**WHAT IS IT?** Artificial Intelligence (AI) refers to both a field of study introduced in 1955 and the technology behind a robot or software capable of intelligent behaviour. Its initial purpose was to breakdown intelligence into faculties and then to mimic them – for instance: memory and perception. AI can be separated into 3 main categories:

1. **AUTOMATION TOOLS**
   - Process Automation Tools (PAT): robotics is the first step into AI territory. They are reactive types of intelligence, which behave according to a simple set of rules.

2. **COMMUNICATIVE AI**
   - Digital communication types, including Natural Language Processing, are able to execute tasks but can also communicate with humans through listening and expression, e.g. chatbots and virtual assistants.

3. **COGNITIVE AI**
   - Self-learning technology, nowadays referred to as AI, has the ability to contextualize information, add new rules, and become smarter with more data and usage. Google’s self-driving car belongs to this category.

**INDUSTRY IMPLICATIONS**

Direct and immediate benefits: more secure and faster service in securities processing.

- Bots capable of screening documents for fraud warnings or compliance checks will ensure a more secure service and better reactivity to security and compliance alerts.
- Automated reporting will also allow us to crunch and process more data in less time.

An improved working environment for employees and a better client experience are also indirect benefits of AI integration: by allowing our teams to spend less time on tedious and repetitive tasks this technology will enable them to add more value through deeper analysis, spending more time on deepening client relationships, hence a better client experience with more human interaction when needed.

**WHAT ARE WE DOING?**

- Launch of a 3 year plan in 2017 of Robotics Process Automation (RPA). As of May 2018 we have 26 Process Automation Tools (PATs) live and an objective of 150 PATs released across 2018.
- Initiation of a commentary service on activity reports using Natural Language Generation (NLG) to provide our clients with text commentary and analysis tailored to their activities.
- Development of a self-learning translation web portal tailored for Corporate Actions, extending to standard communications in the future.
- Creation of document reader blocks to facilitate data extraction from human narrative documents, in order to accelerate data integration and reduce risks in our legacy systems.
- Analysis and integration of a virtual assistant tool with the aim of handling straightforward client queries and providing a harmonious client experience.

**DEMystifying MYTHS**

From a technological point of view, some AI applications in banking have been around since the 80s – cybersecurity applications based on AI or fraud warning systems for instance. But the recent pace of development, as well as the implication for the service industry, makes it a revolution, potentially as impactful as the industrial revolution in its time.

AI is also heavily reliant on data, so there is interdependency on Big Data technologies to clean up and normalise data, and of course to have access to the data itself. In this data race the GAFAM (Google Apple Facebook Amazon Microsoft) are also leading in AI, i.e. Google’s Deepmind.
IN A CHANGING WORLD

Digital technologies are changing the way we work. Anticipating how the world will change is much more than just a legitimate concern for the BNP Paribas Group, it is a major strategic priority.

The adoption of new technologies can represent a huge cost, but missing an opportunity that could shape the future of our industry is perhaps an even bigger cost.

Additionally, one of our main business principles is safety of assets and as such, cybersecurity is a cornerstone of our digital transformation. The technical, legal and regulatory environment for these matters is increasingly complex, hence our continuous investment in data and information security.

The pace of change in technology calls for agility and a need to adapt our business model. We hope our insights will help you address these issues.

WHERE TO LEARN MORE


NOTES

OUR VISION

We believe AI can have a direct and positive impact in the financial and services business space, for both our clients and for our staff. AI enables further automation which in turn translates into more resilient processes and lower operational risks for our clients. AI can also help us enhance the quality and speed of our services. With AI, every employee will experience a level of ease and efficiency in their daily work routine that has never been seen before.

The automation of repetitive, time-consuming tasks allows staff to focus on tasks requiring expertise and creativity. Regulatory reporting will be produced more quickly, while control and audit will be reinforced. In 2018, we launched a COOC on AI for our staff to upskill and adapt to this digital transformation.

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