

TOP TECHNOLOGY TRENDS IN RETAIL BANKING

2022 Edition

3 November, 2021

Zil Bareisis, Head of Retail Banking, Celent

A division of Oliver Wyman





AGENDA

Introduction

Key Technology Trends and Imperatives for Retail Banks in 2022

Q&A

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[Mail](#)

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How Celent Can Help?



Advisory & Research

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Digital Services

Solutions to help financial institutions manage their technology with benchmarking capabilities

INTRODUCTION

The Last 18 Months

- **Changing priorities** for all
- **GDP drop**: one of the steepest ever experienced
- Bank **revenues and asset bases** have been hit...
- ... but global banking system has proven **resilient** with sufficient capital levels

✓ UP TO **11%**

Decline in revenue*

✓ **5%**

Fall in risk-weighted
assets*

Looking Ahead

- An unprecedented **opportunity** for retail banks
 - Gain a strong sense of purpose, grow the bottom line, and ensure ongoing relevance
 - By supporting the recovery from the pandemic and helping tackle some of the big issues facing economies
- However, banks need a new **mindset and capabilities**, especially in technology

* Oliver Wyman Report: [Ready to Lead: How Banks Can Drive the European Recovery](#)

KEY TECHNOLOGY TRENDS AND IMPERATIVES FOR RETAIL BANKS IN 2022

A. Optimizing Customer Engagement and Delivery

Continue with improvements in digital account opening and servicing and measure success

Complement digital channels with human assistance; give customer-facing staff the right tools

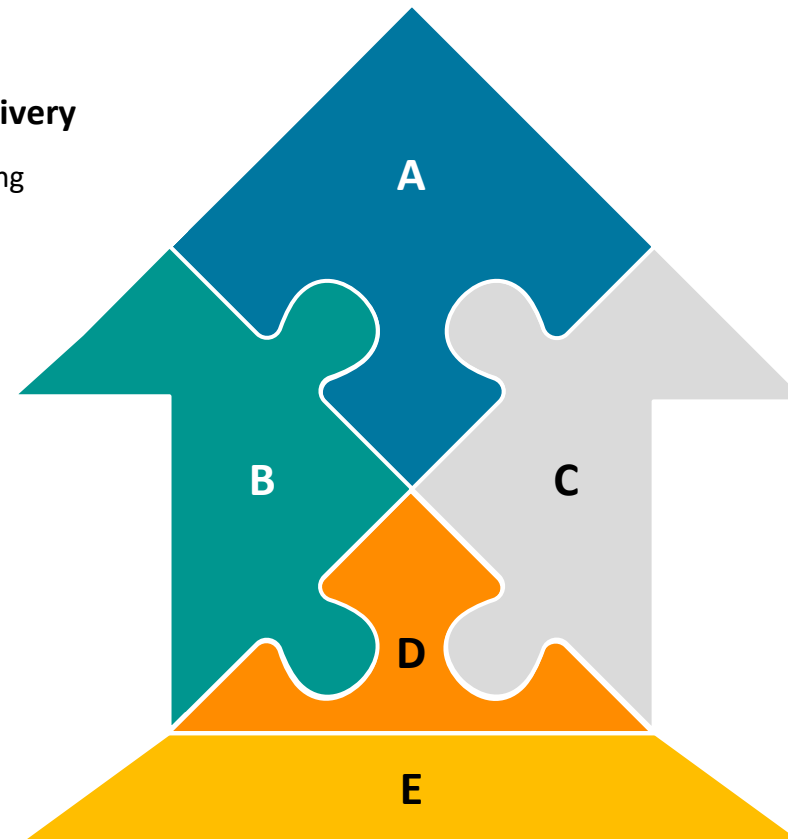
Maintain efforts to rationalize the branch portfolio

B. Embracing Disruptive Imperatives in Payments and Lending

Differentiate through card experiences

Decide on BNPL—hope or hype?

Reexamine solutions across the credit lifecycle



C. Taking an Ecosystem Approach to Growth

Determine your open ecosystem strategy

Decide how to commercialize Open Banking

Consider opportunities and threats in Open Banking Payments

D. Driving Product Innovation and Differentiation

Decide what “purpose” means to you and your strategy

Find the “white spaces” to develop offerings tailored to specific communities

Consider opportunities and risks in crypto

E. Diversifying Technology Transformation Toolkit

Consider use of low-/no-code platforms

Leverage composable building blocks from diverse technology partners

Build on top of increasingly verticalized cloud services

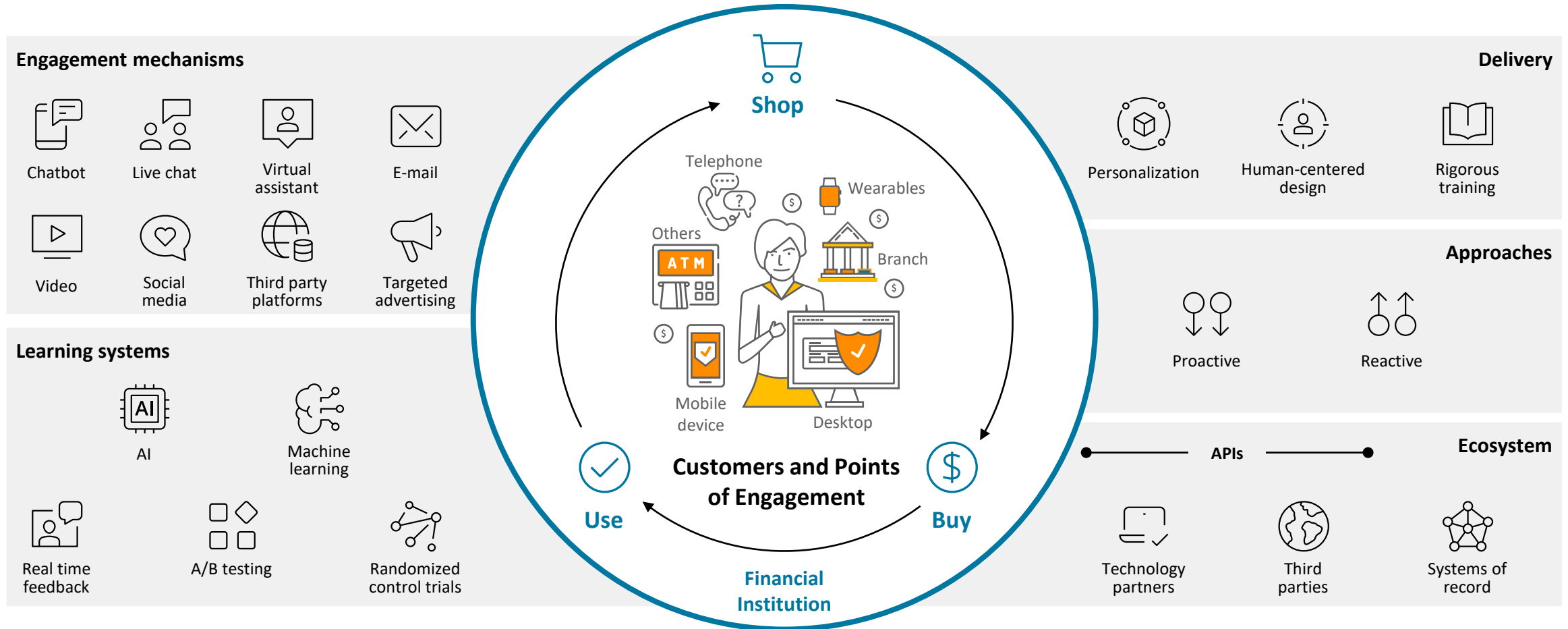
A: OPTIMIZING CLIENT ENGAGEMENT AND DELIVERY

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Maintain efforts to rationalize the branch portfolio

MOST BANKS KNOW WHAT OPTIMAL CUSTOMER ENGAGEMENT SHOULD LOOK LIKE...



...AND YET, FOR MANY, IT REMAINS EASIER SAID THAN DONE

Recent Celent Survey Findings, NA FIs

Despite progress, many still have a way to go to deliver effective digital account opening

- Many focus on supporting account opening online, lack a joined-up approach across products, and are yet to implement modern IDV techniques.
- Many also find the process and outcomes difficult to measure, and when they do, they don't always like the results.

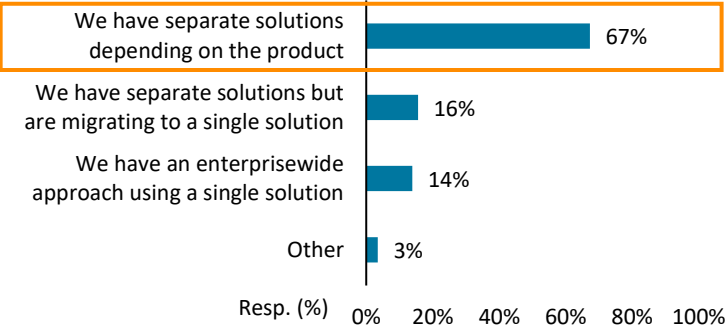
Banks struggle to complement digital channels with human assistance and to give customer-facing staff the right tools

- Banks identify disconnected digital and assisted channels as one of the key pain points.
- Only 51% of FIs can pick up where customers left the application and continue ("save and resume") irrespective of the product.

