How can financial services firms derive value from generative AI?

Firms are looking for ways to unlock the power of generative AI in financial services.

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Summary

▸ Financial services firms are moving toward deploying use cases in lower-risk areas: operational efficiency and augmented intelligence.

▸ While varying viewpoints have tempered widespread adoption, notable benefits and strengths have prompted organizations to actively experiment with use cases.

▸ To retain competitive positioning, firms should drive responsible adoption by leveraging experience from navigating AI in a regulated environment.
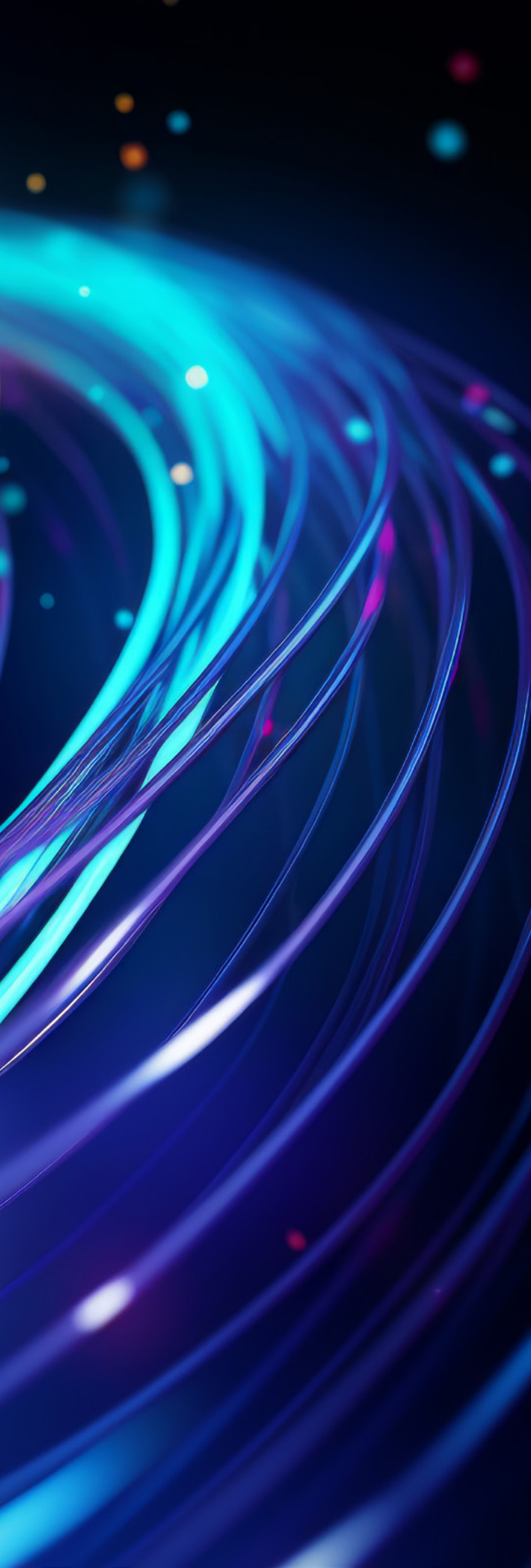
In the ever-evolving landscape of artificial intelligence, large language models (LLMs) have captured the world's attention and ignited a revolution in language understanding and generation. For example, ChatGPT gained more than 100 million monthly active users in less than three months, making it the fastest growing application in history. These remarkable advancements stand at the forefront of generative AI, pushing the boundaries of what machines can do with text and language.

The adoption of LLMs has sparked discussions and varying viewpoints among industry observers, academia, regulatory bodies and the public at large. Governments are being urged to accelerate AI regulation in response to the widespread use of generative AI models and the associated risks they present. Major concerns center around privacy, trust and security.

Despite these concerns, generative AI is widely believed to be a lasting technology that will transform ways of working for numerous industries. The level of expenditure in AI by corporations has been rapidly increasing, as all industries are investing significant time, money and resources in actively evaluating this technology. To that end, some are focused on more controlled experimentation, while others have announced a multiyear commitment of embedding this technology across enterprise use cases.

