Open Banking Solutions:

Capgemini helps drive business value
with the power of APIs

The new value agenda – Leverage Open APIs to unlock business opportunity

People matter, results count.

Disruption: A Catalyst for Positive Change

Trends impacting banks:

– Venture Capital funding is booming

– Barriers to entry have been reduced

– The pace of technological evolution has never been more rapid

– Gen Y and tech-savvy customers offer higher long-term revenue potential

– FinTech is setting the bar higher, according to nearly 70 percent of banking executives

Source: World FinTech Report 2017

The rate at which innovation is being delivered through FinTechs, Unicorns and Neobanks is fundamentally transforming the banking ecosystem, which spurs core questions around the effectiveness of the existing bank model and the mechanisms that best nurture business value within the new digital landscape.

The regulatory agenda in financial services has also switched gears over the last few years, moving from principle-centered regulation to a far greater focus on driving innovation through opening banking frameworks. For example, in Europe banking services' providers are being catalyzed towards open banking with regulations such as Revised Payment Services Directive (PSD2), Competition and Markets Authority(CMA), and a framework for data permissions through the General Data Protection Regulation (GDPR).

The implications of these changes are even more crucial to decipher as banks continue to face competition from new, digital-first players who have agility, consumer mind share and no legacy technology debt to navigate.

The banking digital transformation has become a necessity to allow market access opportunity, but it requires new ways to unlock the value of digital assets and customer data. These winds of disruptive change have been whirling for quite some time now, and the impact is broad — from retail banking, wealth management, commercial banking, capital markets and more.

As a result of this whirlwind of dynamic conditions, a new Financial Services' landscape has developed in which FinTechs and Application Program Interfaces (APIs) play an increasingly influential role in driving new business opportunities, whether they take the form of compliancy to regulatory standards, new revenue streams, driving operational excellence through a more digital operating model, or as the precursor to developing new value propositions for end customers. Open banking presents financial services organization with a new set of digitally enabled business opportunities, as well as access to new business model extensions enabled through more connected partnership collaborations.

The API economy is here to stay, and becomes a necessity for sustainable competitive advantage.

# Create new revenue opportunities with APIs and Open Banking

An open API platform strategy builds on the banking industry's core strengths of trust and brand recognition, as well as customer information assets. It also allows the banking services provider to build on the strengths of non-bank innovators that may be more agile and fast-paced in innovation.

The adoption of open APIs makes it easier for financial services players to collect actionable data in the form of customer purchasing decisions, loan needs, and preferred journey patterns as well as access to contextual information relating to risk profiles, future income projections, etc. These new insights can cost-effectively inform machine learning and support multi-channel marketing, which reduces reliance on above-the-line spending and managing a federated agency network. The result? Banks are able to integrate their services effectively and nimbly deliver new service offerings.

So it is no surprise that CEOs and Boards of Directors are now more actively engaged in the API driven service conversations that previously had been the sole domain of the CIO/CTO.

Exhibit 1: Generate business value with these 5 API strategies
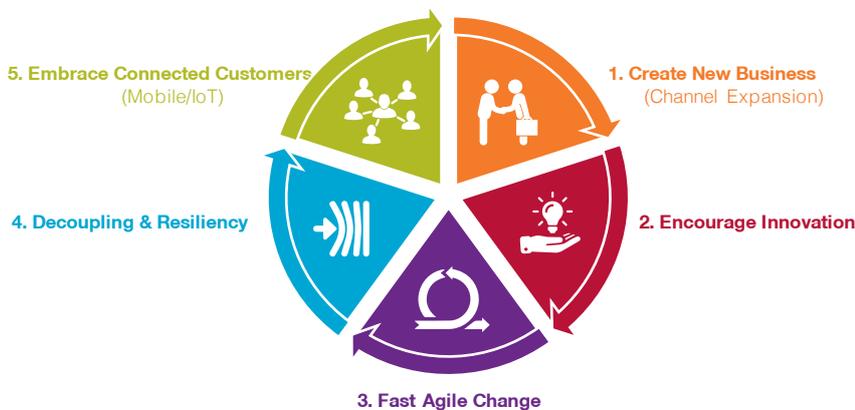
1. **Create New Business** (Channel Expansion): Leverage digital marketing to attract new customers to the bank brand through optimizing spend. Digital marketing helps to drive consumer mindshare, improving the path from prospect to customer. Here, APIs may be used to increase the reach and depth of business channels to provide additional —yet cost effective —revenue growth through new customer attraction.

