

# The art of decisioning in uncertain times

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# Introduction

The Covid-19 pandemic has caused an acceleration in digital use. More people have come to rely on digital services and businesses have improved their digital offering. Customers have come to expect faster, easier, more personalised access to the products and services they need, alongside instant decisions. For businesses, that has meant increasing efficiency and reducing risks, at the same time as innovating, to both survive and thrive.

Making better, faster decisions is essential to address these competing pressures. Intelligent decisioning – combining data, analytics and technology - is the key. It has the power to transform a world where decision-making is a source of friction for your customers, to one where data and insights enable instant decisions and access to the products and services customers need more than ever.

But, how do you make better, faster decisions – consistently and across multiple channels - when the pandemic has brought many more complexities into the decision-making process?

Importantly, many age old challenges also remain, and need answering. How do you onboard customers quicker? How do you manage customer relationships? How do you spot and prevent delinquency? How do you identify vulnerable customers?

In this paper, we explore the challenges and strategies surrounding automation, technology and digital transformation, looking at how to navigate the barriers and complexities relating to adoption.



# The pandemic has brought new questions to the fore

How can you get an in-depth insight into a customer's affordability and creditworthiness if the full picture has been masked by the financial support they've received during lockdown? Who is at risk of unemployment and income shock in the longer term? Which areas and sectors are most at risk, or more resilient?

These new questions also involve businesses having to navigate new operational challenges. Will there be a surge in collections? When will it happen and how long will it last? What impact will it have on losses and ultimately, business recovery and resilience?

Understanding these new metrics is vital for businesses to mitigate risk and support consumers through these unprecedented times.

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Unlocking the true value of your data and customer insight to meet these multiple and pressing challenges is vital. How can you do that without having to invest significant time and money in improving legacy technology and operational strategies – at a time when your resources are already stretched?

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# Legacy technology becomes a greater risk to recovery and resilience



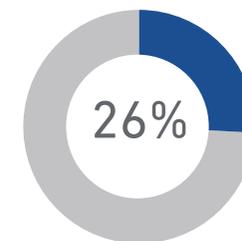
The reality is that businesses burdened by legacy systems can't keep up with the scale and pace of the challenges accelerated by Covid-19. Digital transformation is needed rapidly, within 1-3 months, not 1-3 years. Removing the barriers to automation is more urgent than ever.

Before the pandemic hit, many traditional firms continued to rely on legacy systems, despite recognising their limitations. Often, because system architectures have become intertwined with business models, and the perception that moving away from them is complicated, time-consuming and costly.

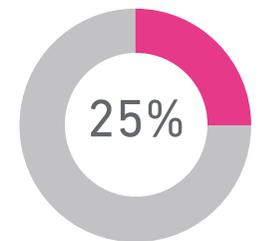
It's clear there's no going back to pre-pandemic business models. However, with one in four (25%) of the global businesses we spoke to highlighting lack of automation across all commercial functions as an acute challenge, how can businesses move forward quickly?



Covid-19 has had a high impact on revenue and efficiency for half of firms



26% of firms are struggling to identify at risk customers



1 in 4 see a lack of automation as an acute business challenge

# The answer lies in flexible, customer-centric technology

To ensure recovery and resilience, businesses need to focus on updating legacy systems and accessing technology that's designed around the customer. Technology that's agile enough to adapt, as people and environments do.

By doing so, you'll be able to respond to the rapidly changing demands of your customers and adjust to the new reality. Now is the opportunity to stay relevant in changing times – to retain and grow your customer base, ensure business continuity and prepare for the future.



# How is Experian investing?

Investment in the best technology is critical to the way we ingest, store and secure data, as well as to the way we develop and deliver our products. Technology enables us to link Experian and third-party data assets to create innovative solutions for our clients and consumers.



We invest widely in emerging technologies to build and bring new products to market quickly. This includes significant investment in PowerCurve – our intuitive cloud-based decisioning platform that automates decision-making easily and effectively. It's bespoke to your needs, providing you with an off the shelf solution, without the expense of building it in-house.

