



DIGITAL BANKING TRENDS

Profitcard, Berlin, 13.06.2023

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netcetera

Banking Trends as Business Imperatives





Payment Service Directive III, Open Banking

#regulation #regtech #technology #open banking

API standardization for openness and access from an account

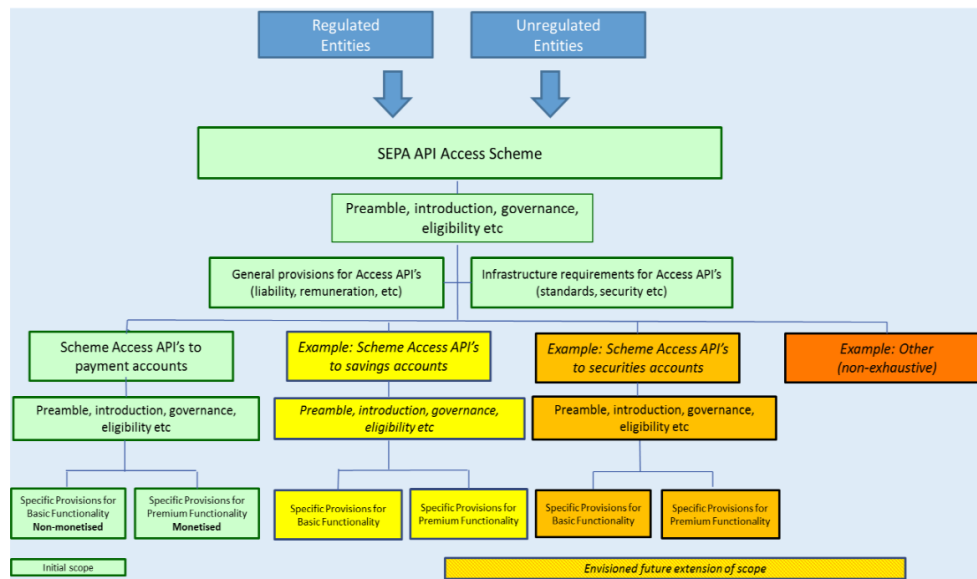
- SEPA Account Access (SPAA)

Regulatory broadening and enforcement

- scope of products and services under regulation
BNPL solutions, contactless payments, digital wallets
- licensing, and supervision of TPPs, especially PISPs

Continuing the fight against fraud

- perhaps a revision of SCA



Vision of a SEPA API Access Scheme

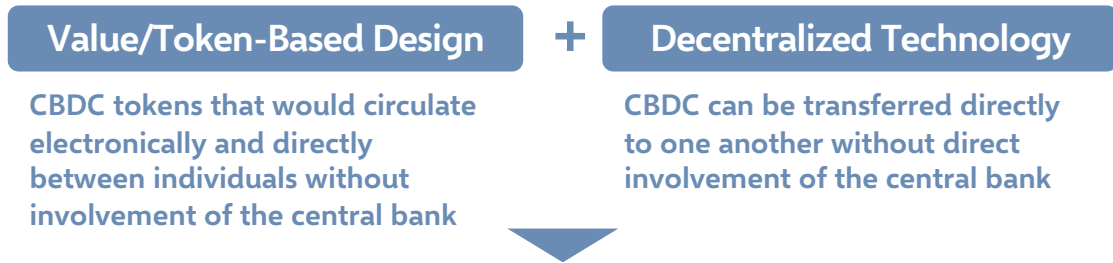
https://www.ecb.europa.eu/paym/groups/erpb/shared/pdf/15th-ERPBM-meeting/Report_from_the_ERPB_working_group_on_a_SEPA_API_Access_Scheme.pdf?52770756a713895bdc4fd072873346be

