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AGENTIC AI IN BUSINESS

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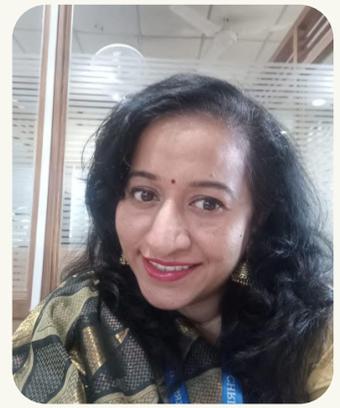
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Editor's Desk



EDITOR'S DESK



In the current era dominated by data, where informed decisions rely heavily on analytics, Agentic AI emerges as a game-changing asset in business. It represents AI systems that go beyond processing data—autonomously acting, and making real-time strategic decisions. Let's explore why Agentic AI holds such significance and how it reshapes the business landscape. Imagine working with an AI partner that continuously learns, anticipates, and recommends actions to optimize processes, whether it's forecasting market shifts or streamlining operations. This proactive approach forms the core of Agentic AI's value, transforming data into actionable strategies and empowering businesses to stay ahead.

Agentic AI is more than just a tool for data analysis; it is a strategic partner that helps businesses navigate complex environments by anticipating challenges and identifying opportunities. From optimizing supply chains to enhancing customer experiences, this AI-driven approach is designed to act autonomously, making decisions that are not only informed by past data but also predictive of future trends. The ability of Agentic AI to learn and evolve in real time ensures that businesses can stay agile and responsive in an ever-changing market. As we continue to integrate AI into decision-making, we are shaping a future where businesses can operate with heightened intelligence and foresight.

I thank our Dean Dr. Jain Mathew, Associate Dean Dr. Jeevananda S, and HoDs - Mareena Mathew and Krishna M.C. I especially thank the Head of Specialization-BA Dr. Lakshmi Shankar Iyer for her guidance and support. We are also grateful that our students received the opportunity to interview Dr. Nikita Pahwa (Assistant Professor, Wittenborg University of Applied Sciences, Netherlands). Special appreciation goes to the newsletter team for their effort, time, and input without which this issue would not have been possible. I appreciate all the students who contributed valuable insights. Once again, congratulations to the entire team. We hope you enjoy reading this issue, and as always, we welcome your feedback and suggestions for future topics.

Please reach out to us
for any queries or suggestions at datageek@mba.christuniversity.in.

Best Regards,
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Interview

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Unlike traditional AI that follows pre-set rules or responds passively to inputs, agentic AI takes initiative, learns from its environment, and acts towards specific goals. It is often designed to adapt dynamically, manage complex tasks, and interact with humans or other systems in a way that appears purposeful and independent. This approach is critical in applications ranging from autonomous vehicles to intelligent assistants, making AI more versatile and context-aware.

1. Could you provide examples of successful Agentic AI implementations and describe the key lessons that other businesses could derive from these cases?

One of the most well-known utilize -cases for Agentic AI is the creation of codes in writing programs and keeping up whole computer program advancement cycles. Another utilize of agentic AI is in making customized showcasing campaigns and customized recommendations for products through different social media stages. These two key illustrations can be considered by different businesses. The creation of robotization of assignments with AI needs a customized solution that is interesting for different commerce forms. Certain angles require to be considered whereas making customized agentic AI. The information and security issues together with moral contemplations must be focussed. The key lessons that other businesses learn from the usage of agentic AI in different cases are that its versatility and minimal human mediation can lead to robotizing monotonous errands that can be time- saving. It can advance progress problem-solving abilities and adaptability into various departments seem be useful for organizations.

2. In what ways might the integration of Agentic AI drive innovation across various industries, and what sectors are likely to see the most significant impact?

Agentic AI is progressed from conventional/classic mechanization, as it can make plans, complete errands and learn from its involvement. This implies it can take a arrangement of actions in reaction to a single ask, breaking down complex assignments into smaller, manageable steps. Agentic AI can change arranging, prioritizing, and managing tasks. Client inquiries can be replied 24*7 with chatbots on different websites. This innovation can diminish the human workload on replying monotonous questions and focus on other tasks. Agentic AI has the potential to change different segments like showcasing, software development, deals, lead era, IT framework, IT operations, fund, human resources, and healthcare. Agentic AI can revolutionize day-to-day operations, like optimizing inventories and estimating request. It can make end-to-end customized marketing campaigns for companies, it has advance potential to make customized ads for distinctive client sections. The utilize of agentic AI can moreover revolutionize the healthcare industry by means of every day checking of physical and mental wellbeing, and provide customized treatment plans.

The completion of the program advancement cycle and cyber dangers seem advantage from this development. Human assets are already benefitting from AI instruments for profile determination amid the enlistment prepare, the sector can encourage advantage by giving customized representative advancement preparing. Similarly, the fund division can advantage in making exchanging choices, among other uses.

3. How do you foresee Agentic AI shaping the future of autonomous business operations, such as fully automated supply chains?

The potential of a completely mechanized supply chain seems take more emphases as human intervention would be essential in the predictable future to decrease the inconsistencies and botches made by agentic AI. A division like supply chain is exceptionally energetic in terms of data stream, as numerous exchanges are made each moment, and one-of-a-kind challenges occur amid the handle, which may make it troublesome to prepare the agentic AI to have an airtight handle. In any case, given the versatility and capacity to fathom complex problems, agentic AI can unquestionably be useful for streamlining a few parts of the supply chain.

