PSD2

PAYMENT SERVICES DIRECTIVE 2

AN OPEN DOOR TO THREAT? OR A GATEWAY TO A WHOLE NEW DIGITAL ECOSYSTEM?

The Payment Services Directive 2[1] – PSD2 – builds on the 2007 Directive, offering Access to Accounts – XS2A. This promises major disruption of the status quo in the European payments services industry. The big question now is: Do banks react to this development exclusively as a threat to "old" lines of business, or do they recognize and exploit it for the true digital innovation opportunity it really is?

The context – Much more than "compliance," this is a new horizon of true digital potential

PSD2 is a milestone event. Not just because it is another instance of major compliance-driven change. Not only because it has many implications for banks at the technology, operations and even business model levels. And not even just because it represents another potential disintermediation threat to banks in their account holding and payment enabling roles. The really big news is this: Banks that are truly focused on new opportunities will react to PSD2 as a catalyst for entry into an entire new phase of "digital for banks."

Delivery platforms and channels are only the beginning. The changes will more importantly affect customer experiences and user interfaces. This is a true – overused, but here entirely appropriate term – paradigm shift. Why? Because banks now have real potential to define and deliver "Digital Bank 2.0," in a clear move away from "bookkeeping on more sophisticated platforms." It is a chance to become true content originators through providing real, innovative new business models.

ENTRY TO A DIGITAL ECOSYSTEM

The most creative and productive way to view PSD2 is not as a threat of "removal of traditional rights," but as the driver needed to explore, design and implement a new digital ecosystem. The first step is recognition that the impact of PSD2 on account detail access and payments enablement is just the beginning. A digital ecosystem that centers on an API "layer" can offer banks the opportunity to align with a whole range of complementary players that until now have been seen as alien. These include utilities providers, e-commerce specialists, retailers and fintechs. Nor does this require investment in from-ground-zero technology. Already – today – some fintechs offer leased pre-existing API functionality that can enable and accelerate the creation of whole new business models within a new digital ecosystem.

