# Top Technology and Business Trends in Banking for 2024

Presentación curada y divulgada por James Perdomo

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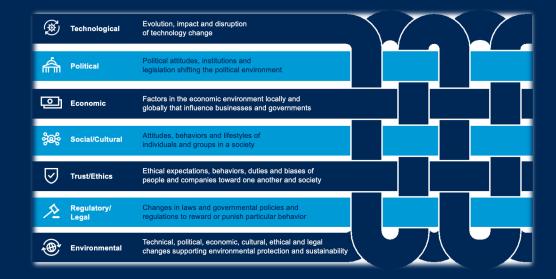
## **Trendspotting**

Trendspotting is the identification of new trends

Technology innovation leaders are challenged to predict how trends and disruptions might affect their organization's business model in the future. Organizations need to be deliberate about organizing, executing and taking action through a trendspotting process.

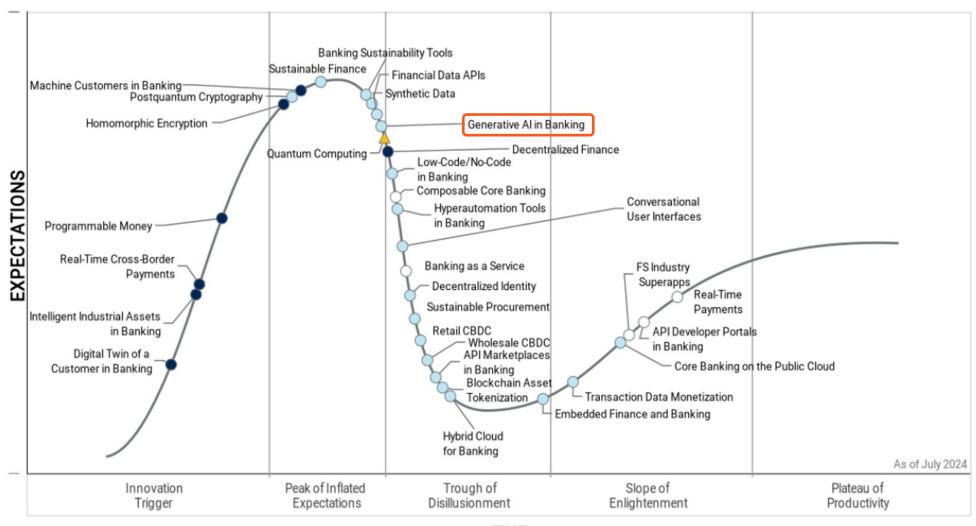
Trendspotting requires technology innovation leaders to be intentional and pragmatic about tracking trends and to look beyond technology.

They must also ensure that the trendspotting effort delivers results that can drive actions supporting future strategy development, optimizing current operations and triggering innovation.



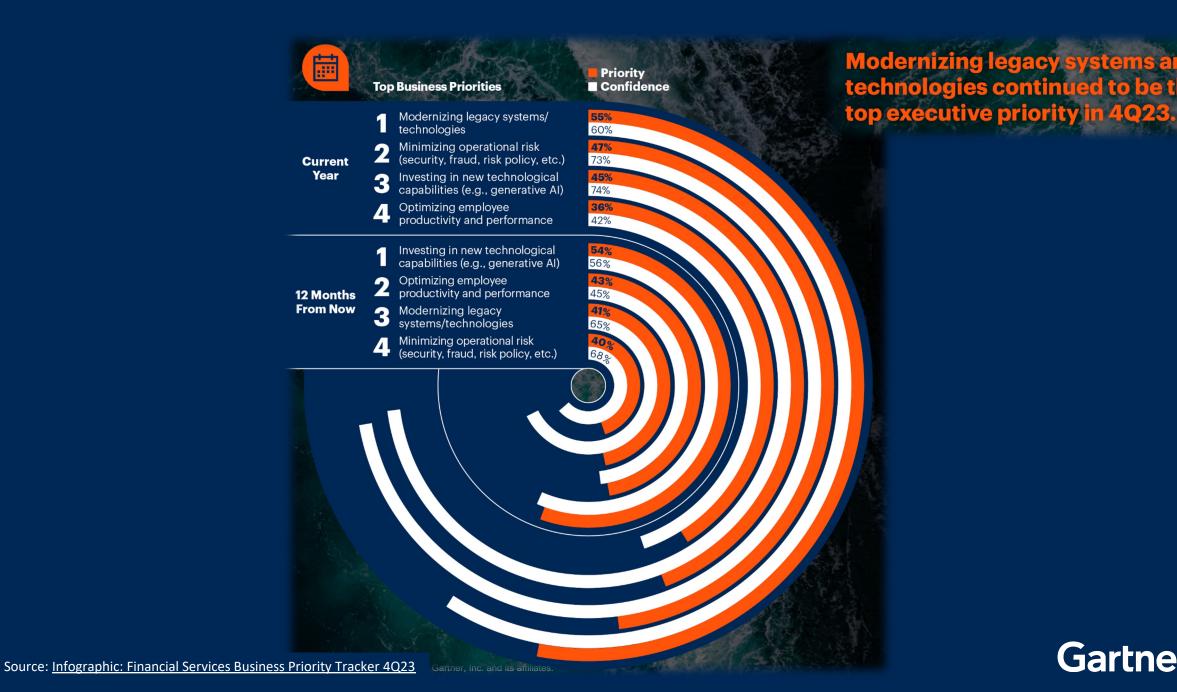


## Hype Cycle for Digital Banking Transformation, 2024



TIME





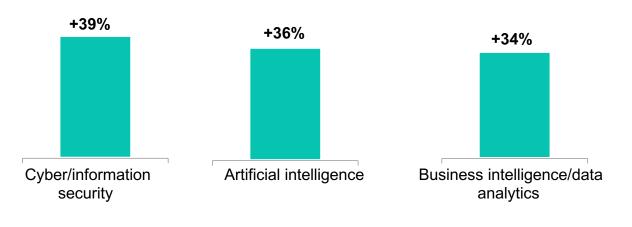




## **Expected Changes in Technology Investments**

#### **Biggest Expected Changes in Investment**

Mean Percent Change Expected in 2025





#### n = 131 – 141; Spanish-Speaking Latin America CIOs and Technology Executives answering

Q. For each of these technology areas, by how much will your enterprise increase or decrease funding in 2025 compared with 2024?

