

# Redefining the Future of Asset & Wealth Management



Trusted partner for your Digital Journey

**Atos**

## — Management Summary

The proliferation of technology throughout financial services has evolved the way in which the industry operates.

However, whilst some sectors like retail banking have adapted quickly to this change, Asset & Wealth Management has been slow to fully embrace its digital potential.

This White Paper reviews the drivers for adoption of technology within Asset & Wealth Management organisations, along with presenting an overview of the opportunities for digital progression that are available today.

04	Introduction
05	Why Now?
08	Enhancing Enterprise
09	Ethics
10	A Way Forward
11	References

# Introduction



## A Decade of Change

The collapse of Lehman Brothers in 2008 and the subsequent global economic crisis initiated a period of disruptive changes within financial services (FS). Over the following decade, new regulatory bodies and reforms were introduced, FinTech challengers reshaped consumer expectations and platform players such as Amazon and Alibaba diversified into comprehensive service providers. At the same time, the relentless progress made in smartphone technology increased app usage by an average of 121% year-on-year (SensorTower, 2019) bringing dramatic changes in consumer expectations and in the "art of the possible" in customer engagement.

This change in expectation has begun to shift the status quo between financial services providers and customers from 'transactional' to 'enduring', causing both opportunities and threats for industry providers. In commercial banking, these digital disruptions have manifested in the form of hyper-personalisation of experience, the popularisation of public API platforms and fragmentation of business models into decoupled layers of the banking stack. Within insurance it has been customer intelligence and Internet of Things cost and accountability drivers. Finally, within savings we have seen increased liquidity of assets and frictionless service switchover.

It is clear from these changes that consumers demand greater levels of intimacy and persistent relationships with the firms they entrust funds to. So why is it that the Asset & Wealth Management (AWM) arm of financial services has only seen incremental improvements to service over that same time period, which have done little in the way of enhancing customer experience and have instead tangled the core offering of most investment firms in additional layers of technical debt and increased operational cost?



## Headwinds in Asset & Wealth Management

At Atos we believe that AWM as an industry has been making steady progress and has created value for investors but there are factors that have reduced the risk appetite for reaching the full potential of digital.



### Operational Costs

We have seen that that operating costs within the AWM industry have increased by 60% (McKinsey&Company, 2018) between 2007 and 2017. This dramatic increase can be largely contributed to the host of regulatory changes coming after the global financial crisis, complexity of asset classes, new products, new distribution channels and an economic recovery which led to a significant increase in assets under management (AUM). As a result of this, focus in the industry sits predominantly with the ability for technology to reduce TCO (Total Cost of Ownership), this has kept the focus away from exploring innovation and modus operandi have largely remained the same.



### Legacy Technology and Processes

Innovations have prioritised building upon legacy processes over searching for new value creation and this has contributed to an increase in the cost of operations and technology, embedding a legacy mindset and straining the speed towards digital. Despite there being a wide range of options available to achieve operational improvements and cutting-edge investment offerings in data and digital.



### Segregated Digital Thinking

There is a distinct separation between technology and investment functions that is impacting the industry's ability to grow from a digital standpoint. For example, the talent from respective functions are not working together to create complementing synergies which can help achieve a digital change.



### Legislation Hot Fixing

Looking at the list of new regulations in AWM over the past four years alone seems daunting, these regulatory changes pose significant technical and operational challenges that must be met appropriately.



### Digital Monopolisation

Finally, there is a lack of clear vision when it comes to setting a high digital standard or digital alpha. Even though digital leaders in AWM outperform their peers when it comes to technology costs over revenue, growth on AUM and profit margins (McKinsey & Company, 2018).



There are several factors that make now the time for Asset & Wealth Managers (AWMs) to implement widespread digital change in their organisations in order to avoid being disintermediated. These range from regulatory constraints, to the global pandemic which has digitised the world of work at an unprecedented speed. Thanks to these factors the AWM industry is changing in orders of magnitude compared to previous decades. We believe that now is the time to act with regards to digitally transforming AWM and future proofing many aspects of the organisation's offerings and operational capabilities.