Value proposition for financial services

While banks and financial institutions have been deploying artificial intelligence (AI) applications across a variety of use cases for several years, including managing credit risk and fraud, generative AI in financial services represents a step change from previous approaches. It holds the potential to revolutionize a much broader array of business functions.

Numerous applications have been identified as ripe for potential use, among them redefining the future of financial advice, insurance claims processing, customer marketing, engagement and servicing. Internal applications such as compliance monitoring, contact center operations, application development and maintenance are also in consideration. The expansion of use cases is driven in part by the significant advancements in the capabilities offered by this technology, particularly in parsing and making sense of unstructured data such as text. Even more potential uses are enabled by the ability to query data in a natural human interaction or Q&A format and provide natural language instructions to create or refine new business content.

At this time, however, the technology is still in its early stages, and generative AI must be used in an ecosystem where its combination with human expertise fosters synergy that leverages the strengths of both to deliver accurate insights and generate value. The primary value areas, acknowledging the current strengths and drawbacks of this technology, fall under two primary categories:

▸ **Operational efficiency:** Enhancing productivity and reducing costs by automating routine tasks such as information review, comparison, categorization and synthesis.

▸ **Augmented intelligence:** Assisting human experts by providing insights, recommendations, creative content and decision-making support.

These areas also enable various second-order effects such as better client experience through timely and adequate support, focusing human effort on more intellectually challenging tasks while streamlining other activities.

How Ernst & Young LLP can help

The generative AI opportunity for financial services

Generative AI (GenAI) is revolutionary. For financial services firms, transforming the business means both understanding and acting, while carefully managing the risks.
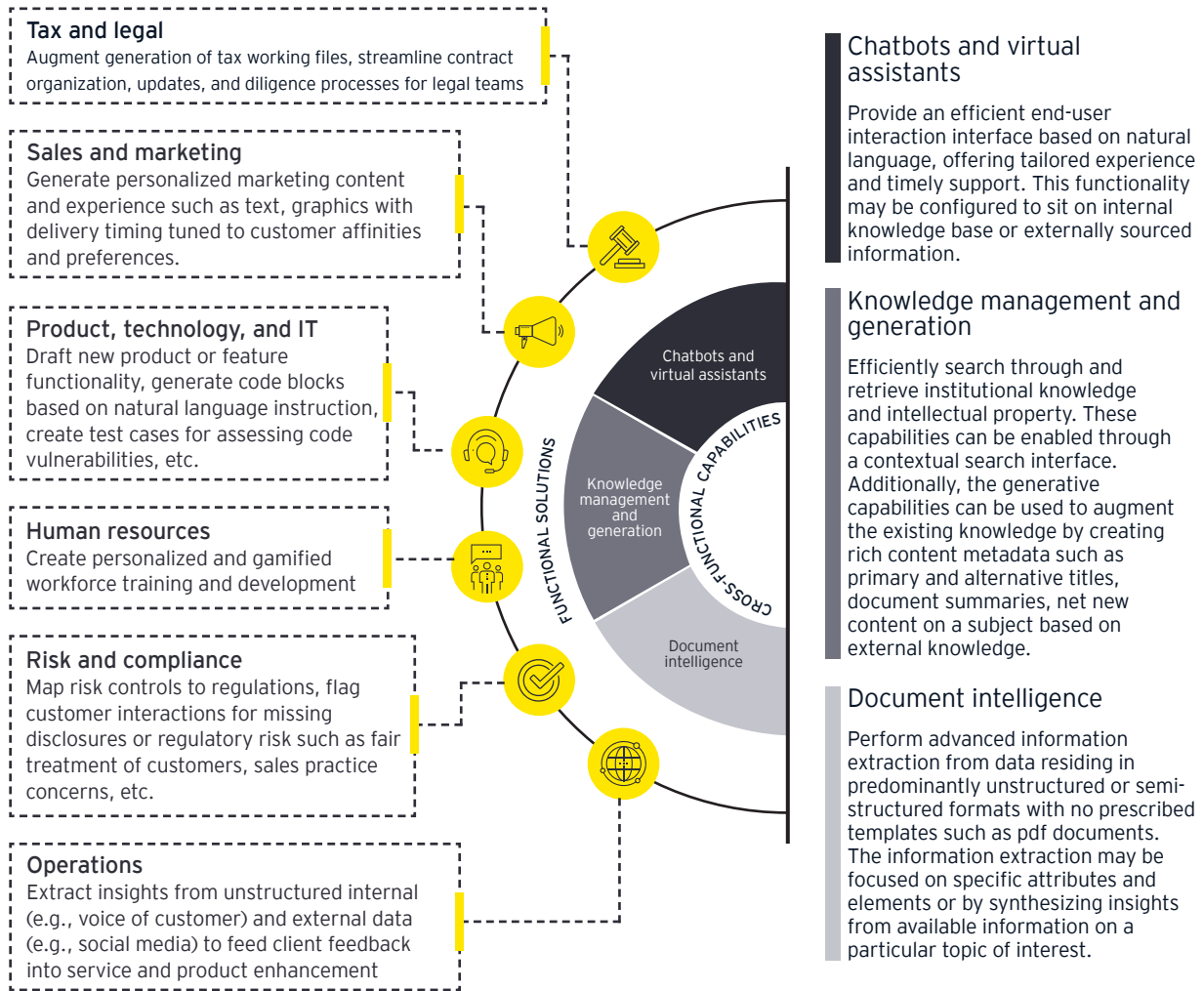
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Artificial intelligence consulting services

