

European Data Strategy for Finance

For the EU's economy to remain competitive on the global stage, Europeans need to turn the necessary digital transformation of EU's traditional industries into a global advantage. The question for EU policy makers today is how to create the right policy environment to support EU businesses becoming the innovators of tomorrow's world whilst preserving and promoting the core of our European values.

There is no easy answer – but it requires a **genuine horizontal approach** as today's sectors lines are increasingly less relevant. This will be a pre-condition to ensure the development of data-driven businesses in Europe and **help EU businesses re-invent themselves** to success globally.

We welcome the Commission's recent Data Strategy which aims to stimulate Europe's data economy. We support the Commission's ambition to create a 'data agile economy' by facilitating cross-sectoral measures for data access and use. We believe that regulatory initiatives are needed to best address the challenges faced by European companies transforming their business model to compete in the digital age.

In each of the cases presented below, the principle of wider and regulated data sharing is central to the policy solution. Guaranteed real time transmission of customers' data in a way that is safe and efficient can improve products, widen financial inclusion, foster competition, and support the fight against fraud, as it allows to provide more convenient just in time offerings.

Three pillars are needed for data sharing to realise its full potential:

1. **User control:** People and businesses, as owners of the data they generate, must be in control of it and decide freely with whom to share it, to their own advantage.¹ Ensure reciprocity across industries, taking into account those holding more data (such as GAFAA²). Focus on a PSD2- like regulation for the rest of industries vs. a PSD3 for the financial sector only.
2. **Safety:** A principle of user ownership must go hand in hand with a principle of user protection. Any data sharing framework must ensure the secure transmission of data. APIs are the preferred method for this: they are safe, efficient and provide access to data on an immediate and ongoing basis. Access can be easily stopped whenever the user decides to do so.
3. **Value added:** Users are the owners of their raw and observed data, but companies that build value around this data and enhance its quality should be able to retain this value. "Elaborated" or inferred data insights should not be subject to data sharing obligations.

¹ [UK Furman Report :Unlocking digital competition](#)

² Google, Amazon, Facebook, Apple, Alibaba.

Depending on how the open finance policy is implemented, we see an enormous risk of further tilting an already unlevel playing field against banks and for the benefit of non-European Bigtechs.

After COVID, the capacity of the financial sector to collaborate with authorities and provide support to the economy is being tested at extreme. This is not the moment to adopt another data sharing obligation only upon the financial sector (and especially banks), for the benefit of the only players that have benefited from COVID situation.

We would ask DG FISMA to be vigilant regarding the compounding of this competitive disadvantage without waiting until the same steps are taken in other sectors. We also encourage DG FISMA to only work with full financial data access in mind: not only data from all financial service providers, but also data gathered by technology providers in the context of financial relationships and data gathered by other players which is useful for financial services, and this create a real choice for European consumers.

The most crucial safeguard that DG FISMA could take here would be timing alignment of data sharing initiatives between the financial sector (where PSD2 is already in place) and BigTech Platforms (gain access to the data of European users) to avoid imbalance. Open data from Bigtech players competing in financial services (also as infrastructure providers) need to happen at the same time as open further banks' data.

Within the financial space, we consider it necessary that this new regulatory framework- that forces the financial companies to open data -would also include big online intermediation services. Otherwise there is a risk that the unlevel playing field will persist as the big online intermediation services continue to benefit from others sharing their data)

Regarding privacy and cyber: we believe APIs are very powerful to ensure that only the relevant data is accessed by the authorized party. We believe it is also necessary to ensure that companies trying to obtain access have proved they have the means to protect privacy and cybersecurity, as provided for under PSD2. A licensing or authorization regimes are needed, depending on the category of data to be accessed and supervision should be put in place to ensure not only these risks but also GDPR is properly respected.

Different approach in the financial space: competition issues

PSD2 create an asymmetric position in Europe which large tech companies are able to gain access to the data of European users, while banks do not have the same rights. Banks are therefore not able to use non-financial data to provide better, more targeted services to European consumers. Forcing only banks to open up their data further can put their viability at risk. As only banks are required to share their customers' data, other sectors, especially those that are very data-rich will take advantage of this.

If the Commission's approach is limited to Open Finance, mandating the sharing of more data by banks, this will not level the playing field with Big Technology players after PSD2. Why is that possible in the financial sector without having determined a market failure, if this is a precondition for mandatory access to data in other sectors? In an environment where boundaries across sectors are disappearing and where platforms are already providing financial services, **this is a clear contradiction.**

Leave the choice to users

We believe consumers can understand perfectly why certain data could be useful in other contexts, irrespective sectorial boundaries, as it happened during the COVID crisis, where everybody understood perfectly that telecom and technology platforms data were extremely relevant to solve a healthcare use case.