## Regulation

In many ways the financial crisis of 2008 shifted the perception of legislation from being a barrier to innovation to becoming a driver behind new opportunities for financial services firms, with the likes of PSD2 and CRD IV in the EU attempting to generate new services that benefit predominantly the end consumer. PSD2 stands out as a regulatory change that was designed to encourage competition and has been the enabler of open banking in the FS industry, but some like Solvency II were seen as a constraint. None-the-less, AWM as an industry is beginning to see a regulatory shift towards more proactive and service-enabling rule sets, led by the introduction of the Markets in Financial Instruments Directives (MiFID II) in 2018.

The main aim of MiFID II was to bring increased market transparency and product governance requirements that ensures investor protection. Regulations such as MiFID II, coupled with projects such as TISA's Open Savings & Investments demonstrates a shift towards transparency, driving more competition in the marketplace whilst subsequently placing pressure on margins, and AWMs are feeling the strain. 66% of asset managers stated that MiFID II has increased

their workload (Chandler, 2019) on minimum portfolio sizes as a result of increasing management fees. Atos predicts that Distributive Ledger Technology (DLT) is one technology likely to grow within the industry due to these changes, resulting in a range of new opportunities for AWMs including data management and reporting improvements. In order to stay competitive in this evolving regulatory landscape, technology must play a key role in improving operational capability and should be championed as the solution.

Driving cost efficiencies has become more pertinent since MiFID II introduced research unbundling to ensure investor transparency for costs on research. As most AWMs bear the cost of research instead of passing this cost onto clients, we have seen a 20-30% reduction on research spend (FCA, 2019). Reports on research quality have been mixed, with a review by the FCA ascertaining that most AWMs believe they get the required amount of research (FCA, 2019). However, a separate review reported a significant decline in the quality of analyst coverage that is particularly severe for UK SMEs (market cap of less than \$1bn) (Karunaratne, 2019).

To deal with the pressures of changing regulations, the AWM industry is finding innovative solutions. MiFID II requires AWMs to report on various forms of data for transparency. Due to multiple data sources, a large distribution network and an emphasis on repetitive reconciliation tasks, this was a complex issue. AWMs are now responding by embracing leading edge technologies like DLT to create a new distributed industry platform for reporting EMT (European MiFID Template) data. The TISA Universal Reporting Network (TURN) is a cutting edge example of DLT being implemented in order to address exactly this, TURN has the potential to create substantial cost savings from year one by reducing the reporting overheads that are driven by repetitive reconciliation of data (TISA, 2020). TISA is partnering with Atos to create the platform, with Deutsche Bank, Fidelity International and more involved in the building and testing. This clearly shows an appetite within the industry to embrace new technologies in order to respond to regulation when there is opportunity for technology to reduce compliancy and operational costs.



## Changing Consumer Demands

We believe that regulators will not only be influenced by the past behaviours of financial services firms in determining their regulatory roadmap, but also the increasing velocity of changing consumer behaviours as we progress further into the digital age. There are four key areas in which demand is shifting within the AWM industry.

Digitalisation has led to a diverse range of products and platforms available to the masses. Investors are more technology literate, enabling greater utilisation of data and more awareness of the opportunities to diversify their investment portfolios. Customer expectations have grown as a result of this, placing AWMs under pressure from new offerings, like trading platforms in the FinTech arena and new asset classes such as crypto currency.

Secondly, the mindset of investors has changed, with many now placing equal emphasis on the sustainability and social

impact of their investments, alongside their expected returns. Now there is a greater demand for transparency and visibility from investors and the ability to swiftly liquidate funds if investment conditions are not met. The rise of globalisation and greater integration of communities have also nurtured demand for bespoke portfolio offerings. For example, halal investment opportunities for the global Muslim population or the increasing awareness of decarbonisation, even the measure of capital allocated against meeting the United Nation's Sustainable Development Goals (SDGs). ESG scores have played a large part in meeting this demand, however now more than ever investors are looking for data driven certainty that their capital is being deployed according to their values and the ability to view the outcomes of the investment.

