

An aerial night view of a city with numerous skyscrapers and buildings, many of which are illuminated with vibrant, colorful lights (blue, purple, yellow, red). The scene is filled with light trails and a dense urban landscape. The text is overlaid on the left side of the image.

**So, tell me again why do we need observability?**

RESEARCHED BY

**OMDIA**

COMMISSIONED BY

**IBM**

**SUMMARY**

**CATALYST**

**Advances in technology offer organizations significant opportunities to drive growth, enhance operational efficiency, and elevate customer experience.** For example, according to Omdia’s IT Enterprise Insights 2025 survey (n=5,100), generative AI (GenAI) is currently being used by 13% of organizations, while 50% of enterprise customers state they are piloting or beginning to implement GenAI. However, these advancements also introduce complexities that demand careful navigation of increased system intricacies, workforce upskilling, and other adaptation requirements. Omdia’s AI and edge survey 2024 (n=640) found that the second biggest barrier impeding a faster adoption of new technology, behind security (40%), was a lack of skills to manage the complexity of said technology (33%). Navigating the complexity of the IT estate has shown to be a priority for business leaders. In fact, improving operational efficiency was the second most important business objective recognized by business leaders

in 2025 according to Omdia’s IT Enterprise Insights 2025 survey (n=6,800). APIS IT leveraged AI-driven automation from IBM to tackle the complexities of the modern IT estate. IBM’s AI-driven automation allowed APIS to optimize operations and reduce manual workloads. **APIS IT achieved a 90% reduction in manual tasks using IBM’s Observability solutions**, which exemplifies how the strategic adoption of AI and observability can streamline IT management and support rapid growth.

Technology business management (TBM) is one area where GenAI technology is being applied with a specific and domain-centric approach. Omdia believes GenAI will be applied to perform the initial understanding of any requests, assisting with problem diagnosis, and automating the response/action. However, if the use of this technology is not matched with organizational maturity and readiness, it will fail to deliver all promised benefits due to mistrust and poor process alignment.



Of organizations are currently using Generative AI (GenAI).



Of enterprise customers state they are piloting or beginning to implement GenAI.

SOURCE: OMDIA IT ENTERPRISE INSIGHTS 2025 SURVEY. NOTE: N=5,100



APIS IT achieved a 90% reduction in manual tasks using IBM’s Observability solutions.



Lack of skills to manage AI and Edge technologies was the 2nd biggest barrier to fast adoption.

SOURCE: OMDIA AI AND EDGE 2024 SURVEY. NOTE: N=640

## OMDIA VIEW

TBM is an established framework, but the introduction of AIOps and FinOps has changed how it is perceived and used. TBM consists of a number of different disciplines such as IT financial management, asset lifecycle management, and observability. The overall purpose of TBM is to enable organizations to react quickly to changing market dynamics, make data-driven decisions, and align organizations around a common business objective. According to Omdia's DevOps survey 2024 (n=5,300) 19% of organizations believe information needs to be more accessible to improve operational processes. This evolution witnessed software vendors develop domain-specific solutions based on their perception of market need and business requirements. However, as the market matured, domain expertise and perception of requirements changed, and the **TBM Council** provided clarification of what a TBM solution must offer customers. One positive aspect of this maturity is the recognition that TBM must be an open solution that does not demand customers deploy a single vendor's stack of capabilities.

With AI-powered automation, observability tools now go beyond simple monitoring by identifying patterns, predicting incidents, and automating remediation steps. The benefit for IT departments to adopt AI-powered observability can be seen in the high number of IT personnel and domain specific skills needed to support the growing business use of technology, which translates to enabling the current IT resources to support larger and more complex environments. This capability also supports rapid, data-driven decision-making and speeds up incident response to reduce downtime and manual processes. AI-enabled observability allows enterprises to stay agile, so they can optimize their IT resources and focus on more strategic initiatives that support long-term growth.





## MARKET DEFINITION OF OBSERVABILITY

Observability and monitoring are core components of TBM, but what is the difference between the two? One of the starting points for observability is seen in the ability to extend the capabilities of IT operational management (ITOM) and IT operational analytics (ITOA) so that organizations can get insights into how the IT estate is performing. In contrast, monitoring provides only alerts indicating the time and location of an incident. This requires manual investigation of siloed data across distinct domains, which not only introduces the potential for human error but also represents an inefficient use of resources.

