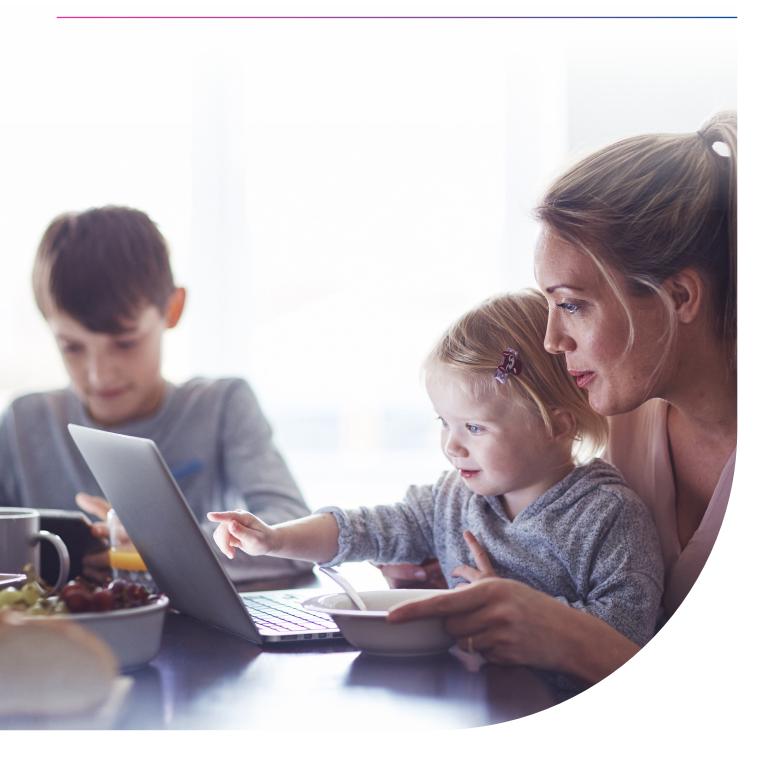


Rethinking affordability

Where we believe change can make a difference



White paper

Opportunities for better lending

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Executive summary

One of the most important considerations facing us as an industry is how we help our client partners manage responsible lending, improve affordability analysis and deliver greater financial inclusion.

The timely arrival of PSD2 and the move towards socalled 'Open Banking' also means the banking and financial services markets are now set to become even more competitive, with real-time analysis of bank account data now a viable opportunity for many lenders.

One of the ways in which this can be of benefit is in being able to better understand an individual's income and expenditure, which offers far more granular insight than from 'traditional' processing.

While some speculate that Open Banking may signify an end to traditional banking, at Experian we believe it actually has the opportunity to reignite it. But businesses - new and old - must put themselves in a strong position in order to benefit.

The reason we see Open Banking as a significant opportunity is because of the potential for greater insight bank account data offers, which can be used to drive better, fairer and more appropriate credit decisions, while enhancing a customer's entire experience simply by being able to understand them better.

In instances where there may be unsustainable levels of personal indebtedness - how much a person owes - and 'financial fragility', it's clear there is a need to revisit and improve decision-making to ensure customers can be safeguarded.

Inside, we explore and outline on our views and beliefs of where the opportunities lie for better affordability assessments and what good customer outcomes could look like. At Experian, we have a core belief in the power of data to achieve better customer and business outcomes and have therefore invested significantly in an Open Banking platform, APIs and data aggregation. We've also embraced new technologies including Artificial Intelligence (AI) and Machine Learning, to categorise transactions and automate decisions.

We're genuinely excited at the potential this technology possesses to change the whole area of affordability analysis, particularly by extending it across the entire credit lifecycle to help personalise the customer journey and create a better experience for everyone. In addition to Open Banking, we've been investing in many other areas too. From new data sources through to enhancements across our decision technology. This is a continued investment which we believe will bring a solid footing to build upon through today's data-fuelled, digital economy. Inside, we outline our views on some of the key influences and challenges we need to overcome to embrace the data-powered future and how we can move to a place where assessing whether to lend is fair, transparent, valuable for all - and easy to achieve.

