IOSR Journal of Computer Engineering (IOSR-JCE)
e-ISSN: 2278-0661, p-ISSN: 2278-8727, Volume 27, Issue 4, Ser. 3 (July. – August. 2025), PP 54-62
www.iosrjournals.org

Comprehensive Research Into All Possible Use Cases Of Agentic AI In Automotive Domains

Aayush Jamalamadaka
Student and Academic Coordinator- Indus International School, Pune, India.
Email- aayushj038@gmail.com

Abstract
This paper explores the various uses cases of Agentic AI in automotive domains. AI agents and Agentic AI have often been misconstrued as synonymous concepts, and hence I have added a section in the paper that clearly differentiates between the two. Each automotive domain has been defined briefly, followed by an expansive insight into the various use cases of Agentic AI in that domain. Moreover, I have added a discussion of how the same features or software would behave or optimize vehicle utilities if traditional AI was used. This has been done to highlight the irrefragable benefit afforded by Agentic AI to automobile manufacturers. A note on cybersecurity has been included to identify a crucial use case of Agentic AI. Finally, the shortcomings of Agentic AI have been highlighted.

Date of Submission: 12-08-2025 Date of Acceptance: 22-08-2025

I. Introduction And Background

Being a car aficionado, my dreams in childhood often lingered around what I considered impossible back then: inception of self-driving vehicles, or a fantastical realm of flying cars. Little did I know that companies- like Waymo- were already bent on converting this into a reality- building autonomous vehicles capable of driving without any human support. Exploring a bit about these autonomous vehicles got me introduced to a new buzzword: Agentic AI. Agentic AI, in simple terms, is multiple AI agents put together to build a system that autonomously learns from massive amounts of incoming as well as past data and proactively take informed decisions designed to boost technological efficiency and automation. What makes Agentic AI so sought-after is its environment-specific adaptability and ability to propose solutions tailored to varied requirements of complex dynamic workflows. Gen AI is different- it is like an assistant, responding to the requests or suggestions provided to it. However, it lacks the technological finesse to independently take decisions after processing the data. Agentic AI contrasts with traditional AI systems as well- traditional AI systems do not have the capability to take independent decisions, and they often follow a predefined set of instructions and rules. Hence, they often fall out of favor from companies looking for software having the ability to adapt to complex workflows and work dynamically. Agentic AI is particularly gaining popularity in the automobile domain- a computer science arena which focuses on the development of crucial software technologies for vehicle development and manufacturing to further enhance vehicle safety, maneuverability, and comfort[1]. McKinsey's research points out that Agentic AI is expected to add up to $215 billion annual value to the automotive industry by 2030**,** with much of this increase coming from more customer-focused solutions and automation[2]. Even so, ethical dilemmas and safety concerns loom large over such systems, and the extent of their reliability is a hotly debated topic. This study aims to analyze various use cases of Agentic AI in automotive domains and present their shortcomings as a note of caution.

II. A Key Nuance- Difference Between AI Agents And Agentic AI

An AI agent is an autonomous agent used for performing limited goal-oriented tasks with a small scope. It often involves an element of repetition and works in response to a specific cue. However, Agentic AI is a combination of otherwise isolated AI agents doing their independent tasks. Therefore, when Agentic AI is used, it often has the exceptional ability to adapt to varied circumstances, form patterns from past data, perform multiple operations simultaneously, and proactively provide suggestions based on consumer preferences[3].

Advanced Driver Assistance Systems (ADAS)

