



the payments association



The Payments Association's Guide to Artificial Intelligence

Use Case: Treasury and Transaction Banking



Martin Runow
Global Head of Payments and Digital
Barclays Corporate Banking



Read The Payment Association's Using AI Intelligently Guidebook [here](#)



We are seeing an increase in firms wanting to be data led. For that they will need to have the right data and architecture in place.

What is AI and what are the different types?

We all have a different understanding of the definition of Artificial Intelligence (AI) and what it can do for us. When we look at AI at Barclays, we try to harness Machine Learning (ML) and Deep Learning to learn from experience and then forecast what is likely to happen next, or what we can apply in the future. In an operational model, we are using automation with RPA on top to improve the processes themselves, even getting the process to self-direct where appropriate.

There are also more contextual forms of AI, like natural language processing, that aim to make sense of what people say and provide an appropriate response.

Why is AI so suited to Corporate Banking?

Any process that has high volumes, high frequency, repetitive and relatively structured data is ripe for AI intervention. Transaction banking and treasury management have all gone through various Straight Through Processing (STP) iterations where there have been attempts to automate processes. But now, by deploying AI/ML and Deep Learning we can start to have something that is automated and efficient as well as bringing costs down.

Order routing is a good example of this. The end customer does not care which rails a payment has

travelled on – the job is to make it travel on the best one and do it quickly and without issue. A good system should do this.

Within fraud detection, ML is especially useful as it can see patterns and link up the seemingly unrelated. For example, a change in an IBAN number on a regular payment that could raise suspicions. ML can find the anomalies and avoid both failed payments as well as false positives. So, what you are getting is better decision-making accuracy about what is suspicious and what isn't. It's all about quality control.

Cashflow forecasting and collateral management are also good examples. AI can look at the historical patterns and can break down what is needed and when. This ensures a business can best use the assets they have. It's all around being able to model with accuracy what effect any particular number/situation has on a cash flow forecast.

What are the issues or drawbacks regarding AI?

Like with anything, there are limitations. You have to know what the process is and be able to audit them. You also need to be on top of things so that unintentional bias does not start to creep in. Unfortunately, the only way to do this is by having a granular level of understanding as to why and how a decision has been made.

Where else can it be used within Financial Services and to what purpose?

All the contextual stuff like robos and chatbots is still to play for. The standard must be good or else people will not use them. Retail banks can use data to provide insight on what a person might need based on their current account transactions or whether they have had a major life change; done sensitively, this is a good thing to have.

What is the uptake of AI like and why?

In general, Robotic Process Automation (RPA) has welcomed the extra firepower that ML brings. It is all around pattern matching and is deployed widely. The more complex use cases are in development and are trickier as they try to make sense of subjective or contextual data and then map them onto a specific thing or person. There is also a fine line to tread in terms of not being creepy and not doing it, even when you don't need to. For example, if you were looking at a sub sector of an industry and using data, you could probably end up identifying individual companies if they were large enough. That brings up privacy issues.

What are the barriers to the adoption of AI?

All financial service providers have access to to huge data lakes?. It makes sense to generate insight from that but the data has to be high-quality. Work needs to be done on standardising data and then getting the right IT stack in place to support the flow of it

In a large company there is always going to be a lot of competition for resources. Within payments at the moment everyone is focused on ISO migration, for example. This will always be the way things are. Competing priorities are a fact of life.

Culturally, AI has been tarnished with concerns that a reduction in headcount will come with its implementation.

What does the future for AI look like?

We are seeing an increase in firms wanting to be data led. For that they will need to have the right data and architecture in place. The same benefits can be applied to multiple areas and the idea is that AI can help streamline and help a process and make it better and more efficient.

“

Within fraud detection, ML is especially useful as it can see patterns and link up the seemingly unrelated, for example a change in an IBAN number on a regular payment that could raise suspicions.

