

AI IN DIGITAL BANKING

Insights on consumer trust, use, and opportunity for AI in financial services

Awareness and interest in AI are high, but the consumer mindset remains tentative

Financial institutions (FIs) have been using machine learning (ML), an early form of AI, since the 2000s to automate tasks, generate predictions, and bolster fraud detection capabilities. S&P Global estimated that FIs, financial services organizations, and insurance companies accounted for 18% of the total machine learning market, while 40% of financial services companies rely primarily on machine learning for fraud detection and financial forecasting.¹ And, according to a Deloitte survey of financial services leaders, 86% report they continue to increase their investment in AI.²

While ML will continue to be integral to banking organizations, other forms of AI are developing that will supplement existing capabilities or create new ones altogether. Newer AI capabilities, such as natural language processing (NLP), generative AI (GenAI), and agentic AI will enable FIs to become more efficient, offload complex manual workflows, optimize personalization for end-users, and offer end-users more sophisticated tools within digital banking.³

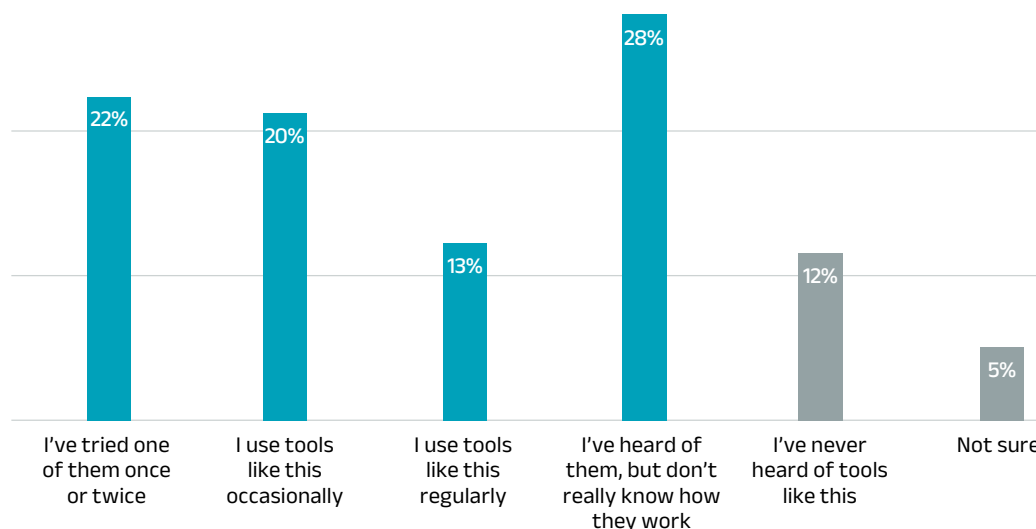
AI is becoming more efficient, affordable, and accessible

AI efficiency is accelerating quickly, making AI more cost-effective and scalable. Between 2022 and 2024, the inference cost (or the cost associated with training generative AI) for a model operating at the level of ChatGPT 3.5 dropped over 280-fold. Hardware costs have dropped 30% annually, while energy efficiency has improved 40% YoY. Open models, which are publicly released and community-driven, are reaching parity with closed models, those that are proprietary and built by tech companies—reducing performance gaps from 8% to 1.7%. All of these improvements are lowering the barriers to advanced AI and accelerating adoption.⁴

While financial institution adoption is accelerating, widespread consumer adoption is still in its early days. According to Lumin Digital's consumer study, 83% of digital banking users are aware of AI tools (from any sector), but only 13% use them regularly.

This signals an important principle: while technological readiness accelerates, **user readiness may not keep pace and will require trust-building, transparency, and intentional design.**

Familiarity of AI Chat Tools



About this study

To better understand how consumers perceive and engage with AI in digital banking, Lumin Digital conducted a U.S. distributed survey in May 2025 of 450 U.S. digital banking users who are 18 years and older. The sample included a diverse mix of age groups, technology comfort levels, and types of financial institutions at which they engage in digital banking, including community financial institution users.

The survey explored:

- Familiarity and usage of AI tools
- Comfort and trust in AI-driven financial experiences
- Willingness to share data with AI providers
- Preferences for how AI should be introduced and communicated

This report explores perspectives through the lens of how individuals have experienced technology throughout their lives—and how those experiences may shape their expectations. While these age-based cohorts represent broad generalizations and directional trends, it's important to remember that every person brings their own unique experiences, assumptions, and biases.