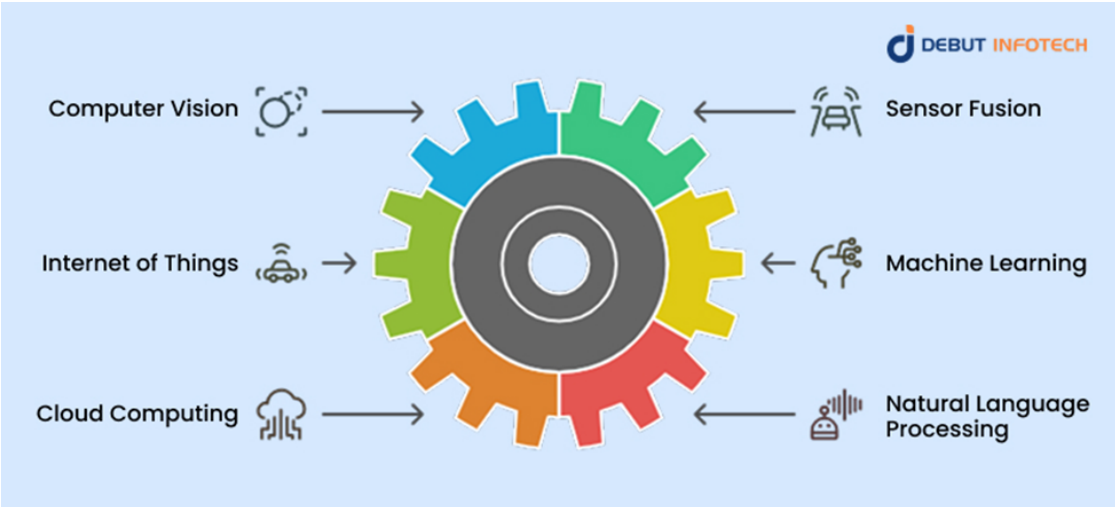

Image 1: A diagram to demonstrate the technologies allowing Agentic AI to effectively perform complex tasks

AI agent is one of the most widely used software for a vast array of ADAS features like Blind Spot detections, Lane Departure Warning, Adaptive Cruise Control, etc. Various automotive software-providing companies create potent AI agents to streamline efficiency, safety, and easy usability in these systems. Since these systems are concerned with the safety of the passengers, they are often of paramount importance to Original Equipment Manufacturers (OEMs) like BMW, Tata, Toyota, Honda, etc. Here is an overview of how Agentic AI plays a vital role in coordinating these features in vehicles.

Computer Vision: This mainly encompasses systems like cameras and video recordings utilized by vehicles to effectively spot any obstacles, detect potential accidents and autonomously take safety-enhancing decisions.

Internet of Things (IoT)- This allows vehicles to access mainstream technological digital services like traffic management systems, AI systems, and other diagnostic systems.

Sensor fusion- Sensors are essentially radar derivatives, which help in detecting obstacles around a vehicle and communicate crucial information to AI agents, which then enables agents to coordinate further actions. The concoction of different sensors in the vehicle- proximity, motion- significantly helps to enhance safety with minimal human intervention.

Machine Learning (ML)- If the camera is the service provider, then the Machine Learning model is the classifier. Simply put, machine learning models help to classify different obstacles rallied to it by the camera inputs. Similarly, it identifies and classifies information provided to it by the sensors. For example- whether the obstacle identified is a car, bike, human being, etc.

Cloud Computing-This allows car companies to stockpile large amounts of data emanating from different fleets, keeping AI models updated. It aids in remote diagnostics and fleet management, permitting the company to have a one-stop-all destination to access data as well as extract crucial insights from it.

Natural Language Processing (NLP)- This bridges the gap between assistance and prompt responses, with AI responding to human requests like messaging someone, or asking AI to share a joke. NLP systems enrich consumer experience and usability.

How Agentic AI contributes to the functioning of different features

Adaptive Cruise Control: The software continuously monitors the movement of the vehicle in front, the proximity of the surrounding cars, and seamlessly optimizes the speed to maintain a safe distance with the neighboring vehicles.

Lane Departure warning: It uses radar and camera insights to detect if a vehicle can maintain a specific lane; if it does not, the technology makes autonomous steering adjustments to keep the vehicle centered in the land and prevent unnecessary accidents. This especially helps during highway driving.

Automatic Emergency Breaking: It continuously keeps a watch on neighboring obstacles (be it vehicles, pedestrians, or any barrier) and autonomously decides to apply breaks when it foreshadows a potential accident or crash.

Blind Spot Detection: Using radar sensors, the software monitors vehicles in proximity and flashes relevant warnings when it detects a possible danger with another vehicle, avoiding haphazard lane changes and subsequent accidents.

In this way, Agentic AI, along with the help of technologies like radars and cameras, can autonomously make decisions and enhance the safety of vehicles on the road.

What if traditional AI or simple code was used to implement these systems?

