Informatica

Insights from Informatica PowerCenter Customers

The State of Cloud Modernization Report 2024

Where data & AI come to LIFE

Contents

Executive Summary

One of the overriding trends in 2023 was the personalization of generative artificial intelligence (AI) across the technology landscape, representing the first steps of proactive AI at the personal level. We saw this in the explosive growth of large language models (LLMs) and tools such as ChatGPT, Google Bard, GitHub Copilot and various other offerings. Looking ahead to personalized AI, data leaders now have a powerful tool to modernize applications and management proactively, bringing localized and highly focused, AI-based capabilities to bear in solving real-world application and data challenges.

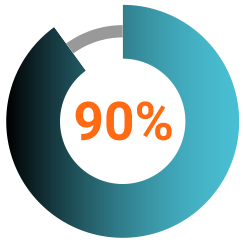
The latest research from Informatica underscores the global recognition among data leaders regarding the competitive advantages afforded by the modernization of applications and data management through AI-powered, cloud-based solutions.

The survey gathered responses from 300 senior data leaders and corporate and IT executives at companies using Informatica PowerCenter in North America, Europe and the Asia Pacific region. It shows that nearly nine of ten data leaders feel prioritizing modernization to the cloud improves efficiencies, drives innovation and achieves greater scalability and elasticity.

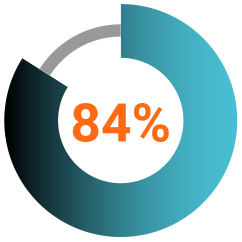
PowerCenter customers are strongly motivated to modernize their data and applications to the cloud, with most enterprises making the move based on senior management and corporate boards leading cloud modernization initiatives. Such top-down leadership, a "cloud-first mandate," is common when significant growth and revenue opportunities are identified, compliance requirements dictate such actions or both options are present.

Nearly half (42%) said failure to modernize will decrease efficiency, and 37% said it will reduce their speed and agility. Respondents also noted that failure to modernize their on-premises applications to the cloud will put them at a competitive disadvantage. The move to modernize data and applications is seen as a business imperative to remain competitive and to meet the growing needs of data leaders to provide visibility into the expanding cloud environment.

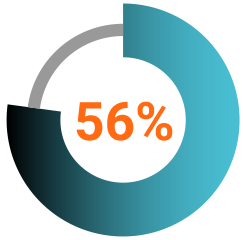
Key Findings



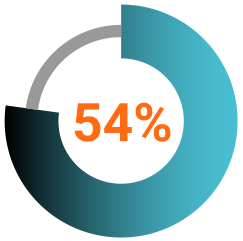
90% of data leaders who prioritize modernization to the cloud to improve efficiency, achieve greater scalability and drive innovation.



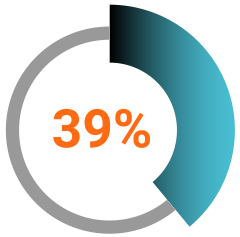
84% of data leaders strongly believe modernizing legacy data infrastructure to the cloud is essential to maximize AI benefits.



