

Ecosystem – 6E

Akshay Rote, Digital Group

May 15th, 2019

Agenda

- Industry Dynamics
 - Government
 - Broking Peers
 - Banking Space
 - Investment Apps
 - API



Ecosystem: Industry Dynamics



Fintech accelerators across the globe

Broking firms



Banks and other FIs



Fintech startup partnerships



Fintech ecosystem partnerships



Governments Policy Push



Building for a financial ecosystem through a set of APIs.

Aadhaar

Verify anyone with an Aadhaar anywhere, anytime.

[SEE HOW](#)

eKYC

Digitise your KYC process & go paperless.

[SEE HOW](#)

UPI

Transfer money between bank accounts in India like never before.

[SEE HOW](#)

Digilocker

Retrieve, Store & Share verified digital documents.

eSign

Sign any document electronically using Aadhaar.



- Govt. of Maharashtra promoted FinTech Accelerator Program
- Launched API Sandbox
- Maintains FinTech Registry, provides grants to start-ups
- Under the purview of Principal Secretary (IT) - IAS
- Also has a Chief Fintech Officer promoting Fintech - Corporate partnerships



Promoted by: Govt. of Andhra Pradesh

Fintech Yatra – 7000 kms | 500 Startups | 15 Cities across Indian

Governments & Regulatory Focus on FinTech

Government sets up panel on fintech to make regulations more flexible
THE ECONOMIC TIMES

Indian govt sets up Fintech committee to help ease regulations

The Fintech committee will also work with UIDAI, the statutory authority issuing Aadhaar identification numbers, to explore creation and use of unique enterprise identification number



Finance Ministry To Release A Report On Fintech Regulations
Inc42

SEBI Forms Fintech Panel Under Mohandas Pai To Modernise Securities Market

Bloomberg | Quint

Sebi Mulls 'Regulatory Sandbox' for Adopting AI, Blockchain in Securities Markets

NEWS 18

The RBI sandbox for fintech: All you need to know
Business Today



Zerodha's FinTech Ecosystem



FinTech Apps



Thematic Investing Platform



Options Trading Platform



Technicals Algo Trading Platform



Real-time Alerts & Basket Trading



Fundamentals Screener

STOCKREPORTS+

by THOMSON REUTERS[®]
Fundamental Equity Research



Online MOOC's Platform



Software & Analytics Lab



CLEVER WAYS TO SAVE

Personal Finance App
acquired by PayTM



3-in-1 Account Partner



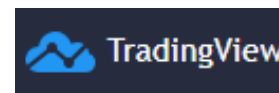
Digital On-boarding API's for KYC



Market Story Telling Blog



Sentiment Indices



Stock Charts



Cloud Partner

Internal Apps



Mutual Fund Platform & Mobile App



Open API Platform



Learning Platform & Mobile App



Community Website



Reporting & Analytics Platform



News Aggregation Portal



Blog



Financial Comic Book for Children



Meta Analytics Trading Language

Zerodha's Kite Connect - Capabilities

Full Fledged Trading & Investment API's – HTTP/JSON



2+ Million Trades / Day
200+ Million HTTP Requests / Day

Start-ups & retail investors leveraging to build experiences via OTT Apps/Platforms:

- Execute real orders – Equities & Mutual Funds
- Obtain live market data
- Manage portfolios – Rebalance

 **Kite Connect** /dev forum

Python Java PHP NodeJS C# .Net Rust

- Supports API's across languages & frameworks
- More than 10k+ question & answers developer forum
- Exhaustive API documentation & support