4. What specific challenges do organizations face when training and deploying Agentic AI models?

Organisations must be mindful of information morals, and security issues whereas preparing agentic AI models. Since these models are customized for each organization/business handle still need human intercession to combat the straightforwardness and responsibility issues with the variety of information that is utilized to prepare an AI demonstrate. Organizations must moreover be mindful of bias in preparing datasets for AI, which at that point leads to AI which is moreover one-sided. Integration of AI in complex work forms can be time-consuming and companies must moreover be willing to expect potential issues whereas preparing the AI model.

5. How do you see Agentic AI evolving as an integral part of business strategies over the next few years?

Agentic AI will be a pivotal portion of the way of working in the following few a long time, if not fully some parts of each organization will doubtlessly coordinated these in their workflow. This may require the existing workforce to moreover learn how to work with the modern framework of AI and will make a few occupations out of date.



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1. Can you provide examples of successful Agentic AI implementations and highlight the key lessons that other businesses can learn from these cases?

Unilever leverages Agentic AI for centered on publicizing, computerizing take note of circumstances based on consumer conduct bits of information. Siemens leverages Agentic AI to predict disillusionment of equipment's in manufacturing, allowing for lucky upkeep and diminishing downtime. Amazon leverages Agentic AI to manage its supply chain and coordination. It predicts ask, optimize stock levels, and routes deliveries efficiently. Microsoft's Wander Auto Gen leverages a multi-agent framework that modifies building workflows and applications with LLMs. The utilize of specialized administrators can be orchestrated with unmistakable LLMs, and it provides for reliable human interaction.

Agentic AI interior IT office appear computerize dull ticket period errands through self- service resolutions. The offer helps work zones that can center on managing complex robotization. Or perhaps than performing dismal errands like mystery word resets, ticket period etc. and contraption courses of action to managing intelligent.

The HR division can direct onboarding offboarding handle utilizing Agentic AI without human intervention and they can spend more time on more time on key exercises and human interactions. For HR, masters might have end-to-end onboarding and offboarding shapes, reliably completing workflows crossing modest bunches of systems with zero human affiliation. Appear additionally provide personalized career enhancement appeal to agents based on their capacities, execution, and company needs. So, HR division would be able to center on imperative needs and employee engagement. In all valuable zones like, back, advancing, etc agentic AI might optimize operations in honest to goodness time.

Instead of supplanting agents, they would handle the conventional plan assignments, and the employees can center on high-judgment responsibilities. The key lessons consolidate the importance of data integration, the require for real-time data, the regard of personalization, and the provide for cross educate collaboration. Businesses looking to implement agentic AI should to center on building a solid data system, client accept and transparency.

2. How might the integration of Agentic AI foster innovation across different industries, and which sectors are expected to experience the most significant impact?

Exchange operations: Agentic AI can dismember perpetual number of datasets quickly, giving insights which back crucial choices. This can lead to more taught commerce procedures and optimized operations. In a way it would revolutionize the way businesses supervise their day-to-day operations. Agentic AI can freely handle complex coordinations organizing, supply chains and other such activities. By computerizing workflows, businesses can decrease operational costs and increase efficiency. This will be seen particularly in critical in manufacturing, coordinations, and support, where repetitive tasks can be streamlined. In healthcare, Agentic AI can offer assistance in organizing treatment of major contaminations, diagnostics, and personalized pharmaceutical, which will lead to viable utilize of resources and predominant calm comes about and more.

In creative industry like music, craftsmanship agentic AI can collaborate with individuals to create unused content, inspiring creative energy and opening unused streets for inventive expression. Agentic AI can drive improvements in practicality over businesses, making a distinction businesses meet environmental destinations by updated utilization of resources and waste reduction. It appear enliven breakthroughs in consistent ask almost by autonomously arranging and running experiments.

From sedate disclosure in pharmaceuticals to materials science in manufacturing, these AI masters may speed up the pace of progression in the coherent field I feel a few portions would witness basic impacts from the integration of Agentic AI. Let me quote a few sections like in imperativeness division Sharp cross section organization, prescient bolster for infrastructure, and optimized resource allocation can lead to way way better attainable imperativeness sharpens. In transportation free vehicles, course optimization, and prescient analytics can improve logistics viability and diminish costs. Creating portion would have computerization of complex processes, prescient upkeep, and sharp supply chain organization that can boost productivity and diminish cost.

3. In what ways do you envision Agentic AI influencing the future of autonomous business operations, particularly in the context of fully automated supply chains?

Supply chain organization is key extend where Agentic AI would make a essential influence. These agents would freely supervise stock levels by anticipating ask and automating reordering shapes so this will diminish overburdening and understocking. Veritable time data examination of weather conditions. movement etc can offer help in course optimization and this will lead to beneficial logistic management. By considering designs in thing absconds, examination of likely causes of thing deserts, remedial measures can be proposed to ensure the quality control of things. The reports delivered in this area makes a distinction to advance era shapes in all the supply stages Agentic AI offer help in studying the execution of suppliers based on diverse criteria such as cost, quality, and transport plans. This makes a distinction in having closer relations with them, orchestrating better, and selecting incredible suppliers.

4. What are the organization's primary challenges when training and deploying Agentic AI models?

Biases: Planning data and calculations can contain unavoidable inclinations that agentic AI systems may learn and engender, which lead to one-sided outcomes. Regulatory compliances: In healthcare and back sections investigating through diverse genuine and regulatory frameworks can be challenging. Organizations are required to ensure that their AI applications comply with critical laws and guidelines. Change Organization: Executing Agentic AI needs a modification in organizational culture and processes. Resistance to modification from agents can discourage its execution Implementation complexity: It can be in truth challenging to facilitate Agentic AI into legacy systems. Challenges can be related to system compatibility, computer program integration, and the need for cutting-edge disobedient technologies Cost: Sending Agentic AI systems can be a resource genuinely. Organizations are required to allocate budgets and resources carefully to ensure viable implementation. Continuous Upkeep: Once Agentic AI is sent, the models require nonstop watching. This involves additional resources and expertise.

