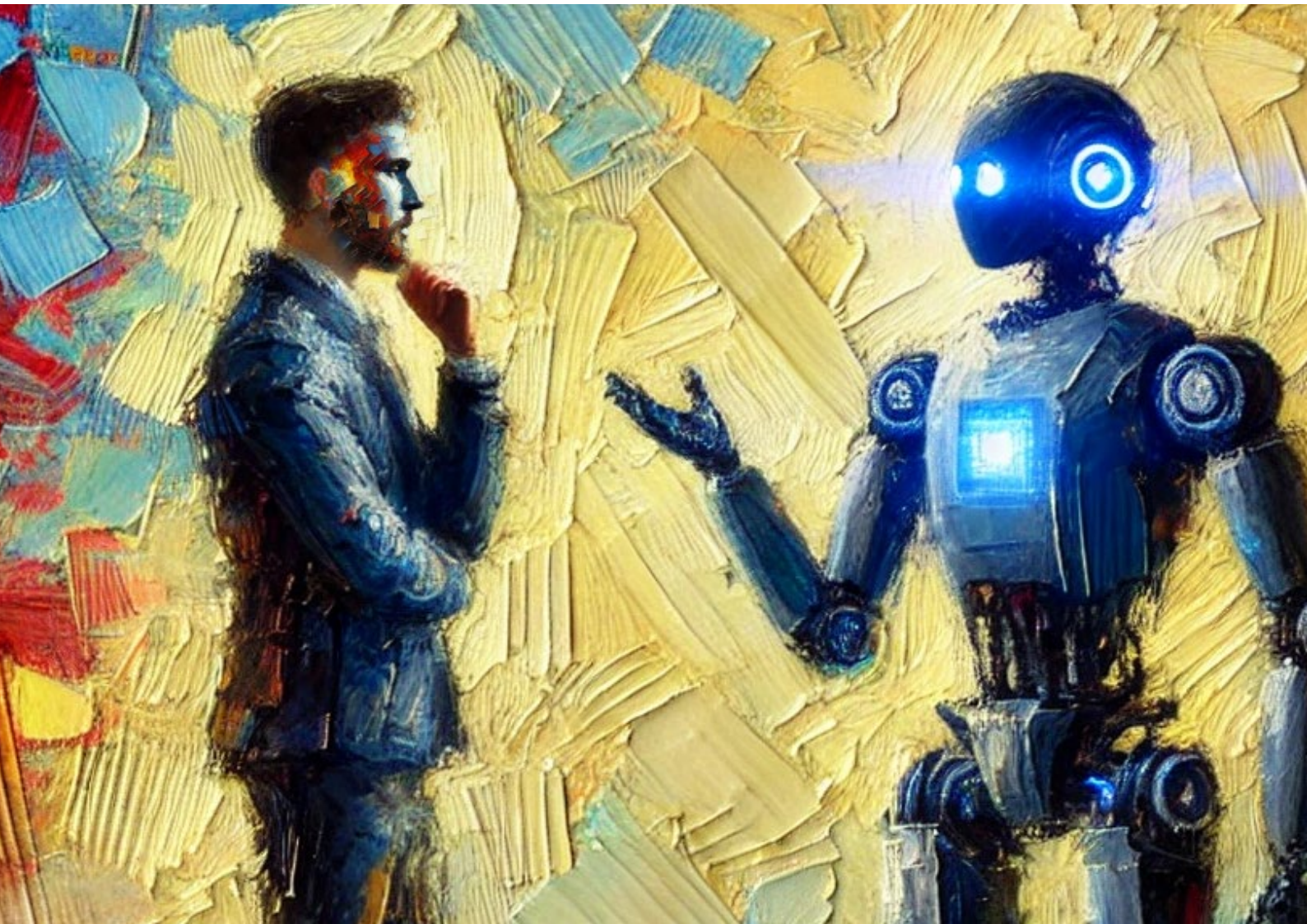
MATERNA

Whitepaper

Clarity in the data flood with BMC HelixGPT

Integrating artificial intelligence into the BMC platform: potential and applications



Bringing clarity to the data flood with HelixGPT

Groundbreaking innovations in the field of artificial intelligence (AI) help organisations meet increasing demands driven by trends and technological advancements. BMC addresses this dynamic with its own solutions, HelixGPT and AIOps, both of which incorporate AI components. These solutions enable organisations to optimise control of their IT environments, respond proactively to changes and not only resolve operational disruptions but also prevent them. By seamlessly connecting data centre operations and service delivery, BMC provides a foundation for agility, resilience and efficiency in an ever-evolving IT landscape.

Discover how BMC technologies help organisations stay in control of the technology wave rather than being swept away by it – and how companies can use them to build a bridge towards a smarter, future-ready IT landscape.



