



CIO

InsideNow

AI in Asset Servicing

AI is disrupting the day-to-day operations of asset servicing. The AI revolution has started and within five years, technologies across the AI spectrum will drive dramatic change.

Authors

Jean-Pierre Maissin - [Sponsoring] Partner - Analytics and Information Management - Deloitte

Nicolas Griedlich - Director - Analytics and Information Management - Deloitte

Philippe Hijazin - Senior Manager - Strategy Regulatory & Corporate Finance - Deloitte

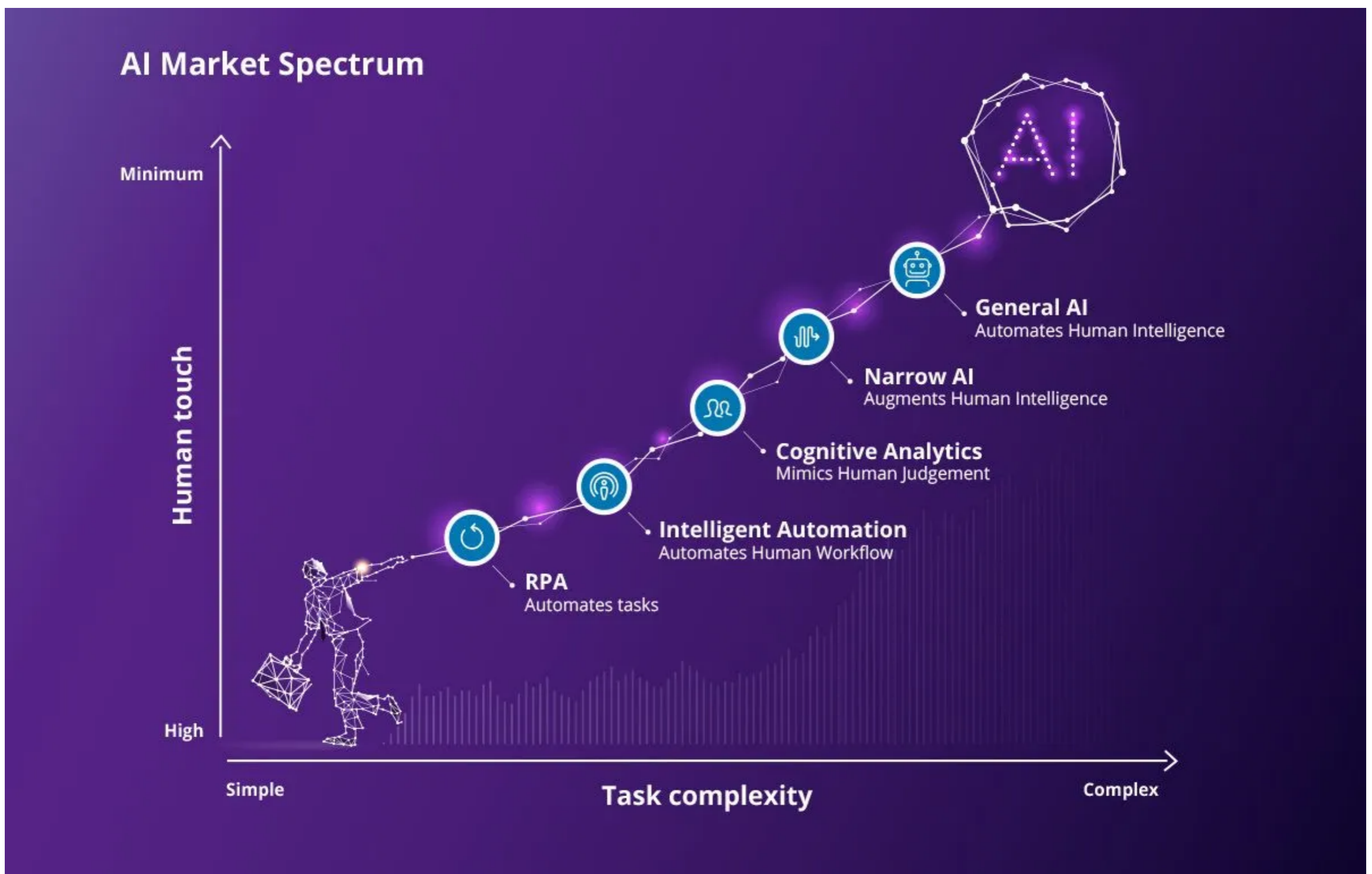
Anke Joubert - Consultant - Analytics and Information Management - Deloitte



AI is disrupting the day-to-day operations of asset servicing. The AI revolution has started and within five years, technologies across the AI spectrum will drive dramatic change. Certain unique characteristics make this especially true for the asset servicing industry. The industry is constrained by relatively poor integration of technology platforms, which introduces process inefficiencies [1]. Customer expectations are changing, driving higher demand for technology enabled services. A stringent regulatory environment imposes requirements that slows down innovation. Furthermore, the industry consists of a large workforce doing mostly manual, repetitive tasks. Key trends will indicate how AI will have positive effects to eliminate these shortcomings [2].