Pricing Model: Rs.2000/ Per Month for Retail Traders

Free for Start-ups



Kite Connect 3 / API documentation

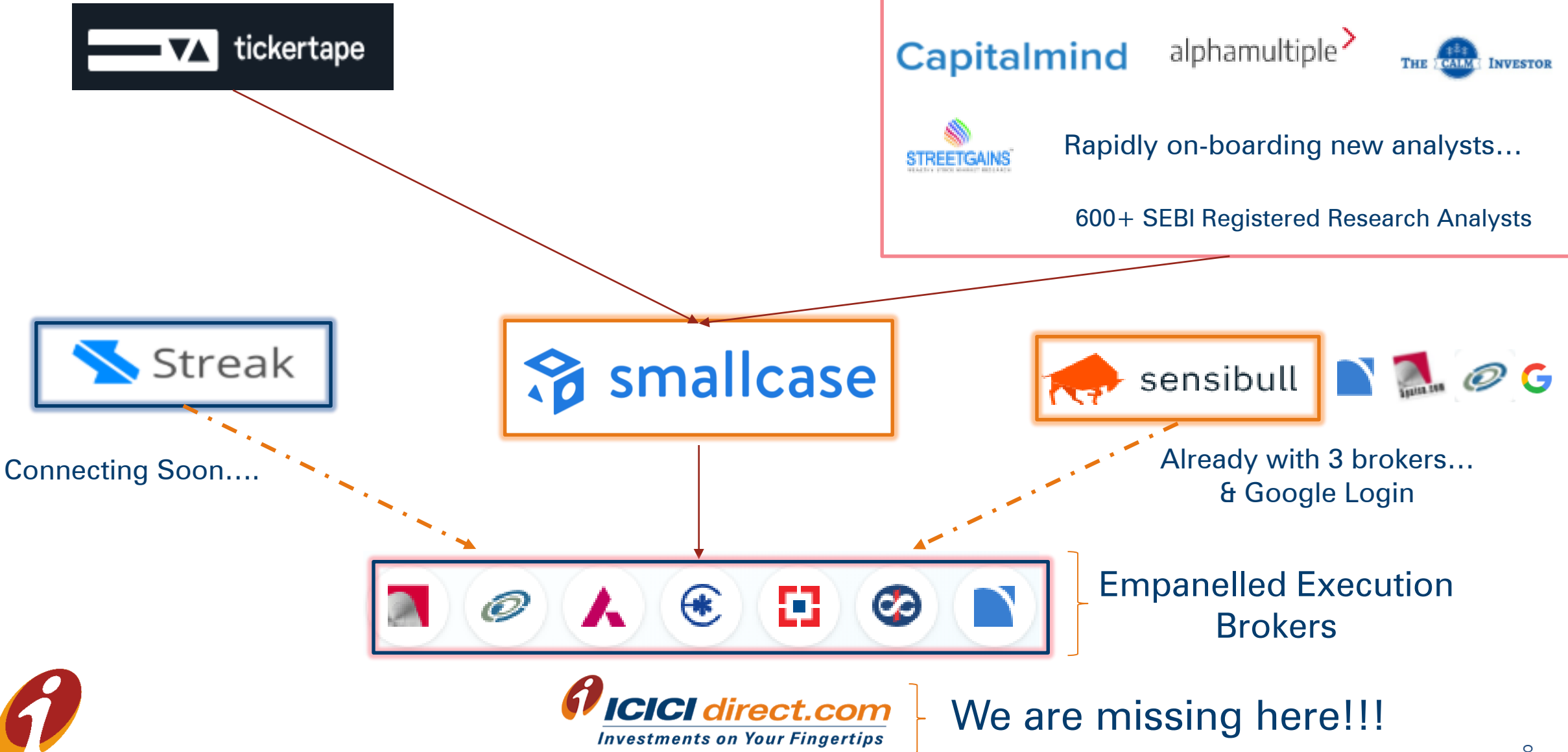
- Exhaustive API Documentation for DIY OTT Application development for start-ups & retail investors
- Extensive set of Trading APIs:
 - Login – Authentication, User details
 - Orders - Place, Modify, Cancel, Retrieve, Multi-legged orders
 - Portfolio, Holdings, Positions, Convert Positions
 - Market Quotes, OHLC
 - Web-socket streaming
 - Historical candle data, Continuous data
- Mutual funds – Place Orders, Place SIP's

Kite Publisher



- Embedding buttons on Websites/Apps/Blogs
- Better experience for end users, readers of financial blogs, consumers of market analysis
- Prospects of added revenue in terms of affiliates
- Free of cost

Ecosystem of Ecosystem



smallcase - Publisher Platform – The Next Big Thing

Broker Gateway + Investment Platform + Publisher Platform

Democratizing Portfolio Advisory

- The Publisher Platform is built for SEBI licensed professionals (individuals/firms) to deliver stock/ETF-based portfolio research/advice to their clients.
- It helps them:
 - Showcase → Create & publish their research as smallcases with a dedicated micro-site.
 - Share → Publishers can also define access levels for each smallcase. smallcases can be publicly available on the micro-site or shared privately with specific clients (for those who offer a fee-based service)
 - Update → Publishers can also rebalance or make changes to their smallcases
 - Communicate → The platform also enables email communication from a Publisher to their clients



Rapidly on-boarding new analysts... There are more than 600+ SEBI reregistered Research Analysts which can potentially come on the smallcase platform!



<https://medium.com/weh-ventures/why-we-invested-in-smallcase-cecc980313bc>

"We want to make investing as easy as booking a cab", says founder of smallcase 

Upstox FinTech Ecosystem



Extensive Set of Trading &
Investment APIs
Rs.750/ Per Month Subscription



AmiBroker

UpStox Amibroker Bridge & Algo
Lab – Interactive Orders & Market
Data Plugin



DartStock – Filters, Trend
Scanners, Opportunity Finder,
F&O Visualizations, Advanced
Charting Features