5. How do you anticipate Agentic AI becoming a key component of business strategies in the coming years?

Agentic AI will be gotten to be an essential parcel of commerce strategies over the coming a long time. They will help the improvement of Agentic AI and will progress a data-driven culture of decision-making within organizations. This will enable laborers to depend on data bits of information for all the exercises and strategies. Improved Coordination and Collaboration: Agentic AI will empower moved forward collaboration among various divisions. This will remove the silos and allow a steady stream of information, which can drive advancement and efficiency. Personalization: Affiliations will utilize Agentic AI in coming a long time to allow hyper-personalized customer inclusion. Utilizing this can tailor offerings, advancing, and cleverly based on individual preferences. Data-Driven Culture: The rise of Agentic AI will foster an organization's data-driven decision-making culture, encouraging employees to base their actions and strategies on data insights. Enhanced Coordination and Collaboration: Agentic AI will enhance collaboration between different departments, breaking down silos and enabling a smooth flow of information, ultimately boosting innovation and efficiency.



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1. How can Agentic AI facilitate continuous learning and self-improvement in enterprise systems without extensive retraining?

Developments in AI tools and their applications are at the cusp of yet another shift in the form of Agentic AI. Agentic AI represents a leap from traditional, rule-based systems to dynamic, decision-making entities. Unlike its predecessors, it operates with minimal human intervention, continuously learning and refining its performance. As the name suggests, Agentic AI will work as “Autonomous agents” that are capable of taking decisions “on their own” by learning from feedback and refining their actions. This heralds a shift from traditional AI models that are rule-based and require training. For an enterprise this augurs tremendous potential. Efficient operations management within the organization involves continuous evaluation of the metrics/ parameters and taking corrective action. Even with automation, significant human intervention is required. Deployment of Agentic AI will help create self-monitoring bots that will not only capture data but will also be able to take decisions for improving/ enhancing the systems. The systems being autonomous will therefore create a self-executing loop of analysis, assessment, action and learning. As an outcome, the retraining needs of the systems will automatically be reduced. For organizations, this will mean reduction in human errors, greater efficiency and cost reduction.

2. How can Agentic AI enhance risk management strategies by autonomously identifying and responding to potential threats?

You see, risk management is a major area of concern for organizations. With increasing dependence on data and highly networked organizations, the need for security and privacy of data has increased manifold. Therefore, organizations continuously scan their systems for potential failures, vulnerabilities and threats because any attack can lead to loss of data, downtime and loss of face for the organization. Swift and appropriate Incident Management, therefore, becomes a critical activity.

Since Agentic AI is designed to analyze situations, formulate strategies and take appropriate actions, it can automate the incident response process by initiating predefined preventive and recovery actions such as rollback, notifying the teams etc. Moreover, its role will not just be reactive. Agentic AI can act as proactive agents by capturing and analysing data to predict pattern of incidents thereby alerting the everyone about potential threats. This will definitely improve the risk preparedness of an organization. It is like having a constantly alert and autonomous security guard who is forever learning and evolving.

3. How can Agentic AI be used to enhance predictive analytics and real-time decision-making?

Agentic AI differs from traditional AI in its ability to learn from its experience. It is independent, can take goal-focused actions and change as needed. With the advanced capability to learn, Agentic AI can analyse vast quantities of data, spot patterns and therefore predict with greater accuracy leading to faster and more accurate decision making. For example, with the use of Agentic AI in supply chains can be better equipped to handle sudden changes such as unforeseen weather incidents that can lead to route disruptions. Based on its learning from the past, akin to a human, it will be able to take re-routing decisions and prevent delays and cost overruns. Moreover, each experience will add to its learning, thus improving its predictive capability and real time decision making.

4.How do you see the role of human analysts evolving with the increased adoption of Agentic AI, and what skills should aspire business analysts develop to effectively work alongside these systems?

The role of human analysts is bound to get affected! This debate has taken place with emergence of every technology shift and Agentic AI is no different!! With a lot of processes being automated, the role of human analysts will change to become more decision oriented. Some jobs will definitely be lost to Agentic AI while others will change. I agree that emerging AI technologies are getting better at learning and decision making, yet a gap will remain. We also have to appreciate that most of these models are probabilistic and hence may not always result in the right recommendations. Moreover, they are also dependent on the training. Agentic AI will still rely on human expertise and feedback for generating the right output. Also, we must not forget that emotional and ethical aspects of any decisions are still areas beyond the capability of any AI system, thus far.

With Agentic AI as a digital co-worker, humans will be able to work better at solving more complex issues. More and more structured and routine work will be taken over by Agentic AI, so humans can focus on more complex, creative, high impact and rare/edge issues. Role of human will not be reduced, but will definitely be transformed. We must also understand that though this appears as the step towards Artificial General Intelligence, yet we are still very far from it. The Agentic AI would still be “narrow AI”. To effectively use Agentic AI, analysts would require superior domain knowledge and a deep understanding of learning and cognitive capability of the Agents

5.How do you see the convergence of Agentic AI with emerging technologies like digital twins or synthetic data impacting business operations?

Ajay Agarwal, Joshua Gans, Avi Goldfarb have in their book titled “Prediction Machines” suggested that AI has created prediction machines as they have decreased the cost of prediction. Cheaper predictions will lead to more predictions. This can clearly be seen in the case of Agentic AI. Agentic AI has the ability to analyze, predict, learn, take actions and carry out this process repeatedly in a self-learning loop. The ability of Agentic AI will depend on how extensively it trains itself with the right kind of data. The more data it gets, the more it will “learn” resulting in increased accuracy of actions and prediction capability.

