



The AI-Powered Banking Shift



Artificial Intelligence as a new technological infrastructure

The emergence of a new general-purpose technology

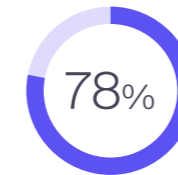
Artificial intelligence is ceasing to be just another innovation on the technological agenda and is beginning to behave as a general-purpose technology, that is, **as an infrastructure on which economic activity is reorganized**. This change implies moving from understanding AI as a tool applicable to specific cases, to recognizing it as a transversal competence that redefines the way organizations operate.

Technologies such as electricity, computing or the internet did not transform economies because of their initial applications, but because of **their ability to be progressively integrated into multiple sectors and become structural layers of the production system**. In each of these cases, the real impact occurred when they were no longer perceived as isolated innovations and became part of the basic functioning of companies.

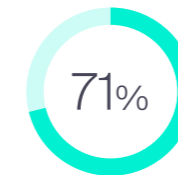
AI follows that same trajectory. Unlike other technologies, it is not limited to a specific domain, but can be applied in any context where data, decisions, or processes exist. This includes practically all economic activity. Its value, therefore, does not lie in individual practices or uses, but in its **ability to amplify functions such as analyzing, predicting, deciding and executing, acting as a transversal multiplier of competencies**.

Popularization of AI in organizations

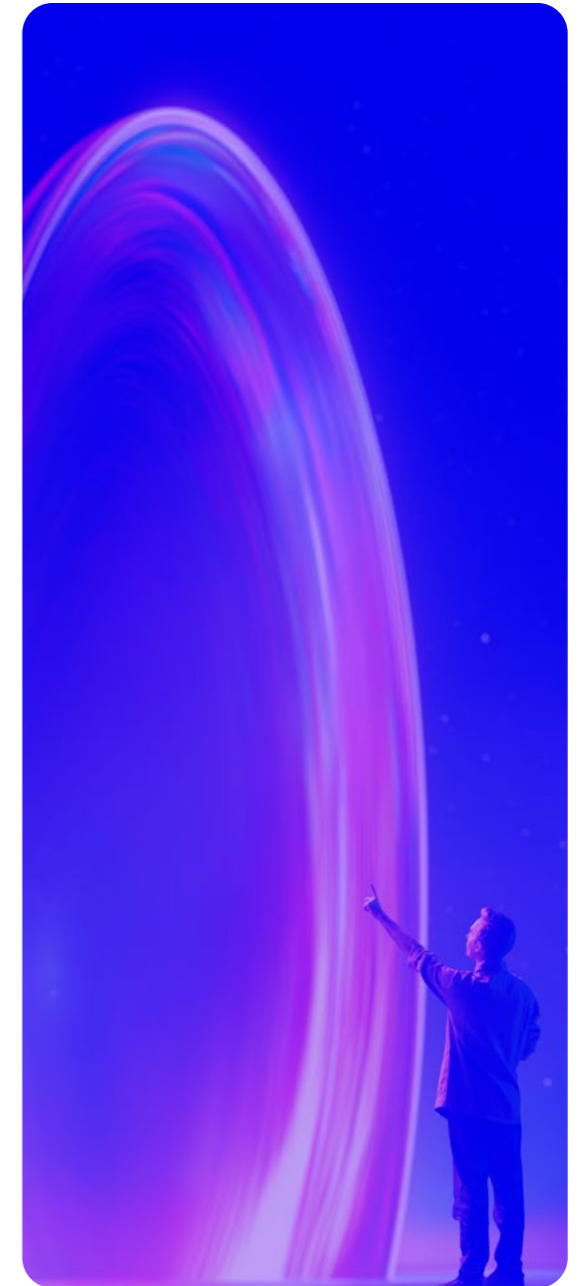
Penetration has risen from 20% in 2017 **to 78%**, but **only 7% have achieved full integration**



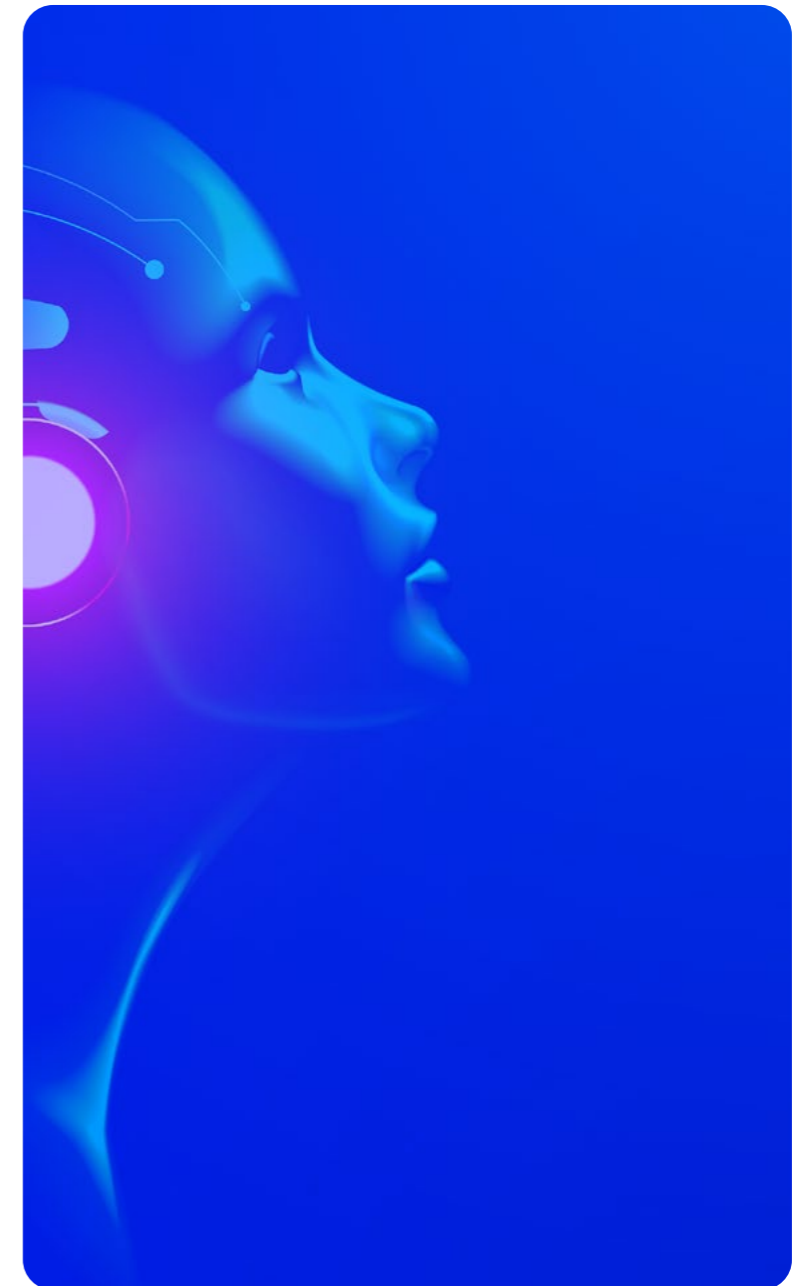
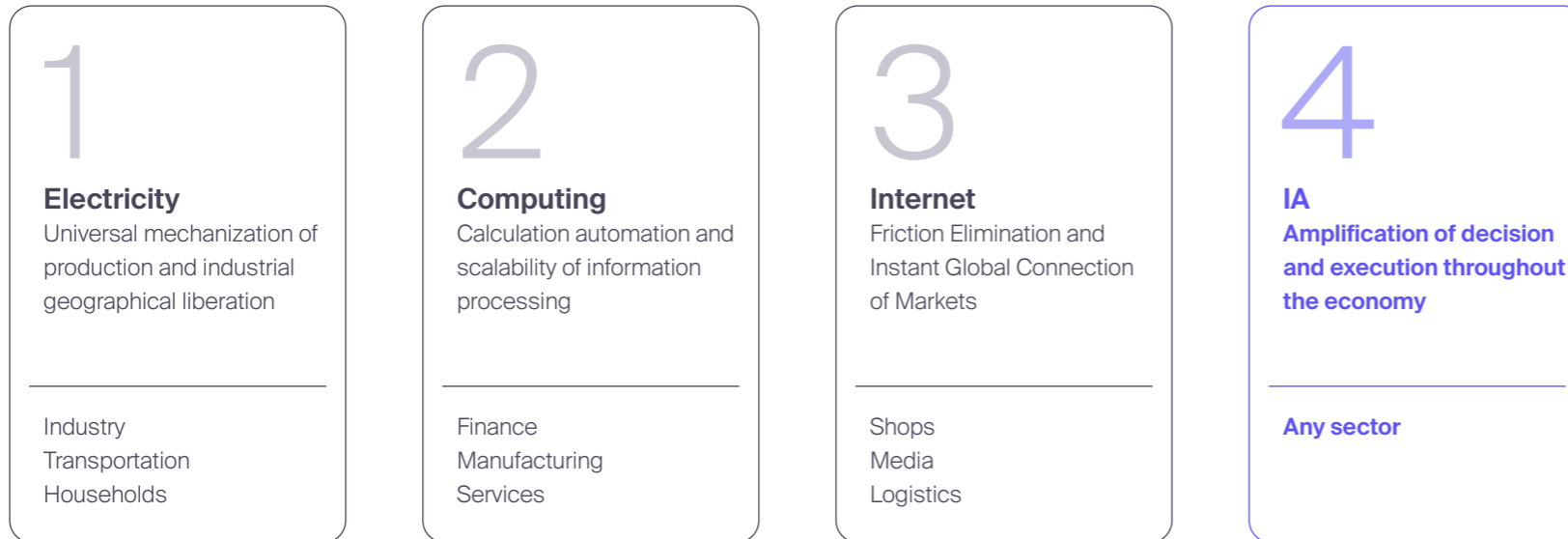
By 2025, **71% of entities have used Gen AI** for at least one function



In just a few years, AI has gone from being confined to specialized environments to being integrated into business operations at scale, becoming part of critical functions in organizations across industries. The fact that **78% of organizations already use it in at least one business function reflects not only its adoption**, but its progressive standardization as an operational component.



