AWS re:Invent

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FSI302

Building an open finance application on AWS

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Agenda

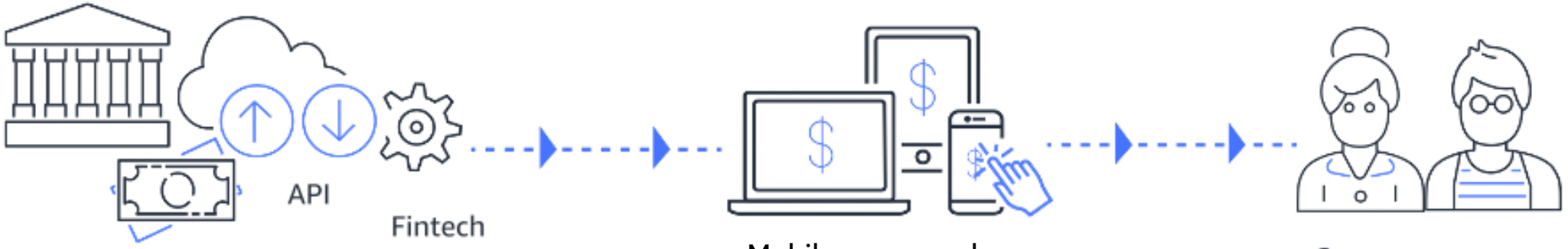
- What is open finance?
- Use cases
- An AWS open finance reference architecture for banks
- Fintech apps and aggregators
- Demo – Build a fintech app using AWS Amplify

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What is open finance?

Secure sharing of financial data through application programming interfaces (APIs)

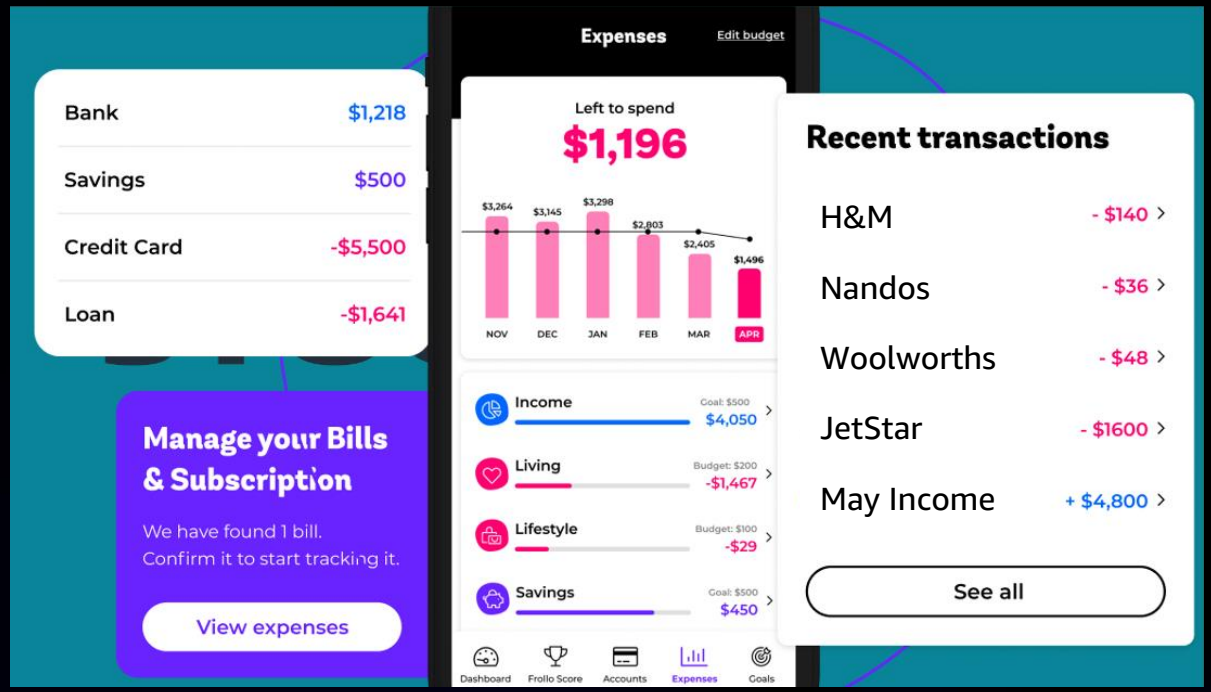
Banks provide a standard API for third-party providers (fintechs)



