



The future of banking starts here!

Tuesday 23 January 2018 | 10.00 am UK | 11:00 am CET

The implications and opportunities of Open Banking, PSD2 and GDPR

Welcome and Agenda

TODAY'S HOST



RICHARD PEERS

Director, Financial Services
Industry



10.00 – 10.05

Welcome and Introductions

10.05 – 10.15

Three visions for banking post-PSD2

10.15 – 10.30

Real-life experiences of banking transformation

10.30 - 10.40

6 monetization models for an Open Banking World

10.50 – 11.00

Q&A and Close

Introductions



RICHARD PEERS

Director, Financial Services
Industry



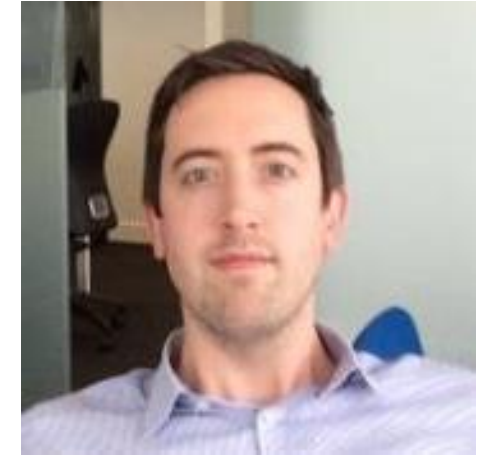
AMIT MALLICK

Digital Open Banking and
API Lead



MOHAN NAIDU

Director Banking and
Financial Services



DAVID FIRTH

Product Manager
Callcredit

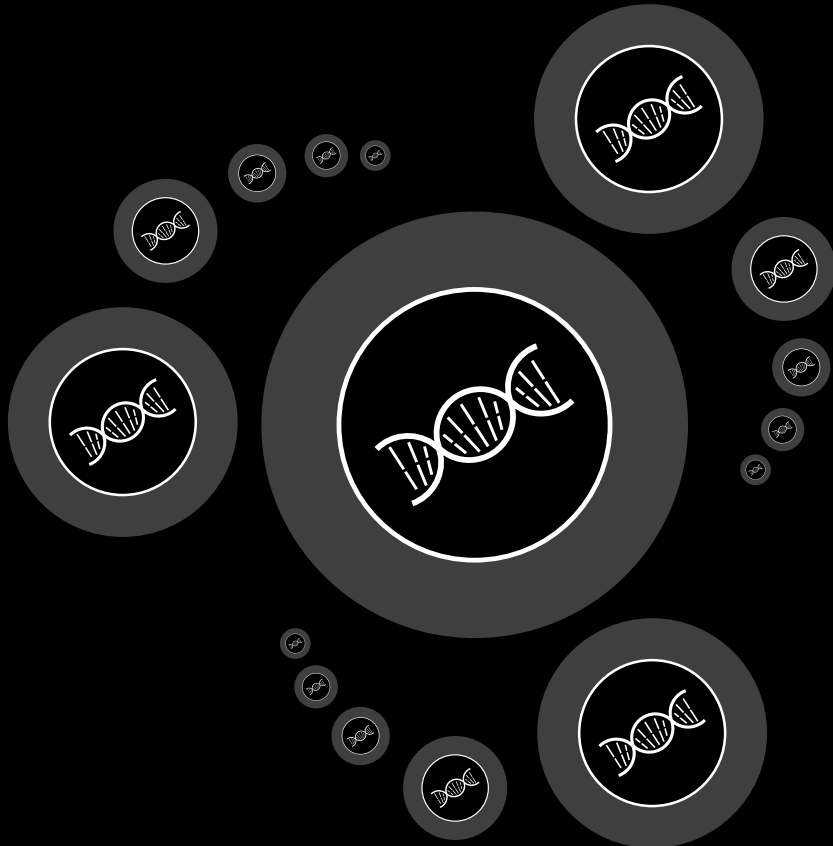


Three visions for the future banking ecosystem

Richard Peers - Director Financial Services Industry | Microsoft

Vision ONE

Ubiquity



The boundaries between industries fade

Banking services become distributed

The focus is on modularity and agility

A spectrum: Marketplace vs Open Banking

Marketplace Banking (Carefully Selected TPPs)