APIS IT had success in using **IBM's Observability solutions** to achieve real-time insights and predictive analytics. These solutions go beyond simple alerts, as they prevent incidents before they escalate. APIS IT saw a **50% faster resolution time for incidents**, which demonstrates how observability can shift from reactive monitoring to proactive IT management.

Understanding how the different domains in a complex IT system are interconnected and then putting this data into context is what observability delivers. The domains encompass all relevant layers, including server infrastructure, storage, network, customer experience, and application performance. Advanced observability takes this further by introducing two additional core capabilities: optimization and automation.

**Optimization:** Observability's benefit is seen by business leaders, as they are given the power to optimize their organizations' IT systems for maximum efficiency and effectiveness. Business leaders are engaging CIOs on their organizations' IT systems by seeking insights across key areas of solution optimization, including:



### The cost aspects of delivering IT services



### Storage capacity



### Computing capacity



### Network capacity and throughput



### Service delivery



### The environmental aspects

**Automation:** Automating key operational tasks is one way IT operations can begin to regain control of a complex and fast-moving environment. To be effective, observability must be able to identify the most opportune tasks that can and should be automated. The expectation is that as the use of GenAI increases, more tasks can be automated. One of the key benefits of this automation is that it reduces the potential for human error. Human error is one of the most common reasons for system failures – consider the recent CrowdStrike incident, which was due to a human error in the testing phase. According to CrowdStrike there was a flaw in the development process. In CrowdStrike's official report there was a mismatch between the number of input fields in the IPC (Inter-Process Communication) Template Type used for the update and the actual inputs provided by the sensor code. Omdia expects observability solutions to drive automation at various levels, from alerting administrators about potential issues to more advanced actions, such as initiating remediation tasks, automatically opening support tickets, or even executing complete process automation based on learned patterns and behaviors. **APIS IT reduced operational costs by 40%, a result of efficient resource allocation and incident management through automation.** This reduced manual intervention, enabled faster incident resolution, and allowed APIS IT to focus on strategic initiatives. Omdia's DevOps survey 2024 (n=5,300) found that the top 2 benefits organizations are looking for from embedded AI in its tooling are to help improve efficiency and employee productivity, 33% put it as a top 3 ranked benefit.

An organization's maturity level will determine how it uses automation see Omdia's Understanding the People and Process Challenges with Deploying Data Center Automation Technologies report for more details. An observability solution must match the level of maturity at which the organization operates if the solution is to deliver the business benefits it promises.

# Organizational maturity is a key indicator of how well technologies deliver business outcomes

## TECHNOLOGY, PROCESS, AND PEOPLE DO NOT FOLLOW A LINEAR PATTERN

**Figure 1 shows the Omdia maturity model for IT service delivery.** The model classifies the stage, defines the key characteristics of that stage, and indicates the tools deployed. The model shows a linear relationship between people, processes, and technology, but in reality, organizations have more of a disjointed relationship between these elements.