Additionally, there has been a shift in investors' appetite for risk as a result of the financial crisis, which has caused a significant

increase in popularity of low risk products, with fixed income products being one such example. AWMs who have historically charged greater margins on active equity funds have seen more withdrawals, this being partly due to their passively managed counterparts outperforming them, even during the volatile markets that we have seen as a result of Covid-19 (Financial Times, 2020). For the traditional AWMs, fee structures are adapting from the 2/20 model (2 % annual management fee and 20% of profits) of the past.

AWMs will have to review and potentially redefine their purpose as they progress their investor engagement strategies in order to remain relevant to the increasing market awareness of consumers. Hence, we believe Digital will be a key enabler in the execution of the demands of the 21st Century consumer and the next decade will be paramount in determining the key players that utilise this tool to its full potential.



## Covid-19

Whilst the 2008 financial crisis has undoubtedly influenced market changes over the past decade, 2020 has brought a new crisis which although is not rooted in financial services, will undoubtedly bring a new wave of knock-on implications for the AWM industry – the COVID-19 pandemic.

The pandemic has clearly shown how quickly the stability of all areas of “normal” life can be shaken, from government policy to personal freedoms and job prospects to perceptions of risk. Things that might have been previously considered unthinkable, suddenly become a reality. Government policies on public spending and borrowing are overturned at a stroke with bailouts being promised to the tune of billions of [€£\$...].

employees on furlough face rapidly rising unemployment prospects, savings returns are squeezed further as negative interest rates are contemplated and industry stock values collapse, entire industries (e.g. travel and hospitality) are shut down at a stroke, and public and private indebtedness hits record levels, continuing to rise.

How will the AWM industry respond to this new crisis and is it just a question of riding the storm or taking a proactive role in supporting the recovery of the global economy? It is almost inevitable that new ways of thinking will be required – ones that embrace efficiency, agility, transparency and purpose, with investment approaches that reward bigger picture thinking to collective benefit realisation. It is highly likely that

just as we now work differently, shop differently and interact differently, we will also now invest differently – 2020 has brought the perfect storm to transform many aspects of the financial services industry. Atos anticipate even more pressure from non-traditional service providers who offer data-driven ecosystem platform solutions that bring a level of choice and risk transparency way beyond that of established providers. A new wave of competition from the so-called digital giants (Amazon, Google, Facebook etc) may arise as they further leverage their digital dominance, market reach and corner sections of the market with their focus on customer engagement. The COVID-19 pandemic looks set to be the most effective catalyst for digital transformation yet.



## Data Democratisation

As legislation, globalisation and market demands become ever-increasingly more progressive, the rules of cooperation and transactions within business networks become understandably more complex. There are key data points and sources that AWMs use to inform the decisions that they make, not all directly held by their own organisation. Business network participants desire standardisation of these rules and may be willing to surrender sovereignty on selected data elements

to achieve it, providing those willing to invest in a platform the opportunity for high volumes of transactions and the resulting data. These parties are known as the Ecosystem Platform Operators.

Ecosystem platforms are underlying technology environments which facilitate trustful exchanges of data, services and value between parties within a business network (Atos, 2020). We have already seen the first steps towards ecosystem

platform thinking with the introduction of Aladdin platform by Blackrock, standardising many of the tools used in portfolio and risk management for any AWMs within a single integration standard. Platforms such as Aladdin are already generating the volumes and value chains necessary for enabling services such as data analytics, extreme personalisation and machine learning for the entire AWM ecosystem to leverage.



## FinTech Influencers

Only very recently have players in the AWM industry begun to seriously acknowledge the prospects of incorporating FinTech services into their own propositions. FinTech has been a widely used term as recently as 2015 pertaining to the use of digital technologies in the delivery of financial services and seeing widespread adoption within B2C markets such as commercial banking, core savings products and micro-trading. In 2016, a survey gathering data from the FS sector found that whilst 60% of AWMs feared losing part of their business to FinTech companies, 34% still did not innovate with FinTech themselves. (PWC, 2017)

Delivering high customer value via digital channels has become popularised by FinTech providers, and the market now expects an omni-channel, hyper-personalised approach to digital banking, forcing many retail banks to implement successful customer portals which aggregate a multitude of internal and external services to compete with their NeoBank counterparts. However, many AWMs have not yet followed suit in manoeuvring their digital engagement with customers and back office processes alike.

