



# Banking in EMEA Key tech trends for 2026

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 **thoughtworks**

Design. Engineering. AI.

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## **Executive summary**

The Europe, Middle East and Africa (EMEA) banking industry is at the precipice of a profound and irreversible transformation. This is not an incremental change, but a fundamental rewiring of the sector's operating model, driven by a powerful convergence of forces: the maturation of enterprise-scale AI, a wave of prescriptive regulation and rising customer expectations for seamless embedded experiences.

The era of siloed products and reactive services is over. The future belongs to intelligent, ecosystem-driven institutions that are not just compliant, but indispensable.

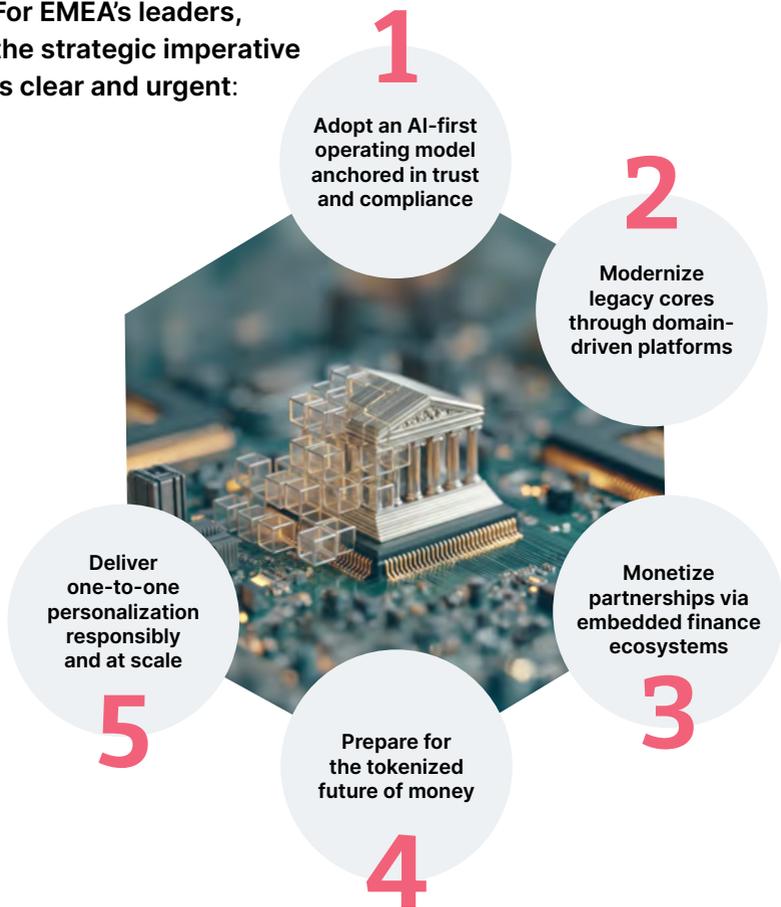
### **Banking is becoming an autonomous, invisible utility**

Banks are emerging from the role of trusted financial caretaker and are actively leveraging that trust to engage more meaningfully with their customers. The ambition is to provide a plethora of both financial and non-financial services by building an ecosystem of partners.

This shift allows banks to monetize life experiences by embedding finance into the customer's daily digital journey e.g., Banking as a Service (BaaS) and embedded finance, effectively becoming a trusted, invisible financial engine.

This profound transformation is accelerated by technology: the industry is rapidly moving toward an AI-first operating model where agentic AI drives hyperefficient operations and informed decisions, making this new ecosystem and service model financially viable and scalable.

**For EMEA's leaders,  
the strategic imperative  
is clear and urgent:**



Legacy modernization is no longer a choice, but a prerequisite for survival, as outdated systems are the biggest blockers to compliance and growth. Winning in this new era requires a commitment to platform thinking, a bold strategy for enterprise-wide AI adoption, and the vision to treat trust- and regulatory-first design as a competitive advantage. The speed of this transformation, not just the vision, will separate tomorrow's winners from those left behind.