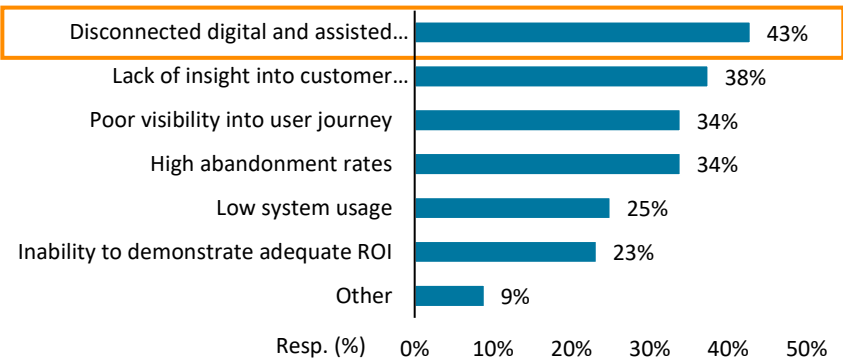
Banks are taking steps towards a rationalized branch portfolio

- A growing number of banks expect a decrease in the number of branches and are taking steps towards a rationalized branch portfolio.
- Yet, branches continue to be an important channel, delivering results: banks acquire >70% of customers in branches, who then start with higher account balances and are more likely to buy other products.

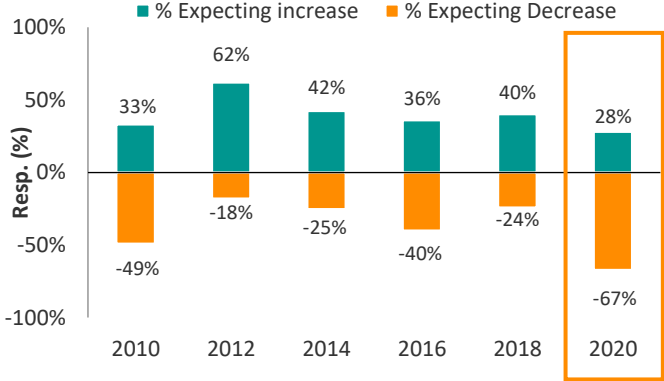
Approach to Digital Customer Acquisition



Pain Points and Improvement Opportunities



Branch Count Expectations Over Time



Q. Which of the following best matches your institution's technology architecture and vendor approach to digital customer acquisition? N=58

Q. Which of the following, if any, would you consider a pain point or opportunity for improvement at your institution? Select all that apply. N=56

Q: Compared to your current branch count, how many branches do you expect your institution will operate five years from now? 2010–2018, n=140–160, October 2020, n=32

Source: Celent

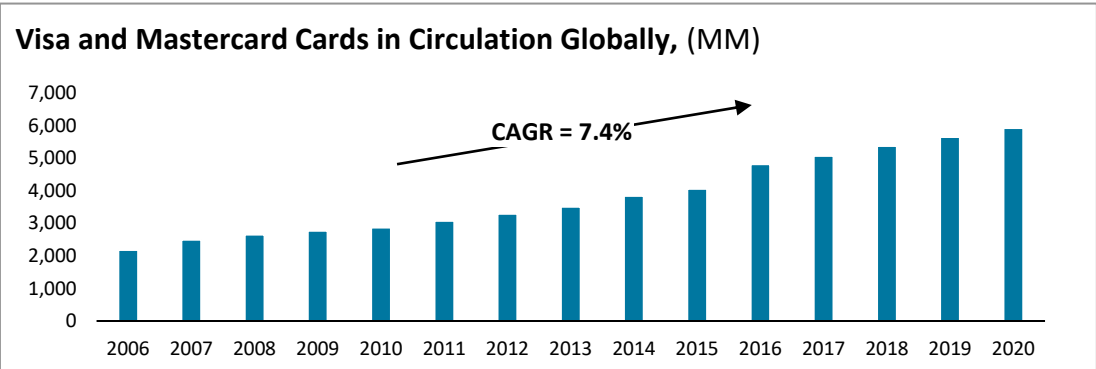
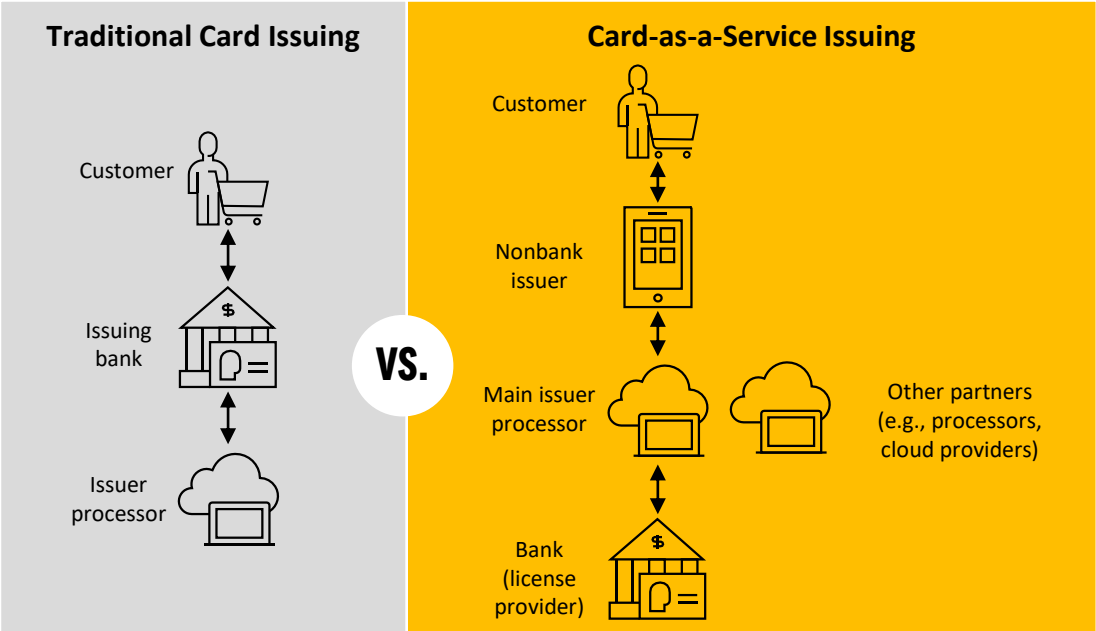
B: EMBRACING DISRUPTIVE IMPERATIVES IN PAYMENTS AND LENDING

Differentiate through card experiences

Decide on BNPL—hope or hype?

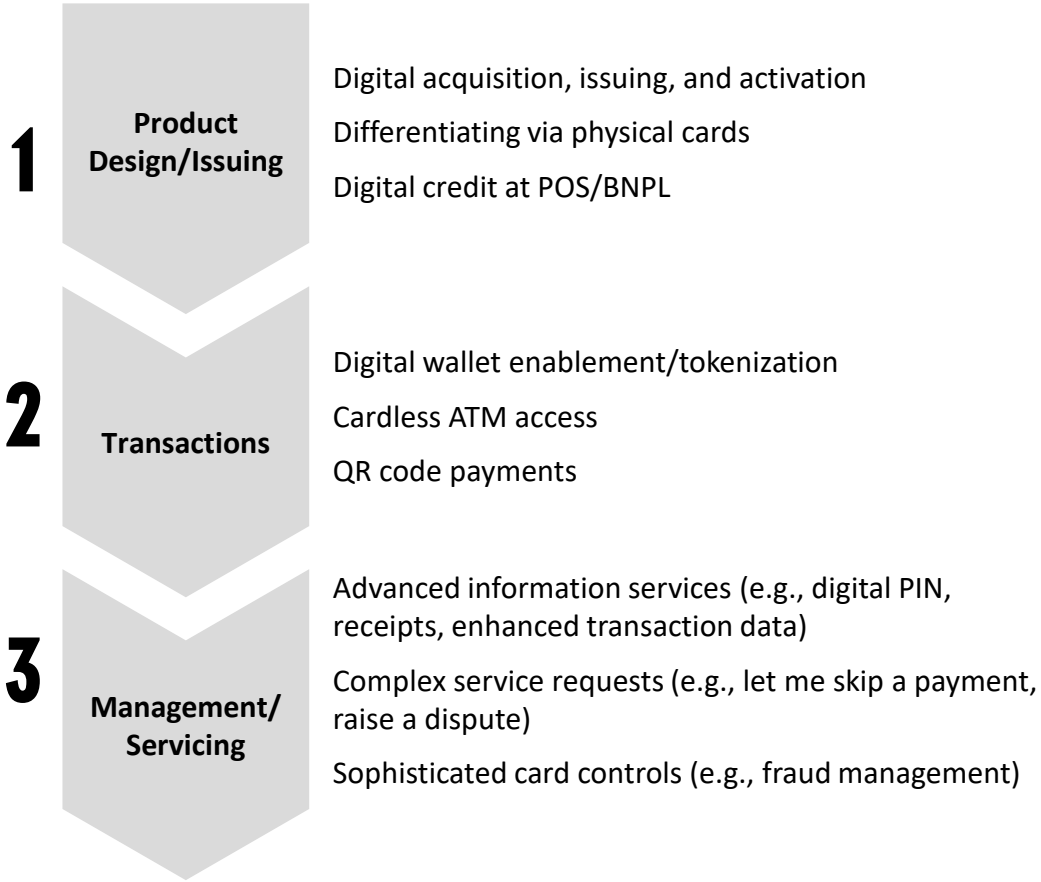
Reexamine solutions across the credit lifecycle