AI follows the same path as other gpts



The joint and cumulative impact of all technological waves on the economy between 1900 and 2018 follows a pattern: **more technology produced more wealth without structurally destroying jobs**

x9

GDP per capita multiplied between 1900 and 2018 in Europe and the US

≈ 0

Net trend in unemployment over the entire period

1.1%

Annual employment growth in Spain, the same as the labour force

The AI paradox: diffusion is accelerating, value is not

Only **8% of organizations have managed to scale AI beyond pilots or marginal use cases** to generate real economic impact. **The remaining 92% use AI, but have not turned it into a competitive advantage.** This gap between adoption and transformation is the defining paradox of the current moment.

This responds, to a large extent, to the level of depth with which AI is being integrated. **The use cases that have been adopted the fastest are also the least transformational.** While they improve individual productivity, reduce operating times, and generate clear efficiencies, their impact tends to be incremental and dispersed.

The true potential of AI emerges in a different type of applications, all **those that reconfigure end-to-end processes, intervene in critical decisions, and alter the pattern** under which work flows within the organization. These applications are the ones that directly impact the main value levers, but they are also significantly more complex to implement.

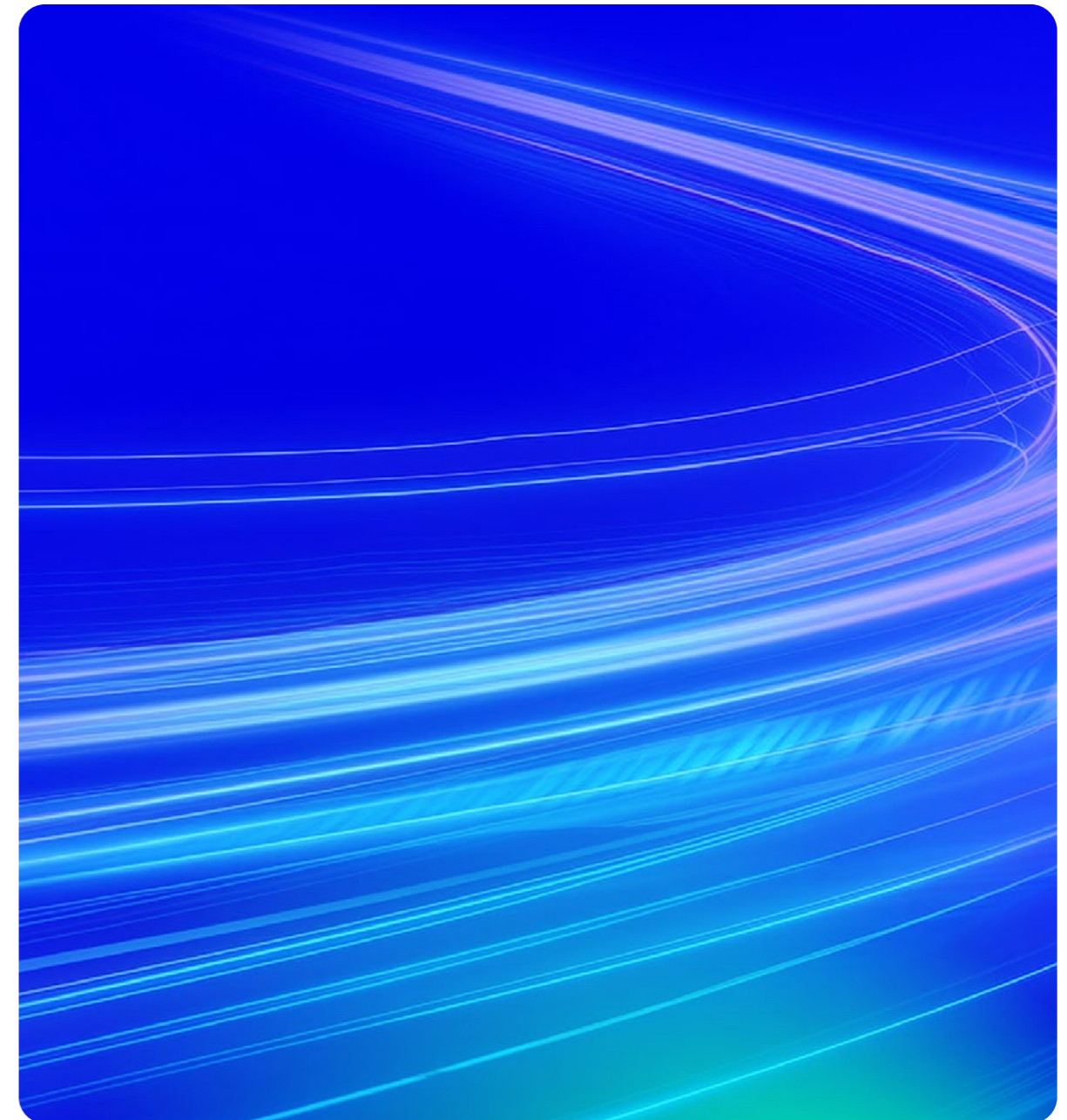
They require **redesigning the technological architecture, structuring data in a coherent way, establishing new governance models and coordinating multiple functions** under an integrated logic.

As a result, a growing gap between adoption and change is consolidating. **Many organizations use AI, but few have managed to integrate it into the core of their operating model.** Technology is present, but not fully incorporated into the way key decisions are made and processes are executed.

The financial system is being divided into:

- Institutions that integrate AI at their core and learn at scale
- Institutions that adopt AI but remain structurally unchanged

This gap will determine who captures the value, who controls the customer, and who becomes invisible in the system.



The phenomenon that defines the current moment



Almost 80% of companies already use AI in at least one function, yet **80% of companies do not report significant value creation through its adoption**

AI improves innovation (64%) and satisfaction, but **its impact on profitability (36%), revenue (33%) or market share (25%) is lower**

Financial services in the age of AI

Financial services are not adopting AI – they are converging with it

Not all industries are equally susceptible to the transformative impact of AI. The depth of disruption in an industry ultimately depends on how much of its core business is information processing, **how structured and abundant its data is, and how much of its value chain rests on tasks that AI can execute with cognitive advantage** over humans.

This affinity explains why AI's fit in the financial sector is particularly deep. Banking is, at its core, an information industry. **Its most valuable assets are transaction, behavior, risk, customer, and market data.** Its main product is intelligent risk management and efficient capital allocation.

Its competitive advantages have rested on the ability to process more information with greater accuracy and speed than competitors. **Artificial intelligence is literally a machine adapted to achieve exactly that.**

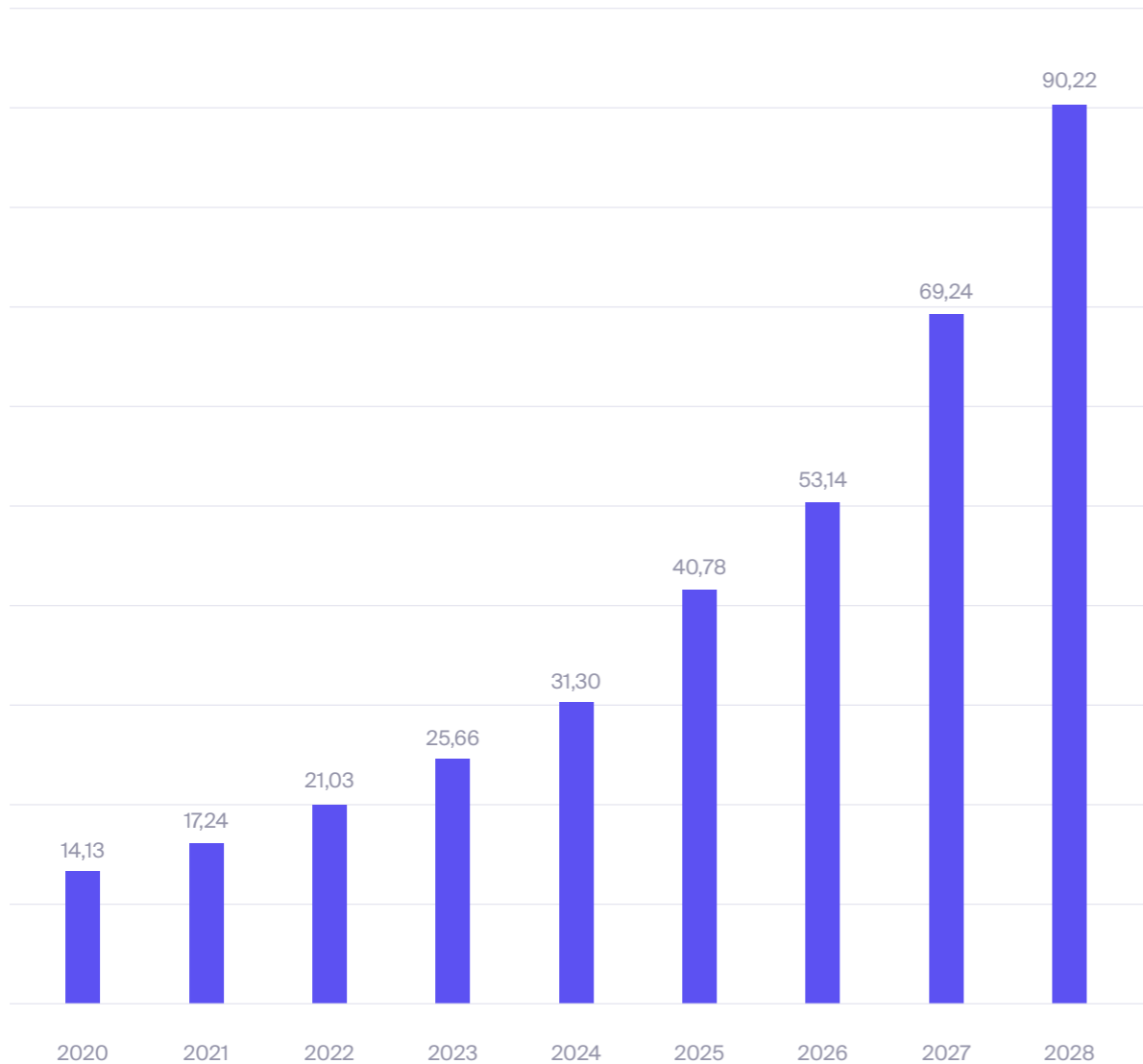
This convergence also helps to understand the speed of its adoption. **More than 60% of financial institutions already integrate AI into critical functions,** and investment continues to grow steadily.

Institutions that effectively incorporate these **competencies into the market operate with a more accurate reading of risk, personalization at scale, and superior decision speed.**

In this context, the differential is not limited to operational efficiency, but **begins to directly affect the relevance of organizations.** The change, however, is not only quantitative. It is not a question of doing faster what the sector was already doing, but of transforming the way in which decisions are made.