## The autonomous, AI-powered bank

Banking is undergoing a revolutionary shift from simple automation to an AI-first, autonomous operating model. This is not about isolated projects, but a strategic, enterprise-wide integration of intelligent agents and embedded AI across the entire value chain. The goal is to move beyond short-term, project-based ROI to a long-term focus on bottom-line impact.

### Manifestation in the market:

Initiative	EMEA examples	Impact
<b>Productivity and development</b>	HSBC's AI-driven engineering tools	<u>15% greater coding efficiency</u>
<b>Data modernization</b>	<u>NatWest's program with AWS to consolidate 20M+ records</u>	Creating a single customer view, making data "AI-ready"
<b>Core infrastructure</b>	<u>Citi's partnership with Google Cloud</u>	Overhauling infrastructure to support enterprise-scale AI
<b>Security and trust</b>	<u>Mashreq's AI transaction monitoring</u>	Fraud flagged in <300ms, reducing false positives
<b>Workforce transformation</b>	<u>HSBC's AI Academy</u>	Strategic reskilling to leverage new AI tools effectively

### **Regulatory and market momentum:**

- **Clear regulatory direction:** The EU AI Act sets a global benchmark for responsible and ethical AI deployment, while the Digital Operational Resilience Act (DORA) mandates modernization of tech infrastructure — accelerating the shift to cloud-native, resilient operating models. The European Central Bank (ECB) is intensifying oversight of AI and ML model governance, driving banks to formalize and scale their frameworks.
- **Quantifiable value:** McKinsey estimates that agentic AI can deliver up to 2.6x improvements in productivity and decision quality, while generative AI could add \$200–\$340 billion in annual value to global banking.
- **Rapid adoption:** Although full enterprise-wide integration remains in early stages, adoption is scaling fast — 27% of banks have already embedded AI systems into core architectures. Across Europe, early use cases include Scandinavian banks leveraging AI for ESG and green finance reporting, and DACH institutions deploying GenAI for knowledge management and operational efficiency, underscoring both regulatory pressure and competitive momentum.

### **Strategic implication:**

For EMEA banks, building an AI-first enterprise has transitioned from a competitive advantage to a critical, table stakes requirement for future relevance, operational efficiency and growth.



## Legacy modernization through domain-driven slices

Legacy systems and fragmented data are major barriers to a data-driven, customer-centric banking model. Modernizing by slicing architecture around business domains, rather than tools, enables banks to overcome vendor lock-in, reduce operational costs and accelerate next-gen capabilities. This foundational work is essential for unlocking key trends like AI adoption, hyper-personalization and ecosystem integration, giving early movers a clear competitive edge.

### Manifestation in the market:

Initiative	EMEA examples	Impact
<b>Enterprise-wide data unification</b>	<u>NatWest's five-year data modernization program with AWS</u>	Unifies 20 million customer records to accelerate AI models, enhance fraud detection and improve personalization
<b>Technical debt elimination and data modernization</b>	<u>Citi's aggressive pursuit of technical debt reduction and partnership with Palantir</u>	Retired 130 applications in Q1 2025; improved client experience through enhanced onboarding and real-time insights in the Wealth segment
<b>Investment in modern data architecture for AI readiness</b>	<u>Deutsche Bank's partnership with Google Cloud and IBM</u>	Creates a foundational data and AI platform to accelerate modernization and improve operational efficiency

<p><b>AI-ready data and payments plumbing</b></p>	<p><u>Commercial Bank of Dubai's enterprise rollout of Microsoft Copilot and integration with J.P. Morgan</u></p>	<p>Serves as evidence of AI-ready, integrated data and payments infrastructure</p>
<p><b>Establishing foundational data infrastructure</b></p>	<p><u>Saudi Data and Artificial Intelligence Authority (SDAIA)'s launch of the Open Data Platform, National Data Bank and Data Marketplace</u></p>	<p>Aims to establish foundational infrastructure for a data-driven society and a vibrant data economy in the Kingdom</p>