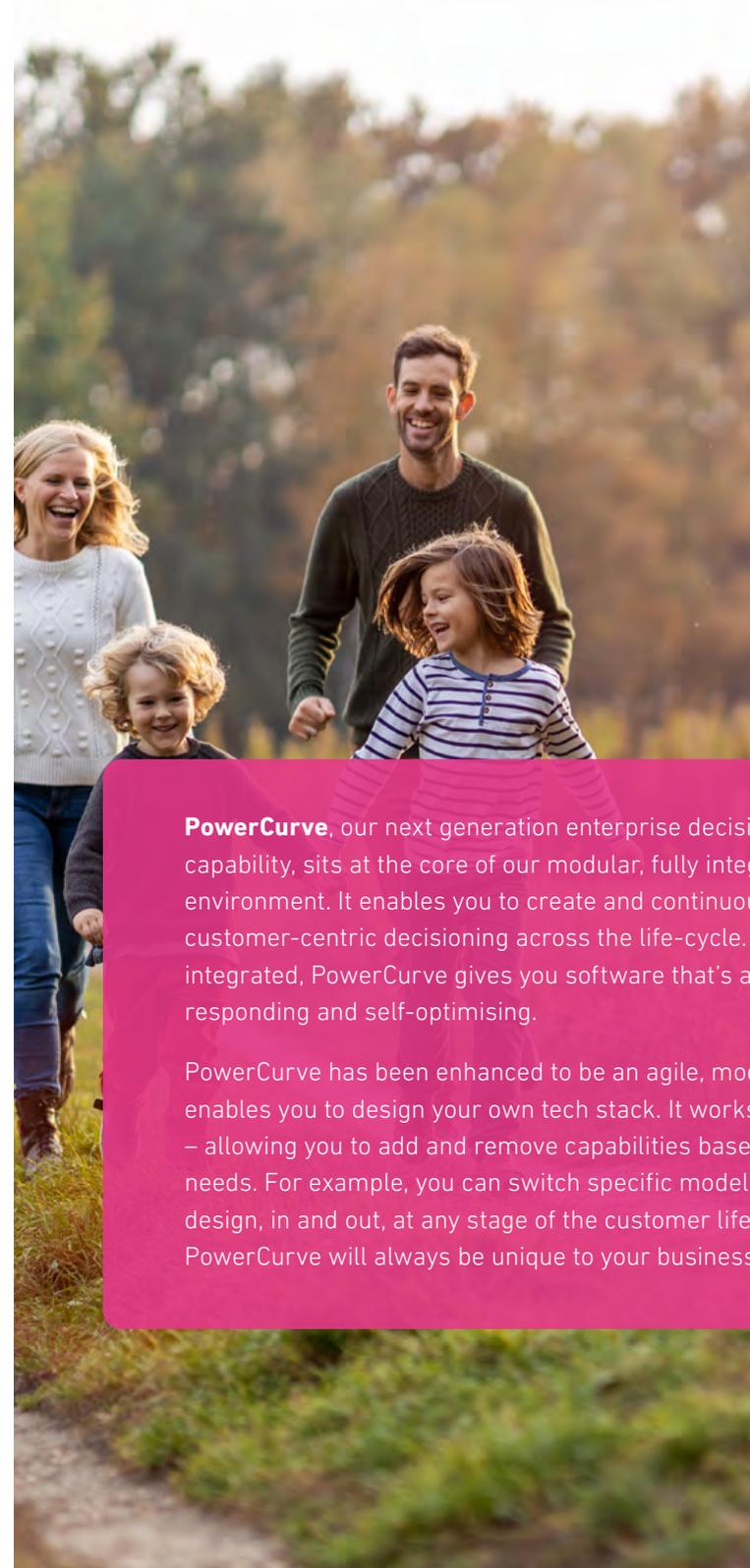
PowerCurve takes your customers' information and enhances it with credit, fraud and internal data, as well as your internal data assets – alongside the ability to consume account transaction data, known as Open Banking. It uses predictive scoring models and policy rules to trigger instant automated decisions. As a cloud-based platform, PowerCurve can be up and running in weeks; and scaled up or down as you need. Customer data is secured in an enterprise-grade system that conforms to the highest standards of security and compliance, with updates done automatically to always use the latest, safest version.

Our commitment to new ways of working means we can adopt a standardised approach for product development, work in an agile way and build products with built-in security features.

# Design your own tech stack with our modular technology suite

Historically, the process of connecting data sources to multiple business units and a variety of systems has been time-consuming and difficult. The initial build, updates and maintenance of a platform could take months, or even years. At Experian, we've continued to invest in innovation, and specifically, our technology suite.

The enhancements we've made to our decisioning software make it much easier to digest into commercial models. It's also configurable and adaptable – fuelled by data and empowered by advanced analytics.



**PowerCurve**, our next generation enterprise decision management capability, sits at the core of our modular, fully integrated execution environment. It enables you to create and continuously improve customer-centric decisioning across the life-cycle. With machine learning integrated, PowerCurve gives you software that's always learning, responding and self-optimising.

PowerCurve has been enhanced to be an agile, modular design that enables you to design your own tech stack. It works just like an app store – allowing you to add and remove capabilities based on your business needs. For example, you can switch specific models such as strategy design, in and out, at any stage of the customer lifecycle. As such, PowerCurve will always be unique to your business.

Our approach to decisioning is flexible because it's cloud-based and interoperable. It's intuitive because it's powered by advanced analytics that enables deeper customer insight. This flexibility and intuitiveness is orchestrated throughout the whole decision process.

Our approach enables you to design decisions as you choose, created by your rules. Giving you an interoperable decision network fuelled by an analytical view of your customer.



## The benefits at a glance



Automated data ingestion, engineering and aggregation. Giving greater access to up-to-date data



Analytics thinking, creation and modelling – test models and create and experiment on even more attributes and variables



Decision strategy and execution – act on insights and improve the outcome of complex decisions that are explainable



Design customer-centric strategies and customer journeys around pre-qualification, originations, customer management and collections



Empower your customers by helping them understand the benefits of sharing their data for fairer, faster, more personalised products and services and bring more value into the relationship



Integrated risk, affordability, fraud and identity components allow you to know your customers and to always understand opportunities and risks - and be confident they are genuine