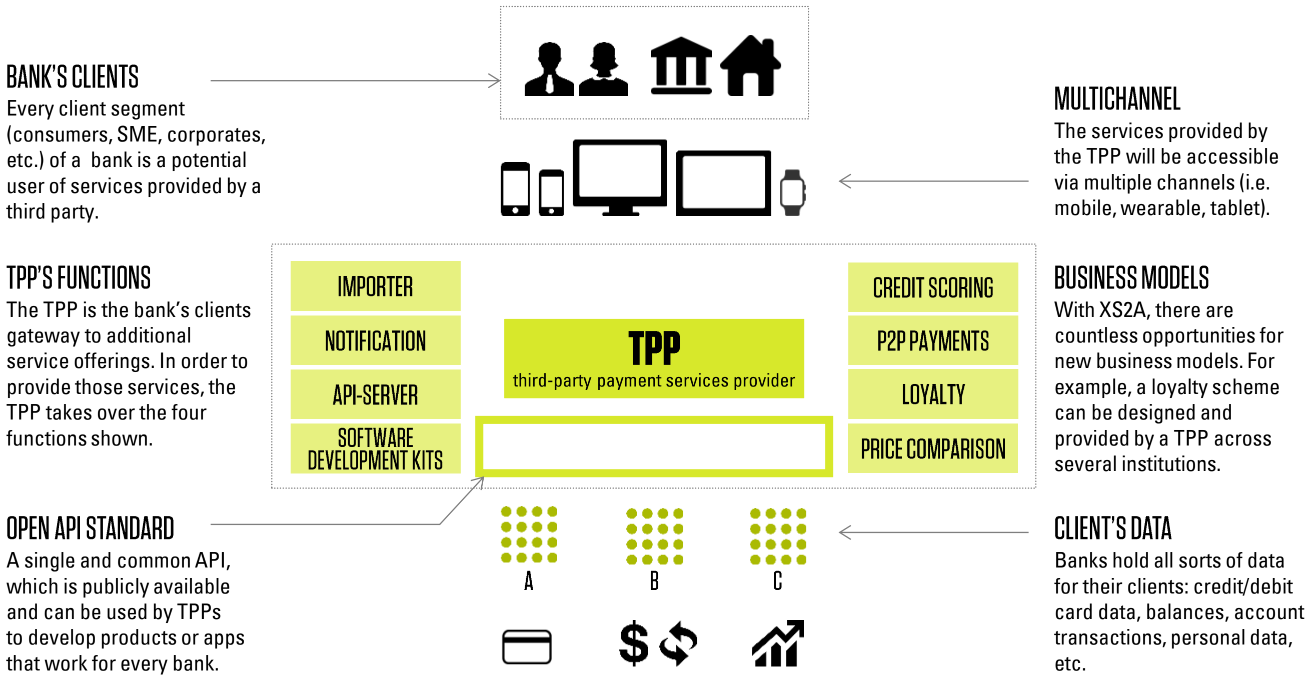


FIGURE 1. KEY DIGITAL ECOSYSTEM TOPOLOGY AND RELATIONSHIPS

Banks now have real potential to define and deliver "Digital Bank 2.0," in a clear move away from "bookkeeping on more sophisticated platforms.

WHAT KIND OF NEW BUSINESS MODELS CAN EXIST (AND THRIVE) IN THE NEW DIGITAL ECOSYSTEM?

Banks can combine their existing access to – and understanding of – customer account-derived data to create a whole range of innovative services. Some of them are detailed later in this paper. They include "an ultimate price comparison engine" that uses the customer intimacy derived from account data to identify and pick the best new deals for the customer on a multitude of products and services. These can range from utilities to mobile connectivity to lease hire on virtually anything. Or consider the potential and the market impact of reinventing the consumer credit rating agency business, based not on aging historicals but instead on the very latest real transactional data. This is indeed a powerful model. It is also a model banks can own very soon, when they start to make use of the digital ecosystem for the benefit of their customers, businesses and consumers alike.

WHAT ADVANTAGES DO BANKS HAVE OVER NEWCOMERS?

PSD2 is all too often presented as a "newcomers' licence." This view must be challenged. In the digital ecosystem, banks have many diverse advantages over first movers and disruptors. Banks have broad and deep proven data handling and holding capabilities. They have brand profile and brand trust. They have pre-existing infrastructures. Far from being the "targets and victims" of PSD2-driven disruption, banks should own the next steps and shape the digital ecosystem to best reflect their customers' next generation of needs and their own commercial best interests. As they do so, however, they must bear in mind that sheer organizational size is less important than the **agility** required to build, manage and encourage these new business models in the digitally enabled ecosystem.

IS THIS DIGITAL ECOSYSTEM OPTIONAL?

No. Because if some traditional players don't scope it out, implement and exploit it, the others (along with all the newcomers) will!

PSD2 – What do banks think today?

Our research[2] reveals mixed attitudes and levels of understanding towards PSD2. Only 37 per cent of survey respondents agreed that its impact is fully understood across their bank. But, they are clear that the fallout will impact core areas: Rethinking the retail banking customer relationship and business/revenue model is the most important issue for 54 per cent of respondents.

Nontraditional competition is seen as the heart of potential disruption, with more than 75 per cent of banks anticipating major competitors among nonbanks playing e-commerce and mobile banking roles[3]. The most pronounced concern, at 85 per cent of respondents, centers around data security (data and reputation protection) after opening up customer accounts to these outsiders.

Yet the challenges are not viewed entirely as negative. At 69 per cent, the majority of participants perceive PSD2 as a new business opportunities enabler. The paradox is that clear sight of the opportunities, as well as the threats, has not yet accelerated adoption of new technologies and approaches.

The important specific change-driving elements of PSD2/XS2A are opening up access across the industry to payment processing services, as well as to customer accounts held by banks. Providing this access in a regulated and secure manner is viewed as being of the utmost importance[4]. With PSD2/XS2A, banks are finally obliged to give up their exclusive position offering online and mobile banking services: figure 2 below.