Consumers are already providing access to some data in certain contexts. For example, in Spain, parents looking for a place in a private school for their children already provide access to their tax data so that their financial capacity is assessed.

Users should not be obliged to share their data, but be left the real choice to choose doing so. For users to be willing to provide data, some conditions should be met

- Usefulness: they would do it if they see there is positive consequences for them. For that, there should be a use case in which they see value.
- Convenience: practical solutions that allow individuals to exercise control, such as mobile and online dashboards or apps.
- Trust: security conditions and data protection would give comfort to consumers sharing their data.

One category of data is not enough

PSD2 has been implemented with no clear effect in terms of disruptive innovation in the market nor benefits to consumers. Account aggregators are not game changers in terms of providing value to customers.

However they are revealing important competitive issues in terms of access to financial data for other purposes not really linked to finance. We believe the main reason for the lack of success is that the PSD2 only opened the access to a very limited set of data, just from banks, and not from other players of the financial ecosystem.

The benefits of Open Finance will be very much dependent on whether the initiative is once again limited to open the data that is now held by banks instead of all the data that is useful in the financial ecosystem. That is, whether customers shall be given the opportunity to give access to the data from all financial service providers, including technology providers in the financial context who accumulate data from financial interactions and even data from providers outside the financial space that is relevant to the provision of financial services.

If the scope of participants is reduced, the benefits will be as limited as in the case of PSD2 but the competitive challenges to banks will only multiply: advancing to such an open finance initiative risks putting banks in an extremely difficult situation to compete with other players in the digital space, in a moment (post COVID) where they should put their resources at the service of supporting the European recovery. This is especially true, if this initiative is developed quicker than the Digital Services Act's initiative to open data from online platforms.

However, in the case that the Open Finance initiative includes data across sectors, we believe this can produce very positive results in terms of:

- More innovative and convenient services for consumers and investors, which are not limited to aggregating information but to analyse it and go beyond current value propositions.
- Efficiencies for the industry by making processes more automated, robust and traceable, with the opportunity to have a 360° view of the customer and provide solutions for the long term (i.e. investment advice that is not only based on the current preferences of investors but also on future employability indicators).
- Business opportunities for new entrants in the financial industry, but also for existing firms that create value for consumers.
- New opportunities for incumbent financial services firms, including through partnerships with innovative start-ups.
- Easier access to bigger sets of data, hence facilitating development of data dependent services.
- Enhanced access to credit for small businesses and individuals that are poorly banked.

Ecosystems of data

Data sharing is key if users, both consumers and businesses are to truly benefit from the opportunities their data could offer for improving the way they access and use financial services.

A broad framework, beyond financial services, has to be developed. Users must be able to share their data held by others (especially large platforms that concentrate large pools of data) with different service providers. The focus should not be solely on financial products, but on use cases and ecosystems. Otherwise the only result will be incremental innovation. More access to data will enhance all the products and services. But also the way the customer is served, the risk management, etc.

True innovation will only come if consumers and business users are able to obtain finance in a manner that is more aligned with their needs, and which evolve in the different stages of their life. No customer wants a mortgage: what he wants is a home. No customer wants a pension product: what he wants is to stay financially safe in its future. We call the EU Commission to abandon the rigid focus on financial products in order to focus at customers' financial needs, which will be better matched with a broader perspective of just the bunch of products that customer holds today.

We believe that all data generated by users in their interactions with all kind of service providers should be available for them to share with whom users wish (please note that we do not believe

that the products or services generate the data, but the interactions of users with these services: this is important to distinguish, because we support that the data generated by the providers, which create additional value to the users-generated data should not be accessible).

Data is organized in ecosystems and the one that refers to a user provides more information about the needs and characteristics of such a user than just a limited context of his or her digital life, so just making partial data queries will lead to poorer outcomes.

In fact, one of the reasons why Bigtech platforms are so successful is because they combine data generated in the different contexts in which they are involved, without any sectorial boundary, to enhance the value proposition to customers by leveraging on this data diversity.

We want to stress that there is not a single category of data that would be valid for adding value in each product or service. It is paramount to highlight that it does not make much sense to focus on a specific range of data to be shared. This is due to different reasons:

- Unknown correlations
- Changing parameters (behavioral changes)
- Diversity in assessment models

Thus, we will provide some examples of how access to various, non-financial categories of data could be useful for enhancing the provision of financial services. However, there are only examples, we don't suggest that there is a specific set of data that has to be opened, based on these examples, but a broader framework in which the customer could be asked for different data based on the actual use case that will be provided and the needs of this specific market player to provide the service.

