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# From Automation to Autonomy

## The Future of Agentic AI-powered Banking

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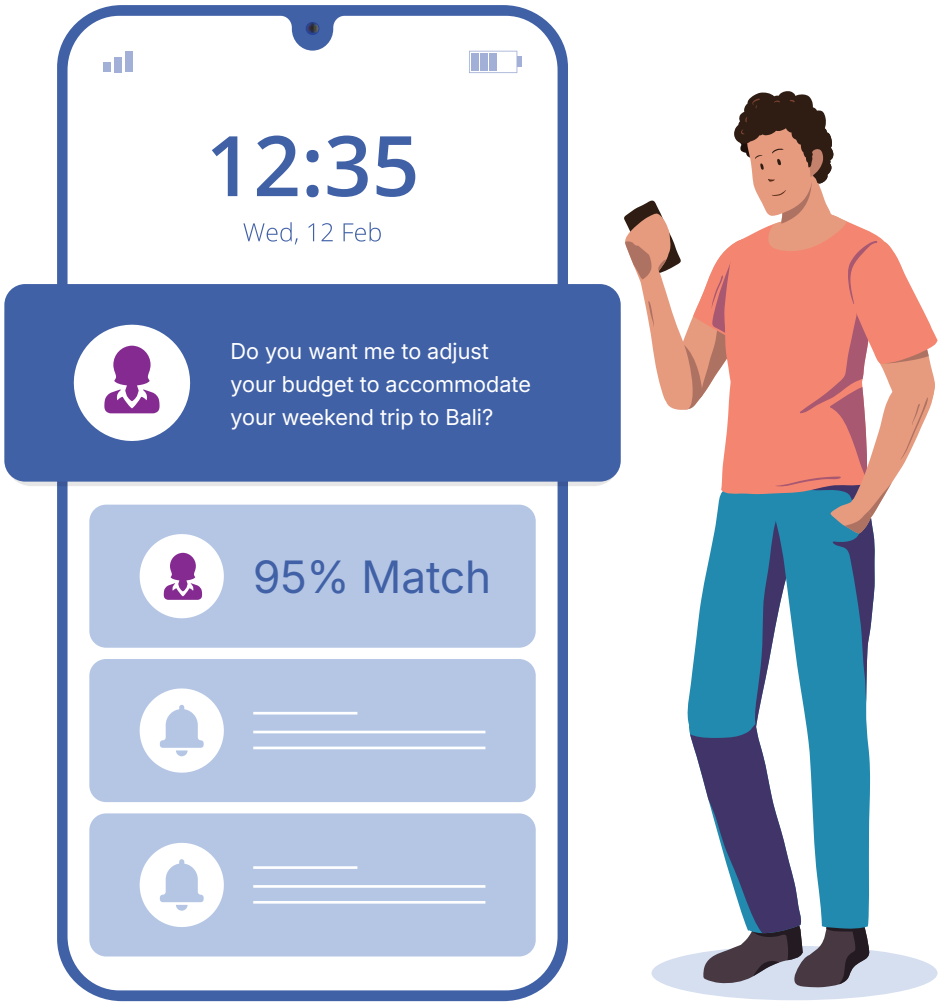


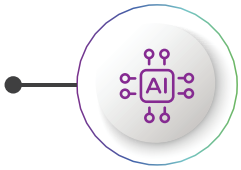

*A bright Sunday morning. Adam is glancing at the news snippets on his smartphone when his AI assistant, Dora, pops up on his holographic smartwatch. "Do you want me to adjust your budget to accommodate your weekend trip to Bali?" Adam nods, and the request is taken care of. As he continues to scroll lazily through the morning news, he spots a sustainable venture that draws his interest. Adam's voice prompts Dora to do a background check on the project and its financial suitability with respect to him. A few minutes later, Dora returns with a '95% match' result to Adam's profile. Adam allows a facial scan and gets Dora to invest in the venture while he continues to enjoy his Sunday...*

No paperwork, no stress—just effortless, intuitive banking that works naturally. Welcome to the world of hyper-personalised, secure, and seamless banking that is focused on financial wellness and sustainable finance – thanks to the magic of Agentic AI.

What seems truly magical is just Generative AI that has upped its game. **Agentic AI** is a fast-evolving AI branch that leaps past simple automation and reactive chatbots to autonomous Agentic AI bots. Think of them as extensions of the larger AI engine that has spawned temporarily to pick up the task at hand, break it down into smaller tasks, and then systematically work to complete them. Just the way a human would approach a task assigned to them. All this while hiding the inner workings and revealing the end result that matters.