Had traditional AI been used, cameras and sensors would simply have relayed the information- the software would have lacked the technological capabilities to autonomously respond to the information and take proactive steps. Moreover, limited adaptability of these systems would have led to their failure when new circumstances- other than the ones practiced in training- would have been encountered. This would significantly possess a safety hazard, as the inability to detect a change of lane and keep the vehicle in the specified lane, for example, would lead to potentially serious accidents on the road[4].

Figure 2: A sneak peek into how the world looks for an autonomous software like Agentic AI operating in a car

Digital Instrument Cluster and the Cockpit

What are they?

The **digital instrument cluster** is the digital display behind the steering wheel(in some cars, it can be found integrated with the cockpit towards the left of the steering wheel), displaying crucial details such as speed, fuel level, tire pressure, RPM, etc. Closely interconnected with the instrument cluster is the **cockpit**- a human-machine interface including infotainment, climate control, ambient light settings, etc[5].

How do AI agents help?

AI agents are inbuilt into these systems; they significantly bolster user experience, safety and help to regulate the information displayed on the cockpit and the digital instrument cluster at all times.

Personalization of Information: AI agents often personalize the information displayed on the instrument cluster according to driver habits and past experiences. For example- The cluster will automatically change configuration when a different driving mode is chosen(showing fuel efficiency in ECO mode, speed limit in SPORT mode, etc.

Voice Commands- Closely associated with the NLP, the voice commands given by the user are taken as inputs, with the duo responding according to the user's requests. This helps in streamlining a hands-free user experience, with only the essential features displayed on the cockpit and the instrument cluster.

User Interface- Software powered by AI agents can decide information that is to be displayed on the cluster based on real-time data and the driving environment. Additionally, it might choose to simplify certain aspects of the design if need arises- functions related to simplifying the driver's job and providing comfortable user experience. For example- the cluster might display a Forward Collision Warning (FWD) on the screen instead of the speed if the vehicle is too close to another one in front of it. Or it might choose to declutter the cockpit if the driver is driving at high speeds to avoid distractions.

Automatic suggestions- Imagine that you are driving on a road that has a traffic jam about 2 kilometers ahead. Traditional AI would have failed to provide a warning or an alternate route, as it often works as an assistant, and only responds when prompted to. AI agents are equipped with the essential technology to proactively suggest an alternate route or warn the user of a potential danger ahead.

What if traditional AI was used?

Had traditional AI been employed, digital clusters would lack the personalized experiences they offered, unable to attune the credentials and information displayed to driver behavior and past data. Voice commands would respond to user's requests, but lack the technological adroitness to respond to deliver personalized and environment-specific responses. Additionally, it would completely inhibit the crucial skill to provide a user interface according to real-time road conditions. In totality, traditional AI systems would detract from the very purpose digital instrument clusters and cockpits are intuitive: it is only in their ability to customize and personalize experiences that these systems are a popular choice for car manufacturers.

Telematics/ Connectivity

What does the term mean?

Telematics is a portmanteau of the words information technology and telecommunications. It involves the transmission of data over long distances for real-time vehicle monitoring, maintenance requirements and driver behavior analytics. In a broader sense, automobile companies utilize telematics to simplify fleet management, ultimately offering an incisive insight into health, productivity, maintenance, and usability of their fleet. Telematics is one of the most widely used applications of Agentic AI, projected to significantly boost revenue of companies, enhance safety, bridge communication gaps, and ultimately usher in a new era of AI-powered telematics[6].

How telematics work

These systems connect with the vehicle's own onboard diagnostics (ODBII) or CAN-BUS port with a SIM card, collect the vehicle specific data and relay the data to a centralized server through a cellular network (or any other form of wireless network). The server (essentially aided by AI agents) interprets the data, compiles its own suggestions and finally displays it to the users through apps customized for smartphones and laptops.

Use cases of Agentic AI

Fleet management- AI agents manage the routes and schedule of vehicles in response to real-time traffic and weather data. This effectively helps companies to manage their fleet, and individual consumers to benefit from the suggestions provided by the software- be it route-related, weather-related, or safety related. At their core, these systems autonomously analyze telematics data and suggest optimal routes for navigation, safety, and comfort of the passengers.

Maintenance schedules- Agentic AI can dynamically adjust service schedules based on wear and tear, actual usage, customer behavior and weather conditions. The autonomous scheduling of maintenance and upkeep pre-empts potential safety hazards, while keeping an eye on warranty and service record tracking. This helps fleet managers and customers decrease expenses and enhance safety by systematically scheduling preventative maintenance.