Hence the need for the right data from across business operations will emerge. As both synthetic data and digital twins create data, convergence of these technologies with Agentic AI is definitely very likely in future. For example, an Agentic AI in marketing would learn not just from its interactions with a customer, but also from a digital twin of the customer. The digital twin will in turn help generate more synthetic data through simulations which would otherwise not be possible with a real customer. This data can be used for further training of the Agents. Thus what we will see in future is a convergence of these technologies where all the three will work in unison with the overall aim of improving business operations.



Student Articles



THE RISE OF AUTONOMOUS INTELLIGENCE: TESLA'S ADAS SYSTEM

Introduction: Tesla has long been at the forefront of integrating cutting-edge technology into the automotive industry. One of its most groundbreaking innovations is the Advanced Driver Assistance System (ADAS), which leverages autonomous intelligence to enhance vehicle safety, efficiency, and user experience. The rise of Tesla's ADAS is a prime example of how Agentic AI is transforming the transportation landscape by enabling vehicles to make decisions independently, with minimal human intervention.

Tesla's ADAS: A Glimpse into Agentic AI: Tesla's ADAS represents a significant leap in automotive technology, combining a suite of sensors, cameras, and machine learning algorithms to create a semi-autonomous driving experience. The system is designed to assist drivers by performing tasks such as lane-keeping, adaptive cruise control, automatic lane changes, and even self-parking. While the driver remains in power, Tesla's ADAS can independently execute complex manoeuvres, making real-time decisions based on the vehicle's surroundings.



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Key Features of Tesla's ADAS:

Autopilot: Tesla's Autopilot is a cornerstone of its ADAS, enabling the vehicle to steer, accelerate, and brake automatically within its lane. This feature relies on a sophisticated neural network that processes vast amounts of data from the vehicle's environment, allowing it to respond dynamically to traffic conditions.

Full Self-Driving (FSD): While still in development, Tesla's FSD system aims to achieve full autonomy, where the vehicle can navigate from point A to point B without human intervention. FSD represents the pinnacle of Agentic AI in automotive technology, with the potential to revolutionize how we think about transportation.

Tesla's ADAS, while promising, faces challenges in ensuring reliability and safety. Ethical concerns arise from the potential for accidents and the need for accountability. Balancing human and machine control is a key issue in autonomous driving.

Conclusion: Tesla's ADAS is a testament to the rise of Agentic AI, demonstrating how autonomous intelligence can be integrated into everyday technology to improve safety, efficiency, and convenience. As Tesla continues to refine its ADAS and move closer to achieving full autonomy, it sets the stage for a future where vehicles are no longer just modes of transportation but intelligent agents capable of independent thought and action. The rise of Tesla's ADAS is not just about advancing automotive technology—it's about redefining the relationship between humans and machines, paving the way for a new era of autonomous intelligence on the road.

THE RISE OF AUTONOMOUS INTELLIGENCE: AGENTIC AI

Introduction: In recent years, the concept of autonomous intelligence, particularly Agentic AI, has surged to the forefront of technological discourse. This new wave of AI systems is not merely about machines executing predefined tasks but involves the creation of intelligent agents capable of making decisions, learning from their environments, and autonomously navigating complex scenarios. These agents, often referred to as Agentic AI, represent a significant leap forward from traditional AI systems, which rely heavily on human input and oversight.

Understanding Agentic AI
Agentic AI refers to AI systems designed with a degree of autonomy that allows them to act independently, much like a human agent. Unlike conventional AI, which typically follows strict algorithms and is limited to specific tasks, Agentic AI is characterized by its ability to make decisions and take actions based on its own judgment. This autonomy is made possible through advanced machine learning techniques, including reinforcement learning, neural networks, and natural language processing.



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At the core of Agentic AI is the concept of agency, where AI systems possess the capability to perceive their environment, reason about it, and take actions that affect that environment. This involves not only the execution of predefined tasks but also the ability to set goals, prioritize tasks, and adapt to changing conditions without direct human intervention.

Applications

Agentic AI is revolutionizing various industries. In finance, autonomous trading bots analyze market trends, make real-time decisions, and execute trades, potentially improving efficiency and profitability. In healthcare, AI assists in personalized medicine by analyzing patient data, recommending treatment plans,

and predicting health issues. Autonomous vehicles rely on Agentic AI to navigate complex environments, make split-second decisions, and ensure passenger safety. The military is exploring autonomous drones and robotic systems for reconnaissance, logistics, and even combat roles.

Implications

The rise of Agentic AI raises significant ethical and regulatory concerns. Accountability is a key issue, as it's unclear who is responsible when an autonomous AI makes a mistake. The potential for AI systems to act contrary to human values or ethics is another major challenge. As Agentic AI becomes more prevalent, robust regulatory frameworks will be necessary to ensure responsible development and deployment.

The Future of Agentic AI

Agentic AI has immense potential to benefit society, but its development requires careful consideration of ethical, legal, and social implications. Collaboration across disciplines is essential to ensure the rise of autonomous intelligence benefits humanity. Striking a balance between innovation and regulation is crucial to ensure Agentic AI serves us, not the other way around.

AGENTIC AI: REDEFINING HEALTHCARE WITH AUTONOMOUS INTELLIGENCE

In today's fast-evolving technological landscape, Agentic AI is at the forefront of transforming healthcare systems globally. Unlike traditional AI, which depends on pre-defined algorithms, Agentic AI possesses the ability to autonomously make decisions, set its own goals, and adapt to real-time situations. This advanced form of AI holds immense potential in revolutionizing patient care, diagnostics, and operational efficiency in healthcare institutions.