The best way to assess which data is necessary, is to look at which is the customer's pain point that we want to solve. Then, look around for an ecosystem of data. In fact, this is exactly what the Commission did in the Green Data Space, where instead of looking for green data in a specific sector, they are looking for varied sources of data in different sectors, in order to have the best knowledge to solve the case.

We are proposing some ideas:

Case 1. Finance for SMEs

Problem: Lack of credit for SMEs

SME lending is not only an important source of business for banks, but it is also vital for the EU economy. The EU Capital Markets Union initiative identified the lack of information of small businesses as one of the main barriers for financing SMEs. In particular, lending can be hindered by the lack of sufficient or adequate data on which to build a solid picture of a business' operational strength and risk profile.

The solution: more data for better credit profiling

What is already possible

There is now a large body of research that testifies to the power of additional data in improving credit scoring. For example:

- ✓ **Research by NBER³ on digital footprints: it concludes that** adding just 10 variables of non-financial information (such as device type, Operating system, Channel, Time of day, Typing errors, lower cases, e-mail service provider, e-mail address chosen by the user - whether it includes his first/last name or a number- , tracking settings) increases model scoring accuracy (area under the curve⁴, AUC) by 5% (from 68.3% to 73.6% in Germany). Such an improvement could translate into a growth of our funding capacity between 10% and 30% for the same level of risk, depending on the portfolio in which it is implemented. **Research by NBER⁵ on digital footprints: it concludes that** adding just 10 variables of non-financial information (such as device type, Operating system, Channel, Time of day, Typing errors, lower cases, e-mail service provider, e-mail address chosen by the user - whether it includes his first/last name or a number- , tracking settings) increases model scoring accuracy (area under the curve⁶, AUC) by 5% (from 68.3% to 73.6% in Germany). Such an improvement could translate into a growth of our funding capacity between 10% and 30% for the same level of risk, depending on the portfolio in which it is implemented.
- ✓ **Bank of International Settlements (BIS) research on Big Tech credit:** Platform data and data via social media has the potential to enrich credit scoring models. In the case of Mercadolibre (Argentina), 30% of its portfolio would have fallen into the high-risk cluster as assessed by a traditional credit bureau. Widening the pool of data used improves creditworthiness of many customers and thus opens new options for them.
- ✓ The Bank of England published a paper in March 2020 on **Open Finance for SMEs⁷**, identifying the following benefits
 - SMEs would be able to harness the power of their data to access the finance they need to grow. The initiative would expand the sources of data that lenders could access, such as data held at insurance and utilities companies, as well as search, ratings and social media data could help to build richer credit files.
 - SMEs would have full control of their data and its sharing; data transfer is permissioned by the SME and actioned via APIs

³ Credit Scoring using digital footprints. US National Bureau of Economic Research, Berg, Burg, Gombovi, Puri, 2018.

⁴ The AUC is a simple and widely used metric for judging the discriminatory power of credit scores. The AUC ranges from 50% (purely random prediction) to 100% (perfect prediction) and is closely related to the Gini coefficient ($Gini = 2 \cdot AUC - 1$). The AUC corresponds to the probability of correctly identifying the good case if faced with one random good and one random bad case. An AUC of 60% is generally considered desirable in information-scarce environments, while AUCs of 70% or greater are the goal in information rich environments.

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⁷ <https://www.bankofengland.co.uk/-/media/boe/files/fintech/open-data-for-sme-finance.pdf?la=en&hash=FD4BC43BBD61EDEC5F8460C6BB7488EFDE647581>

- The same platform also has the potential to deliver a “personal financial passport” for individuals. Such use cases would put into practice the recommendations from the Digital Competition Expert Panel Report (Furman Review). This data mobility would allow consumers to move their personal information from one platform to another, to avoid lock-in and open the door to new services.
- Access to government-verified data, including passport and tax data, such as tax returns, with the permission of the SME can also reduce significantly the likelihood of falsified applications, simultaneously reducing fraud and credit risk.

