paramount creative role in determining vision, assessing trade-offs, and ensuring technology benefits people. The most innovative PMs will view AI as a tool to boost human expertise, rather than replace it.



Chisel is a unified, AI-powered platform for product managers to create roadmaps, collect customer feedback, and build internal team alignment.

Many software tools in the market allow PMs to create roadmaps. However, they fall short of providing great tools to align your team or build great customer connections. Chisel was created to provide a cohesive platform to drive these three aspects of Product management.

Chisel helps PMs move 10x faster in doing their day-to-day job. It reduces busywork, frees up time for innovation, and increases the chances of product success. It enables Product Managers to act as "mini-CEOs" of their product.

Chisel has thousands of happy customers across continents/geography, across organization sizes, and across vertical domains. Chisel is highly rated on G2 and has received several awards.



Top-rated, award-winning platform