TRADITIONAL AND NEW ISSUERS CONTINUE TO DRIVE GROWTH IN CARDS BY INNOVATING BOTH PHYSICAL AND DIGITAL EXPERIENCES



Sources: Celent, company data

Blending Physical and Digital Experiences



DESPITE GROWTH IN DIGITAL PAYMENTS, **PHYSICAL CARDS** REMAIN IMPORTANT AND ARE BECOMING A SOURCE OF **DIFFERENTIATION** FOR BANKS AND FINTECHS

Design

Vertical layout
Inclusion features
Embedded QR code

Functionality

Biometric sensor
Dynamic CVV
No card number/expiry date

venmo



BBVA



Differentiating
via Physical
Cards

Materials

Sustainable materials
Metal

CHASE

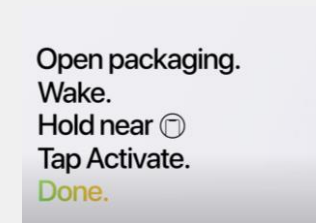


Packaging

Creative packaging
Activation process

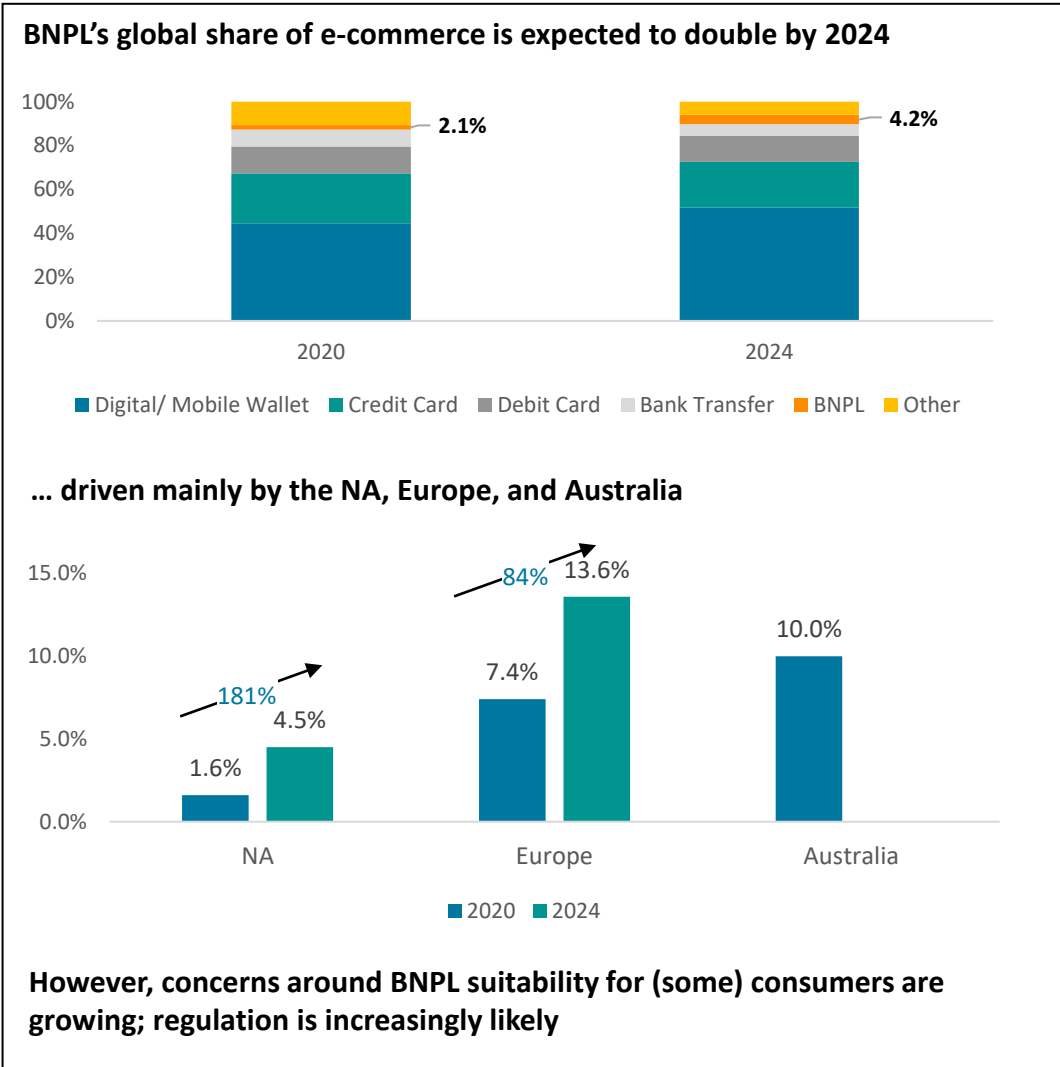
Klarna.

Revolut























Source: Celent analysis

BANKS SHOULD DECIDE IF, WHERE, AND HOW TO PARTICIPATE IN BNPL

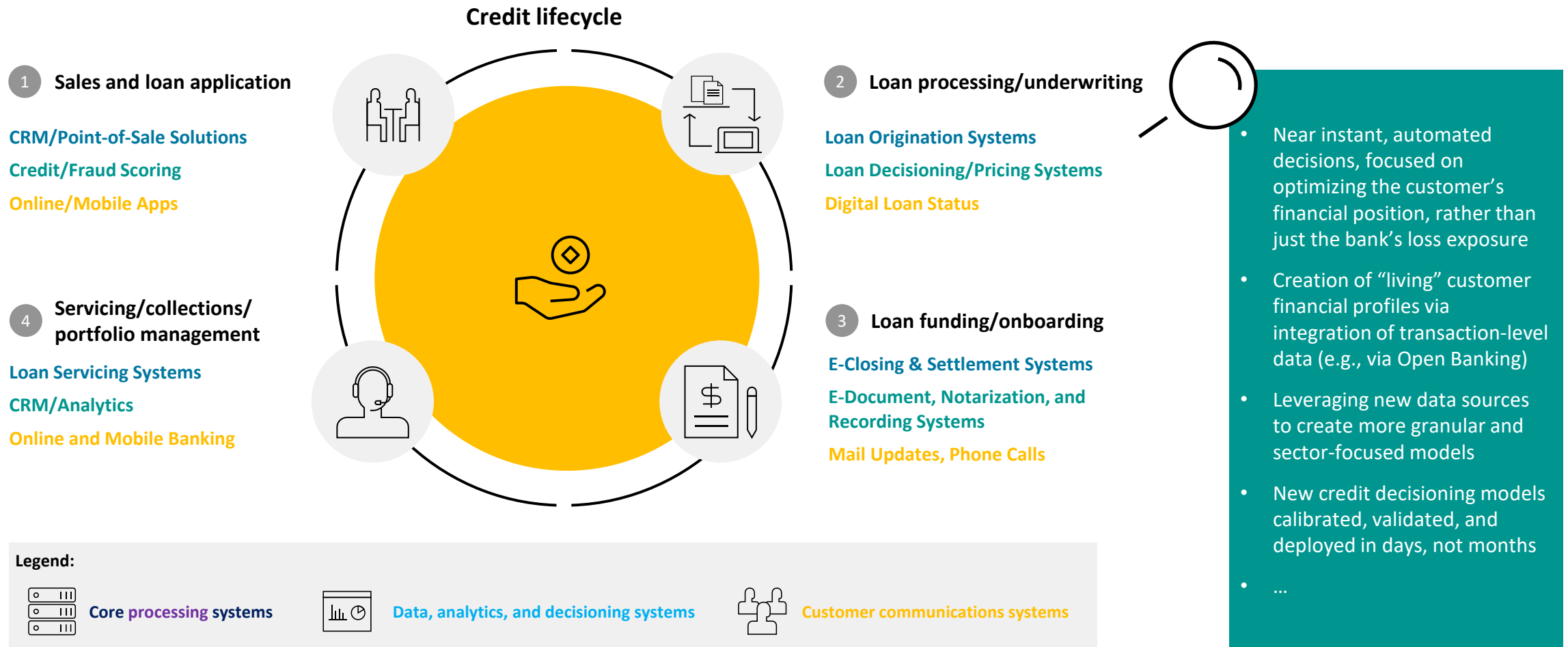


Source: <https://worldpay.globalpaymentsreport.com/en/>
Celent analysis and public announcements



Typical Bank Strategies	Examples
Propositions with Merchant Participation	Direct Partnerships   ↔ 
	Via White Label Solutions  ↔   ↔ 
Consumer-Oriented Propositions	Dedicated/Prepurchase 
	Ad Hoc/Postpurchase  ↔   ↔ 
Partnering with/Supporting Fintech BNPL Propositions	Credit-Led  ↔  ↔  ↔ 
	Distribution-Led  ↔ 
	Technology-Led  ↔ 