Central Bank Digital Currency / Commercial Bank Money Token



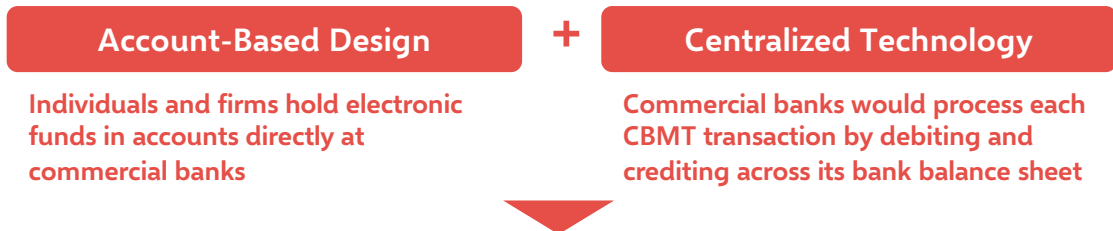
#regulation #regtech #technology #cbdc #cbmt

CBDC (as the intended digital Euro design)



Analogous to physical banknotes and coins

CBMT



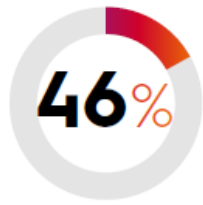
Analogous to complex delivery versus payment systems (e.g. letter of credit)

	Private payments	Offline support	Smart contracts
CBDC	+	+	-
CBMT	-	-	+



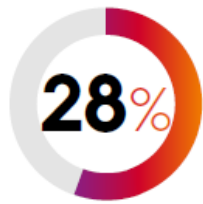
Banking & Sustainable tools

#ESG #regulation #technology #Customer



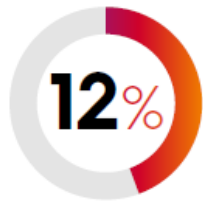
der Deutschen

halten ESG für ein wichtiges Investitionskriterium, verglichen mit 57% aller Befragten.



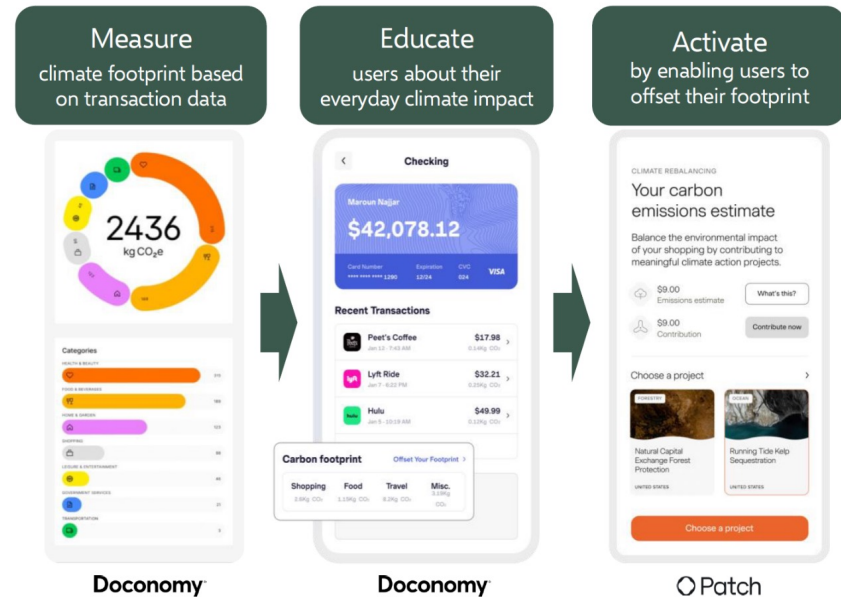
der Deutschen

würden den Service ihrer Bank nutzen, um den CO₂-Fußabdruck ihrer Einkäufe zu monitoren.



der Kunden

glauben zu 100%, dass sie Zugang zu wirklich ESG-konformen Produkten haben.