Easy to Use Algo
Trading System



Back-testing & Active
Trading Application



Full-fledged Desktop
Trading Application



IIFL FinTech Ecosystem



Mobile Advisory Solution -
Complete Tab Based Platform
for Business Partners



Video Statements Platform



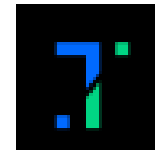
Business Loans &
Disbursements Platform



Tech First Family Office
Management



KYC & On-boarding
Solutions



Trendlyne – Screeners
& Investing Engine



FinTech Ecosystem in the Banking Space – ICICI Bank

Business Ecosystem



AI based Experience

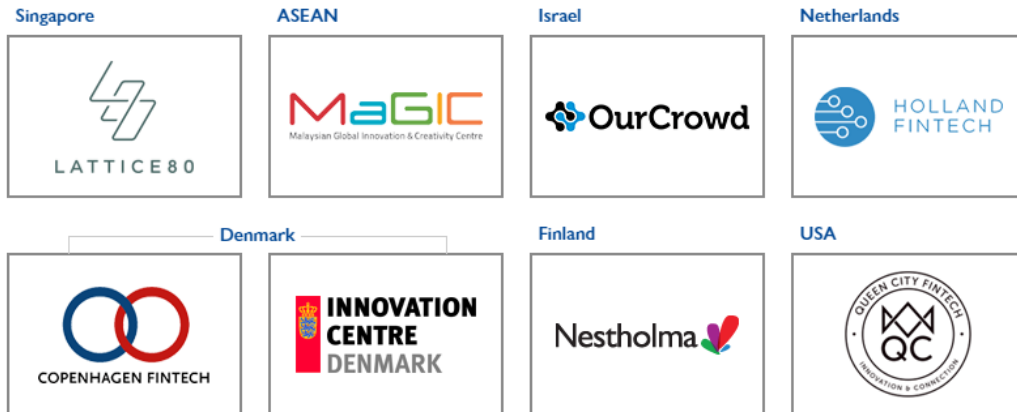


Engagements with 30+ start-ups & 100+ ongoing use-cases...

FinTech Ecosystem in the Banking Space – YES Bank



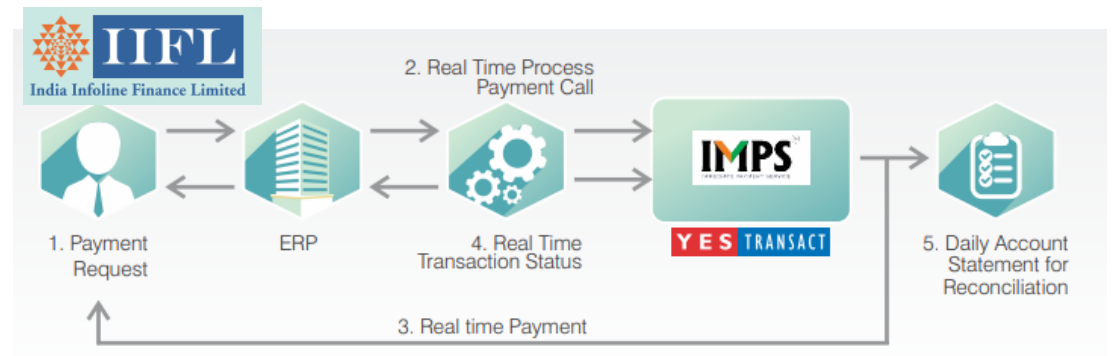
Ecosystem Partners & Accelerators across geographies:



- YES Bank runs its accelerator program with use cases ranging from Banking, EdTech, Smart Cities etc.
- Runs two cohorts of FinTech's each year



API Connect



- First ever Indian Bank to launch API Banking Services
- Transaction processing & Cash Management services via ERP's with easy reconciliations
- Instant – Real-time – Secure
- Enabler for Open Banking Ecosystem



FinTech Ecosystem in the Banking Space

Deve/oper
CONNE<T>



Payments & Lending API's

NASSCOM



DICE
FINTECH ACE

FinTech Accelerator
Partners



API Banking

Banking with the technology edge

Payments &
Lending
API's

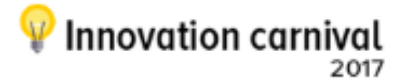


FinTech Innovation
Incubator – Bangalore
& Chennai

FinTech Partners:



DCB BANK



Themes:

- Lending, Payments, Smart Villages, Branch Transformation, Customer Experience, Cashless World, Enterprise products, Frauds, Risk Management

Technology:

- Block chain, IoT, Robotic Process Automation, AI, Analytics, Big Data, Cloud Solutions, Banking on Social Media, Biometrics

APIs:

- UPI, Aadhar, eKYC, eSign, PayPal, Prime Chain, Signzy, Yodlee

Cross Industry Entrants – Lines are blurring



E-Commerce & Payments
Bank – Offering MF &
Broking soon...



Times Group News Giant Offering MF,
Insurance & Personal Finance Apps
2000+ Cr in AUM



Payment App's entering into Wealth
Management... Gold, ELSS & Tax Saving
solutions



Insurance Brokers & Aggregators
entering aggressively in Insurance
Selling D2C...