The commitment to creditworthiness and financial inclusion

Customers always come first. Concentrating exclusively on credit risk at the expense of a genuine assessment of affordability poses something of an industry-wide challenge. However, lenders can now to do far more in their assessment analysis of how much a customer can afford and introduce new methods to do this appropriately.

The regulations and sentiment behind PSD2 and Open Banking are an opportunity. They introduce a set of standards which help provide a clear foundation for better decision-making and gives businesses the freedom to retain their individual variables to best suit their risk appetite.

Having greater access to data will offer lenders a far clearer picture of a customer's individual circumstances. This can help create processes and drive new product offerings as a result of having a better understanding of who is suitable and for what.

The direct connection of data, can help bring new insights into our client-partners' lending assessments, giving a much more effective and single indicator of a customer's ability to repay, while also considering the needs of both credit risk and affordability risk.

But there's an even bigger opportunity to combine data sources to create new variables to better inform decisions.

Advances in AI, underpinned by machine learning techniques, will now enable new ways of understanding and insight by using data to enhance the opportunity for tailored modelling. These are exciting times and will help businesses to make faster, smarter 'intelligent decisions' that are agile, scalable and can be delivered at the speed of their markets.

PSD2 and Open Banking - new opportunities for all

he European Union's Payments Services Directive 2 (PSD2) and the move towards Open Banking is a landmark event. We believe open data architecture will benefit customers, organisations and society at large. Alongside other similar data sharing initiatives, we are seeing a new ecosystem starting to take form. It marks a powerful opportunity for everyone.

Subject to customer opt-in, PSD2 and Open Banking require banks to provide third-party providers with an individual's bank account data through a standardised set of APIs - online interfaces – including payment APIs. This will open up access to all payment accounts including credit cards, payment cards and current accounts. This will enable new market entrants to challenge well-established banks and lenders.

Current methods of assessing affordability are widely acknowledged to be sub-optimal and in some cases the customer experience is poor, inconvenient and intrusive. It is also, in some cases, not inclusive. Digital processes are not always efficient and smooth simply by virtue of being electronic. People can become frustrated with lengthy forms and abandon credit applications quickly.

There is a clear need to access more accurate data which is specific to the individual and can help inform conversations. Potentially, organisations will face the challenge of having to assess both individual and household income and expenditure, depending on the product. As a result we could see even more data points being brought in, in order to make a decision. Without a proper structure equipped to quickly consume and use this data, we could see more friction in decision-making.

Alongside data there is also a need for speed and convenience. This is driven by the rising use of digitally-enabled tools and services, but equally by business requirements to process applications as quickly and efficiently as possible. Decisions need to be swift, but they also need to be accurate, fair and responsible.

To achieve this, technology needs to be fast. This is where we believe advanced analytics - and specifically a categorisation engine - that features Machine Learning, offers an appropriate scalable solution. Not only can it understand and learn from the data it is fed, it can do so at scale and at speed. This can not only help you make fast decisions, but more informed and better ones, as it has the ability to understand more than we have been able to ever before.

This is particularly prevalent in the engine we have created. It not only understands data fast, it categorises it into meaningful and usable categories that can be fed into automated decision systems, or presented to an underwriter in a way they can understand it easily, and quickly. It also presents more granularity of insight to determine what the decision should be. With our research showing that a large proportion of decisions being reached today are made subjectively, this enhanced insight is important to ensure that any decision is made fairly and accurately moving forward. The engine can consume new data sets, such as data from the bureau or alternative data sources, which will further enhance insight to better inform a decision.

3 things we see the open data landscape influence:

- Customers have been given a choice whether
 to consent to the sharing of their data in order
 to access better products and services and
 save time.
- 2. Firms who obtain consent to use a person's bank account data can use this insight to have more meaningful and valuable conversations with them.
- 3. We will see more competition arise as a result of bank account data being shared, with more people better understanding the value they receive from what, and from who. Switching providers will be a likely occurrence as a result of this transparency and understanding of what best suits their needs.

The transformation of lending

PSD2 and Open Banking, alongside new data and more demanding customer expectations, will likely spur a lot of change across traditional finance. It is our belief that this change is a good thing as it all comes back to a single common point: that more data, and more understanding, can enable more opportunity which is rewarding to the customer and will help to achieve better customer outcomes.