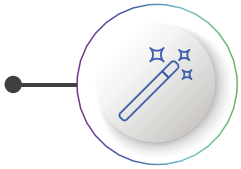
These qualities of Agentic AI open up new possibilities for the Banking sector. Agentic AI signifies a shift toward more intelligent and independent AI systems.

# How the AI landscape has evolved for the Banking sector



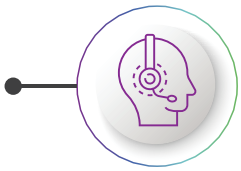

Traditional AI models were primarily rule-based systems. Do you recall those automated customer service systems that handled basic inquiries? The first AI engines could not learn from new data, nor could they adapt to changing customer needs.

Say, an AI system in a bank that flagged off transactions that exceeded pre-defined limits or a loan approval system that based its decision on fixed decision trees are classic examples of such traditional AI models.



Generative AI landed next on the banking doorstep, heralding the ability to create 'new content'. This ushered in AI-driven chatbots that generate personalized financial advice. Generative AI with supervised AI/Machine Learning(ML) could analyze vast amounts of data to identify patterns and predict potential issues.

Think of tailored investment portfolios suggested by AI software after analyzing customer spending patterns and predicting future financial needs using machine learning.



Agentic AI represents the next phase of AI evolution. Autonomous agents capable of executing complex tasks with minimal or no human intervention will open the gates to hyper-personalization. Their ability to work toward a goal makes them stand out. They are memory-equipped, which simply means an Agentic AI can retain, recall, and utilize past interactions. It can respond while keeping in mind user preferences and contextual information.

Agentic AI could autonomously manage customer portfolios, adjusting investments based on market trends and individual preferences while maintaining the memory of past interactions to refine recommendations over time.

## Agentic AI systems come in multiple flavors

Single-agent systems function independently. They offer centralized control to the user. Simplicity and consistency in task handling make them well-suited for straightforward banking tasks. However they lack adaptability for complex, dynamic environments.

Multi-agent systems (MAS) consist of multiple interacting AI agents that work in close coordination with each other like a swarm. They enhance collaboration and adaptability. They are particularly useful in fraud detection, liquidity management, and other intricate banking operations where coordinated decision-making improves efficiency. Their biggest advantage is the almost limitless scalability they offer.

Agentic AI systems also vary in terms of human involvement. 'Human-in-the-loop' systems bring human oversight into autonomous systems thus ensuring ethical and regulatory compliance. This variant makes it the most suitable for as it ushers in a layer of accountability and oversight.

# The immense possibilities of Agentic AI

The versatility of Agentic AI makes it a candidate of choice to address multiple facets of banking to iron out the wrinkles in the user experience. Let's look at some retail use cases.

## Trading and investment

Dora, the AI assistant showcased in the introduction, is an example of an Agentic AI providing personalized investment advice. Who wouldn't love a bot that acts as their banking Personal Assistant? One that can analyze market trends, execute trades autonomously, and even rebalance their portfolio as per market fluctuations.

## Loan Underwriting and Credit Risk Management

Agentic AI bots can automate credit risk assessment by running scans of thousands of data points to determine borrower eligibility. Visualize this – You apply for a loan and it comes back approved in minutes with money transferred to your account in a jiffy. Made possible because Agentic AI bots can predict 'default' risks by analyzing historical patterns to pull down lender risk. Fast-tracking loan approvals becomes a breeze.

## Fraud Detection and Anti-Money Laundering (AML)

A large bank's AI bot sensed danger—a pattern of tiny test payments before massive withdrawals. Acting swiftly, it froze accounts mid-scam, stopping fraud in real-time before losses could unfold. Scenarios like these are possible with agentic bots acting as sentinels to identify fraudulent transactions before they happen.

Agentic AI and the **"do-it-for-me" economy** are made for each other. An economy where consumers prefer automated financial management with minimal effort. Agentic AI is rightly poised to meet this demand-driven especially by Gen Z. They love convenience, personalization, efficiency, and goal-driven services. Agentic AI can provide all that at their fingertips.

# Agentic Business Process Automation: The Next Frontier

Agentic Business Process Automation (ABPA) is Agentic AI for non-retail use cases.