Bank creates well-defined APIs to enable seamless experience

Bank selects specialized TPPs to offer additional financial services along their products

Banks control and provide a seamless integrated experience

Clients have choices curated by the Banks



Open Banking (Any TPP)

Bank creates framework and Open set of APIs

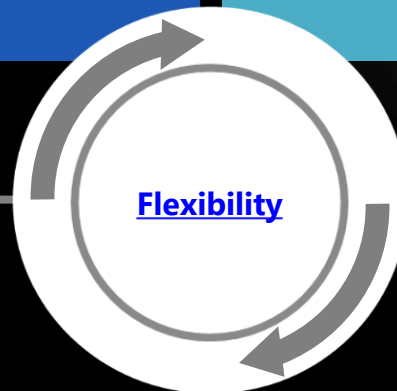
The platform uses Plug-and-play model

Any TPP can plug-in if they meet requirements

TPPs build their own products

Banks cannot control the client experience

Clients have broadest set of capabilities and products choices



Seamless Integrated Experience for customers

Vast selection of products for customer
More Open

OpenBanking Program

Customer Story



Credito Agrícola embraces "Open Banking"



Crédito Agrícola is a private bank with the largest branch network in Portugal. In 2016, there were 821 units (branches or automatic teller machines) in isolated areas where no other bank institution has presence. Crédito Agrícola is one of the leading Portuguese financial groups, with net assets over EUR 16 Billion.

- **Industry:** Financial Services
- **Market:** Portugal
- **Target Customers:** Consumer and Corporate Market
- **Product Used:** Azure API Management, ADFS, Application Insights, Event Hub, App Service, Visual Studio Online

Microsoft helped Crédito Agrícola achieve a...



lower development costs



Faster time-to-market



Increase release quality



End-To-End Business and Operational Visibility



Foster Partnerships



The challenges

- Open systems to foster a strategy based on partnerships
- Provide digital services using the API ecosystem
- Lead in the core communities providing digital services
- Modernize operations driving DevOps transformation

The solutions



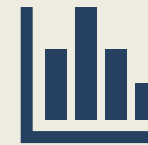
API Management and Integration

(Api Design, Versioning, Dev Portal, Transformation, Protection, Configuration)



Strong Customer Authentication

(oAuth 2.0, OpenId, Multi-factor, 2nd Factor App, Social Identities/On-Prem Federation)



Business and Operational

Power BI Portal For Business and Application Insights For Operational Monitoring



Establish DevOps

DevOps Baseline, enabling Continuous Integration, Continuous Delivery and Infrastructure-As-a-Code

The results

"Microsoft has all the tools we want to use. Microsoft has been with us in this transformation journey as one of our core partners with people and tools to support us. Microsoft technology is more open to introduce specific features we want to introduce and leverage in our strategy."

Dr. Jorge Baião

Chief Information Officer, Crédito Agrícola

Want to learn more?

Read :

[Microsoft on Open Banking](#)

Lessons Learned

"Open Banking" journey posts several challenges regarding banking ecosystem which are an opportunity to learn and improve



Design your APIs using Best Practices



Spend enough time designing your security framework



Automate everything you can...APIs will become your product



Remove barriers between People, Processes and Tools (DevOps)



Invest in Agile Practices



Make sure you have End To End Visibility over the system



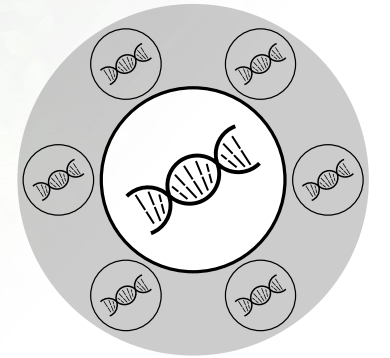
Partners and Developers On-Boarding is crucial



Leverage the Cloud in a Pay-As-You-Model and guarantee Performance and Scalability with cost optimization

Vision TWO

Centrality



Commoditization becomes a virtue

Institutions focus on high-value opportunities

Creating a platform-based, self-reinforcing ecosystem

ClearBank rewrites the rules on delivering financial services

“ We have relied on Microsoft to support us ... and without that we wouldn't be here. Microsoft is investing more in cyber security than anyone else on the planet. Our Azure hybrid model means our data centres are divorced from access to the internet. We have the ability to tune and develop our core, to set up using the best technology and services available.”