We are already working on initiatives to test how our credit scoring models would be improved using more data. Part of the effort is focusing on using more internal data that was not well organized and available. This is showing impressive results (such as 30% increase in model accuracy in some portfolios in Spain, for instance). However, we see the highest potential in the use of external data. For example:

- ✓ We are testing how to improve its credit scoring model by including travel fare aggregator website data. Evidence has shown that this can help produce an enhanced profile of its business strength and credit worthiness. In this case, we looked at scorings and companies with certificate of Excellence. From a universe of companies with BadRate scorings of 9.6%, those with certificate of excellence. We reduced the scoring to 4.1% and in those with high ratings we reduced to 5.4%⁸.
- ✓ We have also developed an end-to-end digital credit facility to these SME clients with a standard product solution.
- ✓ We are also incorporating new data sources for improving non-customer scorecard models. For SMEs models, this includes adding data from a pool of information from a range of commercial global scores, payment network information, company’s director boards analysis, public annual financial reports, digital footprints, traditional bureaus and additional transactional information between customers and non-customers.,
- ✓ **We are also** using Machine Learning technology to model SME customer behaviour during his relationship with the Bank. This includes new transactional data such as ATM transactions, the structure of a lendee’s banking and borrowing arrangements, and other data. This enables us to grant lending for new customers.

The challenge

What more we could do

EU customers now have the opportunity to ask for data portability under the new General Data Protection regulation (GDPR). However, very often data-holders respond to such queries with cumbersome formats and slow timelines which are not compatible with a customer’s preference for much greater immediacy. Under the framework created by PSD2, banks now provide access to customer’s information to third parties in a structured, safe and consistent manner. However, for other kind of data held by other players, they depend on third parties’ willingness to provide access to customers’ data in a convenient format. This is sometimes solved through bilateral agreements among data holders, however has the problem of being limited to the negotiation power of the parties.

Many other use cases could unblock more credit potential for Europe. For example:

- ✓ If a customer provided the financial service provider with data from his geo-localization, it could see he is in an office during all working days (i.e. employed customer). Without the need for the

⁸ The BadRate is calculated: #Bad clients/# total clients, where bad clients that will be default in the next 6 months.

customer to provide more information, the finance provider would be keen to provide him with a short term short-size loan, as a way to start a deeper lending relationship.

- ✓ In the case of SME end-to-end credit facility, with a true portability of data held by the SME it would be easier to improve this digital facility to new SME costumers, develop a digital product customization to their real needs of the SME customer and provide a better and faster credit support to the main economic players. In Portugal, for example, if SMEs and self-employed customers are selling products through digital platforms one could provide access to this information to other players. The opening of these data could make it much easier for companies to access financing, making the market more transparent and competitive, with a direct benefit for the company and for the financial system (as opposed to, for example, Amazon, which currently is the only one to leverage on these data to provide lending).

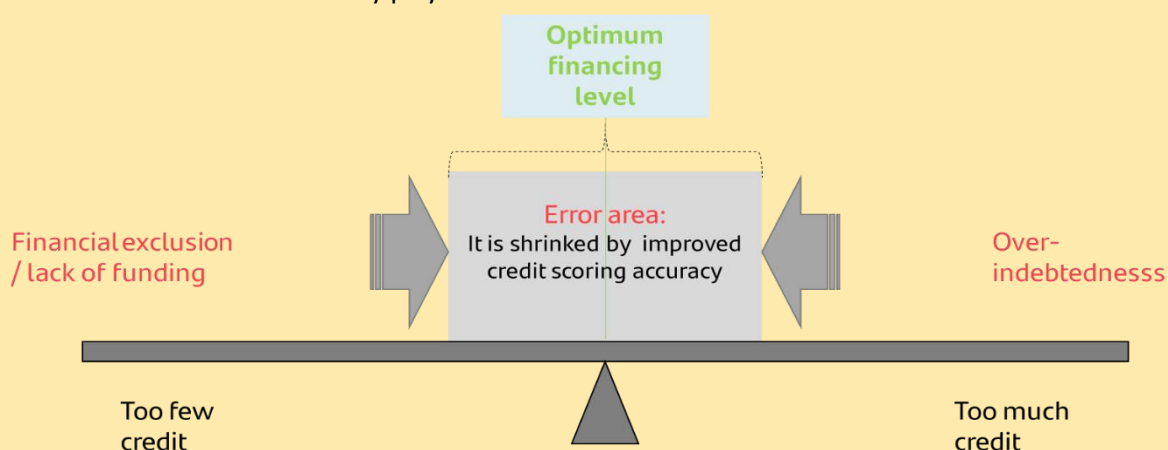
We are limited due to the fact that the data sources that we are using in our testing above are very limited compared to the amount of data held by other players, especially technology businesses that accumulate social, commercial or consumer data through their platforms. We only access these data in a rudimentary manner, through partial agreements and subject to their terms and conditions, or through screen scrapping (which is only used for testing purposes).