Estimated AI and Gen AI spending by the banking sector globally between 2020 and 2028 (in billions of dollars)



Why banking and AI are converging,

Volume and richness of transactional data

Millions of transactions with signals of behavior, risk, and trading opportunity

Nature of decisions

Repeatable, data-driven decisions with measurable consequences

Demand for personalization at scale

Customers expect relevant proposals at the right time

and why you can't NOT

Need for structural efficiency

Bank margins are compressed by types, competition, and cost of compliance

AI-native fintechs and BigTechs competition

New players and platforms operate without technological legacy and with AI at the core from the start

Regulatory and compliance pressure

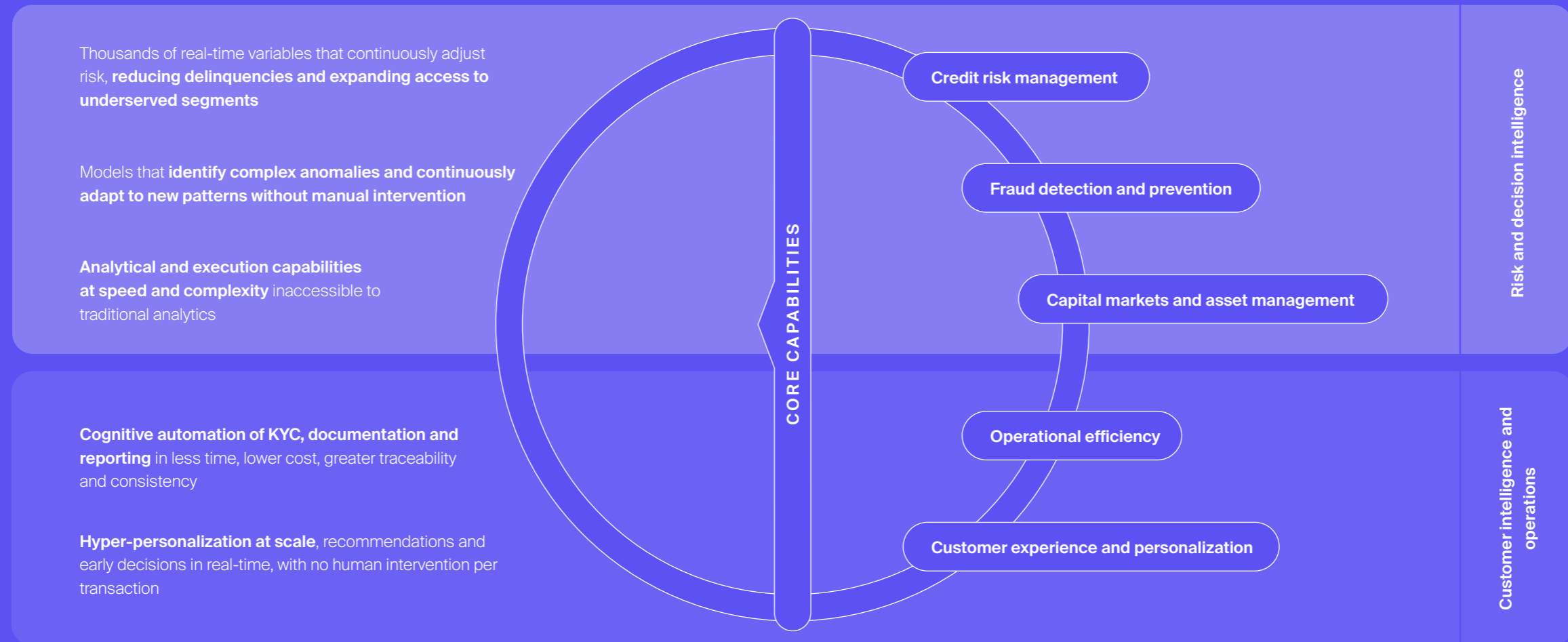
Regulations and the evolution of open banking require data infrastructures and governance



The adoption of AI in the financial sector responds to a **structural affinity between the nature of the banking business and the capabilities of AI, combined with competitive pressure** that makes inaction unfeasible

From automation to intelligent financial services

To understand the scope of this transformation, it is necessary to examine how AI redefines each of the competencies of the banking business:



The advantage is not in having better models, but in **controlling the system where decisions are made and continuously improved**.
Isolated intelligence generates efficiency. Built-in intelligence breeds mastery.

AI can rewrite the economics of banking

Unlike other waves of technology, AI **acts directly on the capabilities that determine how the bank generates revenue, absorbs costs, and turns operational complexity into profitability.** It is not, therefore, a question of optimizing parts of the system, but of altering the principle under which the system creates value.

This redesign is especially relevant in an industry conditioned by labor-intensive structures, fragmented processes, and increasing pressure on compliance, service, and decision-making costs. **AI introduces a turning point by making it possible to reduce the unit cost of operating without reducing the level of intelligence of the model.**

As intelligence is integrated end-to-end, a growing portion of work is no longer reliant on manual intervention, internal scales, and legacy architectures. **The result is a model that operates with less friction, lower cost per process, and a greater ability to absorb volume** without the need to replicate structure.

This change has a direct impact on the margin:

- On the one hand, **AI enables increased revenue** through greater business accuracy, personalization at scale, and a greater ability to capture value per customer.
- On the other hand, **it improves risk-adjusted returns** by refining key decisions such as credit, pricing or capital allocation.

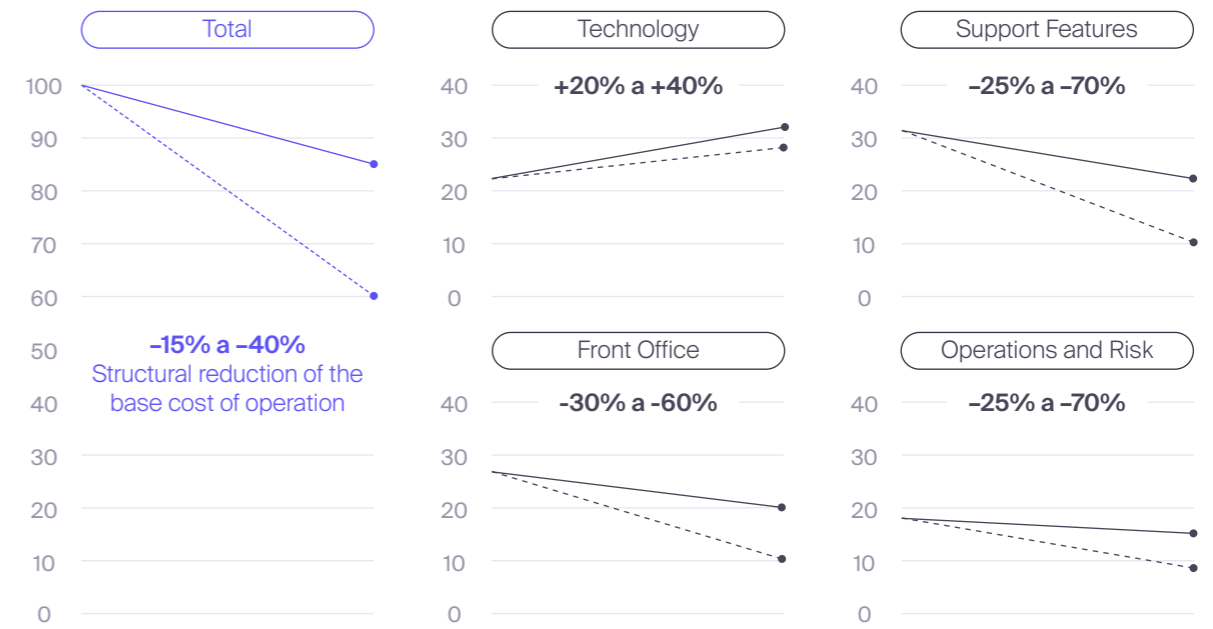
However, true economic displacement occurs when **these effects coincide with a structural reduction in the cost of serving, deciding, controlling, and executing.**

The potential for improvement in financial performance is, therefore, of a magnitude that exceeds the incremental. **Projections suggest that generative AI represents an opportunity of between 200 and 340 billion dollars per year in banking, equivalent to 9-15% of its operating profits.** The most ambitious suggest that it will completely reconfigure the distribution of profitability among the players in the sector. What does not admit of discussion is that the impact will be material, concentrated in those who act with strategic and permanent decision.

AI rewrites the economics of banking

200–340 billions
Annual opportunity for global banking

Equivalent to **9-15% of the sector's operating profits**, the highest value potential of AI in any industry



The only area where costs rise is technology, i.e. **the investment needed to unlock reductions elsewhere**

Is it AI adoption or AI-First mentality?

From isolated use cases to institutional transformation

There is a strategic trap that organizations that recognize the transformative potential of AI but approach it with the logic of mainstream technology adoption consistently fall into.

This might be called the illusion of integration: the belief that adding AI capabilities to existing infrastructure, processes, and culture is equivalent, in terms of strategic outcome, **to building an organization whose fundamental design is conceived from and for artificial intelligence.**

An organization that integrates AI places intelligent models in the interstices of its existing architecture, automating discrete process steps that remain in their original pattern.