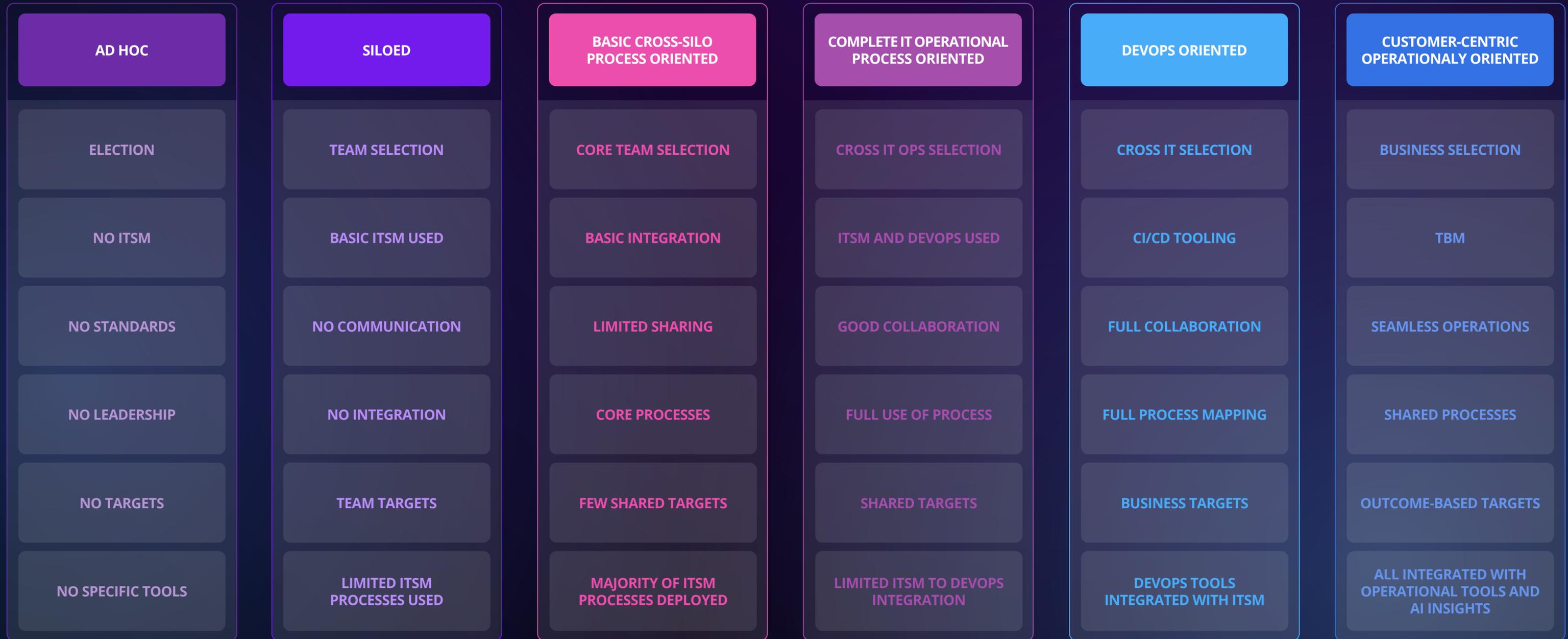
This maturity model explains the use of technology, processes, and people in the IT operational activities needed to deliver services to business customers. Historically, the term “operational activities” referred solely to administrative tasks like server patching, network switch configuration, and storage allocation adjustments etc. However, Omdia considers operational management to include the development phase, the testing phase,

the production running phase, and the retirement phase of any service. It is only by considering these different activities as part of managing the IT service delivery that we can move beyond the idea of business users, development, and operations as separate entities with different responsibilities.

Omdia defines the maturity levels as ad hoc, siloed, basic cross-silo, complete IT operational, DevOps, and customer-centric. TBM is the overarching technology that can bring all the management practices in IT operations together. This approach does not imply that a single individual or team can perform all these activities; rather, it enables the consolidation of a unified view and the establishment of a centralized control point.



Figure 1: Omdia's maturity model for IT operations



SOURCE: OMDIA

# The importance of automation will grow

## FINDING THE NEEDLE IN THE HAYSTACK

### **TBM should become the source of truth for IT and business technology management.**

The benefit of TBM being this single source of the truth is that it incorporates both IT and business information and is therefore trusted by both the business user and the IT administrators. GenAI is set to disrupt more industries in the long term, but while the technology matures and governments play catch-up on legislation, domain-specific AI will flourish. TBM will need to broaden its scope and leverage advanced correlation engines to uncover insights that drive more efficient and effective technology utilization, optimization and performance. This evolution will transform TBM into a predictive capability, enhancing continuous compliance and service quality.

Organizations are inundated with vast amounts of data, often too much to manage effectively. Extracting meaningful insights from this data ranks

as the third-highest challenge for 2025, according to Omdia's IT Enterprise Insights 2025 survey (n=1,684) see figure 2. It's essential for organizations to rapidly and accurately derive insights from IT operational data to have effective data management. By ingesting data from multiple sources, storing it in a distributed database, enriching it with contextual information, analyzing it using advanced AI, and visualizing it with intuitive tools, organizations can swiftly identify and resolve incidents, ensuring operational resilience.