However, by moving fast to develop and implement new business models, in the context of the digital ecosystem referenced at the start of this paper, banks can limit loss of control of online and mobile channels to third-party payment service providers (TPPs). Indeed, they can reassert their strength and position with entirely new and innovative business models.

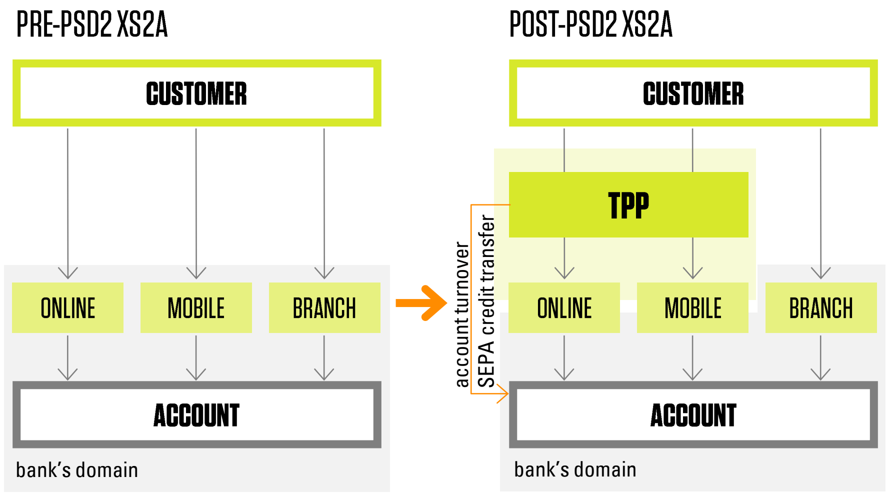


FIGURE 2. BANKS FACE LOSS OF TOTAL CONTROL OF CUSTOMER FACING CHANNELS

Some practical potential business models – for banks AND newcomers

Our research confirms banks do have a high degree of awareness that PSD2/XS2A can lead to the development of new business models. The challenge is that the new directive aims for payment innovation while strengthening opportunities for **external** parties. Competition to offer new services will be tough, coming from a much wider field of new market participants. Banks will need above all to be **quick** if they want to get to market with innovation ahead of the new competitors. They will also need to be mindful of the optimum context: a whole new digital ecosystem.

What kind of innovation might they offer? Below, we introduce some potential business models inspired and enabled by PSD2/XS2A[5].

The European Account

One of the key features of PSD2/XS2A is that a single TPP can access a customer's accounts at each of their separate European banks. It is therefore possible to offer a single account, giving detailed information on **all** the accounts a customer might hold with multiple banks: see figure 3 below.

The European Account model enhances customer experience and convenience, requiring only one set of credentials to access all accounts held. This model also increases the accuracy and usefulness of personal financial management tools because they can draw on and process much more comprehensive customer data. Over time, assuming high European Account adoption rates across the eurozone, large volume data flow would become channeled. This in turn would enable more accurate anticipation of payment behaviors, as well as targeted, data-driven cross-selling opportunities and more precise assessment of future risk. The TPP could even offer a service that automatically determined the cheapest and fastest way to facilitate transactions beyond European borders. Such an offer would significantly increase customer satisfaction.

