

The AI Revolution

Anatomy of a Generational Investment Opportunity

Maxime Houde

Associate Director, Associate Portfolio Manager,
Thematic Investing
iA Global Asset Management Inc.

Saniun Haque

Associate Director,
Thematic Investing
iA Global Asset Management Inc.

We are on the cusp of a technological revolution that promises to fundamentally transform the way we live, work and interact with the world around us. At the heart of this transformation is Artificial Intelligence (AI), an advanced and rapidly evolving field that has begun to exert a profound impact on the global economy.

As AI continues to mature, we are witnessing a paradigm shift in how tasks and processes are executed, with machines and algorithms increasingly taking on roles once reserved for human beings. The AI revolution is not a singular event, but rather an ongoing process marked by the integration of intelligent systems into a wide range of applications. It is driven by several key factors, including advances in computational power, the development of sophisticated algorithms, the availability of massive amounts of data and the relentless pursuit of innovation by researchers, entrepreneurs and policymakers.

From the automation of manufacturing processes and the rise of smart factories to the development of personalized medicine and the democratization of financial services, AI is reshaping the production and delivery of goods and services in virtually every sector. Understanding this transformation is the critical first step to unlocking the generational investment opportunity presented by the AI revolution.

Manufacturing

Manufacturing has long been the backbone of economic growth and development. The AI revolution is poised to redefine this crucial industry by enhancing the efficiency, productivity and adaptability of manufacturing processes. We believe AI will revolutionize manufacturing in three key areas: robotics, automation and smart factories.

The use of industrial robotics has been central to manufacturing for decades. However, the advent of AI has revolutionized robotics by enabling the development of more sophisticated, adaptable, and collaborative machines. AI-powered robots are capable of learning from their experiences, interpreting data and making decisions autonomously, allowing them to perform tasks with greater precision and accuracy.

AI is being used to optimize various aspects of the manufacturing process, from assembly lines to quality control. By leveraging machine learning algorithms, manufacturers can improve production workflows, identify bottlenecks and inefficiencies and adjust operations in real time. AI can also be used to predict and prevent equipment failures, reducing downtime and maintenance costs.

The convergence of AI and the Internet of Things (IoT) has given rise to the concept of the smart factory. In these connected environments, sensors, machines and devices are integrated into a single network, allowing them to communicate with one another and share data. AI algorithms analyze this data to provide real-time insights into factory operations, enabling manufacturers to make informed decisions that optimize productivity, efficiency and resource allocation.

Health care

Known as an industry that is slow and cautious, health care has surprisingly been at the forefront of the AI revolution – long before ChatGPT and machine learning entered the common vernacular. The potential of AI to transform health care lies in its ability to process vast amounts of data, draw meaningful insights and improve decision-making.

Drug development

AI is increasingly being used to speed up the pre-clinical development of drug candidates. The traditional approach, which can take years, is rooted in extensive trial and error where thousands of compounds are individually screened to find one that could potentially advance to human trials. AI is able to shorten this process by pre-screening the list of compounds based on desired properties as well as suggesting and designing appropriate molecules.

Patient care

AI is poised to revolutionize the diagnostic process by automating the analysis of medical images, pathology slides and other patient data. AI algorithms can rapidly identify abnormalities, such as tumors or lesions, with a level of accuracy that rivals or even surpasses that of human experts. These advanced tools not only enhance the speed and precision of diagnoses but also enable early detection of diseases. Additionally, AI-driven decision-making support systems can assist clinicians in developing optimal treatment plans by analyzing patient data and providing recommendations based on evidence-based guidelines and the latest medical research.

Software and IT

The integration of AI into software and IT solutions has not only enhanced their capabilities, but also paved the way for novel applications, creating unprecedented opportunities and challenges for organizations. In this dynamic landscape, understanding the implications of AI for the software and IT space is crucial for both industry leaders and practitioners to stay competitive and harness the full potential of this cutting-edge technology.

AI is changing the software development process by introducing intelligent tools and platforms that streamline various aspects of the development lifecycle. AI-powered integrated development environments (IDEs) and code editors can provide real-time feedback, predict errors and offer code suggestions, enabling developers to write more efficient and error-free code. AI-driven testing tools can automatically generate test cases and identify software vulnerabilities, reducing the time and effort spent on manual testing and debugging.

As cyber threats grow increasingly sophisticated, AI is becoming a critical tool in the arsenal of cybersecurity

professionals. AI-driven algorithms can rapidly analyze vast amounts of data, identifying patterns and correlations that may indicate potential security breaches or malicious activities. These insights enable security teams to detect and prevent cyberattacks in real time, minimizing the risk of data breaches and system compromises. AI can also be used to enhance the efficacy of encryption and authentication systems, further bolstering the security of sensitive information and digital assets.

Service sector

AI is rapidly transforming the service sector, revolutionizing the way businesses deliver value to their customers. As AI technologies advance, they are empowering service providers to optimize and automate a wide range of processes, enabling the delivery of more personalized, efficient and cost-effective services.