FINANCIAL INSTITUTIONS NEED TO REEXAMINE THEIR TECHNOLOGY SOLUTIONS ACROSS THE CREDIT LIFECYCLE



Source: Celent, Oliver Wyman

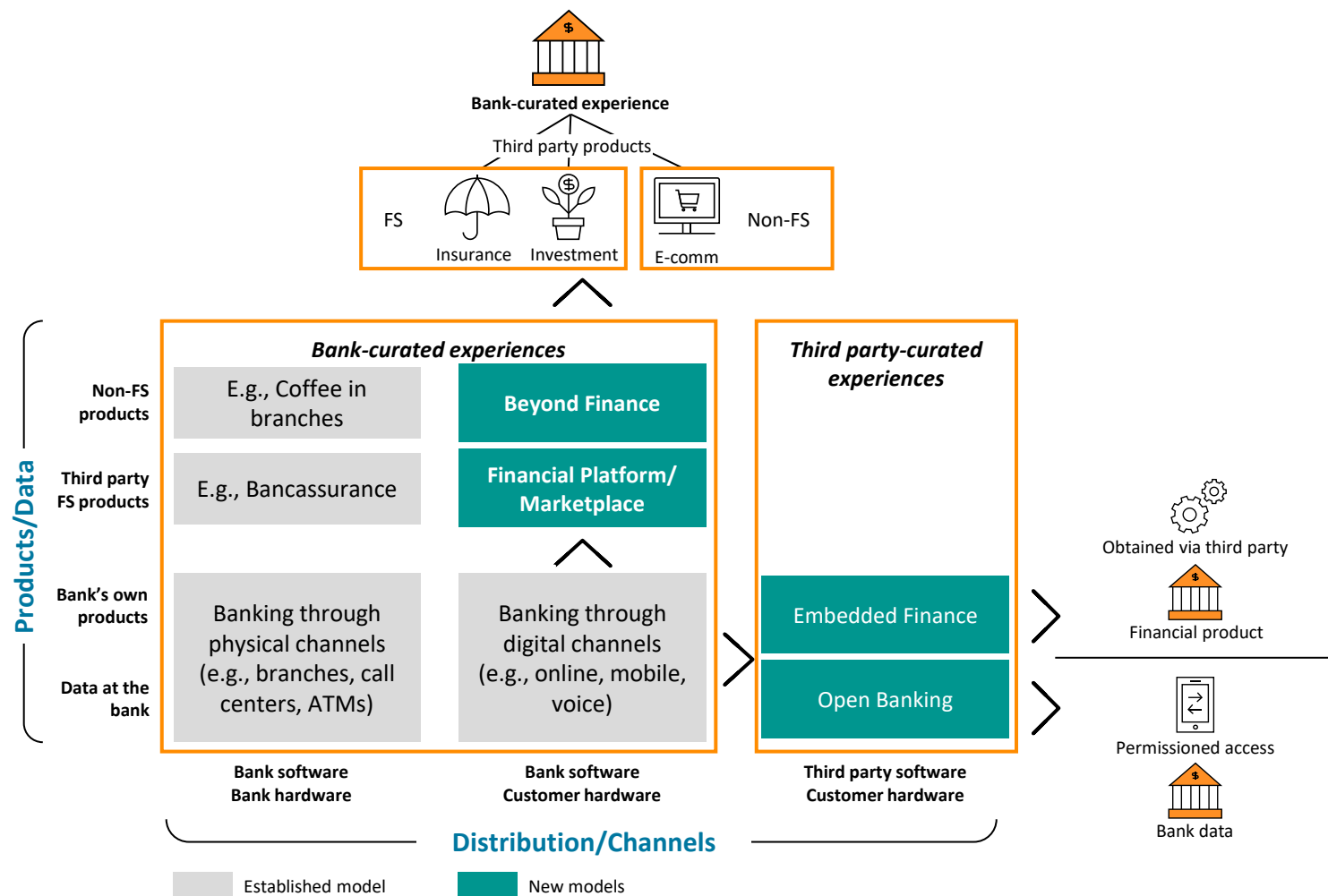
C: TAKING AN ECOSYSTEM APPROACH TO GROWTH

Determine your open ecosystem strategy

Decide how to commercialize Open Banking

Consider opportunities and threats in Open Banking Payments

BANKS MUST DECIDE HOW THEY PARTICIPATE IN THE INCREASINGLY **OPEN** FINANCIAL SERVICES **ECOSYSTEM**

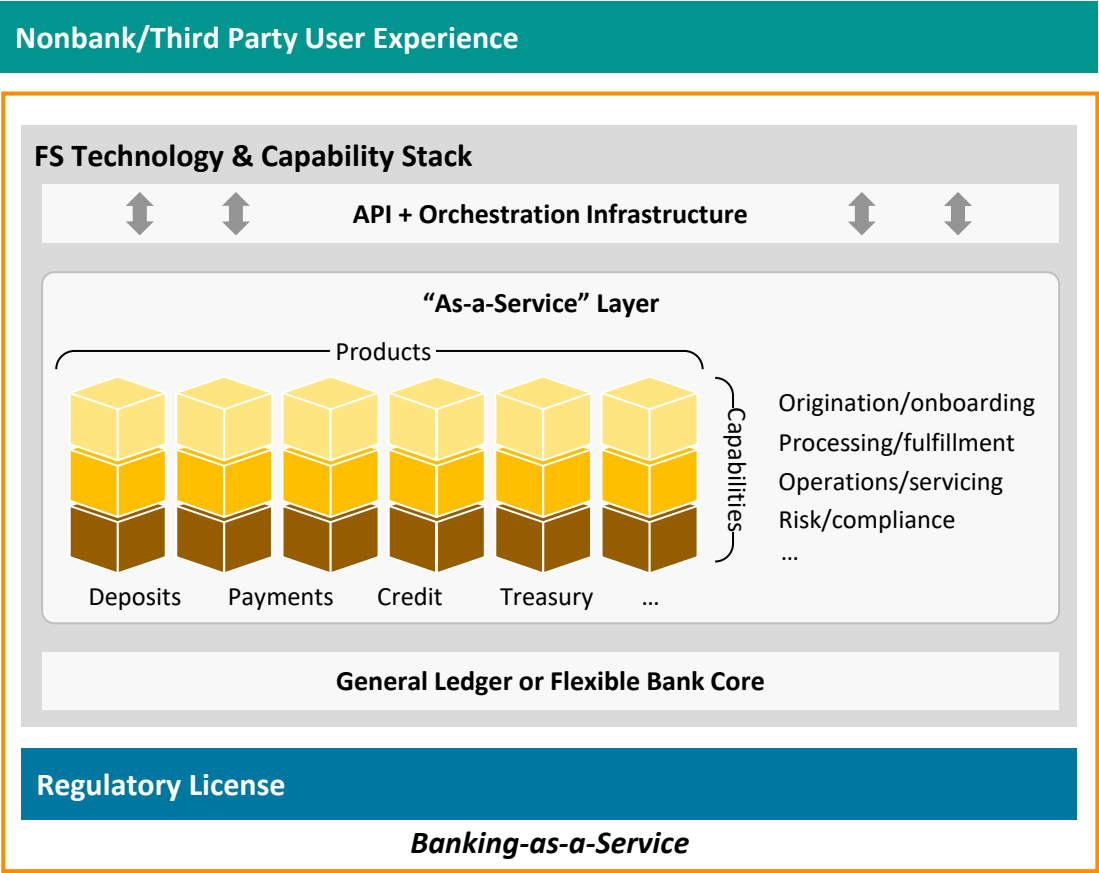


The battleground is for **customer experience**:

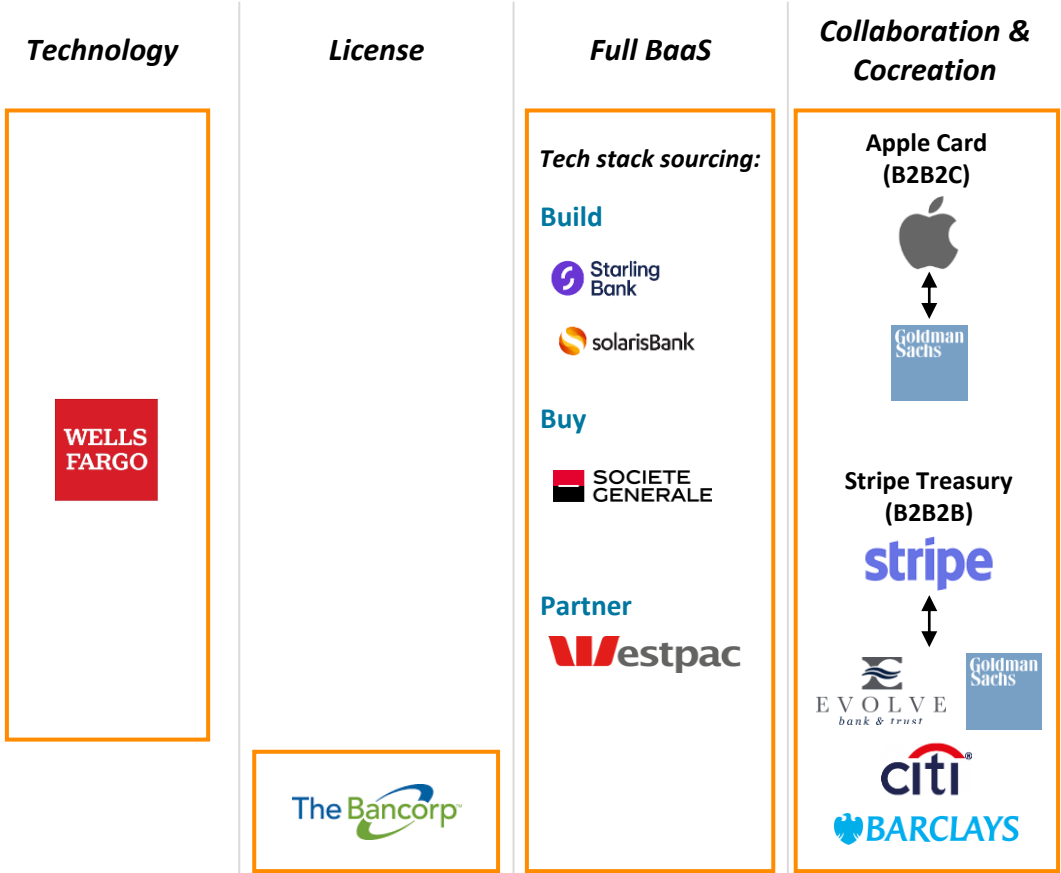
1. Should **banks curate** customer experiences by adding **third party products**—either **financial** (Financial Platform/Marketplace models) or **nonfinancial** (Beyond Finance/ SuperApps)—to what they sell through their own channels to their customers?
2. Should banks help deliver **third party-curved** experiences by enabling **access to data** (Open Banking) and **offering their products and capabilities** (Embedded Finance) via third parties?