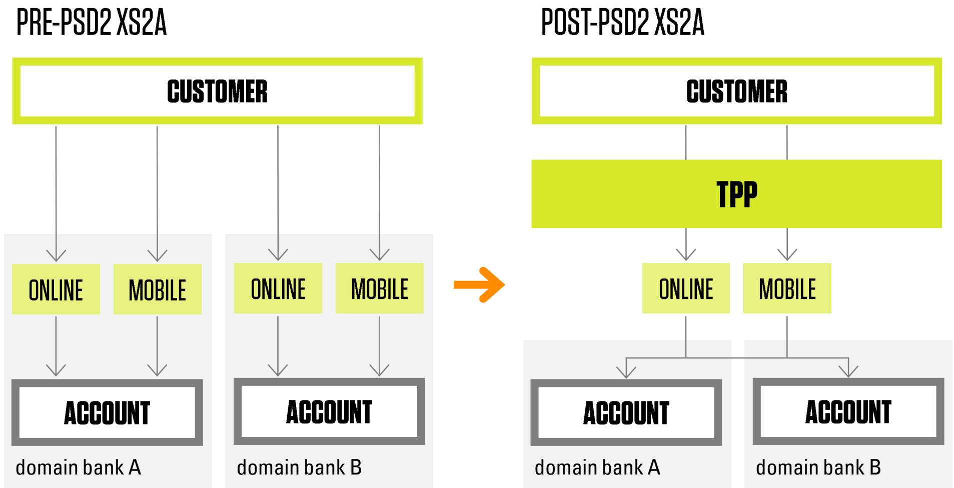
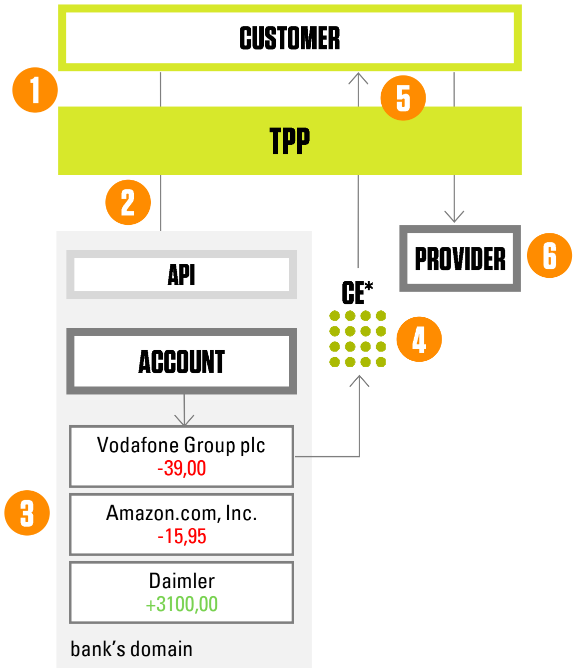


FIGURE 3. THE EUROPEAN ACCOUNT MODEL

THE AUTOMATIC PRICE COMPARISON ENGINE

Comparing utility providers' prices has spawned countless websites. However, the process behind the comparison remains manual. The customer needs to constantly compare prices, and potentially switch providers, to maximize savings. In the PSD2/XS2A digital ecosystem environment, a TPP could offer a service that automates this process. How? An algorithm detects utility payments from a customer's account, compares prices offered from other providers and, if savings can be achieved, **automatically** suggests a change of supplier.

The automated process can run 24/7 to assure savings maximization without actively involving the customer. Even greater potential could be unlocked by combining the comparison engine with the European Account model to capture as many data cross-reference points as possible.



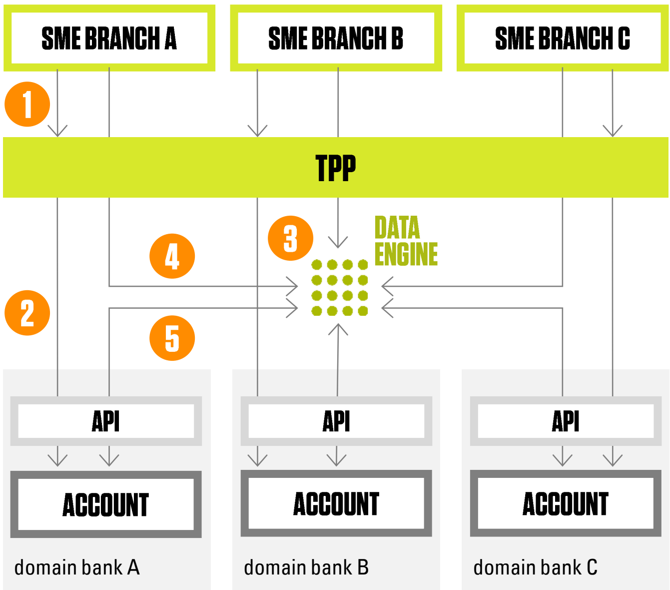
1. The customer gives permission to the TPP to access their account.
2. The bank provides the TPP access to the customer's account through an API.
3. Using an algorithm, the TPP scans the account turnover for reoccurring utility payments.
4. The information is enriched and the price compared in a comparison engine*.
5. If an offer with a lower price is available, the customer is notified and asked for permission to switch providers.
6. Customer's permission is forwarded to the respective provider (digital signature), the current contract is cancelled, and a new contract is entered.

