

Trust and transparency: The future of AI

Artificial intelligence needs to explain itself in order to earn the trust and confidence of both companies and their customers, says Hani Hagra, Chief Science Officer at Temenos

During the 1980s and 1990s, artificial intelligence (AI) was a concept that featured in many science fiction movies – one that was often used to instil panic and depict a future dystopia where humanity struggles at the whim of advancing technology. Fast forward to today and we find ourselves living in a new era defined by data; and one in which AI is already playing a major role across many sectors.

This evolution has come about thanks to our ability to efficiently store, organise and analyse data, and has been further compounded by the internet of things (IoT), which provides yet more data and information about our everyday lives. Essentially the availability of data, and our ability to leverage it with higher powered and cheaper computing, has changed the game.

More and more people have come to realise the value that AI can bring to an increasingly data-rich world. Despite this, a new need is emerging as consumers question how trustworthy AI really is: the need for Explainable AI (XAI).

After all, how can people trust the insights and decisions provided by AI systems if they do not understand the process that underlies them and

cannot access the data that determines them?

If AI is not transparent, can we really be sure that these decisions are accurate and not biased? This is an important question that needs an answer and it's one that XAI technology can help address.

We have recently seen some of the world's leading companies come under the spotlight amid accusations of 'AI bias'. Perhaps the most high profile of these cases came to light recently in relation to some credit cards, where it was alleged that men were receiving 10 to 20 times higher credit ratings than their wives.

The resulting outcry led to an investigation by the New York State Department of Financial Services. Outside of the financial industry, other major players have also come under scrutiny for using biased AI systems.

If we consider the fact that most companies today work with 'black box' AI systems, it's not surprising that many consumers today don't fully trust AI yet. This scepticism is more than justifiable too, when you consider that these opaque AI systems rely on data, learn from each interaction and can thus rapidly accelerate poor decision-making if fed

corrupt or biased data. These black box systems also leave the end customer in the dark, doing nothing to instil trust in the technology. Compounding the problem, most companies don't usually have the privilege of finding out that their AI is biased until it's too late.

The solution to all this is 'white box' XAI systems which explain in plain language how the software operates, how decisions have been made and are able to answer follow-up questions aimed to maximise the customer's wellbeing.

Transparency is key to building trust and by explaining how and why certain decisions have

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been made, XAI can help both customers and companies understand what they need to do get a different outcome. In practice, this could mean turning a rejected loan or mortgage application into an acceptance.

XAI creates win-win scenarios for both the company and the customer. On one hand, the customer can use the insights

provided by XAI technology to improve his or her situation, while the company can leverage the additional customer information to suggest products or services that are better suited to a particular customer or even launch entirely new business lines.

In addition to added transparency, XAI models are built around causality. This means they can be easily analysed and augmented using human intervention, rendering them fairer and safer to deploy as imperfections

can be ironed out incrementally over time. These XAI platforms are unique in that they do not solely rely on data but are in fact elevated by the human experience.

In the banking industry alone, the potential that XAI has to improve the customer experience is massive. Important decisions are already made today by AI on credit

risk, wealth management and even financial crime risk assessments. Other important applications of AI include robo-advisory, intelligent pricing, product recommendation, investment services and debt collection.

From a regulation perspective, there is also a lot to gain in the era of Open Banking and the second Payment Services Directive (PSD2), as there is a real need to provide a framework in which the vast amounts of data being shared can be used to provide customer-centric solutions. As a result, we should anticipate more stringent regulations in the future focused on ensuring AI algorithms do not apply bias and remain as transparent as possible.

Looking ahead, we can expect to see the role of XAI grow from strength to strength. Not only as it supports the seamless and hyper-personalised user journeys today's consumers expect, but because it delivers the critical data-driven insights necessary to win the trust of consumers and regulators alike. In short, XAI is no longer a 'nice to have', but a 'must-have'. **TFTI**

About Hani Hagra
Hani is Chief Science Officer at Temenos, which provides software to financial institutions, of any size, anywhere in the world.