**Regulatory and market momentum:**

- **Regulation as a modernization driver:** DORA (effective January 2025) and the Revised Payment Services Directive (PSD2)'s P3DH framework mandate ICT resilience, unified incident reporting and expanded data transparency, compelling banks to replace fragmented legacy systems with traceable, domain-based architectures.
- **Rising focus on data integrity:** In the UK, regulators such as the Financial Conduct Authority (FCA) and Bank of England are advancing operational resilience and smart data initiatives that demand precise understanding of data lineage and location. These expectations, tied to real-time regulatory reporting, are accelerating investment in modern, interoperable data platforms.
- **National data sovereignty:** Across the Middle East, directives from entities like Saudi Arabia's SDAIA and the UAE Central Bank are enforcing data localization and governance standards, driving large-scale modernization to meet security, privacy and compliance mandates.

**Strategic implication:**

To remain competitive and compliant, a bank's executive leadership must view legacy modernization and foundational data architecture not as a cost center, but as a strategic imperative. The confluence of market pressures, evolving regulatory demands and the rise of AI makes inaction the riskiest option.

**Trend three**



**Seamless, real-time embedded finance**

Embedded finance is transforming banking into an invisible, yet indispensable, financial utility. Powered by BaaS and robust APIs, it integrates core financial functions directly into customers' digital journeys, from e-commerce to mobility apps. This shifts banks from product sellers to trusted, behind-the-scenes partners. The challenge is avoiding commoditization, but the opportunity is vast: a seamless, real-time presence that expands reach, generates new revenue streams and makes banking an intrinsic part of daily life.

## Manifestation in the market

Initiative	EMEA examples	Impact
<b>Banking as a Service (BaaS) enablement</b>	<u>Wise Platform's API-based infrastructure solution; Starling Bank's strategy to sell its technology platform</u>	Enables banks and non-financial companies to embed fast, low-cost international payment capabilities directly into their own ecosystems, turning core banking into a service
<b>Digital wallets and embedded payments</b>	<u>Lloyds' talks to acquire digital wallet provider Curve; NatWest's Payit™ open-banking checkout</u>	Allows banks to bypass third-party fees, directly embedding payment functionality into customer devices and offering businesses an alternative to card payments
<b>Real-time account-to-account (A2A) payments</b>	<u>Belgian banks joining EPI's Wero initiative; Bahrain's BenefitPay surging in usage</u>	Real-time account-to-account (A2A) payments represent a core strategic shift by eliminating reliance on costly card networks, a primary driver for European digital payments sovereignty. Initiatives like EPI's Wero and the rapid adoption of virtual cards (VCNs) in the UK fuel this transition, embedding payments directly and simplifying customer/merchant journeys

<p><b>API as a revenue generator</b></p>	<p>Emirates NBD's <u>APISouq developer portal</u>; <u>J.P. Morgan, Deutsche Bank</u> and <u>HSEC's data monetization initiatives</u></p>	<p>Transforms APIs from free utilities into revenue-generating assets by allowing partners to embed accounts and payments, monetizing the core infrastructure for embedded finance</p>
<p><b>Regulatory frameworks for open finance</b></p>	<p>Saudi Arabia's <u>SAMA Open Banking Framework</u>; <u>UAE's Open Finance Regulation</u></p>	<p>Standardizes secure data sharing and payment initiation, accelerating the development of embedded use cases in retail, mobility and other ecosystems</p>

**Regulatory and market momentum:**

- **Open banking as the foundation:** PSD2 and subsequent open finance initiatives have laid the groundwork for embedded finance by mandating secure data sharing and standardized APIs. These frameworks transformed what began as compliance into the technical and strategic foundation for new, real-time financial ecosystems.
- **Security and resilience as accelerators:** The EU's DORA regulation reinforces this shift by requiring transparent, resilient and secure data infrastructures, compelling banks to modernize their core systems to safely support third-party integrations and cloud-based partnerships.
- **From compliance to opportunity:** In the UK, the Open Banking regime and Consumer Duty regulation are turning regulatory obligations into competitive advantage. Across

the Middle East, government-led open finance initiatives in Saudi Arabia and the UAE are driving rapid modernization and fueling the growth of API-driven ecosystems.