InsurTech's (Insurance Manufacturers)
reaching customers directly via Digital
Channels



Investment Apps



- Reach 1250+ Cities
- 2+ Million Transactions
- 1000+ Cr of AUM



- Tax filing platform scaling to investment products



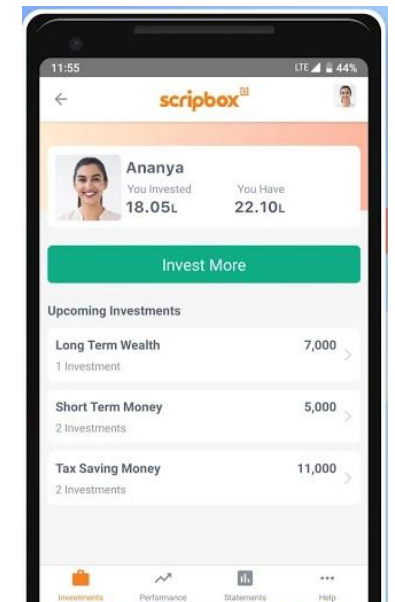
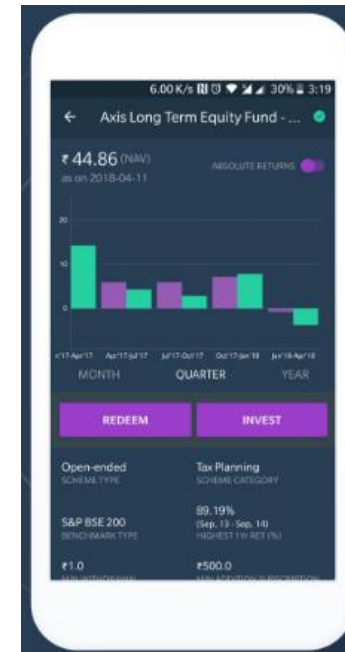
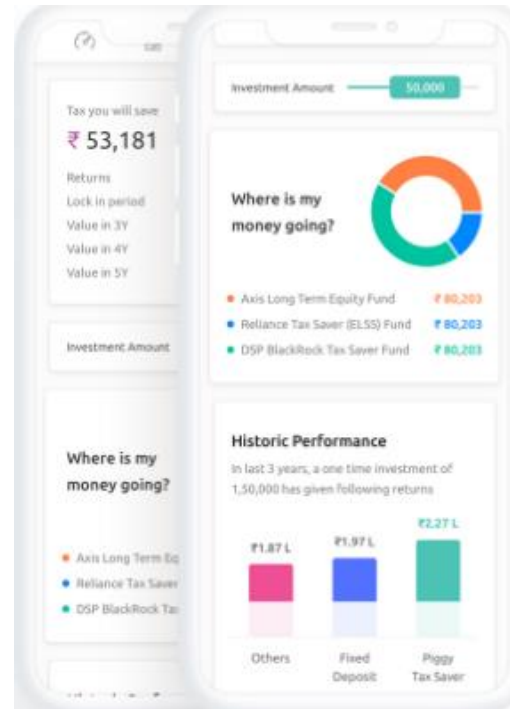
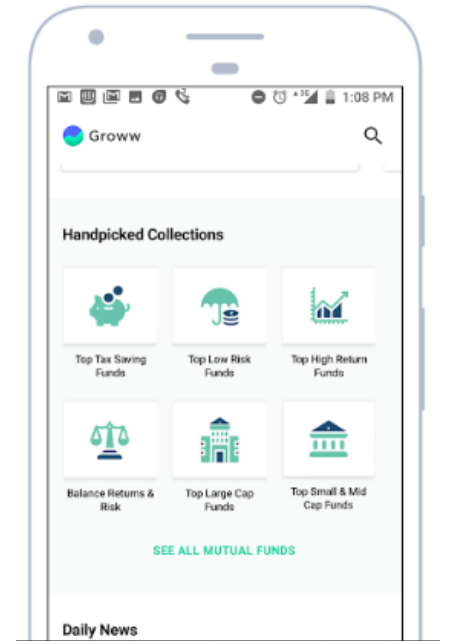
- 700+ Crores of AUM
- Expanded in 500+ Cities



- 1+ Million Users



- Wealth Management Partners for Bank of Baroda, Laxmi Vilas Bank, Oriental Bank of Commerce



Boutique Wealth Management Apps



- 3000+ Crores of AUM, 625 Cities, 5.5 Mn transactions
- Family accounts, Tax planning, Switch to Direct Options & Insurance offerings



- AI & ML driven advisory
- 360 Degree Financial Planning



- 3000+ Crores of AUM, 200k Users
- Chat based personal advisor
- Auto scan & rebalance with OroAssist



- Primers - Thematic portfolios
- Personalized analytics & plans, Intuitive simulations for portfolio risk & returns



- Citrus Cube Wealth scaled to investment advisory & wealth management from Payments gateway business