Our approach to the adoption of AI and intelligent automation is human-centered, pragmatic, outcomes-focused and ethical.

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Cross-functional capabilities and functional solutions

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Tax and legal
Augment generation of tax working files, streamline contract organization, updates, and diligence processes for legal teams

Sales and marketing
Generate personalized marketing content and experience such as text, graphics with delivery timing tuned to customer affinities and preferences.

Product, technology, and IT
Draft new product or feature functionality, generate code blocks based on natural language instruction, create test cases for assessing code vulnerabilities, etc.

Human resources
Create personalized and gamified workforce training and development

Risk and compliance
Map risk controls to regulations, flag customer interactions for missing disclosures or regulatory risk such as fair treatment of customers, sales practice concerns, etc.

Operations
Extract insights from unstructured internal (e.g., voice of customer) and external data (e.g., social media) to feed client feedback into service and product enhancement

FUNCTIONAL SOLUTIONS

CROSS-FUNCTIONAL CAPABILITIES

Chatbots and virtual assistants

Knowledge management and generation

Document intelligence

Chatbots and virtual assistants

Provide an efficient end-user interaction interface based on natural language, offering tailored experience and timely support. This functionality may be configured to sit on internal knowledge base or externally sourced information.

Knowledge management and generation

Efficiently search through and retrieve institutional knowledge and intellectual property. These capabilities can be enabled through a contextual search interface. Additionally, the generative capabilities can be used to augment the existing knowledge by creating rich content metadata such as primary and alternative titles, document summaries, net new content on a subject based on external knowledge.

Document intelligence

Perform advanced information extraction from data residing in predominantly unstructured or semi-structured formats with no prescribed templates such as pdf documents. The information extraction may be focused on specific attributes and elements or by synthesizing insights from available information on a particular topic of interest.

Conclusion

Given their experience navigating the AI landscape in the presence of ongoing regulatory scrutiny, financial services institutions, in many ways, already have a head start deploying AI. As a result, many have become market leaders in establishing an AI governance framework, which includes setting policies, standards and procedures for AI model validation and testing.

While these will need to be refined for generative AI and the broader regulatory standards that will evolve in time, financial services institutions should utilize this current period by investing in and exploring potential new applications of the technology. Financial institutions that successfully embed generative AI into their organizational DNA will be taking a critical first step toward retaining a competitive edge in this space. The time to act is now.

Summary

While many financial services organizations have already moved forward with various artificial intelligence applications, generative AI holds the potential to change the playing field. Institutions seeking to integrate generative AI into their workflow need to address a number of key issues, such as extending their existing AI governance and oversight frameworks to enable the responsible and effective activation of generative AI.

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