

AI Adoption for Small Tech Businesses: Introduction and Myths

Artificial intelligence is a technology that is taking the world by storm. Its impact can be compared to the advent of the internet, cloud computing, and mobile computing as far as the extent to which it is reshaping our world.¹ From a business standpoint, it is important to understand the effects of this new, highly pervasive technology and how it can be leveraged to improve business workflows. According to the multinational professional services network PwC, over 70% of companies have already adopted AI in some form, and this number is expected to grow.² Artificial intelligence, or AI, can be referred to as a general-purpose technology, meaning that its impact can be felt across many different settings. Additionally, general-purpose technologies are characterized by their ability to stimulate innovation and economic growth, as well as inform products and organizational strategy.¹ In the business world, this means that, regardless of business type, structure, or size, AI can be incorporated to improve processes and workflows.. On top of that, AI technology is constantly improving, further increasing its effectiveness in addition to the volume of scenarios in which it can be applied. Already, AI is reshaping industries such as retail, logistics, healthcare, and finance;³ thus, it is not surprising that AI can be beneficial for technology-oriented businesses as well.

¹ Wharton University of Pennsylvania Online and K. Hosanagar, "AI Fundamentals for Non-Data Scientists - AI For Business Introduction," *Coursera*. 2022. Accessed: Jul. 25, 2025. [Online]. Available: <https://www.coursera.org/learn/wharton-ai-fundamentals-non-data-scientists/lecture/nOPzM/ai-for-business-introduction>

² IBM, "Introduction to Artificial Intelligence (AI) - Course Introduction," *Coursera*. 2020. Accessed: Jul. 25, 2025. [Online]. Available: <https://www.coursera.org/learn/introduction-to-ai/lecture/gbHnr/course-introduction>

³ Wharton University of Pennsylvania Online and K. Hosanagar, "AI Applications in Marketing & Finance - Introduction to AI Applications," *Coursera*. 2024. Accessed: Jul. 25, 2025. [Online]. Available: <https://www.coursera.org/learn/wharton-ai-applications-marketing-finance/lecture/trzUr/introduction-to-ai-applications>

AI, when applied effectively, can enhance multiple facets of a business, including but not limited to competitiveness, efficiency, and customer personalization. These benefits are crucial for enabling a small business to stand out from the crowd. Additionally, AI can help small businesses scale their operations effectively and efficiently. Today, AI already being incorporated into everyday life by even with applications such as Siri, Alexa, and Netflix recommendations. This technology is becoming increasingly familiar and accessible to the general public. As its accessibility increases, the ability for small businesses with limited resources to leverage this technology increases as well.

With the introduction of AI being comparable to the advent of other highly impactful technologies, we can look at past examples of businesses that adopted new technologies quickly compared to those that did not. For example, in the late '90s, when the Internet was relatively new, firms that were quick to adopt this technology benefited in the long run compared to those that hesitated. Additionally, companies that persisted in integrating internet technology into their businesses despite setbacks such as the dot-com bust experienced significant benefits compared to companies that retired from the new technology. Given this example, the importance of early adoption of and persistent implementation of AI in the business world becomes largely apparent. Unless you want your business to be left in the dust adopting and integrating AI is an important step to take. AI adoption can grant small businesses advantages such as increased efficiency in operations, assistance with insight-driven decision making, and robust customer personalization programs.

Primarily for small businesses, modern AI serves to level the playing field as opposed to being reserved for larger enterprises.²⁵ With platforms like Google Workspace²⁶ and HubSpot²⁷ freeing up time and simplifying complex applications, it is more and more accessible for companies that may not have massive amounts of resources to dedicate to AI. Small businesses are able to incorporate this technology into their workflows relatively easily. Small businesses are able to leverage the power of AI in order to automate repetitive tasks, improve decision-making, personalize customer experiences, and enhance operational efficiency through optimizing inventory management, predicting demand fluctuations, and providing automated customer service bots.²⁸ These applications of AI free up valuable time for employees to focus on other matters that require more human judgment and creativity.