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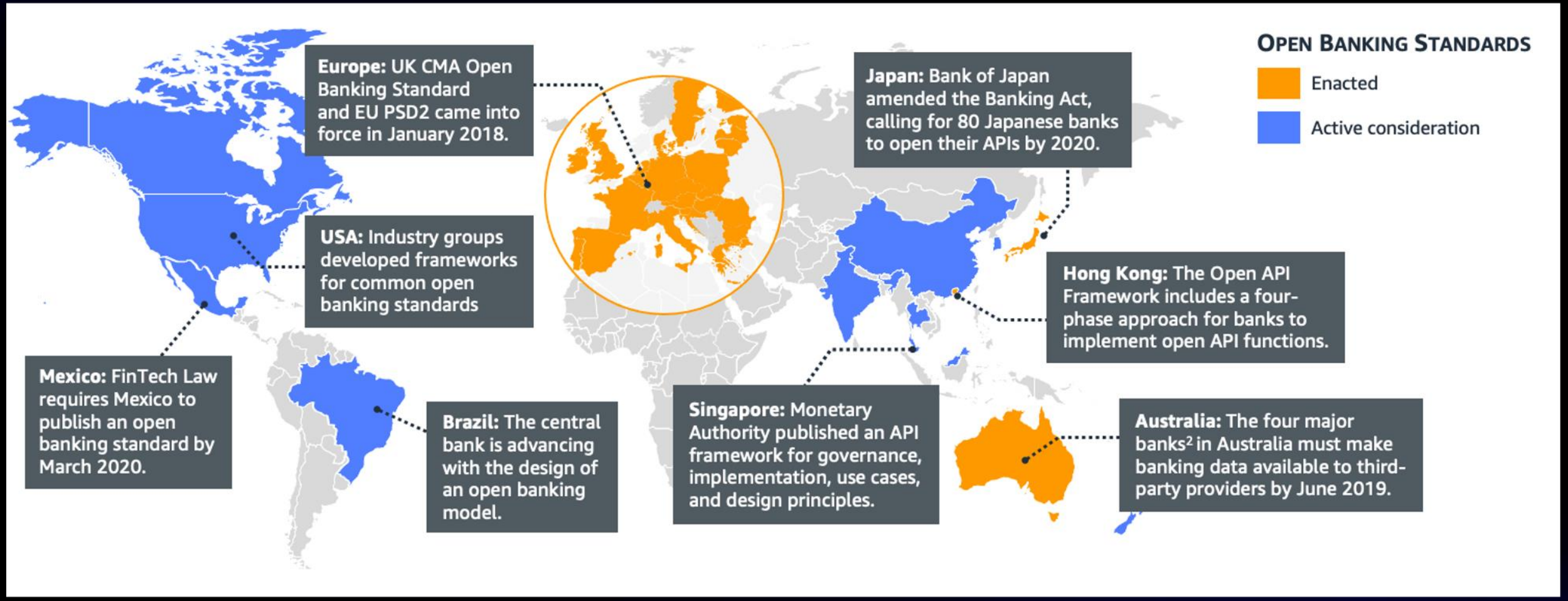
User scenarios

- Automate loan applications
- Make payments easy
- Budgeting and forecasting
- Portfolio management