FIGURE 4. AUTOMATIC PRICE COMPARISON ENGINE

THE SME CASH MANAGER

For small and medium-sized enterprises (SMEs) operating in multiple European countries through a branch network, efficient cash management should mean placing just the right amount of money at the right time in the right place. Currently, the cash management process is handled by the SMEs' bank's headquarters. With the introduction of PSD2/XS2A, banks (as TPPs) can offer more sophisticated services, as figure 5 below illustrates.

In this model the central data engine provided by the TPP collects, enriches and analyzes data from key sources. This process allows for optimization of cash management through a prediction algorithm. Cash can be moved between branches as required or earmarked to indicate that a certain amount is needed in the near future for a particular branch[6].



1. The SME branches (including headquarters) give the TPP permission to access their respective bank accounts
2. The TPP is now able to initiate SCTs and source account-related information.
3. A data engine provided by the TPP collects data from several sources (i.e. account, SME Branch) and predicts future needs for cash.
4. Each SME feeds the data engine with qualitative and quantitative data, i.e. status of projects, future engagements, etc.
5. Information provided by the branches is enriched with account data. Once analyzed, necessary account movements are carried out / cash earmarked.

FIGURE 5. CASH MANAGEMENT SMES MODEL (POST-PSD2)

THE (BANKING) APP STORE

The PSD2/XS2A-driven digital ecosystem environment enables an app store model similar to the one we already know from iOS and Android. But the banking app store is focused **solely** on banking applications, while mirroring the approach already adopted by companies such as Apple. The numerous basic requirements to make it work include strict rules and guidelines set by the operator, provision of a software developer kit (SDK) and, not least, a sustainable revenue model.

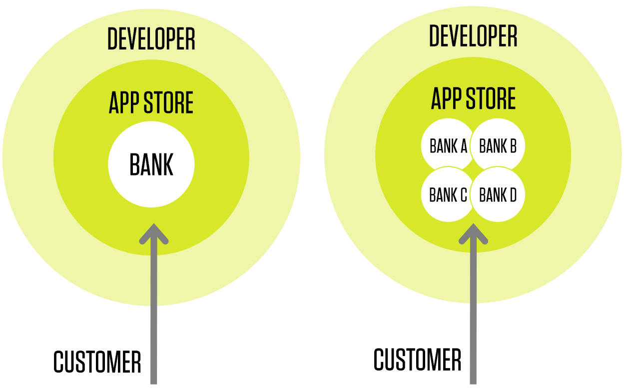


FIGURE 6. TWO POTENTIAL APP STORE SETTINGS

The first app store variant is built around a **single** bank. This brings upsides and downsides for those involved (developer, TPP, bank). Developers will encounter reduced complexity and more limited competition, while the scale challenge of the addressable market is capped. The bank avoids potential brand dilution and direct comparisons with competitors.

Realistically, it is more probable that the second model in Figure 5 will evolve from PSD2/XS2A. Here, the store provides applications for a **group** of banks. Developers will more likely focus effort on the app store that promises the highest economic return (from a broader customer base), leaving behind those setups focused on a single bank.