— **Nick Ogden**
Chairman, ClearBank

Clear.Bank[®]



Vision THREE

Nodality

Customers perform many banking functions

Institutions provide infrastructure and serve as trusted nodes

SKYPE TOMORROW

If we connect
conversations and
services we can make
conversations

More Fun

Richer

More Empowering

Thereby earning a place in
people lives as a daily habit



Real-life transformation experiences

David Firth – Product Manager | Call Credit Group

Mohan Naidu – Director Banking | Avanade

Callcredit

At Callcredit we empower information by combining data with our suite of software and our analytical capabilities, to help businesses and consumers make more informed, confident decisions and build more valuable relationships.

- Callcredit formed its Open Banking strategy in 2016 and is an active member of the OBIE's advisory groups and FDATA.
- Callcredit's response will be a co-branded end-to-end service for our clients and their consumers to utilise the Open Banking framework
- Open Banking will enable consumers to get more value from their data, with explicit consent controls.
- Partnered with Microsoft as the Cloud Infrastructure Provider.



Azure API Management at a large south European bank

BANKS' NEEDS

Meet **PSD2 mandatory requirements** but also lay the necessary foundations for a strategic market response

Build a solution which is **easy to implement and manage** within current technology and operations landscape

Implement **modular and scalable** PSD2 API management solution **with integration hooks** into security/fraud solutions, core systems of record and data sources

Establishment of an **API /micro services based solution** leveraging on existing technology requirements to meet the demanding regulatory implementation timelines

CHALLENGES

PSD2 programme is focusing on immediate to meet compliance. However over future re-use and have a siloed mentality, developing for their specific use case or market

As bank moves towards a modern architecture, there is an ambition to create reusable services (APIs) across many applications

Lack of agreed naming standards and conventions are incomplete and no formal end-to-end API catalogue exists, making it difficult for designers and developers to identify reusable APIs

Number of substantial change programmes currently underway. Delays in providing the API requirements and frequent changes to the API specifications

RESULT

Determine specific Bank requirements can be implemented using Azure as the underlying API Management platform

Prepare a stable Sandbox environment for the selected API solution to run an Hackathon
Creation of developer and publisher portals

Developed PSD2 & Open Banking API's to carry out 24 operations across accounts, security, Payments, Instructions etc..

Analytics provides deep insight into data being passed via API's, how apps are being used, and who is using apps