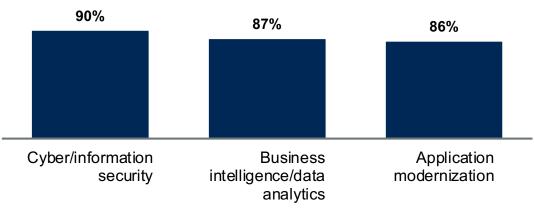
Q. By what percentage do you expect your enterprise's IT budget to increase or decrease from 2024 to 2025?

\*Note: Including augmented reality [AR], virtual reality [VR] and immersive technologies

Source: 2025 Gartner CIO and Technology Executive Survey

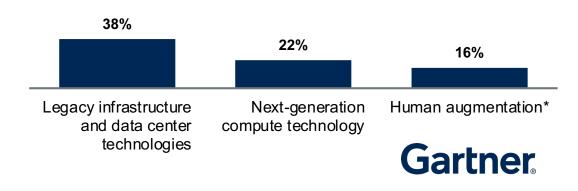
#### **Top 3 Technologies With Planned Investment Increases**

Percentage of Spanish-Speaking Latin America Respondents



#### **Top 3 Technologies With Planned Investment Decreases**

Percentage of Spanish-Speaking Latin America Respondents





## Top Banking Trends to Watch Right Now

#### **Autonomous Business**

- Internal applications of Generative AI outpace customer-facing use cases
- Hyperautomation objectives shift from cost-reduction to revenuegeneration

#### **Core Technology Transformation**

- Core banking modernization hampered by lack of business alignment, inadequate vendor vetting, or lack of integration with other applications
- Commercial off-the-shelf core banking system installations increasingly delivered from the public cloud

#### **Expanding Beyond Banking**

- Open/external APIs for distribution, CX and new business models Ecosystem strategies necessary to engage business customers
- Aggressive movement to monetize data to differentiate and grow
- ESG moves from reactive priority to competitive differentiator

## **Digital Client Experience**

- Priorities shift from client experience to Total Experience
- Digital banking strategy evolves from channel modernization focus to growth-generating platforms
- Fintech partnerships shift from optional to imperative

#### **The Future of Money and Payments**

- Real-time cross-border payment capabilities accelerate
- Autonomous business, machine customers lays groundwork for programmable money

#### **Talent and Organizational Design**

• Al, cloud, and cybersecurity tech talent remains scarce

## **Autonomous Business**

Internal applications of Generative Al outpace customer- facing use cases



#### IT Supported **Business**

1980-1995



How We Operate

#### **E-Business**

1995-2010



How We Sell

#### **Digital Business**

2010-2025



What We Make and Do

#### **Autonomous Business**

2025-2040



"Who" Buys, Makes and Sells Business technology used to focus on business operations.

E-business expanded the role of technology bringing the company on-line.

Then, IT became the core of the business, digital business.

Next... technology will create new styles of organizations.

**Autonomous business may** be the next big thing after digital business.

## **Autonomous Business in Financial Services**











#### Now...



Digital tokens

Programmed





Decentralized Finance DAO Al fraud detection



- Parametric insurance
- Robo-advisor
- Smart ATM
- Personal Finance Chatbot
- Contextual and embedded finance

## K

money



in DeFi DAO



Autonomous machine customer participation

- Al fraud and IAM + decentralized SSI
- Auto-financing production line



Next ...

- Personal digital assistant
- Personal Finance avatar (metaverse)



Auto-adapting and Autocomposing Products

#### Then ...





Autonomous



**Decentralized Data** Assets Exchange



M2M Personal Finance assistants



M2M auto-adapting and autocomposing products

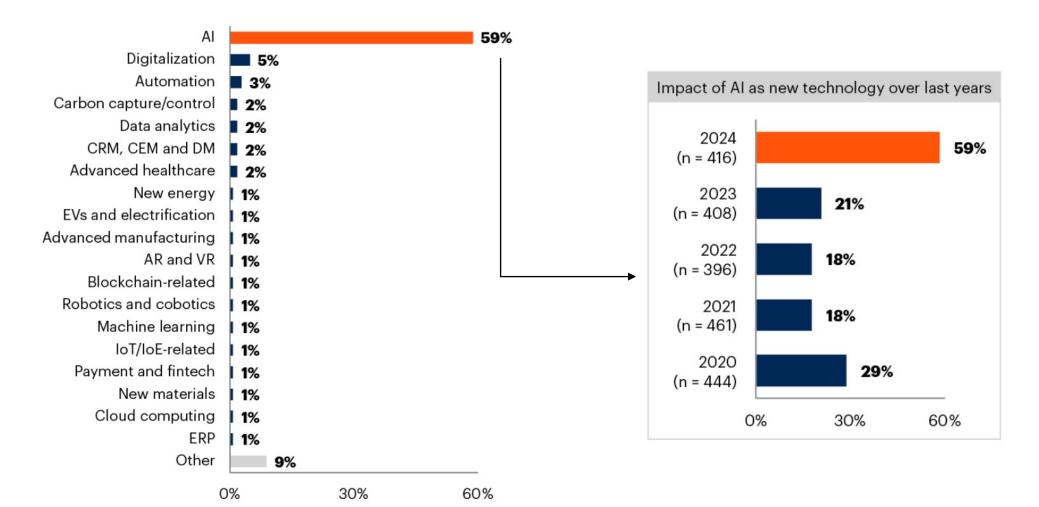
Money and atomized assets

Programmable

machine customer DeFi DAO

## **Autonomous Business Trend #1**

#### Internal applications of Generative Al outpace customer-facing use cases



n = 414, all respondents, excluding "NA"/"None"/"Don't know"