Historically the 'mass-affluent' have not interacted with AWMs however, FinTech influencers such as Trading212, eToro and Robinhood have reached this 'mass-affluent' by utilising digital technologies to change business models. For example, eToro embraces social media characteristics with its CopyTrader feature to allow consumers to mimic the behaviours of top traders and Robinhood attracts new investors with commission-free stock and asset trading to mobile users in the US by baking fees directly into stock purchase price. Traditional AWM organisations will need to utilise digital in order to create unique go-to market strategies that facilitate the growing segment of digitally native consumers.

Whilst it is easy to see the customer facing ways that FinTech has shaped financial services offerings today, financial technology has also made large strides in evolving the inward operations of firms such that AWMs can now make more informed decisions about investments. Many of the tools used by the modern-day AWMs are derived from the leveraging of data visualization, RPA and AI. Stress tests (a tool allowing managers to simulate how

a portfolio might react to various pressures, for example a recession) are a simple example of the powerful way in which FinTech can be leveraged to bring value to the operations of AWMs. The technology required for such 'Monte Carlo' simulations would require impressive computing power and as the boundaries of software in finance are pushed so too are the boundaries of hardware in finance.

As the industry evolves, players in the AWM industry wanting to excel in the current climate must accept change and embrace the possibilities of FinTech in a sustainable manner.

# Enhancing Enterprise



## Data & Insights

At Atos we believe that to address the challenges and ever-evolving landscape of AWM, data will be a key element and differentiator.

The more data available each day from a variety of sources, (e.g. satellite imagery of mining operations or tweets referencing a specific brand) the more valuable insights are available to AWMs. So, how do players within the industry take advantage of this influx of new data? This is a question which is being tackled by every industry and market on the globe. Technology is advancing in such a way that facilitates the organisation, visualisation and measurement of this data.

The AWMs of today have access to comprehensive, insightful information that their counterparts 40 years ago could not dream of.

Market, Customer and Fund data are the crucial areas of data that AWMs need accuracy from. Some of the challenges that affect this data include the data being; unclear, untimely and inaccurate, this issue affects most aspects of the decision-making process that AWMs face. However, a manager's ability to gather or inspect this data in its raw form is limited, so how can technology help? The importance of the ability of technology to process data cannot be understated.

With computer processing speeds increasing along with an ever-increasing list of data sets to be analysed, AWMs need to take full advantage of the power of technology to unlock the vast, obscure, unclear data that could hold the key to the insight that informs their next decision. Whether this be the visualisation of historical trends via a simple line graph or AI driven sentiment analysis of the latest quarterly earnings report, without access to data the portfolio manager is blind. The platform with which they choose to access data is the tool with which they use to view their working world.



## Operational Technology

Imagining the art of the possible is key to maintaining an adaptable business model - allowing for the exploration of new ideas and for the pursuit of future ideals. However, we also believe it is imperative to be objective with the key drivers of cost and opportunity in an organisation such that when technology is implemented, it tackles these areas effectively and creates measurable value. AWM firms aren't free from the costly administrative needs that come with running a large organisation, many of which are

the aforementioned key drivers of cost. Technology in the 21st century is adapting to meet these needs at a rapid rate.

Customer Relationship Management Software and Cloud Computing can contribute greatly to reducing AWM costs and consequently their associated management fees. These are two widely adopted technology solutions, implemented across many industries, but the possible areas for application of existing technology

in AWM in order to reduce management fees are vast and continue to grow alongside their respective tech offerings.

Proof of concept phases and centres of excellence will play a key role in demonstrating the value of these solutions, they'll also act as key milestones, marking progress and quantifying value creation. Yet the overall synergy between core functions and technology departments will define the firm's progression towards digital.



Any strides taken in digitalisation without accounting for ethics will be made in vain – particularly within the AWM industry. Whilst any digital solution will still adhere to financial regulation, the wider picture of embedding ethics into solutions is a hotly discussed topic – Atos have covered this in detail in the Atos Digital Vision: Ethics opinion paper (Atos, 2020).