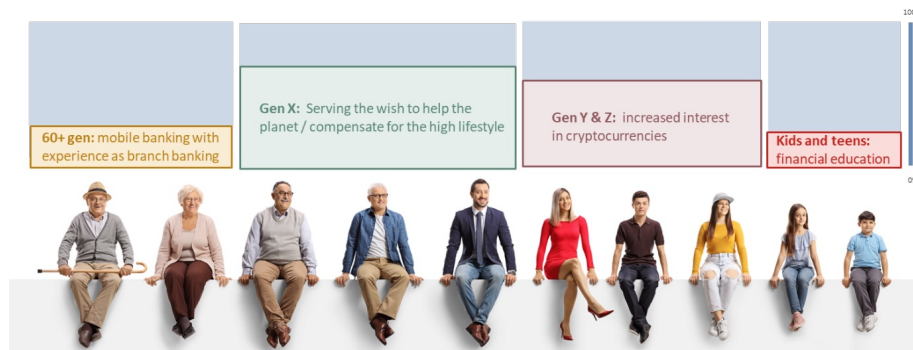
ToPay Green - convert transaction data into valuable insights and empower customers to take actions that benefit the environment

Accessible & Inclusive customer experience

#ESG #regulation #technology #Customer



Can one product cater to the needs of all Customers?



Accessible/Inclusive customer experience

Providing distinct experiences and meeting the needs of diverse customer groups in terms of generations (kids, tech-savvy millennials, Gen Z, silver ager), physical disabilities, etc.

Fostering financial literacy

Educating customers to conduct banking business independently and autonomously, can enhance the user experience by providing a sense of control that increases engagement and moves towards a needs-centric customer strategy.

Regulation stepping in as a catalyst

AI Trends in Banking

Key Trends:

- 1. Robotic Process Automation (RPA) for streamlining back-office operations.**
- 2. Machine Learning algorithms for credit risk assessment and fraud detection.**
- 3. Natural Language Processing (NLP) for chatbots and customer service.**
- 4. Personalized customer experiences through AI-powered recommendation systems.**
- 5. Predictive analytics for customer behavior and market trends.**
- 6. AI-driven virtual assistants for customer assistance and financial planning.**
- 7. Enhanced cybersecurity through AI-based threat detection and prevention.**
- 8. Automation of compliance and regulatory processes.**
- 9. AI-powered investment strategies and portfolio management.**
- 10. Improved operational efficiency and cost reduction through AI optimization.**

How was the previous slide generated?



Write a Macro for powerpoint to make one slide for what are the trends for use of AI in banking



Certainly! Here's a VBA macro code that you can use in PowerPoint to create a slide summarizing the trends for the use of AI in banking:

```
vba Copy code

Sub CreateAIBankingTrendsSlide()
    Dim slide As Slide
    Dim shape As Shape

    ' Create a new slide
    Set slide = ActivePresentation.Slides.Add(ActivePresentation.Slides.Count + 1, ppLayoutTitleOnly)

    ' Set the title of the slide
    Set shape = slide.Shapes.Title
    shape.TextFrame.TextRange.Text = "AI Trends in Banking"

    ' Add a text box for the trends
    Set shape = slide.Shapes.AddTextbox(msoTextOrientationHorizontal, 50, 100, 450, 400)
    shape.TextFrame.TextRange.Text = "Key Trends:" & vbCrLf & _
        "1. Robotic Process Automation (RPA) for streamlining back-office operations." & vbCrLf & _
        "2. Machine Learning algorithms for credit risk assessment and fraud detection." & vbCrLf & _
        "3. Natural Language Processing (NLP) for chatbots and customer service." & vbCrLf & _
        "4. Personalized customer experiences through AI-powered recommendations." & vbCrLf & _
        "5. Predictive analytics for customer behavior and market trends." & vbCrLf & _
        "6. AI-driven virtual assistants for customer assistance and financial advice." & vbCrLf & _
        "7. Enhanced cybersecurity through AI-based threat detection and prevention." & vbCrLf & _
        "8. Automation of compliance and regulatory processes." & vbCrLf & _
        "9. AI-powered investment strategies and portfolio management." & vbCrLf & _
        "10. Improved operational efficiency and cost reduction through AI optimization."
End Sub
```

```
"6. AI-driven virtual assistants for customer assistance and financial advice." & vbCrLf & _
"7. Enhanced cybersecurity through AI-based threat detection and prevention." & vbCrLf & _
"8. Automation of compliance and regulatory processes." & vbCrLf & _
"9. AI-powered investment strategies and portfolio management." & vbCrLf & _
"10. Improved operational efficiency and cost reduction through AI optimization."
```

```
' Format the text box
shape.TextFrame.TextRange.Font.Size = 18
shape.TextFrame.TextRange.Font.Bold = msoTrue

' Center align the text within the text box
shape.TextFrame.TextRange.ParagraphFormat.Alignment = ppAlignCenter
End Sub
```

