



SHOW ME THE VALUE

THE CASE FOR **AI** IN
CAPITAL MARKETS



CAPITAL MARKETS HAS ALWAYS BEEN A PRIMARILY DIGITAL INDUSTRY WITH AN APPETITE FOR INNOVATION.

Decades before artificial intelligence (AI) began gaining mainstream attention, capital markets firms—investment banks, in particular—were testing the waters with precursor technologies. While the rest of the world has been dreaming about self-driving cars and fearing the possible employment impacts of automation, capital markets firms have been making machines work for them with algorithmic trading, quantitative analysis and, more recently, robo advice.

Ours is an industry that has shown a willingness and ability to capitalize on emerging ideas, using them to differentiate our businesses and create value for our clients. It's why capital markets firms are so well positioned to take advantage of the latest technological developments, and why capital markets are poised to be transformed by AI. However, until now, most firms have focused on using these technologies to cut costs, but AI has the potential to create value across the organization in entirely new ways.

THE EVOLUTION OF AI

At its core, AI is a set of technologies that can be used to perform or augment human tasks. Over the past few decades, we have seen a set of technologies evolve that can now learn to sense, comprehend and act.

These developments allow for the digestion of structured and unstructured data (sense), the organization and analysis of these inputs to glean insights (comprehend), and the delivery of responses through appropriate processes or activities (acts). In a capital markets context, that might involve transcribing a trade request received via audio message into plain text, classifying that trade as unusual and automatically notifying the sales team.

What makes AI so transformative though is its ability to learn—often autonomously. These technologies use their experiences to adapt and improve over time, working faster and performing tasks with greater consistency and accuracy at marginal incremental cost. Deterministic technologies that mimic human behaviors are being superseded by intelligent systems that not only perform at or beyond human capacity (today on narrow tasks), but evolve and develop new capabilities like people too. Instead of perpetuating a dependence on programmed responses, and all the limitations and complexity that entails, we're teaching systems how to learn.

FOUR DEFINING FEATURES OF AI

- 1 Sense:** AI can acquire, identify, recognize and analyze structured and unstructured data, such as images, audio and text.
- 2 Comprehend:** AI can use that data to derive meaning, insights or knowledge.
- 3 Act:** AI can use that comprehension to complete a defined process, activity or function.
- 4 Learn:** AI can use those real-world experiences to adapt and improve over time. It's this learning nature that defines AI, enabling it to do different things and do things differently.

FINDING VALUE IN AI

The maturing of AI represents a step change that's creating new opportunities for the capital markets industry—not just five or 10 years down the line, but right now.

To that end, Accenture has identified five key levers that firms can use to derive specific and tangible benefits from this latest generation of AI.

Intelligent automation

Intelligent automation enables automation in new areas that were previously believed to require human intelligence and materially improves the performance of capabilities that are currently automated. That includes taking robotic process automation (RPA) to the next level, augmenting the automation of discrete, low-complexity tasks with cognitive capabilities (e.g., interpreting unstructured inputs, watching for patterns in human behavior and learning how to respond, or self-optimizing). It also includes augmentation of activities like fraud detection, and sales and trading processes to yield improvements in performance.

Today, basic automation replicates simple human activities and maintains consistent levels of quality and output. Intelligent automation creates an opportunity to handle more complex processes, incorporate unstructured inputs, adapt to changes and exceptions, and perform better over time. In capital markets firms, that's relevant not only for back-office tasks, where efficiency remains essential, but across the firm as agility increasingly becomes a key source of differentiation.

Enhanced judgement

Enhanced judgement uses AI to augment human intelligence by evaluating and elevating options for consideration and improving decision making. For example, next-best-action services use cognitive knowledge management systems that draw on inductive modelling and research to produce timely insights on markets and clients that, in turn, inform recommendations to financial advisors.

When an unexpected event occurs, AI can quickly determine which clients are most susceptible from a portfolio perspective and recommend that advisors reach out to them with appropriate information. The goal is to help human employees make informed decisions, consider new strategies and approaches, and ultimately provide better outcomes for both your clients and your business.

Enhanced interaction

Enhanced interaction involves delivering a superior experience to clients through hyper-personalization, conversational interfaces and the curation of real-time information. AI makes it possible to provide a high degree of customization, cost effectively and at scale, by automatically analyzing each client's behaviors. It also makes it possible to engage in more human ways (i.e., conversationally) and offer the right information at the right time in the right context. Firms are looking at cataloging and analyzing sales and trading conversations to better anticipate client needs and increase the effectiveness of interactions.

In capital markets, digital assistants are beginning to transform sales and service interactions. These sophisticated technologies shift the client experience from filling in forms and navigating online portals to engaging in conversation—without the addition of considerable human resources. Used judiciously, digital assistants can enhance interaction in a way that has demonstrated the potential to improve client acquisition, retention and overall satisfaction.

Intelligent products

AI makes it possible to shift where you are on the value chain, access new ecosystems, and bring innovations to market more quickly than ever. It can enable new product and service offerings, make it possible to monetize activities that were previously out of reach, and make existing offerings profitable in new demographic or geographic markets—ultimately resulting in accelerated growth.