BANKS ARE ALSO EXPLORING A RANGE OF STRATEGIES FOR PARTICIPATING IN EMBEDDED FINANCE, WHICH IS OFTEN ENABLED BY BANKING-AS-A-SERVICE

Embedded Finance Stack



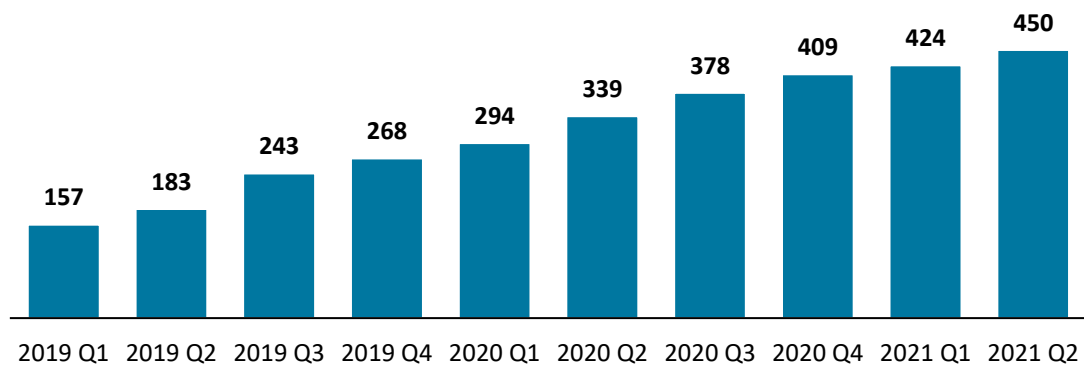
Example Bank Strategies: Emphasis on ...



Source: Celent, not exhaustive examples

AS OPEN BANKING CONTINUES TO MOVE MAINSTREAM AND THE ECOSYSTEM EXPANDS, THE OPPORTUNITIES AND RISKS GROW

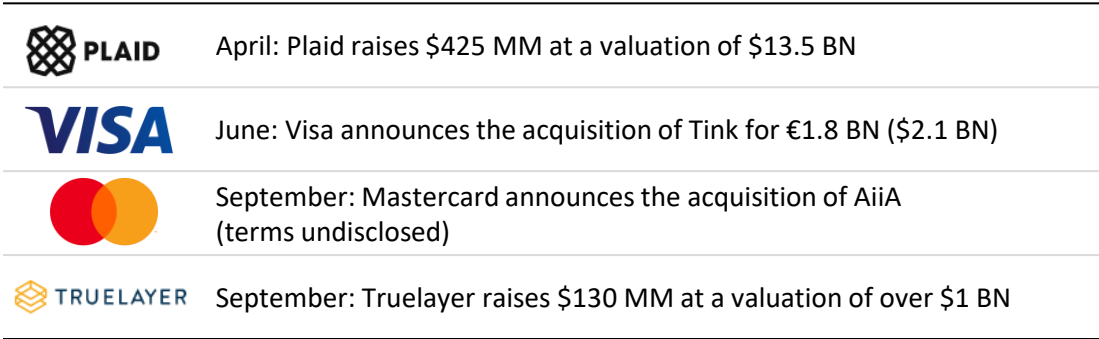
Sustained growth in new third party providers (TPPs) entering the market
Despite the challenges of COVID-19, the number of TPPs licensed as an AISP or PISP by an EU or UK NCA grew by 33% in the year ending in Q2 2021.



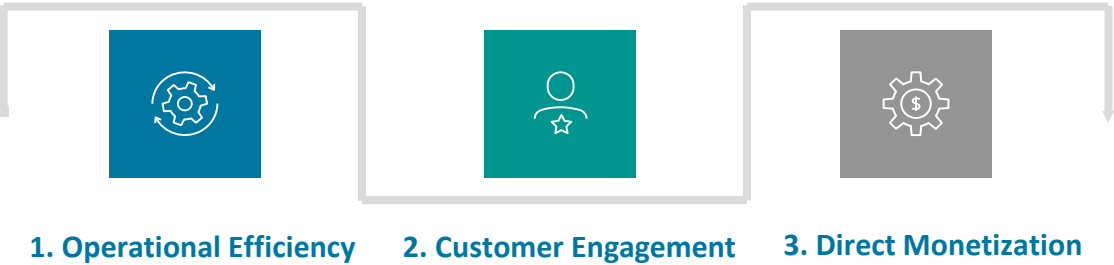
Several banks are live with services leveraging open banking



M&A and funding activity continues apace





























The path to commercializing open banking



Source: Celent analysis of EBA and FCA registers | Celent research, not exhaustive

AS THE OPEN BANKING ECOSYSTEM MATURES, BANKS SHOULD CONSIDER HOW **OPEN BANKING PAYMENTS (OBP)** FIT INTO THEIR STRATEGIES

Banks and other organizations begin to focus on five OBP use cases

Use case	Attractiveness	Examples (not exhaustive)
 Bill payment and collections		  
 SME invoicing and collections		   
 Digital commerce		   
 Account funding		  
 Charity and other donations		 

 **461%**

Increase in payment API calls
in the UK, Aug 20–Aug 21

Source: Celent research, not exhaustive, Celent analysis of UK OBIE performance statistics

D: DRIVING PRODUCT INNOVATION AND DIFFERENTIATION

Decide what “purpose” means to you and your strategy

Find the “white spaces” to develop offerings tailored to specific communities

Consider opportunities and risks in crypto

BANKS ARE BEGINNING TO ACTIVELY EMBRACE “PURPOSEFUL BANKING” AND WHAT IT MEANS ACROSS CUSTOMER STRATEGIES, PRODUCTS, AND OPERATIONS



Customer financial wellbeing is embedded in our DNA—we want to help our customers make better decisions. Financial education remains an important issue in Ireland, with Finance being among Ireland’s top taboos: 74% of customers are uncomfortable talking about it. Bank of Ireland launched a campaign to encourage more open discussion of personal finances as part of its Financial Wellbeing programme.

We are also experimenting with behaviour science techniques to see how we can help customers reduce persistent credit card debt. This might seem counter-intuitive, but we think this will lead to better relationships with our customers, they will be in a better financial position, and will ultimately need more financial services, which hopefully the bank will benefit from as well.



At Bank of America, we’re guided by a common purpose to help make financial lives better, through the power of every connection. We’re delivering on this through responsible growth with a focus on our environmental, social and governance (ESG) leadership.



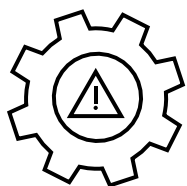
At Erste, “purpose” is our most important topic. Our customers, employees, and investors want to know what we are here for, what our values are, and to see if they share those values. Helping customers prosper by helping them manage their finances better is not just one part of our strategy, it is THE strategy, and it’s embedded in our day-to-day banking operations. These days, you can’t put a proposal in front of the Board without demonstrating how it supports the strategy.

Sources: Celent industry discussions and company websites

FINANCIAL INSTITUTIONS ARE ALSO INCREASING THEIR COMMITMENTS TO SUPPORT CLIMATE TRANSITION

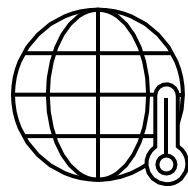
Banks Are Increasing Their Focus on Climate

Risk Management



“What risks is climate change posing to our business?”

Proactive Efforts



“What can we do to help fight climate change?”