Safety monitoring- Telematics often helps relay information pertaining to common safety hazards to fleet managers, allowing them to assess potential lacunae in the functioning of the vehicle parts of defects in the design. Over time, OEMs implement changes in the vehicle to prevent future mishaps. Imagine you employ a driver to drop your son to his music class and do not want the driver to cross a particular area or take a particular road. Telematics offers a crucial service for the same- called geofencing. Geofencing, in simple terms, creates a geographical fence around a vehicle, preventing it from exiting (or entering) a specific area.

Provision of insurance- Insurance companies often rely on telematics to track common accident cases and monitor driver behavior. This allows them to effectively assess potential risks and adjust insurance premium packages accordingly.

What if traditional AI systems were used?

Traditional AI systems are still in use in the automobile arena. They lack the structural and technological heft to proactively and autonomously make suggestions to fleet managers and vehicle owners- suggest traffic-free routes in response to incoming traffic navigation data, dynamically offer maintenance scheduling depending on continuous assessment of the driver behavior analytics, relay safety gaps and suggest changes to address them, and so on. Agentic AI is poised to replace these relatively unresponsive and relatively nonautonomous systems, providing an easy solution to decrease control costs, boost productivity, enhance accountability, and provide comfortable user experience[7].

Chassis and body control

What do the terms mean?

Have you ever felt some vehicles to be bumpier than others on the same road? Or perhaps they are more stable and provide a better zip for driving? Much of it is due to the design of the internal framework, or the chassis of the vehicle. A car chassis (pronounced cha-see) is the skeleton of the vehicle- the structure which consists of wheels, suspensions, steering system, axle system, etc. In simple terms, it is the structural component which affords the car a basic external outline as well as internal stability. A basic framework such as a chassis is crucial for ride quality, control, and stability of the vehicle[8].

At its core, an automobile consists of different ECUs performing distinct and specific tasks and located at different locations. The Body Control Module (BCM) acts as the brAIn-coordinating the internal functions of the vehicle's body electronics by sending and receiving signals from the different ECUs. Has it not been for the BCM, the vehicle would have consisted of a gamut of wires, connecting one ECU to the other. The BCM acst as the one-spot destination to enhance communication between these different units in the vehicle's internal functioning. For example, if you press the button to roll down the window, the ECU associated with the car's battery send a signal to the ignition of the car, prompting the motor associated with the window to rotate and ultimately open the window[9].

Role of Agentic AI

Presently, Agentic AI is not as widely used in this aspect of vehicle management as it is used in other aspects such as ADAS. However, given its ability to enhance vehicle safety with minimal human intervention and costs, its incorporation in the vehicles is increasingly becoming a popular choice for OEMs.

Active Suspension management- AI agents continuously track road conditions and accordingly adjust the suspensions to deliver smooth ride quality, improve handling, and boost passenger comfort. For example, at high speeds, the suspensions become stiffer and tend to tether the passenger to the seat's body.

Electronic Stability Control Program- On skiddy roads, the car often loses the necessary traction. In such cases, AI agents moderate the power given to the engines and the wheels to ensure the stability of the vehicle and safety of the passengers.

ADAS- Implicitly coordinated by the BCM, all ADAS features are designed to enhance passenger safety. As stated previously, the BCM acts as the brain of the vehicle- receiving different signals from the radar sensors and the cameras and emanating various signals to the cockpit to display relevant warnings to the passenger. Simultaneously, it controls the conduct of the vehicle in terms of autonomously applying the brake or monitoring vehicles in the blind spot and flashing warnings if required.

*Body roll and pitch control-*AI agents control anti-roll bars or the suspension system to minimize body roll while fast cornering or sharp turning. Similarly, suspensions are adjusted on slipper roads to ensure the vehicle does not lose balance and maintains pitch control.

What if traditional AI was used?

With specific reference to BMC, traditional AI would lack the proactiveness to coordinate ADAS features and the simultaneous information displayed on the cockpit and instrument cluster. It would lack the capability to respond to new and unfamiliar situations, which often need tailoring in terms of dynamically and adroitly changing the response mechanisms. This is majorly because of traditional AI's restriction to work only on specific pre-trained inputs. Hence, it is often unable to respond to cases not encountered in training, often requiring an upgradation to Agentic AI to offer robust adaptability.