We believe the benefits of being able to analyse the data available today far surpasses being able to decide whether to lend or not. This data architecture offers organisations the opportunity to be more efficient across operations, help digitise and modernise decision- making, predict and pre-empt credit difficulties and to have better conversations. It will help tailor the user experience of each individual which can then broaden the opportunities for better lending. Currently there are limitations in firms abilities to understand what opportunities exist and where. Here are four specific areas where we expect to see significant change:

The introduction of online affordability

A hugely significant change to the application process will be the introduction of online affordability checks with no delay or break to the application.

• Understanding a customer better - always

In the future, lenders will be able to run an affordability assessment across their whole portfolio to give an early indication of a person who may be nearing financial distress. At the other end of the spectrum it can help those who do have the financial capacity for more products and enable you to identify which ones are suitable for them.

• Making finance more inclusive - for all

An important point to consider here is the potential for Open Banking to benefit those customers who are currently financially excluded by moving them back into mainstream lending. Because the insight from bank account data provides a more complete picture of the individual, lenders will be able to make much more sophisticated assessments of a person's affordability. An example includes the self-employed who will typically have small, frequent deposits into their bank account. Being able to identify and categorise these deposits as income and demonstrate a clear pattern over time will make lending much more accessible to this group. Other examples could include new to market credit, or new to country residents, who typically have a 'thin credit file' (a lack of credit history).

New data variables

It's not uncommon for people to ask whether Open Banking will bring an end to credit scores. We don't believe it will. Why not? Because credit scores provide a measure of an individual's credit risk, i.e. how an individual has managed their credit in the past, whereas bank transactions reflect a customer's affordability risk, namely their ability to pay based on income and expenditure. These two data points complement, rather than compete against each other. With the potential to now add even more intelligence into scoring, through new data and new analytical techniques, the two points can be further enhanced.

The opportunities afforded by the availability of bank account data means it is advisable to review and re-address your credit risk policies and lending rules. Better data could be an opportunity to strengthen your portfolio by offering personalised solutions at a lower cost. Data which is more reflective of a customer's financial well-being will allow you to make better decisions which will be a benefit to everyone.

The importance of consent

It makes sense that the more data which is available, the better informed a lender is to make a decision on a customer's ability to pay.

PSD2 and Open Banking are reliant on customer consent. Without this, data will not, and cannot, be shared. It is therefore a business priority to find better ways to communicate with your customers about what value they will receive if they do permit to sharing it.

The concept of customers controlling their data isn't new. It comes as part of an overall shift in sentiment among regulators towards empowering customers – for example through the General Data Protection Regulation (GDPR). The GDPR sets out the rights of individuals to gain easier access to the data companies hold about them and that organisations are responsible for obtaining people's consent to collect information about them.

We need to foster an environment of trust where individuals are willing to give consent in order to gain access to financial products and services that are right for them. This can be done by clearly communicating the new processes and the benefits they will bring to individual customers.

Experian has a vision of the tools we can create so lenders are able to build engagement and trust in Open Banking. For example, a dashboard which continually analyses the customer's spending in order to give personalised advice on new services or offers, or warn them if they are about to go into arrears or financial difficulty. In addition it allows the customer to control, and see, who they share, or have shared, information with.

By merging credit information with statement information and applying advanced analytics, we can provide fresh insight on what product(s) a customer can afford. Categorisation of a person's entire financial circumstance, such as combining income and expenditure with savings, and pension and investment information, will provide a much more holistic view of that individual. This will enable you to build a stronger long-term relationship with each customer.





Bank account information will provide a more granular view of a person's financial behaviours which in turn will help make more inclusive and accurate decisions for them.

The appropriate use of data is more important than ever. We need to be in a place where we are seen as responsible, and we are demonstrating this in everything we do.

Putting the customer at the heart of every lending decision

Everyone in the credit supply chain has a responsibility to make good decisions. It is fundamental that we always focus on the best interests of customers and minimise the risk of financial distress.

Affordability checks require lenders to assess whether a customer will be able to maintain the repayments throughout the credit agreement.

