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Nine Cost Considerations for Observability Platforms

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Addressing Observability Cost Challenges

To understand, forecast, and ultimately maximize the business impact of technology investments, organizations need observability. It is important to keep the viewpoints of each stakeholder group in mind.

Critical Stakeholders

Developers need to know how their applications perform in real time, identify and resolve issues quickly, and ensure system reliability, scalability, and performance. They need to be able to forecast the impact of new code functions on corporate goals, such as maximizing profit, conquering a new market, or defending the current market against the competition.

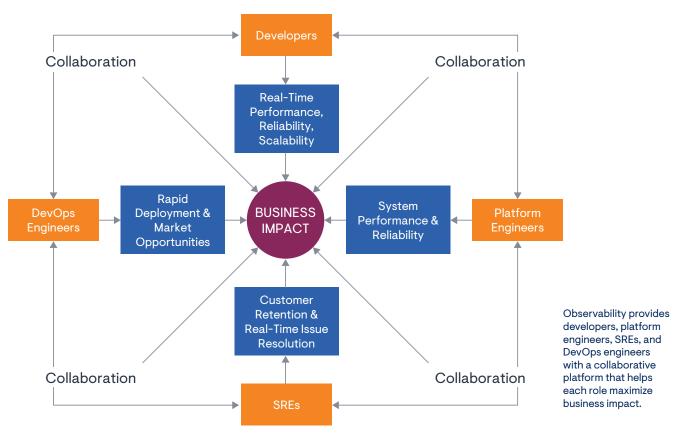
For **DevOps engineers**, observability is not just about ensuring seamless deployment and operation. It is a strategic asset for revenue maximization. By enabling quick iterations and continuous improvement through real-time monitoring and actionable insights, DevOps engineers can accelerate the time to market for new features and products. This rapid deployment capability directly contributes to capturing market opportunities faster than competitors, thereby increasing revenue.

Platform engineers leverage observability to monitor and optimize cloud native applications at scale, ensuring system performance and reliability. Through advanced observability solutions, they can handle the complexity of numerous distributed microservices, manage large volumes of telemetry data efficiently, and gain actionable insights for identifying and addressing performance bottlenecks. Observability enables platform engineers to adapt to continuous deployment and integration, offering real-time insights in dynamic environments. This is essential for maintaining a balance between comprehensive monitoring capabilities and budget constraints while integrating smoothly with a variety of tools and technologies in cloud native ecosystems.

SREs utilize observability as a foundational tool for retaining customers by detecting, diagnosing, and resolving issues in real time. This focus on maintaining system reliability and performance under varying conditions is essential for ensuring a positive user experience. Happy and satisfied users are less likely to churn, making observability a key factor in customer retention strategies. By minimizing downtime and performance degradation, SREs contribute significantly to sustaining and growing the customer base.



BUSINESS IMPACT OF OBSERVABILITY



These examples illustrate the critical importance of observability for optimizing decision-making, prioritizing tasks, and proactively optimizing infrastructure and application performance. This shows that constraining access to observability solutions that different enterprise staff roles require will automatically lead to suboptimal productivity and a growing lack of alignment between enterprise technology investments and business objectives.

Therefore, when selecting an observability platform, it is crucial to completely understand the platform's cost structure to prevent prohibitively high or unpredictable observability costs from becoming a limiting factor for business success.



Checklist: 9 Cost Challenges and Recommendations

Enterprise Management Associates (EMA) research identified nine critical cost factors that can limit an organization's ability to completely and continuously implement the required level of observability. You can use these nine factors as a checklist when selecting your enterprise observability platform. This should not at all suggest that cost is the only decision factor for selecting observability platforms, but it will demonstrate that an unsuitable cost structure prevents enterprises from actually realizing the benefits of an otherwise ideal solution.

#1. Lack of Granularity and Control

Observability platforms often lack the granularity needed for cloud native applications, which dynamically consume resources, sometimes only for brief periods. This mismatch can result in organizations paying for more observability capacity than they use, especially if billing is done in large, predefined increments that don't reflect actual usage patterns. This lack of granularity leads to inefficiencies and inflated costs, since companies find themselves overpaying for observability services relative to the actual resources monitored.

Observability Platform Requirement

To ensure cost predictability and budget control, it is crucial to select a platform like Chronosphere that provides easy and comprehensive control over data collection and retention. By enabling more precise monitoring and billing based on the specific needs and usage patterns of cloud native applications, Chronosphere helps organizations avoid overpaying. This granularity ensures that companies pay only for the observability resources they need, optimizing their investment and eliminating waste.



#2. Lack of Predictability

The cost of observability can be highly variable and unpredictable due to the complexity of factors involved, including data ingestion rates, query complexity, the volume of monitored resources, and the integration of multiple clouds and technologies. This complexity can make budgeting for observability difficult, since costs may fluctuate from month to month based on these factors, leading to budget overruns and financial surprises.

Observability Platform Requirement

Pricing models like Chronosphere's allow reliable budget planning to eliminate the fear of unexpected or unexplainable cost overruns. Eliminating this fear is critical for establishing a general culture of observability.

#3. Vendor Lock-In

Organizations often become entrenched with a specific observability platform due to contractual obligations or the technical challenges associated with migrating to a new solution. This lock-in can limit flexibility, preventing the adoption of more cost-effective or technologically advanced solutions. It can lead to increased long-term costs because organizations are unable to leverage competitive pricing or features that better match their evolving needs.