DIGITAL NATIVE (age 18-34)

Born into the era of the internet, mobile technology, and cloud computing. The digital natives are highly fluent, mobile-first, expectant of an intuitive UX and instant access.

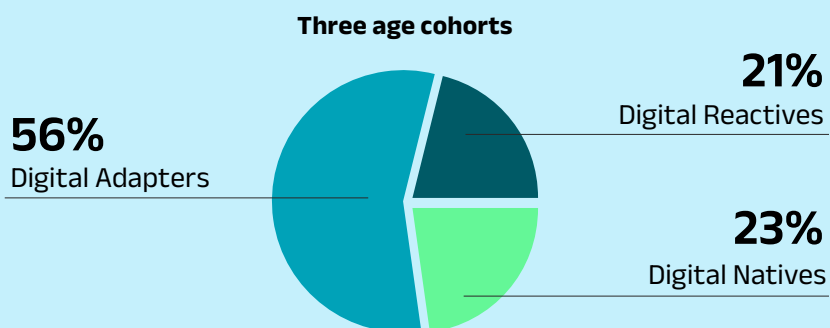
DIGITAL ADAPTER (age 35-64)

Generally born before the internet was widely available, the adapters learned technology as it evolved during their lifetimes, from mainframes to personal computing. They are functional users who evolved in their tech expectations and usage through their work and family, or just curiosity. They are generally comfortable with digital tools and the value they offer.

DIGITAL REACTIVE (age 65+)

Generally out of the workforce, and are now adopting new tech only as it is necessary, and can see the benefit. They will use new tech, but will likely require some human-led support.

The findings provide a snapshot of where consumers are today on the AI adoption curve—and offer guidance for how financial institutions can move forward with thoughtful, user-centered innovation.



Confidence level is 95% +/- 4.6%

Younger users are driving early adoption, but older users are cautiously warming to AI, especially if they experience a benefit

Both the digital native and digital adapter banking users appear to be ready to engage with AI, especially if it can provide useful financial information. While digital reactive users (65+) remain more hesitant than their younger counterparts, they show signs of growing interest.

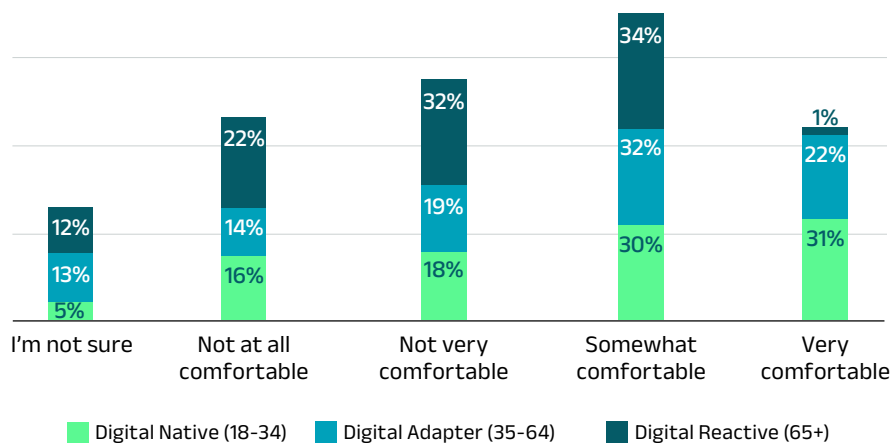
Forty-three percent of the digital natives and 36% of the digital adapters believe that AI has the potential to improve their financial situation. Only 23% of digital reactive users share that view, but 46% report a neutral response (neither agreement nor disagreement).

I believe AI-powered tools could help me improve my financial situation (e.g., save money, pay down debt faster, avoid fees).