True portability puts the data owner in control – not the firm holding his data. For example, Facebook, Google, Microsoft and Twitter are part of the Data Transfer Project. While this appears a welcome new effort to widen data portability, the companies involved choose the counterparties participating in data portability, the kind of data to be transmitted and set the conditions for doing so. There is no genuine new empowerment for the real data owner - the consumer.

The aim of a European data policy should be to complete the regulatory framework for data sharing to boost innovation and competition by giving users genuine control over their data.

What would be the specific benefit to the consumer or business user?

The consumer will always benefit by a better creditworthiness assessment, in the sense that access to more data will improve creditworthiness assessment by avoiding errors (provide too much credit or too few). We can better balance the needs of finance with the needs to control overindebtedness. Error area will be reduced. And this will only play at the benefit of consumers.



Also, this will empower the consumer to widen the range of potential finance providers and thus increase competition in the sector. Finally, the consumer will be benefitted by a more solvent financial ecosystem, in which risk is better priced.

Case 2. Data access and sharing for empowering consumers

Problem: Consumers may not be taking the best financial decision

Very often, consumers make poor financial decisions in terms of spending and the allocation of household resources. At the same time, it is difficult for a financial advisor to get a broad picture of the consumer needs in order to facilitate this service.

The solution: more data for better consumer decisions

There could be a lot of value added to advise the customer if he can afford a new pair of shoes given his current financial situation and future financial needs. With this information, the customer refrain from unwise purchases, or could even be provided with the option to find alternative, cheaper suppliers. An option to operationalize this use case could be that the customer provided access to his bank or other financial advisor to his data when shopping online.

The access that the customer needs to provide here is ongoing. But of course he should be able to cut it in case he is not happy with the service that he receives.

Which data needs to be accessed?

For this specific use case, the key access is to the purchase logs in a defined online marketplace and more importantly, the wish list before a purchase is done. With this access, when the customer selects an item for his wish list, the financial advice provider would tell him if he can afford it or if he needs to wait to get this article. It could even say whether he would need finance and in which terms.

What would be the specific benefit to the consumer or business user?

There is a short-term benefit to the consumer, which is having a tool to better control his finances, not only at an ex-post manner (when he has actually spent money), but in an anticipated way. Thus, he can make better consumption decisions.

A secondary round effect could be to brake a spending spree. The customer can be given advice to avoid overconsumption, which would be very beneficial for the Green Economy

Case 3. Data access for better SME financial advisory services

Problem. Poor financial decisions in terms of cash-flow planning and selection of best lending products.

Many SMEs are using online platforms, and especially Bigtech platforms, to reach their customers. This relationship is generating a vast amount of real time data that could be very useful to provide the SME with financial advice. For example, the data shows the real time sales, inventory (many times also managed by the platform), customer reviews and wish lists, refunds, etc.

The solution: more data for better corporate management

Data that would change the way finance providers can model companies is the access to Enterprise Resource Planning (ERP) data. Typically, the main source of information from an SME is a 18 months-old balance sheet. Real time information is not accessible, even at the SMEs initiative. Access to this information would be key for companies to access credit, as having up-to-date information on their accounts, customers, suppliers, etc. would make it possible to make much more personalized offers. Some companies are already trying to do this, but it is extremely costly due to the lack of infrastructure and the heterogeneity of data and ERPs.

When helped to manage all these data, the SME can predict its cash flows, determine its financial needs and options, chose the most convenient payment service for his customers, and take better financial decisions in general.

The most relevant data in this case is real time sales, inventory, customer reviews and wish lists, which are held by online marketplaces.

What would be the specific benefit to the consumer or business user?

In this case, the direct benefit is for the SME that can receive this additional service from different potential providers: either the platform itself or anyone else that is more specialised in financial advice.

Second round benefits could be for the EU economy that is sustained by SMEs. While making SMEs more financially wise, the ecosystem will be strengthened.

Case 4. More personalised financial offerings for individuals

Problem: Adapting financial offers to customers' needs is challenging in a world which is changing quickly

Financial products and services for both businesses and retail customers could be more customised to the benefit of the customer.