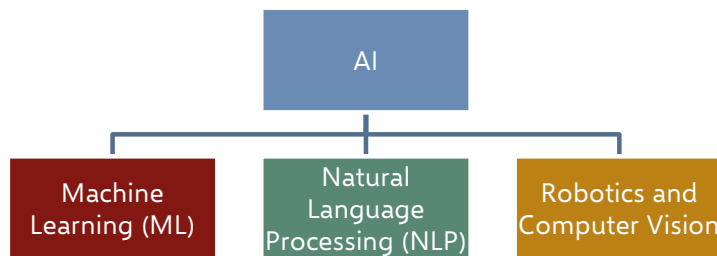
To use this macro, follow these steps:

1. Open PowerPoint and press `Alt + F11` to open the VBA editor.
2. In the VBA editor, insert a new module by clicking `Insert -> Module`.
3. Copy and paste the above code into the new module.
4. Close the VBA editor.
5. Press `Alt + F8` to open the macro dialog box.
6. Select the `CreateAIBankingTrendsSlide` macro from the list and click `Run`.

A new slide will be added to your PowerPoint presentation, titled "AI Trends in Banking," with a text box summarizing the key trends in AI usage in the banking sector. You can customize the content of the text box by modifying the text within the `shape.TextFrame.TextRange.Text` lines in the code.

Artificial Intelligence / Machine Learning / NLP

#technology #AI #generativeAI



Exhibiting intelligent behavior and performing complex tasks

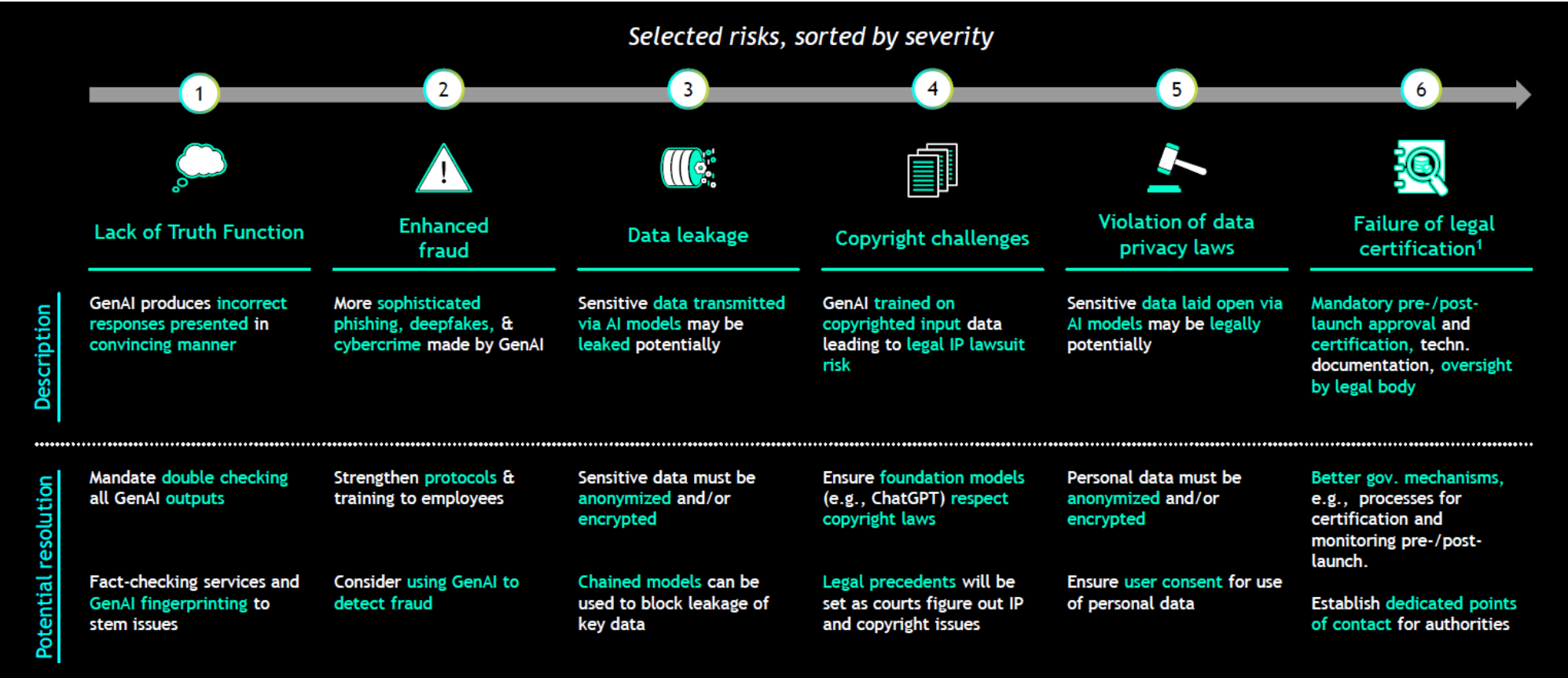
- Credit scoring and risk assessment
- Fraud detection and prevention
- Hyper-personalized Customer Experience
- Virtual assistants / conversational finance /wealth panning
with Synthetic data generation & Generative AI (ChatGPT)