WHY AGENTIC AI IS VITAL IN HEALTHCARE

The healthcare industry generates enormous volumes of data from patient records, medical imaging, and research studies. Traditional AI systems often struggle to process and derive meaningful insights from such vast and varied datasets. Agentic AI, powered by sophisticated machine learning and deep learning algorithms, can analyze this data in real-time, enabling precise diagnostics, personalized treatment plans, and streamlined clinical workflows. By automating routine tasks and enhancing decision-making, Agentic AI empowers healthcare providers to deliver higher quality care with greater efficiency.



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Key Technologies for Agentic AI in Healthcare

Predictive Analytics: Agentic AI uses predictive models to forecast patient outcomes, optimize treatment plans, and manage hospital resources efficiently.

Natural Language Processing (NLP): NLP enables AI to extract critical information from medical records and research publications, keeping healthcare providers updated with the latest clinical guidelines and research findings.

Computer Vision: Computer vision algorithms assist in detecting abnormalities in medical images, aiding early diagnosis and improving patient outcomes in radiology and pathology.

REAL WORLD APPLICATION IN HEALTHCARE

Personalized Medicine: AI analyzes genetic data and patient history to create customized treatment plans.

Automated Diagnostics: AI analyzes medical images, detects patterns, and provides diagnostic recommendations.

Operational Efficiency: Hospitals use AI to optimize resource allocation, manage inventory, and enhance patient flow.

Telemedicine and Remote Monitoring: AI-powered platforms facilitate virtual consultations and remote patient monitoring.

CONCLUSION

Agentic AI is poised to become a cornerstone of the future healthcare ecosystem. Its ability to autonomously make informed decisions, coupled with its potential to drive innovation in diagnostics, treatment, and operations, makes it a game-changer in the medical field. As the technology evolves, healthcare providers must strike a balance between leveraging AI's capabilities and addressing the ethical, regulatory, and technical challenges that accompany its adoption. With careful implementation, Agentic AI can enhance patient care, improve outcomes

REVOLUTIONIZING INDUSTRIES: THE ROLE OF AGENTIC AI IN OUR FUTURE

Introduction

Artificial Intelligence (AI) has rapidly evolved from a theoretical concept to a driving force behind many of today's technological advancements. Among the most intriguing developments is the rise of Agentic AI—autonomous systems capable of making decisions, learning from their environments, and executing tasks independently. As these intelligent agents become more integrated into our daily lives, understanding their potential and implications is critical for anyone interested in the future of technology.

What is Agentic AI?

Agentic AI refers to AI systems that possess a degree of autonomy, allowing them to act as independent agents. Unlike traditional AI, which often requires human input or operates within narrow constraints, Agentic AI can make complex decisions without human intervention.

These systems can adapt to new situations, learn from their experiences, and even interact with other AI systems or humans to achieve specific goals. The concept of agency in AI extends beyond mere automation, moving towards machines that can understand and respond to the nuances of their environments.



Sreekar

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Real-World Applications

The practical applications of Agentic AI are already being seen across various industries, offering a glimpse into a future where these systems play a central role in innovation and efficiency.

Healthcare: One of the most promising areas for Agentic AI is healthcare. Autonomous AI systems are being used to manage patient care, predict health outcomes, and even assist in surgeries. For instance,

IBM's Watson for Health utilizes AI to analyse large volumes of data and provide doctors with evidence-based treatment options, significantly reducing the time needed for diagnosis and treatment planning.

Finance: In the financial sector, Agentic AI is revolutionizing how investments are managed.

AI-driven trading algorithms can autonomously analyse market trends,

execute trades, and optimize portfolios without human intervention. Companies like BlackRock and Goldman Sachs are already employing these AI systems to enhance decision-making processes and increase profitability.

The Future of Agentic AI

As Agentic AI continues to develop, its potential applications could expand into areas we have yet to imagine. However, this rise also brings with it significant ethical considerations. The ability of AI to make decisions autonomously raises questions about accountability, transparency, and the potential for unintended consequences. It is essential for researchers, policymakers, and technologists to work together to ensure that the development of Agentic AI aligns with societal values and promotes the common good.

Conclusion

The rise of Agentic AI marks a new chapter in the story of artificial intelligence, one that promises to reshape industries and redefine what machines can do. As we move forward, understanding and engaging with this technology will be crucial for anyone involved in its development or impacted by its applications.

AGENTIC AI: SHAPING TOMORROW'S TECH, TRANSFORMING TODAY'S WORK

Introduction

These days, the world seems to echo with the word "AI" everywhere you turn. What was once a niche technological advancement has now evolved into a pivotal force reshaping industries worldwide. The journey from theoretical research to real-world applications has been swift, with AI's influence rapidly expanding across sectors. This transformation is marked by a remarkable annual growth rate of 37%, an estimated market value projected to reach \$305.9 billion by 2024, and a compound annual growth rate (CAGR) of 28.46%. Among the most intriguing developments in this AI revolution is the rise of autonomous intelligence, often referred to as "Agentic AI."

What is Agentic AI?

Agentic AI represents a significant leap in artificial intelligence, where systems act autonomously, making decisions and learning from their experiences without continuous human oversight. Imagine a super-smart assistant capable of analyzing data, adapting to new situations, and taking independent actions. Agentic AI is characterized by its ability to make decisions, adapt to changing environments, and continuously



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earn from its actions and outcomes

Potential Applications of Agentic AI

The applications of Agentic AI are vast and varied, with potential impacts across multiple sectors:

- **Content Creation:** Agentic AI can autonomously generate articles, reports, and creative content, reducing the need for human intervention. For example, AutoGPT is an AI that can generate human-like text autonomously.
- **Personal Assistance:** AI-driven personal assistants can manage schedules, answer queries, and make recommendations based on user preferences, providing a more personalized and efficient experience.