From customer support and recommendation systems to data-driven decision-making, AI is playing an increasingly significant role in enhancing the efficiency and effectiveness of customer service. AI-powered chatbots and virtual assistants can handle routine customer queries, enabling support teams to focus on more complex and high-priority issues. AI-driven customer support platforms can also personalize interactions by analyzing customer data and history, providing tailored responses and recommendations that cater to individual needs and preferences.

AI is also transforming education by enabling personalized learning experiences tailored to individual students' needs and abilities. AI-driven adaptive learning platforms can analyze student performance data to identify knowledge gaps and recommend targeted interventions, helping students learn more effectively and efficiently. This personalized approach to education can better prepare individuals for the AI-driven workforce by equipping them with the skills and knowledge needed to succeed in a rapidly changing economy.

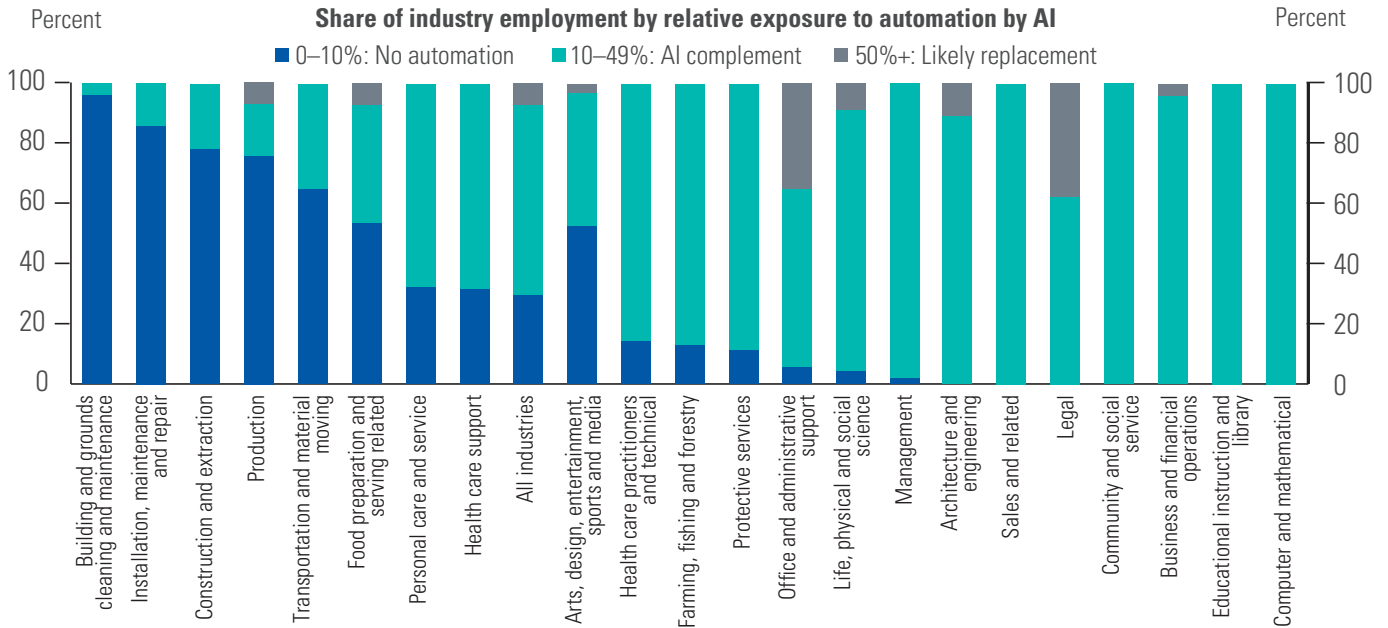
AI's impact on the workforce

The integration of AI into the economy raises significant concerns around job displacement. Research by Goldman Sachs estimates that if AI delivers on its promised capabilities, close to 300 million full-time jobs could be automated. The good news is that worker displacement from automation has historically been offset by the creation of new jobs, and the emergence

of new occupations following technological innovations accounts for most long-run employment growth. Policymakers must strike a delicate balance between