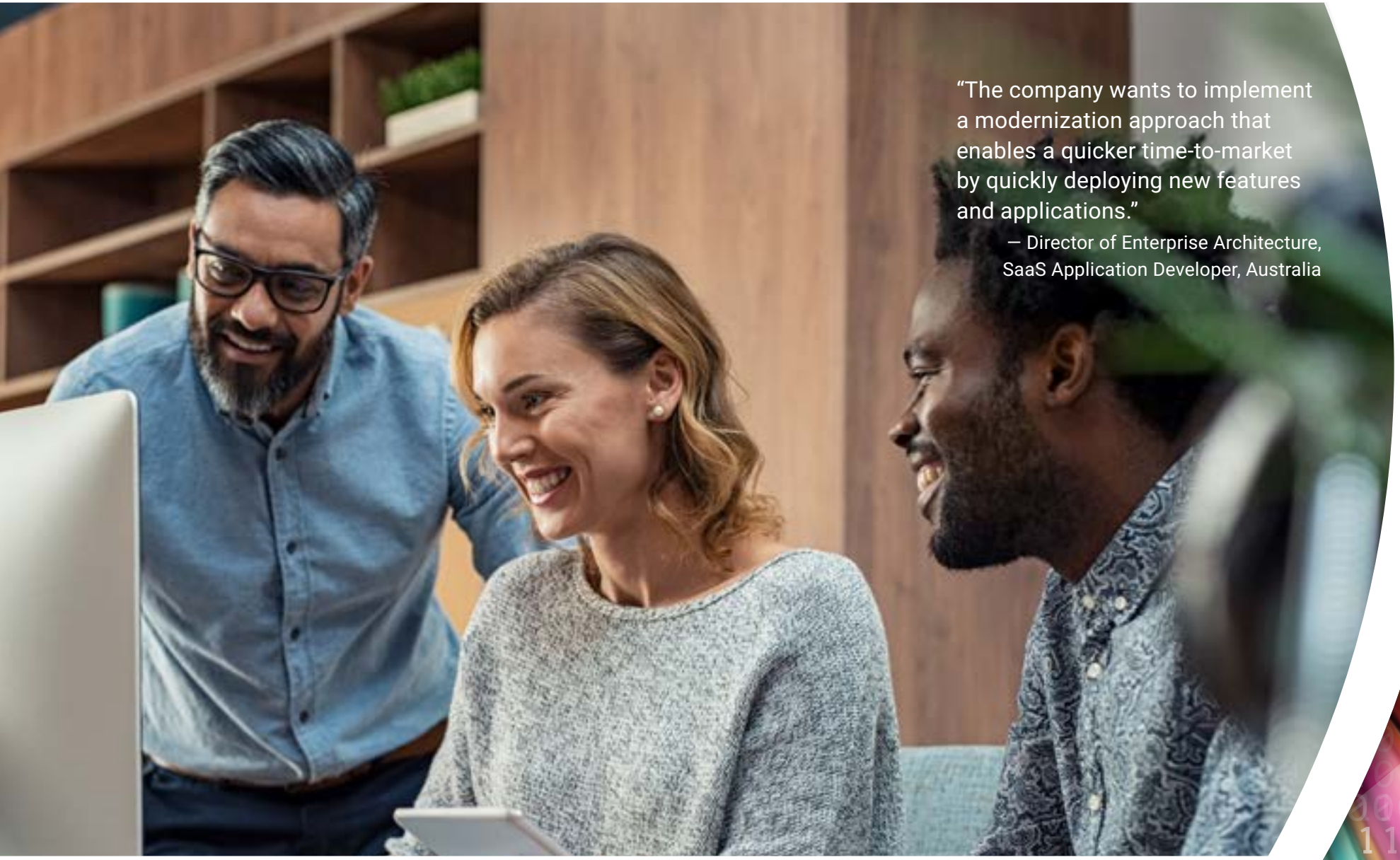
56% of data leaders attribute the main drivers of cloud modernization initiatives as being led by the executive board, leadership and C-suite.



54% of data leaders recognize AI as a pivotal factor driving cloud modernization initiatives, underscoring the crucial nature of modernization.



39% of data leaders cite security and compliance, data governance and technical complexity as the top three challenges in modernization projects out of a selection of multiple options.



"The company wants to implement a modernization approach that enables a quicker time-to-market by quickly deploying new features and applications."

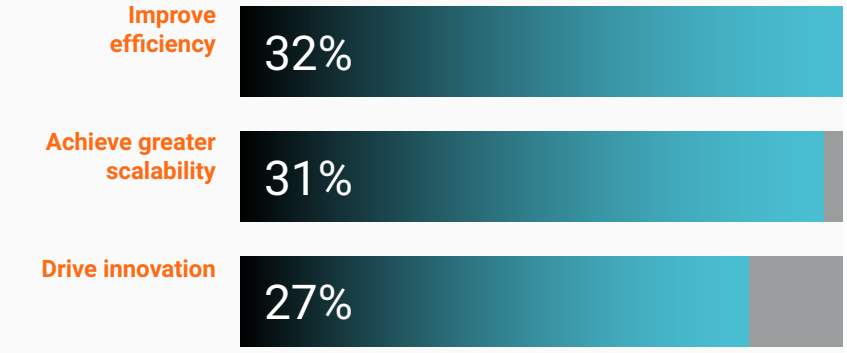
— Director of Enterprise Architecture, SaaS Application Developer, Australia

Customer Perspective: How Modernizing Your Data and Applications to the Cloud Can Unlock the Potential of AI

Moving data and applications to the cloud from on-premises data centers will likely mean changes in data warehousing applications. As enterprises transition to modernized cloud applications, four challenges stand out as they move their workloads.

Data leaders cited **security and compliance risks, data governance, technical complexity and data quality issues** as their primary concerns while modernizing to the cloud. Many mention in their survey comments that enhancing their disaster recovery, improving their visibility into their data, managing their data classification policies and getting a better handle on their AI tools are vital reasons to pursue modernization. They recognize that as the amounts of data increase exponentially, their existing environments are underpowered and ineffective in handling the processes and procedures needed to manage and integrate the data.

What are the top three drivers for modernizing your legacy data infrastructure to the cloud?



Delaying cloud modernization is not a viable choice. According to respondents, such a postponement would result in diminished efficiency, a slowdown in the speed and agility of operations, a loss of competitiveness, a reduction in innovation and the creation of vulnerabilities in cybersecurity defenses.

Harnessing AI in the cloud will provide data practitioners with the ability to use the various data management capabilities in an optimum way.