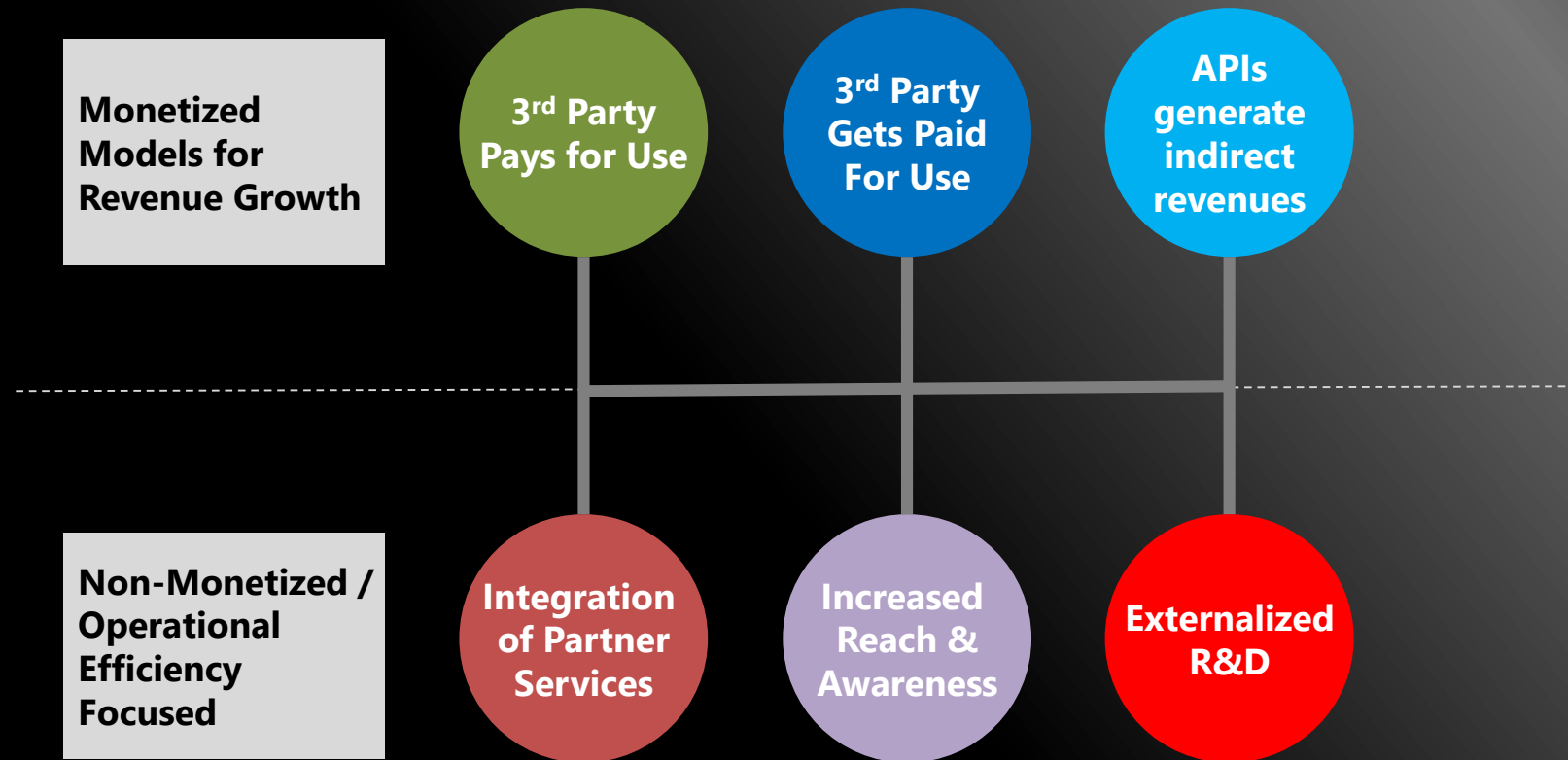
Project Technology Pilot is completed in 4 weeks.
Project GO live in 6 months.

