ADVANCED ANALYTICS TODAY

Using smart data, analytics and machine learning to drive a customer-centric approach

experian™

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INTRODUCTION

The use of analytics to understand and interpret data is nothing new. But as our data universe has expanded, so have our technological capabilities.

Today's advanced analytics can process huge volumes of data faster and more accurately than any human. And while artificial intelligence can't replace human intervention entirely, it can help us deliver consistently better customer service and faster, more efficient back-office processing.

The role of analytics has evolved too. Traditionally analytics has been about prediction. Today, it's more about optimisation – making the best possible choices, in every situation, quickly and accurately. While data analytics was previously used to solve existing problems, today we begin with data and use it to uncover patterns, spot anomalies and predict or identify new opportunities. Data analytics is highlighting trends and problems many never knew existed.

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Our research with Forrester Consulting

In August 2018, Experian commissioned Forrester Consulting to conduct a survey of over 700 business decision makers in Europe, the Middle East, and Africa. Respondents were responsible for, or had influence in, decision-making processes around customer data, analytics, risk and SME services. In this paper, we take a closer look at the prevalent attitudes towards, and adoption rates of, advanced analytics, plus the key challenges and priorities for the year ahead.

Our findings proved just how aware businesses are of the need for top-quality data, analytics and automation. To win customer loyalty, they need to understand and respond to customers' needs better, offering appropriate products that customers can both afford and benefit from.

CURRENT BUSINESS TAKE UP AND PRIORITIES

While the majority of decision makers we spoke to are already using advanced analytics in some capacity (80%). A quarter (26%) acknowledge they're not making the most of the opportunity.

Just 35% of businesses report that they're able to use analytics to extract insight from their data set, while 40% admit they're struggling to keep pace with the volume and complexity of data. Half said they're not able to use their data to drive decision making.
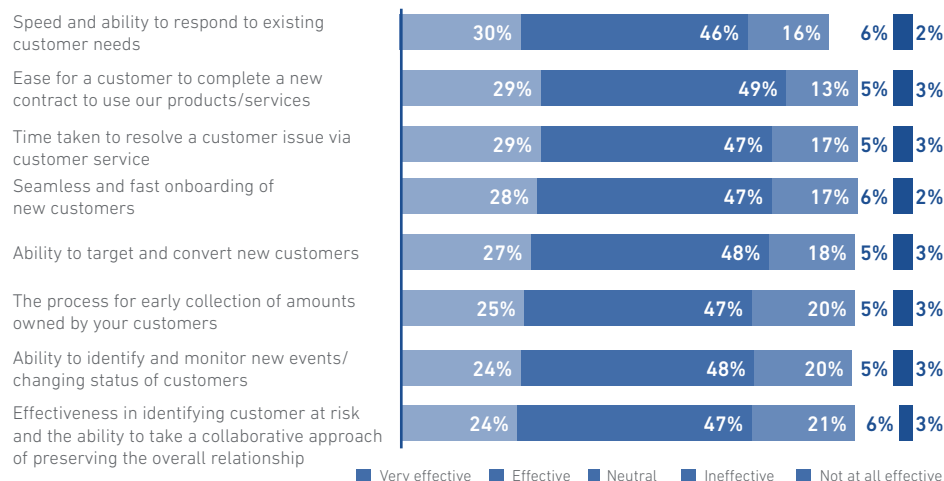
One of the issues here is that it's easier to use advanced analytics to complete specific tasks than it is to implement the techniques on a more strategic, business-wide scale. As a result, organisations' processes aren't equally effective across all stages of the customer lifecycle.

For example, while most are confident that they're effective at responding to customer needs and resolving customer issues, they are less effective at identifying at-risk customers. To drive long-term customer loyalty, firms must also ensure they are focused on the latter stages of the customer life cycle, including customer management and collections.

82% of decision makers acknowledge the importance of data, analytics and AI to business

26% don't believe they're making the most of advanced analytics

57% are increasing budgets for advanced analytics over the next 12 months

70% will invest in improving customer experience, data and information security

71% want to consistently offer personalised products to their customers

80% are already using advanced analytics

How would you rate your organisation's effectiveness across each of the following stages of the customer's journeys with you?