The solution: more data to improve financial offers

What we are doing

We are already working on specific cases to improve financial offering to customers. These show the ways in which using available external data can increase the benefits for customers. Some initiatives for illustration purposes are:

- ✓ We are developing an app prototype based on historical internal data (such as transactional data) and external data that we are accessing through bilateral agreements (limited to what other players want to share about their customers) to allow individuals to better manage their finance in a way that is more tailored to their circumstances. This could also enable the client to be aware of and act on payments issues in way that improves the running of a business.
- ✓ We are already evolving traditional models to machine learning models to better fulfil customers' expectations. This is increasing the rate of acceptance, which shows the offers are more targeted to the customer's needs, and is good for the bank's business We can better avoid burdening customers with proposals they prefer not to receive. At the same time, the bank is working on solutions to facilitate the customers' ability to forecast liquidity needs and take proactive action

What more we could do

There are many ways in which a better approach to data could help improve product customisation and foster competition.

- ✓ **In B2C markets**, greater access to the data accumulated by merchant's platforms would enable financial providers of all kind a wider view of the transactional activity of their customers and, to better know their needs and to better design services around that.
- ✓ **In B2B markets**, if SMEs could provide access to their data held by big merchant's platforms to other players this would help improve the way in which a wider range of potential finance providers assessed their credit strength and design services and products to suit them.

It should be stressed that in both cases, the sharing of data would remain the prerogative of the customer and the process be transparent so he remains in control of his data.

Additional examples are:

- ✓ One interesting initiative could involve **public administration**, specifically the Social Security Agency. If this public body opens its data, simpler financing can be proposed (paperless, with better models and minimizing fraud and decreasing the cost of credit). Social security provides data on the client's current payer, labour seniority, previous payers and the contribution bracket. All of this data is extremely predictive of a client's payment capacity and therefore would facilitate access to credit for salaried employees.
- ✓ Additionally, in the area of **insurance sales**, we believe that sensor data (Internet of Things) could be used to adjust the value proposal to the customers' needs.
- ✓ **Utility Switching Services:** Banks clearly play a central role in terms of how customers think about managing their money and bank brands are trusted by consumers. We are ideally positioned to identify where customers have an opportunity to save money on their utility bills, particularly if banks were able to access additional data such as tariff's, agreement expiry dates etc.
- ✓ **Digital Receipts:** As part of the payment process, there are FinTechs trying to solve the problem of the fact that the transaction data passed through to the payment product, does not include any SKU or basket level data in most cases i.e. exactly what products were included in the basket. This would be a powerful tool to enable customers to manage their spending, as proof of purchase for warranty purposes, expense management for corporates, powerful data to enable customer loyalty and targeted offers. We have explored this capability in the UK, but the real challenge is that there is no real model to get broad merchant engagement likely to enable the scale required.
- ✓ **Subscription and regular payments management.** The challenge is that customers have no central way of managing all of their subscriptions that may be spread across different payment products or digital platforms, plus no visibility as to what the product is without approaching the supplier directly. Service suppliers could be effectively incentivised to make it as difficult as possible to cancel, which makes people reluctant to sign up in the first place. Visibility of tariff information, expiry dates, and the ability to sign up or cancel services in a central place would mean significant savings and avoidance of duplication for customers. We have a product designed to solve this challenge, however the downstream access to data makes it challenging.

The challenge

The current GDPR approach to data portability does not extend the concept to non-personal data. Company data is included in the non-personal data category, which means that SMEs have no right to data

portability⁹ and can only rely on contractual relationships for data sharing. The terms and conditions for accessing platform services tend to include the right for the platform to capture all the data generated by the SME when selling through it. SMEs depend on the platforms' willingness to provide access if they wish to have access to – let alone any control of - this data¹⁰.

As a basic principle, the regulatory framework for data sharing should include companies' data. Two basic routes are available for driving this.

- ✓ Competition policy: the privileged access to data described above can generate anti-competitive behavior if the platform operator is also competing with users that do not have access to that data. The access to company data is at the heart of the competition case that the EU Commission opened against Amazon in July 2019, to assess whether Amazon's use of sensitive data from independent retailers who sell on its marketplace is in breach of EU competition rules¹¹. If data was open to other players, incentives to gather and use it in a non-competitive manner would be lower.
- ✓ Regulation: Ex ante regulation is a feasible alternative to head off competition issues around data – as suggested by both the UK Furman report¹² and experts advising the European Commission¹³. Both have suggested mandatory data sharing as a possible solution to enhance competition.

What would be the specific benefit to the consumer or business user?

There are many ways in which access to this data would facilitate more personalized products and services:

- ✓ Car insurance sales with customized premiums according to the driving style they generate in driving apps
- ✓ More competitive conditions on health insurance by the user connecting his "wearables" to the insurance provider to detect healthy lifestyles
- ✓ Smart Homes: use the data from smart sensors in the home (flood, fire, gas, etc.) to offer more competitive prices in insurance. This data is already being integrated by both Google and Amazon.