The answer to this, we feel, lies in the data-sharing it more effectively and using better analytics to understand it. How this is done will undoubtedly continue to vary amongst lender and across products – but the foundations of responsible, fair lending should be consistent across all decision-making. Lenders must go further to extend protection for customers into every step of the lending process, even if that means the product cannot be offered at that time. Lenders must also understand all of the assets available, and how it can be brought together in the most appropriate and effective way. This understanding is something we can provide.

Consent needs meaning

If customers feel they have little choice but to give consent to bank account data being shared in connection with a lending application, then it could arguably undermine the purpose of the consent framework under PSD2 and Open Banking.

Customers need to be given a choice whether to share their data and lenders are mandated to seek this consent. However, if consent is not given, lenders need to consider what alternative data sources can be used to support a decision without being overly intrusive, such as bureau data.

Consider financial inclusion and the wider impact of any decision

If a customer perceives the sharing of their data will not result in a positive lending decision and their application is rejected, they may resort to unregulated lending because they cannot access mainstream credit. It is important to ingrain best practice lending at every stage, but also to consider the whole picture of a decision. If you accept, or reject, what will that mean for the customer?

Uncovering the value of new data

Our tools for categorising bank account data can be applied across your whole portfolio to assess a person's financial stability, and therefore what capacity they might have for additional credit or maintaining their outstanding credit commitments. The benefit of this is not only that its scalable across your entire customer base (for those who consent), but you can continually monitor customer behaviour to help you manage the relationship based on that customer's individual circumstances and needs. Most importantly the opportunity to aggregate and categorise bank account data on this scale will enable you to predict change before it happens.

People before process

Getting your processes and systems right will give a positive outcome for everyone. Put people before processes, empower your employees to do the right thing, embed the culture that says the customer comes first and make use of technological tools to identify vulnerability much earlier. You can go the 'further' through understanding what support your customers may require and helping to broker the connection. For example, connecting customers who are in financial distress with a debt support agency.

We have been working on connecting decisions and how debt services can be brought into the decision outputs in our DataLab. We have seen some significant opportunities arise which offer greater potential to be more customer centric end to end.

We have been testing variables of alternate data sources and found some huge benefits in introducing certain ones. We can clearly see the value in doing this.

The customer sits right at the heart of this new world of data-driven insight. Every organisation needs to gain each customer's trust and focus on their well-being.



Today lenders can personalise

lending decisions and offer

The role of analytics in affordability

In analysing and categorising vastly more data to help process the initial credit application and manage repayments, analytics will also continue to play an integral role in scoring and to inform decisions. Data has always driven decision-making but the new tools to integrate that data will add certainty and help you make a qualified assessment. There is scope for everyone to benefit from these opportunities.

Machine Learning is a method of teaching computers to analyse large datasets and find patterns and trends in the data to make predictions. By training a machine to process repetitive validation, without the assumptions humans make, you can focus your attention on the most complex lending models responsible for the biggest exposures.

At Experian all of our analytical developments are underpinned by our mantra of FACT. Fairness, accuracy, the customer and transparency.

We believe organisations need to be able to aggregate and categorise new and different types of data to draw meaningful insights.

At Experian, we have created a machine-based learning system that can achieve over 90% accuracy in identifying income and expenditure when analysing (unseen) transaction data for the first time. We can categorise twelve months' worth of bank transactional data in one second. We feed it into automated decision software and append other data sources, and this better informs credit decisions and reduces the time to offer.

This brings a significant opportunity for you to amend your lending rules and create new rules based on a more intelligent and personalised view of your customers.

The machine could identify an opportunity where you may need to have a conversation with the customer. For example, to tailor repayment terms due to a change in customer circumstance, offer more suitable products, or identify financial stress. The data could be used to support a customer with a 'thin credit file' to access credit. It provides a more granular view that enhances the traditional credit score in these circumstances and offers an opportunity to engage with those who, until now, are most often declined credit because of this invisible credit history.

White paper

Opportunities for better lending

Bank account data is categorised into segments to identify spending patterns and financial behaviours which can then be understood on a level which far surpasses a human's assessment. This can be automated within the decision-making framework and gives a better understanding of these types of customers. Not only is the process inclusive it is also more effective for both the applicant and the lender.