	Very effective	Effective	Neutral	Ineffective	Not at all effective
Speed and ability to respond to existing customer needs	30%	46%	16%	6%	2%
Ease for a customer to complete a new contract to use our products/services	29%	49%	13%	5%	3%
Time taken to resolve a customer issue via customer service	29%	47%	17%	5%	3%
Seamless and fast onboarding of new customers	28%	47%	17%	6%	2%
Ability to target and convert new customers	27%	48%	18%	5%	3%
The process for early collection of amounts owned by your customers	25%	47%	20%	5%	3%
Ability to identify and monitor new events/changing status of customers	24%	48%	20%	5%	3%
Effectiveness in identifying customer at risk and the ability to take a collaborative approach of preserving the overall relationship	24%	47%	21%	6%	3%

The next 12 months: key commercial investments and priorities

During the next year, over 70% of firms will invest in improving customer experience, data and information security. Nearly two thirds (60%) will work to ensure a seamless customer experience and over 70% want to consistently offer personalised products. The majority (87%) of businesses plan to increase or maintain their budget for advanced analytics.

Around a third of businesses (35%) have already leveraged automation to support decision making in customer onboarding, while 43% plan to implement in the next 12 months. Significantly, collaboration with at-risk customers is also regarded as a key tactic for 75%, while regulation and compliance are an ongoing concern for 69%.

Challenges and opportunities

Digitising key customer management processes can help you meet several key strategic priorities. These include:

improving acquisition channels and targeting the right prospects.

identifying opportunities to cross-sell, upsell and prevent churn.

engaging customers effectively throughout the lifecycle.

optimising customer-level decisions at the collection stage.

creating early-warning systems for customers at risk of defaulting.

maximising customer lifetime value.

Which of the following customer journey tactics will you be adopting over the next 12 months?

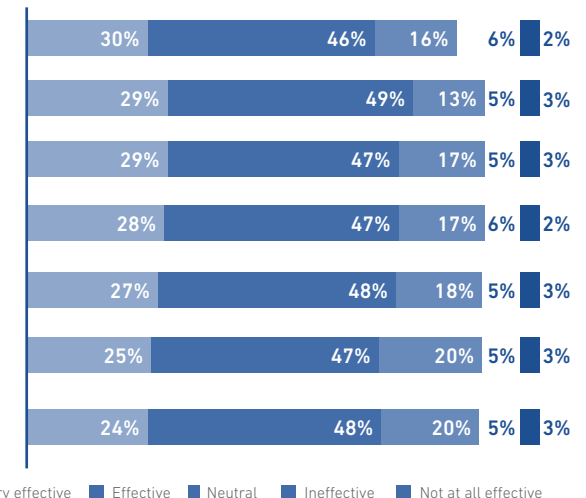| Tactic	Very effective	Effective	Neutral	Ineffective	Not at all effective
Combining internal and external data to create a better view of the customer	30%	46%	16%	6%	2%
Improving acquisition channels with additional data sources to enhance targeting capability	29%	49%	13%	5%	3%
Implement automated decision systems to manage potential high-risk debt by sensitive treatment of customers at an earlier stage	29%	47%	17%	5%	3%
Maximise the impact of your customer interaction across channels to improve the rate of success in cross-selling and upselling of products and services	28%	47%	17%	6%	2%
Consolidating/rationalising customer-level decision in the collection environment to minimise	27%	48%	18%	5%	3%
Optimise the customer-level decision in the collection environment to minimise losses	25%	47%	20%	5%	3%
Cross-function customer journey mapping to maximise customer lifetime value	24%	48%	20%	5%	3%

Very effective Effective Neutral Ineffective Not at all effective

PLUGGING INTO AUTOMATION AND MACHINE LEARNING

Right now, many organisations are using mixed customer messages and approaches. To make the most of automation and machine learning, businesses need to apply them across the whole business and across the lifetime of the customer relationship, from onboarding to long-term management, including collections.

By maintaining a comprehensive 360-degree view of customers, it's possible to use predictive analytics to pre-empt change and offer relevant services at key points in their life, from house moves to the birth of a new child. In that way, automation is the key to better customer service and long-term loyalty.

"Disparate systems and processes mean analytics are only being applied against specific tasks as opposed to holistically."

Five reasons that are delaying adoption:

Data volumes and data-quality struggles

Many businesses are overwhelmed by the sheer volume of data at their disposal. Data quality is an issue too, with most analytical teams' time spent on basic data cleansing and management. At the same time, disparate systems and processes mean analytics are only being applied against specific tasks as opposed to holistically.

The difficulty in maintaining a single customer view

Analytics are only as good as the data they feed off, and data changes fast. Some businesses may have achieved a single customer view. But to maintain it, you must continually assess your data quality against validated sources and update and refresh data assets regularly.

Lack of investment

Since getting customers through the door is a priority for many, acquisition teams are likely to receive more investment than fraud teams. What should matter most is making sure you get the right customers. The right analytics can allow you to create and orchestrate a data insight strategy that benefits the entire enterprise.