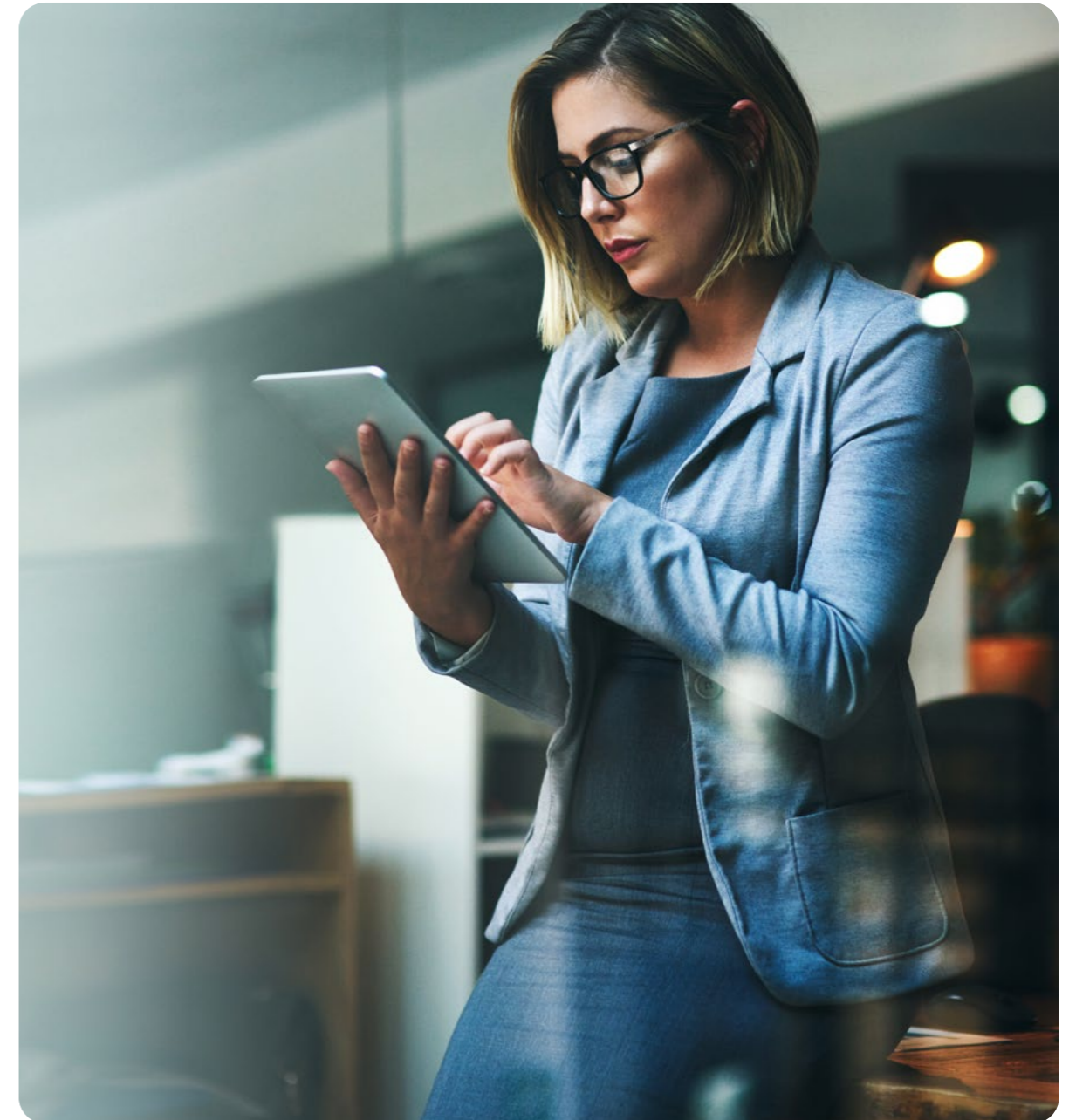
The result is **marginal efficiency**, where costs are reduced, processes are accelerated, and experiences are slightly improved.

An AI-first bank, on the other hand, **has redesigned its fundamental architecture**, from technological, organizational to cultural, **under the assumption that AI is the central layer of operation**, not a complement to the existing layer.

Being AI-first is a **design principle that permeates every architectural decision in the organization.** Its dimensions are at least four:

- **Data as a primary strategic asset ,**
- **Technological infrastructure designed for AI,**
- **Redesigned operating models** around artificial intelligence,
- **Organizational culture oriented towards experimentation** and algorithmic learning

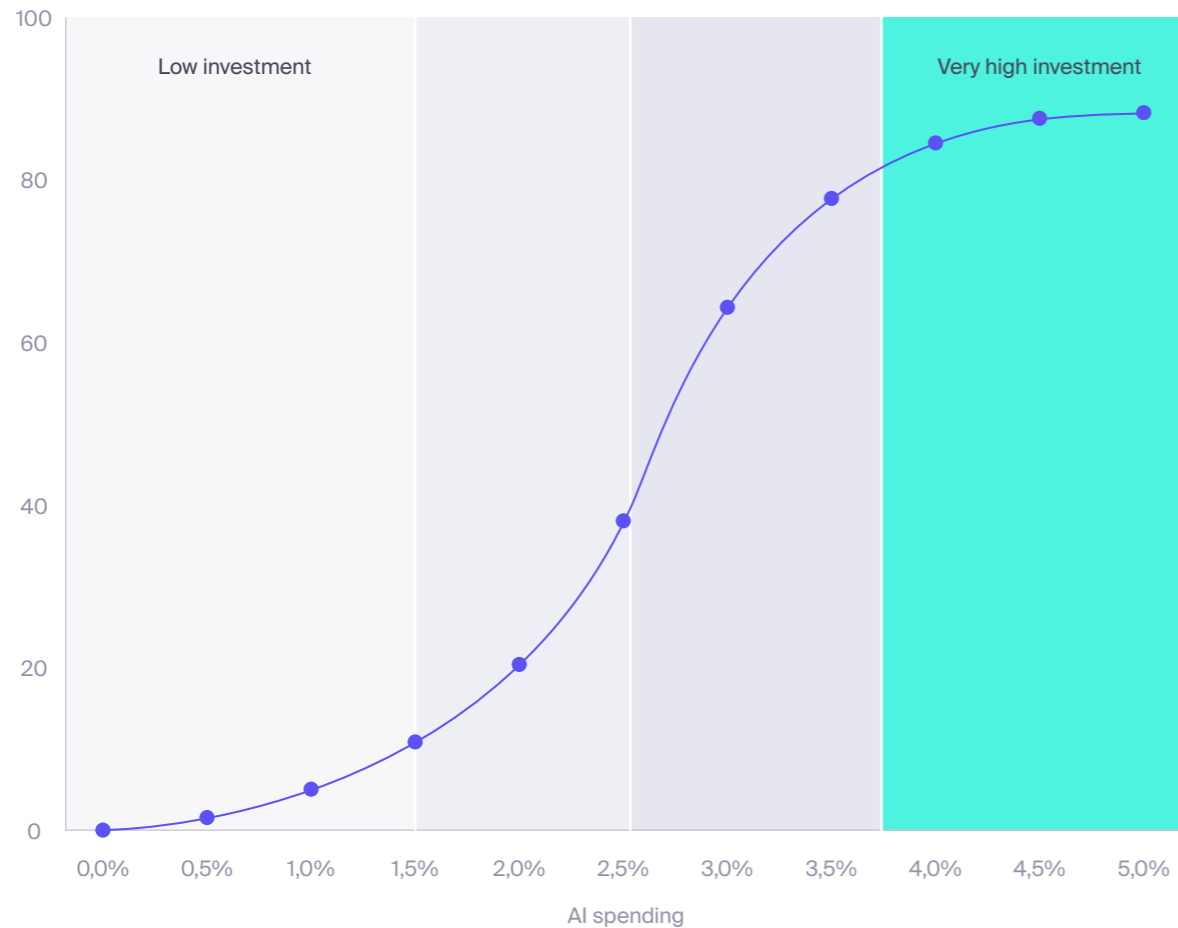
Real value emerges when the bank is no longer understood as a sum of independent functions and **begins to operate as an integrated system, designed to learn, decide and execute continuously.**



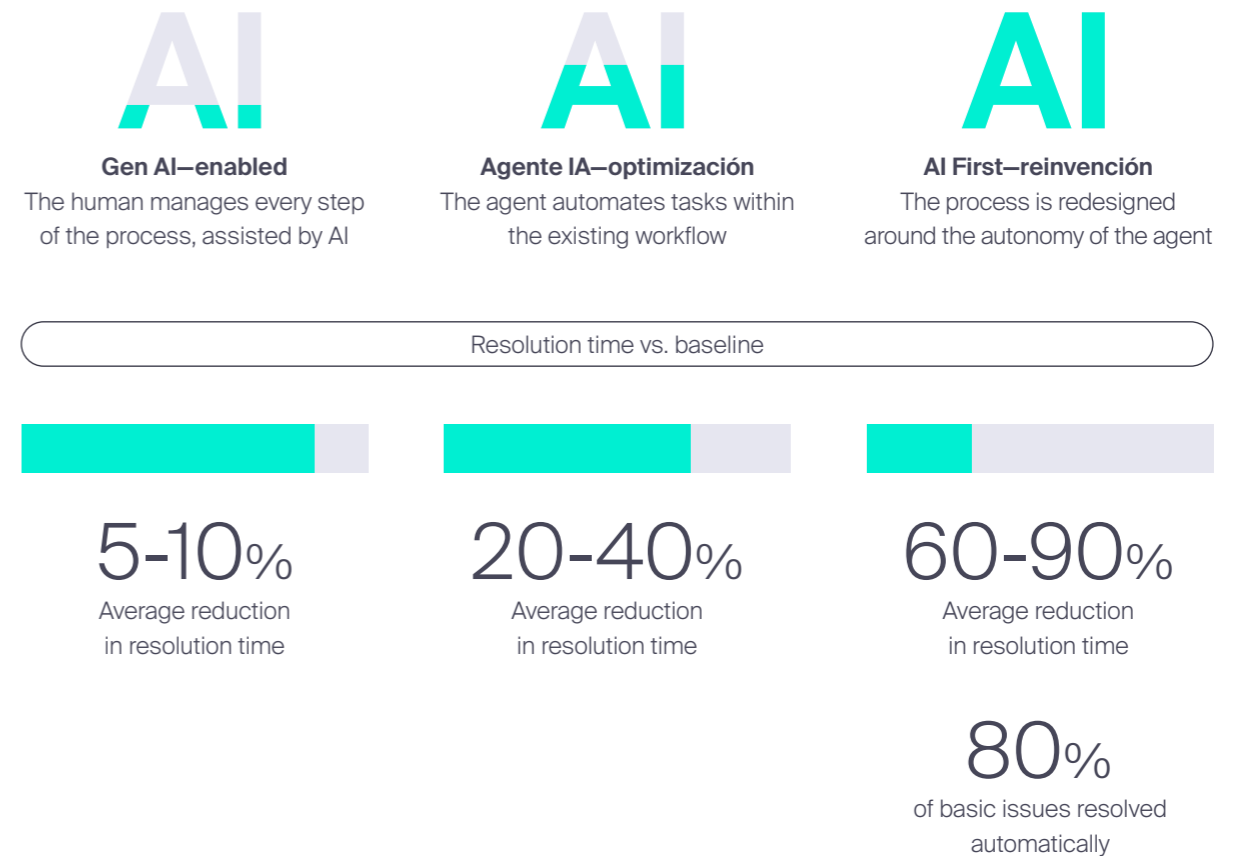
Why depth matters

Efficiency of AI based on expenditure

Efficiency gains



Below 1.5% of spending on AI, the return is almost zero. **The real jump occurs between 2.5% and 4%,** when investment exceeds the threshold of structural integration