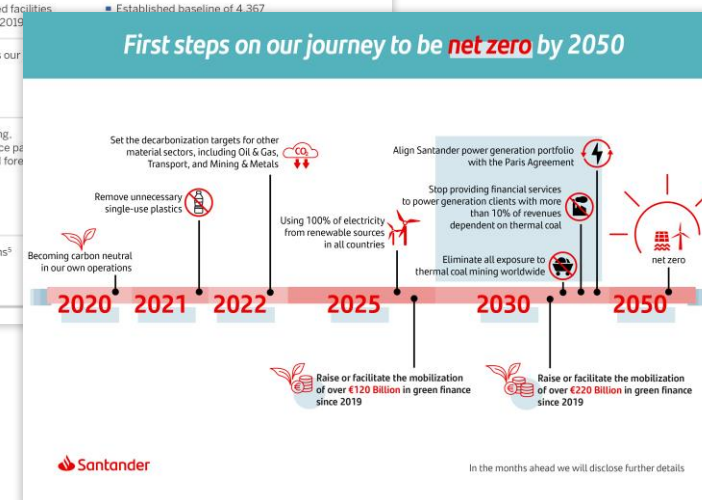
- **Promotion of green business**
- **Environmental initiatives**
- **Reducing carbon footprint**



Supporting the climate transition is one of the five major challenges facing banks in Europe. An estimated €1.5 trillion to €2 trillion needs to be invested in the green economy, more than twice the size of the Next Generation fund.

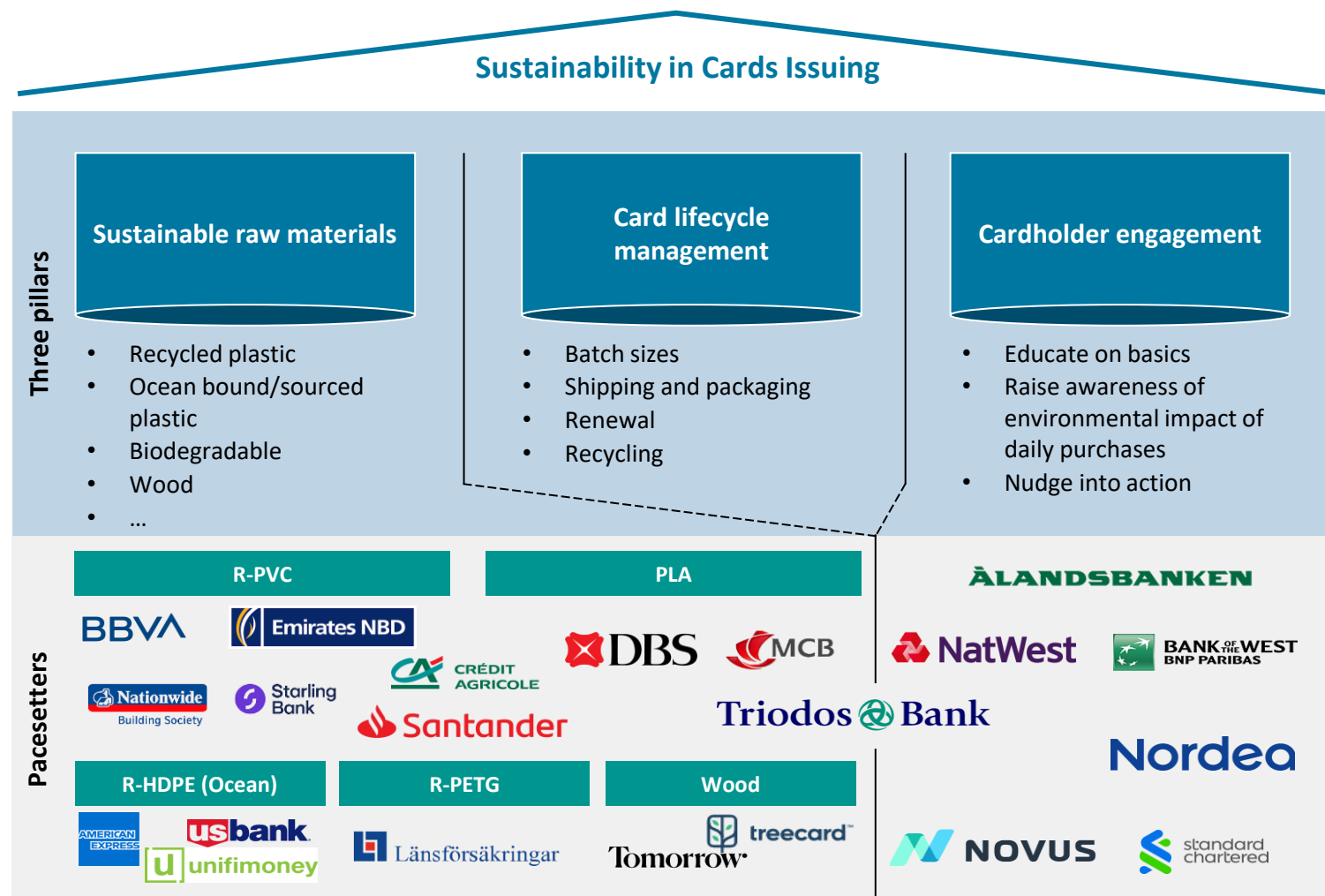
Examples of FI Activities: American Express and Santander

PROGRESS ON OUR 2025 ENVIRONMENTAL GOALS		
	2025 ENVIRONMENTAL GOALS	2019 PROGRESS
	Remain carbon neutral for our operations. ¹	■ Zero net GHG emissions. ²
	Continue to power our operations with 100% renewable electricity.	On track Target: 100% 100%
	Reduce energy use by 35% across our managed facilities compared to 2011. ³	On track Target: 35% 29%
	Reduce waste generated from our managed facilities by 10% per colleague compared to 2019. ³	■ Established baseline of 135kg per colleague.
	Divert 60% of office waste generated from our managed facilities away from landfills. ³	On track Target: 60% 38%
	Achieve zero waste certification for our U.S. headquarters.	■ Implemented composting program. ■ Removed single-use plastic* cups.
	Reduce water use from our managed facilities by 10% per colleague compared to 2019.	■ Established baseline of 4.367
	Eliminate single-use plastics across our	
	Source 100% of our direct marketing, customer communications and office paper from certified sustainably managed forests.	
	Achieve Green Building certifications ⁴ for 60% of our operations.	



Oliver Wyman report on the European Banking Outlook

SUSTAINABLE CARD PROGRAMS ARE ONE TANGIBLE EXAMPLE OF HOW RETAIL BANKS CAN SUPPORT THE CLIMATE TRANSITION



Source: Celent

Path Forward

- ☐ Assemble the Right Stakeholders
- ☐ Develop the Plan
- ☐ Silence the Skeptics



*Last week I was working at a bank.
Today I am working to try and
improve the world.*

Branch staff member at one of the
leaders in sustainable cards

CLIMATE, DIVERSITY, AND INCLUSION CAN BE HELPFUL LENSES WHEN LOOKING TO DEVELOP PROPOSITIONS TAILORED TO SPECIFIC COMMUNITIES

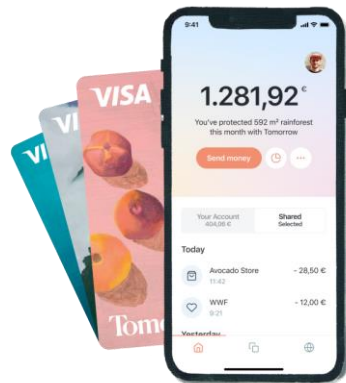
Tomorrow

<https://www.tomorrow.one/>

“Banking for a better future”—investing customer deposits into sustainable projects

Customers protect the climate with every purchase. For every euro paid with a Tomorrow card, the firm pays a portion of interchange fees to save 1m² of rainforest from deforestation.

A debit card made of wood is available for a fee or as part of the premium account package.



GREENWOOD

<https://bankgreenwood.com/>

A digital mobile banking experience made for Black and Latino customers

For each new account, Greenwood donates funds through Goodr to feed five meals to a family.

The company gifts \$10,000 every month to a Black- or Latino-owned business; customers can give to charities through spare change round-ups.

The accounts offer no fees, two-day early pay, and tailored personal finance content for the Black and Latino community.

For one and for everyone.

When you open a digital bank account through Greenwood, you save money, help the community, and get paid early. Recirculating wealth. That's the Greenwood way.



Daylight

<https://joindaylight.com/>

Founded by “queer millennials to solve problems we’ve experienced already” and address unique needs of the LGBT+ community: “different timelines, different kinds of families, different goals and different futures”

Daylight's mobile-first accounts have the customer's chosen name, regardless of what their actual ID says.

Customers receive up to 10% cash back for spending at queer bars and LGBTQ+ allied businesses.

Content is tailored to LGBT+ people. Financial coaches are available who “champion and affirm, rather than judge.”



#CallMeByMyName

Get your chosen name on your card regardless of what your legal ID says.

Show the world the real you.

HAVING LONG STAYED CLEAR OF **CRYPTO**, BANKS AND FINTECHS ARE CONSIDERING IF AND HOW THEY SHOULD START **EMBRACING IT**

Potential crypto-related opportunities for financial institutions ...

Crypto Trading

Banks are beginning to consider whether they should support customers buying/selling and sending/receiving crypto “directly” from their accounts.

Over 4 million active **Square Cash** users, ~11%, have used the BTC service, generating US\$120 million in net profit during the first half of 2021. **PayPal** saw users who purchased crypto through the platform logging in to PayPal twice as often.

Crypto-Based Rewards

Customers are attracted to traditional products such as credit and debit cards offering rewards in crypto.