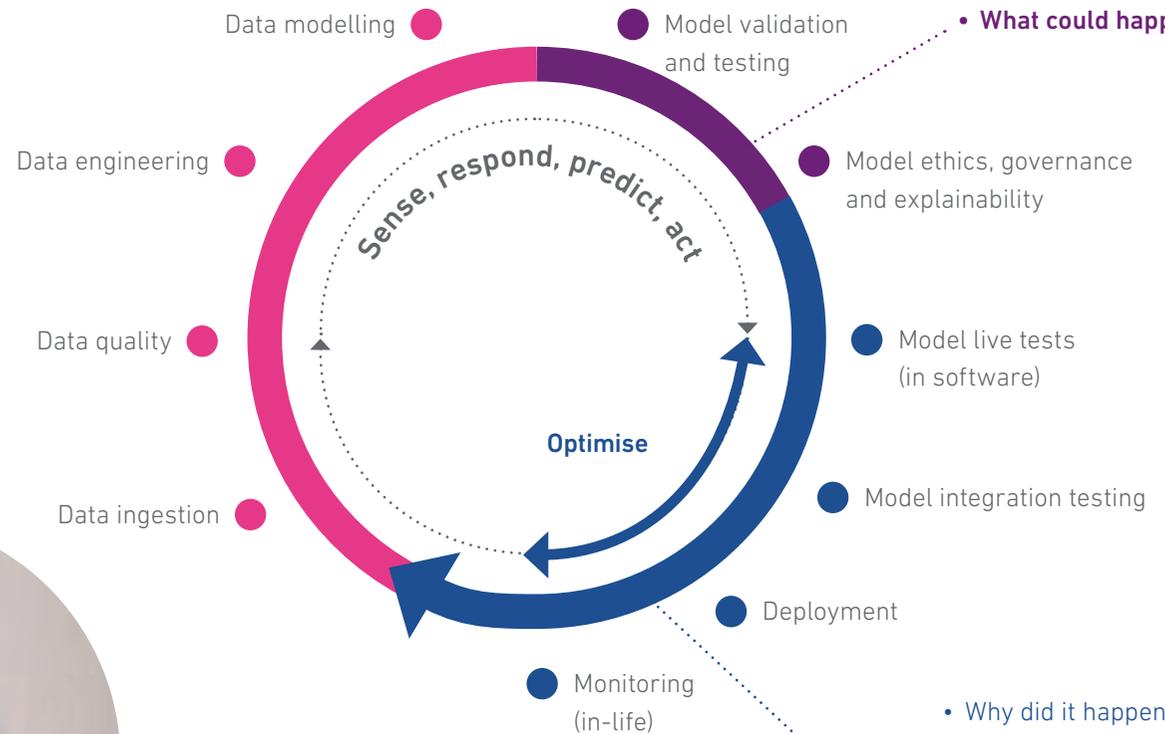
# Recovery and resilience

Making the right decisions at the right moment in time is crucial to gaining a competitive edge. However, you also need confidence in those decisions. Being able to test scenarios and rules before real-life application will give you that assurance.

Our decisioning architecture enables flexibility by design, allowing firms to respond, tweak and optimise strategies and processes as the pandemic-induced economic crisis unfolds – to build recovery and resilience. It also provides the ability for continual monitoring, testing and learning, and crucially, to deploy any change that's required. A cloud native architecture means our decisioning platforms are faster to integrate – in just a few weeks.

**Our approach to decisioning allows you to run analytically advanced processes that help you understand the what, the why and the if**

- What happened?
- Why did it happen?
- What will happen?
- **What could happen?**



- Why did it happen?
- What will happen?
- What could happen?
- **What needs improving?**



# Gaining insight into your customers

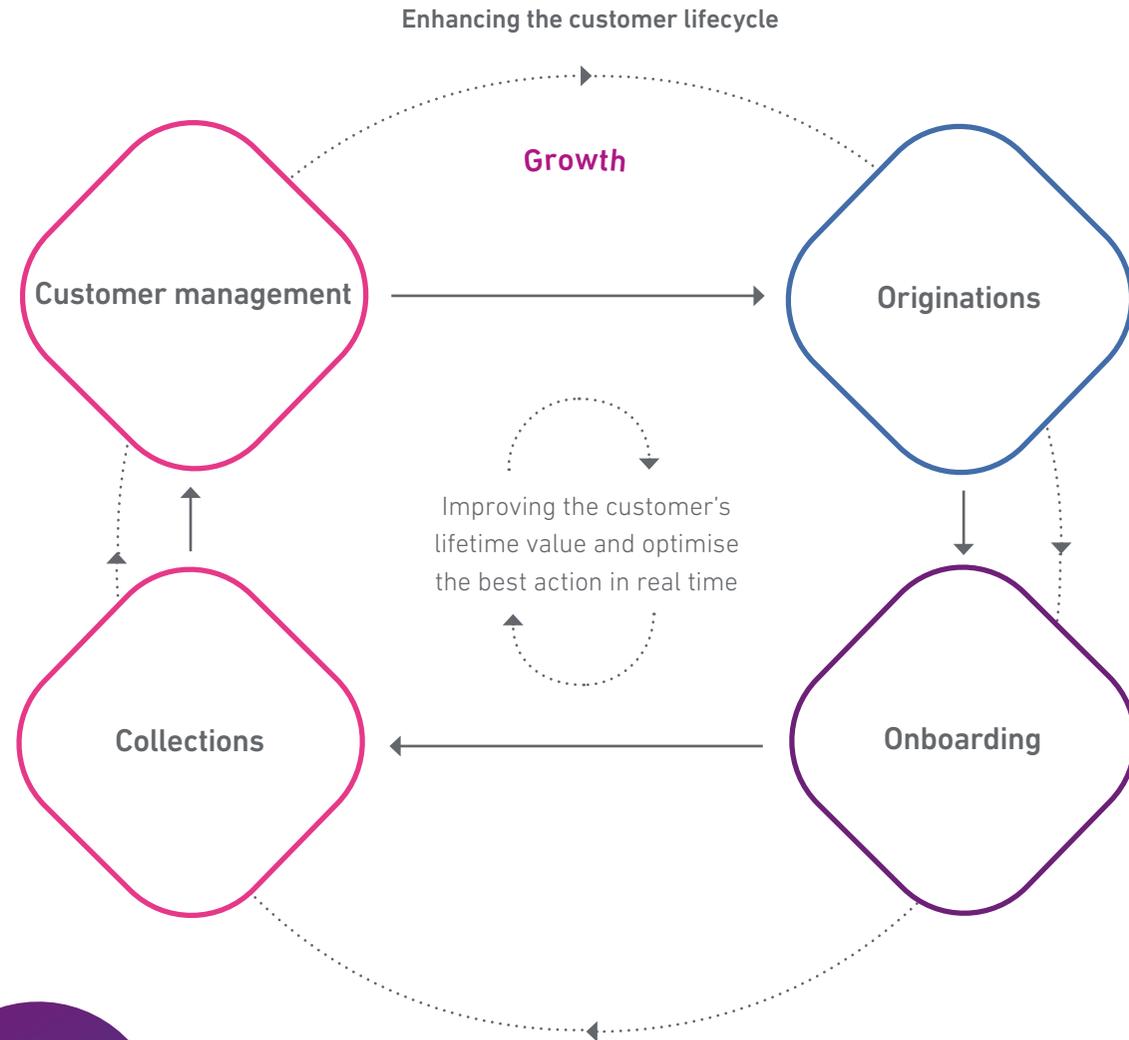
To stay ahead of the competition and on the path of sustained growth, you need a clear line of sight of both risks and opportunities through the customer life cycle. Gaining better insights into customers is critical to achieving that.

For customer acquisition, successful businesses look at time spent on each micro-step (e.g. data field), dropout rates at each of those steps, and do A/B testing at a very granular level. The idea is to understand all points of friction, so they learn and improve the experience. This is what most executives we speak with are working towards.