There are a number of myths and misconceptions regarding artificial intelligence. The bullet points that follow will list a few of these misconceptions and explain why they are incorrect.

- Myth: AI always requires expensive data scientists to implement.
- Myth: There are a number of tools that allow users without strong backgrounds in data science to leverage the power of AI.

²⁵ S. D'Amico, "Empowering Small Businesses: The Impact of AI on Leveling the Playing Field," *Open Policy Institute*, *Open Policy Institute* Mar. 27, 2024, <https://openpolicy.org/empowering-small-business-the-impact-of-ai-on-leveling-the-playing-field/> (accessed Jul. 25, 2025).

²⁶ Google Workspace, "AI for Small Business," Google Workspace, 2025, <https://workspace.google.com/resources/ai-for-small-business/> (accessed Jul. 26, 2025).

²⁷ HubSpot, "Supercharge your work with HubSpot AI," *www.hubspot.com* (Oct. 24, 2023), <https://www.hubspot.com/products/artificial-intelligence> (accessed Jul. 25, 2025).

²⁸ E. Carr, "How Small Businesses Can Use AI Tools," *Investopedia*, Mar. 29, 2024, <https://www.investopedia.com/how-small-businesses-can-use-ai-tools-608366> (accessed Jul. 24, 2025).

²⁹ J. H. Team, "Dispelling the Misconceptions about AI Toolmakers," *Futurex.com*, 2024, <https://www.futurex.com/blog/common-misconceptions/> (accessed Jul. 24, 2025).

- Myth: AI is too new and risky

- Adoption of AI has some risks, but a well-thought-out AI framework helps to keep risks under control.¹⁴

- Myth: AI is so massive that we have to go slow

- Start with short-term projects, but build a framework that can scale quickly as your business takes on AI measures.

- Myth: AI will replace human employees

- AI can make employees more productive, but does not think or learn. Humans innovate or create by. AI is designed to complement human abilities, not replace them.¹⁵

- Myth: We'll need to hire a lot of new talent to implement AI

- While AI does require specialized skills and roles, there are plenty of pre-built and/or "no-code" models available to consumers, such as Google Workspace, HubSpot CRM, and Microsoft Power Platform AI Builder. Prebuilt models.

- Myth: We need perfect data to start

- While data quality is essential, start with what you have rather than waiting for "perfect" data. Data quality can improve as you go, and AI

¹⁴Ernst & Young Global Limited, "Rethinking business with generative AI," EY, 2024, <https://www.ey.com/en-us/tech-effect/ai/ai-for-generative-ai-business-myths.html> (accessed Jan. 27, 2025).

models can be built to work with imperfect data.” Additionally, companies can access third-party data sources to improve their AI operations. (Examples of these will be covered in a later document).

- **Myth: AI is too complex for smaller providers use.**

Increasingly, AI tools and resources are simple to adopt, and training resources for employees are available as well.² Tools such as Amazon Web Services, Azure and IBM watson have all are targeted toward small business and startup and are designed with simplicity in mind.

Additionally, the online learning platform Coursera has several free and paid courses that cover different aspects of AI or data. Some companies such as Microsoft and Google offer their own training resources as well.

This series of documents will provide an in-depth look at various aspects of AI integration with a focus on small technology-related businesses. The next two documents will discuss the benefits of AI and provide a number of quick-start guide for small business owners looking to get started with AI as quickly as possible. The remaining documents will discuss topics such as assessing AI readiness, how to choose the right tools for your business, best practices surrounding AI, how to use AI ethically and be responsible with handling data, common pitfalls related to AI, how to build a team skilled in AI, measuring success and ROI of investment in AI applications, staying current in the ever-changing AI landscape, and case studies in which small business successfully implemented AI successfully and what worked for them. After reading these documents, you should have a comprehensive and robust understanding of how your business can leverage implementing AI to help your company thrive.