Payments

A growing number of merchants and platforms—including high-profile ones—are accepting cryptocurrency for purchases (e.g., Starbucks, Microsoft, Sotheby's, and Shopify).

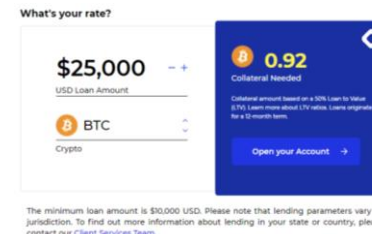
Crypto wallets and card networks are “building bridges,” although currently, the vast majority of crypto-linked debit and credit cards convert the cryptocurrency into fiat prior to paying merchants.

Lending

Opportunity to consider the value of crypto assets when making lending/credit risk decisions.

Some players (e.g., Coinbase) lend to customers against their crypto assets without the customer having to sell.

Some crypto fans go as far as borrowing money to buy more crypto, although this can be a risky proposition for all parties.



... enabled by emerging partnerships between solution providers



In May 2021, FIS and NYDIG announced a partnership to develop a solution that enables banks to offer their customers the ability to buy, sell, and hold bitcoin via their bank accounts.

FIS' Digital One Mobile provides an interface connecting consumers in-app with bitcoin trading services.

NYDIG provides a secure, regulated custodial and trading platform for bitcoin transactions.

In late 2020, FIS and NYDIG partnered with Quontic Bank to enable the bank to be the first FDIC-insured financial institution in the US to go live with a Bitcoin Rewards debit card.

E: DIVERSIFYING TECHNOLOGY TRANSFORMATION TOOLKIT

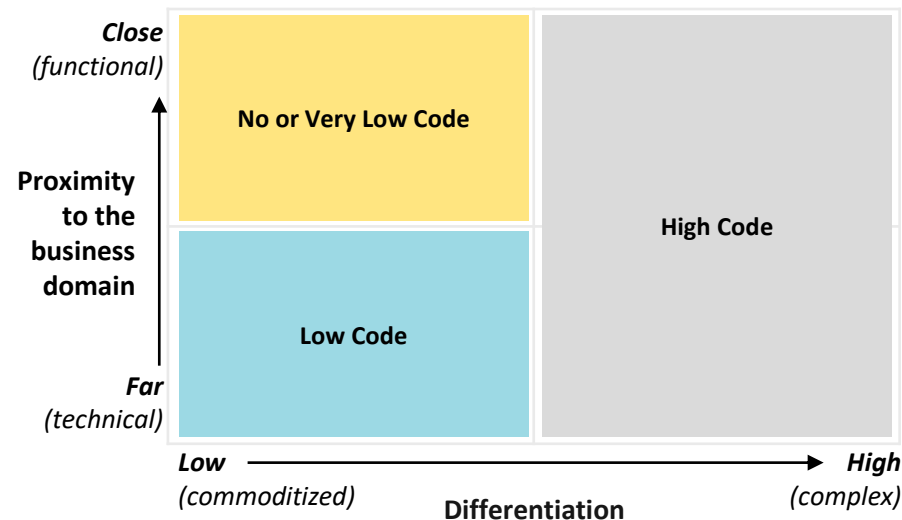
Consider use of low-/no-code platforms

Leverage composable building blocks from diverse technology partners

Build on top of increasingly verticalized cloud services

AS DEMAND FOR TECH TALENT OUTPACES SUPPLY, BANKS ARE LOOKING AT MAKING USE OF INCREASINGLY VERSATILE **LOW/NO CODE** DEVELOPMENT PLATFORMS

Where Low/No Code Platforms Work Well Today



NO CODE

Empower the **business**

Drive application development to solve **specific needs**

Establish governance and guardrails to allow business users to create innovation

LOW CODE

Empower the **developer**

Reduce friction for **repetitive processes**

Reuse services and capabilities

Leverage standardization where possible

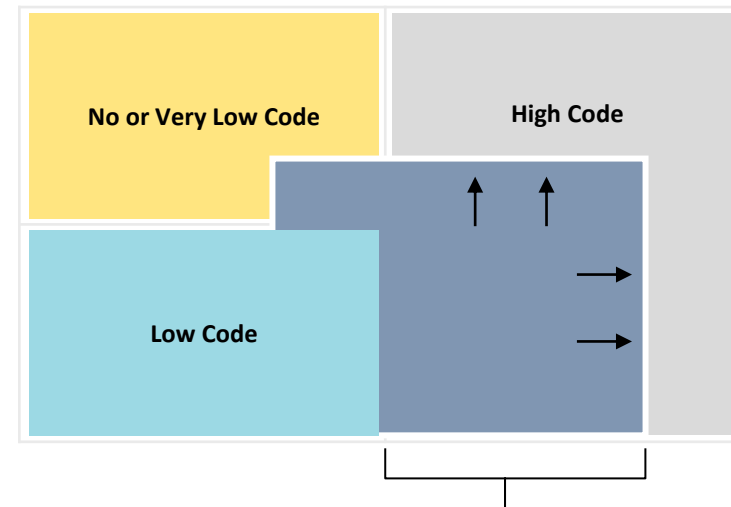
HIGH CODE

Build value-adding feature sets and **differentiated solutions**

Introduce significant customization

Reduce reliance on prebuilt blocks or commodity

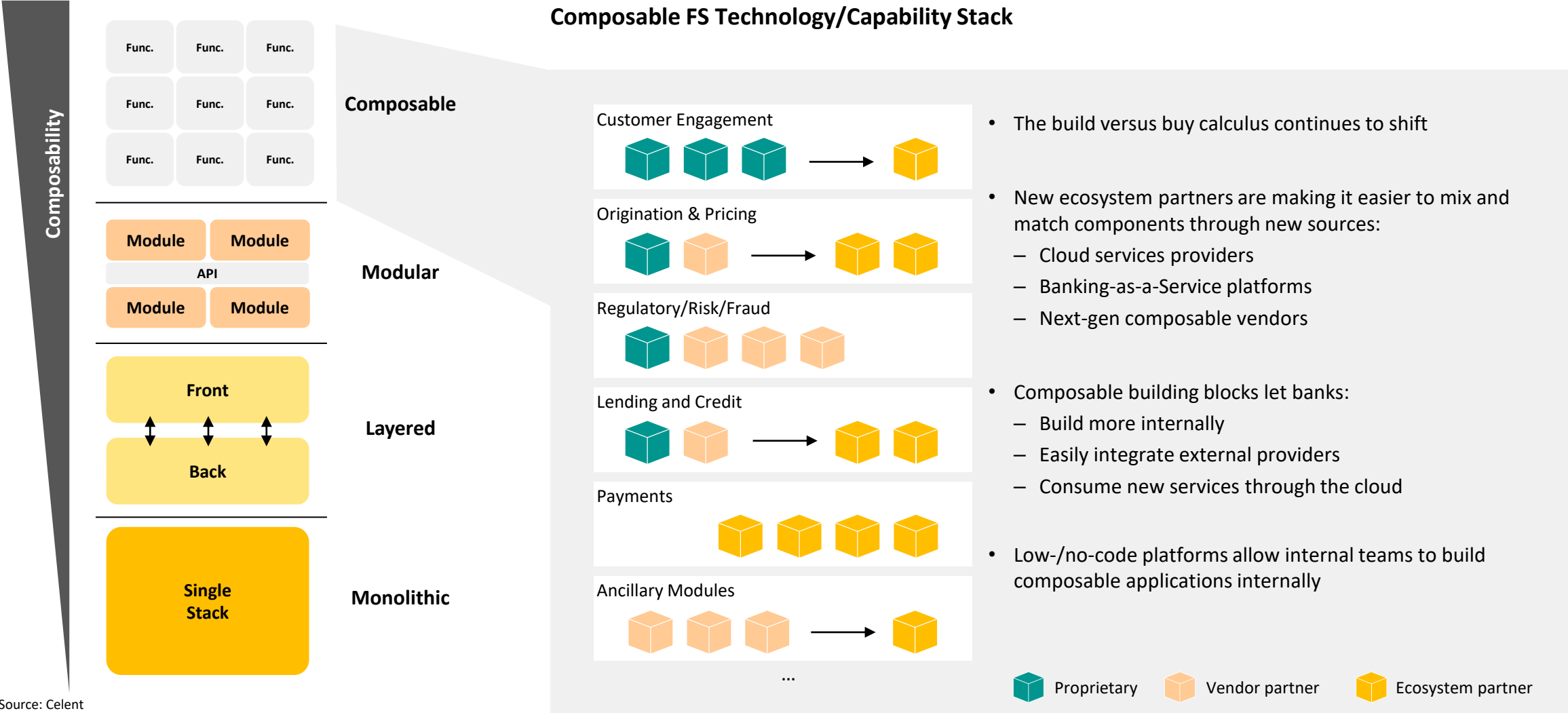
How Low Code Platforms Are Evolving



Low code platforms are maturing into traditionally high-code environments

Platforms moving in this direction are focusing on deeper enablement of the developer experience