A TBM solution requires access to a range of data sources, including log files, CMDBs, other data repositories, network traffic wire data, unstructured data and real-time streaming data. While Omdia recognizes that, initially, only a limited number of solutions will support the full range of data sources, we anticipate that these capabilities will be integrated into solutions as market demand and adoption expand.

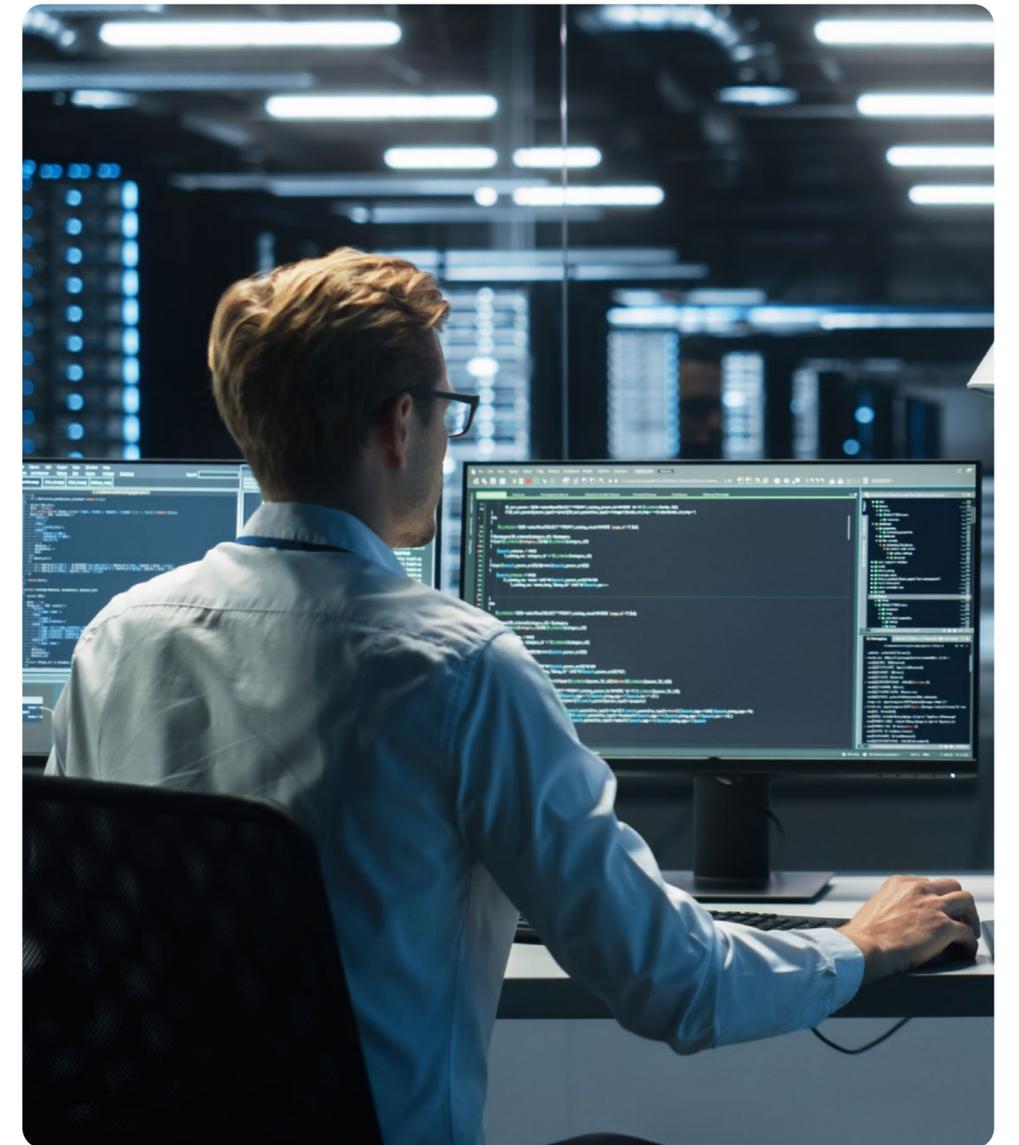
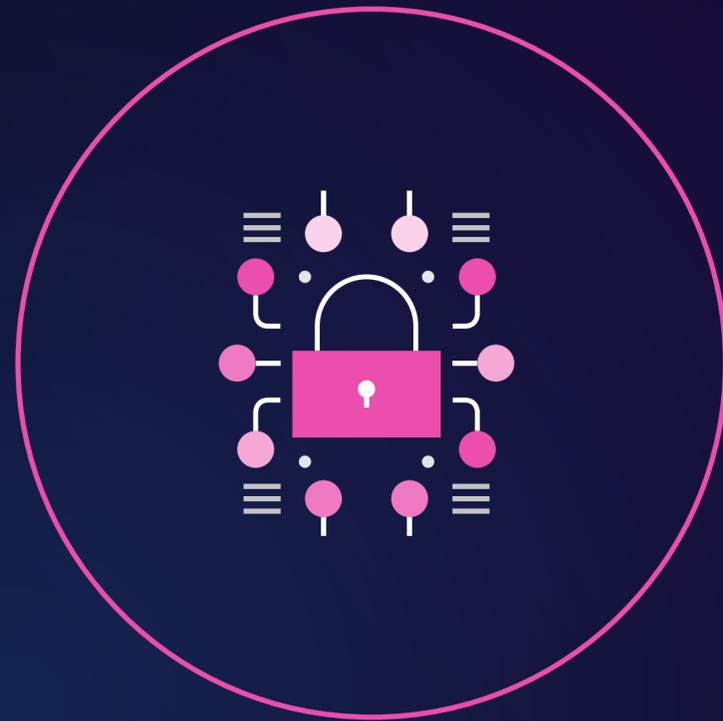
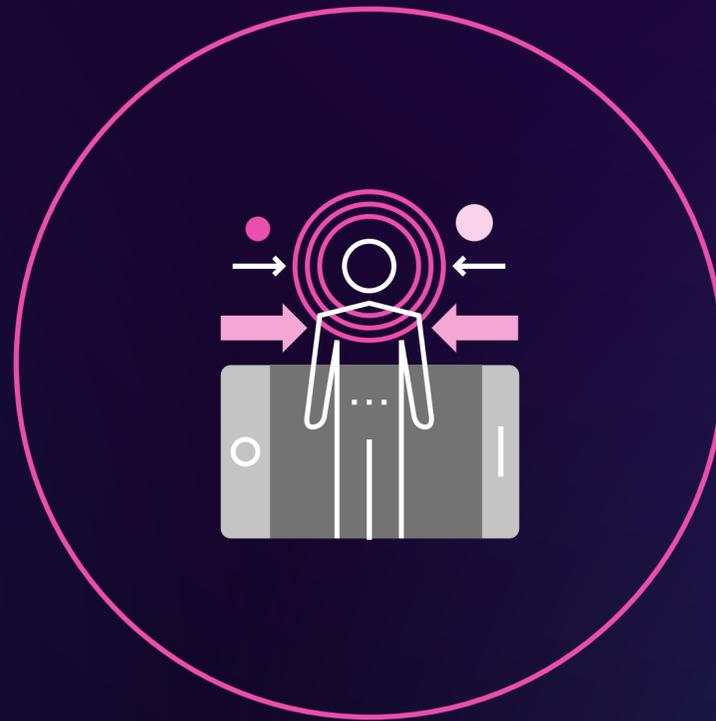


