Positioning
your data strategy
for business advantage

The role of FinTechs in applied
Artificial Intelligence initiatives

FINOVATE

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Atos

Introduction

Hosted by Dan Cohen (Group SVP, Global Financial Services and Insurance, Atos), on the 19th April 2018, Atos and Worldline in partnership with Finovate convened an executive breakfast briefing focused on exploring the business value obtained through applying Artificial Intelligence (AI). Attendees heard first hand from an expert panel of FinTech founders and leading financial services institutions, how a combination of a clearly defined data strategy, applied AI and FinTech partners can disrupt business as usual activities.

This report provides a summary of the panel's opinions and the subsequent table discussions amongst the participants. It draws on the insights of experts as well as the real-world benefits and risks that stem from the increased application of AI and Machine Learning in financial services.

Eddy Claessens, Group Industry Director at Atos, introduced the event by highlighting how AI has moved beyond the realms of a "tech project". With proven use cases, it is clear that AI has the potential to become pervasive in information intensive industries, such as financial services. AI could enable large organizations to do things they have never done before and derive real business value as a result.

He argued that, to achieve this, AI must be tightly aligned to a company's business strategy. That way it could become a catalyst for change in terms of both modernization and maintaining the upper hand over competitors.

Also, that all the while, FinTechs are not just enabling technological advances within the financial services industry. They are also creating a whole new ecosystem with a web of multi-level relationships. Major institutions must understand this and embrace them into their own ecosystems.

Featuring industry figures who are actively driving innovation at companies including Ulster Bank, Royal Bank of Scotland, Simudyne, Kuflink and W.UP, the panel session continued

the theme of applied AI within financial services. Facilitated by Michael Davison, Industry Principal, Financial Services, Atos UK and Ireland, the debate then focused on what a good data strategy looks like, the value that FinTechs can bring to new AI initiatives and how to set up an AI program for success. Directly afterwards, attendees were invited to give their opinions on the benefits, challenges and risks of applied AI in financial services.

The panelists

Hari Ramamurthy
Chief Technology Officer,
Kuflink

Hari is responsible for leading Kuflink's technical architecture and product innovation. This includes providing technical direction, product innovation and product design for the online P2P platform utilizing the latest in what the technical world has to offer.

Hari has always been intrigued with data and finding patterns in consumer behavior. Prior to Kuflink, he worked within the FinTech, AdTech and e-commerce sectors bringing a wealth of experience to the development of robust, scalable platforms.

Hari is co-founder and the Chief Technology Officer of SimplyCook, a food subscription business that offers restaurant quality meals. Prior to that, he held the same position at LendInvest. Before joining LendInvest, Hari served as the Head of Applications at MadBid as well as roles at Unanimis, FMC Marketing and QuazzleTelecom.

Damien Judge
Head of Commercial Excellence,
Ulster Bank

Damien is responsible for data, analytics and CRM teams in Ulster Bank. He led a pioneering project in 2017, to deliver the world's first Next Best Product solution using AI. He presented at Dreamforce 2017, the journey to a best in class hybrid cloud solution using Sales Cloud and Heroku.

Ulster Bank, a unit of Royal Bank of Scotland, has decided to use AI to get closer to its customers. In partnership with Atos, Damien and his team have deployed US software giant Salesforce's Einstein consumer relationship management (CRM) platform in the first full-scale implementation of this type of AI system in the financial services industry worldwide.

Justin Lyon
Chief Executive Officer,
Simudyne

Justin is a strategy consultant and entrepreneur. He is founder and CEO of Simudyne, an enterprise simulation company. He is also an Authorized Finder for the World Bank Group's Multilateral Investment Guarantee Agency (MIGA).

Justin has used simulation for analyzing a wide range of situations – from studying the conflict and restoration of peace in Sierra Leone to stress testing a Middle Eastern Bank as part of their regulatory compliance and teaching strategic thinking to insurance executives.

In 1994, Justin started an internet technology firm and sold it in 1998, for 15 times his original capital investment. In 2007, he was selected by a panel of distinguished judges to join "The Future 500" – a small community of people starring Britain's most promising up and coming talent.