A key component of the digital future is AI – its ability to intersect data science with societal goals provides significant potential for progress. Whilst this can be used to overcome human bias (a fully understood problem within AWM) difficulty arises in ensuring bias isn't built into an AI solution. Once poorly selected data is used to train AI, social, gender, racial or other biases can creep into decision making without human intervention. The future ecosystems powered by AI will not only have to deliver on efficiency but also have excellence. These ecosystems will drive decision making and it is absolutely necessary that the AI behind the scenes is trusted.

We believe that trust will be the differentiator in how quickly AWM adopts AI. Future solutions need to extinguish the ambiguity of the technology and the decision-making process. Investors and clients will need to establish how and why investment decisions were made, what considerations took place and what the potential result could be via explainable AI principles. Following guidelines such as the European Commission's 'Ethics

Guidelines for Trustworthy AI' (European Commission, 2019) could prove crucial to ensuring that AWMs achieve the necessary standards of trust that will be expected from AI implementation. This will be even more important as the AWM world is becoming more ESG (Environmental, Social & Corporate Governance) conscious. At Atos, we believe that AI, if implemented with the right ethical framework will enable the industry to invest in a more ESG driven mode and bringing sustainable returns.

There also needs to be trust in AI to handle private customer data, and processes in place to ensure it isn't sent where it's not supposed to be. A link between these issues circle around auditability and accountability of input, processes and outputs from any given solution, which stems from a lack of transparency of data transactions. An understanding of ownership of data generated is fundamental for any cross-platform multi-party digital solution. These are significant challenges to overcome, which can be a blocker unto itself.

Fear of the unknown can prevent any form of change when the current ways of working are familiar, even if they are fraught with problems of their own – the devil you know is better than the devil you don't. But a shift in perception is needed to realise that digital solutions can be designed to systematically fight these issues, including transparency of data transactions. Blockchain is a prime example, designed from the ground up to ensure data/value exchange across independent parties that forgoes a single gatekeeper to the data, and shaped by features of visibility, transparency, immutability, auditability and real-time insight. Therefore, we strongly believe that Blockchain/DLTs will be the foundation of many future ecosystems. This will give data owners, regulatory bodies and investors' confidence in privacy and transparency of future ecosystems and be an enabler in participating in industry led ecosystems.

Digital solutions alone are not the saviour of ethical progress. But if it's not seen as an ally, then progress will be forever hindered.

# A Way Forward



## Hyper Personalisation (AI)

As technology progresses and we have access to more data along with enhanced analytical capability courtesy of artificial intelligence tools, the role of the financial advisor in the AWM industry will trend towards deep personalisation for the clients. Financial advisors will have access to historic investment data to understand the patterns in their clients' investment decisions and be able to offer opportunities that may appeal to them. For example, being on Amazon.com and being presented with "you may also like" or "customers also bought" type of investments to add a real personal touch to the client offering. These changes may seem incremental, but they are adding to a new dimension for clients and evolving the status-quo.



## Be First, Be Smart, or be Both

In the connected world we live in, it is inevitable that data will be generated from each; transaction, news headline, social media post and many other sources. However, for the AWM industry, the key is to gain advantage, by making use of those new data points to generate value. For example, profiling new clients based on the above-mentioned data points, gathering 'customer DNA'. This could be looking at a magazine article of a tech entrepreneur who becomes wealthy and could be looking to invest, a YouTube star who becomes an overnight celebrity with 1 billion views or a sports star who signs a record-breaking sponsorship deal. This information is all around us and readily available, but what is required are technology enabled tools like AI and ecosystems to analyse and untangle the data in order to act upon it.



## Client Interaction

There is no doubt in that we live in a new reality post the COVID-19 pandemic. In April 2020, the CEO of Microsoft said "we've seen two years' worth of digital transformation in two months" (Nadella, 2020). AWM players who were still debating the pace of their digital agenda have had no choice but to accelerate their efforts and get on-board with new channels for client interaction or risk being left behind. Digital conferences and video calls have become the norm for all matters of discussion, regardless of their significance. The interaction between investors and banks saw limited disruption and it was business as usual. For example, trading desks at top investment banks on Wall Street were replaced by home offices and we still saw record levels of trade transactions in order to meet client expectations.