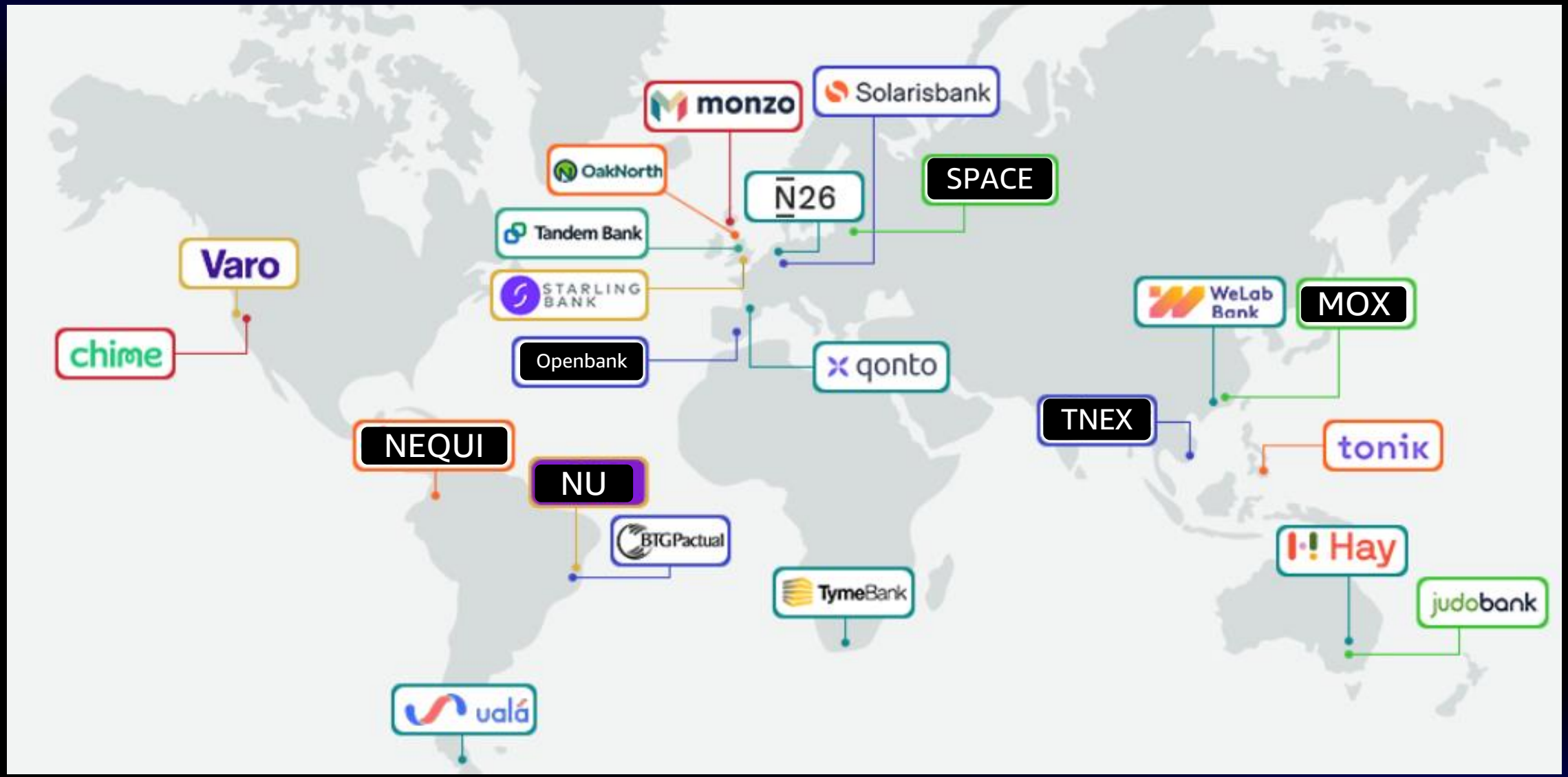
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Open finance is global – By mandate or choice



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Digital banks built on AWS



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Open finance in the US

Orgs promoting open finance APIs

- Financial Data Exchange (FDX)
- Afinis

Fintech aggregators

FINANCIAL
DATA EXCHANGE

Afinis

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A leading G-SIB bank achieved open banking compliance on AWS



The bank's open banking and connected money services used AWS services including AWS WAF, AWS CloudFront, Amazon Route 53, Amazon API Gateway, Amazon S3, ELB, Amazon EC2, AWS Lambda, Amazon VPC, AWS KMS, Amazon SQS, Amazon CloudWatch, AWS CloudTrail, and AWS Elastic Beanstalk