The various challenges involved are making sense of the vast quantities of data and the immaturity of that data as well as the construct of that data. Fast-moving environments also add to the need for tools that are data and/or analytics agnostic.

Our recommendation is that you stay agnostic. The data analytics environment is changing and evolving so fast that it's almost impossible to predict how business models look in five years. There's a largely untapped opportunity to use data analytics and decision management solutions to design the right customer treatment and identify the next best action for that customer.

Selecting the appropriate timing, medium and channel for those actions will lead to greater consistency and contribute to having more relevant communications with your customers. The more relevant you are, the more precise you are with offers and the treatments leading to improved response rates, greater connectivity and interaction with the customer. This results in memorable experiences that enhance loyalty and drive profitability.



# How Experian is leading on next generation decisioning

We draw on the depth and breadth of our credit information databases and on other information, including clients' own data, to develop predictive tools, sophisticated software and platforms. These all help businesses manage and automate large volumes of decisions and processes.

We apply our expertise in analytics and software across many industries. Our services help our clients improve the consistency and quality of their business decisions in areas including:

- Credit risk
- Fraud prevention
- Identity management
- Customer service and engagement
- Customer retention
- Customer value management
- Account processing
- Account management

Through our decisioning you can look to receive immediate value and return on investment. Through current live projects many clients have experienced:

**25%**

decrease in exposure to risky customers

**54%**

increase in take up rates

**20%**

decrease in provision costs

**35%**

decrease in non-performing loans

**49%**

improvement in credit card transaction volume

**26%+**

improvement in delinquency rates

In addition to improving your outcomes, our software provides the ability to enhance checks, insight and processes that form part of your overall decision journey. Including:



Assessment of creditworthiness, suitability and affordability supports responsible lending, reduces default rates and helps to spot financial vulnerability quickly – helping customers to get back on the right track



Faster, frictionless and better-informed decisions improve customer experience – enriched by multi-channel engagement



Relevant insights into new and existing customers improves customer engagement and management



Authentication of customer identity helps prevent identity fraud and other crime

Central to all this is how we can power the entire journey, from end-to-end. This approach to our software enables you to choose the elements and components that suit your business need, at the time of need. You can add, adapt and change at leisure - all of which can be done fast, and under your control.



# Digital transformation enables everyone to become a disruptor

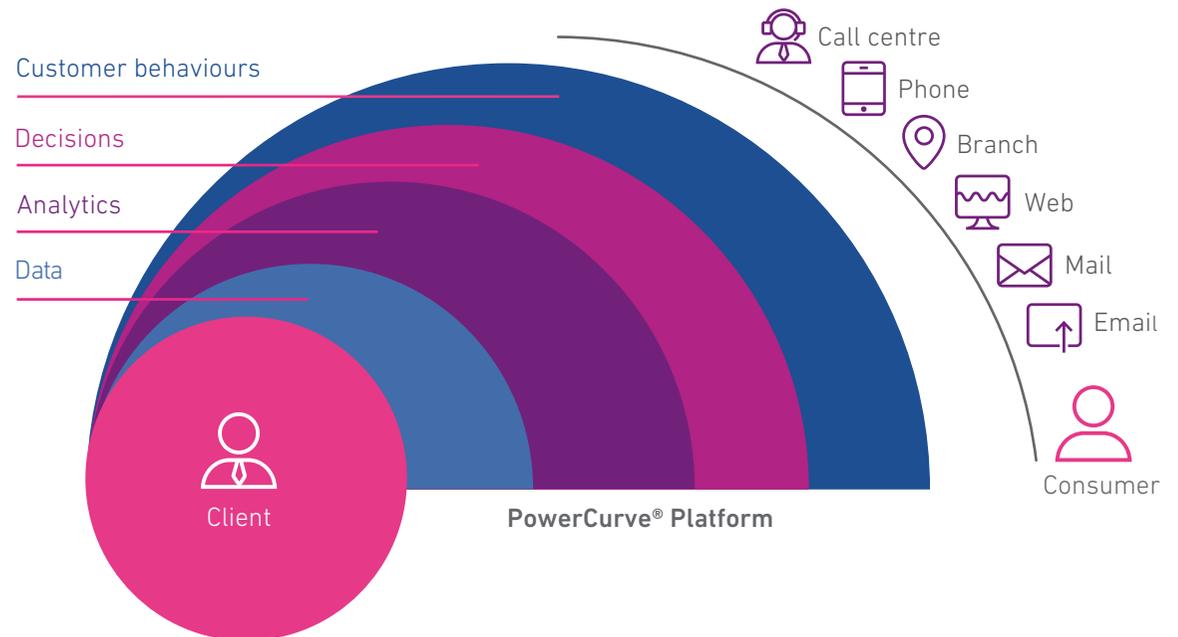
The world is experiencing significant transformation as it digitises. As consumers, we expect to transact through our mobile devices, for transactions to be concluded quickly and securely, and for offers to be increasingly personalised.

These wide-ranging needs can be addressed by increased use of data, analytics to interpret the data and advanced technologies that automate and speed up decision-making. This gives you the opportunity to make yourself a disruptor by creating faster, smarter, seamless delivery models – and respond fast to market and customer changes.

As regulation changes in line with ML advancements, there is an increasing need for complex decisions derived from analytical models to be able to be explained to the regulator in a satisfactory way. Being able to prove biases have been removed, and show transparent explainability, allows increased trust in ML models for regulated activities – PowerCurve enables this level of explainability.



We have built an intelligent architecture that delivers effective decision orchestration – always



# Digital transformation is here to stay

In a post-Covid-19 world, it's likely that businesses will get used to taking leaps out of their comfort zone when it comes to tech adoption. Helping to remove some of the barriers to automation.