2. **Encourage Innovation:** Bring innovation to the bank ecosystem to help spur additional revenue streams, enhance customer experience through emerging technology, and right size the cost/income ratio. How? Expand the innovation funnel by allowing partners, suppliers and other businesses to transform on top of bank platform services. This drives better collaboration with partners, suppliers and the ecosystem through direct integration of — and access to — services.

3. **Fast Agile Change:** Deliver innovation quickly to improve speed to market. Getting there first is critical to driving customer connection and advocacy. The digital framework allows for fast execution by shielding "systems of record" behind APIs, which removes resource bottlenecks and streamlines internal development.

4. **Decoupling and Resiliency:** Count on APIs to decrease architectural coupling and allow a more robust and independently-scalable platform. Shifting away from point-to-point to a more federated model reduces development cost and improves the ability to rationalize applications post digital transformation.

5. **Embrace Connected Customers** (Mobile, IoT and Network of Everything): With smart mobile devices evolving rapidly, banking on the move is now an entrenched customer behavior. And "virtual" banking has been one of the key drivers in moving the market away from branch-based transacting. During 2017, it is expected that more than 460 branches will close in the UK as a consequence of consumers now conducting their bank online, and on the move through smart phones[1].

Device independent APIs enable new bank servicing strategies and business capabilities to be rapidly deployed to mobile-only customers. These APIs enable customers to check their balances and transactions and to ask questions about their banking products (e.g. suspected fraud, disputes, loan approvals, change of details etc.) Additionally, with the emergence of AI, IoT and blockchain, very specific use cases around customer management are now easier to deploy against the API backbone.

Moving to a digital model? Consider this...

Overheard in the boardroom

– How can we enable new business models?

– How do we use APIs to create new revenue streams?

– How do we use APIs to amplify existing revenue streams?

– What monetization models are appropriate?

– How do we select and reach out to customers?

– How can we increase our market profile / brand position?

– How do we defend against disintermediation?

Clearly, opportunities through the API economy and open banking are tangible. But banks and financial services providers face a variety of transformational challenges when considering the move to a digital model. A dynamic environment buoyed by ever-increasing customer expectations, regulations, FinTech innovations, and banks' dependency on legacy IT systems are muddying the decision making process.

Opportunities versus challenges

• There is often a disconnect between business strategy and API strategy
• Keeping up with the aggressive speed of FinTech innovations can be daunting
• Which are the best tools to evaluate potential APIs and revenue models?
• How should roles and responsibilities be identified in order to launch and run APIs as a product?
• The "business" of APIs is new territory
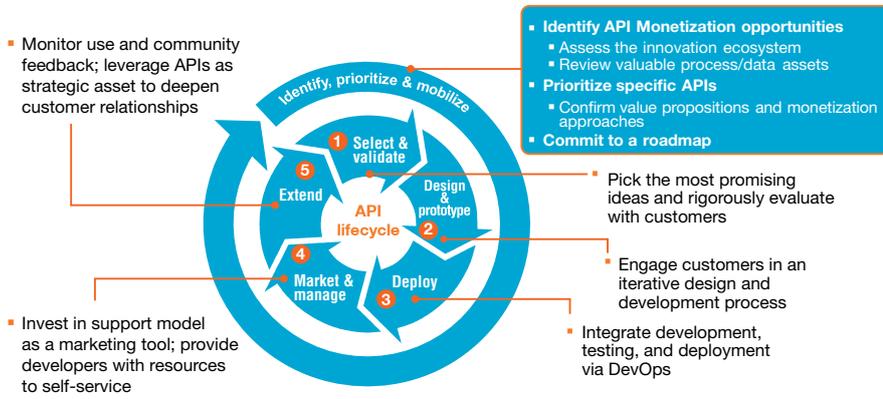• KPIs and metrics need realignment in the digital economy

Let's get started

The first step is to identify and prioritize API value-creation opportunities. Capgemini can help jump start your journey through our proven and tested API planning and mobilization engagement process, which helps to define your API-as-a-product operating model.

Within six to eight weeks, you will have developed a roadmap with a prioritized set of API monetization opportunities.

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[1]The Telegraph, March 26, 2017 "This year 525 banks will shut: will yours disappear?"