	Disagree	Neutral	Agree
Digital Native (18-34)	25%	32%	43%
Digital Adapter (35-64)	28%	36%	36%
Digital Reactive (65+)	31%	46%	23%

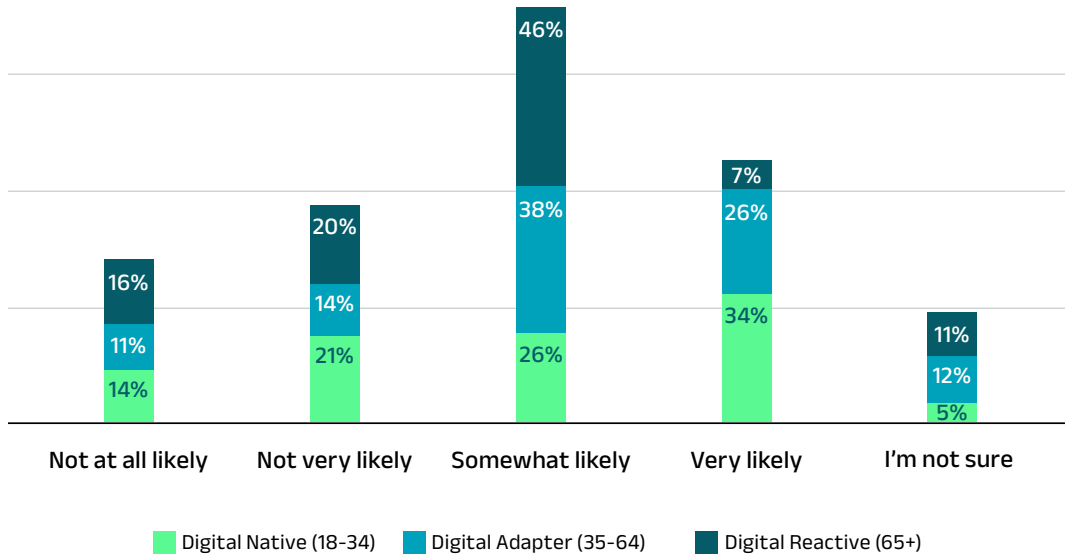
Thirty-one percent of digital native users and 22% of digital adapter users are very comfortable receiving AI-generated financial recommendations from their banking app, compared to just 1% of digital reactive users. When the response is broadened to include "somewhat comfortable," over 61% of digital natives and 54% digital adapter users agree, and just over one-third of those 65+ agree.

How comfortable would you be receiving financial recommendations or suggestions from AI in your banking app?



Sixty percent of digital natives and 64% of digital adapters are very or somewhat likely to try an AI tool to improve their financial situation. Just over half of the digital reactives said they are very or somewhat likely to try an AI tool, with only 16% reporting not at all likely.

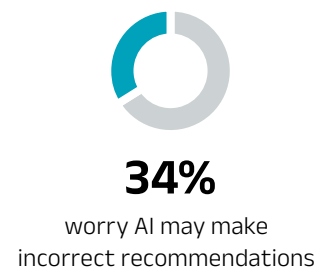
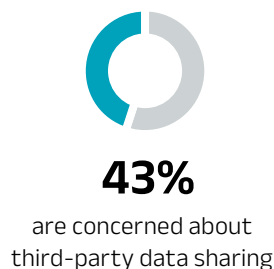
If a tool powered by AI could help you improve your financial situation—for example, by helping you save money, stick to a budget, pay down debt faster, or avoid fees—how likely would you be to try it?



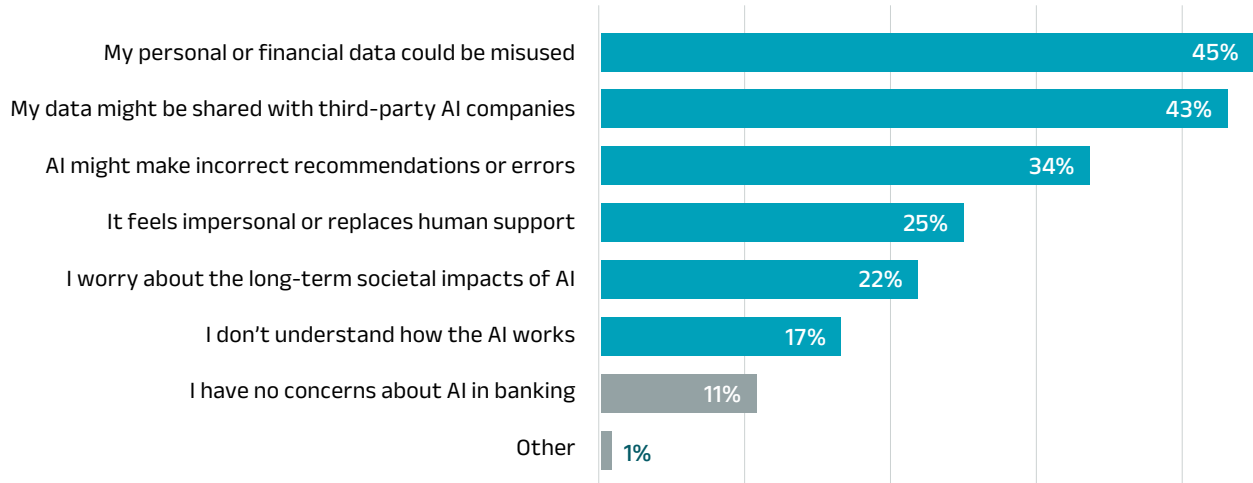
Key takeaway: This data continues to suggest that a gradual deployment strategy—where younger, tech-forward users serve as the early use case—can accelerate broader adoption over time.