The difference in return is due to whether the process is optimized or reinvented. That's the distinction between AI adoption and AI-first mindset

Embedding AI into the core operating model

The transition to an AI-first model must become an institutional redesign in the entire organization: it involves **dismantling a logic built around functions, hierarchies and sequential processes, and replacing it with a model designed to learn, decide and execute continuously.**

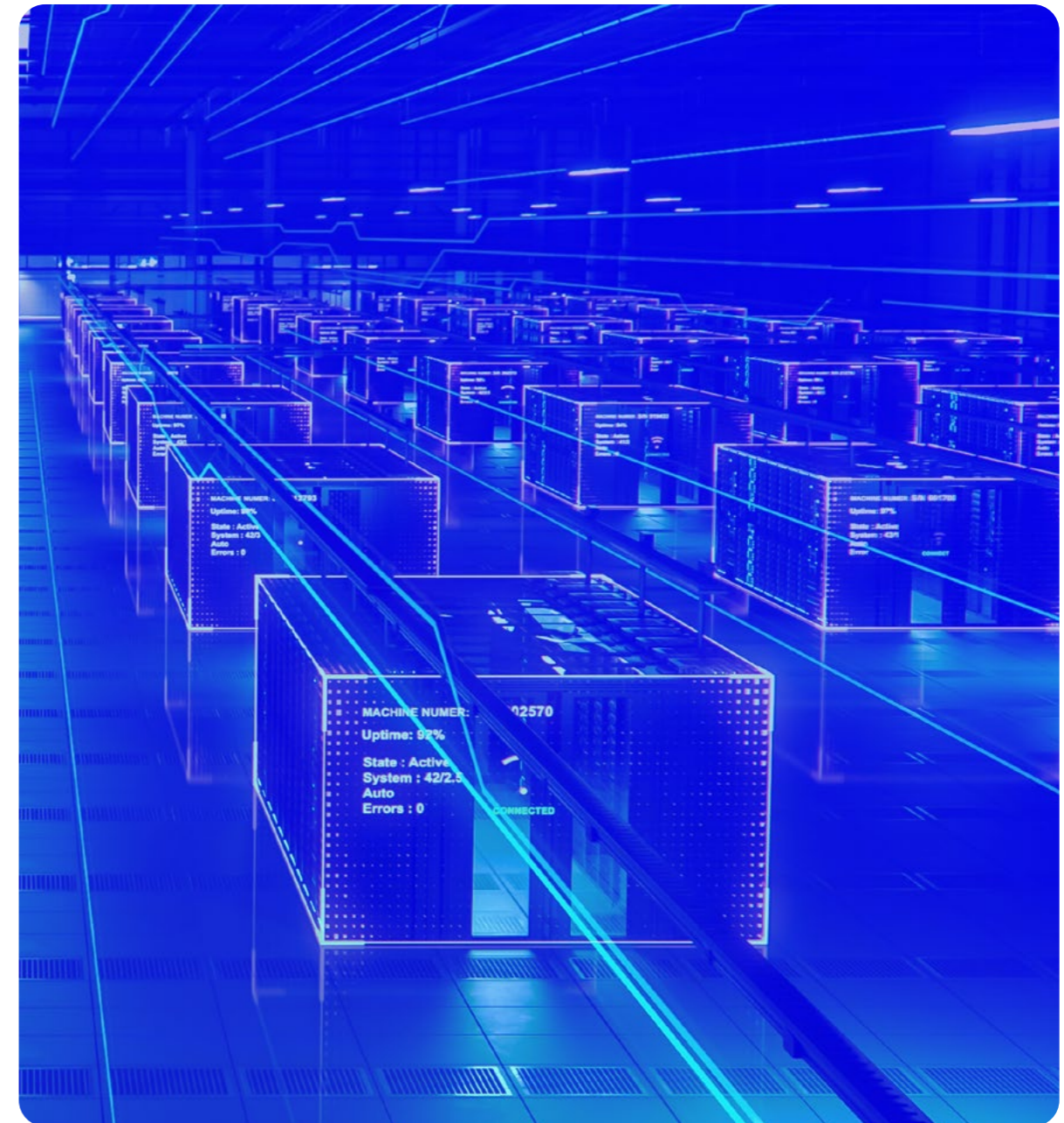
This change requires intervening in multiple barriers of the system simultaneously. First, **banking must move away from a product- and channel-centric organization to evolve toward a principle of contextual interaction.** This involves redesigning how experiences are built into dynamic systems capable of adapting in real time to the customer's context.

Secondly, it is necessary to rebuild the decisional core of the bank. Decisions are no longer one-off events encapsulated in processes and become a continuous, distributed and scalable capacity. This requires **creating a cross-cutting "decision factory," where models, data, and business logic operate in an integrated way throughout the organization.**

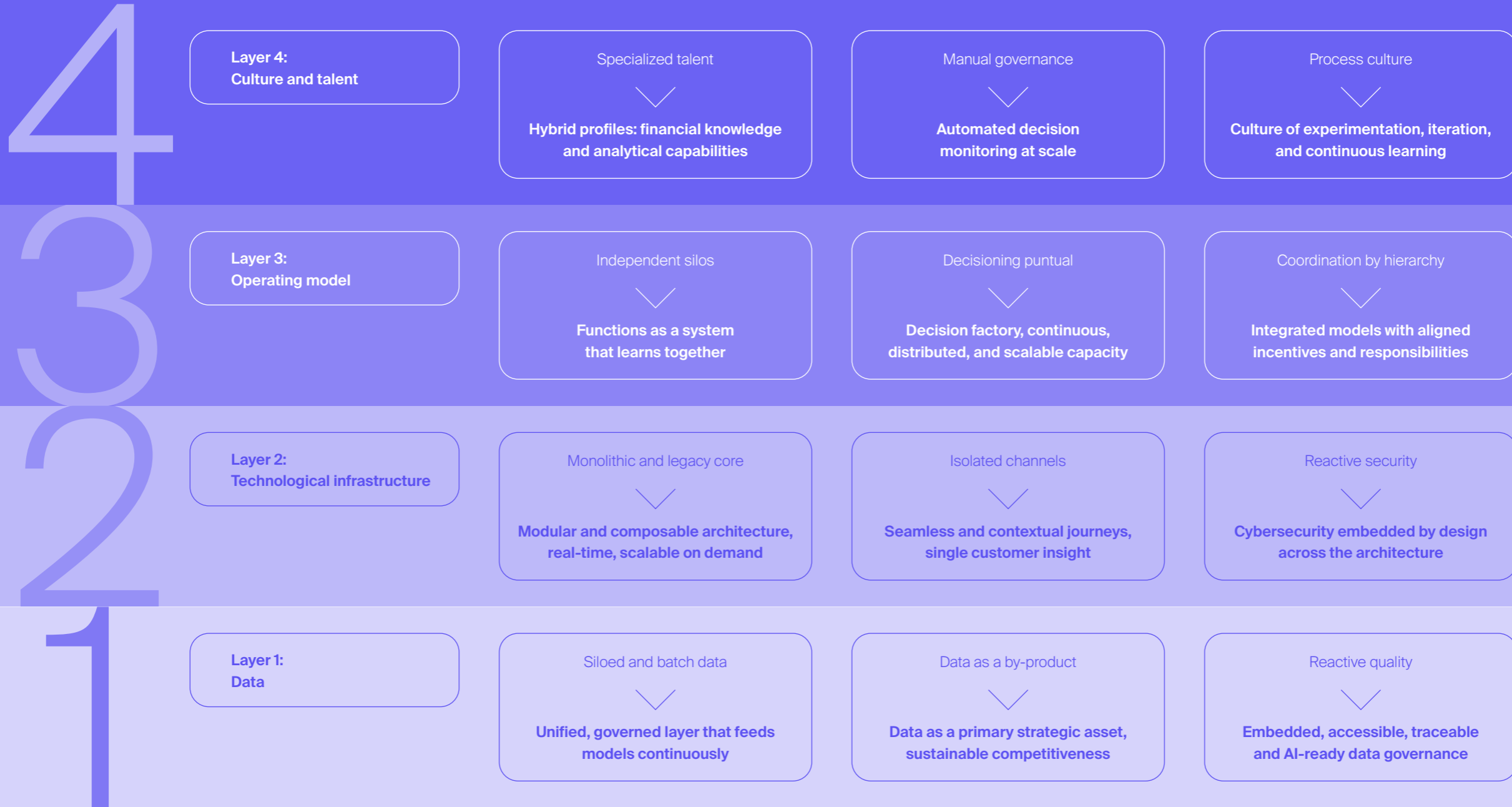
But this redesign cannot be sustained without a profound transformation of the technology and data base. **Legacy architectures, designed for stability and control, must evolve into modular, interoperable, and real-time-oriented environments.** This involves not only modernizing infrastructure, but establishing a data layer that is governed, accessible, and ready to feed models continuously.

Finally, the most complex change is organizational. **Becoming AI-first requires redesigning how the institution is coordinated,** boundaries are blurring, giving way to integrated operating models: governance must evolve to manage automated decisions at scale, talent must combine financial knowledge with analytical capabilities, and the organization must develop the discipline necessary to scale AI consistently, aligning incentives, responsibilities and execution.

The result is an institution where intelligence is distributed throughout the architecture. Where systems don't just execute instructions, they learn from every interaction. And where the competitive advantage does not come from optimizing existing processes, but from having redesigned the entire system to operate under a native logic of data and intelligence.