From disruption to resolution: how AI is transforming IT services

With previous technologies, data centre operations and service delivery were separated. As a result, extensive investigations were often required in the event of a service disruption.

Ticket processing is often slow for various reasons. On the one hand, researching and analysing complex systems can take a great deal of time because dependencies and interactions must be examined thoroughly. On the other hand, knowledge articles or detailed descriptions that would support faster problem resolution are often missing. In addition, unnecessary requests that consume resources slow down processing and divert attention from core tasks. The human ticket agent is often the bottleneck in IT service management processes: to resolve requests, they must search for information, diagnose errors or wait for input from other teams. With limited staffing and increasing ticket volumes, this bottleneck is becoming more noticeable.

An AI-based solution such as BMC HelixGPT provides an innovative approach, acting as a virtual assistant within the ITSM ecosystem. With its comprehensive understanding of the system landscape, HelixGPT can provide IT service staff with solutions or guidance within seconds, helping resolve common problems more quickly and significantly reducing the workload on IT departments. Routine requests that previously required ticket creation can now be handled directly by HelixGPT. The effect: better focus on complex challenges and a much more efficient workflow. From the ITSM suite to the CMDB, service monitoring and the digital workplace, there are many data sources integrated into the BMC toolset. HelixGPT can be integrated seamlessly into the entire suite and provides broad support – not limited to individual functions. This includes the user portal as well as the supporter and administration portals, since disruptions in these tools are often complex and require input from multiple experts.

BMC HelixGPT addresses this challenge on three levels

First level:
simple data integration

- Knowledge Management
- Confluence
- ITSM
- Artificial Intelligence Operation

Second level:
various points of entry

- Digital Workplace (DWP)
- IT Service Management (ITSM)
- Artificial Intelligence for IT Operations (AIOps)
- External points of access

Third level:
security structure

- No hallucinations
- Data protection and compliance
- Stateless design
- Secure permission model
- Data encryption and data isolation
- Data retention

First level: simple data integration

Data exists in different systems, tools and formats. To generate real value from this data, it must be consolidated and analysed efficiently. This is exactly where BMC HelixGPT comes in, significantly simplifying data integration.

To ensure HelixGPT can fully unfold its capabilities within the ITSM landscape, the AI needs access to the relevant data sources. HelixGPT provides a well-designed and seamless integration of data from a wide range of systems, such as the CMDB or ticketing systems. The platform offers flexible interfaces and integrations to consolidate data quickly and consistently. Thanks to the use of AI-supported mechanisms, data normalisation and processing take place automatically, improving efficiency and accuracy in problem resolution while saving resources.

HelixGPT brings together the necessary information from various systems. This saves time and makes it easier to access exactly the data needed. The system can thus make better use of valuable resources, such as the time of service staff, and respond quickly to complex requests. With its simple and efficient data integration, BMC HelixGPT enables organisations to make informed decisions in real time, detect operational disruptions faster and deliver innovative services. This is ensured by various individually usable out-of-the-box connectors (predefined integration interfaces that are ready to use without additional customisation or programming). These connectors are explained in more detail below.

- Knowledge Management

The integrated knowledge management system enables HelixGPT to provide relevant information and documentation for frequently occurring issues directly. If a customer, for example, has a question about a recurring error message, HelixGPT can immediately offer suitable articles and solution approaches from the knowledge base. This eliminates the need for staff to search for information and provides direct insights.

- Confluence

The wiki serves as a central repository for documentation, project information and other internal resources. HelixGPT can search and use Confluence content to provide service staff with all relevant information required to resolve a ticket. This ensures that no important information is overlooked and enables faster, more informed problem-solving.

- ITSM

Because BMC HelixGPT is deeply integrated into IT service management processes, it can automatically access current and historical tickets to provide context and solution paths for similar cases. This information is valuable for quick and effective resolutions, as the AI not only knows the current ticket but can also analyse the history of comparable cases.

- Artificial Intelligence Operation

HelixGPT is also an essential component of operations management and supports the team with critical information. Data gathered through BMC Helix Operations Management and BMC Discovery forms the basis for providing additional insights in natural language. HelixGPT can also make suggestions for new automation scripts, reducing the workload required for routine tasks.

Second level: various points of entry

One of the major advantages of BMC HelixGPT lies in its variety of entry points. Organisations can integrate the platform exactly where it delivers the greatest value – whether in IT operations management, service management or business process analysis.

BMC HelixGPT is available at various access points, making interaction more flexible and easier for users. This flexibility ensures that HelixGPT can be embedded seamlessly into existing infrastructures, regardless of an organisation's size, industry or technological maturity. By enabling integration into multiple environments, different departments and user groups across the IT landscape can access the same service without leaving their familiar workspace. HelixGPT thus becomes a universal tool that supports both simple requests and complex ITSM processes.