Exhibit 2: API Lifecycle

- Monitor use and community feedback; leverage APIs as strategic asset to deepen customer relationships

Identify, prioritize & mobilize

API lifecycle

1 Select & validate
2 Design & prototype
3 Deploy
4 Market & manage
5 Extend

- **Identify API Monetization opportunities**
  - Assess the innovation ecosystem
  - Review valuable process/data assets
- **Prioritize specific APIs**
  - Confirm value propositions and monetization approaches
- **Commit to a roadmap**

- Pick the most promising ideas and rigorously evaluate with customers

- Engage customers in an iterative design and development process

- Integrate development, testing, and deployment via DevOps

- Invest in support model as a marketing tool; provide developers with resources to self-service

Capgemini accelerates your ability to identify, prioritize and mobilize API monetization initiatives. And that enables you to rapidly focus and mobilize API investments.

- Identify the **business implications** for your API strategy and priorities
- Outline your potential API consumers, competitors, and other ecosystem participants with an **innovation ecosystem map**
- Evaluate potential **core process/data assets** and their value to the external API ecosystem
- Gauge your **current internal business technology capabilities** to develop, launch and operate API-based services
- Develop a **prioritized list of potential APIs** with internal/external value proposition (e.g. direct monetization, indirect brand impact) operational readiness along with the commercial model (e.g. open/closed, be paid, pay, revenue share)
- Develop a 12-18 month **implementation roadmap**

Aside from the challenges we have discussed, there are also very specific monetization options around API use by direct customers and indirect partner networks.

Guiding Principles:

– Set up APIs-as-a-product operating model

– Systematically generate ideas from internal and external sources

– Pick the most promising ideas and rigorously evaluate with customer input

– Develop "Try, Test and Adapt" mindset

– Encourage nimble product teams

– Security is a big deal; so, involving Risk and Compliance is important

Exhibit 3: API-specific monetization models

|	Model	Description	API Consumer	Example
Direct — **Benefit** — **Indirect**	**1 API Access Fee**	- Fee per transaction - Subscription fee for access - Offered directly or as an "upsell" against other services	- Open - Partner	- Payments - Account verification
	2 Shared Value	- Share value delivered via the API with the API Consumer, e.g. be paid/pay a percentage of transaction value	- Open - Partner	- FX conversion (share of currency value) - Loans
	3 Referred business/ Sales leads	- Expand distribution channels through partners (i.e. API consumers)	- Open - Partner	- Mortgages (named individuals closing on house purchase)
	4 Brand uplift/ Product promotion	- Positioning the Bank's brand and marketing messages via third-party apps	- Open - Partner	- No cost balance enquiries, credit checks, etc.
	5 Actionable Data for insights	- Collect directly actionable data (e.g. purchasing decisions, loan needs etc.) or contextual information (e.g. risk profile, future income projections etc.) that can inform machine learning and/or support multi-channel marketing	- Open - Partner	- Accurate estimates of increased real estate values (to tailor mortgage refinancing offers)
	6 Agility/Reuse	- Reduce development effort - Increase business agility/reduce time-to-market	- Internal	- Different product teams sharing development of common micro-services

A resilient and scalable Open Banking solution from Capgemini

Capgemini's repository of pre-built APIs includes PSD2 APIs that can help you to reduce time to market to compliance while leveraging the platform beyond PSD2 compliancy.

As your end-to-end transformation partner, Capgemini offers a fully integrated API platform to launch your API and Open Banking initiatives. Simply stated, that means unlocking new business models and revenue opportunities for you. Our well-tested and highly secure platform allows digital services to be integrated quickly, consistently and cost effectively, on site or in the cloud.

Our framework encompasses components across four dimensions. Each accelerator is based on mature open-source products and contains extensive documentation including API documentation best practices, API publishing guidelines, Cloud Native & DevOps accelerators, scalable examples and auto-provisioning scripts.

