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

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<td>10.00</td>
<td>Welcome and Introductions</td>
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<td>10.05</td>
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<td>Real-life experiences of banking transformation</td>
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<td>10.30</td>
<td>6 monetization models for an Open Banking World</td>
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**TODAY’S HOST**

**RICHARD PEERS**
Director, Financial Services Industry
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
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 product choices

Seamless Integrated Experience for customers → Flexibility → Vast selection of products for customer → More Open
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

**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

**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

**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 Visibility**
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

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

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
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
Vision THREE

Nodality

Customers perform many banking functions

Institutions provide infrastructure and serve as trusted nodes
If we connect conversations and services we can make conversations More Fun, Richer, More Empowering. Thereby earning a place in people’s 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 form their data, with explicit consent controls.

• Partnered with Microsoft as the Cloud Infrastructure Provider.
## 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.

Monetized Models for Revenue Growth

- 3rd Party Pays for Use
- 3rd Party Gets Paid For Use
- APIs generate indirect revenues

Non-Monetized / Operational Efficiency Focused

- Integration of Partner Services
- Increased Reach & Awareness
- Externalized R&D
3rd Party pays for use of APIs

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

- **Used When:**
  - Charge for usage model
    - Ex: Payment Processing, Credit Checks, Analytical Data

- **Related Models**
  - **Pay As You Go**
    - Pay for what is used (No minimum fee)
  - **Tiered Pricing**
    - Different pricing per level of service
  - **Freemium**
    - Free up to a predefined limit, pay for usage above limit
  - **Unit Based**
    - Pay for set number of units / API Calls
  - **Transaction Fee**
    - Payment is a percentage or a set fee per API transaction

- **Examples**
  - Windows Azure
  - Cognitive Services
  - NASDAQ OMX
  - LinkedIn
  - Facebook Like
  - Google Maps
  - Pearson
  - PayPal
3rd Party gets paid for using APIs

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

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<th>Related Models</th>
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| Share revenues of an existing service or product as an incentive to expand customer reach | **Revenue Sharing**  
Share revenue generated when product or service is sold | Google AdSense, Amazon Product Advertising API, Uber Voucherify |
| | **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 | |
# APIs that generate indirect revenues

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

### Mutual benefit in publishing and consuming APIs

- Ex: Access to large user base, content acquisition

### Related Models

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<th>Related Models</th>
<th>Examples</th>
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<tr>
<td>Access to Real-time Data</td>
<td>Provides real-time or up-to-date data for users who use the (paid) service</td>
<td>Expedia</td>
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<tr>
<td>Access to Large Customer Base</td>
<td>Allows ease of registration for users to continuously expand user base</td>
<td>facebook, twitter</td>
</tr>
<tr>
<td>Increase Channels and/or Devices</td>
<td>Provide broader services across channels to increase subscribers</td>
<td>Netflix, at&amp;t</td>
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<tr>
<td>Enhance Internal Services</td>
<td>Provide enhanced services to existing users to reduce churn</td>
<td>Comcast</td>
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### Examples

- Expedia
- facebook
- twitter
- Netflix
- at&t
- Comcast
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

**Increased reach & awareness**

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

**Used When:**

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

**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

**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
For more information, contact …


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Thank you