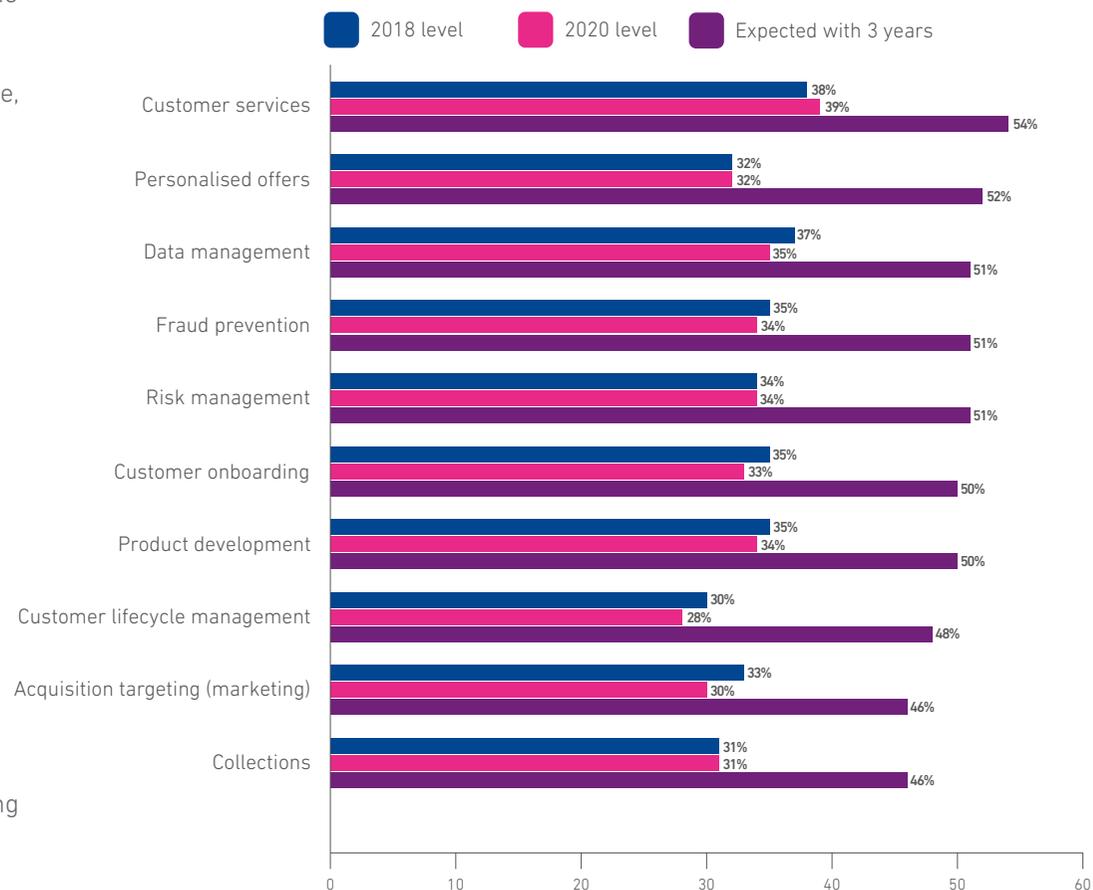
Businesses have been focusing on digital transformation for several years of course, with machine learning (ML) and artificial intelligence (AI) both hot topics, along with cloud computing. Already popular within marketing and operations, take up elsewhere within businesses has been slow – resistance being mainly due to the lack of legislation and a fear of unsupervised decisioning on topics such as lending.

The strive towards using ML/AI across businesses has accelerated since the pandemic. The driver for this change is an industry-wide desire to improve customer insight and enhance digital customer experience. The current focus is immediate – businesses need to transform now, in 1-3 months, not over the next 1-3 years.

There are various use-cases penned for AI/ML approaches. From our own additional qualitative research, we can see that marketing and operations remain the most common use-cases, although pilots and trials are becoming much more common as AI/ML is critiqued and explored more practically in the business environment. Most commonly, the use of ML is brought in through integration of it in process design, such as integrated ML in technologies and software.

Credit risk continues to be more cautious, however in the last 18 months we have seen a significant increase in AI/ML use in credit risk too. Specifically, around pricing and 'next best action', and in using AI to engage; such as chat-bots and virtual assistants. The chart to the side here shows from our industry-wide research, the most common use-cases now, and how that's predicted to change within the next 3 years.

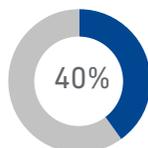
To what extent does your organisation leverage ML/AI in the following areas?  
How will this change within the next three years?



## Firms are looking for AI/ML in order to improve customer insight, and action



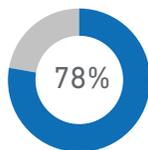
Following the pandemic accurate customer insight has become a top priority for businesses



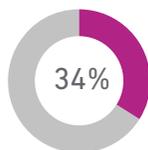
Up to 40% of decision-makers admit they're also now struggling to get a complete picture of indebtedness or identify financially at-risk customers



In fact, at least half of all firms have seen a spike in operational costs and are far less confident in their effective delivery of accurate customer segmentation, acquisition and SME services, following the pandemic



Nearly four out of five (78%) decision-makers are increasing or retaining their investment in improved customer insight

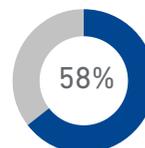


Up to 34% are set to use it to develop new products and services, while around 30% are set to improve lifetime value, in identifying the most valuable customers and further personalise the experience

## A second trend is relating to fraud and identity, as firms look to enhance strategies to protect consumers and portfolios



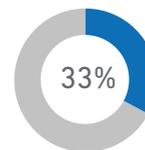
Nearly one in three (29%) decision-makers voiced concerns at rising fraud



At the same time, more than half (58%) have stepped up efforts to monitor fraud and suspicious activity among financially-stressed customers



As a result, more than two thirds (69%) of firms' fraud budgets are set to be increased or retained at existing levels for the foreseeable future



More than one in three decision-makers (+33%) also plan to expand the use of data and analytics to drive fraud improvements, highlight risk and help meet regulatory requirements



Despite adoption of ML or AI for fraud prevention not changing significantly within the past two years, more than half of firms (+50%) expect to make big investments in these areas during the next three years

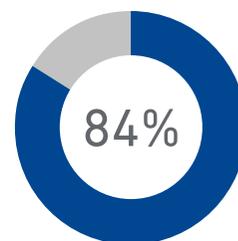
# Human skill and supervision will remain integral to business

Technology needs to be combined with skills and knowledge around not just tech, but the opportunities for data to be turned into insight. Especially with analytics being used business-wide, to solve a greater range of complex issues needing nuanced responses. That means data literacy should be an integral part of any digitisation strategy. Data literacy is the ability to read, work with, analyse and argue with data.