Powertrain

What it means

As the name suggests, powertrain is any system that provides power to a vehicle and ultimately help in propelling it forward. In a car, specifically, it often includes parts like engine, motor, and its internal components such as transmission, energy storage system, and driveshaft. In a conventional Internal Combustion Engine (ICE), the powertrain system converts the stored gasoline or fuel into kinetic energy and transfers it in the form of torque to the wheels of the vehicle[10].

Role of Agentic AI

Real-time powertrain optimization and personalization- AI agents closely monitor driver behavior and engine parameters to adaptively manage fuel injection, turbo boost and other settings. This helps to create a personalized driver experience, optimizes the powertrain performance to suit the driving style of the particular driver(For example- more power for more highway driving). This helps increase fuel efficiency, reduce unnecessary CO2 emissions, and enhance the overall driver experience.

Transmission control- Agentic AI embedded in in the BCM often helps change gears dynamically after analyzing past experiences, road conditions, and driver behavior. This helps to increase the fuel economy and smoothness of the vehicle.

Predictive maintenance- Lying at the intersection of powertrain and telematics, this system checks for faults in powertrain components over time. If there is a major fault jeopardizing the safety of the passengers, AI agents will automatically relay this information to the users through the telematics app.

Adaptive traction control- AI agents also control power distribution among vehicles, especially all-wheel drive ones. This helps in effective power distribution and increase traction on slippery roads.

Emissions reduction and compliance testing- To comply with universally imposed laws related to CO2 and other harmful emissions, implicitly fitted AI agents in vehicles often adjust combustion parameters and treatment systems to minimize the emission of toxic gases directly into the atmosphere. This ensures conformity with environmental laws without ignoring driver comfort and vehicle performance.

What if traditional AI was used?

Again, traditional AI will not be able to personalize driver experiences and adaptively manage fuel consumption and transmission controls. It would lack the foresight to make timely suggestions related to maintenance due to possible wear and tear of the powertrain components. Moreover, these systems cannot tailor their services to constantly changing compliance laws, leading to possible legal quagmires for OEMs.

Infotainment

What it means

Infotainment is also a portmanteau, formed by the words information and entertainment. The In-Vehicle Infotainment (IVI) system operates as a multimedia interface within the vehicle, providing important information and content related services- from radios to radar sensors to built-in cameras[11]. The system consists of a Central Processing Unit (CPU) at its core, effectively coordinating all the functions delivered to the users generally through different interfaces- audio, touch screen, button panel, voice commands, etc. The market analysts predict that the global automotive infotainment market will generate $20,720 million by 2030 and grow at a decent 8.32% CAGR[12].

Role of Agentic AI

Personalized content recommendation- AI agents learn extensively from driver preferences over time, including music choices, radio channels, driving modes, news, etc. Accordingly, they suggest media content, attuning the experience to the driver's mood, past data, driving mode, weather, etc.

Conversational Seamlessness- AI agents have embedded voice assistants that analyze consumer preferences after robustly processing complex queries. They have the anticipating power to predict driver needs, manage calls, messages and other driver-related tasks autonomously, as well as through natural dialogue.

Context aware decision-making- Imagine you are driving on a highway, with constant beeps on your phone eroding your focus on the road. AI agents come in handy at such times, automatically silencing notifications and prompting the user to keep complete attention on the road. Therefore, AI agents adapt UI dynamically to enhance driver safety and convenience. They also sync calendars and phone contacts with the vehicle's Bluetooth system, proactively reminding drivers about appointments or meetings, suggesting optimal departure timings, and so on. Similar adjustments are made related to acoustics and sound-related changes- loud external environments might warrant relevant noise cancellation.

Multi-modal coordination- AI agents combine all inputs in tandem- voice, eye movements touch, gesture, etc. This allows them to make relevant changes to the Infotainment system and accordingly enhance driver experience. To illustrate, say a driver's gestures and eye movements suggest that the driver is in a gloomy mood(The IVI system has a predefined set of cues or inputs which help it identify moods of a driver). The IVI system might play cheerful mellifluous music, potentially spray an aromatized scent through the air conditioning system or make relevant changes to the display component of the Infotainment system to cheer up the driver. While enhancing safety (a driver in a gloomy mood is vulnerable to losing vehicle control), this ensures an alert system that is capable of robustly adapting to new and dynamic environments.