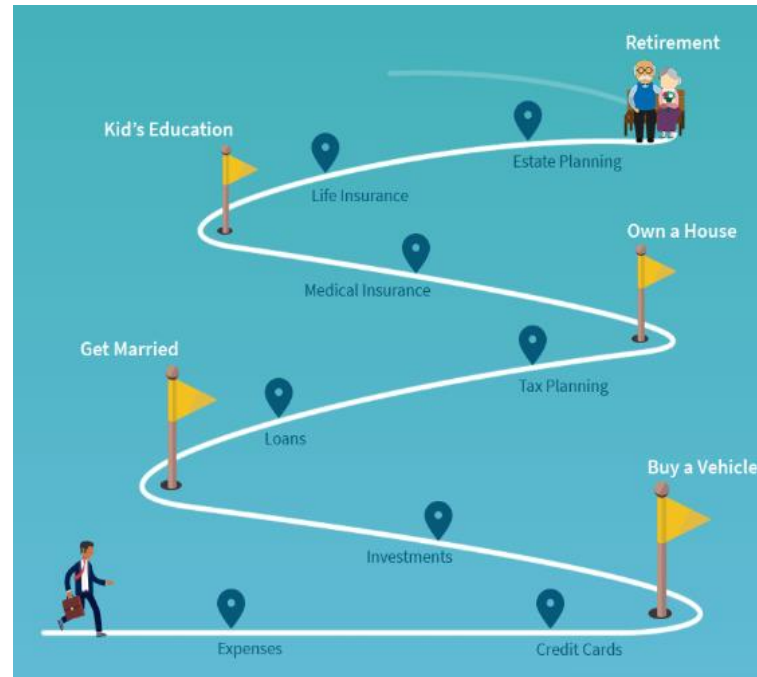
Robo Advisors



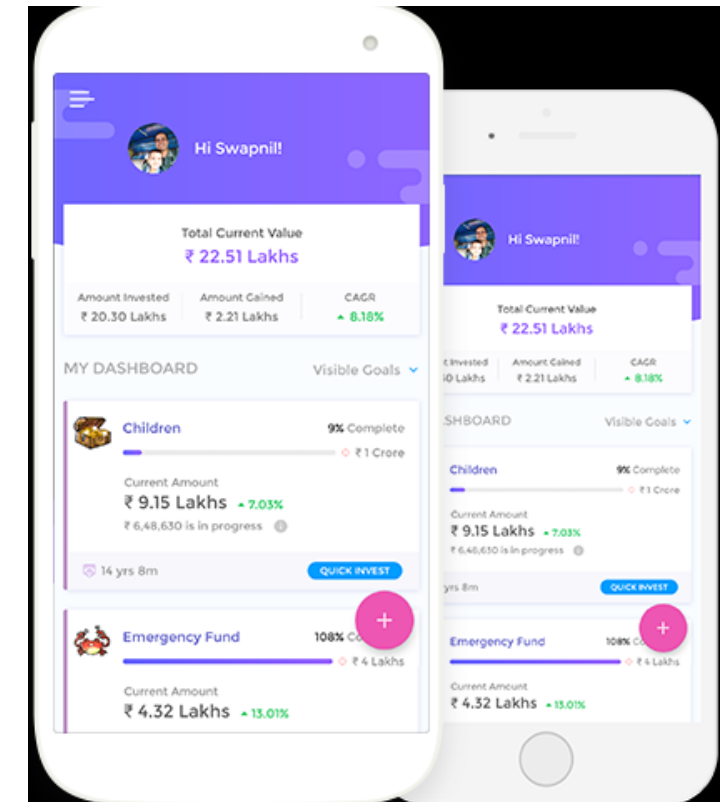
- Robo-advisory for ETF Portfolios
- Executes via Brokers via Zerodha, Edelweiss



- Personal finance management with Investment advisory
- Track goals, track expenses
- Also offers Insurance



- Complete paper-less KYC
- Risk profile based investing
- Goal based investing
- Advisory fee model pricing



Robo Advisors – The leap



Retirement Planning Solutions



Dynamic Equity & Debt Fund Exposures



PFM, Loans, Tax Planning,
Retirement, Goal planning –
Executing via Sushil Finance