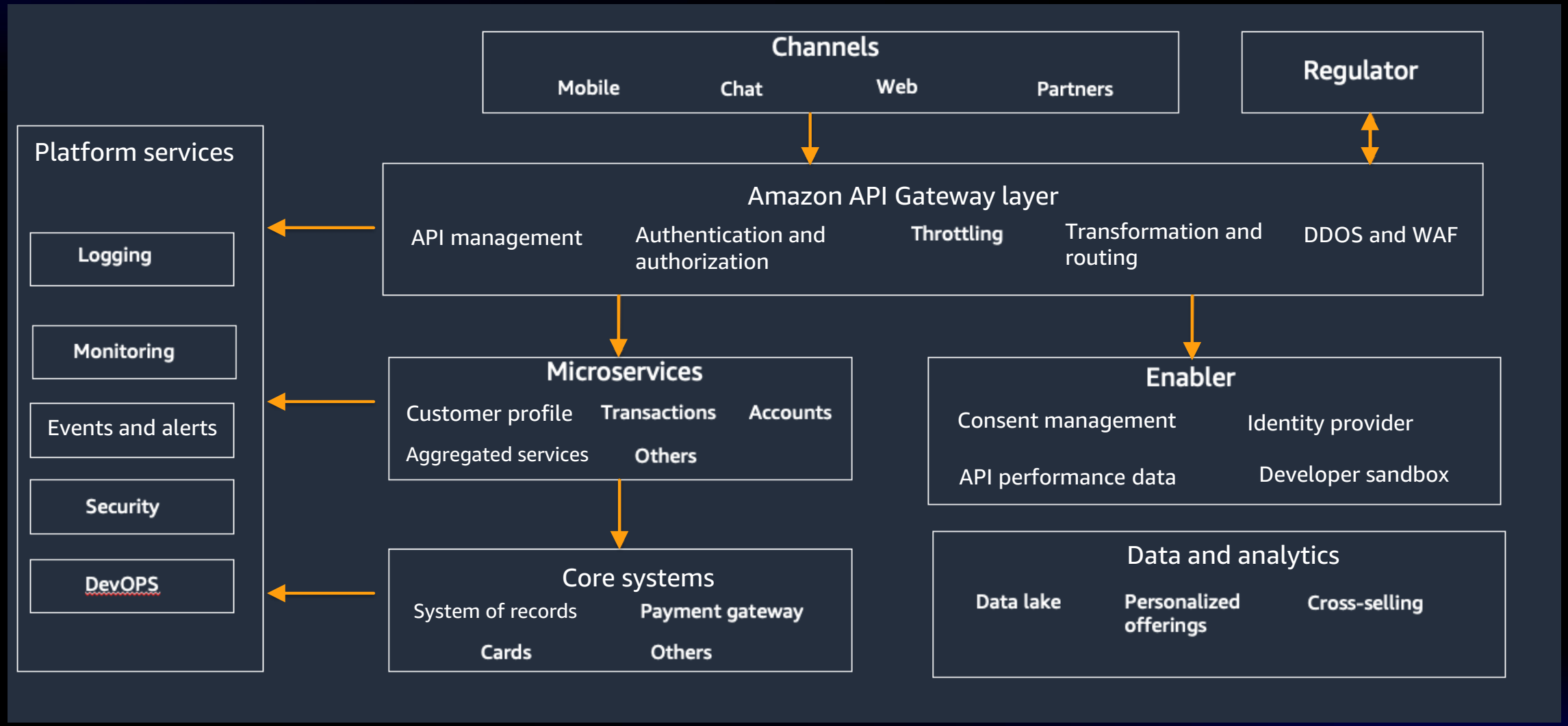
The bank needed to rapidly develop its open banking propositions to meet growing expectations of retail banking customers, and compete more effectively with fintech start-ups and challenger banks

They chose to build their open banking platform on AWS, and completed it within five weeks – ahead of the regulatory deadline; the solution is scalable, and able to be deployed in other countries as regulation allows

AWS technology has not only helped the bank to be compliant but also to cost-effectively scale compute capacity and utilize advanced data analytics to drive business growth globally

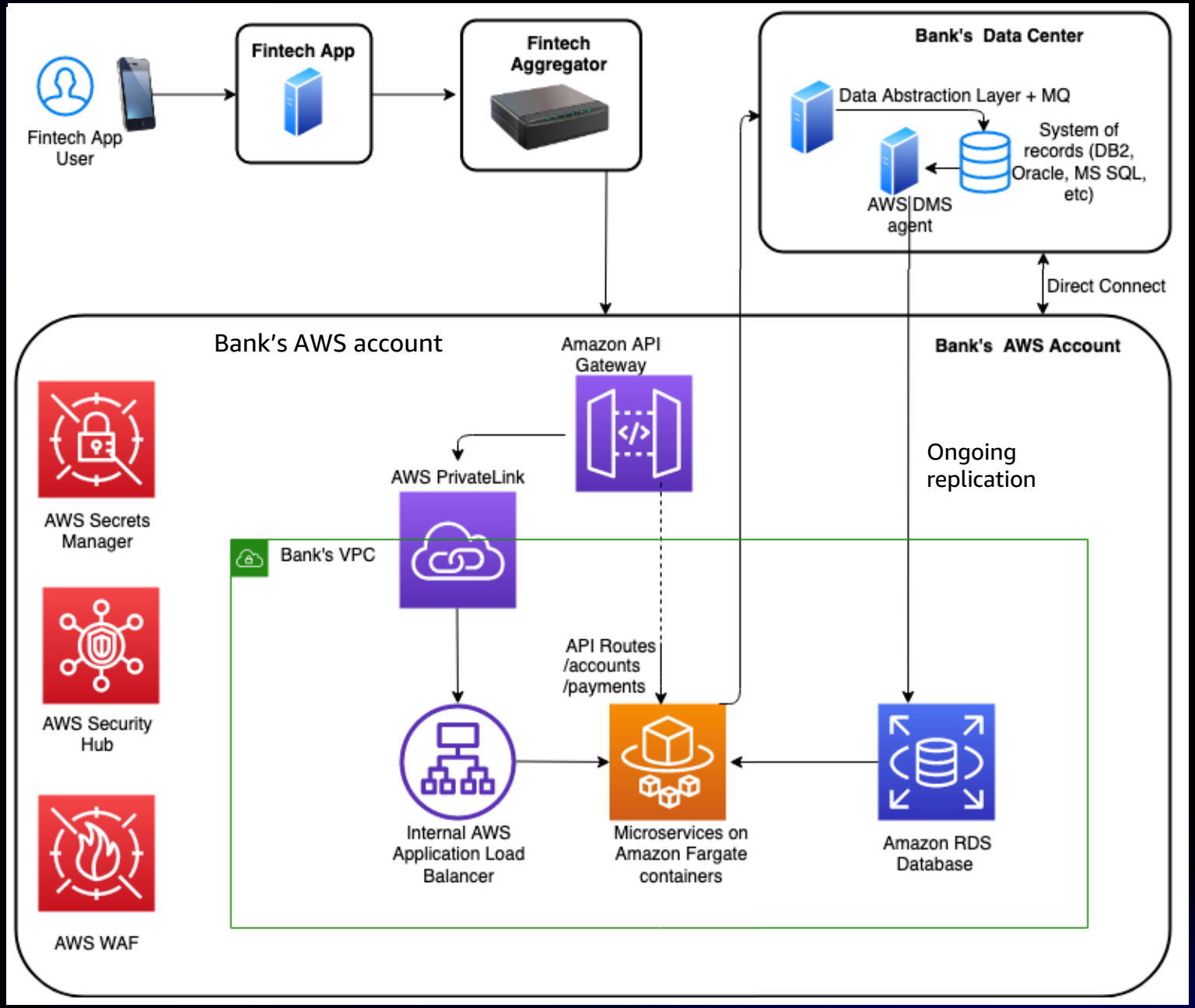
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Open finance – Functional architecture