The data skills gap

Many businesses are struggling to build teams that can spot opportunities in data, develop them and take them to market quickly. However, access to the right technology can provide non-scientists with the tools they need to test, learn and compete effectively. We envisage that new jobs will be created to support data architecture and insight strategies.

Lack of understanding and control

Non-data scientists can feel bewildered at the sheer complexity surrounding advanced analytics. We see businesses that are unclear on where to start and, in some instances, unclear if they will retain control. The right analytics solution will provide flexibility, meaning control of the actions will always remain in the hands of the business.
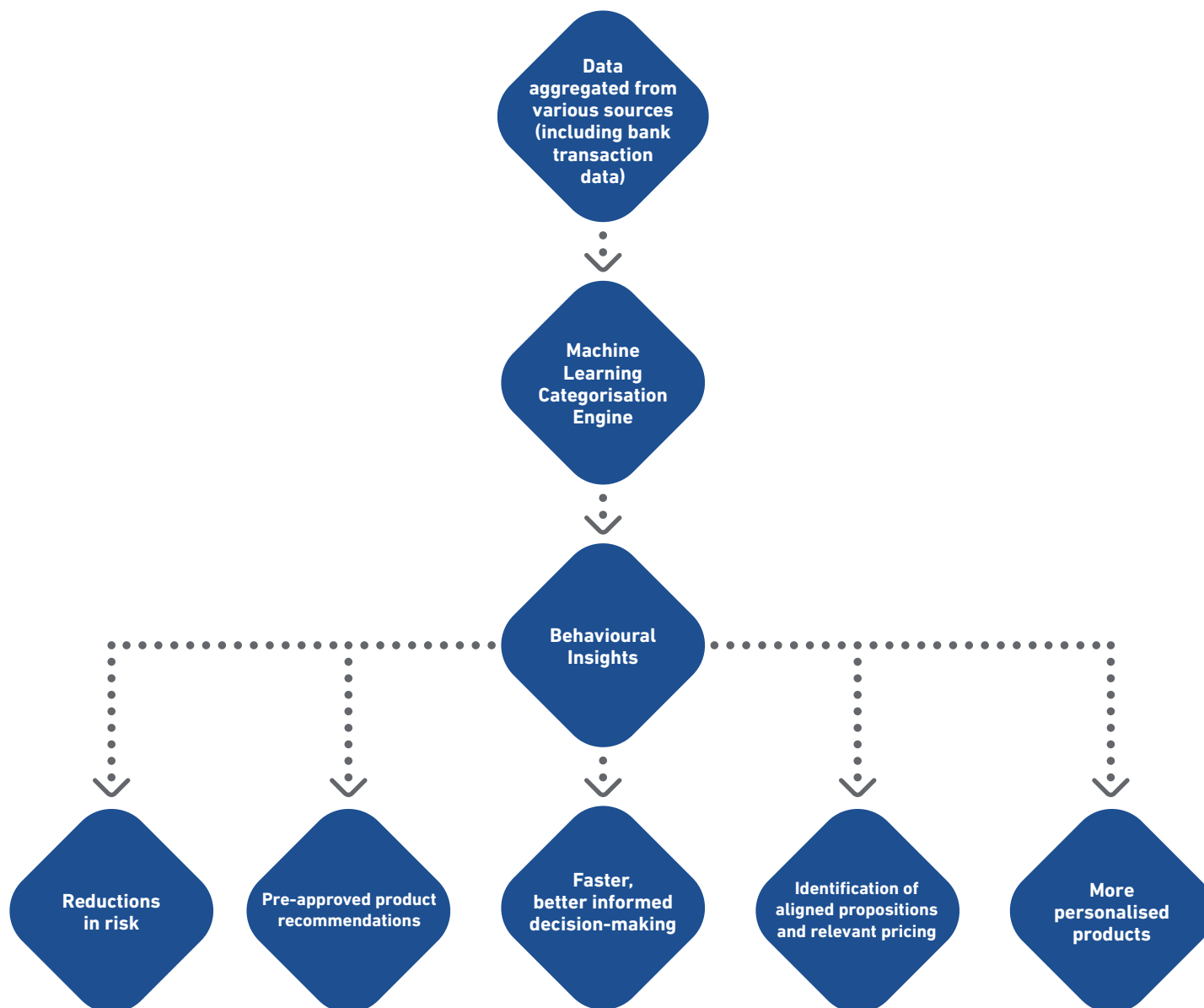
Emerging applications and opportunities

One area where machine learning really comes into its own is in the analysis of new and non-traditional data sources.