Trust is a significant barrier to acceptance

Despite an overall warming to the use of AI, the number one concern about the use of AI in banking is trust. Across all users, survey results confirm:



What concerns, if any, do you have about using AI features in your banking experience?



These concerns are not limited to any one age group. All users share the same top worries, indicating that privacy, explainability, and user controls must be built into every AI touchpoint.

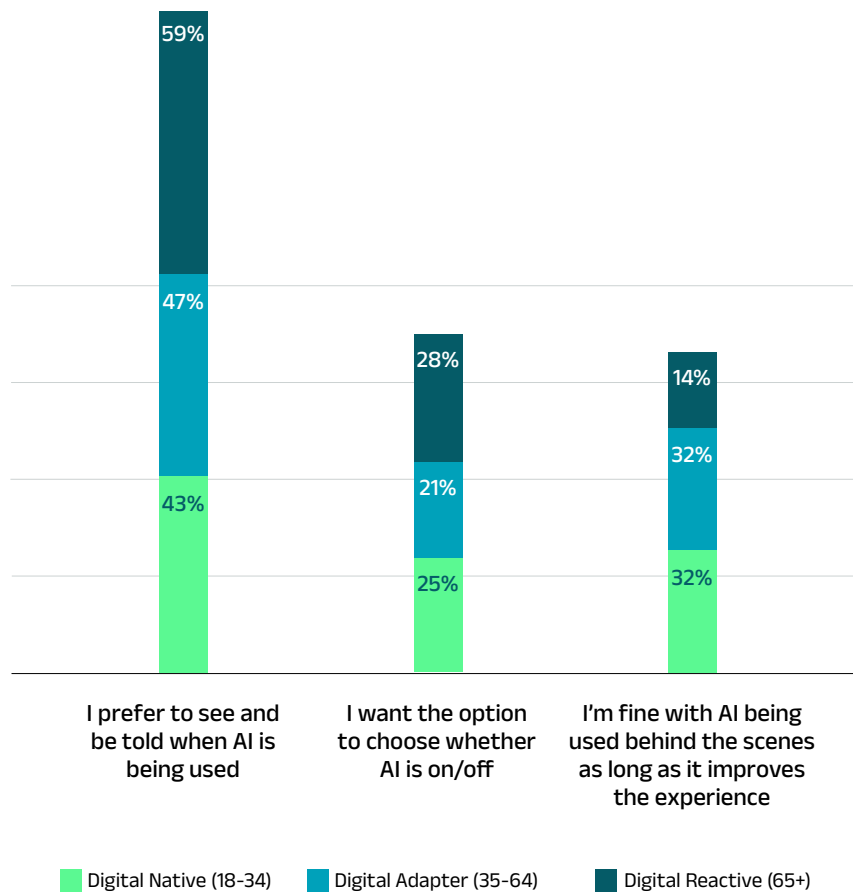
What concerns, if any, do you have about using AI features in your banking experience?

	Digital Native (18-34)	Digital Adapter (35-64)	Digital Reactive (65+)
My personal or financial data could be misused	42%	42%	59%
My data might be shared with third-party AI companies (e.g., OpenAI, Anthropic, Google)	47%	40%	53%
AI might make incorrect recommendations or errors	34%	35%	34%
It feels impersonal or replaces human support	22%	24%	34%
I worry about long-term social impacts of AI	27%	17%	33%
I don't understand how the AI works	20%	16%	18%
I have no concerns about AI in banking	9%	15%	3%
Other	2%	0%	2%

A critical step to building trust is transparency. Survey findings show similar preferences across age groups, showing a clear expectation for visibility when AI is used.