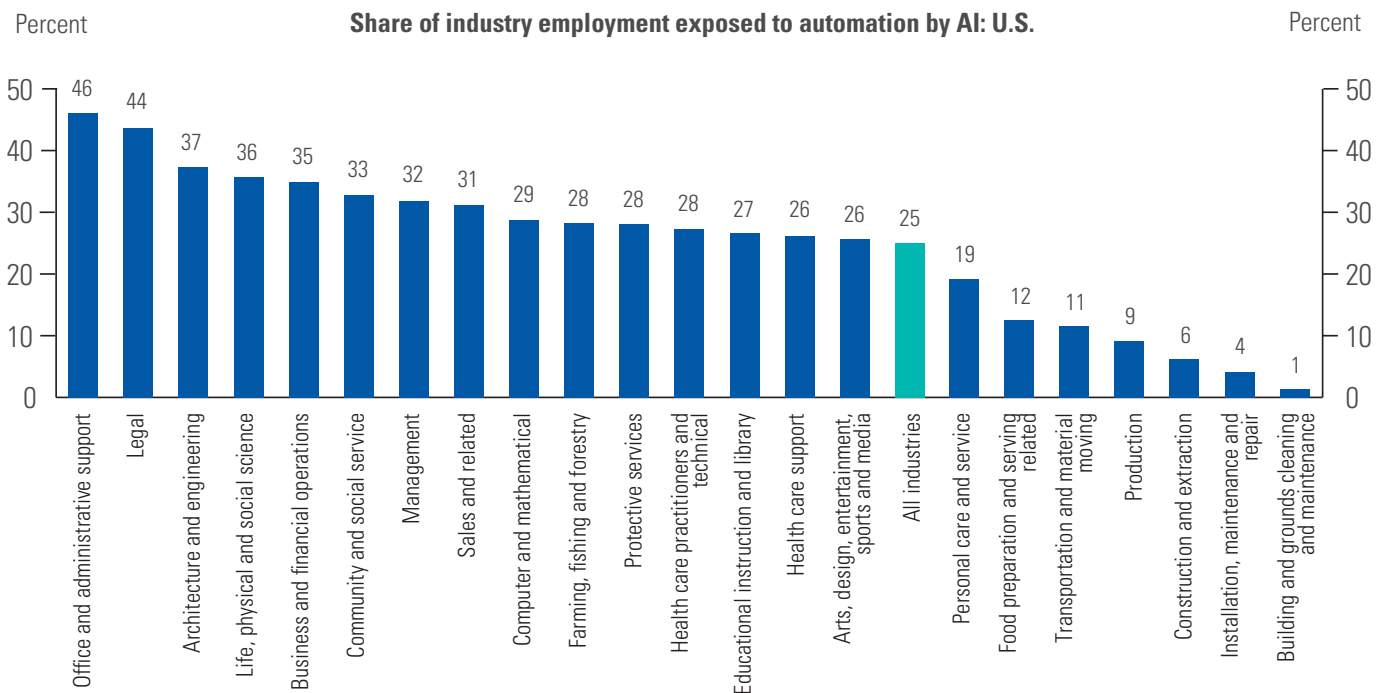
promoting these technological innovations, protecting individual rights, and ensuring an equitable society.

Replacement in legal and administrative fields, little effect on manual and outdoor jobs, and productivity enhancement everywhere else



Source: Goldman Sachs Global Investment Research.

One-fourth of current work tasks in the U.S. could be automated by AI



Source: Goldman Sachs Global Investment Research.

Governments can achieve this balance by devising AI policies that address issues related to data protection, transparency, accountability and fairness. These policies should be developed in consultation with a diverse range of stakeholders, including industry representatives, civil society and academia, to ensure all perspectives are considered. By fostering a collaborative environment and establishing comprehensive regulatory frameworks, stakeholders can ensure that AI is developed and deployed responsibly and in a manner that promotes the greater good. Furthermore, by prioritizing education and reskilling initiatives, both government and the private sector can help prepare the workforce for the AI-driven future and unlock the full potential of this transformative technology.

Conclusion

As we navigate the AI-adoption phase, a deep understanding of the technology's far-reaching impact is paramount to identifying potential growth areas, mitigating risks and making informed investment decisions. By leveraging this knowledge, portfolio managers can seize the potential of AI-driven innovations, capitalizing on emerging trends and ultimately delivering enhanced outcomes for their clients.

About iA Global Asset Management

A magnet for top investment talent, iA Global Asset Management (iAGAM) is one of Canada's largest asset managers, with over \$100 billion under management across institutional and retail mandates. We help investors achieve their long-term wealth creation goals through innovative investment solutions designed for today's complex markets. We are building upon our historic success, supporting the growth of our core strengths, and exploring innovative ways to meet investor needs. We are rooted in history and innovating for the future. Our experienced portfolio managers use a proprietary investment methodology, rooted in iAGAM's unifying commitment to strong risk management, analytical rigour and a disciplined, process-driven approach to asset allocation and security selection.

Rooted in history, innovating for the future.

General Disclosures

The information and opinions contained on this report were prepared by iAGAM. The opinions, estimates and projections contained herein are those of iAGAM as of the date of their publication and are subject to change without notice. Views expressed regarding a particular company, security, industry or market sector are the views of only that author/speaker as of the time expressed and do not necessarily represent the views of iAGAM. Any such views are subject to change at any time based upon markets and other conditions and iAGAM disclaims any responsibility to update such views.

iAGAM endeavours to ensure that the contents have been compiled or derived from sources believed to be reliable and contain information and opinions that are accurate and complete. However, iAGAM makes no representations or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions contained herein and accepts no liability whatsoever for any loss arising from any use of, or reliance on, this report or its contents. There is no representation, warranty or other assurance that any projections contained in this report will be realized. The pro forma and estimated financial information contained in this report, if any, is based on certain assumptions and analysis of information available at the time that this information was prepared, which assumptions and analysis may or may not be correct.

This report or the views and opinions expressed herein are not to be construed as a recommendation, offer or solicitation to buy or sell any security. You should not rely solely on this report in evaluating whether or not to buy or sell securities of the subject company. You should consider whether it is suitable for your particular circumstances and talk to your financial advisor.