What if traditional AI was used?

Traditional AI would quickly be sidelined by OEMs because it is unable to personalize infotainment systems based on the real-time driver mood and environment-specific vehicle conditions. It also lacks the conversational robustness to respond to customer queries outside of the trained data, largely due to its limited adaptability and learning potential. With limited anticipating power and context-awareness, traditional AI would fail to recognize driver discomfort, wayward vehicle functioning, and unlearnt external environments.

Middleware

What does it mean?

Middleware acts as a bridge between the operating system, the applications that run on it, and hardware components (ECUs located at different locations). This is becoming especially important, as OEMs struggle to strike a balancing act between software usability and inter-hardware connectivity.

Use cases of Agentic AI

Resource Management- AI agents dynamically allocate computational resources such as GPU power, memory, and bandwidth to vehicle applications based on past user experience, priority, and internal as well as external context. For example, a city drive might allocate more resources to infotainment medium, while a highway drive might prioritize ADAS systems and allocate more resources and GPU power to them.

Fault detection and self-repairing- AI agents proactively monitor software and hardware parts of the vehicle. Upon detecting a failure, it reroutes data or alters the module functioning of the component concerned. For example, if an ECU sensor component near the tire fails, the agent restarts the ECU, while simultaneously alerting the backup ECU sensor to restore functioning without any disturbance to the driver.

Efficient and context-specific data routing- AI agents intelligently route sensor data and control systems between the vehicle internal and external systems or between the vehicle systems and the cloud. While sending relevant data gathered from the camera to the ADAS features, the agents simultaneously ensure that traffic data are sent to the cloud-based service to achieve balanced bandwidth distribution. The agents also manage the Quality of Service(QoS) systems of the vehicle, ensuring that bandwidth is transferred to prioritize essential features depending on the context and driver behavior. For example, in a busy city street, the middleware software will intensify communication with sensor fusion and efficient breaking systems to facilitate a safer environment for the driver.

One-stop connection point for different units (The Linker)- Multiple AI agents feed inputs into the middleware software, ensuring that it effectively fuses their data, extracts insights and acts as a linker between different and distinct components. For example- All agents controlling camera systems, sensor systems, and braking, feed their data into the agents in the middleware. The middleware enhances communication between them and ultimately helps them make a decision in conforming to safety requirements, driver comfort, and entertainment.

What if traditional AI was used?

Traditional AI would lack the resource management skills to effectively and autonomously transfer GPU power and bandwidth according to internal and context specific requirements. Though it would be able to detect faults in the vehicle ECUs, it would lack the technological prowess to proactively reroute data or alter module functioning of basic parts. Similarly, it would lack the ability to assign a priority to different ECU functioning and route sensor data or manage control systems efficiently. Hence, it would act as a passive inhibitor- taking in information without having the proactive ability to make context-aware dynamic suggestions.

A note on cybersecurity

Before we dive into the shortcomings of Agentic AI, let us take a quick look into how it enhances cybersecurity in automotive systems.

Autonomous threat detection- Agentic AI has the innate ability to detect anomalies or suspicious activities in a vehicle's software. A slight indication of malware or phishing attacks warrants an immediate feedback mechanism from Agentic AI, isolating affected nodes or blocking incoming traffic from the contaminated data source.

Proactive threat hunting- Unlike a reactive traditional AI system, Agentic AI proactively hunts for vulnerabilities and hidden cyber-attacks in the automotive system. It foreshadows potential attack strategies by internal simulations and adapts defenses accordingly.

Adaptive learning- Serving a crucial differentiator from traditional AI systems is Agentic AI's ability to adaptively learn from new threat patterns in real-time by recognizing subtle and previously unseen patterns.

Predictive security management- Closely related with proactive threat hunting is Agentic AI's to dynamically predict future threats to security of the vehicle or the software associated with it. This preemptive approach follows a more "prevention is better than cure" philosophy than pandering to the traditional AI way of removing a threat before it takes a malignant form.