....towards Human-Centered AI solutions

WS The financial industry begins to explore the promise of generative AI

	Segment	Initiative Description
Morgan Stanley	Banking	Developed an AI-based engine called Next Best Action, which delivers customised messages to clients and prospects guided by financial advisors.
J.P.Morgan	Banking	Using ChatGPT-based language model to detect trading signals from Federal Reserve statements and speeches.
Goldman Sachs	Banking	Using ChatGPT-style AI to assist developers with writing code.
Deutsche Bank	Banking	Teamed up with NVIDIA to develop AI applications for better risk management, efficiency, and customer service.
CITADEL	Hedge Fund	In the process of negotiating an enterprise-wide licence to use OpenAI's ChatGPT tool.
Bloomberg	Financial Research	Launched BloombergGPT, a large language model trained on financial data to aid with NLP tasks in finance.
Klarna	Embedded Finance	Integrated ChatGPT for personalised shopping recommendations via its search and compare tool.
Brex	Business Finance	Launched AI tools using OpenAI's tech for real-time answers on business questions and insights on corporate spending for CFOs and teams.
البن ALBAN	Business Finance	Integrated OpenAI's advanced AI tech to offer real-time insights on corporate spend and critical business questions.
Trovata	Business Finance	Trovata AI aims to automate corporate finance workflows with OpenAI's ChatGPT technology, launching a beta version to select clients.
Dough	WealthTech	Added ChatGPT into its micro-investing platform to enable its users to educate themselves about finance.
crypto.com	WealthTech	Introduced an AI companion for investors to help them learn about the crypto industry with real-time information.
OnFinance	WealthTech	Launched NEO, a ChatGPT-powered chatbot for financial education for the masses.
ATP Bot	WealthTech	Launched an AI bot for quantitative trading similar to ChatGPT, providing investors with a scientific and effective way to invest.
stripe	Fintech Infrastructure	Integrated OpenAI's new natural language technology, GPT-4, into its own products and services.
Flagright	Risk Management	Partnered with OpenAI to launch Flagright AI, an AI suite for global AML compliance and fraud prevention.
plum	InsurTech	Launched PolicyGPT, a chatbot based on GPT-3 to educate customers about their health insurance policies.