Future ecosystems within the AWM industry will have to have customer experience at the heart of their operations. How clients interface with their advisors, view their investments and the level of transparency will be key requirements in retention. Digital interaction will still have to be complemented by physical meetings and determining what works well for each client. However, KYC will have to go beyond the regulatory framework, and it will be much more about forming a relationship that works well for both parties. For example, a tech-savvy millennial may be happier with a digital only experience, yet a more traditional client may prefer face-to-face meetings.



## Quantum Solutions

There is no doubt that quantum computing will present extraordinary opportunities for the FS Industry in the near future but how can AWMs prepare for and take advantage of the power of Quantum? We believe that as this technology progresses, we will see a shift from quantum being a cutting-edge technology to required IT hardware. As this technology filters into the AWM industry, players must take the necessary steps to prepare their firms for the changes in their industry to come. Atos has set out 5 key opportunities to prepare for these changes, covering; learning & development, quantum teams, quantum development tools, application readiness and quantum risk assessments. Please see our 'Quantum computing in financial services' (Atos, 2018) paper for a more in-depth look at the exciting opportunities that quantum computing presents in FS along with the way in which Atos can assist in taking full advantage of a quantum world.



## Data & Asset Ecosystems

Atos anticipates that over the coming years, the full potential of business platforms such as Aladdin will be fully realised. However, some organisations may become uncomfortable with the tethering and centralisation of these large volumes of data. This may force the AWM industry to reevaluate the governance structures of such platforms, opting for solutions such as distributed ledger technology and API interfaces to decentralise and untangle some components of the platform, avoiding single organisations from owning all the influence over the technological tools employed by the industry.

Organisations may choose to rebuild components of the platform individually and reconcile the standards under an ecosystem platform in which creators of data and value on the network own the permissions and rights to those assets. Regulators may be willing to support this by providing guidelines of cooperation and limiting centralisation. Collaboration focused regulations can provide the certainty that companies require new approaches and foster innovation. But it may be that some jurisdictions lack the risk appetite, leaving it to industry organisations to take the lead in fostering less monopolised ecosystem platforms and landscapes.



## Conclusion

For AWMs, the evolving nature of the industry could prove to be a frustrating disruption to their BAU activities, or it could prove to be an opportunity. By objectively analysing both the key pressures faced and the subsequent technology opportunities, AWMs can begin to form their outlook on what exactly their journey towards digital will look like.

Both the internal operations and external offerings of AWM firms should continue to evolve alongside the developing market that they operate in. In order to facilitate this evolution, they must adopt a suitable strategy that champions their progress towards digital and encourages interaction between core functions and technology departments. Those firms that shy away from these changes, seeing technology as a means

to an end, may fall victim to the pressures of the industry in a way that their more agile, tech-enabled counterparts do not.

Asset & Wealth Management firms should embrace technology in an objective and sustainable manner, that not only looks boldly into the future but also realizes the opportunities available today.

**Atos. (2018, May 1).**  
Quantum computing in financial services.  
Retrieved from atos.net:  
<https://atos.net/wp-content/uploads/2018/05/Atos-Quantum-FS-white-paper.pdf>

**Atos. (2020, March 01).**  
Digital Vision Ethics.  
Retrieved from atos.net:  
<https://atos.net/wp-content/uploads/2020/04/atos-digital-vision-ethics-opinion-paper.pdf>

**Atos. (2020, June 01).**  
Journey 2024, Future Vision, Refining Enterprise Purpose.  
Retrieved from atos.net:  
<https://atos.net/wp-content/uploads/2020/06/atos-journey2024.pdf>

**Chandler, B. (2019).**  
Report says MiFID II is impacting on wealth managers and platform providers' businesses.  
Retrieved from <https://www.wealthadviser.co/2019/07/03/277043/report-says-mifid-ii-impacting-wealth-managers-and-platform-providers-businesses>

**European Commission. (2019, April 9).**  
Ethics Guidelines for Trustworthy AI.  
Retrieved from ec.europa.eu:  
<https://ec.europa.eu/futurium/en/ai-alliance-consultation/guidelines#Top>

**FCA. (2019).**  
FCA finds MiFID II research unbundling rules working well for investors.  
Retrieved from <https://www.fca.org.uk/news/press-releases/fca-finds-mifid-ii-research-unbundling-rules-working-well-investors>