⁹ Contact persons working for the SME are within the scope of the GDPR and the data portability right.

¹⁰ Under the reasons and objectives stated by the European Commission to publish the proposal for a Regulation on promoting fairness and transparency for business users of online intermediation services, were the unclear conditions for access to, and use of, data collected by providers. The final text does not provide a right to access, but only transparency.

¹¹ According to the Competition case, "When providing a marketplace for independent sellers, Amazon continuously collects data about the activity on its platform. Based on the Commission's preliminary fact-finding, Amazon appears to use competitively sensitive information – about marketplace sellers, their products and transactions on the marketplace".

¹² <https://www.gov.uk/government/publications/unlocking-digital-competition-report-of-the-digital-competition-expert-panel>

¹³ <http://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>

Case 5. Helping citizens to plan for their future while channeling funds to the economy

The Problem: financial advice related to pension and social security

Individuals lack of proper understanding of financial markets, which prevents them from channeling funds to long term investments. This is also harming the long term financing of the European economy.

Lack of proper understanding of capital markets mean that individual investors' portfolios are not always properly balanced between their future needs and current preferences. Financial information, together with interviews with customers, have been the basis on which the current portfolios have been built. However, the current portfolio composition is not the best picture, since it can quickly become outdated (they are more linked to the last occasion the customer spent time to review the portfolio or the recommendations in newspapers rather to its current financial needs). Current roboadvisors only partially solve this problem, since they rely on the same kind of financial information. Other information sources can prove more useful to refine this inefficient portfolio allocation.

The solution: more data to understand investors' needs and expectations

In order to build a financial portfolio, some key elements are:

- ✓ Customer profiles, including behavioural factors such as risk aversion, financial knowledge and experience
- ✓ Customer future financial needs, including consumption patterns, family situation, expected public pension streams
- ✓ Market and product analysis

Data that would be useful to improve portfolio allocations could come from social networks (especially about consumer behaviour and risk aversion), search engines (especially useful to understand consumer knowledge), marketplaces and utilities (for expected consumption), government data (for future public pension streams)

The challenge

Customers who are willing to share such data to have better views of their financial needs and opportunities in the future, should be able to ask social media, search engines, etc to facilitate access to these data to financial planning service providers.

For this, current infrastructures for data sharing under GDPR are insufficient, as they only provide the opportunity to make analysis based on static figures and not dynamic changes which could happen very quickly. For example, after COVID crisis financial planning and portfolio allocation of different types of investors should have changed, though this would not happen using only static information.

What would be the specific benefit to the consumer or business user?

In this case, the direct benefit for the customer is to have a full picture of his future financial needs and resources to help them make the best asset allocation decisions for his future and be able to adapt not only to market moves, but also to changes in their personal situations.

Case 6. Improve security for consumers and build a safer economy

The Problem: financial crime

The threat of fraud facing banks and payments firms has grown dramatically in recent years¹⁴. Estimates of fraud's impact on consumers and financial institutions vary significantly, but losses to banks alone are conservatively estimated to exceed \$31 billion globally by 2018. It is also one of the most relevant causes for consumer mistrust on the digital economy

The solution: more data to improve safety

What we are doing

Banks are committed to fight fraud and money laundering by putting their knowledge and information at the service of the ecosystem.

Specifically on fraud, we are improving detection in a range of ways:

- ✓ We identify companies suspected of fraud based on behavioural anomalies. These anomalies are detected with transactional data, using a relationship networks as a model.
- ✓ We are developing new ways to reduce the number of declined genuine customer requests based on pairing the information about them and their devices. This allows the bank to make better informed decisions when customers register one of their cards. However, the decision on which data to share and under which conditions is just taken by the providers and very often our negotiation capacity is very small.

What more we could do

Data sharing across industries would improve fraud management through advanced analytics, both facilitating the identification of fraud cases by considering a larger variety of data in the predicting models and, also, by reducing false positives, which is a source of friction with customers. In the current digital economy other data could be more useful to this objective. For fraud detection and also AML fight behavioural data is very powerful, and today many of these interactions happen in the digital space.