Think of ABPA as **self-driving business operators**—just as autonomous vehicles navigate roads, ABPA manages workflows, makes intelligent decisions, and adapts to changing conditions without constant human intervention. All at an institutional level.

ABPA propels business automation across various departments, like loan approvals, fraud detection, customer onboarding, and compliance monitoring in financial services. Its operational logic learns, adapts, and optimizes using real-time data to meet constantly changing business requirements.

The end goal would be automating the entire value chain.

# Embracing the Agentic AI revolution: Strategies we recommend

Banks across the board are convinced about the power of AI. Agentic AI is poised to be 'AI on nitro-boost'. How do banks with differing current levels of AI adoption and varying with respect to strategy and execution, take the next step? Here's our point of view.

## Leaders

Large banks, Big Tech firms, and top FinTechs are at the forefront of Agentic AI. To maintain dominance, they should focus on ethical AI frameworks, real-time risk management, and human-AI collaboration.

## Fast Followers

Super-regional banks and agile FinTechs rapidly integrate AI but usually lack scale. To compete, they should go for modular AI adoption and develop partnerships with tech leaders.

## Laggards

Banks with low AI capabilities and a conservative approach run the risk of 'missing the bus' altogether. They will benefit by starting with AI-assisted automation. They can also upskill employees, and adopt low-risk AI use cases, like fraud detection, before scaling.

## Emerging Players

Niche FinTechs developing specialized AI solutions can disrupt the market. They should focus on industry-specific AI innovations. This can be complemented with strategic alliances with established players to scale their Agentic AI models while ensuring compliance and security.

# Challenges in Agentic AI Adoption

Agentic AI adoption amplifies the concerns that came to the fore with AI adoption.

**Data Quality & Availability** – 'Garbage In – Garbage Out' is an adage as old as the computer era. Throwing poor-quality data quality at Agentic AI will inadvertently lead to inefficiencies and poor decision-making

**Customer Trust & Confidence** – Users tend to be skeptical of new technology, especially around matters concerning data privacy and personally identifiable information (PII). This tends to get accentuated with Agentic AI as it is designed to take the bulk of the decision-making away from humans. AI-driven interactions must be transparent and ethical to gain user trust.

**Bias & Fairness** – AI models tend to reinforce existing biases and, if not carefully managed, can potentially lead to unfair outcomes in credit scoring, hiring, and fraud detection. Responsible AI trained to be ethical, fair, and transparent can promote user confidence and trust in these systems.

**Regulatory Compliance** – As technology evolves, the regulatory landscape is redrawn to ensure the right guardrails are in place. Banks need to constantly adapt.

**Integration with Legacy systems** – Incompatibility with outdated infrastructure, inconsistent access to data that stays siloed in legacy systems, and operational disruptions due to the inability of older systems to deal with modern AI systems that may require real-time processing can bring inconsistent Agentic Ai experiences.

**Organization Structures not built for Collaboration** – Traditional Banks have a top-down, central command hierarchy that is not wholly suited for collaboration. Agentic AI implementation requires a free access to information across silos and seamless collaboration between departments. This is a challenge that needs to be dealt with to give unfettered access to modern AI systems to perform at their peak productivity.

However, the opportunities Agentic AI provides are simply too great to ignore. New revenue streams and the boost agentic AI can deliver to human efficiency and productivity are magical.

# The Bank of the Future

As AI permeates into every aspect of the functioning of a bank, it is poised to alter the very structure and the way a bank does business. The visual representation shows deep insights into how reimagined engagements with the bank's customers, made possible by AI, alter the bank's structure.

Banks are already transforming through the rolling out of Agentic AI services to breathe life into use cases.

**KeyBank,** for instance, has rolled out Agentic AI to ingest, verify, and help underwrite customer data, thus automating loan processing.

**CBW Bank's NetXD** system can open new accounts, transfer funds, and set up recurring payments autonomously after obtaining customer approval via biometric authentication. This helps optimize interest earnings.

**JPMorgan Chase** has rolled out Agentic AI for fraud detection in real-time by autonomously monitoring transactions and flagging suspicious transactions.

**Bud Financial's** Agentic AI scans customer transactions and reallocates funds to improve financial outcomes for the customer

**UiPath** integrates Agentic AI for continuous monitoring of regulatory requirements and automatic compliance report generation. This fast tracks Know Your Customer (KYC) checks and Anti-Money Laundering (AML) investigations.