Six monetization models for an Open Banking World

Amit Mallick - Open API Lead, UK&I | Accenture Digital

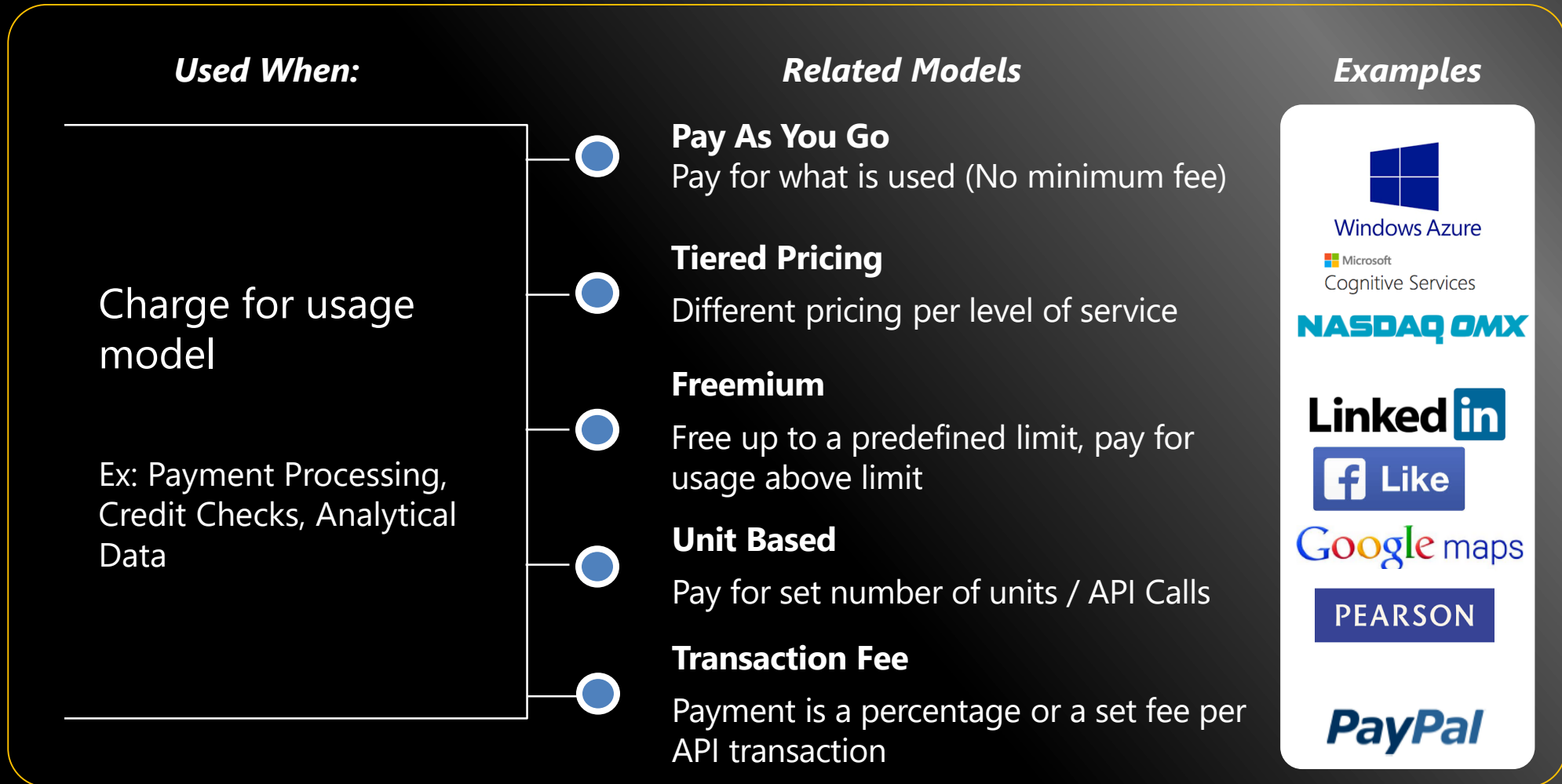
Business and monetization models

For each business asset, the appropriate business objective and monetization model should be clear so that the API Strategy is aligned to support the business goals.



3rd Party pays for use of APIs

The developer pays to use the APIs that typically provides a service needed by the consumer



3rd Party gets paid for using APIs

The developer is incented to be a publisher of a business asset through APIs

Used When:

Share revenues of an existing service or product as an incentive to expand customer reach

Ex: Product Advertising, Customer Acquisition

Related Models



Revenue Sharing

Share revenue generated when product or service is sold



Cost per Click (CPC)

Pay when the user clicks on the link back to API



Cost per Action (CPA)