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Open finance architecture on AWS



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Fintech apps

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Examples of fintech apps

- Venmo
- Zelle
- Betterment
- Square Cash App
- Intuit Mint
- Coinbase



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Growth of fintech startups

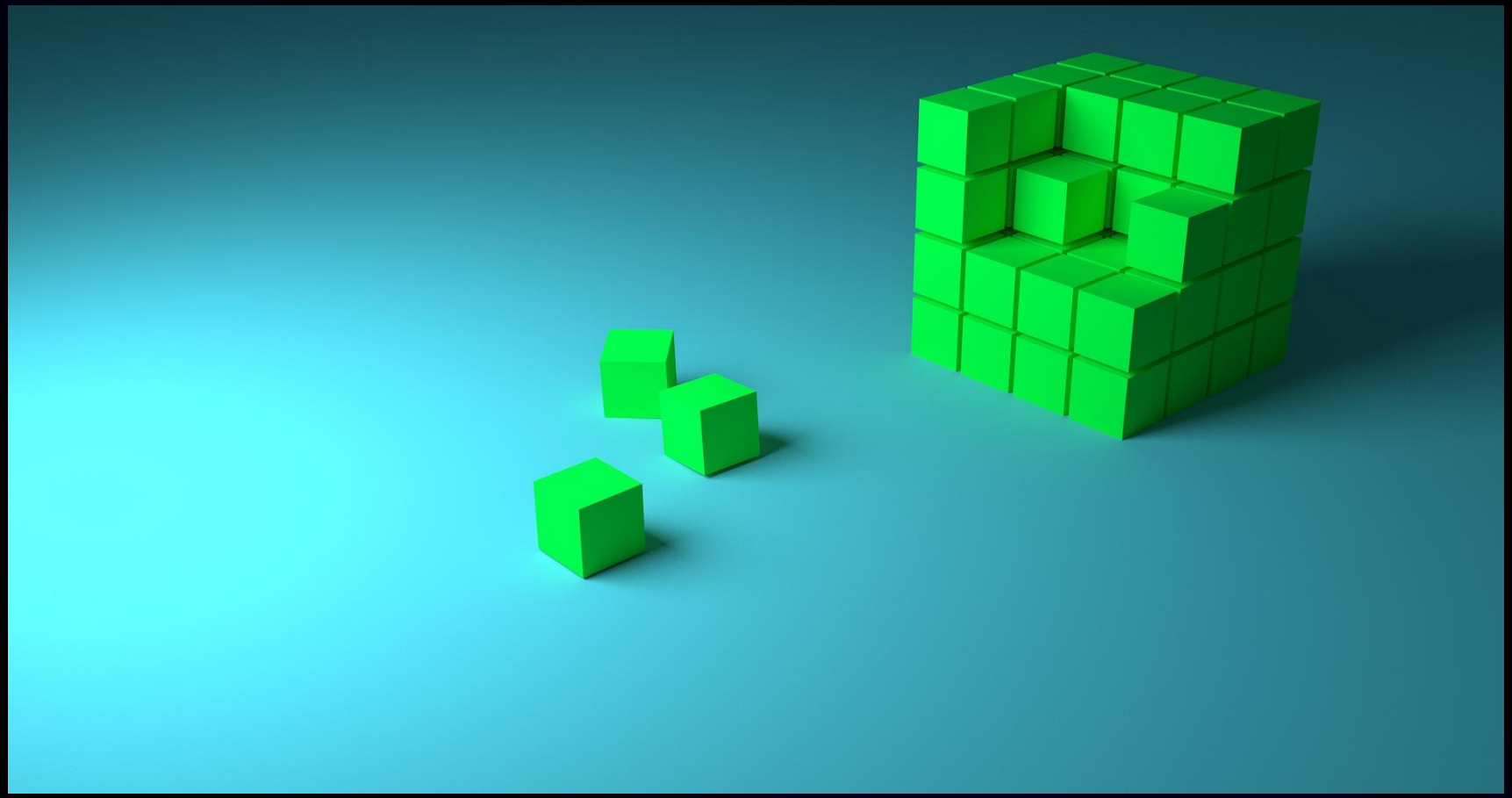
- $22.8 billion raised in Q1 2021
- Sector is growing 20% annually
- Fintech app use has grown 72% since 2019