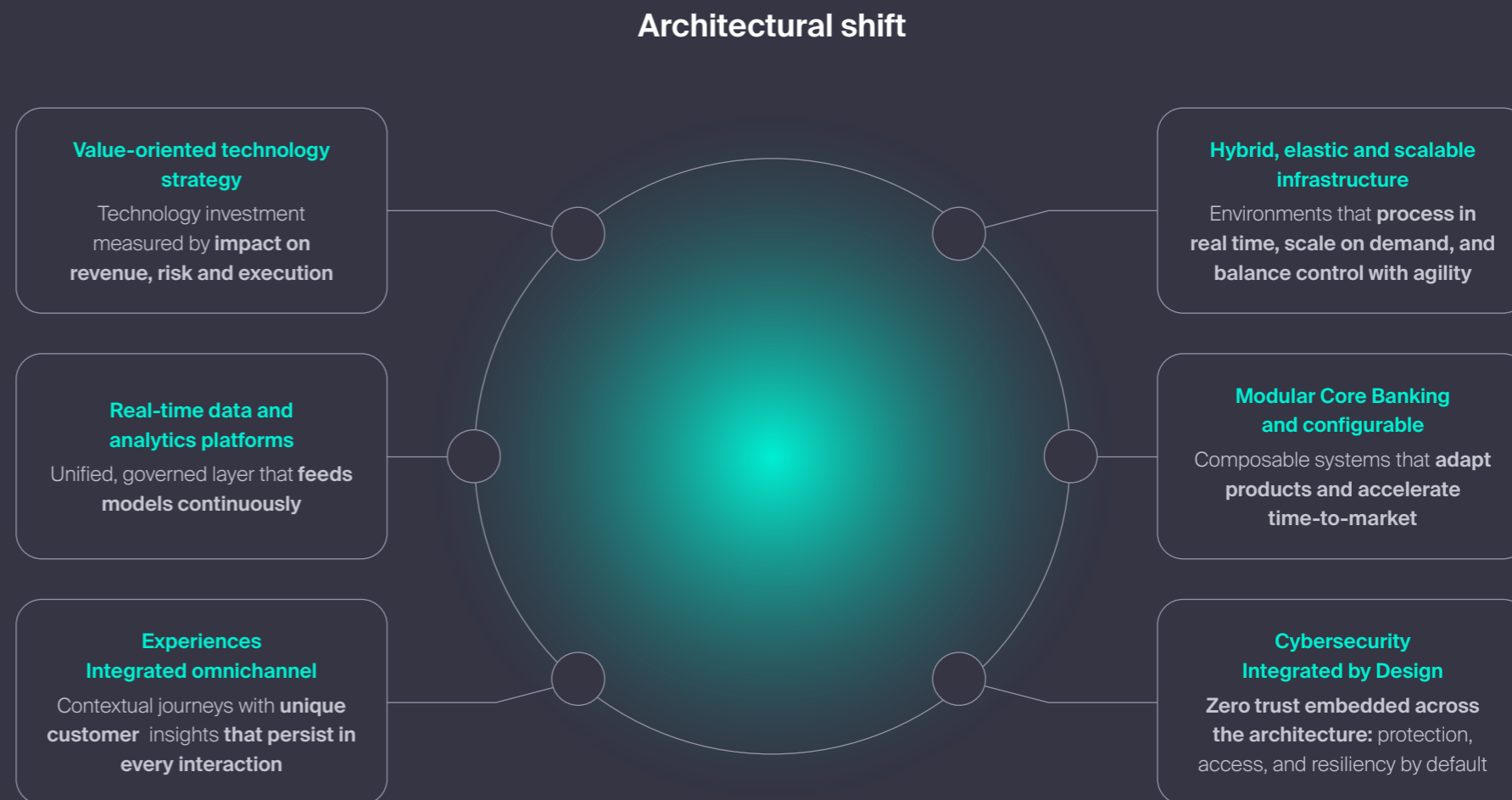
Layers of the AI-first bench



The architectural foundations of an AI-First institution

Making AI part of the institutional core places new demands on the bank's architecture. Organizations require a **technology and data foundation capable of supporting real-time decisions, personalization at scale, resilient operations, and continuous innovation competition.**

This implies reorganizing the change around **six architectural displacements:**



AI-First: from concept to execution

The bank that emerges from this transformation is not simply more efficient, but fundamentally different in how it functions as a system. The institution begins to operate as a continuous network of interconnected decisions, where each interaction feeds and readjusts the behavior of the whole. **The result is a model in which the intelligence that allows the bank to operate with unprecedented elasticity.**

This logic also redefines **the bank's position in its environment and across it, connecting functions that previously operated independently.**

In the relationship with the customer, this translates into an entity that actively accompanies financial life. Now a customer does not apply for a loan; he receives a proposal at the moment when his behavior indicates need and capacity. **Interaction is no longer organized around products and is structured around everyday decisions** such as buying, investing, saving, protecting oneself.

Internally, coordination between areas changes substantially. Risk, business, operations, and technology no longer act as sequential layers that validate or execute decisions, but as parts of a system that learns together. **Each decision becomes a learning point that improves the next cycle.**

Those that integrate models along the value chain will generate a cumulative advantage: the entity that operates the most is the one that learns the most, and the one that learns the most decides faster than its competitors.

In operations, processes that previously required multiple validations, internal transfers, and wait times are executed almost instantaneously. This **reduces times, and forces the entity to integrate as an active node within** broader ecosystems.

AI-first banking operates with speed, accuracy, and adaptability that change the rules of the competitive game: credit decisions in milliseconds, fraud detection before loss, customer management as a continuous capability, all on a structurally lower cost basis.

All this on a lighter cost basis, which frees up resources to continue investing in the intelligence layer that supports the model.

How AI-first banking works

Real-time data capture

The bank collects in real time signals generated by each interaction from all touchpoints simultaneously

Intelligent processing

The models analyze multiple variables at once, identifying patterns and risks, at large scale and speed

Autonomous or assisted decision

The system decides autonomously or assisted according to the level of risk within the defined governance limits

Execution at the right time

The action is executed on the right channel and at the right time, without friction or manual intervention, with traceability for auditing

Continuous learning

Each decision and its result feed back into each other. The entity that operates the most is the one that learns the most cycle by cycle

The transformation of the financial ecosystem

AI lowers the barriers to financial intermediation

The redesign towards AI-first models not only alters how financial institutions operate, but also redefines the environment in which they compete. **As intelligence is integrated into the core of banks, it also does so in the rest of the actors in the system**, generating a broader displacement: the reconfiguration of the entire financial ecosystem.

Historically, banking has been one of the sectors with the highest barriers to entry. Regulatory capital, built trust, physical infrastructure, and the complexity of regulatory compliance made for a competitive perimeter that was difficult to penetrate. **These barriers not only protected incumbents, but defined who could participate and under what conditions.**

AI is systematically eroding these fundamentals:

Trust no longer depends on long-term relationships or physical presence, but **can be built through personalized, high-quality digital experiences.**

In addition, **the infrastructure ceases to be a proprietary asset** and becomes **accessible under as-a-service models**, allowing new players to operate without the need to replicate the sector's historical investments.

Finally, **data scale is no longer a barrier to entry** and the advantage is to build models that learn faster with the available data.

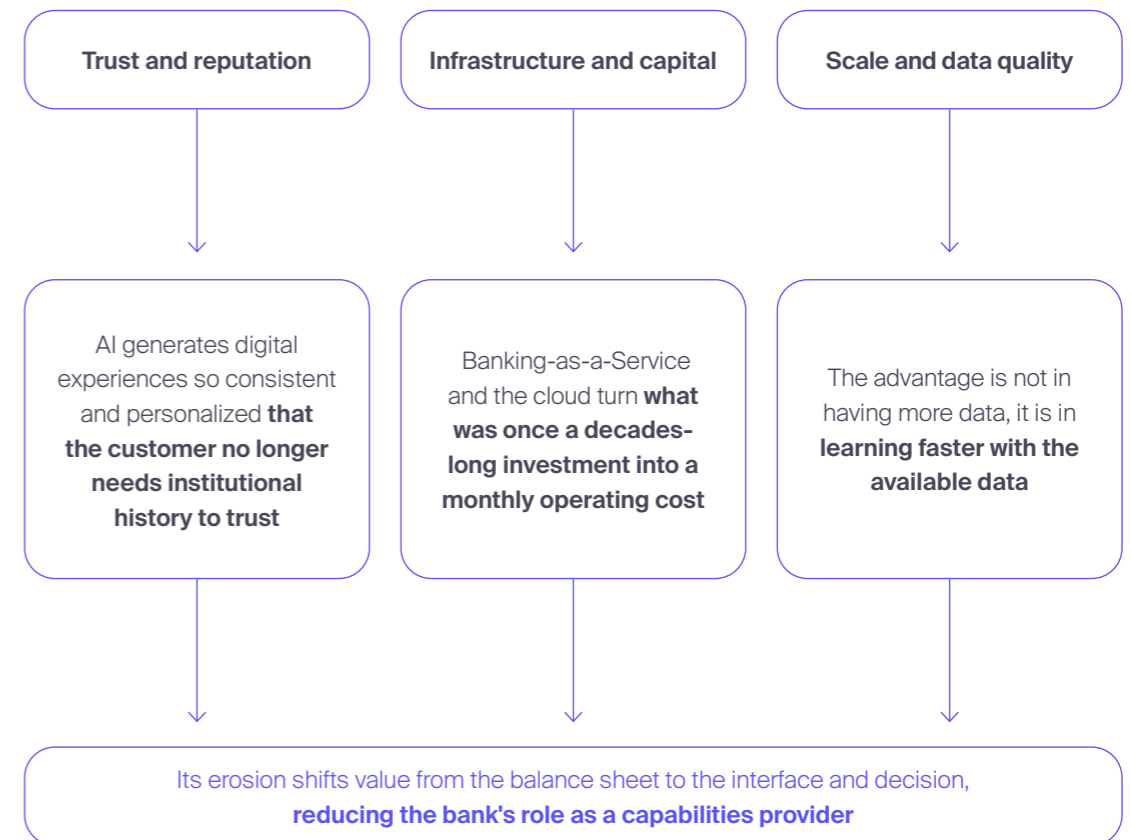
This requires architecture and talent, and both are accessible to actors that incumbents did not have on their radar, **opening the door to more agile players**, capable of competing in specific niches without the need to replicate the reach of a universal bank.

The result is an unprecedented expansion of the competitive perimeter. **New entrants can enter the financial value chain at specific points, capturing high-value segments** without taking on the full complexity of the banking model.

This entails an increased **risk for banks of being relegated to balance sheet providers** if they do not control the customer relationship or the decision layer.