In this way, Agentic AI takes a big leap from traditional AI systems, offering a heightened sense of security and protection against potentially unsettling cyberthreats. This also enhances vehicle longevity, ensuring that small cyberthreats don't contribute to a much larger after-effect on the vehicle's internal as well as external functioning.

Major Shortcoming of Agentic AI

Bias and accountability issues- While immensely advantageous, Agentic AI cannot escape traditional bias traps- an Agentic AI system trained on underlying fraudulent or biased data tends to produce biased or inaccurate results. The concern spans a wider landscape- AI systems often err in cases where safety is compromised. This might include autonomous breaking implemented at an inaccurate time, or a slight lag in lane departure warning. This is majorly due to inaccuracy of the algorithms used to train these systems.

Security risks- Agentic AI often stores sensitive data in the automotive industry- data on the cloud of fleet management systems, for example- making them extremely vulnerable to cyberattacks. Though they have pretty good software to prevent cyberattacks, they are not completely immune to them. The autonomous nature of Agentic AI introduces a major risk- they might unintentionally breach privacy regulations, leading to a major violation of compliance laws. What's worse, OEMs will be directly liable for this breach. Hence, these systems require continued human oversight and a periodic enhancement of security systems to successfully prevent security breaches. This leads to an unintended ripple effect- an increase in costs required to train personnel to maintain oversight.

Cost barriers- Agentic AI also requires continuous updates and changes in its algorithms to ensure new patterns are quickly as well as efficiently assimilated by the system. Its ability to respond effectively in a new environment requires massive amounts of training data, again increasing the base cost required to build and maintain these systems.

Integration into existing systems- Implementing agentic AI often requires certain prerequisites- one of the crucial ones is new and efficient systems having the ability to train as well as support the integration of Agentic AI. Most companies still rely on legacy AI systems for providing service, often needing a complete revamping of the underlying mechanisms to accommodate for the broader inclusion of Agentic AI services. This entails further costs, as well as additional compliance law revisions. This can be time-consuming and expensive at the same time, especially if the Return on Investment(ROI) is insubstantial to cover up for the initial investment as well as constant upkeep[13].

References

[1] Tata Elxsi. AI Agent Systems: Building Autonomous Solutions. Https://Www.Tataelxsi.Com/News-And-Events/Agentic-AI-Systems-Building-Autonomous-Solutions. (2025)

[2] Debut Infotech. Exploring The Impact Of AI Agents In Automotive Applications. Https://Www.Debutinfotech.Com/Blog/AI-Agents-In-Automotive-Industry. (2025)

[3] Analytics Vidhya. What Is The Difference Between AI Agents And Agentic AI? Https://Www.Analyticsvidhya.Com/Blog/2025/05/AI-Agents-Vs-Agentic-AI/. (2025)

[4] Datacamp. Agentic AI: How It Works, Benefits, Comparison With Traditional AI. Https://Www.Datacamp.Com/Blog/Agentic-AI. (2025)

[5] Blackberry. Digital Cockpit. What Is A Digital Cockpit? (2024)

[6] Transorg Analytics. How Telematics And Agentic AI Are Transforming The Automotive Industry. Https://Www.Transorg.AI/Driving-Innovation-How-Telematics-And-Agentic-AI-Are-Transforming-The-Automotive-Industry/. (2025)

[7] Verizon Connect. What Is Telematics? What Is Telematics? Everything You Need To Know | Verizon Connect. (2023)

[8] Acko. What Is A Car Chassis: Types Of Chassis Frames Explained. What Is A Car Chassis: Types Of Chassis Frames Explained. (2024)

[9] Embitel. How Body Control Module (BCM) Works In An Automobile. Body Control Module In Automotive | BCM Control Unit. (2025)

[10] Arm. Powertrain. What Is A Powertrain? – Arm®.

[11] Evans Halshaw. What Is A Car Infotainment System, And How Does It Work?. What Is A Car Infotainment System, And How Does It Work?. (2024)

[12] Einfochips. Everything You Need To Know About In-Vehicle Infotainment Systems. In-Vehicle Infotainment System - Everything You Need To Know About. (2025)

[13] Digitaldefynd. 20 Pros & Cons Of Agentic AI. 20 Pros & Cons Of Agentic AI [2025] - Digitaldefynd. (2025)