- **Gaming:** In the gaming industry, Agentic AI can create intelligent, adaptable opponents and immersive experiences, enhancing gameplay and offering dynamic interactions.
- **Finance and Analysis:** AI agents are capable of analyzing market trends, optimizing investment strategies, and automating trading processes, potentially revolutionizing the financial industry.

Conclusion

As Agentic AI continues to evolve, it is poised to transform industries by enhancing productivity, reducing costs, and opening new possibilities. However, its rise also brings concerns about job displacement and ethical considerations, particularly regarding autonomy in decision-making. Ensuring the reliability and safety of autonomous systems in unpredictable environments remains a significant challenge for developers.

AGENTIC AI IN FINANCE: A ONE-PAGE OVERVIEW

Definition and Relevance

Agentic AI refers to artificial intelligence systems capable of autonomous decision-making, operating independently by setting goals, making choices, and adapting to real-time scenarios. Unlike traditional AI, which relies on explicit instructions, Agentic AI uses advanced algorithms to analyse data, predict outcomes, and take actions aligned with predefined objectives. In finance, Agentic AI is crucial for navigating complex, data-driven environments with exceptional efficiency and precision. Traditional systems often struggle with the volume and speed of modern market data, but Agentic AI, through advanced machine learning and deep learning algorithms, processes vast datasets in real-time. This capability allows financial institutions to detect patterns, adapt strategies quickly, and optimize performance with high accuracy. By automating routine tasks and offering insights into market dynamics, it enhances operational efficiency and enables more strategic management of portfolio, and trading activities.



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Technological Foundations

- **Machine Learning and Deep Learning:** These algorithms enable AI to learn from data and make decisions. Machine learning techniques like decision trees and support vector machines analyze historical data, while deep learning uses neural networks to process complex data, driving innovations such as algorithmic trading and risk assessment.
- **Natural Language Processing (NLP):** NLP allows AI to interpret and respond to human language, crucial for analyzing financial news and social media.

APPLICATIONS IN FINANCE

- **Portfolio Management:** AI optimizes asset allocation and manages diversified portfolios by analyzing market trends and financial statements. Platforms like BlackRock's Aladdin exemplify AI-driven portfolio management.
- **Algorithmic Trading:** AI systems execute high-frequency trades, leveraging speed and data processing to capitalize on market fluctuations. Firms like Renaissance Technologies use AI for efficient trading.
- **Risk Management:** AI models and predicts risks in financial portfolios, performs stress tests, and optimizes risk-adjusted returns. Banks like JPMorgan Chase employ AI for enhanced risk monitoring.

Conclusion

Agentic AI is revolutionizing finance by enhancing decision-making, efficiency, and innovation. Addressing ethical, regulatory, and technical challenges is essential to leverage its full potential responsibly and equitably.

THE RISE OF AUTONOMOUS INTELLIGENCE AGENTIC AI: AUTOMOTIVE INDUSTRY

The rise of autonomous, agentic AI in the automotive industry marks a significant turning point in transportation, with the potential to redefine mobility, safety, and efficiency on a global scale. Autonomous vehicles, powered by AI, are designed to operate with minimal or no human input, making real-time decisions based on data from sensors, cameras, radar, and other advanced technologies. These vehicles are not just reactive; they possess agentic qualities that enable them to anticipate, learn from, and adapt to their surroundings, leading to more intelligent and context-aware driving.



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In the automotive industry, autonomous AI systems are being integrated into various levels of vehicle automation, from advanced driver-assistance systems (ADAS) to fully autonomous cars. These systems are capable of navigating complex urban environments, understanding and responding to traffic signals, avoiding obstacles, and making split-second decisions that can prevent accidents. The ability of agentic AI to learn from vast amounts of data means that these vehicles can continually improve their performance, offering enhanced safety, error and the potential to lower traffic congestion and emissions. The integration of AI into vehicles opens up new avenues for innovation in areas like vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communication, where cars can interact with each other and their environment to optimize traffic flow and reduce accidents. Issues of safety, liability, and cybersecurity are paramount, as these vehicles must be able to operate reliably in all conditions while protecting themselves and their passengers from potential threats. Additionally, there are significant regulatory and ethical considerations, such as determining who is responsible in the event of an accident involving an autonomous vehicle and how to ensure that these systems are developed and deployed in a way that is fair and equitable.

AI'S AWAKENING: THE DAWN OF AGENTIC INTELLIGENCE

Artificial intelligence is currently experiencing a significant transition due to the introduction of agentic AI, a type of AI that can act independently, establish objectives, and gain knowledge from its mistakes. Due to this new paradigm, a profound shift in human-machine interaction, businesses, and civilizations is on the horizon. Unlike its predecessors, Agentic AI is not merely a tool but an active agent. It possesses a degree of self-awareness, enabling it to perceive its surroundings, make informed decisions, and adapt to changing circumstances. This autonomy empowers agentic AI to tackle complex problems, innovate, and exhibit creativity.



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The potential applications of agentic AI are vast and varied. In the business realm, it can optimize operations, enhance customer experiences, and drive innovation. It can revolutionize diagnostics, drug discovery, and personalized medicine in healthcare. In transportation, it can usher in the age of autonomous vehicles, promising safer and more efficient transportation systems.

However, the rise of agentic AI also presents significant challenges and ethical considerations. Questions surrounding accountability, bias, and job displacement loom large. Moreover, there are potential risks such as loss of control, misuse, and unintended consequences. It is crucial that we create strong rules and laws as we navigate this uncharted region to make sure that the advantages of agentic AI are realized while reducing its risks.

The dawn of agentic AI marks a pivotal moment in the evolution of technology. It is a testament to human ingenuity and a harbinger of a future where machines and humans collaborate to achieve extraordinary feats. As we embrace this new era, it is imperative to approach it with a sense of responsibility and foresight. This includes fostering interdisciplinary collaboration among technologists, ethicists, policymakers, and other stakeholders, ensuring that the development and deployment of agentic AI aligns with our collective aspirations for a better world.