# Strategic Imperatives for a Seamless Adoption

- Banks will do well to start off with **small steps while keeping the larger picture in mind** of how Agentic AI would be ushered into the organization.
- Equally important would be to invest in **capability development and talent acquisition.** The right talent could make a big difference in the speed and confidence in adoption.
- Quality Data has no substitute. Build a **strong data foundation.** Unfettered access to the right data empowers Agentic AI fully.
- Implement **organizational change management** to address potential job displacement and role changes.
- Take steps to communicate with the customer. It pays to **build trust and earn customer confidence** when Agentic AI rollouts are planned.
- Be on the lookout for **regulatory changes.** Plan to adhere to regulations from the outset.

# Agentic AI Adoption – Take Action with Caution

Agentic AI can put banks on a winning track if they take a cautious, well-balanced approach. Preventing biases and unforeseen outcomes will be needed. Having humans in the loop would augur well from a regulatory and compliance standpoint. To top it all, the foundation of all AI-powered software should be human welfare.

Agentic AI is altering the **fundamental structure of banking,** paving the way for the **Bank of 2030**—a model that is **hyper-personalized, seamlessly integrated, secure, and centered on financial wellness.** As outlined in McKinsey's report, future banks will rely on **autonomous AI agents** to optimize operations and enhance customer engagement. Banks will cease to be static institutions and evolve into dynamic financial ecosystems hyper-customized to the last service.

## What should your bank focus on?

**Capability Development** – Hiring / Partnering with the best AI experts

**Strong Data Foundation** – Quality Data for AI model training while ensuring data privacy and security compliance

**Small steps with an eye on the Big Picture** – Give a push for High Impact, Low Risk use cases while ensuring AI alignment with business goals.

**Organizational Change Management** – Push for a collaborative working environment

Where are you on this journey?

# About the Authors

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Chandra is a digital transformation leader with over 25 years of experience driving innovation across global enterprises. He has held leadership roles such as Vice President and Global Head of Digital Experience and Transformation, delivering cutting-edge customer and employee experiences through emerging technologies like Metaverse, Web 3.0, AI, and Cloud. Chandra leads the company's digital and AI-led transformation strategy, focusing on business outcome-driven approaches. He champions platform-building, strategic co-creation with niche partners, and value realization for customers. He has successfully managed billion-dollar P&Ls, revitalized underperforming units, and enabled enterprise-wide transformation. Chandra is known for aligning technology with business strategy to unlock efficiencies and competitive advantage, making him a trusted advisor in the evolving digital landscape.

**Chaithanya Krishnan**
Vice President – Head of Consulting Group- BFSI

Chaithanya is an experienced IT strategist with 22+ years of industry expertise in banking, finance, and manufacturing. He excels in storytelling and plays a vital role in shaping organizational IT strategies, blending current trends and prospects. With a focus on BCM, IT strategies, and EA roadmaps, he helps organizations reimagine their businesses. As a consulting leader, Chaithanya defines new customer journeys, drives business process transformations, conducts capability maturity assessments, portfolio rationalization, and technology ROI analysis. He actively contributes to Architecture Advisory boards, working closely with CXOs to ensure strategic value realization.

**Kulpreet Kaur**
Principal Consultant & Industry Research Leader

Kulpreet is a seasoned management consulting professional with over 20 years of experience. With industry expertise in banking, risk and compliance, finance, and manufacturing, she is leading SLK Consulting Group's Industry Research wing, delivering forward-looking insights on emerging technologies and their application with real world use cases, business models, vendor landscapes, competitive analysis, and solution evaluations to support clients' strategic initiatives. Additionally, she oversees business analysis, fit-gap assessments, and business process transformation with focus on AI application and enterprise adoption strategies.

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# About Us

SLK is a global technology services provider focused on bringing AI, intelligent automation, and analytics together to create leading-edge technology solutions for our customers through a culture of partnership, led by an evolutionary mindset. For over 20 years, we've helped organizations across diverse industries - insurance providers, financial service organizations, investment management companies, and manufacturers - reimagine their business and solve their present and future needs. Being A Great Place To Work Certified, we encourage an approach of constructively challenging the status quo in all that we do to enable peak business performance for our customers and for ourselves, through disruptive technologies, applied innovation, and purposeful automation. Find out how we help leading organizations reimagine their business at https://www.slksoftware.com/


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