Much has been written about the usefulness of transactional and other data to better assess customers' affordability, and machine learning is the ideal way to deal with the extra complexity this entails. The resulting models may then be added into automated decision-making processes to widen eligibility thresholds, decrease the risk of defaults, deliver increased revenue, speed up the onboarding process and improve customer experience.

Real-time analysis of customers' bank transactional data can also enhance fraud detection by revealing suspicious or non-typical spending patterns, which can be used to trigger alerts.

Elsewhere, machine learning can also be used to drive enhanced customer segmentation models reflecting behaviours, attitudes and preferences. Models can then be used to enable pre-approved offers for existing customers leading to increased revenue, increased lifetime customer value and more effective marketing campaigns.

"One area where machine learning really comes into its own is in the analysis of new and non-traditional data sources."

Data aggregated from various sources (including bank transaction data)

Machine Learning Categorisation Engine

Behavioural Insights

Reductions in risk

Pre-approved product recommendations

Faster, better informed decision-making

Identification of aligned propositions and relevant pricing

More personalised products

THE IMPACT AND OPPORTUNITY PRESENTED BY 5G CONNECTIVITY

Widespread super-fast 5G connectivity is now just a matter of months away and offers a timely opportunity for businesses serving the new generation of digital natives. It's expected to launch across the UK within the next 12 months, followed by widespread adoption across the rest of Europe by 2025.

The numbers speak for themselves: 5G's arrival is predicted to drive US$620 billion in business opportunities during the next decade. Of this, analysts expect around US$200 billion will come directly from video analytics and real-time automation.[1]

All banks, lenders, financial services providers, telcos and fintechs will directly benefit from 5G's widespread adoption since it will enable them to connect to their customer base via even more devices. It's predicted it will also drive a surge in the number of connected IoT devices, from smartphones, wearables and home appliances to sensors appearing everywhere from public infrastructure to clothing.

Crucially, 5G will have a direct impact on consumer-centric legislation like PSD2, which puts customers in the driving seat by offering them a clear say in how their personal information is shared and used by organisations. As a result, and as the use of third-party APIs accessing banks' databases continues to grow, use of scalable machine learning and adaptable analytics platforms, such as an analytical sandbox

$200bn
video analytics and real-time automation will drive revenue streams

$620bn
5G will drive new business opportunity

1 The 5G Business Potential, Ericsson www.ericsson.com/en/networks/trending/insights-and-reports/the-5g-business-potential

ANALYTICS ON DEMAND

In a competitive world, it's imperative to be able to spot opportunities, assess ideas quickly, and test and learn. We believe analytics needs to be much easier for businesses to access, and that you shouldn't have to independently invest in this, or be a data scientist in order to benefit.

Experian Ascend is a powerful analytics platform that provides on-demand access to Experian's leading consumer bureau plus a range of alternative data sources, including your own. Combined with cutting-edge analytics tools and industry-leading consultancy, it lets you uncover unique insights to inform decision making and drive your business forward.

"In the US, where Ascend was first launched across Experian, we saw a 30% improvement in how quick it was to take a test a scenario into live business environment."