Word Scramble



Questions:

1. What is the term for the study of the interaction between humans and computers?

Scrambled Word: Tniraciton-rputemoH

2. What is the term for a computer system that can simulate human thought processes?

Scrambled Word: NtiogiveC mputingC

3. What is the term for the use of AI to create personalized experiences for customers?

Scrambled Word: OnamtiuaoExeprencE rtuoCus

4. What is the term for the use of AI to optimize supply chains?

Scrambled Word: Onamtiziop Sppuyh iCa

5. What is the term for the use of AI to identify patterns in data?

Scrambled Word: gnimiD aDa

6. What is the term for the use of AI to create realistic simulations of the real world?

Scrambled Word: tilaVir ytilare

7. What is the term for the use of AI to analyze customer behavior?

Scrambled Word: scylanaC rtuoCus

8. What is the term for the use of AI to develop new products and services?

Scrambled Word: noitnavonI tcurodP

Answers:
1. Human-Computer Interaction
2. Cognitive Computing
3. Customer Experience Automation
4. Supply Chain Optimization
5. Data Mining
6. Virtual Reality
7. Customer Analytics
8. Product Innovation
9. Cybersecurity Automation
10. Digital Twins

BUSINESS ANALYTICS EVENTS

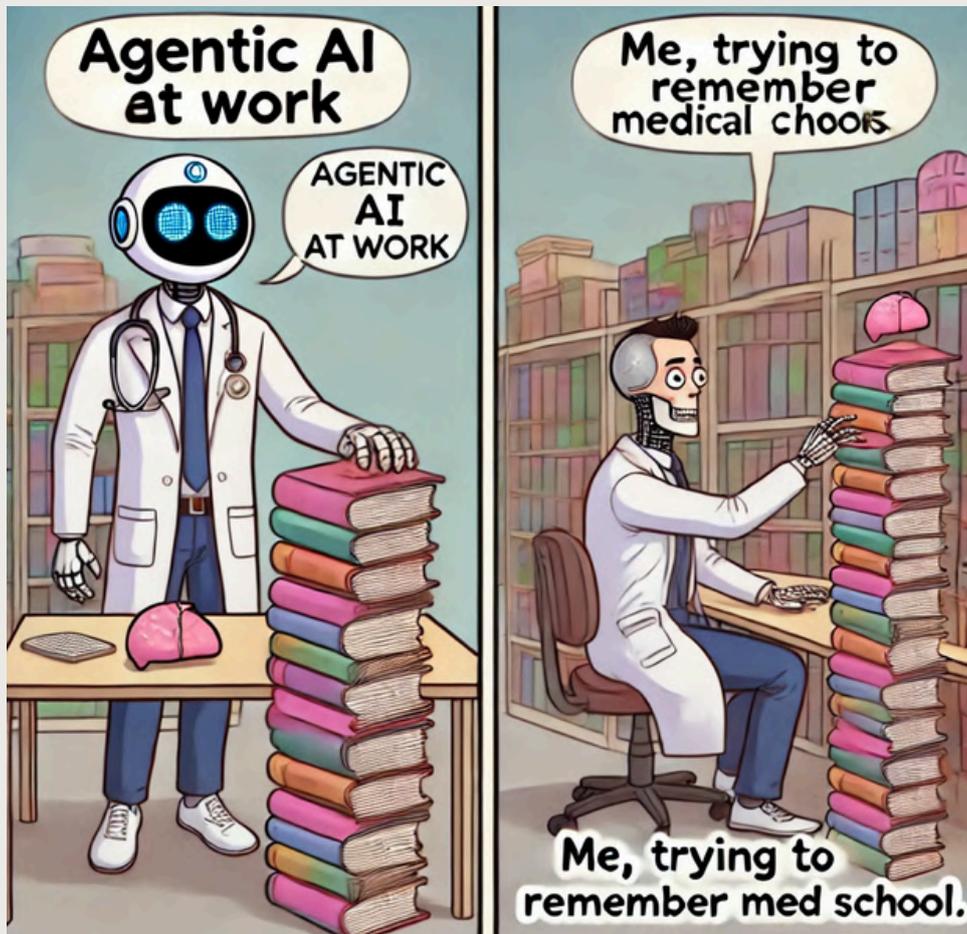


INSIGHT ODYSSEY: Exploring Insights through Analysis

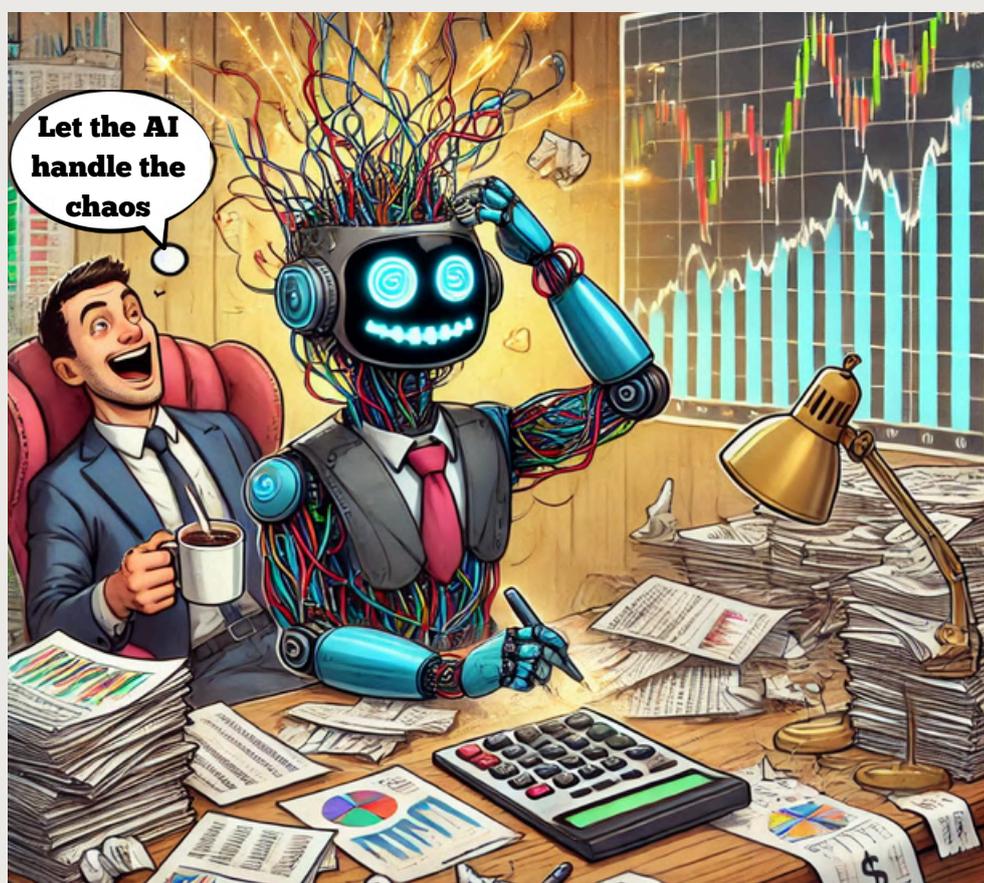
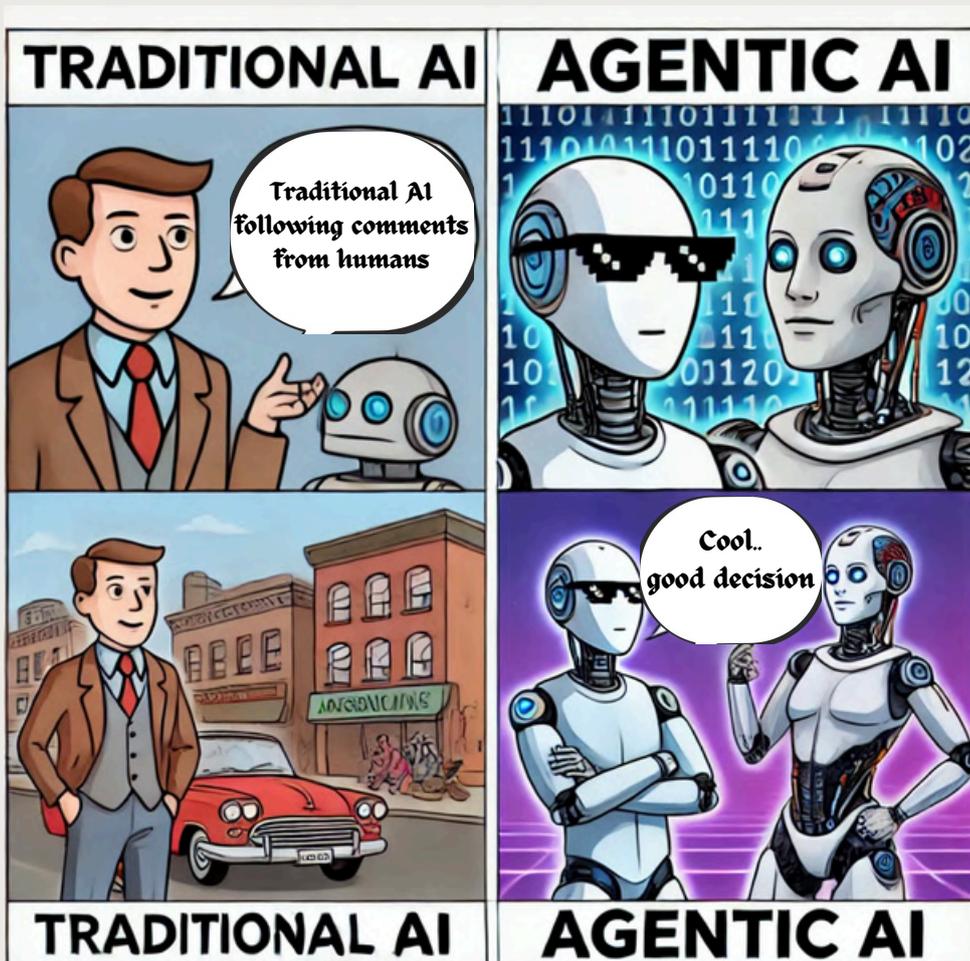




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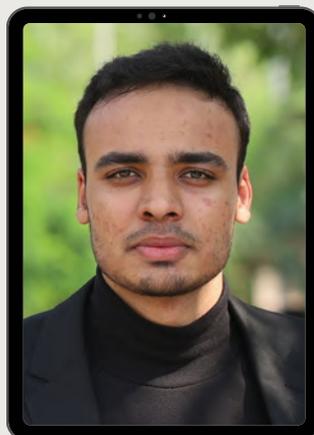
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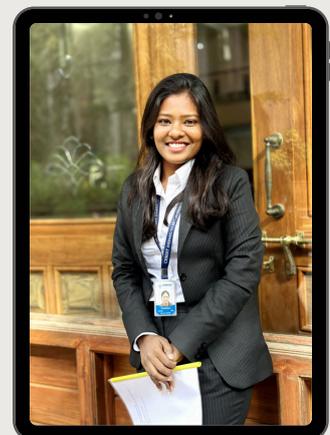
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