The variety of entry points makes BMC HelixGPT a versatile solution for organisations looking to address different IT and business requirements. Whether for optimising operations, improving user experience or supporting strategic decision-making, HelixGPT adapts flexibly and provides support where it is needed most.

- Digital Workplace (DWP)

In the digital workplace, end users can submit requests and issues directly to HelixGPT without creating an IT ticket. If an employee, for example, has an IT request related to software setup, HelixGPT can offer this as a self-service option via the DWP and resolve the request immediately. This relieves the IT support team, and employees receive faster responses.

- IT Service Management (ITSM)

For IT support and specialist departments that work closely with the ITSM tool, HelixGPT offers direct assistance with complex requests. IT experts can receive automated support and solution suggestions based on experience through HelixGPT's integration into ITSM. This enables faster, more informed responses and optimises workflow efficiency across the IT department.

- Artificial Intelligence for IT Operations (AIOps)

HelixGPT supports AIOps processes by detecting anomalies and potential issues at an early stage. For example, the AI can identify unusual activity in infrastructure components based on data streams and event logs and propose measures before a failure occurs. This increases IT process efficiency and system stability.

- External points of access

Since many organisations already use AI or chat-enabled applications, HelixGPT offers integrations for them as well. For example, an employee can communicate with HelixGPT directly via Microsoft Teams to open DWP tickets. Integration with copilots is also possible, eliminating the need to switch between tools. This is only a small part of the integrations BMC will offer in the future to ensure a unified IT landscape.

Third level: security structure

BMC HelixGPT relies on a comprehensive security structure as an integral component to ensure the reliability and confidentiality of information. Because HelixGPT is used in critical IT processes and works with sensitive data, a high level of security is essential. With dedicated measures, BMC ensures that the AI accesses verified and valid data sources and adheres to all compliance and data protection standards.

The security structure of BMC HelixGPT combines cutting-edge technologies, strict policies and continuous monitoring to provide a fully protected platform. BMC ensures that the platform is updated regularly to respond to new threats and eliminate vulnerabilities. Updates are delivered without interrupting operations to ensure platform availability.

- No hallucinations

One of the challenges of using AI in sensitive environments is the phenomenon of "hallucinations". These are AI-generated outputs that appear plausible but have no basis in actual data. To avoid this issue, HelixGPT is programmed to access only verified data sources and not to "invent" information. In addition, sources are always referenced in the context of answers. This keeps outputs relevant and correct and strengthens the reliability of HelixGPT. Administrators can also configure the model's temperature settings, which influence the randomness of outputs.

- Data protection and compliance

Data protection and compliance are especially important for data-driven systems such as artificial intelligence. For this reason, BMC builds on five pillars.

- Stateless design

BMC ensures in its architecture that data control remains with the HelixGPT administrators. It also ensures that data is not stored persistently at any stage.

- Secure permission model

At the infrastructure level, data in the database is encrypted (data encryption at rest). At the application level, a multi-level permissions model is applied so that users only access data they are authorised to see. Additionally, an access control list (ACL) check is performed before data is made available to HelixGPT.

- Data encryption and data isolation

The vector database uses AES-256 encryption. Data from multiple tenants is separated and isolated. Access to this data is managed through a role-based rights model configured via the Helix portal and ITSM. Access to other tenants is not permitted and fully excluded. Prompting is only allowed for the respective tenant and requires the HelixGPT administrator role.

- Data retention

BMC uses a "bring your own model" approach for HelixGPT. A supported model can be provided by the customer and run locally or on controlled systems without compromising security. The vector database contains metadata, and whether this information is stored depends on its source. For example, an unpublished knowledge article is removed from the database.

Conclusion: moving into the future of IT operations with BMC HelixGPT

BMC HelixGPT is transforming how organisations design and optimise their IT and business processes. Combining powerful artificial intelligence, simple data integration, flexible entry points and a robust security structure, the platform offers a holistic solution for the challenges of modern IT environments.

HelixGPT enables organisations to manage increasing complexity in the IT landscape by automating processes, accelerating decision-making and proactively preventing operational disruptions. With seamless integration into existing systems and intelligent data usage, organisations can not only operate more efficiently but also strengthen their ability to innovate and improve service quality.

The platform builds a bridge between IT operations and the business world and lays the foundation for a future-proof, agile and resilient IT infrastructure. Organisations that use HelixGPT are well prepared to keep pace with a dynamic and constantly evolving technological landscape and to actively shape the future.



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Materna covers the entire range of services offered by a full-service IT provider in the premium segment: from consulting to implementation and operations.

Its customers include IT organisations as well as specialist departments in the private sector and public administration.

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