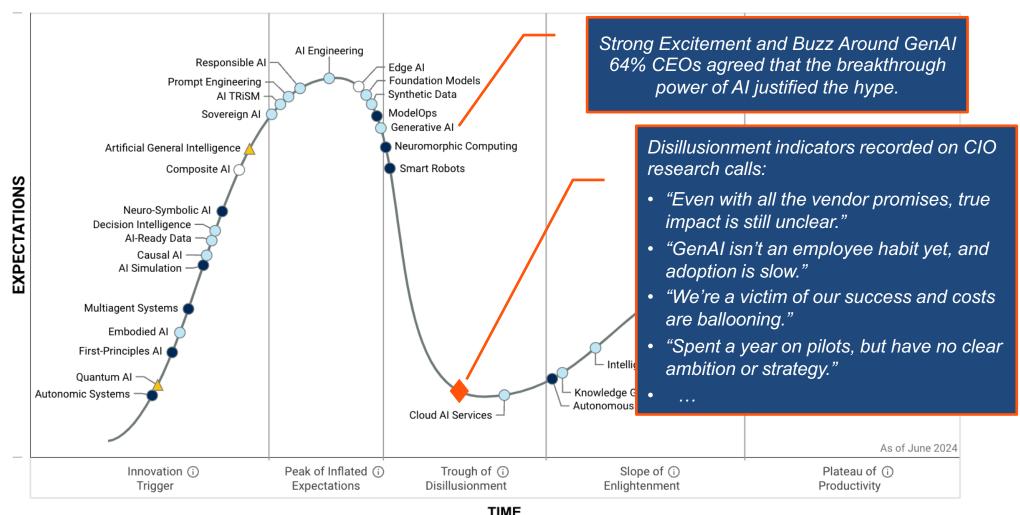
Q. The new technology that will most significantly impact our industry over the next three years is.

Source: 2024 Gartner CEO and Senior Business Executive Survey

Note: Numbers may not total 100% due to rounding. Graphic not showing mentions <1%.

811360 C

## Hype Cycle for Artificial Intelligence, 2024



TIME











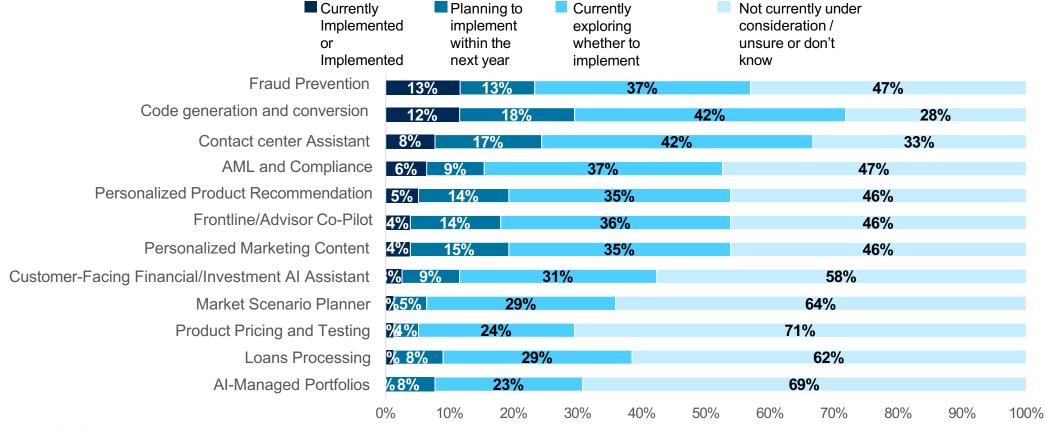


## **Autonomous Business Trend #1**

#### Internal applications of Generative Al outpace customer-facing use cases

#### Gen Al Use Cases in Banking and Investment Services

Percentage of Senior Banking Executives



#### n = 78 senior banking executives

Q: What generative AI use case categories in banking and investment services is your organization considering, and in what time frame?

Source: 2023 Gartner Financial Services Research Panel Survey (August)

Note: Responses 5% and below have not been shown.

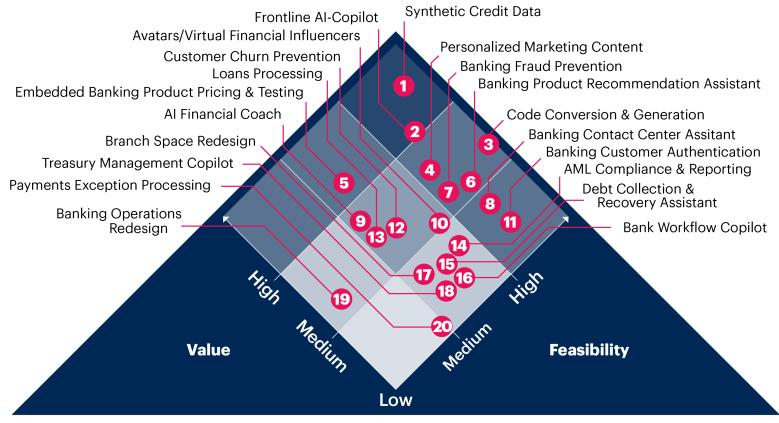
AML = anti-money-laundering; GenAl = generative Al

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## **Generative AI Use-Case Prism for Banking**

#### **GenAl Use-Case Prism for Banking**



Source: Gartner 792822 C



## Case Example

## Swedbank | Deep Fraud and Financial Crime Detection



Swedbank - Nordic-Baltic banking group Swedbank Swedbank partnered with Hopsworks and NVIDIA to generate **synthetic transaction data** that mimics existing financial crime, as well as new kinds of financial crime that are anticipated but not present in the historical record. The use of this synthetic data allowed Swedbank to run fraud and financial crime detection experiments <u>without risking customer privacy or intellectual property</u>.

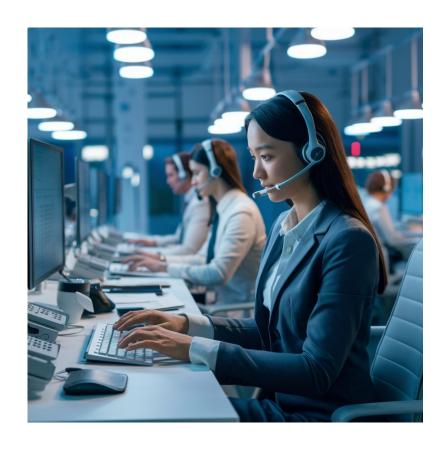
Trained **generative adversarial neural networks (GANs)** as part of its fraud and money-laundering prevention strategy. The approach is to model problems in a semi-supervised fashion using anomaly detection via GANs. Al and other analytical approaches have reduced Swedbank's total gross fraud by 55% over the past three years.

Source: Case Study: Deep Fraud and Financial Crime Detection Built With Generative Adversarial Networks



## Case Example

## Ally Financial | Automated Summaries Masking Pll



Ally Financial has improved its call center operations by integrating Microsoft Azure and Azure OpenAl Service, significantly enhancing customer interactions. This strategic move automated the note-taking process, previously a manual and time-intensive task. Now, over 700 associates can swiftly access and edit summaries of weekly customer calls, boosting productivity and allowing more time for customer engagement.