Figure 2: Top 3 ranked challenges for IT Operations in 2025



14%

Cybersecurity



12%

Improved customer experiences



10%

Make complex data actionable

SOURCE: OMDIA EDGE AND AI SURVEY 2024 (NOT PUBLISHED) N=1,300



An additional advantage of TBM is its capacity to promote a collaborative, knowledge-sharing culture among the diverse stakeholders involved in IT delivery across the organization. The effectiveness of this collaboration serves as a crucial benchmark for evaluating the value of the technology. TBM solution must, at its heart, be easy to use and enable the intuitive sharing of information. For TBM to foster collaboration among IT operations, application development, and business teams it must facilitate shared visibility across these functions. TBM needs to build on this collaborative framework by automating root cause analysis, integrating chatbot support, streamlining workflows through automation, and delivering cognitive insights. These techniques empower CIOs in their transformation efforts by dismantling silos, optimizing internal processes, accelerating problem resolution, and enhancing the customer experience.

As the oversight layer, TBM should integrate seamlessly with existing tools, while avoiding the perception of an additional management or tooling layer. The capability to enable customers to retain existing investments in tools is a significant business benefit of TBM because it reduces the initial costs while delivering the insights. A secondary benefit

is that customers can then adopt new tools to fit with their internal change process. TBM should be almost invisible to users, as it enhances existing tools and processes without disruption. In mature organizations TBM's transformative impact on processes and structures will become evident. However, collaboration must be carefully managed through access controls and privileges, ensuring users see only the relevant information they need, as to not be overwhelmed with excess data.

# Turning insights into management

## PROACTIVELY IDENTIFYING ISSUES BEFORE THEY ARISE WILL STRENGTHEN BUSINESS CONFIDENCE IN THE IT DEPARTMENT

**As organizations adopt TBM, their expectations around reporting and analysis will change.** TBM will implement metric-driven reporting and analysis, which will enable organizations to define key business outcomes and become aligned with relevant IT performance metrics. For instance, if an enhancement to a customer-facing application has the potential to generate an additional \$100,000 in daily revenue, then a metric tracking the time from concept to production can be directly associated with this financial impact. The premise behind metric-based reporting and analysis is that IT actions, or processes, are directly linked to business activity in a measurable way. By adopting this approach IT departments can redefine their role within businesses in a strategic and measurable way.

Compliance and privacy are areas of increasing importance for TBM because understanding when equipment is out of compliance or when an unusual event has occurred are important capabilities that can shorten the time from a known incident to a resolution. The business benefit of this is that organizations reduce the window of vulnerability and therefore the potential risk of being compromised. For compliance purposes, understanding a system's status—including its patch level, active workloads, and criticality—provides essential insights for determining optimal patching schedules.





In complex IT environments, the inherent increase in risk underscores the need for automation to swiftly identify potential vulnerabilities. A fundamental aspect of risk management is understanding a system's "known good" behavior, which is critical for detecting anomalies, such as potential security breaches that require investigation. A key benefit, which is being able to identify any unusual behavior early, gives organizations the ability to reduce the impact of any security breach. While vendors may employ different technologies to identify anomalies, most solutions analyze events, incidents, and resource usage to flag deviations from this established baseline. For instance, a sharp rise in disk I/O activity could signal ransomware activity where large volumes of data files are being read and locked, which would necessitate immediate attention.

Finally, TBM can serve as a valuable asset in addressing the re-skilling and knowledge challenges associated with digital transformation. Leveraging GenAI capabilities embedded within TBM solutions can enhance skill development and knowledge retention across an organization. For example, a virtual assistant can guide users in understanding various business functions to help the users build skills and deepen their knowledge in a more interactive and accessible way. 34% of organizations believe it is essential for them to implement AI to avoid falling behind competitors according to Omdia's DevOps 2024 survey (n=5,300).

# Making management actionable

## INCREASING OPERATIONAL EFFICIENCY AND RESILIENCY THROUGH AUTOMATION

### Effectively optimizing resources demands

**advanced engineering expertise.** For TBM to achieve this optimization, it must have comprehensive insight into the entire application stack. The insight, enables TBM to generate actionable measures that ensure peak performance at minimal cost while addressing all necessary resources for the application. For example, TBM can account for CPU utilization, thread utilization, core utilization, heap consumption, garbage collection, database memory, storage capacity, storage IO, and storage throughput. These granular details alone will not help IT operational teams to identify efficiency as, to be able to do that TBM must correlate these different data points in context.