SLOW REACTION TO PSD2/XS2A OPPORTUNITY = INEVITABLE COMMERCIAL AND REPUTATIONAL LOSS

In spite of high awareness of commercial potential, some 69 per cent of survey respondents still view PSD2/XS2A as a step-by-step challenge. Initial focus is on compliance and operational consequences **before** moving to the business opportunities. But this misses the point: that new, less complex and more flexible nonbank entrants will cut to the commercial chase and pull ahead.

Loss of business opportunity through failure to realize the full ecosystem potential and then act quickly will be compounded by reputation damage. Millennials already view banks as being at high risk of disruption[7], believing they lack differentiation and will fail to provide innovative solutions or even keep up with new developments in payments and funds access over the next five years.

A digital ecosystem that centers on an API “layer” can offer banks the opportunity to align with a whole range of complementary players that until now have been seen as alien.

Banks that are truly focused on new opportunities will react to PSD2 as a catalyst for entry into an entire new phase of “digital for banks.”

NEW SOLUTIONS DEVELOPMENT – BUY IT, BUILD IT WITH SOMEBODY ELSE, OR DO IT YOURSELF?

When considering any new business model, the question of the optimal development approach arises. This, of course, assumes that an institution opts to engage with PSD2 beyond compliance only, and choses to actively pursue the opportunity to use data and service aggregation for driving value creation.

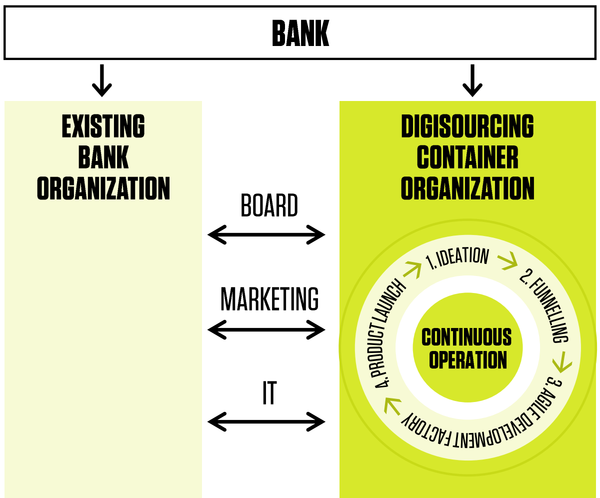
Any business today wishing to move fast prefers either buying in or building collaboratively with partners, as opposed to do-it-yourself. This is especially the case with traditional banks. Typically, they have less experience in dealing with innovative technologies, while having to face the inflexibility that comes from complex regulations and infrastructures. Not surprisingly, current trends in fintech likewise favor collaboration above purely internal development[8]. And, pre-existing bank API layer functionality that can be leased on a highly cost-effective basis de-risks entry into the new digital ecosystem from both the financial and functional perspectives.

The role of an expert partner

Successfully delivering any new business model to take advantage of PSD2/XS2A opportunities requires a mix of financial expertise, business development experience and digital capabilities. It also needs **vision** to see, implement and exploit the kinds of innovative and disruptive models that are possible in the new ecosystem. The right partner will provide this mix. They can expertly address multiple activities that include business impact analysis, business case definition, validation of blue ocean strategy[9], market screening, target operating model development and plugging into existing APIs, among many others.

Capco DigiSourcing – accelerating digital innovation

DigiSourcing creates a "container" for the digital development ecosystem, a dedicated space where the bank and Capco Digital specialists can collaborate without silos. DigiSourcing applies a tightly-managed, creativity-led and output-focused process with four key stages: Ideation, Funnelling, Agile Development Factory, and Product Launch. The key benefits of the output are precision, speed, agility and responsiveness of highly market specific digital products and services. DigiSourcing is designed to transform a bank's ability to deliver new digital consumer and corporate propositions at pace. Download full details of DigiSourcing.