The Al integration has reduced postcall work by 30%, and the bank is aiming for a 50% reduction, while achieving an 85% accuracy rate in capturing key call details. Moreover, Ally Financial has open-sourced its code in the LangChain Community package, enabling other companies in regulated sectors to benefit from its code.

Source: Banking Case Examples to Build Your Generative AI Strategy.

## **Autonomous Business**

**Hyperautomation** objectives shift from cost-reduction to revenue-generation

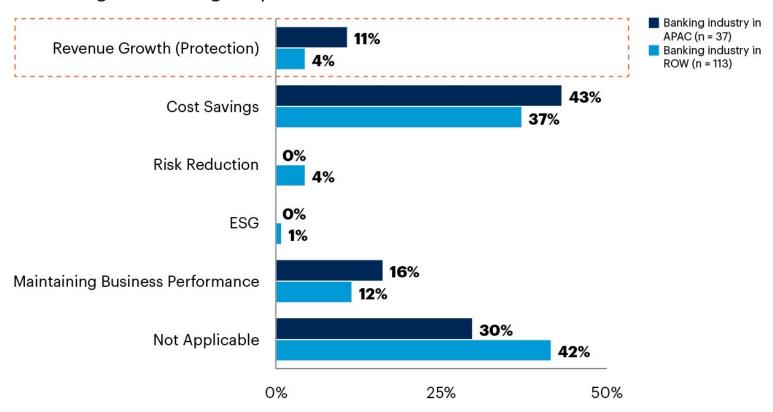


## **Autonomous Business Trend #2**

Hyperautomation objectives shift from cost-reduction to revenue-generation

#### **ROI of Automation — APAC vs. ROW**

Percentage of Banking Respondents



n varies by segment, Banking CIOs and technology executives answering

Q: For each technology below, what is the main ROI that it provides your enterprise? Automation (physical/robots) Source: 2023 Gartner CIO and Technology Executive Survey



## **Gartner Definition of Hyperautomation**



# **Business driven hyperautomation**

An approach in which organizations rapidly identify, vet and automate as many approved business and IT processes as possible through a disciplined approach

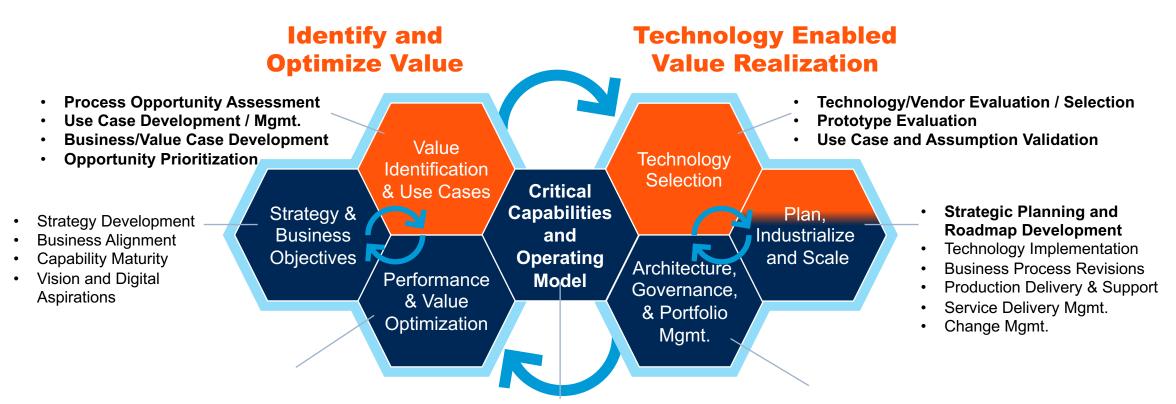
Hyperautomation involves the orchestrated use of multiple technologies, tools, or platforms inclusive of, but not limited to:

- Robotic Process Automation (RPA)
- Chatbots and Conversational Platforms
- CoRPA and iBPMS
- Process and/or Task Automation tools
- Machine Learning
- Artificial Intelligence

Note: \*Also referred to as Intelligent Automation (IA), Attended Automation, Business Process Automation etc.



## Gartner's Hyperautomation Capability Framework focuses on the key elements required to build, manage, and deliver ongoing value.



- Performance Tracking
- **Business Case Realization**
- Metrics & KPIs
- Value Lifecycle Mgmt.

- **Operating Model**
- Organization/ Center of Excellence
- Project/Program Mgmt.

- Architecture, Security, Technology Standards, Policies, and Roadmaps
- Service Governance Board
- Technology / Service Portfolio Mgmt.
- Technology Lifecycle Mamt.



## Case Example

## **Deutsche Bank | HSBC**



**Deutsche Bank** leveraged hyperautomation technologies to launch new treasury services for institutional and corporate clients. The newly invented solution can help institutional clients to expand the reach of their existing in-house bank to as many group subsidiaries as possible

**HSBC** Asian branches enriched real-time payments with new capabilities like multi-currency global e-wallet for commercial banking clients, omnicollect digital invoices and API to cross-border FX solutions through hyperautomation technologies

Source: Deutsche bank Source: HSBC



## **Digital Client Experience**

**Priorities shift from Client Experience to Total Experience** 





## **Digital Client Experience Trend #1**

**Priorities shift from client experience to Total Experience** 

# Most companies focus on the individual experience areas, with dedicated teams and capabilities. But is this enough?

### **Customer Experience (CX)**

Understand several dimensions of customers: wants, needs, expectations, beliefs, feelings, and past experiences





Employee Experience (EX)
Increase employee satisfaction,
retention, skill level, and productivity.

## Multiexperience (MX)

Interact across multiple touchpoints: mobile apps, web Augmented Reality/Virtual Reality (AR/VR), wearables with a combination of approaches: voice, touch, vision, etc.





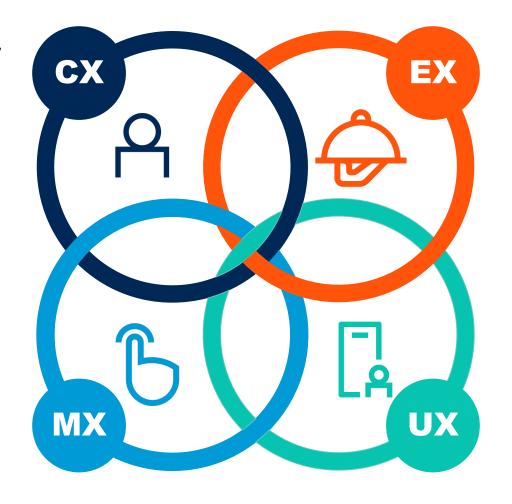
## **User Experience (UX)**

Combine business objectives, **user needs**, and design best practices to optimize digital products.



