Forbes Middle East

Can Artificial Intelligence Take Over Financial Services?

Artificial intelligence (AI) has become a common buzzword in financial circles and while the narrative of this disruptive technology is making headlines, it is by no means new. AI encompasses and refers to a broad spectrum of technologies, from Robotic Process Automation (RPA), algorithmic trading, chatbots and machine learning. The precursors of AI have been around since the early 60's and can be loosely described as the act of designing computers that have the ability to learn, without being explicitly programed. AI uses artificial neural networks (ANNs) to mimic the human brain in terms of decision making processes. ANNs are an integral part of our daily lives; for example, we see them in speech recognition, translation tools, social network filtering, medical diagnosis and sales forecasting.

AI is under the spotlight because the connected and online world generates massive amounts of structured and unstructured data, that properly mined and analyzed, provides useful patterns and insights into human behavior and events. Companies use AI to create enhanced services and improved processes, and its integration into products and services has significant benefits for both the service provider and the end user.

Thanks to AI's vast potential, the financial services industry has become one of the biggest champions of this technology. Traditionally, the transactional space has been particularly sensitive to human error due to the sheer volume of data generated over millions of transactions every day. Eradication of this as a risk, in addition to faster processing, holds a massive appeal for financial institutions.

According to Accenture's Technology Vision 2017 report, 71% of respondents stated that they believe that AI will have an impact on their daily lives within five years. An impressive 76% of consumers in the U.A.E. stated that they are comfortable with the use of AI in their interactions with government and businesses.

We cannot talk about AI without discussing how IoT fits into the picture. IoT is the "Internet of Things" and it is used to describe the interconnection of computing devices embedded in everyday objects, which use the internet to send and receive data. The nature of IoT means that there is an incomprehensible amount of big data that can be used in almost any interface. The smart analysis of this data will shape the way we consume and create products. It is estimated that the number of IoT connected devices will grow by almost 25% annually, and of the 28 billion total devices that will be connected by the internet in 2021, close to 16 billion will be IoT devices. The only way to keep up with IoT-generated data and unlock its insights, is through machine learning.

Research produced by McKinsey reveals that citizens of the U.A.E. are significant adopters of AI and new technology with over 80% of urban consumers, preferring to do some, if not all, of their banking through digital channels and specifically mobile phones. This trend is playing out across many financial services channels. Digitization in the banking sector

obviously has significant benefits in the customer service, product development and sales arena. In another study conducted by KPMG in 2016, they revealed that Saudi Arabia and the U.A.E. are the leaders in the adoption of mobile banking and it is estimated that mobile banking users in the Middle East and Africa will exceed 80 million by the end of 2017.

Forex brokers also use machine learning to develop new strategies for trading volatility on behalf of their clients. They use advanced automated trading software to scan a vast amount of trading data to create a strategy based on what it “learns” from market patterns. However, they are not yet fully intelligent, as they operate on historical data and probabilities. They cannot anticipate sudden geopolitical events, surprise resignations of leaders, environmental issues or unanticipated election results. To be truly intelligent, the software must be able to evaluate multiple streams of data and make decisions based on that information. They cannot factor in events that have not happened. In the wider finance industry, AI is starting to gain traction. A recent report by MIT Technology Review suggested that Goldman Sachs does have a true AI system managing its consumer lending. It’s called ‘Marcus’, and it operates with no input from its human colleagues.

JP Morgan’s COIN program analyzes financial deals that used to take legal teams thousands of hours to complete. The program looks at interpreting commercial loan agreements and has helped the firm significantly cut loan-servicing mistakes, which were the result of human error.

The challenge financial firms face in terms of fully harnessing the power of AI, is dealing with legacy systems and the spaghetti bowl of unrelated, incompatible CRM systems that are prevalent within these institutions. The result of M&A’s different software custodians within departments and the fear of losing data in a mass cross-over, is stopping many of the larger players from fully committing to AI. The task of tying together a multitude of disparate data sources within an enterprise, is no mean feat. The new kids on the block that use optimized data platforms like Hadoop and blockchain technology, have an advantage over the behemoth; they will be able to optimize AI from product inception, and provide their customers with unique and engaging experiences.

Perhaps the biggest challenge of all for the full adoption of AI is talent, or the lack thereof. We are still playing “catch up” in terms of producing the right kind of talent for large scale roll outs. Despite gloom and doom predictions about robots and software taking our jobs, a more measured view is that the AI industry could create millions of new jobs, and according to McKinsey, 90% of jobs are not fully automatable. An educated guess is that our working futures will embrace technology - not be eliminated by them.

Hussein Sayed is Chief Market Analyst at FXTM

https://forbesmiddleeast.com/can-artificial-intelligence-take-over-financial-services