But there are challenges to be solved



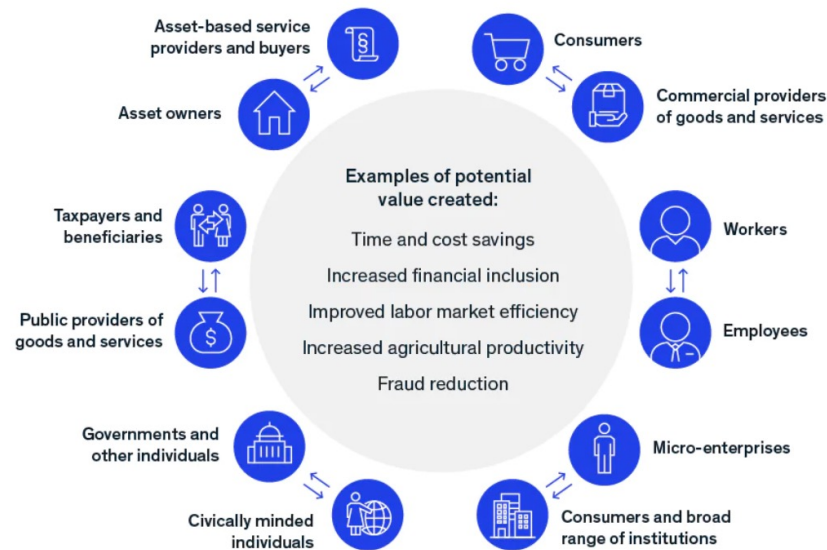


Digital Identity

#technology #customers #digitalID

Facilitating interaction between individuals and institutions

Digital ID facilitates 6 key types of interactions between individuals and institutions.



<https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/infographic-what-is-good-digital-id>

Digital identity enables residents and businesses to identify themselves and to share certain personal information with public and private services safely, often it is stored in an app/wallet.

Digital Identity wallets provide a secure and user-friendly tool for the identification of the customer and for the authentication of transaction / payment.

- Bank lead Digital Identity: Nordic countries, ich.app (AT)
- Cooperation models: e.g. itsme (BE), Verimi (DE)
- State-driven models: EUDI (EU Digital Identity)
- Decentralized models: Self Sovereign Identities (SSI)

Question: Which model will prevail?

Super Apps

#technology #customers #wallet



Super-apps are already dominant in several markets



1.24 billion users China's leading social app has become a successful super-app, offering messaging, social networking, shopping, payments and other services for free.



230 million users A widely used digital wallet in China started by the marketplace giant Alibaba, Alipay's QR code payments are used by millions of businesses from luxury malls to street shops.



187 million users Southeast Asia's leading super-app, Grab, offers services in three main areas: deliveries (food, meals, packages, documents), transportation (ride hailing) and financial services (payments, e-commerce and insurance).



170 million users Although it started as a call centre for ride-hailing services, Indonesia's GoJek super-app now offers over 20 services in transport & logistics, food & shopping, payments, daily needs, business and news & entertainment.

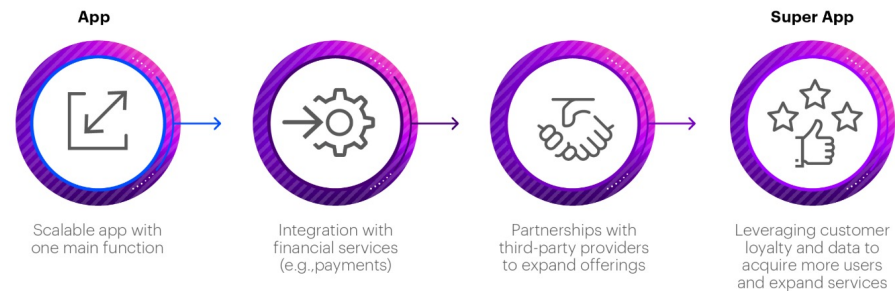


150 million users India's leading super-app offers mobile recharges; utility bill payments; travel, movie, and events bookings; in-store payments; parking payments; tolls and payment at educational institutions through their QR code system.