Examples are:

- ✓ If the customer provides access to his localisation, social network and email connections (not the content), the payment service provider could quickly detect if there is a personal relationship with the customer in whose behalf the payment is initiated. If he is located near the point of interaction where a payment transaction is taking place. The data needed is geolocalisation social network and email connections (not the content).
- ✓ In this regard, another initiative that could be considered concerns onboarding systems: In e-commerce today there is an absolute heterogeneity of onboarding systems - authentication for customers. Although there are regulatory issues to be addressed (each sector has its own regulators who require different authentication measures), the idea would be to take advantage

¹⁴ For one assessment by McKinsey, see:

<https://www.mckinsey.com/~media/McKinsey/Industries/Financial%20Services/Our%20Insights/Combating%20payments%20fraud%20and%20enhancing%20customer%20experience/Combating-payments-fraud-and-enhancing-customer-experience.ashx>. The same report concludes: "advanced analytics provide a tangible reason to integrate data across siloes, a means to automate and enhance expert knowledge, and the right tools to prevent, predict, detect, and remediate fraud".

of the identity certification already made by one company to facilitate the onboarding of that customer in other companies.

- ✓ Alibaba has already built a fraud risk monitoring and management system based on real time big data processing and intelligent risk models. The system can track and analyse accounts or users behaviour, identify suspicious activities and apply different level of treatments. To extend the fraud risk prevention ability to external customers, it has also built up a big data based fraud prevention product, AntBuckler that aims to identify and prevent a range of malicious behaviours. We believe data gathering should be done in a manner that is fully compliant with the highest EU standards for data protection, but the example shows the potential of these models.

The challenge

PSD2 empowers consumers and businesses to choose who to share their payments data with, under what conditions, in a safe way. This is a first step to unlocking opportunities for innovation and boosting competitiveness. According to the IIF¹⁵, “information sharing is key for financial institutions (FIs) and law enforcement agencies to track and identify suspicious activities”.

Nevertheless, regulated access to data is at present limited to payments information and is not extended to customer’s data held by other industries, and specifically large Big Tech platforms. These platforms are sitting on large reserves of relevant data that could be used to improve safety.

Any strategy that makes it easier for customers to request and require the sharing of their data, coupled with an extension in the scope of data that can be shared, would contribute to an improvement in the capacity to tackle fraud.

What would be the specific benefit to the consumer or business user?

In this case, the direct benefit for the customer is to avoid fraud. A second round benefit would be that he will not need to be contacted so often by the payment service provider for negative fraud alerts

Case 7. Improve the identification process for better experience

The Problem: customer identification

The identification of customers is a key issue for banks, since they don’t only need to take care of the common customer identification means but also ensure compliance with AML/CTF rules. This complicates the processes and create barriers for customer, which makes the customer experience suffer since the inception. There is still not a solution to onboard customers in a manner that is smooth and robust at the same time.

The solution: more data to improve onboarding

What we are doing

An approach to Personal Data Mobility report. The [Ctrl-Shift sandbox experiments](#) from 2019 centres on the benefits of data portability enabling people to move their data between different organisations. Given their objective and that one of the big techs (Facebook) was involved in the report, this is one of the best reports in this area. The work of the sandbox focused on the infrastructure required to enable Personal

¹⁵ <https://www.iif.com/Publications/ID/258/Deploying-Regtech-Against-Financial-Crime>

Data Mobility; and how it can be used to create value. The report argues that Personal Data Mobility has the potential to unlock significant value for individuals in the form of service enhancements or valuable new services. But realising the full value of the initiative needs broad cross-sector participation. In particular technology companies, health providers, supermarket businesses, other retailers, travel providers and government services need to share data as well as banks, media companies, social media businesses, energy providers and telecoms businesses. Perceived utility and trust by users are crucial. The paper also highlights how Digital identity will accelerate Personal Data Mobility

What more we could do

We are working with different players to develop solutions to this important issue.

- ✓ **Digital Trust Protocol:** This is an industry call for contribution towards creating an open standard for sharing verified data based on a person-centric approach. The protocol was tested for a real use case to present a National Lottery demo. In the case of the partner fintech, our bank helped them by leveraging the verified data in our systems to confirm potential identity from their customers who are our customers, and at the same time those of our customers had a more frictionless digital onboarding.
- ✓ **We are also working with a fintech to develop** a disruptive solution to validate customer data among different industry sectors partners, which can anonymously validate their user data and activities (login, paying, etc).

The challenge

We are developing these ideas with network partners. However, the experience would benefit from the sharing of data with other players at the initiative of users. This is not possible today as the data is very often locked in the hands of certain players.

What would be the specific benefit to the consumer or business user?

The consumer will have a better experience and smooth onboarding and KYC journeys when we can validate their data with those of other players, since they will be flagged as “compliant” customers if they operate under normal circumstances from the KYC point of view.

As an example, when registering for ordering a taxi from a mobile app, if that same customer normally use the same mobile for banking and personal details such name and addresses matches our records as well, the taxi company will get a positive score from the network about the customer’s identity and will let user register straight away.