Remco Veenenberg
International Sales Evangelist,
W.UP

With a strong working knowledge
of emerging technologies, Remco's
focus is on growth, sales, business
development, marketing and presenting.
A serial entrepreneur with a neuroscience
background, Remco is on a mission to turn
the CEE region into an innovation hub.

Having established more than 40+ applied
AI communities worldwide as part of
the core team of CITY.AI, he has built a
large international network of peers and
practitioners in the field of AI.

His own community, Budapest AI, aims
to strengthen the Hungarian technology
ecosystem by organizing knowledge
exchange events, facilitating business
matchmaking and launching hackathons.
His organization, W.UP is an official partner
of Google GDG.

Mark St John Qualter
Head of Artificial Intelligence,
Royal Bank of Scotland, UK

Prior to his current role as the Head of
AI at Royal Bank of Scotland (RBS), Mark
designed and led the project that successfully
transformed the bank's SME real estate
lending proposition.

Mark has held a number of other roles since
joining RBS in 2001. These include Head
of Strategy of the Customer Solutions Group
(the specialist product division within
Corporate Banking), Director of Strategy for
RBS Invoice Finance and UK Head
of Corporate Invoice Finance.

Mark has also been a member of the
Yorkshire and Humberside Regional Council
for the CBI and is currently a Governor
of Manchester Metropolitan University
and Chair of the Audit Committee.

Alan Grogan
Head of Data, Analytics and Business
Intelligence, Atos Codex Team

Alan leads a large function covering data
strategy, data consulting, data management,
solution architecture, big data platform
engineering, data science, AI and business
intelligence.

His achievements in analytics have seen his
work covered in prestigious publications
including The Financial Times, CMO.com,
TechUK and i-CIO.com. He is ranked in the
Top 50 list of Data Leaders in the UK.

Alan has also been recognized by IBM as one
of the world's 'Big Data Heroes'. He is credited
for bringing leading analytics technologies
to the UK, including 2017 breakthrough UK
projects for Zoomdata, KNIME and Salesforce
Einstein.

Panel discussion

Atos, Worldline and Finovate have long promoted collaboration between FinTechs and financial services institutions. This breakfast briefing focused on why data and AI represent a golden opportunity for all, assuming partners understand each other and can see where the value lies.

Deep understanding = deep benefits

The panel explained how data analysis has multiple applications in financial services. A robust data strategy can be the lynchpin of the business – helping to take trading positions, projecting possible risks and supporting credit or stress testing.

The opportunity to automate data-led decision making via AI at relatively low cost represents not just a saving but also a source of new value. For example, it could be folded back into the business's wider working methods, leading to specific and targeted choices.

AI can be used to deal with regulatory issues and reduce compliance costs. This is often top of the agenda for financial services institutions because it is a practice that involves significant time and investment.

AI also has a role as a "super computer" – enabling smarter decisions. Although this point was qualified by one panel member who said that this would always require a human to have the final say over any financial decisions.

For others, AI is important because it can identify problems before they need to be solved. FinTechs are demonstrating how deep understanding of data and application of AI can work in this area, making them ideal partners for larger institutions.

AI simulations also offer the chance to speed up processes. As Justin Lyon noted, simulation has been the bedrock for enabling AI. He explained that this was how Google's AlphaGo defeated master Go player Lee Se-dol in 2016. The first step in the evolution of that particular AI was building a simulation from which the AI learned how to interact with data. The simulation was then used to create intelligence, leading to the success of machine over man.

A driver of business

The panel highlighted how the processing of mass data is the area where AI offers the most obvious benefits. There has been a paradigm shift – from the old world in which data came from a business to the new world in which business comes from data. Yet a great deal of data remains under exploited. FinTechs are making waves throughout the sector because they are able to bring additional insights that, ultimately, lead to better services.

To process vast amounts of data – whether structured or unstructured – and rapidly gather information to advance our understanding of very difficult problems requires incredible amounts of energy, said Alan Grogan. This demands a clearly defined data strategy. Remco Veenenberg concurred, saying that "AI is only as good as your data."