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Fintech aggregators (US)

- Finicity
- Yodlee
- MX
- Plaid



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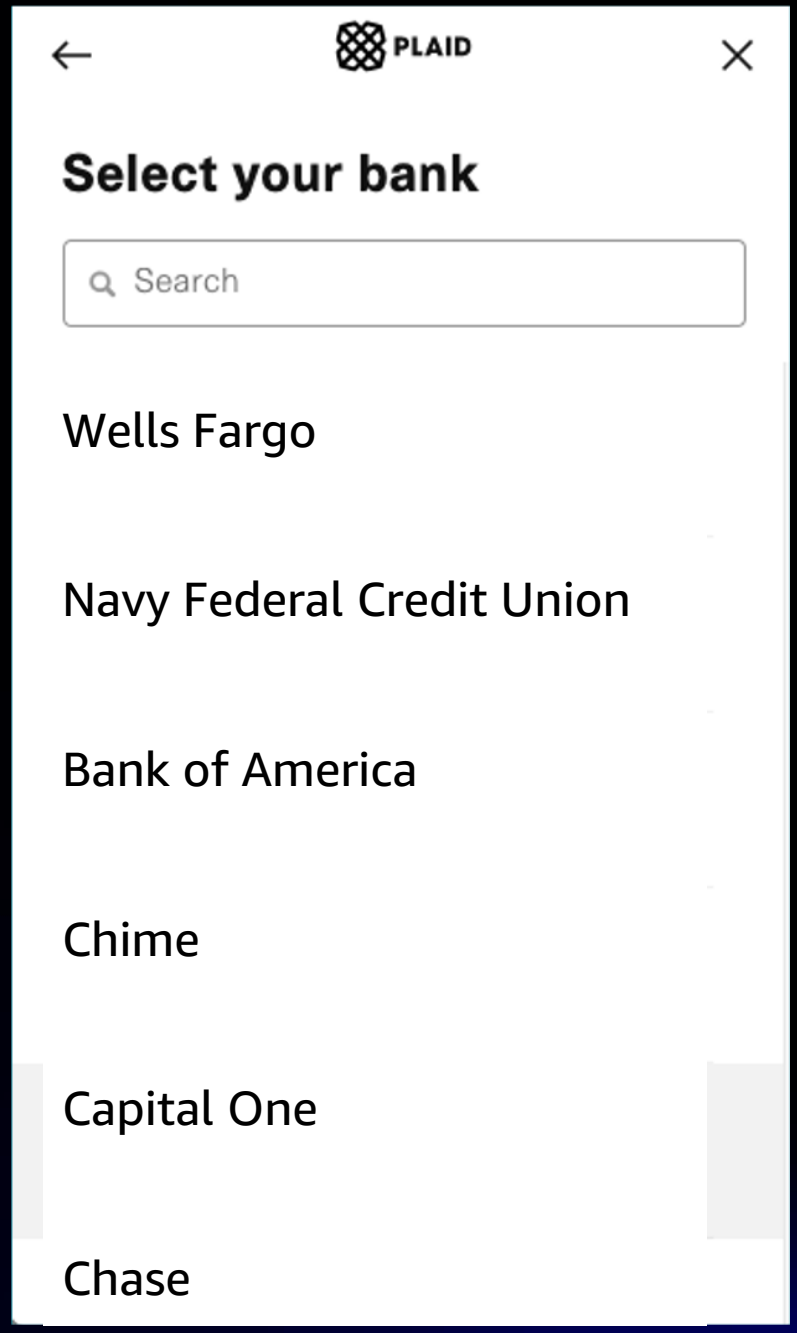
About Plaid