#1

Automating IT operational processes was a top initiative in 2024-2025

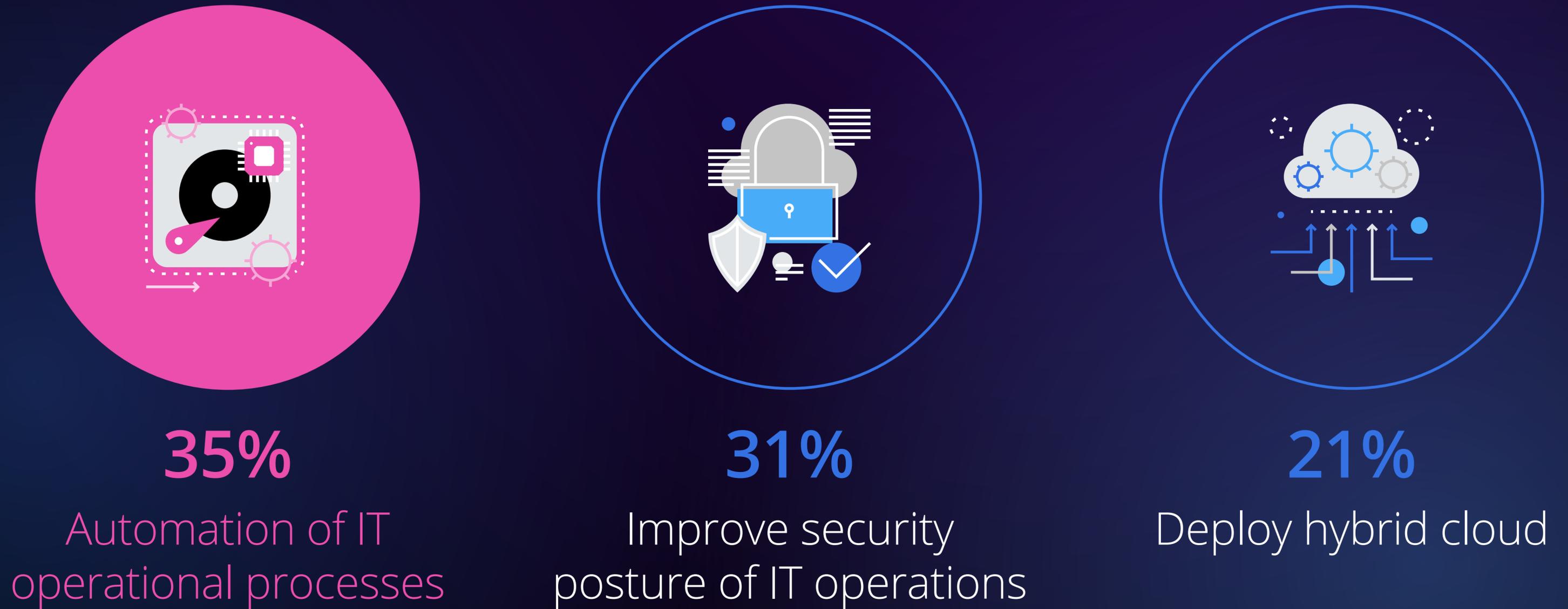
TBM can help improve operational efficiency by utilizing and consolidating needed resources, while shutting down unwanted resources. Omdia's IT operations survey 2023 (n=133) shows that automating IT operational processes was a top initiative in 2024-2025, see figure 3.

A significant benefit of observability is its ability to dynamically scale resources to meet specific service level objectives (SLOs) aligned with the KPIs that best support a customer's business requirements. A major strength of leading solutions is their ability to scale effectively across diverse environments. Scaling resources, whether up or down, should accommodate a range of common cloud environments to provide flexibility across diverse infrastructure options. By supporting various cloud-native and containerized services, organizations can enhance operational efficiency and ensure seamless scalability to enable optimized resource allocation tailored to specific workload needs. This adaptability empowers businesses to respond swiftly to changing demands and evolving operational requirements. Another essential capability is the ability to identify and remove

unattached storage volumes. This capability allows for financially informed decisions to be made by accounting for available discounts and automatically expanding discount coverage to maximize savings.

A key strength of TBM is that it can work with existing domain expert systems, such as ITSM solutions, by ingesting data, integrating with incident management workflows and AI powered chatbots, augmenting existing knowledge, and optimizing existing processes. This further helps to improve the collaboration between teams and efficiency of IT operations, while reducing incident resolution times. The value of these integrated capabilities is that, by being proactive, organizations can ensure services remain available. However, resiliency is an aspect that is often overlooked as a benefit of TBM. With comprehensive visibility into the entire system, customers can identify potential threats to service delivery. By leveraging embedded GenAI capabilities remediation actions can be determined to address these issues before they result in business downtime.