Veenenberg went on to compare the data skills of the GAFAs (Google, Apple, Facebook and Amazon) with those of the banks. He explained that customer advocacy for Amazon stems from the fact that the retailer seems to understand what they want. It leverages data to proactively tailor personal recommendations. Banks, he said, could do the same and better protect themselves from the threat of GAFAs moving into financial services.

Hari Ramamurthy also stressed the need for speed and accuracy when it comes to establishing a strong data strategy. His company has developed alternative sources of data – in effect, creating a self-learning mechanism that feeds back to physical client managers. As an example, Kuflink would lend money to a medical student based on the fact that the student has a better degree and would turn out to become a better borrower in the long-term.

The data-sharing conundrum

For big banks and insurers, handing over customer data – either to machines or to FinTech firms – comes with an element of risk, the panel pointed out. For most firms, there are many hurdles that FinTechs need to cross before they can even touch that data. The most important of these is security.

The recent misuse of Facebook data by Cambridge Analytica serves as a warning about the potential dangers of handing over data to a third party. Even knowing where to put the data, assuming it cannot be stored in the cloud, is problematic.

Atos panel moderator, Michael Davison, highlighted the importance of transparency in everything that is done by financial services institutions. He noted that the House of Lords in the UK is advocating that the country should become a world leader in the correct and productive use of AI. As the landscape changes, customers still need to trust their financial services institutions and the regulators who monitor the whole industry.

FinTechs and the role of the Digital Services provider

According to the panel, there are around 40,000 FinTech firms in London alone. As a result, finding the right partner among all of these emerging businesses can be daunting for larger institutions.

Digital Services providers can help derive a clear problem statement and offer a lab environment to test out and find the best-fit FinTech solutions. They also offer a health check service of FinTechs, providing a stable vetting process as well as assessing a specific application of the FinTechs offerings. This helps allay fears that FinTechs may not survive long enough to implement the solutions they have developed.

FinTech companies often have the solution while the financial services institution has the market knowledge. This is where the Digital Services provider can be most effective in forging a unique and beneficial relationship between the two parties. They understand the customer. It must then understand how the FinTech company can analyze data to ensure the best possible outcome for all, including the end customer.

In closing...

The panel concluded by highlighting how the financial services industry is already being transformed by AI and the work of FinTechs.

Some financial services institutions only want to invest in least-cost, least-risk solutions and see what peers are doing before they act. However, others are embracing the need for change and seeing AI as a "catalyst" or "accelerator for change".

AI if adopted properly and with necessary due diligence has the power to transform almost every aspect of the industry, including the all-important relationship with the customer. But it must remain subservient, enabling what is done in the front and back office or helping make better decisions or reducing costs, rather than making decisions independently.

Here, FinTechs are both the challengers and facilitators. They may appear to be small when compared to the established financial services institutions, but the likes of Google and Amazon are vast. If one of these were to open a bank, it would be a significant challenge to the incumbents; something Damien Judge said would put the banks under immense pressure.

Effective and efficient collaboration between financial services institutions and FinTech companies offers many strategic opportunities. However, FinTechs will only become successful strategic partners if the bank shares the data it has – following all necessary security measures to protect the customer. Successful collaboration rests with the common understanding and recognition of each partner's strengths and weaknesses as well as how they add strategic business value.

Breakout sessions

Most participants agreed that banks and other financial institutions are largely open to exploiting AI and working alongside FinTechs. It was also noted that many banks already have their own innovation labs. However, the consensus was that there is still room for more innovation within the financial services sector. This will require a change of mindset among senior leaders before there is a broader cultural shift.

There would always be an element of risk involved in embracing innovation and new partners. In this case, the potential risks of AI and FinTechs would need to be accepted or offset in order to move forward.

The opportunity

During the table discussions, participants highlighted real-world scenarios in which AI could add value to financial services. A key theme was that AI allows better, more efficient services with faster reactions. This was evident from the way that AI is already being used to deal with customers.