DIGISOURCING CONTAINER ORGANIZATION

- A separate unit that does not require a lengthy setup
- Operated by a heterogeneous team
- Delivers digital products, services and initiatives via rapid innovation cycles

FIGURE 7. DIGISOURCING IN ACTION

The DigiSourcing container approach identifies areas essential to building a new business model around PSD2/XS2A.It must be stressed that **relevant collaboration** is key. For example, at Capco we always aim to involve our extensive network of leading fintech companies in key areas such as blockchain, artificial intelligence, mobile and data. The goal, on behalf of our clients, is to enrich successful outcomes through the ideas and solutions from technology innovation leaders, both established and startups.

Conclusion – This IS a gateway to opportunity

Yes, PSD2 with XS2A is a regulatory imposition. And, yes, it does open the door to the threat of new competition from fresh market entrants. But its real milestone significance for established banks is as a driver for payments innovation, solutions creativity and enhanced services and experiences for customers. In summary, PSD2 triggers the ability in banks to become content originators as well as data holders and handlers.

To realize this potential, however, demands that banks pass through the gateway today – now – by developing and delivering the business models that will reassert their position both in the payments space and through an innovative range of new models. This they must do if they wish to maintain competitive distance through their unique experience of secure data handling and customer service. A wait-and-see approach will only open the door wider to the threat from disruptors.

1. Detailed background on the Directive's framework is available at: http://ec.europa.eu/finance/payments/framework/index_en.htm
2. Sponsored by FIS and conducted by Finextra, the results of the survey "PSD2 and XS2A - Regulation or Opportunity?" were published in May 2015. The survey received responses from 64 financial institutions in more than 28 countries.
3. They include Google, Apple and specialist payment processors.
4. Under PSD2, granting access to online payment services to third parties is referred to as third-party payment service provider (TPP) provision. XS2A obliges banks to provide API-enabled access with their permission to customer accounts and associated account information to third parties. XS2A allows TPPs to not only initiate SEPA Credit Transfers (SCTs) on behalf of the account holder, but to access account information with permission.
5. For simplification purposes, an external party as well as a bank is designated as a TPP. These opportunities are equally applicable to market newcomers, hence the degree of urgency for the banks.
6. The high-level model depicted can be applied to SMEs that also operate beyond European borders. However, some adaptation would be necessary.
7. The Millennial Disruption Index, http://www.millennialdisruptionindex.com/
8. Deutsche Bank AG, from hubs in Berlin, London and Silicon Valley, is planning to evaluate more than 500 startup ideas each year (source: Financial Times). The Barclays Accelerator, with locations in Cape Town, London, New York, and Tel Aviv, supports startups with capabilities including machine learning, digital banking solutions and trading (source: Barclays Accelerator website).
9. The term is derived from the book "Blue Ocean Strategy" (Harvard Business Review Press, expanded edition, 2015), by W. Chan Kim and Renee Mauborgne. The authors argue that instead of competing, companies can succeed by creating "blue oceans" of uncontested market space.

AUTHORS

Bernd Richter bernd.richter@capco.com
Gabriel Holz gabriel.holz@capco.com

ABOUT CAPCO

Capco – an FIS™ company – is a global business and technology consultancy dedicated solely to the financial services industry. We work in this sector only. We recognize and understand the opportunities and the challenges our clients face. We apply focus, insight and determination to consulting, technology and transformation. We overcome complexity. We remove obstacles. We help our clients realize their potential for increasing success. The value we create, the insights we contribute and the skills of our people mean we are more than consultants. We are a true participant in the industry. Together with our clients we are forming the future of finance. We serve our clients from offices in leading financial centers across North America, Europe, Africa and Asia.

WORLDWIDE OFFICES

Bangalore • Brussels • Bratislava • Chicago • Dallas • Düsseldorf • Edinburgh • Frankfurt • Geneva • Hong Kong • Houston • Johannesburg • Kuala Lumpur • London • New York • Orlando • Paris • Singapore • Toronto • Vienna • Zürich

To learn more, contact us in the UK on +44 20 7426 1500, in Continental Europe on +49 69 97 60 9000, in North America on +1 877 982 2726 or visit our website at **CAPCO.COM**

T1616-0316-01-EU

FORMING THE FUTURE OF FINANCE

CAPCO.COM