Figure 3: Top initiatives for IT Operations in 2024-2025



SOURCE: OMDIA IT OPERATIONS SURVEY 2023, N=133

# Conclusion

## **OPERATIONAL EFFECTIVENESS IN A COMPLEX HYBRID MULTICLOUD WORLD NEEDS INSIGHTS, MANAGEMENT, AND AUTOMATION.**

One of the primary reasons that IT is perceived as an inhibitor of change is in its lack of efficient processes to deal with technology and its customers' use of that technology. For many years IT departments have been implementing solutions that help the business units become more efficient and effective, while neglecting their own needs for improvements. This situation has been highlighted by the rise in GenAI, which is helping businesses deliver change at a rate never experienced before. This technology revolution that is driving people, process, and business change means IT must transform its modus operandi faster than the business adoption of GenAI.

TBM can be valuable in helping IT departments evolve from being viewed as solely cost centers and into business units that enable innovation and business improvement. Delivering this transformation requires IT to join up its activities from gaining new insights from the data it collects, translating these insights into meaningful management processes, and then taking the required actions rapidly and securely so as to maintain service availability.

Finally, while observability alone may not be revolutionary, it establishes a critical foundation that empowers IT to adopt new, transformative practices that position it as a catalyst for business innovation rather than a mere support function.

# Appendix

# About

## IBM

IBM Observability solutions offer a robust set of capabilities, from application performance monitoring to full-stack observability, application management to incident management, resource optimization and more. These solutions help organizations simplify complex IT architectures, maximize operational resiliency and assure application health and performance. IBM Observability solutions provide deep visibility into critical applications and IT infrastructures, while leveraging AI to provide root cause analysis and actionable insights for improvement. As a result, IT is enabled to shift from reactive firefighting to proactive, strategic improvements. With AI-powered observability from IBM, organizations can quickly identify and remediate issues, optimize resource utilization and mitigate risks while boosting performance across the entire technology landscape.

### APIS IT case study [→](#)

-  IBM
-  IBM Technology
-  IBM Data, AI & Automation

-  IBM Instana Observability
-  IBM Concert
-  IBM Turbonomic

## Omdia

Omdia is a global technology research powerhouse, established following the merger of the research division of Informa Tech (Ovum, Heavy Reading, and Tractica) and the acquired IHS Markit technology research portfolio\*.

We combine the expertise of more than 400 analysts across the entire technology spectrum, covering 150 markets. We publish over 3,000 research reports annually, reaching more than 14,000 subscribers, and cover thousands of technology, media, and telecommunications companies.

Our exhaustive intelligence and deep technology expertise enable us to uncover actionable insights that help our customers connect the dots in today's constantly evolving technology environment and empower them to improve their businesses – today and tomorrow.

\*The majority of IHS Markit technology research products and solutions were acquired by Informa in August 2019 and are now part of Omdia.

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Roy's key areas of research include cloud computing, cloud-native technologies, IT strategy, IT operational management, and data center technologies. He also advises on quantum computing, automation, virtual desktop infrastructure (VDI), and workspaces. Roy uses his extensive experience combined with Omdia's surveys and market data to understand how technologies will add benefit to businesses.

He works in the enterprise team and has over 40 years' experience in the IT sector working for a variety of consultancy and end-user companies with experience in defense, utilities, automotive, retail, and fast-moving consumer goods industries. He joined Butler Group as a senior analyst in January 2006. Roy has worked on many major report projects, white papers, and primary research. He also delivers keynote speeches globally. He has a Bachelor of Science (Hons.) in electronic engineering and telecommunications, an international MBA, and is a Member of the Institute of Engineering Technology (MIET) and holds the registered status of a Chartered Engineer (CEng).

## Further reading

**Understanding the People and Process Challenges with Deploying Data Center Automation Technologies** (March 2021)

**Maximizing performance of critical government services** - APIS IT and IBM



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