Low advisory fees starting
Rs.100/Per Month



PFM based approach towards
investments



Model Portfolio's & Interactive
MF Research

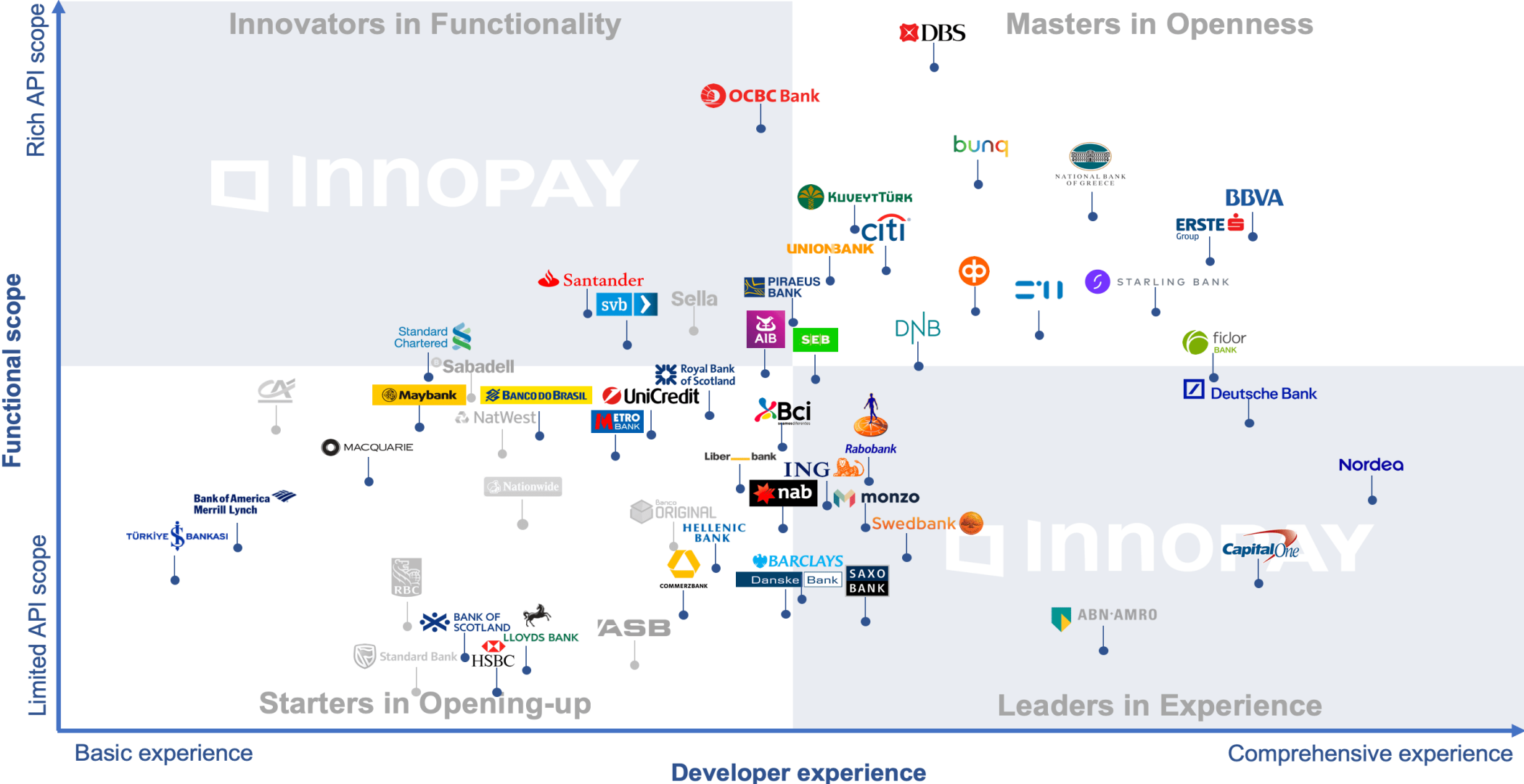


Tax Planning, Will Drafting,
Real-estate, Lifestyle, Value-
added offers



- What makes each of the Investment Apps stand out is their lean & clean User Interface
- Design Thinking Methodologies used for creating intuitive customer journeys'
- Surreal & Smooth User experience
- Each one of these are specialized in some thing or the other to make themselves stand out – differentiated product line or service offering