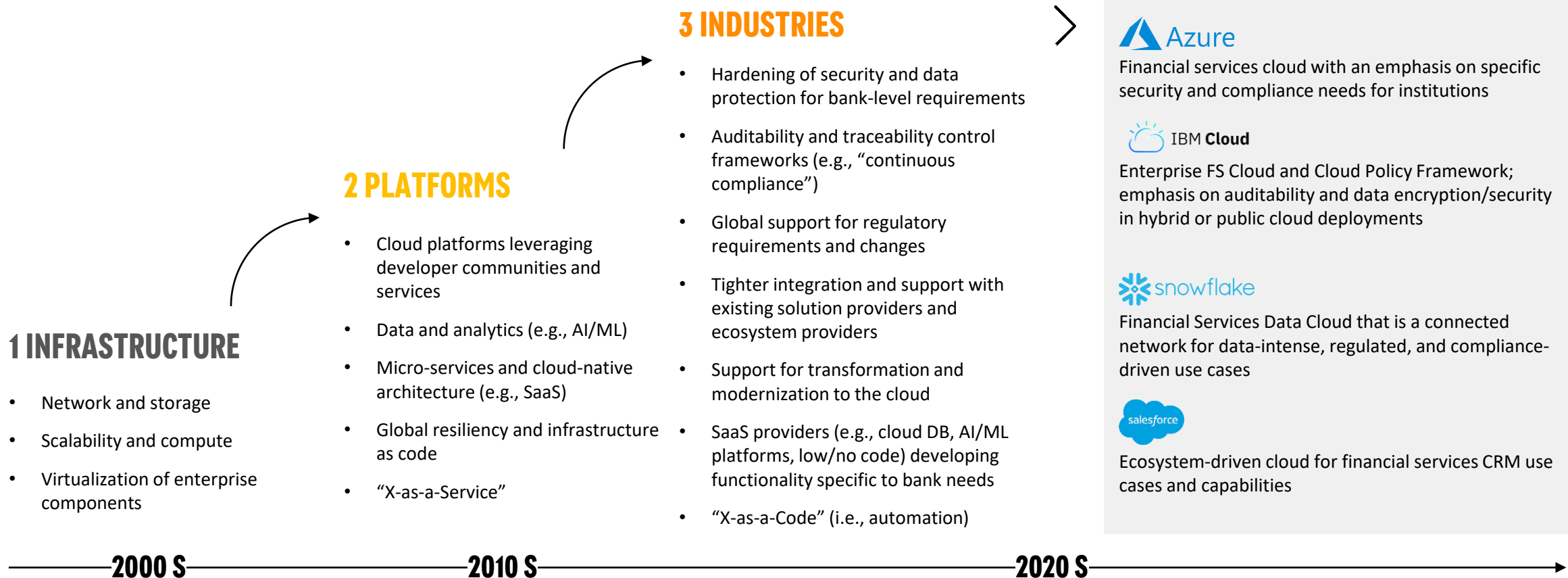
BANKS SHOULD SEEK TO LEVERAGE COMPOSABLE BUILDING BLOCKS FROM A GROWING ECOSYSTEM OF DIVERSE TECHNOLOGY PARTNERS IN THE CLOUD



Source: Celent

CLOUD SERVICES ARE BECOMING INCREASINGLY VERTICALIZED, AS PROVIDERS SEEK TO ADDRESS SPECIFIC INDUSTRY NEEDS AND PAIN POINTS

The Evolution of Cloud Services



Source: Celent analysis

BANKS ARE ENTERING INTO PARTNERSHIPS WITH CLOUD PLATFORMS, EITHER DIRECTLY OR VIA THEIR SOFTWARE VENDORS

Selected Bank Partnerships with Cloud Platforms



Partnered with IBM to build a public cloud specific to financial services institutions. Not exclusive to BofA but offers a route forward as they migrate from private cloud.



Hired top AWS engineer to lead its cloud technology transformation. Has migrated production databases to AWS. Using the public cloud to launch new digital banking propositions.



Partnered to create specific next-generation financial products for the public cloud. The bank is collaborating to create a path for migration and build on engineering capabilities and regulatory support.



Entered into a three-year strategic partnership, as part of a plan to have all core banking and trading systems in the cloud by 2025. Plans to use Azure's AI and data analytics capabilities to automate processes and deliver "hyper-personalization" for customers

Selected Software Vendor Partnerships with Cloud Platforms



Global strategic partnership to expand cloud availability of digital banking channel platforms, cards and payments processing, and authentication. NCR will collaborate with GCP on new products and services targeting financial services.



Announced cloud payment strategy leveraging Microsoft Azure to deliver payment solutions in the public cloud. ACI and Microsoft will collaborate to provide real time and digital payment offerings to financial institutions.



Running SaaS core platform on AWS, achieving "Financial Services Competency" that takes into account architectural best practices, industry expertise, and security/compliance certifications.



Announced the availability of Temenos Transact next-generation core banking with Red Hat OpenShift on IBM Cloud to accelerate hybrid cloud adoption within the financial services industry.

Source: Public announcements

SUMMARY: KEY TECHNOLOGY TRENDS AND IMPERATIVES FOR **RETAIL BANKS** IN 2022

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Continue with improvements in digital account opening and servicing and measure success

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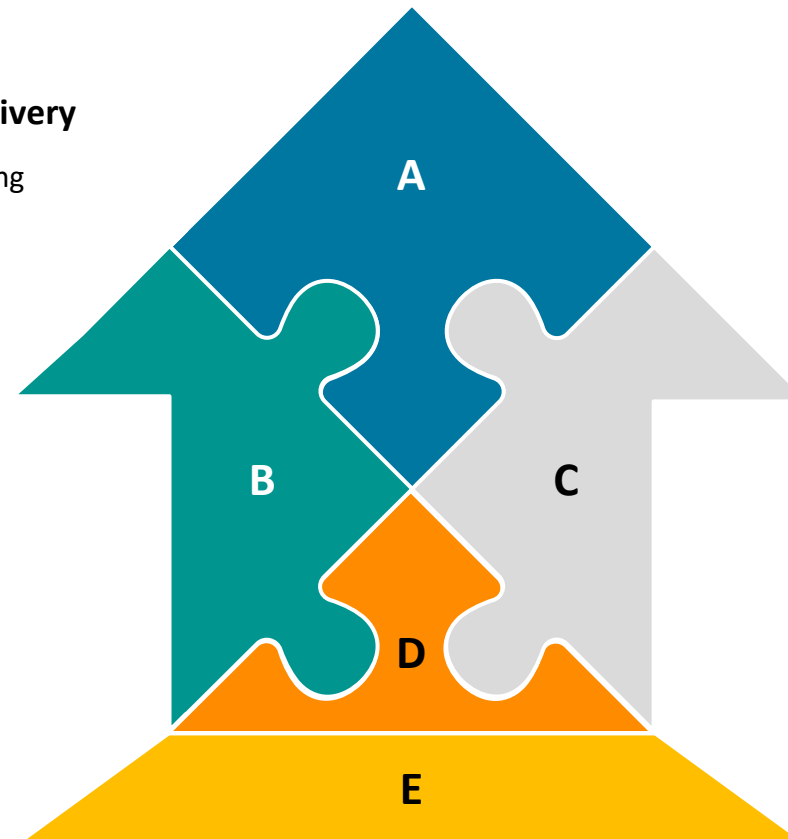
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Build on top of increasingly verticalized cloud services

SELECTED EXAMPLES OF RECENT CELENT RETAIL BANKING RESEARCH

A Optimizing Customer Engagement and Delivery		Digital Account Opening: You Can Only Improve What You Measure State of Digital Customer Acquisition: Much Work Remains Digital Customer Engagement Platforms Customer Communications Management Vendors 2021: Retail Banking Edition COVID-19's Impact on NA Branch Banking
B Embracing Disruptive Imperatives in Payments and Lending		Top Trends in Global Retail Lending 2020–2021 Loan eClosing Technology for a Socially Distanced World Optimizing the Consumer Credit Life Cycle Ensuring Payment Systems Resilience: Mission Critical, Not Mission Impossible The Payments Industry: Managing Through and Beyond the Pandemic
C Taking an Ecosystem Approach to Growth		Demystifying Embedded Finance: Promise and Peril for Banks The Steady Rise of Open Banking: Laying the Foundations for Open Finance Now Is the Time for Open Banking Payments The Evolution of Europe's TPP Ecosystem: Assessing the Health of Open Banking Parsing the Data Aggregation Landscape in the US
D Driving Product Innovation and Differentiation		Saving the Planet with Sustainable Card Programmes Digital Maturity in Banking: Conversations with Tier 1 Banks Becoming an Agile Bank Varo Bank: Celent Model Bank of the Year 2021 Top Technology Priorities for Retail Banks in 2021
E Diversifying Technology Transformation Toolkit		Low/No Code Vendors in Banking IT Services Vendors in Banking: 2021 Retail Banking Edition Tech Spending During COVID-19: The Road to Normalcy in 2021 Technology Modernization and the Role of the Ecosystem Cobiscorp: Accelerating Client Migration to the Cloud with COBIS SL

ZILVINAS BAREISIS

Head of Retail Banking



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How Celent Can Help?



Advisory & Research

Expert insights delivered by Celent analysts, leveraging original and curated content on the platform



Consulting

Bespoke client consulting, leveraging content on the platform



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Core infrastructure for the capture and presentation of all of Celent's research



Digital Services

Solutions to help financial institutions manage their technology with benchmarking capabilities

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