- For all digital banking users, the top preference is to be told when AI is being used. Forty-three percent of digital natives, 47% of digital adapters, and 59% of digital reactives agree.
- Many prefer no AI label—just describe the benefit clearly (14%–32%).
- And just around a quarter want the option to choose whether AI is on/off.

When AI is used to improve your banking experience, how do you prefer it to be presented?



Key takeaway: In short, messaging matters. AI features must be clearly disclosed, purposefully integrated, and designed with user benefit at the forefront.

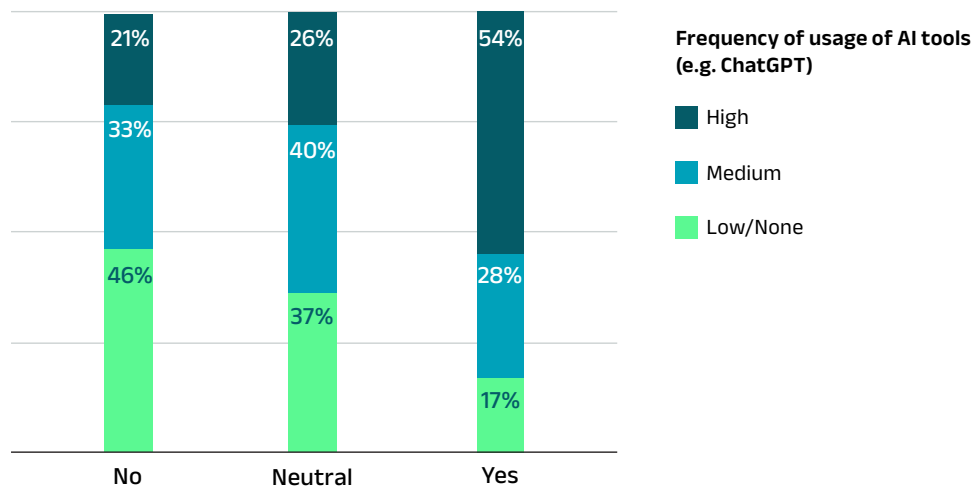
Experience and familiarity with AI tools drive acceptance

The study's insights point to a linkage between familiarity and trust, suggesting that exposure to AI may play a key role in future user acceptance. Even if users believe that AI can improve their financial situation, those with little or no AI exposure remain unconvinced about sharing financial data.

Fifty-four percent of frequent AI users are comfortable sharing banking data with AI providers if they feel that sharing would improve their financial situation. Among users with little to no AI experience, only 17% are comfortable, and 46% say they wouldn't share data with AI tools even if it would improve their financial situation.

Users comfortable sharing banking data with third parties are already much more open to AI tools overall. Among those not comfortable, 31% say they wouldn't use any AI tools, compared to just 1% that would not use any AI tools among those who are comfortable.

Would you be comfortable sharing some of your banking data with trusted AI providers (e.g., OpenAI, Google, Anthropic) if it helped your improve your financial situation?



Which of the following AI-powered tools would you personally choose to use in your banking app, if they were available?

AI-powered tools in banking app	Users comfortable	Users neutral	Users not comfortable
Summarizing your recent account activity in plain language (e.g., you spent the most on groceries and dining out last week)	19%	13%	13%
Answering your banking questions in a conversational chat (e.g., why was I charged twice or when is my next payment due)	18%	18%	17%
Suggesting helpful actions based on your account activity (e.g., transfer from savings to cover your upcoming bill)	18%	14%	6%
Notifying you of unusual transactions and explaining why (e.g., this looks different from your usual spending pattern)	15%	18%	17%
Helping you write messages to customer support (e.g., write a message asking for a fee refund)	13%	9%	4%
Automatically sorting and labeling your transactions (e.g., this looks like a recurring gym membership)	9%	9%	8%
Generating personalized tips based on your financial behavior (e.g., you could save \$50/month by canceling unused subscriptions)	8%	6%	5%
I wouldn't choose to use any AI powered tools	1%	14%	31%