## **Total Experience Synergy**

Customer **Experience** 



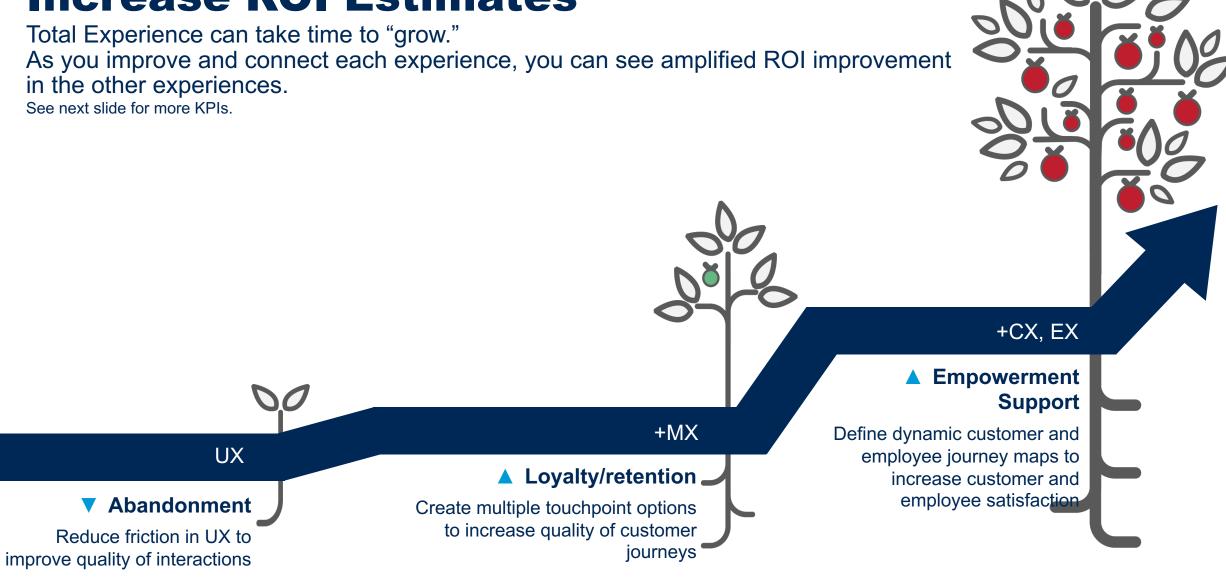
**Employee Experience** 

Multiexperience

User **Experience** 



## **Increase ROI Estimates**



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## **Measuring TX: Benchmark Assessments**

Assess where you currently are for each experience prior to implementing a TX strategy.

See next slide for how it may look completed.

Representational list, not meant to be all-inclusive.

Metrics significant or unique for this industry are **bolded**.

- ▲ Areas where you want to see increases.
- ▼ Areas where you want to see decreases.

|                                 | Sample Metrics                                | СХ | EX | UX | MX |
|---------------------------------|---|----|----|----|----|
| Employee<br>Experience          | ▼ Employee Churn/Turnover                     |    |    |    |    |
|                                 | Participation in change management            |    |    |    |    |
|                                 | ▲ Perception of technology                    |    |    |    |    |
|                                 | ▲ Perception of skill development opportunity |    |    |    |    |
| Quality<br>Operations           | ▲ Channel used is preferred                   |    |    |    |    |
|                                 | ▲ Data quality across channels                |    |    |    |    |
|                                 | ▼ Error rate                                  |    |    |    |    |
|                                 | ▼ Forced channel migration                    |    |    |    |    |
| Customer<br>Satisfaction        | ▲ Financial empowerment support               |    |    |    |    |
|                                 | ▲ Active usage                                |    |    |    |    |
|                                 | ▲ Process satisfaction                        |    |    |    |    |
|                                 | ▼ Abandonment Rate                            |    |    |    |    |
| Loyalty Churn<br>Retention      | ▲ Customer/Employee Effort Score              |    |    |    |    |
|                                 | ▲ Use of Multiple Channels                    |    |    |    |    |
|                                 | ▼ Inactive users                              |    |    |    |    |
|                                 | ▼ Attrition propensity                        |    |    |    |    |
| Advocacy<br>Brand<br>Reputation | ▲ Advocacy propensity                         |    |    |    |    |
|                                 | ▲ Customer/Employee Referrals                 |    |    |    |    |
|                                 | ▲ Use of Multiple Channels                    |    |    |    |    |
|                                 | ▼ Escalation Rate                             |    |    |    |    |



## Case Example

## Commonwealth Bank of Australia | Digital Portal

#### CommBank

**Total Experience Opportunities** 





resources across channels, both digital and in-person as well as external resources.







Commonwealth Bank of Australia (CommBank) provides a digital portal to accelerate small business growth by gathering resources in one place.

CommBank has collected both bank and nonbank resources. to help people starting small businesses, from developing an idea to getting financing. Business customers have multiple tools and touchpoints to manage their business, including tools for help in financial difficulties.



## **Digital Client Experience**

Fintech partnerships shift from optional to imperative

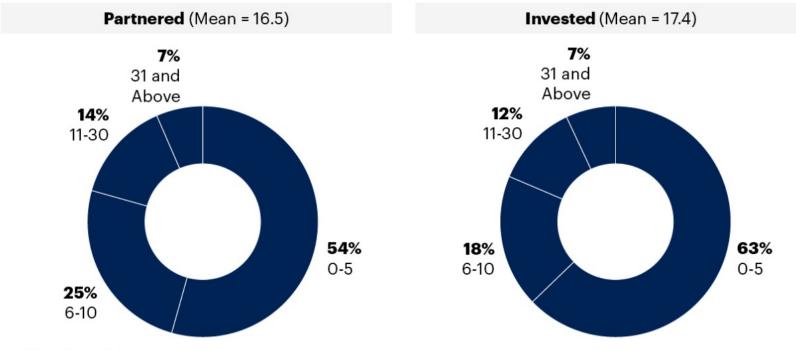


## **Digital Client Experience Trend #3**

Fintech partnerships shift from optional to imperative

#### Number of Fintechs Banks Have Partnered With/Invested In

Percentage of Respondents



n = 99, all banking respondents

Q: Please provide your best estimate on the total number of partnerships and investments that your firm currently has with fintechs/insurtechs till date.