**Strategic implication:**

For banks, embedded finance is moving beyond experimentation to a core strategic capability. The challenge lies in integrating services seamlessly into partners' ecosystems without diluting the bank's brand or control over the customer experience. Institutions must evolve from product-centric providers to agile technology partners, building API-driven platforms and establishing partnerships that unlock new revenue streams, extend reach and position the bank as an indispensable component of the digital economy.

**Trend four**



## **Programmable digital assets and tokenization**

Programmable digital assets and tokenization are reshaping the global financial system, laying the foundation for the next generation of money and assets. This trend enables the creation of programmable, instantly settled stablecoins and tokenized securities. While regulatory complexity and building customer trust remain key challenges, the potential impact is immense: tokenized assets can unlock new liquidity, drive innovation and speed up settlement across global markets.

## Manifestation in the market:

Initiative	EMEA examples	Impact
<b>Pioneering tokenization platforms</b>	<u>Deutsche Bank's DAMA 2 project on public blockchains with finaXAI partnership</u>	Creates a next-gen platform for tokenized assets, enabling more efficient fund management and asset servicing with a focus on regulatory alignment
<b>Strategic digital asset services</b>	<u>Citi's Token Services initiative and JPMorgan Chase's patents</u>	Establishes institutional-grade digital asset solutions for cross-border transactions and builds future-proof infrastructure for digital value exchange, including satellite-based payments
<b>Institutional adoption networks</b>	<u>Goldman Sachs joining the Canton Network for regulated financial assets</u>	Fosters institutional collaboration on blockchain to ensure privacy, interoperability and mainstream adoption of tokenized assets
<b>Programmable money in core offerings</b>	<u>HSBC's tokenized deposit services; <a href="https://www.business.hsbc.com/en-gb/insights/innovation/asset-tokenisation-in-the-quantum-age">https://www.business.hsbc.com/en-gb/insights/innovation/asset-tokenisation-in-the-quantum-age</a></u>	Integrates programmable money and assets into core banking services, creating new liquidity pools and enabling faster, more efficient settlement for various asset classes

<p><b>Wholesale CBDC rails</b></p>	<p>Project mBridge's MVP with the UAE and Saudi Arabia</p>	<p>Establishes a system for instant cross-border wholesale Central Bank Digital Currency (wCBDC) settlement, creating a new digital-first rail for international trade. This is strongly supported by the FCA's ambition to position the UK as a global digital finance hub, promoting both an official digital pound (CBDC) and the regulation of stablecoins as a core means of payment</p>
<p><b>Strategic acquisitions</b></p>	<p><u>Stripe's acquisition of Bridge (\$1.1B) and Coinbase's acquisition of Deribit (\$2.9B)</u></p>	<p>Signals massive institutional investment and confidence in stablecoin infrastructure, which will directly impact the availability and reliability of programmable digital assets for banks to leverage</p>

**Regulatory and market momentum:**

- **Clear frameworks enabling legitimacy:** Regulation is catching up with innovation, turning digital assets into a regulated reality. The EU's Markets in Crypto-Assets (MiCA) framework and DLT Pilot Regime establish a legal foundation for stablecoins and tokenized securities,

compelling banks to treat digital assets as a strategic — not experimental — priority.

- **Regulatory sandboxes accelerating adoption:** In the UK, the Digital Securities Sandbox (DSS) and forthcoming stablecoin regime create a pragmatic pathway for testing issuance and settlement of tokenized assets within a supervised environment, bridging the gap between pilots and production.
- **National strategies shaping infrastructure:** Across the Middle East, top-down initiatives such as Saudi Arabia's and the UAE's digital asset frameworks — including participation in Project mBridge — are driving banks to build compliant, in-country infrastructure for the next generation of money.