- Allows app developers to connect users to their bank accounts
- Connects to over 10,000 banks worldwide
- Is an AWS partner
- Used by over 3,000 fintech apps, incl. Venmo, Betterment, SoFi, and Expensify

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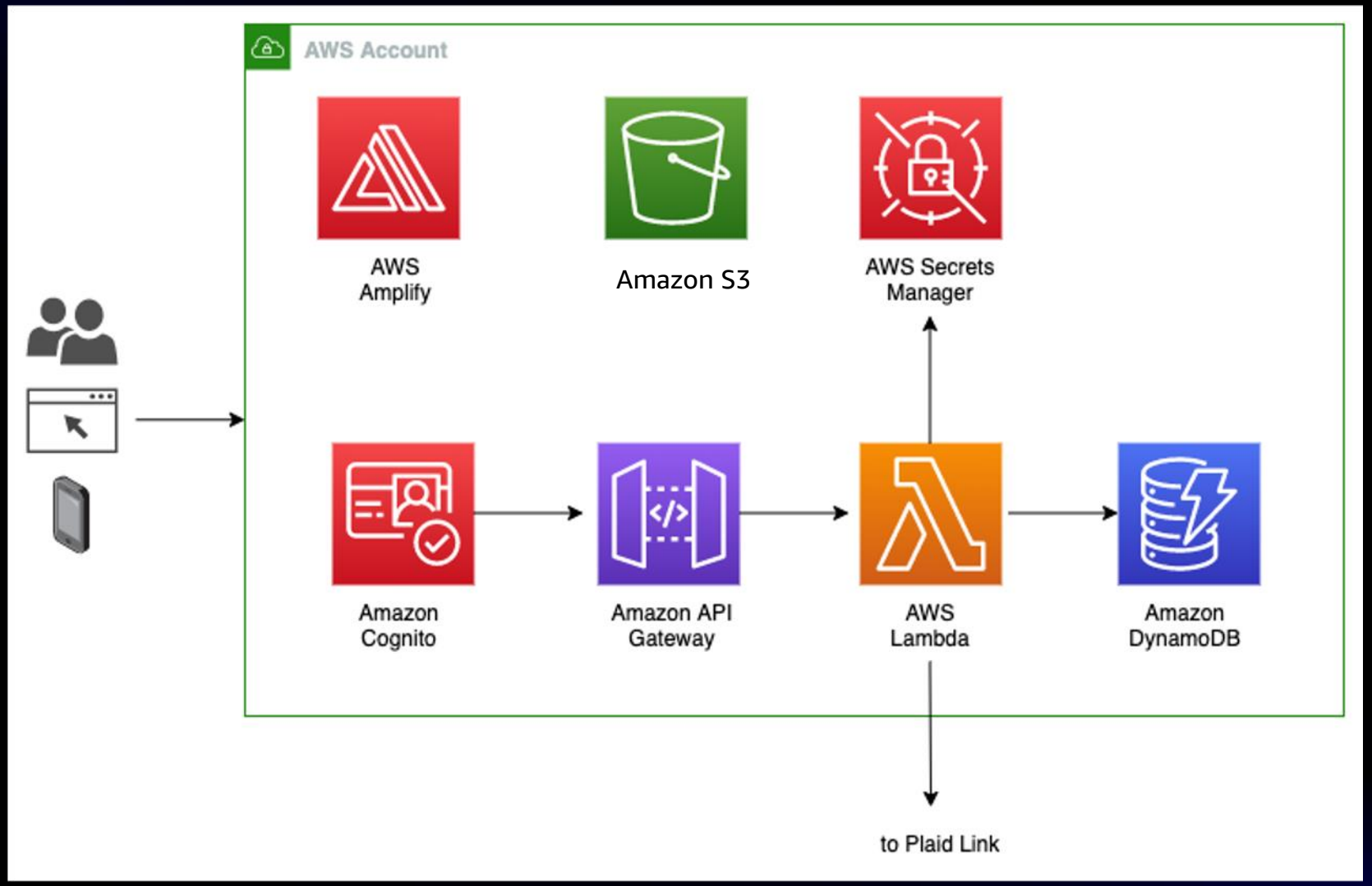
Demo objectives

- User signup/login
- Select bank from list
- Display latest transactions
- Build using AWS Amplify and Plaid API