Pay when a specific action is taken, such as product purchase



Referral / Registration

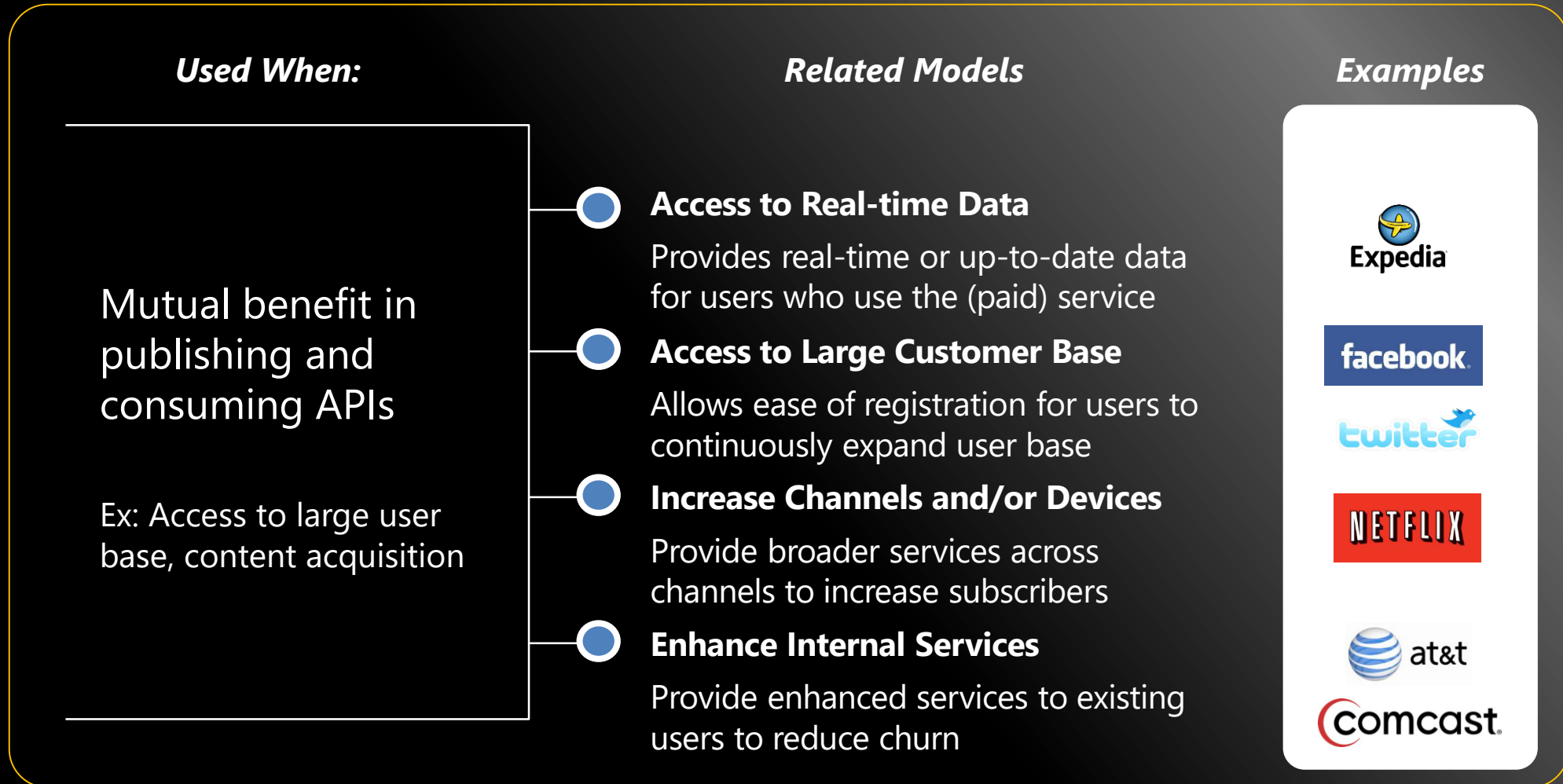
Pay when a user signs up or registers through the API

Examples



APIs that generate indirect revenues

APIs are not monetized directly for usage, but help expand core business & generate indirect revenues



Integration of Partner Services

Provide value added services and manage partnerships at a lower marginal cost

Used When:

Leverages partners services to fulfill core value chain and pursue a more efficient way to use partner's services



Benefits

- **Provide Richer Value Added Services**
Customers are provided with integrated services across the value chain
- **Scalable Partner Sourcing & On-boarding**
Potential partners can easily be added and on-boarded to continuously source new partners and seek better services
- **Streamlined Partner Management**
Performance of partners are easily monitored and adjustments for services can be made quicker

Increased reach & awareness

APIs are used to increase reach across different channels through partners & 3rd party developers

Used When:

The business asset is of lower value or company desires to advertise assets across as many channels and devices possible

The New York Times

Benefits

- **Increased Brand / Service Recognition through New Distribution Channels**
Allow for broader population to recognize your brand / service
- **Lower Marketing & Advertising Costs**
Lower costs to advertise the brand / service compared to traditional ATL/BTL methods
- **Accurate Tracking of Marketing Effectiveness by Channel / Device**
Data on who showed interest when, how and where are available to understand which channels & methods are more effective

Externalized R&D

Foster creative ideas and use cases of 3rd party developers to accelerate innovation through public APIs

Used When:

Company has a business asset in demand yet does not have the budget to develop and market all use cases in-house



NETFLIX

Benefits

Faster Product Development

Quicker time to market than building all services in-house

Build a Community of Developers & Publishers for your Services

A platform to communicate with 3rd party developers and partners and get quick feedback

Rationalization and Controlled Access to Internal Resources

All data uses resources can be managed and tracked through a unified & consistent method

Q&A

For more information, contact ...

<https://enterprise.microsoft.com/en-us/trends/psd2-and-open-banking/>

<https://www.avanade.com/en/industry/banking/second-payment-services-directive-whitepaper>

<https://www.accenture.com/gb-en/insight-opportunities-risks-payments-service-providers>

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Thank you