As one bank executive explained, now they were able to address 25% of customer enquiries 'out-of-hours' thanks to AI. Their response to customer enquiries was 50% faster and the customer onboarding process had also become smoother.

AI could increase people's access to financial services, improve the customer experience and provide a significant element of personalization. As such, the majority of participants were happy with the idea of an AI-based automated service as it had the potential to increase a bank's reach. However, they stressed that this would only work right now if their clients still had a point of contact when needed.

Participants also highlighted how AI would have an impact on internal operations. Speed of processing would be likely to increase – for example, when a customer applying for a loan could get a response within minutes.

In an industry of vertical, centralized data, attendees also highlighted how AI could act as a horizontal layer across vertical databases inside and outside of banks. Since there are often multiple versions of the same data within financial markets, AI could play a vital role in providing more interaction and collaboration between them.

Focus on the FinTechs

Continuing the subject of FinTech engagement, one participant described the relationship with FinTech firms as schizophrenic. On the one hand, traditional financial services institutions want to use FinTechs to improve their business models. But on the other hand, they also perceive them as a threat. Smaller Institutions in particular have a tendency to see FinTechs as competition rather than enablers.

Clearly, participants had already determined that it was important for both partners to take enough time to properly understand each other to avoid clashes. Picking the right partner would be important, not just culturally but also to ensure that the right solution would be created.

Some participants argued that there would always be a degree of conflict in such a relationship – since change is uncomfortable. Institutions would need to adapt to how FinTechs work and think, becoming more agile. There was also the suggestion that FinTechs need to slow down and take a broader approach to make sure their solutions work to fix the bigger problem. As one participant quipped, "A new engine without wheels does not make a car, it's just a new engine."

There was a mixed view around the tables as to whether financial services firms should work directly with FinTechs or bring in service providers for support. One proposed solution was to form a joint venture outside of the existing businesses and resource it appropriately. A faster process would be to bring in third parties that could help integrate partners and technologies into an overarching system to encourage a smoother transformation.

The potential risks

Some companies admitted that their data is in a mess and would need the support of AI to get it into a decent shape to begin with. They also recognized that it was essential that AI tools were trained with the right quality of data. Poor quality data will affect algorithms and ultimately lead to incorrect decisions and poor intelligence.

One pertinent question raised was how could institutions monitor the monitors – namely the AI tools that would oversee data. What were the security implications and how could they handle malicious intent? Furthermore, it was noted that the heavy use of AI comes with a heavy energy cost.

Other worries included working alongside FinTech firms. This was not necessarily related to their role within the industry per se. It was more to do with organizational risk and what would happen if the FinTech went bankrupt.

Atos FinTech Program

Atos and FinTech: Quick facts

- Atos has launched a global FinTech program
- Atos is judged to be a Global Leader in FinTech Services by NelsonHall and IDC
- Atos partners selectively with FinTechs which align with pressing market needs and which complement Atos's capabilities
- Financial services institutions can benefit by engaging with Atos on its Industry Solutions which deliver business benefits through expertly integrated FinTech content

The mission of the program

The FinTech phenomenon has shaken the foundations of the financial services industry offering new ways to create value in an ageing industry. But not every bank or insurer is going to make the FinTech transition. And not every FinTech is going to outlast the initial burst of activity. So how are you going to exploit opportunities to survive and thrive in financial services? As a leader in integrating FinTech solutions, answering this question is our primary focus. That is why we established the Atos FinTech program with three clear aims:

- To give FinTechs improved access to established financial services institutions so they can work together to rapidly achieve global scale in their chosen markets
- To partner Financial Services providers with pre-vetted, quality-assured and road-tested FinTechs, InsurTechs and RegTechs
- To offer unique insights, commentary and research into the rapidly changing FinTech landscape

How is Atos FinTech organized

FinNet: FinNet is our knowledge portal covering the latest trends in FinTech from around the world. Find FinNet at atos.net/FinTech to learn about market developments, emerging sub-markets, and forthcoming innovations.