Source: 2022 Gartner Bank Fintech and Insurtech Engagement Survey 791803 C





# There are five key steps to consider when you are on a journey to create an engagement plan for fintechs.





- Identify how you want to innovate
- Assess the digital maturity of your organization
- Identify where they complement your existing business

Assess where a fintech might help



- Identify the agile innovators
- Identify fintechs which will improve your services and products
- Explore each engagement strategy for right fit



- Identify clear metrics to measure the success
- Create a list of objectives to track the progress
- Continue to work on cultural alignment





Engage





- Understand the implementation process
- Understand if the fintech understands 'compliance'
- Determine need for external expertise on these technologies
- Create a strong business case for working with a fintech



- Include all stakeholders as you engage
- Clarify how to start the partnership.
- Work with the risk office early on to make sure any new risks are managed
- Ensure cultural alignment to remove work friction



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## **Digital Client Experience Trend #3**

Fintech partnerships shift from optional to imperative

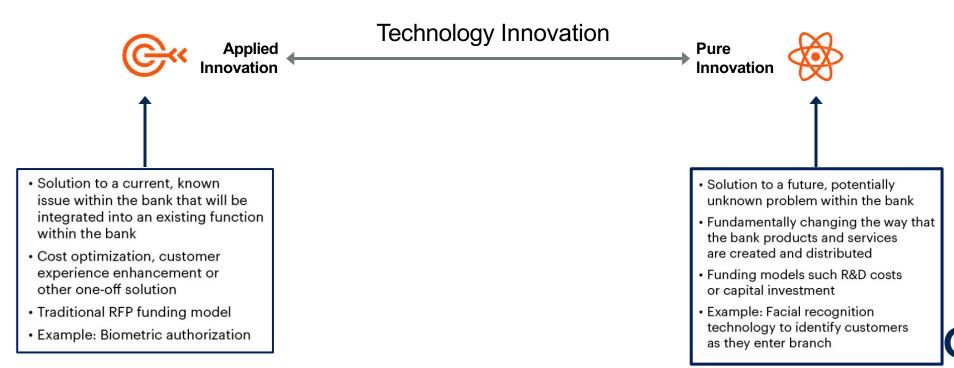


## Evaluate your strengths and pursue strategy based on the type of fintech you are dealing with.



## **Reasons for Engagement**

## **Why Banks Engage With Fintechs**

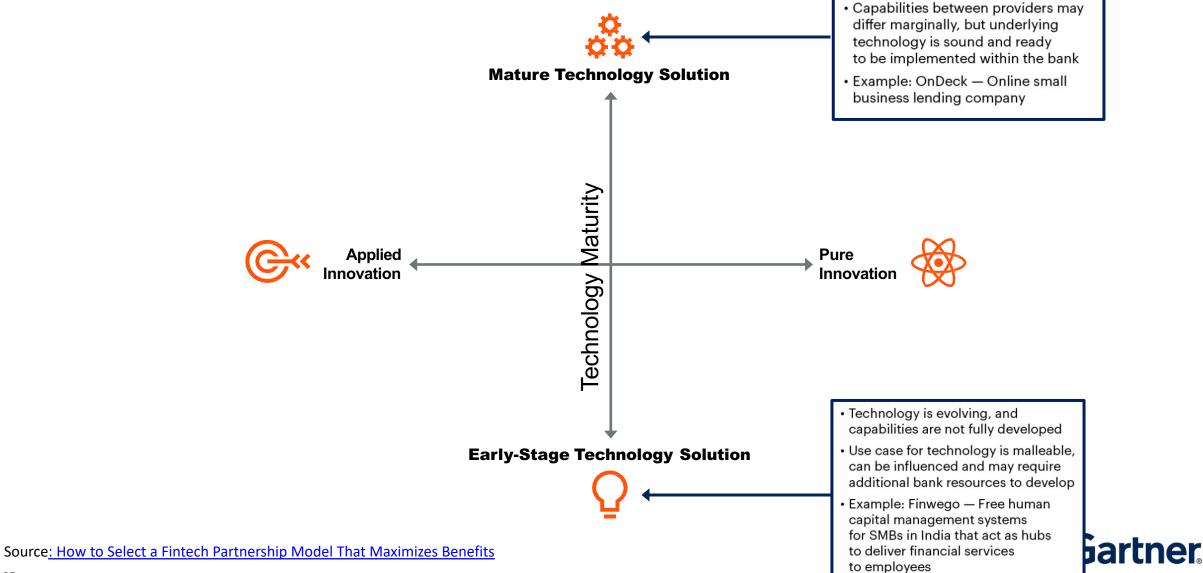


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Source: How to Select a Fintech Partnership Model That Maximizes Benefits

## **Reasons for Engagement**

**Why Banks Engage With Fintechs** 

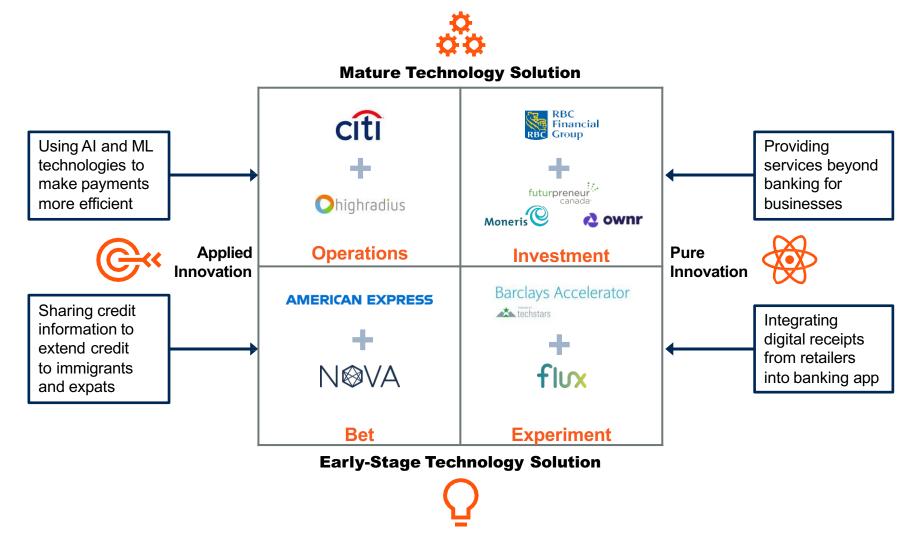


· Technology is an established product

or solution

## Four Approaches to Engagements

## Framework for Evaluating Fintech Engagements



Source: Gartner

## **Core Technology Transformation**

**Core banking modernization** hampered by lack of business alignment, inadequate vendor vetting, or lack of integration with other applications

