AI maturity tracker: Characteristics of a sophisticated AI-driven business

Insights for advancing AI/ML adoption in your organization

White paper

In an era marked by digital transformation, businesses are increasingly harnessing the power of artificial intelligence (AI) and machine learning (ML) to leverage data, automate processes, and enhance customer experiences. This survey, conducted by Foundry for Searce, delves into the intricacies of AI adoption, shedding light on the characteristics of mature AI organizations. For example, the data showed that 81% of these organizations had either deployed, or were planning to deploy, chatbots or similar automation compared to 55% of their non-mature counterparts. By understanding the experiences of these AI pioneers, businesses can chart a course towards greater AI/ML maturity.

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Survey methodology

This survey engaged 120 senior AI/ML decision-makers at US enterprises. Respondents represented diverse sectors, with financial services, manufacturing, production, distribution, and retail/wholesale industries well-represented. Nearly half (43%) hailed from companies with 20,000 employees or more.

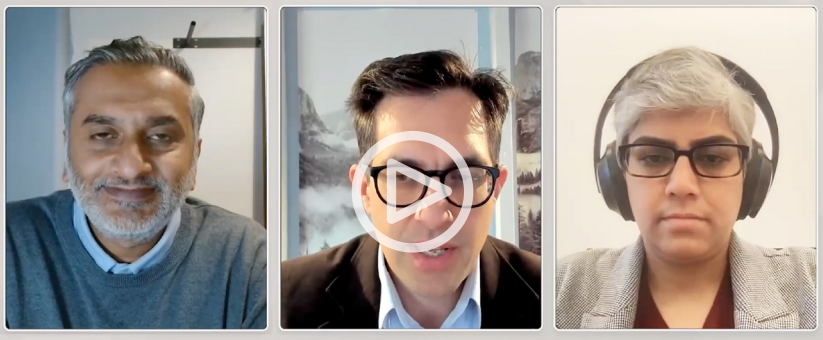
Challenges of AI/ML adoption

AI and ML adoption, while promising, presents challenges. The survey uncovered several obstacles:

1. **Data Challenges:** AI/ML models thrive on high-quality, well-labeled data. Survey results underscored data security (58%), data management/governance (55%), and scalability (54%) as the primary barriers to AI/ML progress.

2. **Talent Shortage:** The scarcity of skilled AI and ML professionals poses a significant hurdle. Companies grapple with finding the talent needed to spearhead and administrate AI/ML initiatives, with leadership and change management emerging as the top obstacles (51% versus 34% for organizations that have successfully deployed AI).

3. **Cost Considerations:** Cost can be prohibitive, especially for smaller companies. Additionally, a lack of comprehensive understanding of AI/ML benefits can discourage investment.



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Video

What are the key characteristics of businesses with more sophisticated AI strategies?
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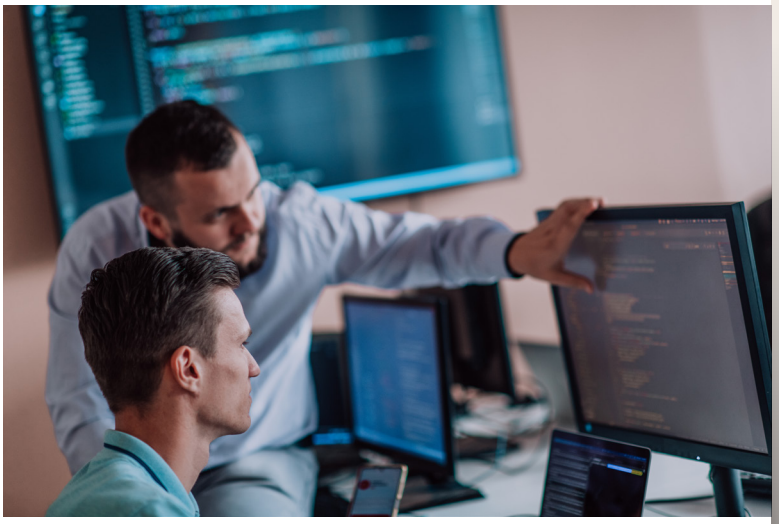
4. **Risk and Governance:** Navigating the ever-evolving regulatory landscape surrounding AI and ML compounds these challenges. "There's a lack of clear and consistent regulations," Vrinda Khurjekar, Senior Director, AMER business at Searce, says. "This can make it difficult for companies to know how to comply with the law."



The role of data

Data plays a pivotal role in driving AI/ML adoption. Respondents identified advanced analytics (59%), technological innovations (54%), and data-driven enhancements of existing products or services (48%) as their top motivations for embracing AI/ML.

Key characteristics of mature AI organizations

A significant proportion of organizations have successfully evolved into mature AI entities. More than one-third of respondents (39%) are mature – meaning they've successfully deployed one or more AI-based products to clients. Key findings include:

- **Strategic corollaries:** This AI sophistication in mature organizations appears to have strategic corollaries. Internet of things (IoT) technology was reported as a motivating driver for AI/ML initiatives by just 34% of non-mature organizations, while data integration across apps and cloud environments was cited by 32%.