The strategic question is no longer **who the traditional competitors are, but who is best positioned to operate in an environment where intelligence, not infrastructure, defines competitive advantage.**

How AI erodes historical barriers to entry in banking

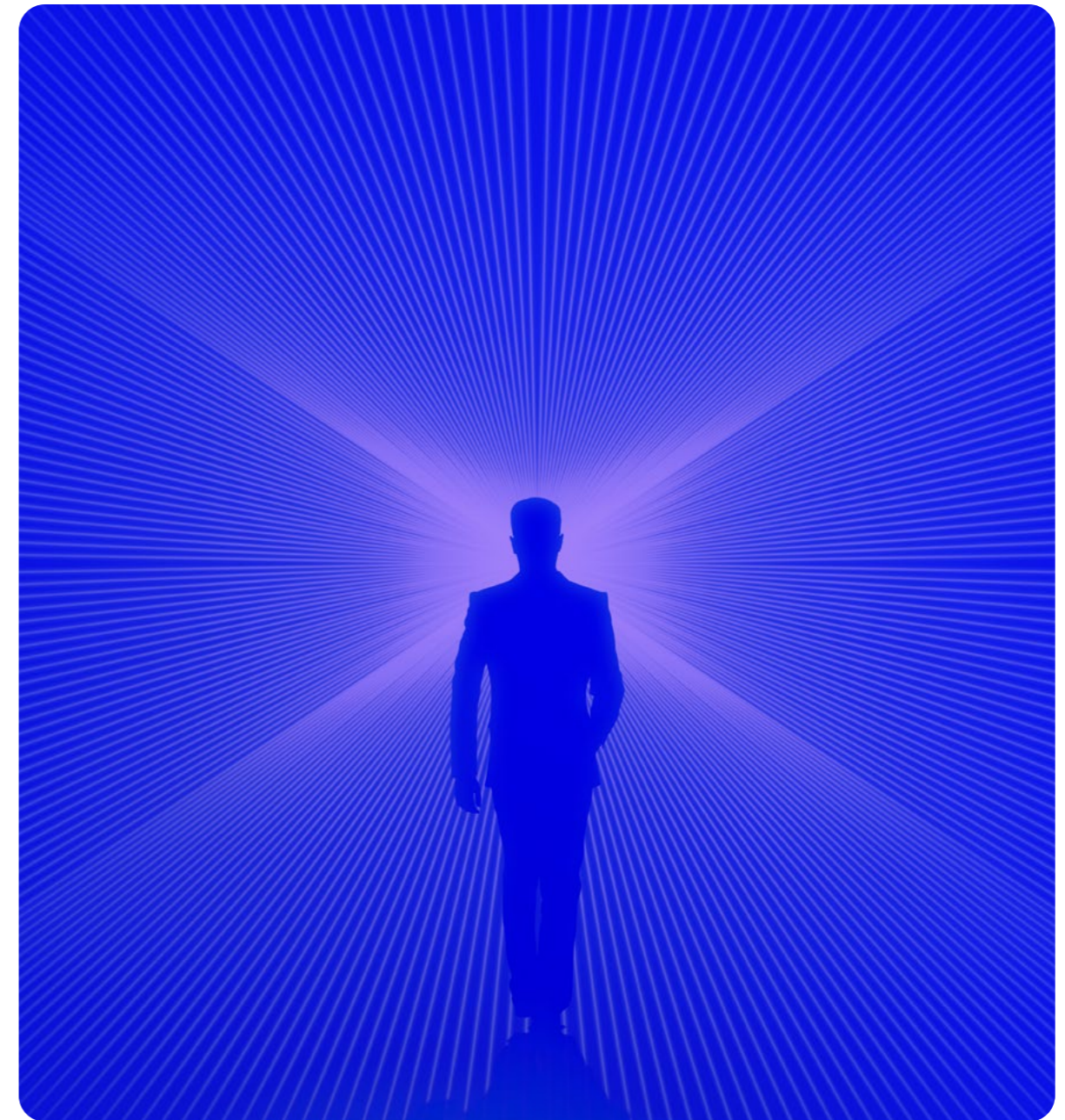


Who's entering the value chain, and what it means for those already in it

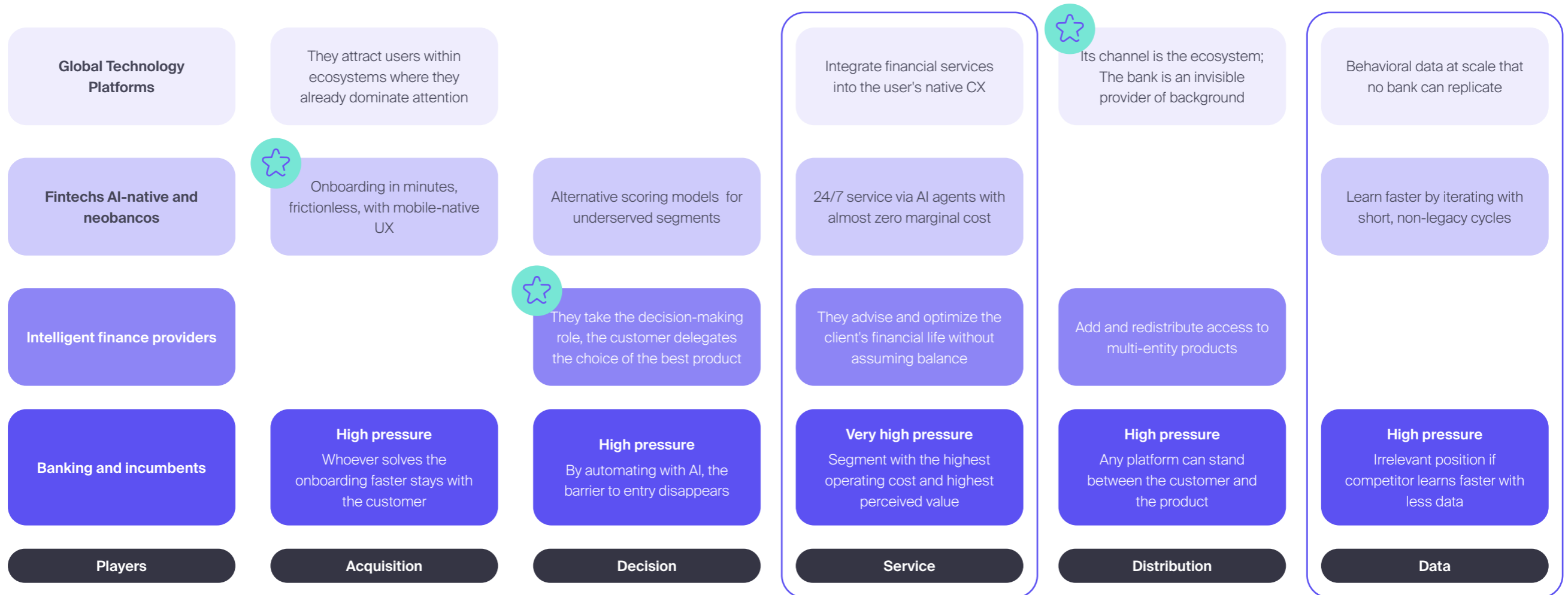
The reconfiguration of the financial ecosystem driven by artificial intelligence introduces players with radically different advantage dynamics than traditional banking. **These participants do not compete by replicating the traditional banking model, but by occupying positions where intelligence, interaction or learning generate structural advantages.**

As a result, **the control of value is no longer concentrated in a single institution and is fragmented among different actors** that dominate specific layers of the system. Institutions with less capacity to invest in data, architecture and infrastructure will be limited in their ability to compete in AI-first models and actors that fail to scale decision models throughout their operations run the risk of being trapped in low-value positions, competing on price or in segments where differentiation is limited.

The system evolves towards a structure more fragmented in capabilities, but more concentrated in value capture, where the advantage lies in mastering the layers of decision, relationship or learning. **Today, banks still maintain a relevant position in service and data, which they can not only sustain, but expand to other layers** if they manage to activate these assets through intelligence, architecture and execution capacity.



Who is entering the value chain, and where



The new balance amidst the AI transition

The new financial ecosystem is organized around a **bifurcation that separates institutions based on their ability to integrate intelligence into the core of their model.** This division is not only based on scale, market share or historical positioning, but also on decisions made about architecture, talent and investment.

At one extreme, there are the actors that have managed to build proprietary AI platforms that operate as self-reinforcing advantage engines. Not only do they use intelligence to optimize decisions, but they **have created systems capable of learning from each interaction, continuously improving and scaling that learning throughout the organization.** Every customer, every transaction, and every decision fuels a cycle that increases accuracy, reduces marginal cost, and strengthens your competitive position over time.

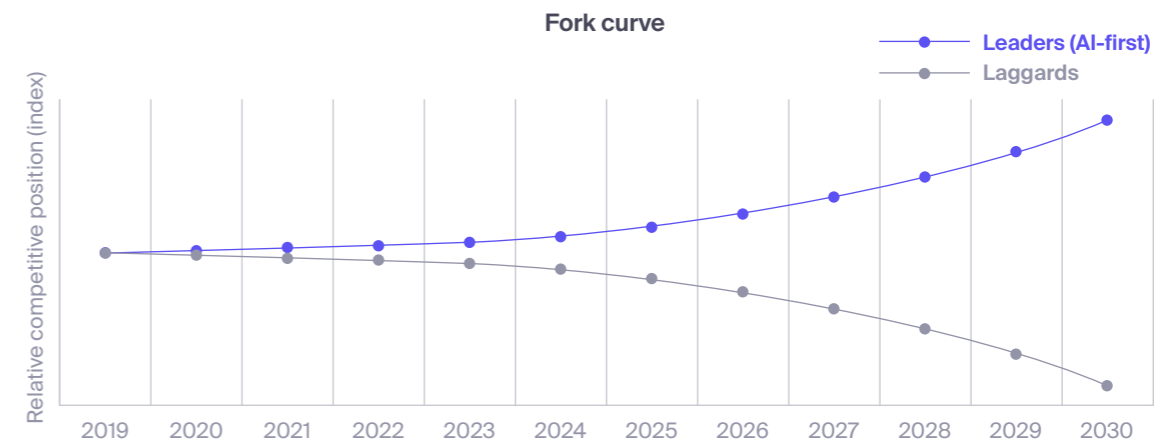
At the other extreme, there are those institutions that, although they have adopted AI technologies, have not managed to integrate them structurally. They operate with hybrid models where intelligence coexists with legacy architectures, generating friction, duplicity, and limitations in the scale of impact. As a result, **their role tends to shift towards diminishing intermediation positions, where the relationship with the customer is weakened and the pressure on costs and investment intensifies.**

This new balance is defined by **who is able to translate this technology into a sustained ability to learn and execute.** Institutions that have made early and sufficiently ambitious decisions about how to redesign their architecture, attract talent, and prioritize investment have captured an advantage that is not easily replicable in later phases.

