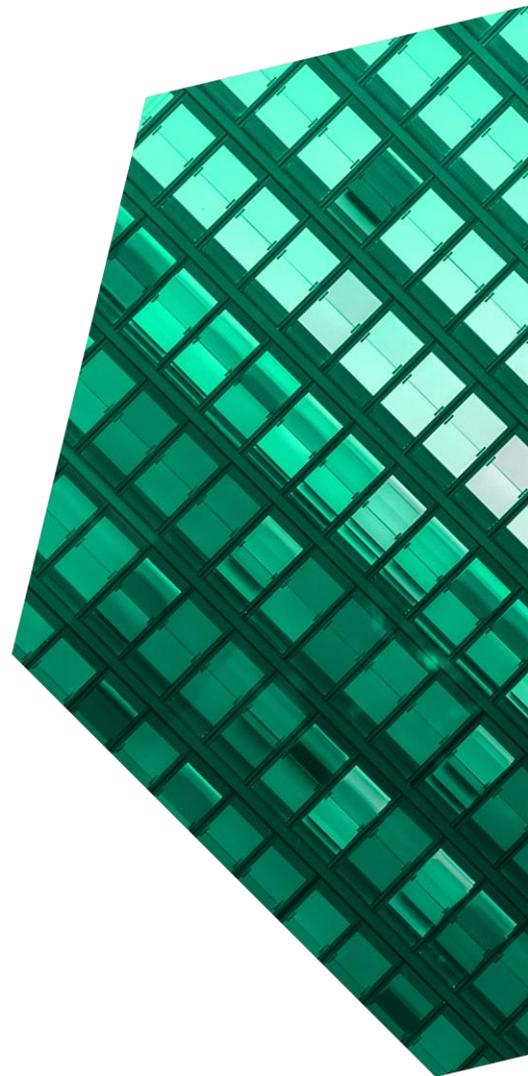


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The Microsoft Azure AI Customer Journey

Drivers leading to the Azure AI investment

Interviews				
Role	Industry	Revenue	Relevant Azure AI Usage	Main Use Cases
Principal architect, AI	Energy	\$231 billion	Cognitive Services, Applied AI Services, Azure Machine Learning	Anomaly detection, predictive maintenance, demand forecasting, data verification/document intelligence
Integrated business services, program management	Retail	\$96 billion	Azure Machine Learning	Demand forecasting
Partner	Professional services	\$45 billion	Cognitive Services, Applied AI Services, Azure Machine Learning	Fraud detection/transaction monitoring, document intelligence, optimization
Head of go-to-market (GTM) and digital solution portfolio management	Technology	\$30 billion	Cognitive Services	Anomaly detection, predictive maintenance
Senior vice president, industrial analytics	Technology	\$30 billion	Cognitive Services	Anomaly detection, predictive maintenance
Senior principal, digital	Aviation	\$1 billion	Applied AI Services	Document intelligence/optical character recognition

KEY CHALLENGES

Forrester spoke to representatives at five organizations with experience using Azure AI. Prior to ~~2019~~, organizations had no experience with AI or ML technology and relied on human-led physics or ~~engineering~~ engineering teams were testing out building and deploying their own models in house. Multiple utilized basic open-source AI or ML models for simple task automation.

~~Some~~ struggled with challenges including:

- **Use of manual processes.** Some organizations had various manual, routine processes that required a lot of manpower, that they knew presented an opportunity for automation. These processes included account or transaction monitoring, data verification, equipment inspections, template creation, or data extraction.



IMPLEMENTATION, APPLICATION BUILDING, AND TRAINING

Evidence and data. The interviewees' organizations incurred upfront internal labor costs from time spent on implementation and change management as well as labor costs associated with the time internal employees spend receiving training on the Azure AI solutions. Implementation timelines for the interviewee's organizations ranged from one week for bare bones setup to 18 months for full model training before deployment. On average, it took about six weeks for technological and data setup, but about six months to complete application building and to get models in production. Overall, timelines greatly depended on the organization's level of technical expertise and the sophistication or level of customization of their use cases. Multiple interviewees noted the strength of their organization's partnership with Microsoft as an asset during implementation, as they received free structured training or guidance from the Microsoft team. Interviewees reported that custom training on the Azure ML platform was intensive, but training on Cognitive Services was lightweight, and both depended on the previous experience that the organization's engineers or data scientists had. Over time, teams could deploy new models more quickly. The head of digital portfolio management at the technology organization described: "A lot of our team members were already aware of Azure and had worked on Azure technology, and our partnership with Microsoft helps us a lot. So, setting up the Azure instance is not a problem — our guys do it in a day or two days."

Modeling and assumptions. Forrester modeled this cost based on the following information:

- Initial work on data and technological infrastructure setup, application building, model training, and refinement takes nine months and

makes up 80% of the work conducted by a team of six engineers.

- Four engineers work on the AI applications involved in the development of the organization's new product offering through the first third of Year 2.
- The organization's AI/ML engineers and data scientists each spend a total of 80 hours receiving training and learning about Azure AI.

The fully burdened monthly salary of the average engineering resource is \$14,690, or \$85 an hour.

Risks. The expected investment is subject to risks and variation based on several factors that may increase costs or extend deployment, including:

- An organization's deployment size, legacy technology landscape, maturity of existing processes, and the level of change needed to deploy Azure AI, especially alongside any cloud migration or adoption efforts.
- An organization's unique organizational requirements, processes, or technology complexities that can limit or lengthen implementation, such as regional regulatory demands, specific integrations, or high data access and protection requirements.
- The size, expertise, skillset, and labor cost of existing technical and business user resources and internal deployment teams, as well as the training method and delivery mechanism.

To account for these risks, Forrester adjusted this cost downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$1.7 million.

Appendix B: Supplemental Material

“The Forrester Wave™: AI/ML Platforms, Q3 2022,” Forrester Research, Inc., July 12th, 2022.

“Enterprises Must Invest In AI Platforms To Empower Multirole AI Teams,” Forrester Research, Inc., August 26th, 2022.

“Global AI Software Forecast, 2022,” Forrester Research, Inc., September 29th, 2022.

“Predictions 2023: Artificial Intelligence,” Forrester Research, Inc., October 27th, 2022.

“Enterprises Must Invest In AI Platforms To Empower Multirole AI Teams,” Forrester Research, Inc., August 26th, 2022.

Appendix C: Endnotes

¹ Source: “Predictions 2023: Artificial Intelligence,” Forrester Research, Inc., October 27th, 2022.

² Source: “Global AI Software Forecast, 2022,” Forrester Research, Inc., September 29th, 2022.

³ Source: “Enterprises Must Invest In AI Platforms To Empower Multirole AI Teams,” Forrester Research, Inc., August 26th, 2022.

⁴ Total Economic Impact is a methodology developed by Forrester Research that enhances a company’s technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

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