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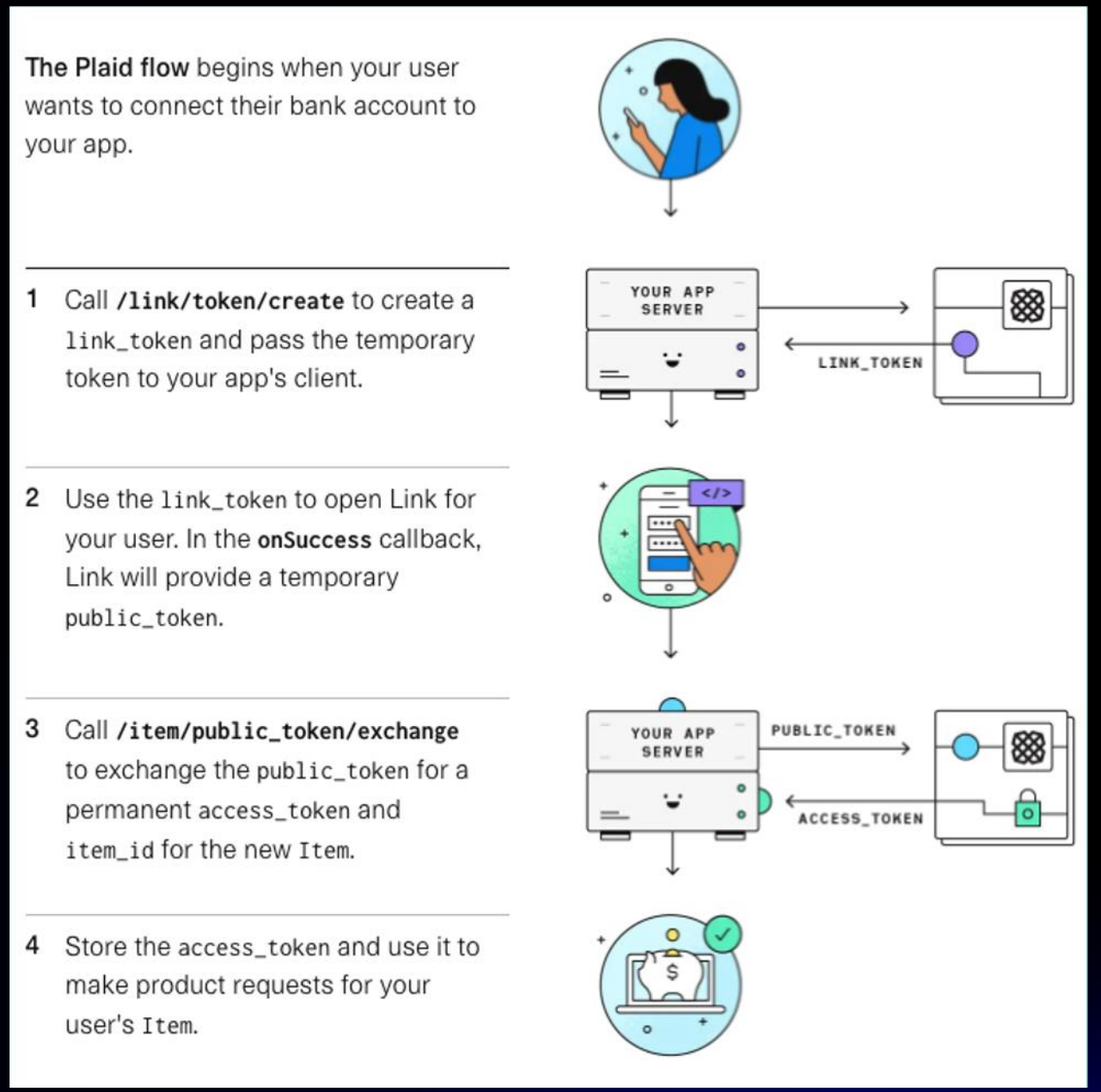
What we'll build



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How Plaid Link works

- Call create token API
- Get a temporary token
- Call exchange token API
- Get permanent access token



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Prerequisites

- Install the Amplify CLI on your MacBook – https://docs.amplify.aws/cli/start/install
- Go to plaid.com and create a free sandbox account
- Click the Get API keys button to get your sandbox API keys
- Can view these keys in the Team Settings menu

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Ready to start building?

Work with your AWS account team to gather requirements

Speak to our AWS professional services team

- Pre-configured landing zones for digital banking
- Continuous integration(CI)/continuous delivery (CD) operating model

Work with our AWS partner network to implement solutions on AWS

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Thank you!

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