

AI and Machine Learning

Unlocking the power of data

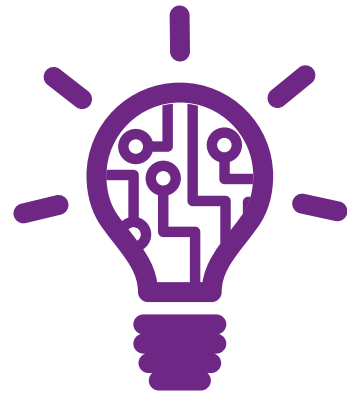


Experian believes that Artificial Intelligence and Machine Learning can bring very important benefits to a more inclusive financial services sector. They can deliver more insightful decisions by lenders, more insights and control for consumers, a better interaction with vulnerable consumers, and more people accessing affordable credit than ever before.

AI and Machine Learning

We welcome and support the Government's commitment to making the UK a world leader in the fields of Artificial Intelligence, Machine Learning and the application of big data to power these industries. Experian wants to continue to work with Government and other stakeholders to ensure its successful development and real-world application.

It now falls to ministers and policymakers to ensure that the AI and Machine Learning revolution is supported and encouraged. Moving forward we call on the Government to ensure that:



1

There is a fair and level playing field when it comes to the regulation of specific consumer impacting AI and Machine Learning processes and that no multi-tier system of regulation develops

2

Businesses who develop and use AI and Machine Learning processes in their operations are accountable for their actions and outcomes to consumers, Government and regulators

3

Ensure that all AI and Machine Learning processes are auditable and traceable upon request from the appropriate party for decisions that have a material impact on a consumer and rely on the use of personally identifiable information

4

There is clarity for each main AI and Machine Learning use case as to what needs transparency and auditability and what does not


Experian is the leading global information services company, providing data and analytical tools to our clients around the world. With the advent of Open Data, Experian aims to use new data streams and its innovative processes to enhance credit risk decisioning for businesses, improve consumer experiences by delivering bespoke affordability assessments, increase consumer awareness and engagement in affordability and combine new capabilities with our existing organisational products and services turning new data into new consumer insights.

Experian has prioritised unlocking the power of data to realise opportunities for people and organisations, data is the DNA of our business. At Experian, how we work is as important as what we do. We treat everyone fairly and their data with respect. We work with integrity, always.

With the era of Open Banking now upon us, Experian is ready to partner with consumers and businesses to make sense of these new, complex data streams. Tools such as our automated Categorisation Engine, Trusso, takes raw data and in real time sorts it into 94 different income and expenditure categories, making it easier for consumers and businesses to absorb this new data into their personalised affordability assessments. This new capability was developed in our world leading DataLabs, where Experian's expert data scientists are not only conducting fundamental AI research but also applying cutting edge techniques to real-world business situations. Our DataLabs operate in a safe and secure environment where both internal and collaborative research takes place. When consumers and businesses choose to share their data with Experian, we can add real value to each party and enable lenders and consumers to make informed, real time decisions.



This capability to harness the power of advanced analytics and combine it with new, big data sets offers the opportunity to build a more inclusive economy. This could be done in a number of different ways, not only by providing bespoke credit scores but also through bringing new data streams, such as rental data, online and using them to help people with thin or non-existent credit files access to affordable credit. Using these new data sets can bring added benefits, as a 2017 report by Policy in Practice highlighted when their analysis showed:



Using data from Experian's Rental Exchange lead to a 45% increase in securing their digital authentication.

The opportunity to expand the inclusiveness of the financial services sector is a key part of the UK Government's own FinTech Strategy as any step forward in technology must be beneficial to all sectors of society, ensuring that no group in our country is left behind. At Experian, this is something we also believe and are working hard to ensure that the technology we use and develop has the consumer at its heart.

We welcome the commitment from the Government made by both the Secretary of State for Business, Energy and Industrial Strategy and the Secretary of State for Digital, Culture, Media and Sport to ensure the UK is at the forefront of the AI and Machine Learning transformation.

Experian supports the steps being taken to address the skills gap in the UK in relation to the AI industry and the recommendations by Dame Wendy Hall and Jerome Pesenti in their 2017 report to increase the funding in further education in areas such as maths and data science.

A young woman with dark hair in a bun, wearing glasses and a denim jacket, is focused on a tablet device. She is sitting at a desk in an office environment, with a keyboard and a notebook visible. The background shows a blurred office space with computer monitors.

Experian is well aware of the transformational advances that are being made in AI and Machine Learning and the impact they can have on society. We look forward to working with the Government to achieve the ambitions they set out in the Industrial Strategy Grand Challenges, the AI Sector Deal and with national organisations such as the Alan Turing Institute as the UK builds an innovative AI environment. Experian looks forwards to sharing our expertise and insight with Government and working together to deliver these new capabilities to the financial services sector.