48 million users Operating across 13 countries in the Middle East and North Africa, Careem offers a wide range of services including transportation, food, shopping, deliveries, payments and sending credit.

How apps become super apps



Super apps as a single digital platform for a wide range of virtual products and services. Instead of managing dozens of different apps, consumers enjoy a more convenient use of a one-stop platform for multiple tasks.

A **digital wallet** can be considered a super app once it provides more functionality than payments (e.g. identity, loyalty, digital receipts, offers...)

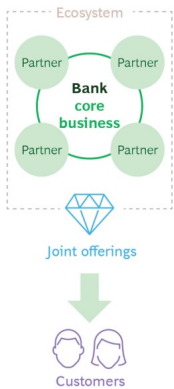


Ecosystems, Embedded Finance

#business trends #customer experience #embedded finance

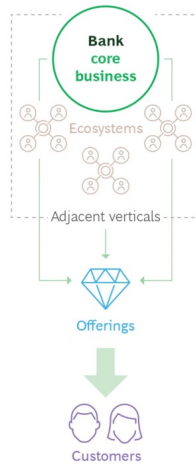
Build ecosystem around the core & play as orchestrator

Existing business as the core, partner with players from different industries, and take the orchestrator role



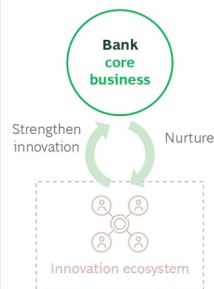
Go deep into specific verticals and markets

New ecosystems in various verticals (e.g., travel, mobility), offer broad range of products bundled with bank services



Use ecosystems to learn and experiment

Nurture ecosystems that focus on open innovation, use ecosystems as innovation engine to support core and strategy



Play as a dedicated contributor

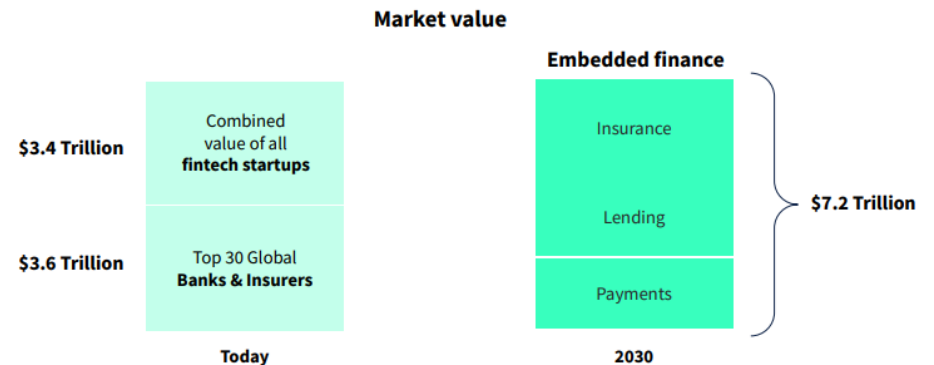
Focus contributor role on selected ecosystems, customize (to some extent) to the respective ecosystem



Source: BCG Henderson Institute analysis.

Value-based ecosystems as organizational forms characterized by a **specific value proposition**, and by a defined, albeit changing, **group of actors with different roles** such as consumer, supplier, orchestrator, complementary players

Embedded finance refers to the integration of financial services and capabilities into non-financial platforms, products, or experiences, enabling seamless and convenient access to financial services for users.



Source: ABN Amro, Dealroom.