Open Banking Landscape Worldwide

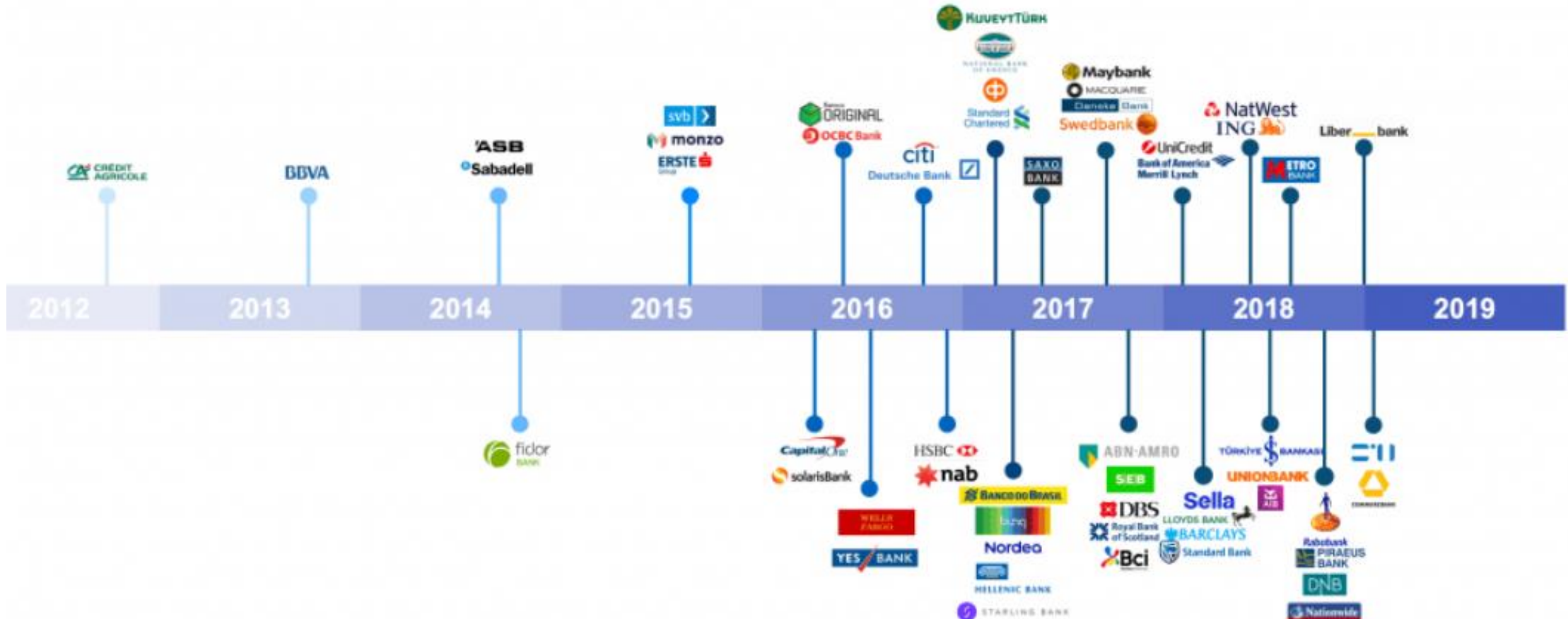


**Grey indicates limited portal accessibility, thereby complicating full assessment*

INNOPAY Open Banking Monitor (OBM) – Developer Portal benchmark (update February 2019)

Note: If your bank is not in the OBM yet, go to openbankingmonitor.com and let us know!

Open Banking API – Activity Pickup



Most of the API Ecosystems in Banks outside India have picked up in the previous couple of years

The API Spectrum



← **CLOSED API** →

← **OPEN** →

PRIVATE

Closed API that is accessible to the broker only

PARTNER

Open API That is accessible to our preferred partners

MEMBER

Open API accessible to members belonging to a community

ACQUAINTANCE

Open API accessible to anyone complying with preferred requirements

PUBLIC

Open API accessible to anyone typically involving basic regulation

Need for IBM Connect, Oracle apiary or Google APIGEE



PLAID



TRADEIT

API Suites

IBM API Connect



Google apigee



ORACLE + apiary



API Lifecycle Management Suites



API Connect

Indian Use-case with Retail Banks like YES, Kotak Bank

Strengths:

1. Established & powerful position in the market – Diversified in genre of clients, geographies & capabilities
2. One of the most comprehensive coverage of Full Lifecycle API Management Suites

Cautions:

1. Not much innovation in functional enhancements has taken place since the previous offerings, just following market trends
2. API Connect does not provide flexible API value-rating features for monetization



Industry agnostic use-cases from Financial Service to media houses & news giants

Strengths:

1. Powerful support for API Design, rapid prototyping, collaboration between API providers & consumers
2. Huge improvement in terms of Ability to execute & Completeness of Vision
3. Pricing is low, as it starts low & increases with API traffic, very low upfront cost

Cautions:

1. Design portal is on cloud
2. Customers dissatisfied over installation & initial setup procedures, low score for overall support & service
3. Focused on security features, less on API monetization & business-focused features



Relevant Use-case: Trading APIs with Tradier in US

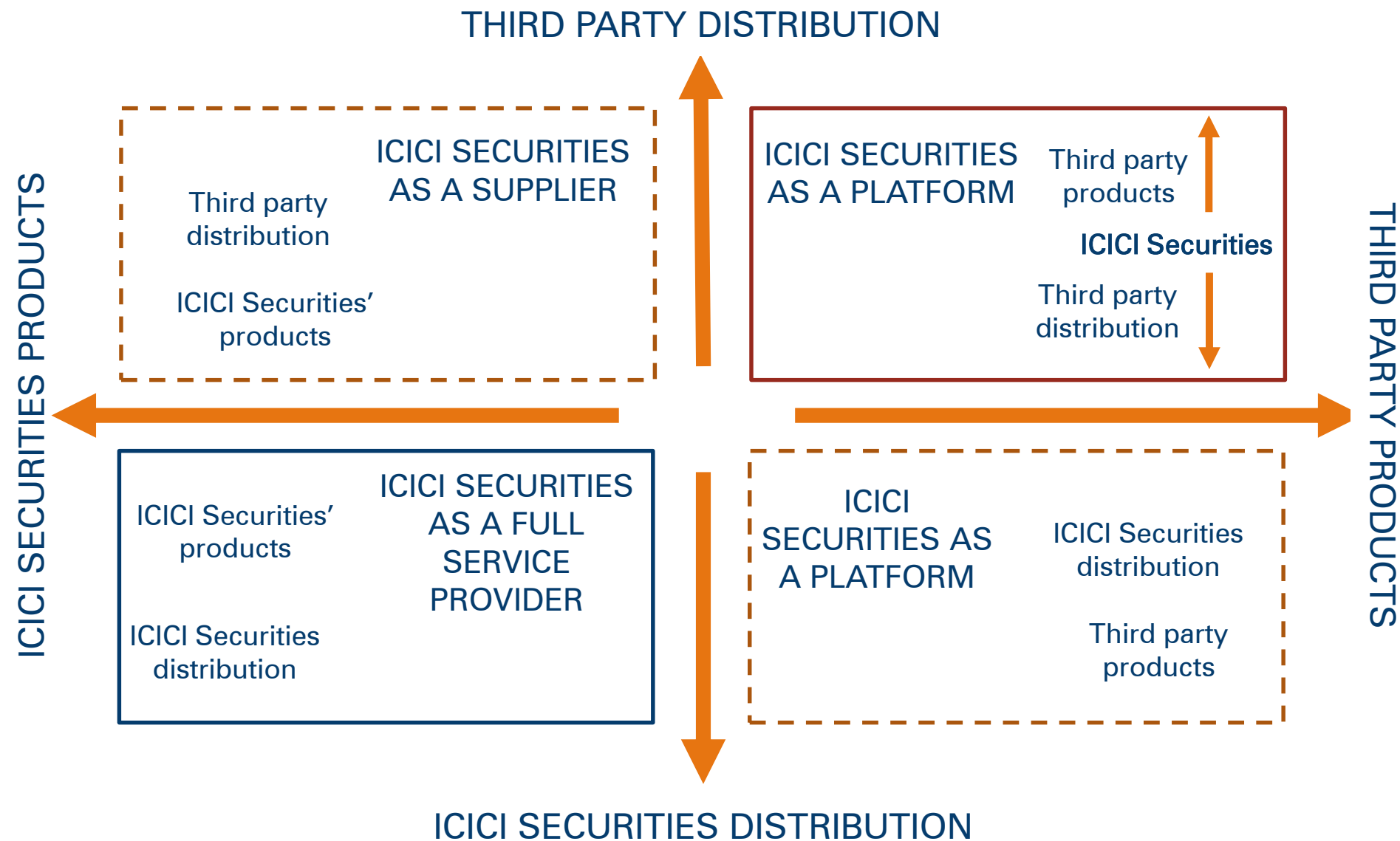
Strengths:

1. Sharpened Enterprise Focus with APIGEE acquisition
2. Google's Thought Leadership with various Customer Success Stories
3. Google's extensive & Innovative API platform for Machine Learning & AI

Cautions:

1. Google being a mega vendor, yet APIGEE is a focused group for API suites
2. Can cause product complexity, wider priorities & dependencies on Google's offerings

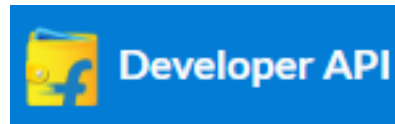
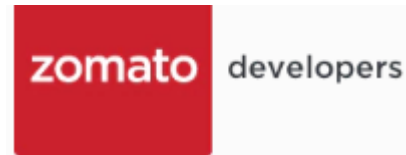
Strategic Options



API Regime Across Industry

It's not just Banking but everywhere leading to Disruption

Private Organizations Leveraging APIs

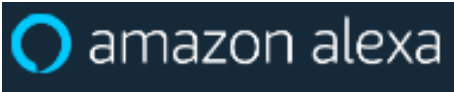
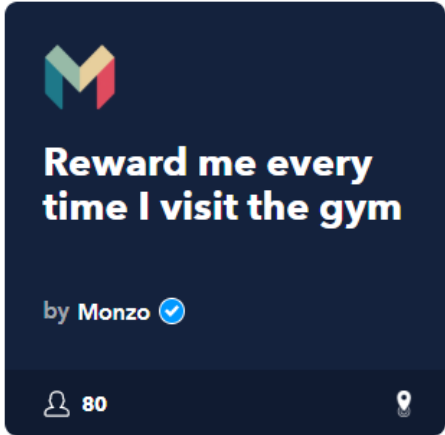
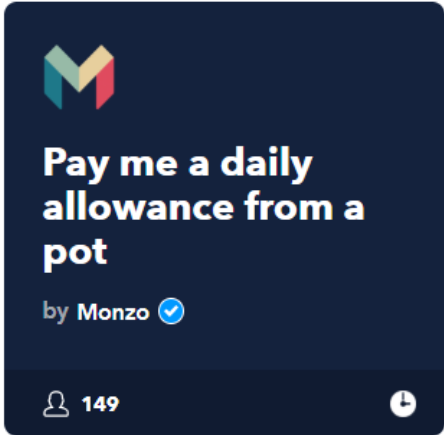
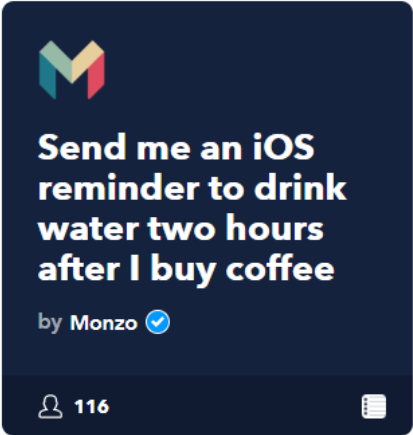
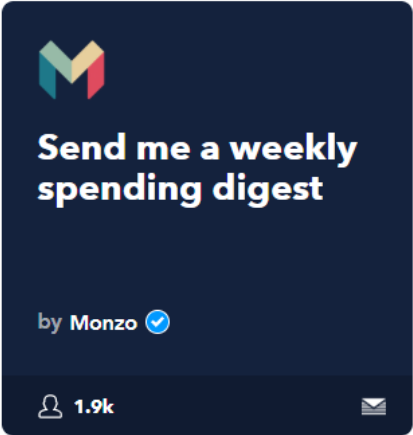


Government Organizations with APIs



New Tech in Financial Services – The Big Picture

AI, ML, IoT....





Thank you