ACCELERATE AI ADOPTION IN BANKS SWIFTLY, YET STEADILY

Abstract

The crawl-walk-run-fly approach empowers banks to become agile, AI-first institutions that navigate challenges with agility and drive significant business growth.

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Banks continue to increase AI spending

Interest in artificial intelligence has increased over the past two years due to advancements in generative AI. The third volume of the Infosys Bank Tech Index found that banks are intensifying their AI efforts, marked by an expected 6.2% spending increase during April to September 2024 — the highest among all technologies. AI now accounts for the largest share of bank tech budgets at 31%, followed by cybersecurity at 27%.

A swift, steady approach to AI adoption

Yet, banks prefer a methodical, progressive AI adoption rather than a rapid deployment. Specifically, they embrace the crawl-walk-run-fly (CWRF) method, tailored for the highly regulated financial sector. This approach ensures compliance and substantiates business benefits before greenlighting any technology initiative (Figure 1).

Crawl-Walk-Run-Fly Approach to AI : Stages of Adoption

Crawl

Lay the groundwork
- Embrace simplicity and low-risk implementation
- Adopt Trial periods and sandboxes
- Focus on individual tools that make jobs faster, easier, or cheaper
- Identify opportunities to automate repetitive tasks
- Target small tactical wins

Examples
- Content summarization
- Data cleanup in documents
- Data extraction

Walk

Stride forward
- Transition from ad hoc experimentation to organized accessibility and AI integration
- Embrace advanced technologies, such as integrating knowledge from other sources using RAG
- Add guardrails
- Develop sophisticated prompts
- Create centralized toolchains and toolboxes for AI

Examples
- Knowledge retrieval applications
- Customer support chatbots
- Automated workflows

Run

Hit full pace
- Transform human-driven workflows into automated assembly lines
- Streamline complex prompt workflows
- Implement advanced RAG techniques
- Establish dynamic monitoring frameworks
- Fine tune models

Examples
- Copilots
- Advanced knowledge retrieval applications
- Advanced intelligent assistants
- Automated research applications

Fly

Innovate and transform
- Exhibit increasingly sophisticated and human-like capabilities.
- Enable nuanced decision-making using AI techniques like reinforcement learning
- Achieve self optimization
- Implement sophisticated architectures
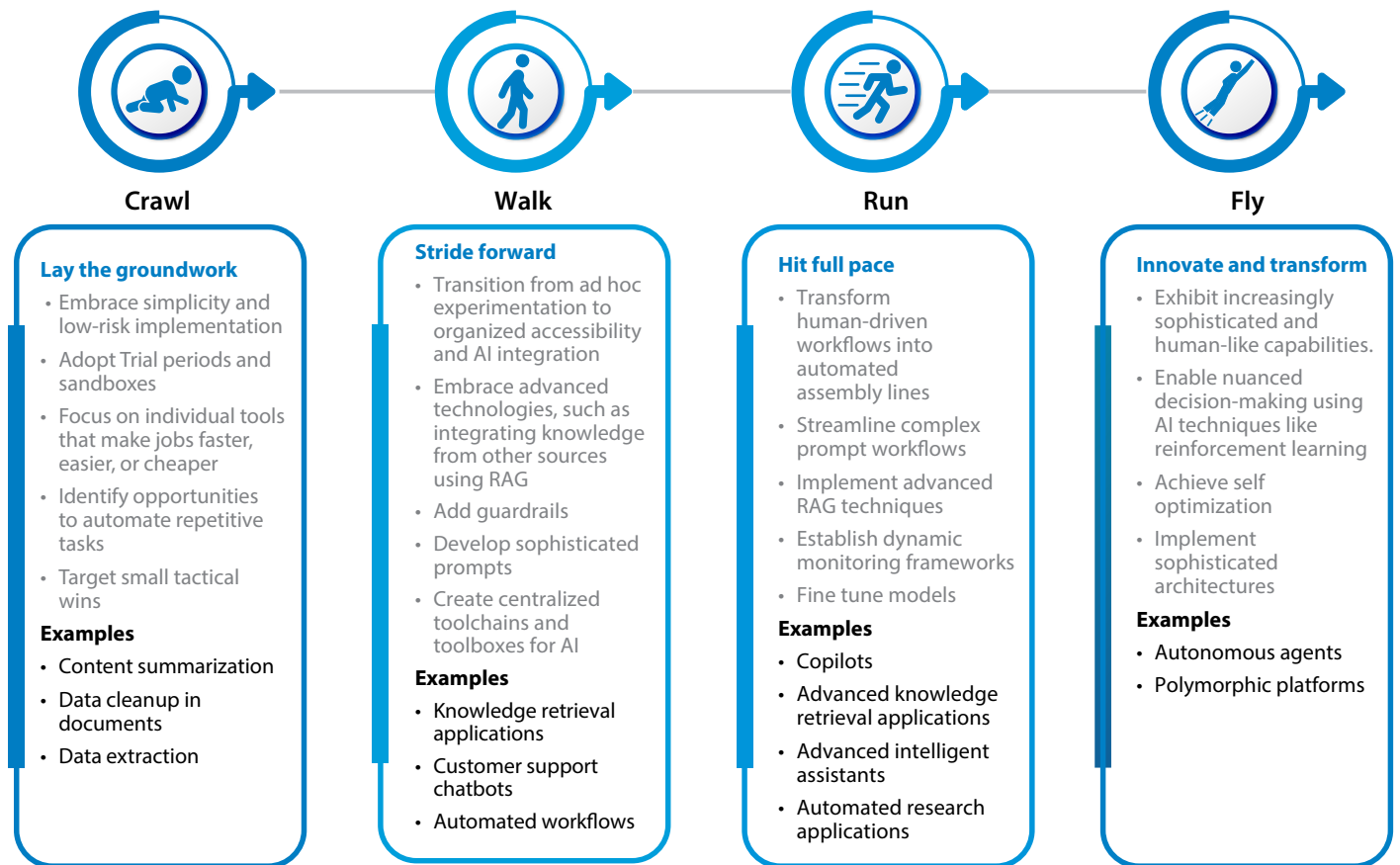
Examples
- Autonomous agents
- Polymorphic platforms

