

# AI in Banking

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**Banking is about bits and bytes –**

*John Reed, CEO of Citi Bank*

**Banking is about  
\$ or data?**

Comment from a visionary in  
80s

We are realizing it now



## Digital Alien vs. Digital Native

Are we standing  
on cultural divide?

So far aliens are shaping the  
world...

Natives are taking over now



How big is this storm?

Whirl spins are erupting from 3 directions

Change is not an option any more

## Desired Quadrant based on 2018 forecast



Is the market ready?

Digital readiness quotient – welcome to new world

a world of opportunity for digital leaders

**Digital Readiness :** [https://www.youtube.com/watch?v=3zljxlq\\_hvA&t=11s](https://www.youtube.com/watch?v=3zljxlq_hvA&t=11s)

Incremental to Non linear

Branch  
Banking



One to one

Call Centre



One to many

Digital  
Relationship



One to one

Is there a basic  
change in connect?

Paradigm shift in customer  
connect

Banks need to part of  
customer journey 24\*7

# Welcome to era of digital @banking



Digital only Banks

Emergence of digital only bank...

Traditional banks embarking on digital journey

Survival of digitaest



# Simplified Reimagined Architecture

## Engagement Systems



Bank apps      3<sup>rd</sup> Party apps      White labelled apps

- Customer Journey
- Colleagues journey
- Crowd Sourced Developers

## Redefined Middle Office

**API Gateway** Business | Tech | Security | Ext Orchestration

**Micro Services Based processing** AI - BI - M/C Learning | Business (Product, A/C etc.) | Transaction Manager | Contextual engines – NBA....

**Brokerage Services** Domain | Data | Identity | etc.

**Data Services** Master Data | References | Data warehouse (Lakes) Reporting services

- Agile & transparent layer
- made nimble by API, microservices
- powered by BI, AI, Machine Learning
- Biometric secured enabled
- Big Data capable

## Core Banking

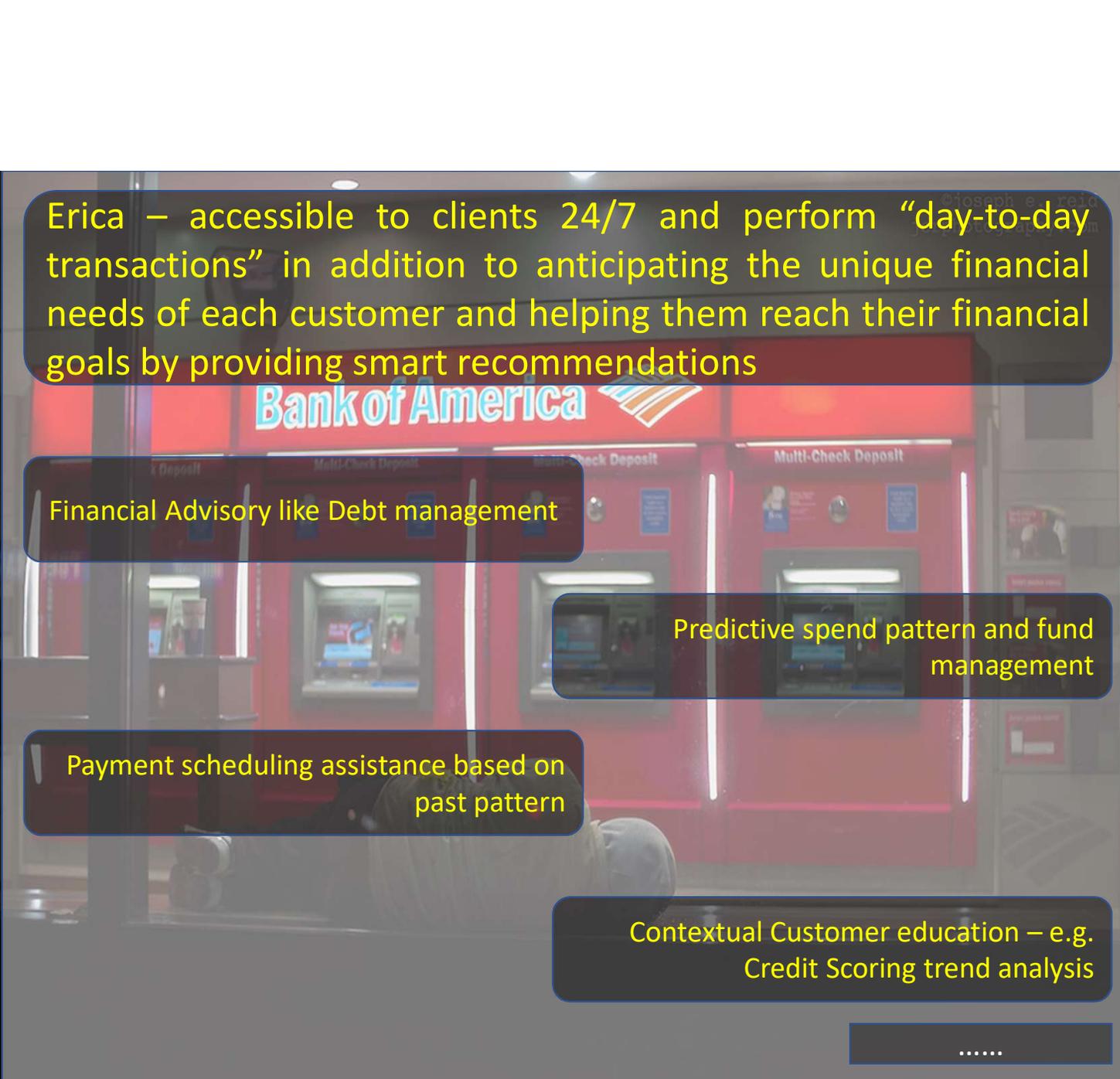
Account Management      Lending System      GL System      Other Core Systems