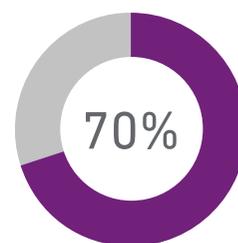
Our 2020 Global Data Management research showed that 84% of the organisations we surveyed see data literacy as a core competency that all employees need to have in the next five years. The same number are planning to recruit for specialist data roles in the next 12 months, including data analysts, data quality analysts, data engineers and data scientists.

70% say a lack of data literacy skills in the business is impacting the value they get from investments in data and technology.

[Read the full 2020 data management report here](#)

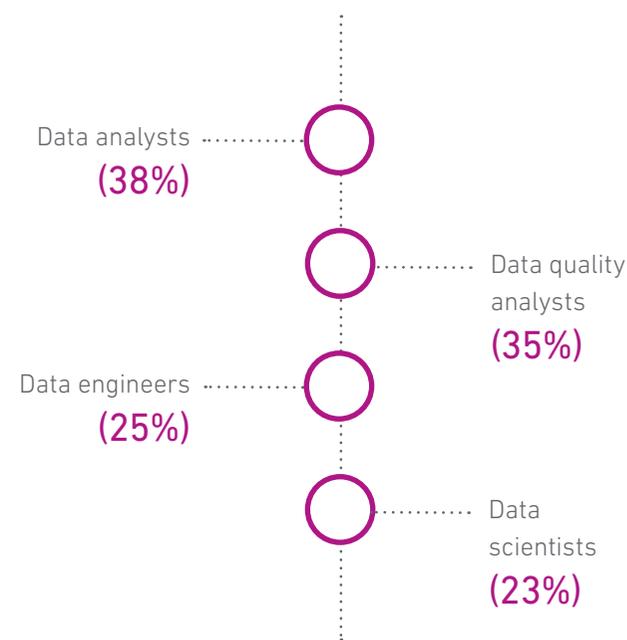


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84% of organisations are looking to hire specialised data roles in the next 12 months



87%

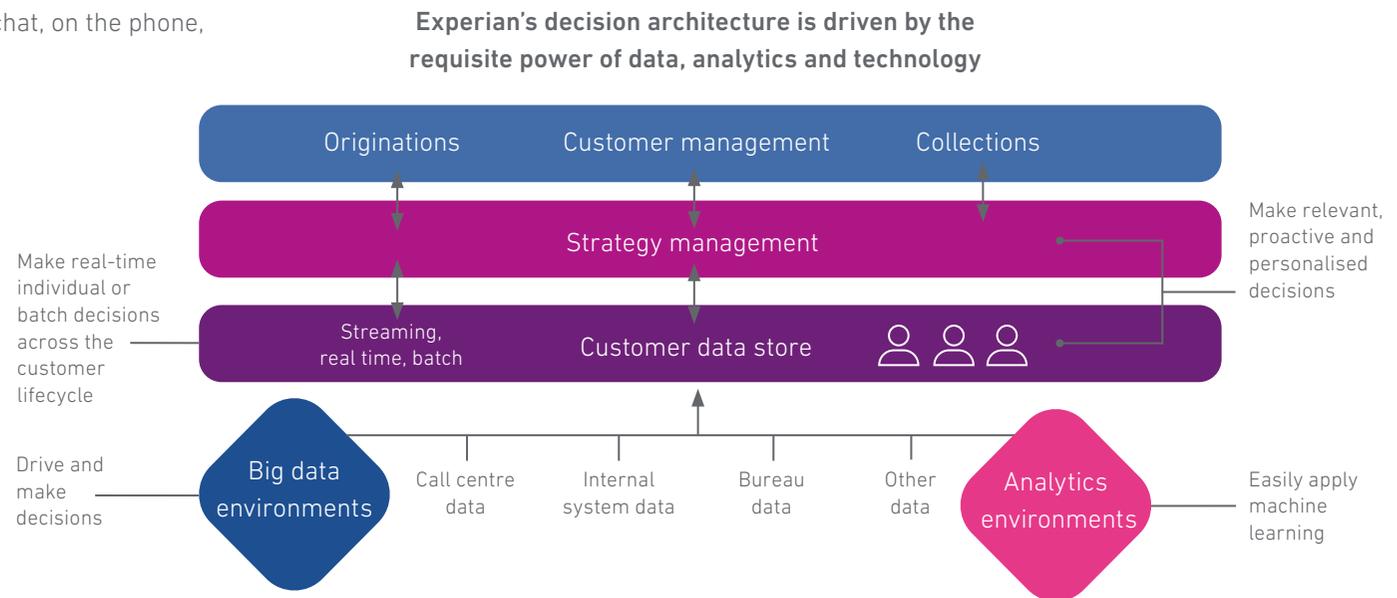
87% see at least one of these roles as being challenging to hire for in terms of finding the right skills

# Data continues to be one of your biggest assets

Data is key to enhancing your customer insight and experiences – both the data you hold and additional data including non-traditional data sources. Without an ability to integrate data, the quality of your decision-making will be impacted – which could lead to lost opportunity.

Historically, organisational structures and strategies have put the focus on products rather than customers. Personalisation has changed that with customers expecting connected, consistent experiences whether they're online, in-app, on chat, on the phone, or in-branch.