WHAT ARE THE KEY AI TRENDS IN THE ASSET SERVICING INDUSTRY?

AI will influence asset servicing across the AI market spectrum. Interference on the lower range such as RPA can be a quick win to increase productivity and pave the way towards more sophisticated AI implementation. This will create an asset servicing industry that looks very different from what we know today. Seeing how and where AI can disrupt the status quo will help asset servicers create a conceptual roadmap for their industry.



RPA is an easy way to introduce AI with low complexity. RPA enables automatic transaction processing, data manipulation and response triggering – implementing this automation across the value chain can reduce the manual workload and save time for more complex tasks. Automation alone can lead to significant cost reduction of around 35 percent, consistency in task execution, and reduced error susceptibility [2].

Intelligent automation moves toward less human intervention and higher task complexity, including fields like text analytics and scripted task bots. Cognitive analytics goes further to mimic functions of the human brain such as natural language processing (NLP) and pattern recognition. This can lead to automation of back office activities such as net asset value (NAV) dissemination, fee billing, and client reporting. These services will create meaningful insights and metrics for strategic decision-making.

Narrow AI moves toward image and speech recognition, deep learning, and natural language understanding (NLU). Know your client (KYC) and anti-money laundering campaigns can be implemented by combining narrow AI and the larger amounts of available data [3]. AI-enabled analytics and CRM tools will provide differentiated insights to enhance existing client servicing models. These tools can equip sales teams with easier and quicker access to relevant content [4].

Quantum computing and natural language generation (NLG) lie within general AI that aims to automate human intelligence. Automated portfolio commentary platforms through NLG, in conjunction with portfolio analytics software, will save time and improve customer communication through high quality, consistent commentary [5].



HOW TO ENSURE QUALITY AI OUTCOMES?

The increased implementation of AI in the financial industry could pose policy concerns. This is especially alarming, due to the lack of international regulatory standards for AI in asset servicing [6]. Proactive AI governance starts with a data governance-operating model with clearly defined roles and responsibilities for data owners, data stewards, and the data governance committee [7]. AI should be seen as an asset – thus after AI implementation, the model should be maintained as any other business asset. Deloitte encourages the following principles to ensure quality AI outcomes:

GARBAGE IN, GARBAGE OUT

With AI implementation comes the responsibility to monitor the appropriateness, completeness, and integrity of data. This requires up-front business and technical checks involving the operational workforce to create accountability [8]. Quality should be ensured along the data value chain throughout data collection, data quality controls, data aggregation, and reporting [9]. Monitoring AI use cases over the long-run will ensure that the AI output remains appropriate and answers current business questions.



DO NOT REINVENT THE WHEEL

It is important to know what has been done, in order to benefit from the lessons learnt and knowledge gained in the industry. The Institute of Electrical and Electronics Engineers' (IEEE) Ethically Aligned Design (EAD1e) details foundations for transparent and impartial intelligent systems [6]. The CSSF's (Commission de Surveillance du Secteur Financier) white paper gives valuable insights on financial sector specific AI opportunities, risks, and recommendations [10]. The asset servicing industry could reuse these defined standards to their advantage while leveraging off their maturity in data governance. Integrating AI measures with existing data policies, would already cover certain key considerations.

TWO HEADS ARE BETTER THAN ONE

The industry should collaborate to set a generally accepted AI implementation code. Regulators will be more prone to recognize the efforts of a majority of the asset servicing industry than that of a single company [6]. Such a collaboration would be possible through the establishment of a new working group or with the support of an existing body such as the Association of the Luxembourg Fund Industry (ALFI) and the European industry association, EFAMA.

UNBOX THE BLACK BOX

AI results can be complex and hard to explain. Transparency will help ensure high quality outcomes and avoid risky AI decision-making. Part of AI implementation should involve understanding the reason behind the results. This investigation should include checking for bias and unfairness in the training data as well as in the algorithm itself. Additional back testing for model maintenance would ensure that results stay accurate over the long-run. The AI decision-making process must be clear, transparent, and explainable to realize the full potential of responsible AI [11].



HOW CAN ASSET SERVICERS PREPARE FOR AI DISRUPTION?