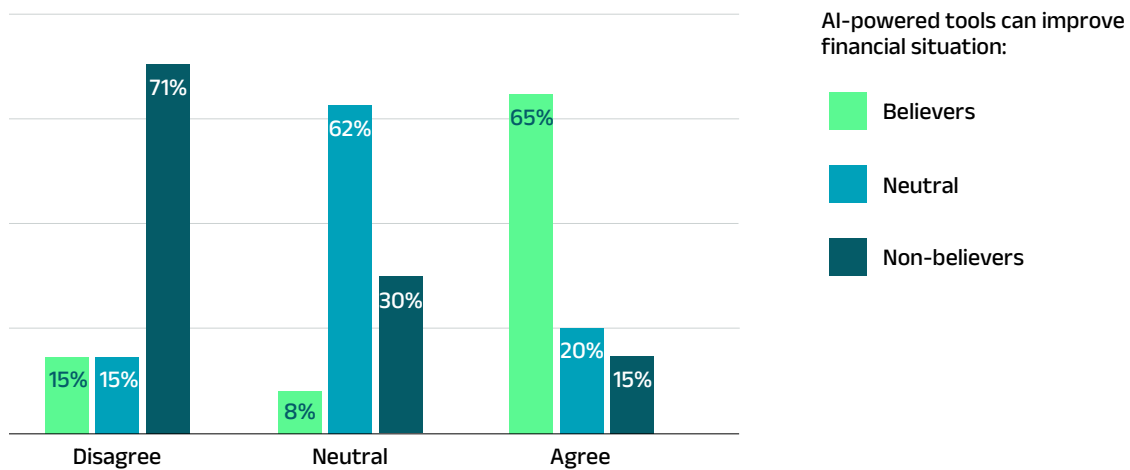
Key takeaway. Expect trust and openness to grow as users gain exposure to AI tools in all sectors. This data continues to support a phased, progressive implementation strategy for AI feature deployment, starting with low-risk, high-utility features that encourage usage and build trust gradually over time.

Belief drives behavior: Perceived value is a key motivator

There is a “belief effect” that underscores the need for AI features that clearly demonstrate value, whether it’s summarizing spending, predicting financial patterns, or assisting with budgeting.

Consumers who believe AI can improve their finances are **3x more likely** than skeptics to share data with AI providers: 65% of believers would agree to share data, 20% are neutral and 15% of the non-believers would be open to sharing data.

I would be comfortable sharing some of my banking data with trusted AI providers (e.g. OpenAI, Google, Anthropic) if it helped me improve my financial situation.



Building toward the future

AI is transforming the digital banking experience to make both digital banking and the management of digital banking more productive, including:

Benefits for FIs

- Improved ROI via increased product and feature adoption
- Operational efficiency gains via simplified operations, reduced costs, and automated workflows
- Improved customer financial well-being, literacy, and experience
- Reduced call center/customer support volume and time spent resolving user issues
- Deeper insights into user profiles, behaviors, and actions taken across digital banking
- New markets and opportunities unlocked with AI-driven predictive analytics and tools

Benefits for End-Users

- Hyper-personalized recommendations for financial products
- Increased awareness of digital banking features
- Increased self-service capabilities to get help faster, answers quicker
- Greater security from fraudulent actors
- More intelligent and sophisticated tools that provide deeper insights into habits and more accurate predictions of future outlooks
- Embedded or expanded experiences—AI in digital banking proactively working for you outside of a typical logged-in session

Widespread adoption of AI by consumers depends on more than just technical capability. This study shows that **awareness is high** but **trust and understanding remain significant barriers** to widespread adoption.

Users are open to AI when it demonstrates clear value, respects their privacy, and offers **transparency, explainability, and control**. The opportunity is not just to deploy AI, but to **deploy it wisely**—in ways that enhance existing services, align with institutional values, and anticipate regulatory and ethical responsibilities. Financial institutions that take a deliberate, research-informed approach will define what successful AI in banking truly looks like.

About Lumin Digital

Lumin Digital is the leading, future-ready digital banking solution powering remarkable growth for financial institutions across the United States. Combining innovation, data, and speed, Lumin's disruption-proof platform was born in the cloud to stay ahead of the evolving expectations of retail and business banking users. With Lumin Digital's unique approach, our clients innovate and scale at their own pace, optimize digital banking ROI, and create a strong digital relationship with their customers. Lumin has received top marks from clients on the G2 Marketplace for digital banking software. For more information, visit lumindigital.com.

Reference

¹<https://www.spglobal.com/en/research-insights/special-reports/ai-in-banking-ai-will-be-an-incremental-game-changer>

²https://www.deloitte.com/content/dam/assets-zone3/us/en/docs/services/consulting/2023/us-banking-tech-insights.pdf?utm_source=chatgpt.com

³<https://www.ibm.com/think/topics/ai-in-banking>

⁴<https://hai.stanford.edu/ai-index/2025-ai-index-report>