**Financial Times. (2020, September 01).**  
Active funds fail to outperform passive rivals despite Covid-19 opportunity.  
Retrieved from ft.com:  
<https://www.ft.com/content/d3ddba89-c220-4ebc-a89f-fdc97af8c9c4>

**High-Level expert Group on Artificial Intelligence. (2019, April 9).**  
Ethics Guidelines for Trustworthy AI.  
Retrieved from ec.europa.eu:  
<https://ec.europa.eu/futurium/en/ai-alliance-consultation/guidelines#Top>

**Karunaratne, N. (2019).**  
Equity research quality declines under Mifid II.  
Retrieved from <https://www.investorschronicle.co.uk/company-news/2019/10/17/equity-research-quality-declines-under-mifid-ii/>

**McKinsey & Company. (2018, November 9).**  
Achieving digital alpha in asset management.  
Retrieved from McKinsey.com:  
<https://www.mckinsey.com/industries/financial-services/our-insights/achieving-digital-alpha-in-asset-management>

**McKinsey&Company. (2018, November 01).**  
The state of the European asset management industry 2017.  
Retrieved from mckinsey.com:  
<https://www.mckinsey.com/-/media/McKinsey/Industries/Financial%20Services/Our%20Insights/Full%20speed%20ahead%20in%20European%20asset%20management/The-state-of-European-asset-management-2017-web-final.ashx#:~:text=The%20European%20asset%20management%20ind>

**Nadella, S. (2020, April 30).**  
2 years of digital transformation in 2 months.  
Retrieved from microsoft.com:  
<https://www.microsoft.com/en-us/microsoft-365/blog/2020/04/30/2-years-digital-transformation-2-months/>

**PWC. (2017, Aug 31).**  
Beyond automated advice How FinTech is shaping asset & wealth management.  
Retrieved from pwc.com:  
<https://www.pwc.com/gx/en/financial-services/pdf/fin-tech-asset-and-wealth-management.pdf>

**SensorTower. (2019, January 19).**  
The Top Mobile Apps, Games, and Publishers of 2018: Sensor Tower's Data Digest.  
Retrieved from SensorTower.com:  
<https://sensortower.com/blog/top-apps-games-publishers-2018>

**TISA. (2020, July 1).**  
Open Savings & Investment  
Definition of problem and proposed solution.  
Retrieved from tisa.uk.com:  
<https://www.tisa.uk.com/wp-content/uploads/2020/09/OSI-July20.pdf>

**TISA. (2020, September 21).**  
TISA reveals new blockchain utility will cut asset management data and analytics costs by up to 90% from year one.  
Retrieved from www.tisa.uk.com:  
<https://www.tisa.uk.com/wp-content/uploads/2020/09/TURN-release-September-2020-V4.pdf>

## References

## Acknowledgements

**Fahad Faisal** – Head of Client Innovation - Financial Services UK&I

**Joe Thomas** – Business Consultant

**John Hall** – Head of Portfolio UK&I

**Matt Cresswell** – Financial Services Innovation Lead UK&I

**Navin Rudhra** – Digital Transformation Consultant

**Oliver Townsend** – Business Consultant

# About Atos

Atos is a global leader in digital transformation with 110,000 employees in 73 countries and annual revenue of € 12 billion.

European number one in Cloud, Cybersecurity and High-Performance Computing, the Group provides end-to-end Orchestrated Hybrid Cloud, Big Data, Business Applications and Digital Workplace solutions. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos|Syntel, and Unify. Atos is a SE (Societas Europaea), listed on the CAC40 Paris stock index.

The purpose of Atos is to help design the future of the information technology space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Find out more about us

**[atos.net](https://atos.net)**

**[atos.net/careers](https://atos.net/careers)**

Let's start a discussion together



For more information: [fahad.faisal@atos.net](mailto:fahad.faisal@atos.net)

Atos, the Atos logo, Atos | Syntel and Unify are registered trademarks of the Atos group. January 2021 © Copyright 2021, Atos S.E. Confidential information owned by Atos, to be used by the recipient only. This document, or any part of it, may not be reproduced, copied, circulated and/or distributed nor quoted without prior written approval from Atos.