Perhaps even more compelling are the findings of the engine that point to potential inefficiencies in the accuracy of affordability calculations. It suggests an unnecessarily high rate of lender referrals and declines due to low confidence in the data, rather than the customer being a higher risk. Automation can significantly reduce the cost of manual referrals and ensure that data is being used to drive decisions.

There is nervousness around the role of analytics in this context. The principles of fairness, accuracy customer and transparency (FACT) must be upheld in this process, as in any other area of lending. We appreciate some of you may continue with traditional models such as bureaubased assessments and some will combine bureau and Open Banking. A combination of both is likely to bring a much more granular level of detail which will help in decision-making, particularly for marginal decisions or consumers with complex financial lives.

We will not labour the point on advanced analytics in this paper; suffice to say that we believe it can offer incremental benefits to how lending is assessed as we move forward. The capacity of the technology to learn and adapt offers an opportunity for lenders to make the transition from current affordability measures into more sophisticated insight of what is genuinely affordable for that individual customer.

Research commissioned by Experian and conducted by Forrester, highlights how 40% of business decisions are made based on subjective opinion rather than data. As we outline within this paper, it is our belief that data can be a force for good to enhance decision-making and improve outcomes for everyone¹.

We believe that Machine Learning has huge potential to improve financial assessments and transform lending, as well as many other areas from fraud to marketing to supporting every business performance metric.

^{1.} Innovation, smart data and the drive to customer-centricity - http://poland.experian.com/analytics/forrester-report.html

Conclusion

By being aware of the changing trends in the customer landscape and using tools such as AI to process transactional data available through PSD2 and Open Banking, you will be able to generate better lending decisions at lower cost and bring significant improvements to the customer experience. You can plan for change and market products to the people most likely to need and be able to afford them in a valuable and yet responsible way.

At Experian, we have an established affordability proposition in the market based. The provision of summarised current account data and estimates offers an enhanced level of understanding when traditional bureau based decisions are not appropriate or suitable for the individual. We are not abandoning our traditional capabilities, but building on them to engineer a new architecture which includes Open Banking data, bureau data and other data sets as they become available. This approach has the ability to enhance business decisions by giving more accuracy. It is also scalable and fast which can only be a good thing as data, and the expectations of customers, continue to grow at an exponential rate. These changing components can be easily consumed, understood and met, with the right framework that enables this.

Credit scores will be vitally important and new ways of scoring using transactional insight are emerging. Without grabbing this opportunity and accessing the tools that can help you do just that, there is a high probability that you will not attain the level of success you, your customers.

We are investing heavily in helping to make this happen and have a multitude of solutions to give you a customer-first approach. Today the data, analytics and technology can give more accuracy, on large scales of disparate data, fast. What this will look like will differ across each lender. This is important in encouraging innovation and transformation in the market. A one-size-fits-all approach is not the best approach to change in our view.

What we believe is that the tools that can enable and support successful change are now available. In the big data economy, the role of analytics in making intelligent decisions is pivotal. The need to deliver value in any interaction or transaction is essential. And the ability to do this is here and now.

We believe that by using data appropriately you can truly make a difference to society and people's lives. You can empower your customers and help drive forwards a new standard of lending and financial management which will continue to power the region to be one of the world's leading providers of financial services. From here, we can only continue to build on this success - and we believe this can be done effectively when underpinned by a solid footing that is purposely equipped.

As we have said throughout, it is our belief that the answer lies in data. Advanced analytics have the ability to turn data into information - from there to knowledge, and from there to wisdom. While a well understood approach, this layering is essential and each step needs to be achieved in order to move upwards successfully. This is where we need to be, enabling better customer outcomes through better understanding each and every customer and being able to consume and use the information that is available. Whether it be using traditional methods which consider new variables, or using advanced techniques such as categorisation of bank account data, all opportunities have the ability to be refined and realigned to bring better outcomes for all.



About Experian

Experian unlocks the power of data to create opportunities for consumers, businesses and society. At life's big moments – from buying a home or car, to sending a child to university, to growing a business exponentially by connecting it with new customers – we empower consumers and our clients to manage their data with confidence so they can maximise every opportunity.

We gather, analyse and process data in ways others can't. We help individuals take financial control and access financial services, businesses make smarter decisions and thrive, lenders lend more responsibly, and organisations prevent identity fraud and crime.



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