



# The Mortgage Industry's Artificial-Intelligence-Enabled Future

Understanding the state of Artificial Intelligence (AI) deployment—how broadly it is being used and in what ways—is challenging for many business leaders. Machine learning and other technologies are advancing significantly faster than many anticipated just a few years ago. The pace of development is accelerating and can be hard to grasp.

To help clients better understand the evolving AI landscape, KPMG conducted the 2019 Enterprise AI adoption study, a cross-industry analysis as well as a survey focused exclusively on the adoption of AI in the mortgage industry.

## The KPMG 2019 Enterprise AI Adoption Study

The KPMG 2019 Enterprise AI Adoption Study was conducted to gain insight into the state of AI and automation deployment efforts at select large-cap companies. This involved in-depth interviews with senior leaders at 30 of the world's largest companies, as well as secondary research on job postings and media coverage.

To summarize the key learnings from our interviews and our insights from working with clients, we highlight eight key trends that can serve as guideposts for your organization. If your organization is lagging in AI deployment, these insights could help you move up the “learning curve” faster. If your organization is leading in AI deployment, these insights may help fill in gaps and afford you greater confidence along your AI journey.

### Key Takeaway

While implementation challenges exist, senior executives agree that the wave of artificial intelligence (AI) enablement is closer than we think. Relative to recent years, enterprise AI adoption within the mortgage industry shows acceleration. In a cyclical and competitive industry, lenders are seeking opportunities to enhance loan quality, increase productivity, and provide a better borrower experience without negatively impacting the bottom line. AI and other cognitive automation tools will ultimately drive growth and subsequently separate sustainable leaders from the pack.

<p><b>Trend 1</b> </p> <p><b>Rapid Shift from Experimental to Applied Technology</b></p> <p>AI has quickly moved from a “technology to watch” to a “technology to deploy.” Not long ago, enterprise AI was considered a Horizon 3 technology—something that would be available in three to five years. But large companies are now deploying AI.</p>	<p><b>Trend 2</b> </p> <p><b>Automation, AI, Analytics, and Low-Code Platforms are Converging</b></p> <p>Companies are deploying these technologies in tandem, finding that they work more effectively together.</p>	<p><b>Trend 3</b> </p> <p><b>Enterprise Demand is Growing</b></p> <p>Many large companies are making major investments in AI. The direction of adoption is toward scale and scope across the enterprise.</p>	<p><b>Trend 4</b> </p> <p><b>New Organizational Capabilities are Critical</b></p> <p>To fully harness the benefits of AI, an enterprise must make major investments in talent, business processes, data, and values and norms.</p>
<p><b>Trend 5</b> </p> <p><b>Internal Governance Emerging as Key Area</b></p> <p>Companies are increasingly paying attention to the investments required to establish internal policies and procedures around AI deployment.</p>	<p><b>Trend 6</b> </p> <p><b>The Need to Control AI</b></p> <p>While AI has many benefits, it can also raise risks and ethical concerns. There is growing attention and debate regarding what types of guidelines are appropriate and where they should be applied, monitored, and enforced.</p>	<p><b>Trend 7</b> </p> <p><b>Rise of AI-as-a-Service</b></p> <p>Although most large companies understand that they will always need to build many capabilities in-house, they will increasingly be able to tap into the AI-as-a-Service market.</p>	<p><b>Trend 8</b> </p> <p><b>AI Could Shift the Competitive Landscape</b></p> <p>Many of the companies we interviewed believe AI could truly be a game-changer and fundamentally shift the dynamics of competition. Nearly all see AI as playing a role in creating new winners and losers.</p>

Source: KPMG's 2019 Enterprise AI Adoption Study

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## 2019 Digital Mortgage Survey

During the 2019 Digital Mortgage Conference, KPMG surveyed nearly 200 conference attendees. In the eyes of industry executives, these results speak to the direction of the mortgage industry. The results of the 2019 Digital Mortgage survey echo the trends that emerged from the 2019 Cross-Industry AI Adoption survey. In particular, the digital mortgage survey underscored two key trends (trends 1 and 8 from the preceding chart): the rapid shift from experimental to applied technology and its ability to shift the competitive landscape.