Fairness

It is vital that fairness is put at the heart of the development and use of Artificial Intelligence and Machine Learning and that fairness is seen as more than just an outcome. Fairness in AI and Machine Learning means tackling issues of bias that may exist in both the data being analysed and the algorithms it is being exposed to. This requires that the concept of fairness must be built in to the design process when developing an AI or Machine Learning operating framework. This means resolving issues of bias to ensure that our processes and outcomes do not discriminate for example on the on grounds of sex, race, religion, disability or colour. Once Experian has designed a process it will regularly review its accuracy and effectiveness, making changes where needed to ensure it remains accurate and compliant. With the Open Data era upon us, Experian believes it is now appropriate to update the 'Guide to Credit Scoring 2000' to recognise the changes that are taking place in the sector and new capabilities to analyse personally contributed data that are being brought market. As a business that is regulated, Experian is accountable to regulators, whereas some businesses involved in the use and application of AI processes are not. This could lead to an uneven and unfair playing field developing. Regulation shouldn't act as a potential barrier to companies who are conducting innovative and fundamental research in a safe and secure way as this otherwise could result in the UK being left behind in the development of a world leading AI sector.

Data and the rates at which it is now produced and available are fuelling the growth of AI and Machine Learning and the issue of fairness extends to the use of this data. Experian's credit data can only be used for specific purposes. When consumers share their data with Experian, we are honest and open about the way this data will be used.

The ask from policy makers:

Ensure there is a fair and level playing field when it comes to the regulation of specific consumer impacting AI and Machine Learning processes and that no multi-tier system of regulation develops

Ensure that existing sector specific regulation is applied consistently

Experian welcomes the opportunity to be part of the Government's Financial Services AI working group involved in designing new rules that are fair to both consumers and business

Accountability

As the interest and focus increases on the transformational impact of Artificial Intelligence and growth of Machine Learning, so do concerns about its use, regulation and potential reach. We recognise that for many people the most significant risk to their personal information is now driven by new technologies.

The ability for consumers, Government and regulators to challenge these new processes and hold the people creating and using them to account is necessary and important. The Data Protection Act, gives both consumers and the Information Commissioner more power and control over data and how it is used.

Government must recognise that accountability is right and proper in ensuring the necessary levels of trust are developed to enable business and consumers to take advantage of these new opportunities. This requires that companies have information that is accessible to both businesses and consumers, which in plain, simple language explains their processes. Experian understands that where we have used machine learning algorithms that could have a material impact on a consumer, we need to be able to explain and account for how an outcome has been reached. That is why we not only have detailed sections on our websites explaining how we use data and answers to frequently asked questions, such as how does Experian generate a credit score but we also have contact centres where both consumers and businesses can speak to us.

Without this clear accountability element in place, consumers would understandably be wary of engaging with AI and Machine Learning, given the potential impact it could have upon them.

The ask from policy makers:

Ensure that businesses that develop and use AI and Machine Learning in their operations are accountable for the technologies' outcomes to consumers, Government and regulators

Ensure that where appropriate, consumer facing algorithms can be explained by their developers, in plain and simple terms that are easily understood and easily accessible

Ensure that regulators have the tools, understanding and expertise necessary to fulfil their duties

Transparency

The advances in Artificial Intelligence when combined with Machine Learning have enabled new insights to be extracted from vast, unstructured data sets that have only recently become available. The Second Payments Services Directive and Open Data era is now starting to flourish and presents consumers with new opportunities to harness the power of their personal data. This data is in turn driving development of new processes that can bring greater personalisation of services.

This data will often contain personal and sensitive information, to then subject it to algorithms and automated processing and be able to meet the requirements of the GDPR, organisations must be able to explain how decisions have been reached. Transparency will also help to allay and counteract the fears that some consumers have regarding AI's possible impact on their lives. Ensuring good outcomes for consumers is also at the heart of the FCA's rules for businesses and when developing products Experian goes to great lengths to ensure there is no consumer detriment as a result of the steps we have taken. It is therefore appropriate that the Government recommends that all consumer AI and Machine Learning processes whose outcome will have a material impact on a consumer are fully auditable and traceable upon request from the appropriate party.

Experian, as an FCA regulated company already does just that, it ensures that it addresses issues of bias at the beginning of our processes and provides a clear audit trail. We also work with both regulators, the FCA and ICO, to ensure that we not only abide by the rules and guidelines in place but also help to develop key industry standards that have resulted in best practice.

However, when discussing issues of transparency, it is important to recognise that for AI and Machine Learning there are actually

two types of transparency, a use case level and an algorithm level. Use case level transparency requires an explanation not of the actual algorithm but rather the way in which personal data is being used to deliver an outcome. Algorithm level transparency is where a consumer may want to know how an algorithm has interpreted their data to reach a particular decision and why it ranks some data points as more important than others. When addressing concerns about transparency, it is important that policy makers highlight the two differing types of transparency that exist.

Government and regulators must also be transparent in their own actions and decision making process to enable both consumers and organisations to have faith that they are acting and will continue to act in a fair and consistent manner.

The ask from policy makers:

Ensure that developers of AI and Machine Learning are transparent in the ways they are developing and applying these new processes and datasets

Ensure that companies in their design process and development framework recognise the importance of tackling issues of bias

Ensure that Government and regulators are open and engaged with industry



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Next steps

As the Government now embarks upon its work in building a world leading AI, Machine Learning and Big Data environment, Experian stands ready to engage and assist in helping the Government, Regulators and consumers along this journey.