As well as a user-friendly interface that's accessible from a regular computer, Ascend offers the ability to visualise and model from data. This powerful tool lets you quickly identify the changes and opportunities brought by model changes or new segment analysis – for example, if you wanted to understand the likely impact of credit risk policy change, or optimise your marketing efforts. In short, it enhances decision making across all business areas.
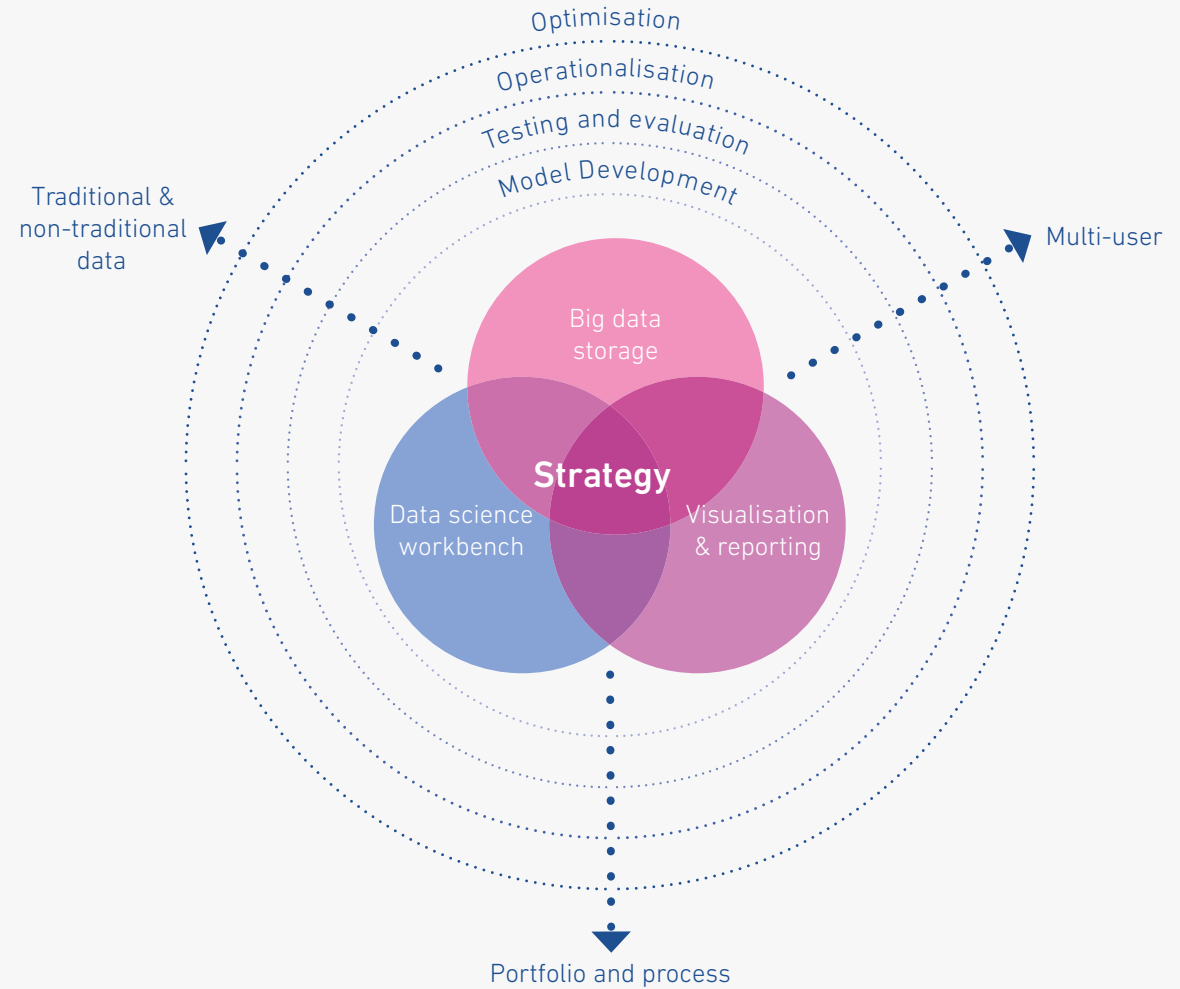
Improving access to analytics

Ascend's arrival comes as many of our clients face a period of transformation characterised by intense competition and scrutiny.

As a strategic partner we're here to help our clients solve their biggest challenges. Ascend quickly converts vast quantities of data into smart, actionable insights using the latest machine learning and artificial intelligence. It enables our clients to quickly call up the solution, query a file and make accurate strategic decisions right there and then.

This type of platform is a must if businesses are to effectively compete in today's economy: it lets you keep pace with the market and consistently deliver outcomes that best serve your customers.

With the IoT expanding at an exponential rate, plus payment and ID verification technology set to surge on the back of widespread adoption of wearables, now is the time to join us at the forefront of the data and analytics revolution.

Optimisation

Operationalisation

Testing and evaluation

Model Development

Traditional & non-traditional data

Multi-user

Big data storage

Strategy

Data science workbench

Visualisation & reporting

Portfolio and process

ABOUT THE RESEARCH AND INSIGHT CONTAINED WITHIN THIS REPORT

Research insights

Research contained within this paper, unless sourced otherwise, is an extraction from Experian research commissioned through 2018 and 2019. This includes research with third-parties including Forrester Consulting, as well as consumer research conducted on Experian's behalf through C Space. Additional data insights are derived from data sources such as National Hunter.

- Read from our research commission to Forrester Consulting **here**
- To read insight from our Global Data Management trends, **click here**
- For a full view of the UK Fraud trends, please read our **annual fraud report** – also see our Global Fraud and Identity report **here.**

For more information on any specific quotation, **please contact us**.

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 college, 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 decision and thrive, lenders lend more responsibly, and organisations prevent identity fraud and crime.

For more than 125 years, we've helped consumers and clients prosper, and economies and communities flourish – and we're not done. Our 17,200 people in 44 countries believe the possibilities for you, and our world, are growing. We're investing in new technologies, talented people and innovation so we can help create a better tomorrow.

Learn more at **www.experianplc.com**

To find out more about our services, visit our website: **www.experian.co.uk/business**