Simplified Core

# What are digital ingredients ?

Window dressing or ...

Core changes

A photograph of a Bank of America ATM kiosk with several text boxes overlaid on it. The text boxes describe the capabilities of Erica, a predictive analytics-powered AI financial assistant. The background shows the red and white branding of the Bank of America ATMs.

Erica – accessible to clients 24/7 and perform “day-to-day transactions” in addition to anticipating the unique financial needs of each customer and helping them reach their financial goals by providing smart recommendations

Financial Advisory like Debt management

Predictive spend pattern and fund management

Payment scheduling assistance based on past pattern

Contextual Customer education – e.g. Credit Scoring trend analysis

## Predictive Analytics powered AI for financial advisory

Voice & chat capable, personalised contextual financial assistant

45 M households in US



AI technology allows us to take an experience that would have required our customers to navigate through several pages on our website, and turn it into a simple conversation in a chat environment. That's a huge time-saving convenience for busy customers who are already frequent users of Messenger

## AI based BOTs with Social Media

Intelligent BOT assisted services delivered in messenger platform of social media

Frictionless Connect @ customer point @ her language

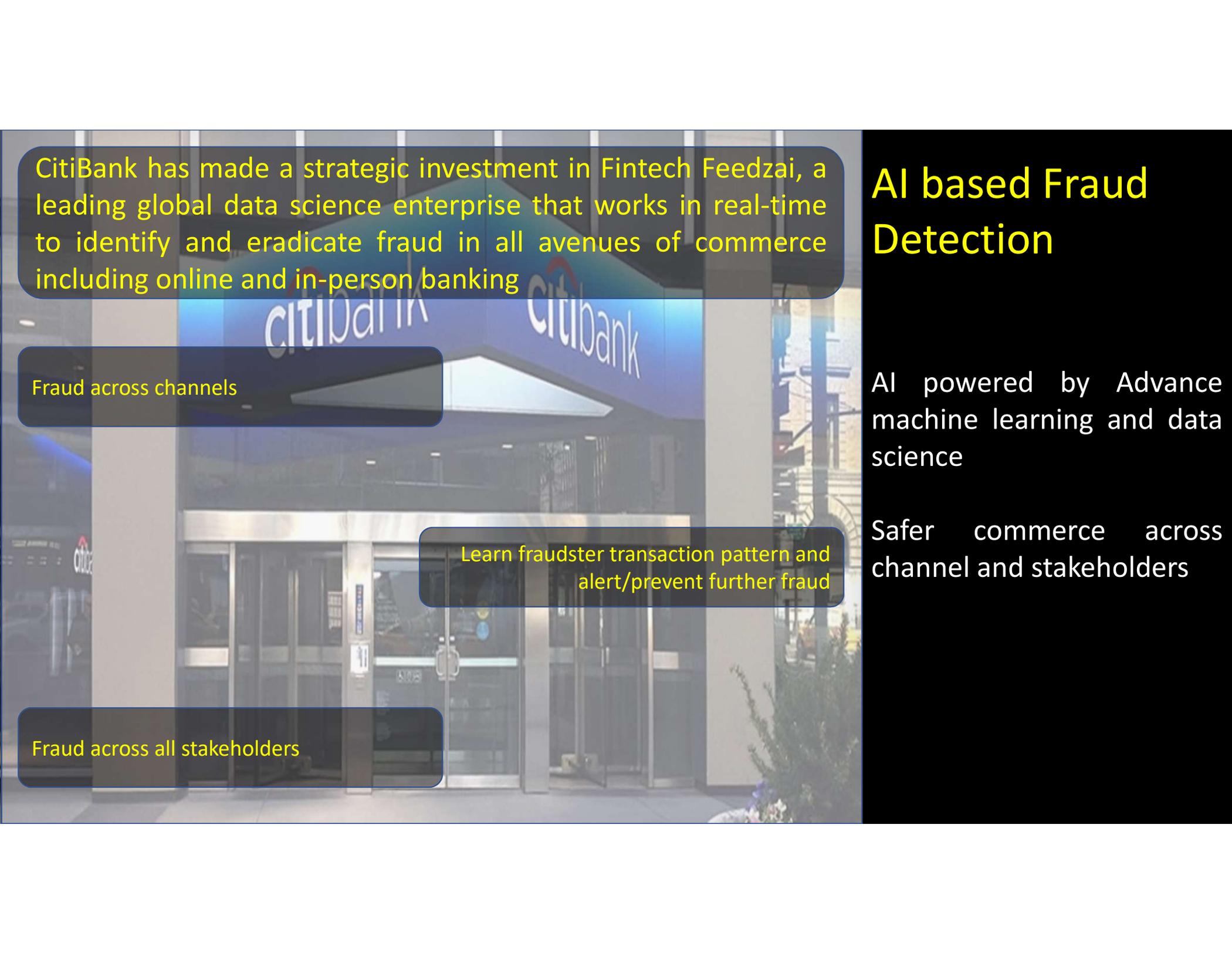
JPMorgan Software Does in Seconds What Took Lawyers 360,000 Hours - Bloomberg.



## AI based Contract Intelligence

NLP and Machine Learning based Intelligent platform

12000 contracts per annum  
– 360 K manual effort

A photograph of a CitiBank building entrance at night. The building has a modern glass facade with the 'citibank' logo illuminated in blue above the entrance. The entrance features a set of glass doors and a revolving door. The scene is lit with blue and white lights, creating a professional and secure atmosphere.

CitiBank has made a strategic investment in Fintech Feedzai, a leading global data science enterprise that works in real-time to identify and eradicate fraud in all avenues of commerce including online and in-person banking

Fraud across channels

Learn fraudster transaction pattern and alert/prevent further fraud

Fraud across all stakeholders

## AI based Fraud Detection

AI powered by Advance machine learning and data science

Safer commerce across channel and stakeholders



“We’re taking people off the mind-numbing tasks that a bot could do, and freeing them up to service clients and do higher-value-added tasks and more analytical tasks.” – *SVP Doug Shulman*