Robo-advice is a good example of how a precursor technology has been used in this way in the capital markets space. A typical investment management firm has a minimum asset threshold for its clients, below which

it is unprofitable to provide service. Robo-advice has blurred that line, making it feasible to target and engage with new audiences, and allowing firms to provide services to the underserved. For institutional firms, the notion of AI-powered business-to-business (B2B) interfaces is just beginning to emerge, but the potential and expectations are significant.

Enhanced trust

Enhanced trust involves not only building trust in AI within your organization, but also building trust in your institution among industry players, regulators and clients outside your organization. AI is only effective if the humans around it believe in it and trust that it will help. Functions like compliance, finance, risk, audit and legal are intended to provide control and oversight to ensure your organization is doing what it is supposed to be doing. In a highly regulated environment like capital markets, AI can be a cost-effective approach to governance that offers important insights.

As firms begin to build and use AI solutions, it's important that transparency and traceability remain top of mind. Do you know what these systems are doing and how they work? Understanding the technology's role in your organization and being accountable for its outcomes are particularly important when it comes to AI. One need not look any further than the "flash crashes" associated with algorithmic trading to understand the financial and brand consequences that are at stake.

Most capital markets firms have focused AI efforts on intelligent automation—automating the things they do now. While that's a great place to start, the true value lies in moving beyond and using AI to enhance human judgement, improve how you interact with clients, expand your product and service offering, and build confidence and trust among stakeholders.

AI'S POTENTIAL IN CAPITAL MARKETS

Early adopters in the capital markets industry focused their efforts on compliance, using AI to enhance fraud detection and boost cyber security.

More recently, attention has shifted to client service, in the form of next-best-action and next-best-offer decision making. Looking ahead, risk management stress testing, algorithmic trading and conversational user interfaces are key areas of interest on the horizon.

At the same time that AI trends are being embraced by the industry as a whole, several subtle distinctions are emerging. Many large market players that historically have been on the cutting edge of these types of technological innovations might be struggling to keep pace thanks to massive legacy systems, years of cost-cutting and talent attrition. Meanwhile, more nimble players, mainly in the wealth and asset management spaces, are increasingly using AI to differentiate themselves with clients in an increasingly competitive marketplace.

FIVE VALUE LEVERS OF AI

- 1 Intelligent automation:** Layering cognitive capabilities on automation technologies to enable self-learning and increase autonomy.
- 2 Enhanced judgement:** Leveraging AI capabilities to augment human intelligence and improve decision making.
- 3 Enhanced interaction:** Delivering superior client experiences through hyper-personalization, conversational interfaces and the curation of real-time information.
- 4 Intelligent products:** Using AI to introduce new products and services, and tap into new business models and markets.
- 5 Enhanced trust:** Building trust within the organization using AI, and building trust outside the organization in how AI is used.

FIVE AI ENABLERS

- 1 Compute:** Complex AI techniques require compute processing power to train, run and act.
- 2 Data:** AI success depends on the volume, accuracy and accessibility of your data.
- 3 Ecosystem:** Expanding your ecosystem to include new, third-party digital capabilities to expand outside the four walls of your organization.
- 4 Experience:** How well you understand your clients' goals will determine the quality of the experience, products and services you are able to provide.
- 5 Talent:** Designing, crafting and managing AI solutions requires human resources with specialized skills.

BUILDING A FOUNDATION FOR AI

Finding and realizing the value of AI requires capital markets firms to build a foundation where it can thrive—now and in the future.

Accenture has identified five factors, or enablers, that could help boost value creation and achieve returns faster: elasticity of computing power, data, ecosystem participation, human experience-centered design and talent. Keeping these enablers in mind will be critical as you take steps to lay the groundwork for your journey into AI.

Move beyond automating for efficiency and cost reduction to true growth

Begin by scoring your organization against the five enablers identified above. Where are your strengths and challenges? What do you need to do to close the gap between where you are now and where you need to be to realize the full potential of AI?

Redefine the boundaries of your ecosystem

Identify where you can source data, both internally and externally, to feed your AI engine. Is there data you can share and monetize? Do you see opportunities to expand your dataset by adding non-traditional partners to the mix?

Begin, then iterate from there

The best way to master the AI learning curve is to begin. Create and execute AI proofs of concept rapidly to begin realizing value, acquiring and developing talent, and strengthening your other core enablers. You can—and should—refine as you go.

Set parameters for your AI

As AI becomes more pervasive within capital markets, strong guidelines regarding ethical data use, information sharing, transparency and privacy will be increasingly important. How will you establish governance that can provide sufficient accountability while keeping pace with the technology? How will you ensure that your AI aligns with your core values and ethics? That it benefits not only your business, but your employees and clients too?

The case for AI is clear and growing, but it will take work for capital markets firms to realize the full potential of this evolving technology. AI is ready to work, but are you ready to make it work for you?

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