



How Banks Can Boost their Performance with Artificial Intelligence

This white paper is among the first efforts to explore the potential of Artificial Intelligence (AI) and Machine Learning in Luxembourg. Developed by ICTLuxembourg, the paper seeks to raise awareness, knowledge and contribute to Luxembourg's emerging ecosystem in this technological area.

Being the member of ICTLuxembourg, the Luxembourg Bankers' Association (ABBL) is the professional organisation representing the majority of banks and other financial intermediaries including also FinTech firms established in Luxembourg. In addition to being the voice of the whole sector on various matters in both national and international organisations, the ABBL actively contributes to fostering the uptake of novel technologies by its members.

One of the main objectives of the ABBL and its dedicated Digital Banking and FinTech Innovation Cluster is to support its members in achieving the digital transformation of their business. This type of digital journey as well as the embracement of FinTech innovation are of greatest importance to the future of banks and other financial services providers. ABBL's activity spans across various technological domains with the special attention paid towards AI where the adoption of this technology by banks and other financial services firms has just begun.

"AI as a phenomenon emerged for the first time in 1960s. However, only now we are witnessing its impressive resurgence especially in the financial services sector thanks to the combination of several demand and supply factors, namely: sophistication of algorithms and computing power, availability of data and respective infrastructure, high potential of cost reduction and revenue gains, accelerated competition and the compliance pressure coming from regulators and supervisors. Examples of the application of AI and

Does having a robot in your board of directors sound like science fiction? It already happened as a robot called Vital has been named director by a Hong Kong venture capital as early as in 2014. The underlying technology is based on prescriptive analytics but there is even a bigger revolution in the making: the combination of several AI sub-field such as prescriptive analytics, NLP, creativity processing, social intelligence and planning - all packaged in one - will generate what we call "general intelligence", an artificial intelligence able to surpass human in cognitive aspect and able to understand the human impact of the decision.

Banks and financial services success, besides being recognized as a trusted third party, lies in their ability to manipulate efficiently large volume of data (especially numbers), elaborating statistics models and reacting quickly to new information impacting the environment.

These conditions create the perfect environment for multiple AI technologies to thrive but banks have defined a strategic plan to address the adoption of AI.

The fourth horizon is entitled “Creating a new market”: it is the “next week” horizon as it uses concepts, research technologies and bank specific assets and market position to create an entirely new market. The question to ask is: «how may society, politics, general behaviours may change in the future with the use of AI technologies?»

THE CHALLENGES

The usual fear associated with AI is the job loss, or rather job transformation. Tomorrow all the tasks requiring very specific skills will be more easily replaced by an AI than generalist ones. Therefore, a trader specialised in a niche financial product will be more likely to be replaced than a banker dealing with common customers.

As we are at the beginning of this new chapter for banks and customers all over the world, more opportunities will soon emerge. According to Carlo Friob, CEO of KBL European Privat Bankers,

CONCLUSION

Risks, opportunities and challenges: AI will bring all those elements to the bank industry. At the end of the 19th century, no company succeeded by rejecting the adoption of electricity. AI has clearly become the new electricity of nowadays knowledge economy and rejecting it is no option!