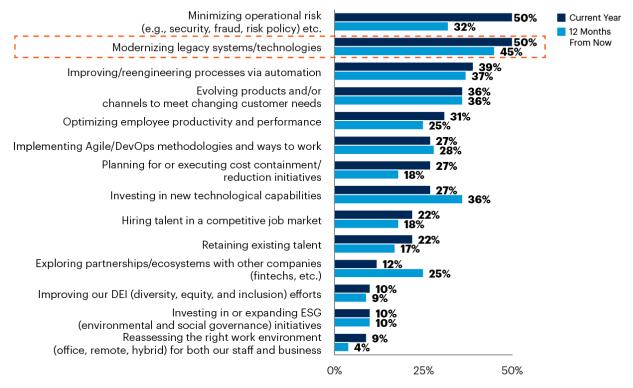


## **Core Technology Transformation Trend #1**

Core banking modernization efforts hampered by lack of business alignment, inadequate vendor vetting, or lack of integration with other applications

#### **Top Business Priorities, Current Year vs. 12 Months From Now**

Percentage of Senior Banking Executives



#### n = 105 Senior Banking Executives

Q: From the list of business priorities below, please select your top priorities for the current year and 12 months from now. You may select up to four priorities for each time period. You may select the same priorities for both time periods, if applicable

Source: Gartner Financial Services Business Priority Tracker, Feb 2023 788458 C



# The landscape for Core Banking is constantly changing...

#### NK NK

# **Competitive Environment**

- Digitally native competitors and "coopetitors"
- Dynamic, fast growing FinTech landscape (as challengers and enablers)
- Significant technology investments of incumbent banks
- Core Banking and Lending capabilities remain key for customer relations
- Increasing relevance of eco-systems integrating Lending (house, mobility, etc.) and Core Banking
- Increasing componentization of solutions to accelerate speed of delivery and to foster integration capabilities

# Impacts on Core Banking and Lending environment





# Industry and Regulatory Environment

- Continuing low interest rate environment
- EBA and ECB guidelines on origination and underwriting, for robust and prudent standards for credit risk taking, renewed focus on monitoring and workout
- Increased amount of funding (securitizations, portfolio sales)
- PSD2 implication for credit
- Blockchain business models incl. Security Token offerings (STO), enabling new ways of financing and securitization and P2P Lending



#### **Customer Demand**

- Restrained customer demand growth
- Increasing customer impatience (speed and convenience are essential)
- Ubiquitous service consumption (always connected, omni-channel, multi-device)
- Lower customer loyalty
- For Retail, especially Lending is part of customer / buying experience
- For Commercial, Lending is part of a global and multi-service Banking offering



#### ... with considerable impacts on our clients' Core Banking environment...

#### **Typical topics we** observe in client discussions

Custom developed or homegrown CBS monoliths with increasing complexity, maintenance costs and backlog

Fragmented and fastgrowing vendor and solution landscape with many new (niche) players entering which makes it more and more difficult to oversee

**Several overlapping Core** Banking systems in place with increasing data inconsistencies. redundancies, inefficiencies

**Increasing pressure on need** for modernization, despite of negative business cases for **CBS** renewals

Mainframe offloading is pursued, where possible, or continued to run opportunistically otherwise

Efforts for customer retention and customer acquisition is rising significantly, while customer loyalty is declining

**Dealing with eroding margins** impacted by an increased transparency of service offerings with too less differentiation (esp. Core Banking)

Long time-to-market for new services/ products due to long development and release cycles

Growing inability to keep pace with regulatory and security changes implemented in existing system landscape

Limitations to standardize and consolidate based on highly complex, differentiating features (e.g. commercial loans)

Inflexible and aged architectures struggle to incorporate and manage short-cycled (technologydriven) business requirements



# **Gartner identifies three prevailing CBS Modernization strategies...**

#### **Abstraction**

"Abstract Away From Legacy"



API (outer)

Mediation

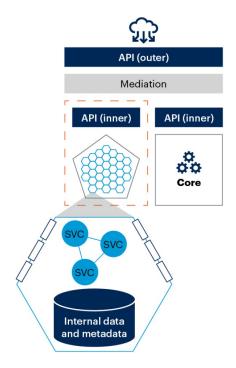
API (inner)





#### **Precision**

"Surgical Replacement"

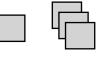


#### **Emigration**

"Package Replace or Build"









API (inner)



Core



# ... resulting in four archetypes for CBS Modernization

|                      | •   |   |  |  |
|----------------------|---|---|--|--|
| Strategic<br>Option: | Legacy Abstraction  | Package<br>Progressive  | Package<br>Full Platform Replacement   | Custom Develop<br>Renewal  |
|                      | <ul> <li>Minimize the functional footprint<br/>of legacy core banking<br/>applications</li> </ul>   | Evaluate and replace core     applications independently with     point solutions (e.g. credits first)                          | Replace the majority of core<br>banking systems with an<br>integrated core banking system  | Rebuild platforms on modern technology   |
|                      | Medium  | High  | Medium   | Low  |
|                      | <ul><li>Spanish Digital Bank</li><li>Primary French bank</li></ul>  | <ul><li>Tier 2 Belgian Bank</li><li>Tier 1 Belgian Bank</li></ul>   | <ul><li>Tier 1 Belgian Bank (countries abroad)</li><li>Nordea</li></ul>  | Citi     UniCredit   |
| Outlook:             | Stable  | Stable  | Increasing   | Declining  |
|                      | Becoming a more popular option<br>as banks recognize the need to<br>increase architectural maturity to<br>support digital efforts and<br>increase agility | Will continue to be a viable<br>option as vendors move to more<br>open architected solutions<br>reducing integration complexity | Will continue to be a popular<br>choice when banks seek limited<br>implementation risks as core<br>banking vendors move towards a<br>digital platform architecture | Only considered by largest<br>banks with a perceived need for<br>a custom core solution or special<br>institutes |
| Why not:             | <ul> <li>Less proven option, limited capabilities by SIs</li> <li>Strong architecture function required</li> </ul>  | Long-term strategy required and<br>risk to remain with duplicate<br>systems   | <ul> <li>Known program failures due to customizations</li> <li>Core banking suites are not really integrated</li> </ul>  | Goes against the view of core functionality as a commodity   |