FinHub: FinHub consists of a team of industry thought leaders and trend watchers who develop our community of pre-vetted, qualityassured, and road-tested FinTechs. Via a stringent selection process, we identify, assess, and partner only those with the strongest possibility of delivering new value with us.

FinLab: FinLab is a cloud-based API platform for you and your partners to create banking or insurance services. We provide the technical blueprints and integration support to fast-track your go-to-market proposition.

FinLab focuses on completing end-to-end customer journeys by bundling FinTech services to demonstrate ways to challenge the status quo.

FinTech and opportunity with Atos

The FinTech, InsurTech and RegTech communities are vital in reshaping front and back-end processes that touch everyone's lives. They positively disrupt the industry to improve value to all who play by changing conventional thinking. It is important to Atos to be there both to disrupt and facilitate the change by leveraging our capability to mitigate the risks associated with the delivery of this much desired innovation on all sides of the client-to-customer transaction.

The opportunity for FinTechs, banks and insurers

With the emergence of FinTechs, banks and insurers are facing new competitive pressures. At the same time, FinTechs face challenges with international regulatory compliance, credit issuance and global distribution channels. Our cloud based FinTech propositions, engagement program and research offer new ways to meet the industry's core transformation challenges head on.

Customer experience

How can banks and insurers give customers a personalized experience in tune with their digital lives?
By partnering with the right FinTechs through Atos to redefine their service portfolio.

Business reinvention

How do businesses of all sizes redefine their ambitions to respond to demand?
By working with a partner to understand the customer, implement change and take advantage of advanced technologies.

Trust and compliance

How can FinTechs, banks and insurers re-establish trust and protect data in a fast-paced world?
By working together to provide innovative services, meet changing regulatory obligations and establish state-of-the-art security.

Operational excellence

How can FinTechs maintain an upward trajectory to ensure they meet customer or regulatory expectations?
By relying on an experienced partner to introduce robust risk management and scale up while staying compliant.

How you benefit

For banks and insurers

• Faster access to prepared, pre-vetted and quality-assured FinTechs
• End-to-end management of FinTech integration within your service ecosystem
• Delivery of new services that customers want with selected FinTechs

For FinTechs

• Partnership opportunities with major Financial Services players
• Co-creation of prototype services within a wider customer journey
• Developing a collaborative go-to-market offering that customers want

Atos FinTech: Global market recognition

Atos is positioned as a Leader in FinTech Services in Banking by analyst firm NelsonHall

• The NelsonHall research noted Atos strengths in FinTech services as its technology capabilities and proprietary IP in credit origination and management, data management and fraud detection; its close relationships with many leading FinTech software vendors and its investment in software-defined data center capability[1]

Atos is named an IDC FinTech Rankings Top 25 Enterprise Company by IDC Financial Insights

• The IDC Financial Insights Rankings categorise and evaluate the top global providers of financial technology based on calendar year revenues from financial institutions for hardware, software and/or services[2]

1. https://atos.net/en/2017/awards_2017_07_17/atos-positioned-leader-fintech-services-banking-analyst-firm-nelsonhall
2. https://atos.net/en/2017/awards_2017_09_12/atos-named-idc-fintech-rankings-top-25-enterprise-company-idc-financial-insights

About Atos

Atos is a global leader in digital transformation with approximately 100,000 employees in 73 countries and annual revenue of around € 13 billion. European number one in Big Data, Cybersecurity, High Performance Computing and Digital Workplace, the Group provides Cloud services, Infrastructure & Data Management, Business & Platform solutions, as well as transactional services through Worldline, the European leader in the payment industry. With its cutting-edge technologies, digital expertise and industry knowledge, Atos supports the digital transformation of its clients across various business sectors: Defense, Financial Services, Health, Manufacturing, Media, Energy & Utilities, Public sector, Retail, Telecommunications and Transportation. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, Unify and Worldline. Atos SE (Societas Europaea) is listed on the CAC40 Paris stock index.

Find out more about us
atos.net/fintech

Let's start a discussion together