Exhibit 4: Capgemini's Open Banking Solution
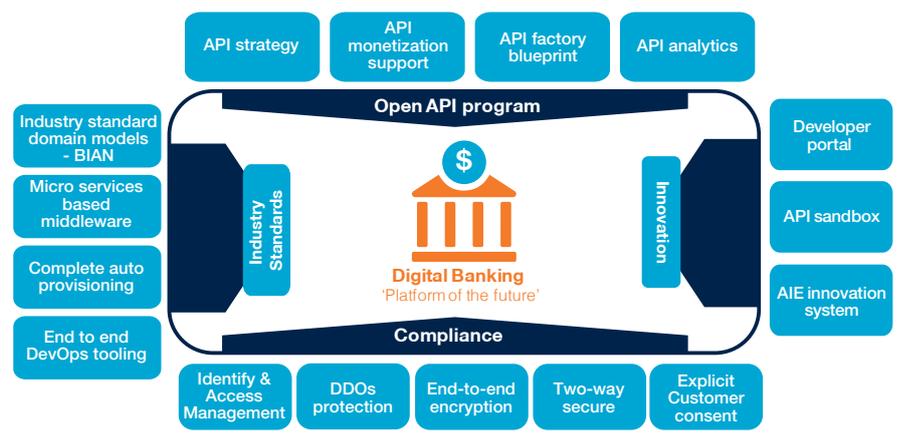
Our innovative solution helps banks leap frog to the Open API economy and manage an open innovation ecosystem. It provides an integrated developer portal and API sandbox to enable third-party providers and developers to build innovative Open APIs. Additionally, banks can access Capgemini's innovation ecosystem—a broad range of collaborative partners and FinTechs—through our Applied Innovation Exchange platform and Money + Magic Approach.

Capgemini's Open Banking solution provides **three different deployment models** to offer flexibility and a range of pricing:

- A model that is accessed as a fully-managed service on a dedicated virtual private cloud (with pricing based on API usage)
- A Capgemini built and deployed model on a dedicated virtual private cloud and then transfer of the operations to the bank
- A model installed on- premise in a private cloud within the bank's data center

Capgemini incorporates best-of-breed, fit-for-purpose technologies such as Amazon Web Services, Pivotal Cloud Foundry, IBM, Mulesoft, Splunk, Ping Identity and AppDynamics. Partner technologies are chosen based on company vision, product features, alignment with technology and architecture best practices, high resilience and fault tolerance, and precedence of usage within the financial services industry. We also have the flexibility to reuse your existing technologies. Our flexible internal platform architecture accommodates the "swap out" of any specific product if needed.

Unlock the Future of Digital with Open Banking and an API-based ecosystem

As a financial services digital transformation leader, Capgemini has deep domain knowledge across the banking value chain. Our assessment frameworks and API value-creation models are backed by more than 30 years of banking and capital markets experience and extensive industry research.

We are one of a handful of providers with experience managing large-scale API programs. For a UK client, we managed the delivery of 86 API endpoints supporting 20-million unique consumers and £1.5 billion GBP (British pound sterling) in revenue.

Get ahead of digital disruption. Now is the time to build momentum for API-led innovation to get ahead of digital disruption. And Capgemini has the right experience to help you embrace Open Banking as a way to digitally transform, innovate and unlock new business models and growth channels.

Case study: Our approach in action – new revenue though APIs

The bank challenge: "How to create new revenue streams through investing in API-based innovation by design"

After a series of ideation sessions designed to understand the value available to the bank through APIs, the bank opted to create an API with an online travel service that books a high volume of international travel. Through this API the travel service can offer customers the opportunity — and convenience — to purchase foreign currency from the bank as they book their travel. This collaborative business model opens up a new revenue stream at very low sales and distribution cost. Use of the API opened the door to collaboration with a travel service partner; and now the bank can assess additional potential synergies with the partner's customer population.

In this context, the approach to building APIs is critical. The collaboration between the bank and travel service was the result of the bank thinking holistically about its strategy. The bank was originally approached by a commercial customer wanting it to provide them with an API for downstream payment processing. Rather than creating a single solution for this important customer, the bank thought more broadly about its API platform. The bank is now looking at launching approximately 1,000 open APIs over the next few years.

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For a complimentary workshop on how to create value from APIs or a demo of Capgemini's API platform – contact us at **banking@capgemini.com**

For more information, visit us at **www.capgemini.com/openbanking**

About Capgemini

With more than 190,000 people, Capgemini is present in over 40 countries and celebrates its 50th Anniversary year in 2017. A global leader in consulting, technology and outsourcing services, the Group reported 2016 global revenues of EUR 12.5 billion.

Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness.

A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

Learn more about us at
www.capgemini.com

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