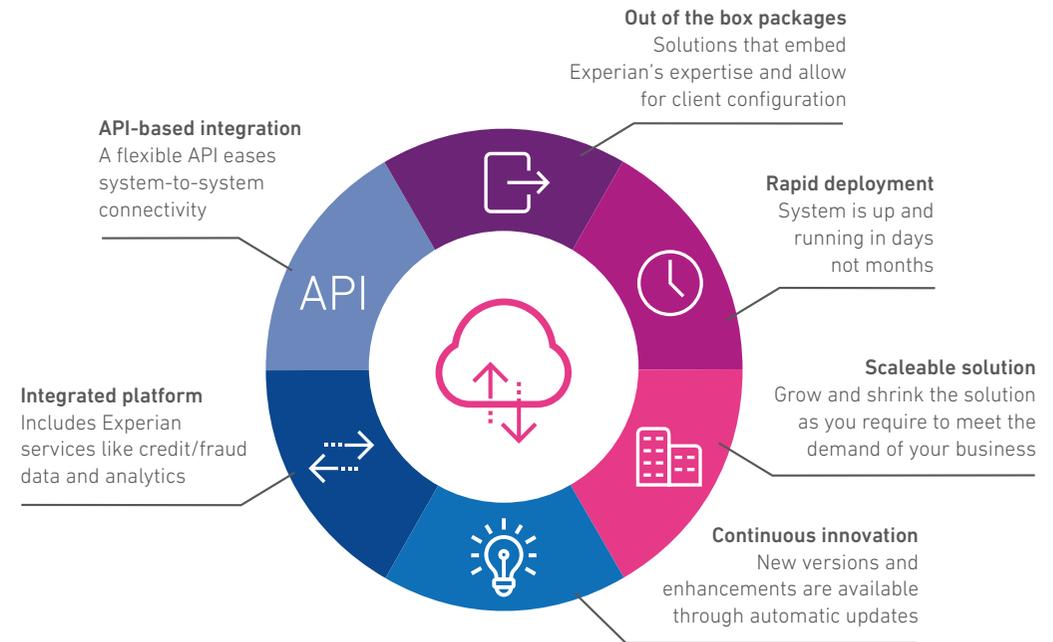
Without a single definition of a customer based on individual customer insight, and a single entity to manage the relationship, clear, in-depth understanding and consistency is impossible. Establishing this definition, along with coherent KPIs, is fundamental to centralised customer decisioning.



# How our innovative approach to decisioning can support you right now – and in the future

In the longer term, being able to consolidate and integrate products and services via a single platform will help you drive effective processes into the future and ensure high levels of customer satisfaction.

## Our cloud based, single platform delivers complete, agile and integrated decisioning capabilities:



The ability to combine and analyse data from every part of a business is a major benefit of our approach to decisioning. Our cloud native technology enables you to scale accordingly to your customer needs. Enabling you to launch new products and services while keeping operational and investment risks low. It also enables you to stay flexible, agile and secure with your customer data.

Right now, our decisioning approach can help you seamlessly provision for emergency products and services, including changes to existing loans and repayments. Flexibility in the Covid-19 economy can be the difference between a business surviving the crisis or not – time is of the essence and a response is needed quickly.

# Supporting the evolving open, and alternative, data environment

We're leading the way with open data, driving value for our clients and consumers. Open data means we can introduce new services such as affordability checking tools, personal finance management and recommendation engines.

The Experian Open Data Platform (ODP) has a repository of over 150 APIs that can be used to power digital services by providing access to demographic, lifestyle, financial and non-financial product information – all with consumer consent.

Through the interconnection of our open data platform, alongside our extensive bureau data too, decisions can be made at scale and speed, with greater accuracy.

The only way to deliver great customer experiences at scale is to automate your decision-making process as much as possible.

This requires advanced analytics technologies that can determine key factors such as affordability, based on accurate, complete, up-to-date customer insight.

Automating decisions provides a range of efficiency benefits, allowing you to focus time and resources on borderline cases. Additionally, customers can be provided with self-service options, giving them more control over their finances.

It also enables you to speed up lending decisions dramatically, especially for complex and high value products. This can transform traditionally slow, cumbersome processes like high cost or small business lending. Making it fast, convenient and easy for customers – fundamentally improving customer experience.

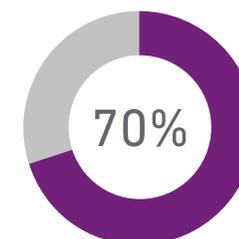
Our high performance decision engine can help you harness the power of data and machine learning right now. And to make batch or real-time decisions at scale, personalise actions and deploy them instantly.

By connecting and enabling fluidity between open data, core data, data analytics and decisions, our approach enables you to orchestrate decisions that are intelligent, intuitive and valuable.

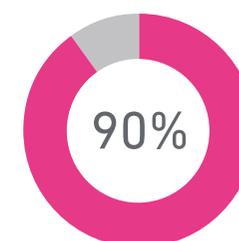
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Experian's ODP gives you instant access to a customer's financial information without the hassle and cost of developing your own infrastructure. With this data, and the application of data analytics, you can easily create a picture of their financial situation to deliver new products and services to them quickly and responsibly, building trust and loyalty, and creating competitive advantage.

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The ODP has proven to reduce the time taken to process an application by up to 70%



Our application of machine learning and data science in the ODP enables it to categorise 90% of bank transactions in milliseconds, reducing the time taken to confirm a customer's affordability

# Decisions based on customer behaviour

We're constantly evolving our flexible, interoperable decisioning platform to enable you to access an intelligent and intuitive architecture that manages effective decisions. Our platform is easily integrated into your own commercial environment and IT infrastructure. In order to recover and build resilience, you need to find, target, reach and win new customers. Then retain and grow them while understanding their risk of attrition and total future value.

By augmenting your decision architecture you can orchestrate the right decisions at speed and scale and act in the moments that matter. By accessing and interpreting customer behaviours into your decisions, you can direct the right decisions at the right time, knowing when customers are going to leave or default for example, and the best moments to engage.

Every interconnected customer interaction and decision is centrally captured, giving you an ever-improving view of your customer, based on real-time customer behaviour and decision outputs. That enables you to fundamentally change the dynamic and respond based on customer insight, rather than a customer prompt.