The new equilibrium: the gap that becomes irreversible

The ecosystem is divided between those who integrate AI structurally and those who embrace it superficially.

This distinction, invisible today, determines the competitive position of the next ten years:



Trayectoria ascendente

- **Competitive Advantage**
Cumulative; Each cycle reinforces the next
- **Customer Relationship**
Proactive; anticipate, personalize, accompany
- **Marginal cost**
Decreasing Decrease; Scale without replicating structure
- **Investment capacity**
Liberated; Efficiency finances innovation

Trayectoria descendente

- **Competitive Advantage**
Eroded Pilots without structural impact
- **Customer Relationship**
Reactive; responds, but does not anticipate
- **Marginal cost**
Growing; Fixed structure without AI efficiency
- **Investment capacity**
Trapped; costs absorb the budget

The future of financial services in the AI era

From digital banking to conversational and agent-mediated banking

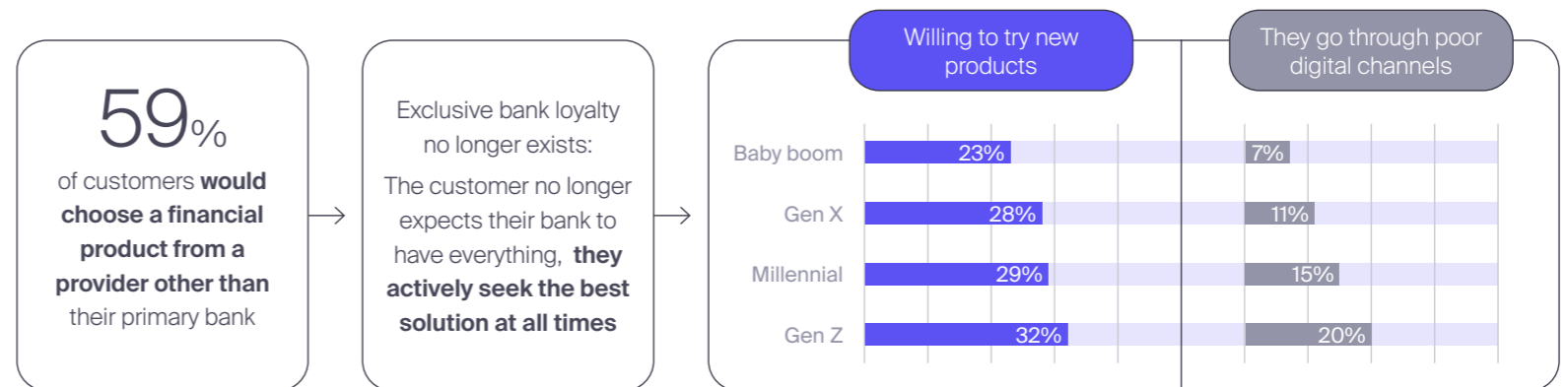
The banking interface of the future will be an ongoing, contextual, and persistent conversation. The customer does not "enter" the bank; It interacts with it constantly through artificial intelligence agents that understand its complete financial situation, its objectives and its context. Thus, **the financial agent becomes the main point of interaction, acting as an active system that interprets, anticipates and executes actions within the limits defined by the customer.**

However, this model introduces a strategic tension that cannot be ignored. The financial agent is, at the same time, an opportunity and a point of vulnerability: **whoever controls the agent, controls the recommendation; and whoever controls the recommendation, captures the customer's decision.**

If that agent belongs to a technology platform or a third party, **the bank may be relegated to a product provider** in a marketplace of decisions that it does not manage or see.

The control of the recommendation layer will thus become the new competitive front. Not the product, not the price, not even the digital experience, but who is in a position to tell the customer what to do with their money at the moment they need it.

In this scenario, **banks do not disappear: they become infrastructure.** The question is whether they will control the system or be controlled by it.



Three scenarios depending on who controls the agent



Banks - embedded, proactive and life-centered

But the most profound change occurs in the position that the customer occupies within the financial system. Banking is no longer organized around internal products, channels, or functions, **it is now structured around the customer's financial life as a continuous stream of interconnected decisions**. The customer is not the entry point to the system, but rather becomes its organizing axis.

This means that banking activity is no longer activated on demand, but is articulated around the customer's context. **Financial decisions are not grouped into isolated moments, such as contracting a product, applying for financing or reviewing an investment, but are part of a continuum where each action has implications for the following.**

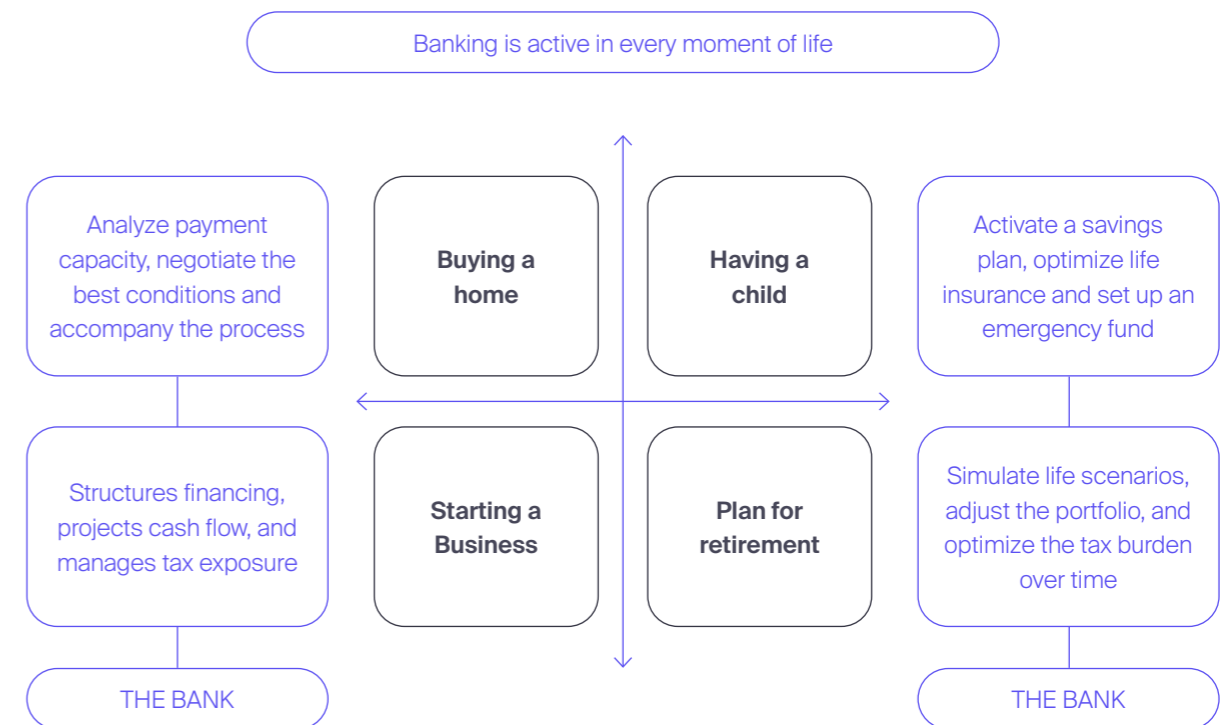
Thus, **the design unit becomes the customer life cycle**. Buying a home, changing jobs, starting a family or planning for retirement are no longer disconnected events but milestones within an integrated financial dynamic.

The entity organises its proposal, its decision-making capacity and its execution around these moments, connecting information, context and action in a coherent way.

The result is a system in which the customer does not navigate banking, but the banking dynamically adapts to their life. But **this model is only possible for the institutions that control the point of contact**: those that own the layer where the recommendation and decision are made.

Banks will not compete to offer financial products. **They will compete to stay relevant at the time decisions are made**. Those who are not present at that time will not be part of the system.

The shift towards life-centered banking



The future is now, and it won't last long

There is a common temptation in debates about long-term technological impact: **to treat them as forward-looking exercises with no urgency for actual action.** But, the conditions that define future competitive positions are now being established:

- **The data** that will train next-generation models **is being generated today,**
- **the talents** that will build AI platforms **are being captured right now,**
- and **decisions** that will determine the competitive agility of institutions in the future **are being made (or avoided) in the meetings of the present.**

The window of opportunity to build sustainable competitive advantages in AI is real, but it is not infinite. **Institutions that act with conviction and speed in the coming years have the potential to establish leadership positions** that will be extraordinarily difficult to erode once consolidated.

Those that remain in observation mode or peripheral experimentation will find that, when they choose to act decisively, the scale effects and learning cycle of their more advanced competitors will have generated an **asymmetry of capabilities that money and investment cannot solve.**

The transformation of banking by AI is not a future scenario that managers can evaluate with the comfortable distance of forward-looking analysis. **It's an ongoing process, with winners consolidating and laggards forming, in real time.**

The question that determines the strategic destiny of each organization is more concrete and more urgent: **Where does your institution want to be on this new competitive map, and what decisions must you make today to ensure it?**



The future of banking will not be defined by who has the most assets, but by who controls intelligence at scale. And that position is now being decided.

The window is open, but not for long

The four critical decisions

<p>Build a unified data architecture</p>	<p>How</p>	<ul style="list-style-type: none"> • Audit all existing data sources for quality and accessibility • Dismantle silos and establish shared data layer with centralized governance • Migrate from batch processing to real-time ingestion as standard
<p>Attract and retain AI-trained talent</p>	<p>How</p>	<ul style="list-style-type: none"> • Identify the 20–30 critical AI profiles that the industry needs in the coming months • Design a value proposition for technical talent: autonomy, impact and resources, not just salary • Create an internal reskilling academy to convert financial talent into hybrid talent
<p>Evolve to an AI-ready environment</p>	<p>How</p>	<ul style="list-style-type: none"> • Prioritize core banking modernization for business value, not technical urgency • Adopt API architecture that allows functions to be decoupled without rewriting the entire system • Establish MLOps infrastructure to deploy, monitor, and update models in production
<p>Redesign AI-first operating model</p>	<p>How</p>	<ul style="list-style-type: none"> • Identify the processes with the greatest impact and redesign them from scratch with AI-first logic • Establish governance frameworks for automated decisions: thresholds, monitoring, and auditing • Align incentives and business KPIs with the results of AI models



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