Two key trends (1 and 8) are the rapid shift of AI from experimental to applied technology and its ability to shift the competitive landscape for companies that implement it at scale. In mortgage banking, 39% of companies view AI as a strategic growth imperative, implying that this technology has moved beyond the pilot and experimental stages. In addition, over one-fourth (28%) view AI as a productivity driver of core operations. From our larger study on AI adoption in the enterprise, productivity improvements of 10% to 20% are common when AI and automation are deployed functionally or at scale across the enterprise.

## How does your executive management view AI adoption in terms of the expected business model?

- 39% responded they view it as a “Strategic growth imperative”
- 28% believe it to be a “Productivity driver for core operations”

A significant increase in AI enterprise demand (trend 3) has been ongoing in the last 12 to 18 months. While AI and automation was first focused toward back-office processes in many financial institutions, increasingly it is being deployed for critical line of business applications and customer-facing activities.

## Where in the mortgage value chain will AI have the greatest impact?

- 42% answered underwriting, while 26% pointed to customer acquisition

While technology and financial constraints are ever present among many companies, it is the governance,

decision-making, and management authority capability that KPMG feels will be a differentiator between companies that are leaders versus laggards in deploying AI. New organizational capabilities, including talent identification and training (Trend 4) and enterprise-wide internal governance (Trend 5), are critical components in a successful enterprise-wide deployment strategy.

## What is your organization's biggest challenge in delivering AI-enabled capabilities and solutions?

- Fairly even spread across the main four:
  - 23% experience technology constraints
  - 27% lack financial resources or a willingness to invest
  - 21% have significant talent gaps
  - 22% demonstrate execution challenges such as governance and decision-making
  - 7% listed “other” as the challenge.

Investment priorities vary by industry and technology maturity of each company. In our larger surveys, a core group of companies is spending in excess of \$200 million annually on AI- and automation-related projects on an enterprise-wide basis. Rise of AI-as-a-Service: Average spending among the largest 200 companies exceeds \$50 million per year. Functionally focused spending like mortgage banking can easily exceed \$5 million per year or more for companies that are fully committed to deploying AI.

## What will be your organization's level of investment in delivering AI-based capabilities and solutions in 2020?

- 85% budgeted under \$5 million
- 12% allocated between \$5.25 and \$25 million
- 3% are planning more than \$25 million in AI investment.

Companies of all types are seeing the impact of AI today across a range of functions. Given the numerous applications for AI and automation in mortgage banking, e.g., document reading and classification, data

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extraction, mortgage eligibility prediction, etc., it is expected that mortgage banking will be one of the first areas in banking to experience large-scale AI and automation technology deployment. We believe the impact will occur faster than what many people expect because of the availability of “as a service” options (Trend 7), which will make AI solutions more accessible, scalable, and cost effective.

## When will the mortgage industry begin to feel significant impacts of AI-enabled capabilities?

- 50% believe within the next two years
- 34% indicated from three to four years

KPMG's Lending Transformation team can help you navigate these complex challenges and transform your business. Our practice includes approximately 200 professionals in the United States who focus specifically on mortgage, consumer, and commercial lending, providing deep industry knowledge and experience in the financial services sector. Our professionals couple industry experience and leading practices with a well-established suite of methods and delivery accelerators to ultimately help our clients drive profitable growth through a customer-centric and integrated digital business model.

To learn more about the mortgage industry's use of Artificial Intelligence, we invite you to listen to our podcasts:

- [AI Solutions steal the show](#)
- [Digital can make the mortgage process Amazon-like.](#)

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## To learn more about how KPMG can help your firm advance its digital transformation, please contact:



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