- **Leveraging AI for enhancement:** In mature organizations, the IoT figure rises to 57%, while the data integration figure hits 51%. These enterprises are harnessing AI/ML to enhance customer experiences,

automate tasks, improve decision-making, and deepen predictive capabilities.

- **Planned deployments:** When it comes to the types of tools enterprises are pursuing, organizations' top planned deployments are chatbots and automated customer support (65%), security surveillance (56%), and speech recognition (49%).

- **Strategies for success:** Mature AI organizations employ several strategies for success, including investment in high-quality data, talent development, and a strategic approach characterized by gradual scaling via small pilot projects. "Mature AI organizations start with small pilot projects and gradually scale up their AI and ML initiatives over time," says Khurjekar. "This helps mitigate risks and ensure AI and ML are being used in a way that's aligned with the company's overall business strategy."

- **Budget and confidence:** Mature organizations are more likely to allocate dedicated budgets for AI and ML initiatives (55%). They also take measures to increase confidence in AI/ML capabilities, including fairness and unbiasedness checks (68%), exploring explainable AI techniques (64%), and data encryption (62%).

- **AI literacy and change management:** Mature organizations prioritize an AI-friendly culture. With 70% of their workforce well-versed in AI, compared to 48% in other organizations, they ensure widespread AI understanding. They also proactively manage change, with 64% employing robust change management guidelines, easing AI team and process integration.

- **Training and executive buy-in:** Mature organizations encourage collaboration and learning. They see "communities of practice" thrive (51%), fostering knowledge sharing and upskilling. They are also more likely to organize structured AI/ML training programs (66%), leverage low-code/no-code technology to enhance in-house AI/ML skills (74%), and manage data centrally across teams and functions (64%). At mature enterprises, 57% say

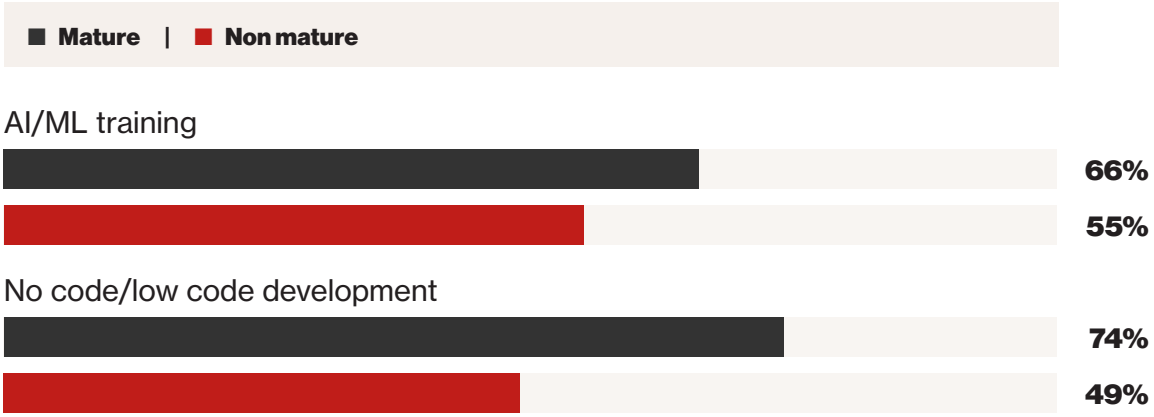
initiatives are led by senior/C-level executives. Non-mature organizations trail well behind in all these categories.

- **Dedicated budgets:** More than half (55%) of mature organizations say each team has a dedicated budget for AI/ML initiatives versus 38% of non-mature ones.

- **Other attributes:** Mature organizations actively implement multiple measures to enhance confidence in AI/ML capabilities, including steps to ensure ML system fairness (68%), exploration of explainable AI techniques (64%), and data encryption (62%).

As we explore these characteristics of mature organizations, it is important to note that even they face challenges in sharing, reusing, and expanding ML components and solutions. The research showed that 64% of mature, and 71% of non-mature organizations, find it somewhat challenging. To overcome them, organizations across industries are increasingly turning to ML platforms. Mature organizations lead in integrated ML platform adoption (43%

Figure 1 | **In-House AI/ML skills plans**



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vs. 30% for non-mature organizations) and have more automated ML data pipelines with continuous integration and delivery.

Leveraging third-party expertise for AI maturity

In today's dynamic AI landscape, organizations are increasingly recognizing the advantages of partnering with third-party experts (53% of mature and non-mature organizations). Collaborating with experienced AI and ML professionals not only provides access to specialized knowledge but also offers cost-saving benefits. Some of the key advantages include accelerated time-to-market, effective risk mitigation, and access to cutting-edge AI technologies.

"Working with a service partner leverages their experience from other projects and their expertise to deliver significantly more business value than doing it in-house," Patrick Bangert, SVP Data, Analytics and AI at Searce, says.

As mature AI organizations continue to thrive through automation and managed services, it becomes imperative for non-mature organizations to consider the potential of third-party collaboration on their AI journey. Joining forces with seasoned AI partners fuels operations and expedites progress towards AI maturity.

To explore how Searce can modernize your organization and help you achieve AI maturity, click here.