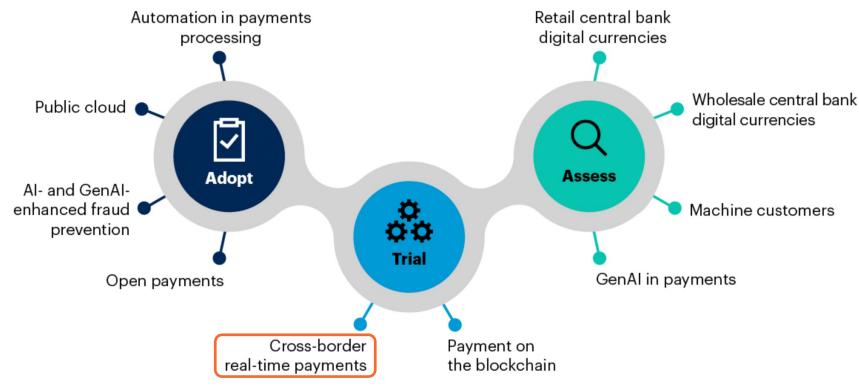
The Future of Money and **Payments** 

Real-time cross-border payment capabilities accelerate



## **The Future of Money and Payments Trend #1**

Real-time cross-border payment capabilities accelerate



Source: Gartner 810613 C



#### Case Example

# **Real Time Cross Border Payments**

The Southeast Asian Payments Initiative aims to link the payment systems of several countries in the region.

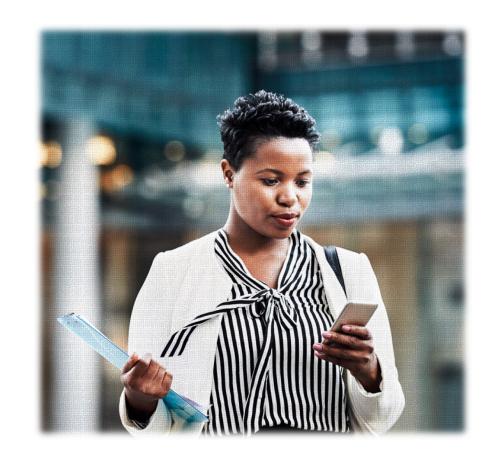


How ASEAN is making instant crossborder payments a reality



Swift and Wise join forces to expand cross-border payment options globally

Payments, 18 September 2023 | 5 min read





# **Expanding Beyond Banking**

**Open/external APIs for** distribution, CX and new business models

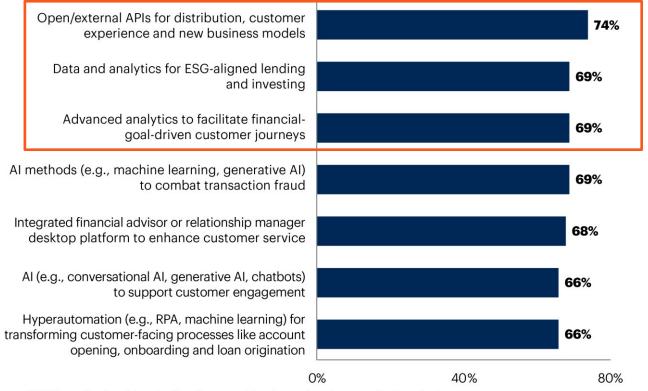


# **Expanding Beyond Banking Trend #1**

#### Open/external APIs for distribution, CX and new business models

#### **Importance of Technology Use Cases**

Percent of Banking Respondents Indicating "Very Important"



n = 67-69 senior banking technology and business leaders, excluding "not sure"

Q: How important is each of these to meeting your enterprise's overall goals and objectives? RPA = robotic process automation

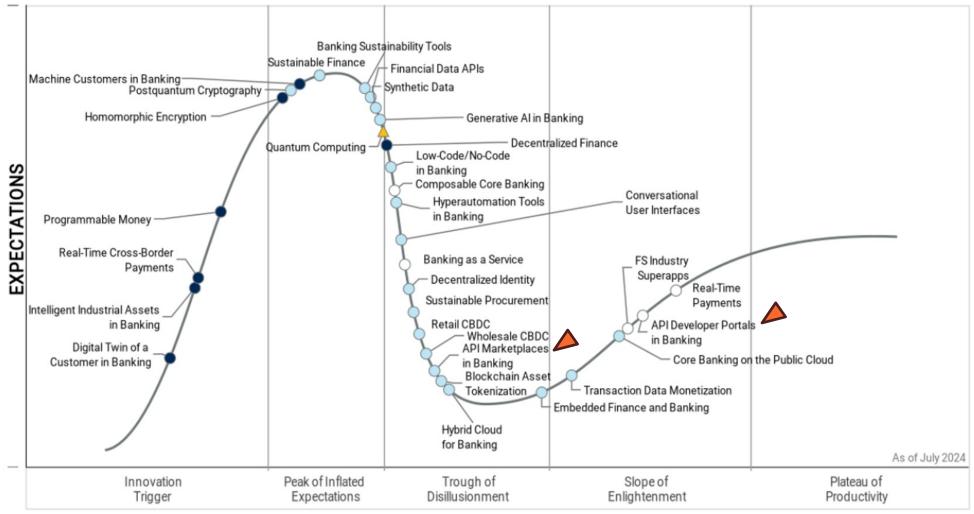
Source: 2023 Gartner Business Outcomes of Technology Survey 801869 C



# **Expanding Beyond Banking Trend #1**

Open/external APIs for distribution, CX and new business models

**Hype Cycle for Digital Banking Transformation, 2024** 



TIME



## **Expanding Beyond Banking Trend #1**

Open/external APIs for distribution, CX and new business models

#### **Recommendations:**

- Bank CIOs need specific examples use cases that clearly demonstrate how open banking technology investments can enable innovation and competitive differentiation, while minimizing risk.
- Accelerate the development of enterprise open banking strategies by sharing with, and explaining to, CIOs' business colleagues the business value of the use-case examples.
- **Prioritize open banking technology investments** with executive business colleagues by evaluating planned technology investments — such as API architectures, authentication solutions — against these open-banking-led business and product use cases.



# Gartner provee la experiencia y el conocimiento necesario para que nuestros clientes tomen la decisión correcta, cada día

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