**Strategic implication:**

Programmable digital assets and tokenization are a strategic imperative for owning the next generation of financial infrastructure. The opportunity is to turn regulatory clarity into a competitive edge. Future revenue lies not in traditional intermediation, but in becoming the trusted issuer of tokenized deposits and provider of instant, frictionless settlement rails. The greater risk now is inaction, ceding this foundational layer to new players at far higher cost than investing to lead in the digital asset economy.



## Hyper-personalization at scale

Hyper-personalization is moving banking beyond basic segmentation to true one-to-one relationships. With AI and unified data platforms, banks can deliver tailored products and real-time advice while partnering across ecosystems to offer complementary non-financial services. By anticipating customer needs more precisely, they can build loyalty and long-term value. The biggest barrier remains fragmented legacy data — a challenge banks are now addressing through major modernization investments.

### Manifestation in the market:

Initiative	EMEA examples	Impact
<b>AI for proactive wealth advisory</b>	<u>UBS's STAAT proprietary AI platform</u>	Analyzes client data to surface key opportunities for wealth management advisors, providing a foundation for highly personalized advice
<b>Digital journeys and personalized engagement</b>	<u>BNP Paribas' acceleration of investments in mobile apps and digital journeys;</u> <u>Fintilect's AI-based personalization platform</u>	Targets 700,000 annual digital acquisitions and aims to multiply digital sales by 10; enables retail banks to customize product offers and customer journeys

<p><b>AI-driven personalization platforms</b></p>	<p><u>NatWest's AWS + Accenture program</u>; <u>BBVA's new app with an AI finance coach</u>; <u>ING's refocused AI strategy</u></p>	<p>Helps NatWest "anticipate and respond to customer needs faster" and deliver personalized services at scale; provides a proactive AI assistant to help customers manage accounts and get financial help; shifts ING's AI from experiments to production use cases with measurable customer value</p>
<p><b>Real-time customer experience</b></p>	<p><u>HSBC's use of GenAI for service agents and AI-assisted credit analysis</u>; <u>Mashreq's Neo app</u></p>	<p>Speeds up responses, tailors experiences and leads to a +50% click-through rate (CTR) and +16% debit card activation from personalized campaigns</p>
<p><b>AI-powered digital lending</b></p>	<p><u>FAB's acceleration of digital lending with AI decisioning</u></p>	<p>Enables real-time, context-aware offers within credit workflows</p>
<p><b>Monetizing non-banking ecosystems</b></p>	<p><u>BNP Paribas' provision of non-financial services (e.g., real estate, specialized insurance advice) across its European retail divisions</u>; <u>UBS's Circle One platform leveraging its Global Expert Network (on art, philanthropy, etc.)</u></p>	<p>Drives loyalty and lifetime value by embedding the bank into non-financial "life experiences." This demonstrates the successful monetization of the bank's distribution network and data insights through ecosystem partnership APIs</p>

### **Regulatory and market momentum:**

- **Privacy and transparency as foundations:** Regulations such as the General Data Protection Regulation (GDPR) and regional data protection laws compel banks to manage customer data with explicit consent, transparency and precision. This creates the foundation for ethical, data-driven personalization at scale.
- **AI governance driving accountability:** The EU AI Act introduces a risk-based framework requiring strict data governance, algorithmic transparency and human oversight — ensuring personalization systems remain explainable, auditable and compliant.
- **Trust as a competitive advantage:** In the UK, the Consumer Duty regulation links personalization directly to customer outcomes, turning responsible data use into a measure of business success. Similarly, national frameworks in Saudi Arabia and the UAE mandate data localization and privacy-by-design, pushing banks to modernize their architecture while reinforcing customer trust.

### **Strategic implication:**

For banks, hyper-personalization is now a critical driver of customer relevance and growth. The main challenge is breaking down legacy data silos, enabling real-time decisions and embedding data privacy and ethical AI into day-to-day operations. Banks that succeed can anticipate individual customer needs, deliver tailored experiences at scale, and turn regulations like GDPR and the UK's Consumer Duty into opportunities to build trust. The payoff: a more engaged, loyal customer base and measurable gains in lifetime value.

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