Figure 1. The CWRF approach to AI

This strategic framework begins with small, focused AI projects, like automating routine tasks or personalizing basic customer interactions. As success is proven and confidence grows, banks can gradually expand their AI footprint, moving into more complex applications like fraud detection and risk assessment. This iterative process allows institutions to maximize learning, build internal expertise, and demonstrate tangible value before taking the leap toward full-fledged AI transformation. The approach involves :

1. **Lay the groundwork:** Identify simple, high-impact use cases for AI adoption. Understanding AI capabilities and limitations helps identify tasks suitable for automation. This requires IT readiness through legacy modernization, data readiness, optimization of the software development lifecycle, and automation of technology and infrastructure. Banks can work on AI proof of concepts (PoC) in the sandbox environment, thus minimizing risks of disruption to operations and customers. For example, JP Morgan uses this approach to review apps that LLMs can work with, ensuring low risk and data sensitivity. Once a bank meets foundational compliance requirements — such as legal and ethical obligations, governance, responsible data collection and use (including data security and privacy protection), and unbiased, explainable algorithmic outcomes — it can promote AI use. This helps justify the investment.

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2. **Enhance and scale:** Based on outcomes of the pilot projects, banks can expand AI applications to more complex processes, integrating solutions with existing systems and workflows while maintaining continuous monitoring. This proactive approach helps identify challenges and build expertise through training and upskilling.

3. **Implement and innovate:** With a strong foundation, banks must embed ethical AI practices. Technology is strategically integrated at scale across businesses. Banks can begin to streamline operations, automate tasks, personalize customer experiences, and potentially generate new revenue streams through AI-powered services

4. **Enterprise transformation:** The long-term horizon covers business and technology amplification. Institutions can deploy AI end-to-end in their front-, middle-, and back-office operations. Here, AI operates at an enterprise scale, serves customers, offers recommendations to relationship managers, automates treasury functions, and handles clearing and settlement operations. At this stage, the organization is sufficiently mature for business units to deploy fully self-service solutions.

A few banks have evolved a systematic method for CWRF adoption. One example is Morgan Stanley, which laid the groundwork in 2018 by using data analytics and ML to improve internal processes. By 2022, they had progressed to implementing AI solutions for client service and investment management. Today, the bank operates in full "run" mode, with initiatives such as AI @ Morgan Stanley Assistant, adopted by 98% of their financial advisers, and AI @ Morgan Stanley Debrief, a generative AI-based meeting productivity tool rolling out to 15,000 advisers this month. Another example is Goldman Sachs. The investment bank established its data and talent foundation and deployed internal research teams to explore AI, preparing to launch risk management and back-office efficiency solutions in 2023. While many of their projects are yet to cross the PoC stage, many developers use generative AI to automate code, resulting in large efficiency gains.

In contrast, most banks allow organic adoption, with different groups independently advancing from early experimentation to implementation at scale. Regional priorities differ. The Infosys Bank Tech Index found that North American banks prioritize cost reduction more than banks in the rest of the world. European banks are looking to transform their business models, while financial institutions in APAC and the Middle East and North Africa prioritize developing innovation and new product offerings.

An AI-first strategy for financial services institutions

The CWRF approach helps banks move steadily toward becoming AI-first financial institutions that better navigate economic and business challenges and innovate new business models. Once they establish a foundation of modernized technology and infrastructure, talent and change management, and data readiness, banks can explore numerous use cases across back-office, back-/middle-office, and front-office applications. AI-first financial institutions can bring the best out of their data to become more efficient and grow. For example, as part of its Forward '28 strategy, Danske Bank is accelerating data and AI investments to become a leading digital bank. The bank is transforming into an AI-first institution by partnering and using AI to modernize, improve business operations, and enhance security.

The Infosys Bank Tech Index shows that a massive 96% of banks reported less than half of their projects on track. The CWRF approach can help banks identify high-potential projects and significantly improve their likelihood of success.

Authors

ALEC BOERE
Associate Partner
Infosys Consulting

AMIT KHULLAR
AVP - Senior Industry Principal
Infosys Financial Services

UTTAM PURUSHOTTAM
Senior Principal - Business Consulting
Infosys Consulting

For more information, contact askus@infosys.com

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