Account closure validation across systems

Processing time improvement

Cycle time reduction for trade entry

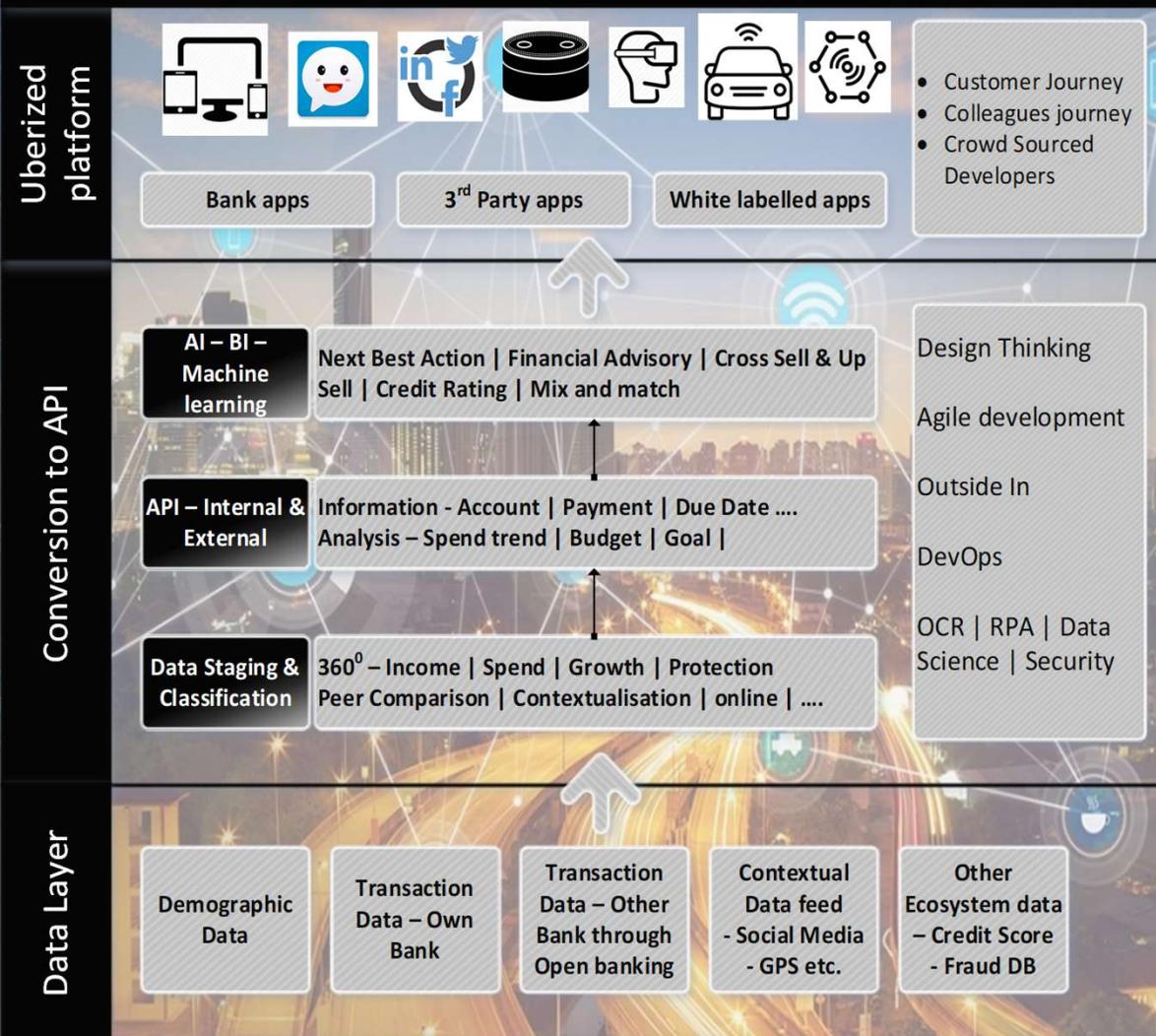
Lightening fast failed trade reconciliation by robot

## RPA led AI for process efficiency

Task automation by OCR, smart form, workflow & robotics

In 15 months, 220 BOTs in action

## Data conversion to asset by API



## Are you ready for Uberized banking?

Digital leaders in banking are strategically transforming banking platforms...

Towards a Uberized platform Of doing business of money



**Thank you  
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