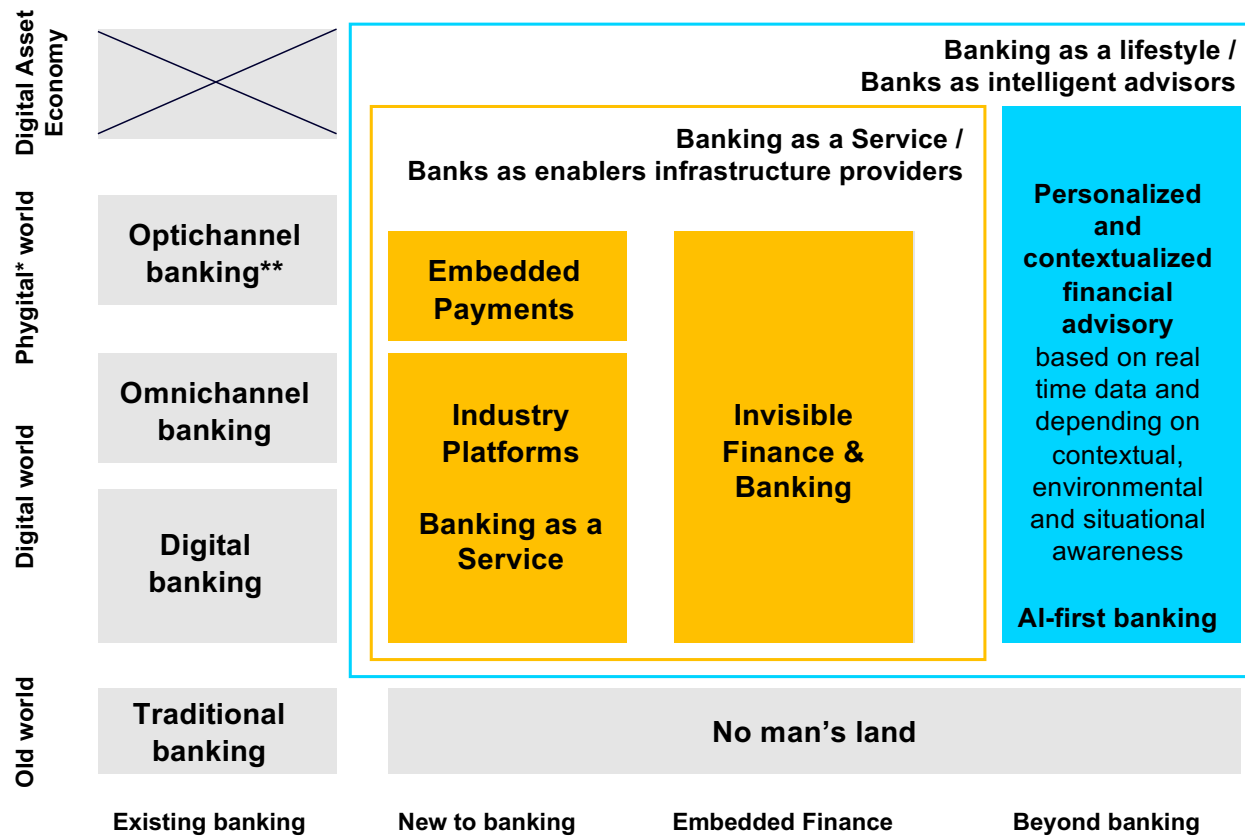
<http://etc.ch/GQkc>



Please indicate by voting, the 3 most important trends to your business in the next 3 to 5 years:

- Open Banking, PSD3
- CBDC, CBMT
- Sustainability in banking and payments
- Accessible/inclusive customer experience
- AI & ML, Generative AI Personalized & contextualized banking
- Digital Identity (Bank lead)
- Super Apps / Wallets / Marketplaces
- Ecosystems, Embedded Finance

The Innovators Dilemma and Waves of Innovation



*Phygital: connecting physical and digital worlds in a hybrid customer journey

**Optichannel: optimal cross-channel customer journey created for every customer and interaction to significantly improve sales and engagement

We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don't let yourself be lulled into inaction.

Bill Gates
Founder, Microsoft



Digital Banking & Payment @Netcetera

Netcetera is since Q1 2023 a majority owned Giesecke and Devrient company

In Q2 we created the „Digital Banking“ division, with existing business coming from the ToPay Mobile Wallet, Mobile Banking in Switzerland and many bespoke banking projects

Netcetera is providing digital banking interfaces to more than 100 banks

Netcetera secures millions of banking and payment transactions daily



Let's
connect,
exchange,
discuss &
engage!



Kurt Schmid

Managing Director Digital Banking

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Thank you!



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