Key AI trends highlight the large impact of AI in asset servicing. This can lead to major disruption if companies who are not prepared. Companies who anticipate and embrace AI will reap the benefits of AI as a strategic differentiator: lowered costs, improved productivity, and an evolving client base. In order to capitalize on the upward growth trend, asset servicers will need to invest in supporting technology [12].

The Deloitte Analytics Catalogue has multiple AI use cases across the banking, insurance, and investment management sectors. This gives a broad overview of AI possibilities in different phases of AI implementation.

To take advantage of available data for defining smart objectives, our data valorization and

monetization approach dedicated to information management (IM) is the ideal solution.

Deloitte also has an innovation framework accelerator, which manages the process of idea generation, selection, implementation, and decommissioning.

It is clear that AI is disrupting and will continue to disrupt the asset servicing industry. Be prepared. It is important to analyse your resources and assess possible use cases. Select the relevant use case to assure starting with quick win topics where your business has the needed data and infrastructure in place, keeping data quality in mind throughout. Start small, but start right. Deloitte recommends six steps that can help asset servicers be industry leaders in the AI revolution [2].

Six steps to become a leader in the AI revolution



Senior management skillset

Technology-focused management is integral in fostering a technology-focused business culture. Strategic decisions should reflect the vision of technology disruption.

Align hiring plans

Hiring plans that reflect the shift from labor-intensive tasks, to more automated tasks will pave the way forward. Recruiting tech-savvy individuals and developers early on will drive AI implementation.

Strengthen client relationships

Disruption would allow more time for value-added services and client time. Asset servicers can add value by providing regulatory and market intelligence to clients.

Start small... and fail fast or scale up

Meaningful data valorisation use cases should be assessed through a POC as well as underlying technological assets in order to prove benefits and their relevance as a foundation in you AI journey.

Define success

Multiple goals will shift the direction towards measurable success. Joint ownership between technology and operation increases the probability of reaching goals.

See change as an asset

Innovation leaders and a company culture that embraces change will ensure trust in the midst of undeniable technological disruption.

Sources:


- [1] Robots will strike investment management first. Bloomberg 2016. <https://www.bloomberg.com/news/articles/2016-05-03/cfas-warn-asset-management-firms-should-fear-fintech-most>
- [2] The future of asset servicing: Shaped by three disruptive technologies. Deloitte 2017.
- [3] CFAs warn asset management firms should fear fintech most. Bloomberg 2016. <https://www.bloomberg.com/news/articles/2016-05-03/cfas-warn-asset-management-firms-should-fear-fintech-most>
- [4] Artificial intelligence - The next frontier for investment management firms. Deloitte 2019.
- [5] AI use cases. Deloitte 2019.
- [6] Asset Management Artificial Intelligence standards. Fortune 2019. <http://fortune.com/2019/03/22/asset-management-artificial-intelligence-standards/>
- [7] DAMA-DMBOK Functional Framework. Data Management Association 2014.
- [8] Innovation vision and Framework. Deloitte 2018.
- [9] BCBS 239 - a zoom on the scope. Deloitte 2017.
- [10] Artificial Intelligence - Opportunities, risks and recommendations for the financial sector. CSSF 2018. https://www.cssf.lu/fileadmin/files/Publications/Rapports_ponctuels/CSSF_White_Paper_Artificial_Intelligence_201218.pdf
- [11] Unboxing the box with GlassBox. Deloitte 2019.
- [12] Investment Management: Technology go-to-market. Deloitte 2018.



Conclusion

It is always better to be the disruptor than to be disrupted. AI trends prove to increase efficiency and reduce cost. A quick win is to start with data valorisation on the lower end of the AI spectrum – simple automation could cut around 35 percent of costs. With automated simple tasks, staff can shift attention to more complex tasks. This would pioneer for subsequent introduction of other AI implementations throughout the AI Market spectrum. Now is the time for asset servicers to start formulating tactical and strategic plans. Be proactive and incorporate AI governance from the get go. Six practical steps can guide asset servicers to be ready when the technologies' tipping point arrives and AI changes the day-to-day of the asset servicing industry.

Share #Deloitte**InsideNow**



Analytics & Information Management

The world is changing, fast. Customers are demanding a more personalised experience. Competitors are appearing out of nowhere. Governments and regulators are demanding faster and more accurate reports. The most important answers to your complex business challenges may be hiding in your data. Those who can make sense of the vast quantities of information at their disposal are coming out on top. But in a world where the amount of information is doubling every 2 years, how can we keep up?

© 2021. See [Terms of Use](#) for more information.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. Please see www.deloitte.com/about to learn more about our global network of member firms.

The Luxembourg member firm of Deloitte Touche Tohmatsu Limited Privacy Statement notice may be found at www.deloitte.com/lu/privacy.