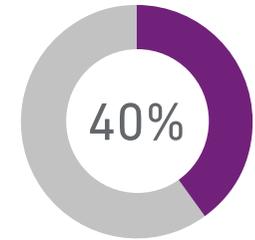
We're making huge investments in making sure models can be created and deployed into operational decision making – enabling businesses to create and continuously improve customer-centric decisioning across the lifecycle.

Our optimisation solution calculates the impact of every single possible decision (e.g. price, product, campaign, offer, terms, collections action) on each individual customer. It then selects the best combination of decisions in order to maximise a business goal (such as take up, contribution, cash collected etc).

It does this whilst meeting business constraints, such as bad debt, cost, budget, product availability, exposure, customers offered advertised rate etc.

Our solutions typically lead to 10%-40% uplift in performance, even against already very sophisticated techniques and strategies – and we have many examples significantly exceeding this.

It also has native connectivity with our PowerCurve solutions and vastly simplifies the strategy design process – giving you proof of concept before and during deployment, at an individual level, tree/segment level, or in real-time – all within 6-16 weeks (depending on complexity).



uplift in performance



Operational within  
6 weeks

# Eliminating bias in credit decisioning

Understanding and preventing bias in any kind of decisioning process is a growing concern for regulatory bodies, the services industry and society in general. We've developed a solution that aims to solve the ultimate problem of determining and fixing algorithmic and decision bias. It applies to any stage of modelling, allowing clients to train fair models, to evaluate fairness of existing models, and to improve fairness of unfair models. The platform utilises state-of-the-art academic research and novel statistical approaches, along with public and Experian-private corroborative data.

Our aim is to enable you (and Experian) to demonstrate fairness, our consumers to enjoy fairness, and the regulators to ensure fairness.

We're continuing to heavily invest in our technology and innovation road map, using the latest techniques and tools, meaning we're constantly adapting and advancing.



# Conclusion

The right decisions can help to protect and enable people at different stages of their lives. And today, thanks to simultaneous advances in data, analytics and technology, we have the opportunity to make more intelligent, better informed decisions than ever.

Firms across every sector are focussing their efforts on automating processes. We also see new types of augmentation and innovation lead the way in customer decisions.

To make and orchestrate the right decisions in the moments that matter for your customers, having the most intelligent and agile base of architecture will be imperative. The ability to connect your technology and integrate new and non-traditional data into a consistent workflow; understood and harnessed by AI, will be the key to success.

This isn't a logical process; it's sporadic and complex. AI can remove the complexity, advance the possibility and be operational instantly. Any decision should be transparent, fair and ethical. They should be appropriate and forward-thinking.

With the right strategies in place you can enhance your end to end decisions, helping you optimise actions, but also effectively communicate with your customers – in ways they choose, as and how they change.

At different points in their life they'll have different wants and needs, different product consumption and risk profiles, different attitudes to consent and data use. This all means that any analytics platform needs to be adaptable. It must allow you to respond to and manage change, fast.

Advanced analytical platforms, such as a sandbox environment, allow you to understand the impact of changes to your current policy rules in the live environment. For example, you could identify any exposure caused by economic stress, new segment groups to target, or what products would be suited to which customers.

At Experian we've heavily invested in our data, analytics and technology. Our continued investment in our platforms enable you to access whole of market insights, alongside non-traditional sources of open data.

Through our investment in cloud we can empower you with effective decision strategies and journeys within 6 weeks. This offers you instant improvement in accepts and conversion, while simultaneously reducing your risks through better identification of factors such as at-risk and predelinquency.

Our software is modular, giving you the ability to design decisions in the way you choose. It's responsive, allowing you to control, and make change as and when you need. It's also interoperable, making it easy for you to digest into your commercial systems – it's implementable within 6 weeks.

## Sources:

<https://mck.co/2Hg74rx>

<https://bit.ly/32Slrux>

<https://bit.ly/32WteY8>

<https://bit.ly/3kl3ipu>

<https://on.ft.com/303ewgd>

<https://bit.ly/2FZwBok>

<https://bit.ly/3kHcryx>

<https://bit.ly/3kMEcG5>

<https://bit.ly/2RRq8yp>

# We're listed by Gartner as a representative vendor for decisioning solutions



## Gartner Report 2020:

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“Decision Management Suites (DMSs) go beyond business rule management systems by providing more features for designing, deploying, maintaining and auditing decision-making software.

Machine Learning (ML) support is a consideration in an increasing number of DMS selection processes, although many decisions supported by DMSs in current production environments use only rules without runtime ML or other analytics. However, decision services built using DMSs from vendors such as Experian use ML in most or all of their applications.

Some DMS vendors, including Experian, have integrated their DMS products with open-source or third party DSML tools, providing an enhanced level of compatibility in decision design, model management, deployment and operations, compared with using a DMS with a generic third-party DSML platform.”

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# Additional resources you may find useful

At Experian, we're continually adding to our thought leadership library, with an intention of helping you maximise the opportunities and understand how to respond to the changing environment. Here are examples and may provide additional context around specific points relating to decisioning.



[Read here](#)



[Read here](#)



[Read here](#)



[Read here](#)



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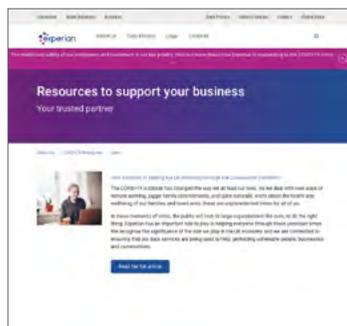
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The insight contained within this report is prepared using research performed on both Experian data and external data sources, in addition to market research. All sources, unless referenced, are from Experian insight.

The information contained within this report is designed to help businesses manage the complexity brought by a national crisis - and is a summary of key areas and capabilities. Experian are making this information available, in the public interest, to help firms understand the breadth of change and requirements needed in order to better support, and protect, consumers and businesses nationally.

To understand more about the breadth of market-leading capability Experian has, or to access further detail on the impact of Covid-19 on consumers, business and lending portfolios - please contact us.



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