Observability Platform Requirement

The ideal vendor emphasizes flexibility and interoperability in its observability solution, reducing the risk of vendor lock-in. By supporting open standards and providing robust APIs, observability platforms (such as Chronosphere) ensure that organizations can integrate a platform with existing toolchains and migrate to or from other solutions as needs change. This openness not only prevents long-term cost increases due to lock-in, but also ensures that organizations can always use the best tools for their requirements, optimizing both cost and performance.



#4. Freemium Plans

Many observability platforms entice users with "free" or "freemium" plans, which – while initially appearing cost-effective – often come with significant limitations. When these limits are exceeded, organizations can face substantial charges. This approach can lead to unexpected costs as companies scale up their usage, making what seemed like an economical choice initially turn into a significant expense, especially when companies need advanced features or greater capacities.

Observability Platform Requirement

Look for an observability platform that offers a transparent pricing strategy to eliminate the surprises often associated with "free" or "freemium" models. By offering clear, upfront information about costs and capacities at each tier of service, observability platforms like Chronosphere ensure that organizations can make informed decisions about their observability strategies. This approach helps prevent the shock of unexpected charges, allowing companies to plan their expenditures more effectively and scale their observability infrastructure in a financially predictable manner.

#5. Premium Features

Organizations often subscribe to premium observability features with the intention of maximizing their monitoring capabilities. However, without a clear understanding of the utility or cost implications of these features, they may find themselves paying for functionalities that are underutilized or not necessary for their specific needs. This misalignment between feature usage and cost contributes to inefficiencies and inflated observability budgets.

Observability Platform Requirement

The observability platform needs to focus on ensuring that customers understand the value and implications of each feature before making a commitment. Observability platforms such as Chronosphere provide comprehensive documentation, targeted training, and responsive support. This helps customers make informed decisions about the features that are essential for their operations, ensuring that investments in premium functionalities are fully leveraged and aligned with actual needs.



#6. Compliance and Data Security

Ensuring that observability practices comply with industry regulations and data security standards can introduce additional complexity and cost. Organizations must navigate a landscape of legal and technical requirements, which may necessitate specialized configurations, additional security measures, and ongoing compliance monitoring – factors that can significantly increase the overall cost of observability.

Observability Platform Requirement

The optimal observability platform is designed with compliance and security in mind, providing features and configurations that help organizations meet their regulatory and security obligations more easily and cost-effectively. Observability platforms such as Chronosphere incorporate best practices and compliance standards. This reduces the need for organizations to invest in additional tools or services to meet these requirements, thus lowering the total cost of ownership.

#7. Geographical Data Storage Costs

Storing observability data across multiple geographical locations, either for compliance reasons or to reduce latency, can significantly increase storage costs. This is particularly challenging for organizations that operate in multiple regions and need to balance the requirements for data sovereignty with the need for efficient, cost-effective data access and analysis.

Observability Platform Requirement

Platforms such as Chronosphere offer flexible data storage solutions that help organizations manage their data storage costs more effectively. By optimizing data storage and transfer processes and providing options for data localization that comply with regional requirements without incurring unnecessary expenses, observability platforms enable organizations to manage their geographical data storage needs efficiently.



#8. Real-Time Monitoring and Alerting

Setting up extensive real-time monitoring and alerting systems is crucial for timely incident detection and resolution. However, the costs associated with these real-time capabilities can add up, especially for organizations that set up more monitors and alerts than necessary. Such actions lead to increased operational costs without proportionate value.

Observability Platform Requirement

The ideal observability platform is designed to offer efficient and cost-effective real-time monitoring and alerting capabilities. By providing tools that help organizations fine-tune their alerting thresholds and monitor setups, solutions such as Chronosphere ensure that customers can achieve the right balance between real-time responsiveness and cost, avoiding unnecessary expenses while maintaining high operational standards.

#9. Skill Gap and Training Cost

The complexity of modern observability platforms often requires specialized skills to manage and optimize effectively. This can lead to additional costs for training existing personnel or hiring new staff with the necessary expertise. The investment in developing these capabilities can be significant, especially for organizations that are scaling or evolving their technology stack.

Observability Platform Requirement

The ideal solution mitigates the impact of skill gaps and training costs through its intuitive platform design and comprehensive support resources. By making its platform accessible to users with varying levels of expertise and providing extensive documentation, training materials, and community support, observability solutions such as Chronosphere reduce the need for specialized training and make it easier for teams to manage their observability infrastructure effectively.



Conclusion

Addressing these nine cost challenges during the selection process ensures that organizations can take full advantage of their observability platform's capabilities. Ultimately, staff will only embrace a solution that consistently ensures a viable cost benefit ratio between the overall cost of app deployment and operation on the one hand and the cost of observability on the other. Chronosphere's cloud native observability solution addresses these challenges by helping companies manage runaway observability costs, reduce downtime, address and fix problems before they impact customers, and improve the developer experience.

Learn more about Chronosphere and request a demo





Source: DALL-E painting the concept of '9 Cost Considerations for Observability Platforms' in a combination of the styles of Pablo Picasso and Friedensreich Hundertwasser.



About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading IT analyst research firm that specializes in going "beyond the surface" to provide deep insight across the full spectrum of IT management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help its clients achieve their goals. Learn more about EMA research, analysis, and consulting services at www.enterprisemanagement.com or follow EMA on X or LinkedIn.

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