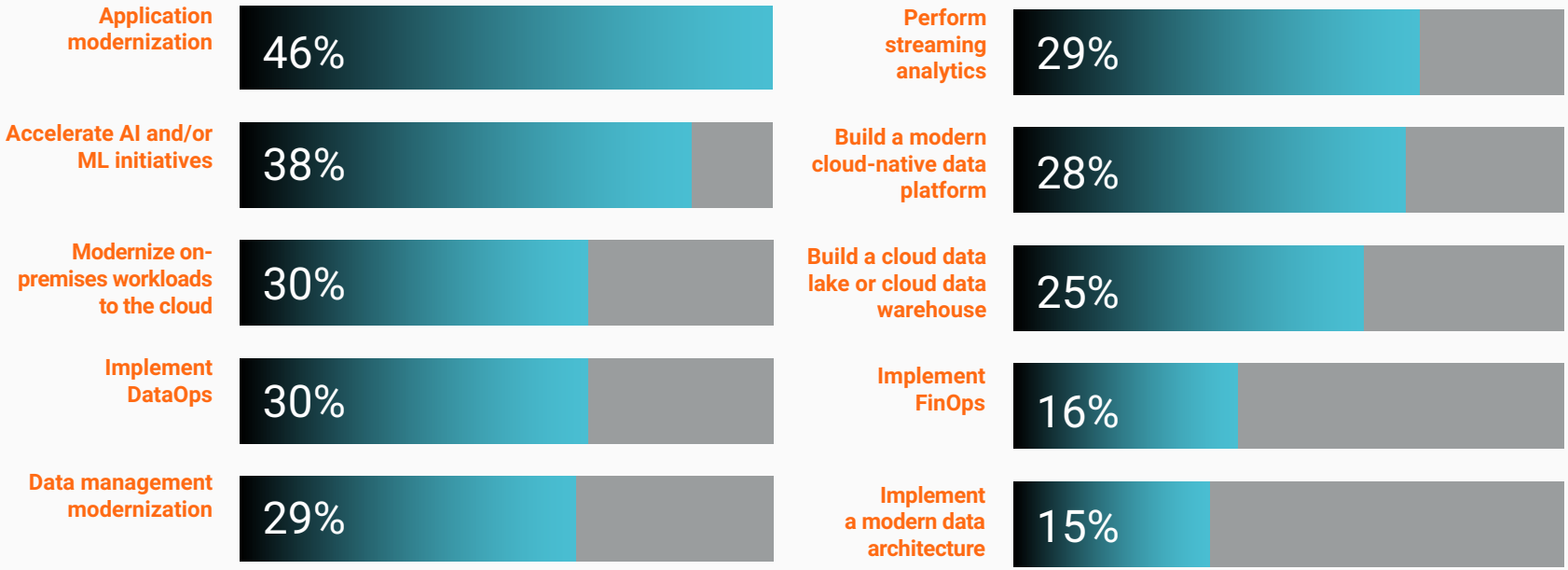
"I hope that the cloud modernization process would enable us to centralize and consolidate our IT infrastructure, resulting in reduced complexity and improved management."

— Database Manager,
Retail Industry, United States.

A Look Ahead: Data and AI Trends for 2024

From an AI perspective, 2022 was the year that generative AI came out of the labs, and 2023 was the year it became ubiquitous; 2024 is shaping up to be the year where organizations invest in cloud modernization initiatives to unlock value from AI as they digitally transform.

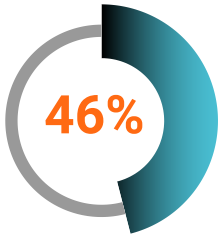
What are your cloud modernization initiatives over the next 18 months?



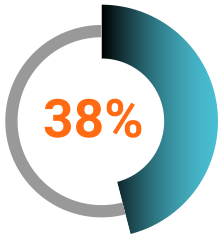
In 2024, 84% of data leaders will implement AI to garner better insights into their applications and radically transform how they work. Additionally, they plan to use AI to generate better analytics of cloud-based applications and operations.

To transform their organizations to thrive in the cloud in 2024, data leaders are focusing on AI-powered automation (23%) and are looking for multi-cloud support to avoid vendor lock-in and to reduce risk (18%). They want to take advantage of cloud providers with specialized capabilities to meet high-performance goals. PowerCenter customers are also looking for enhanced scalability (17%) and elasticity (15%) as they move their workloads to the cloud. They continue to value the flexibility to onboard new data management use cases (13%).

Spotlight: 2024 trends



46% of the PowerCenter customers surveyed plan to focus on application modernization.



38% plan to focus on accelerating AI and/or machine learning (ML) initiatives.

"We expect the new cloud technology to provide us with better insights and analytics on our systems' performance and usage."

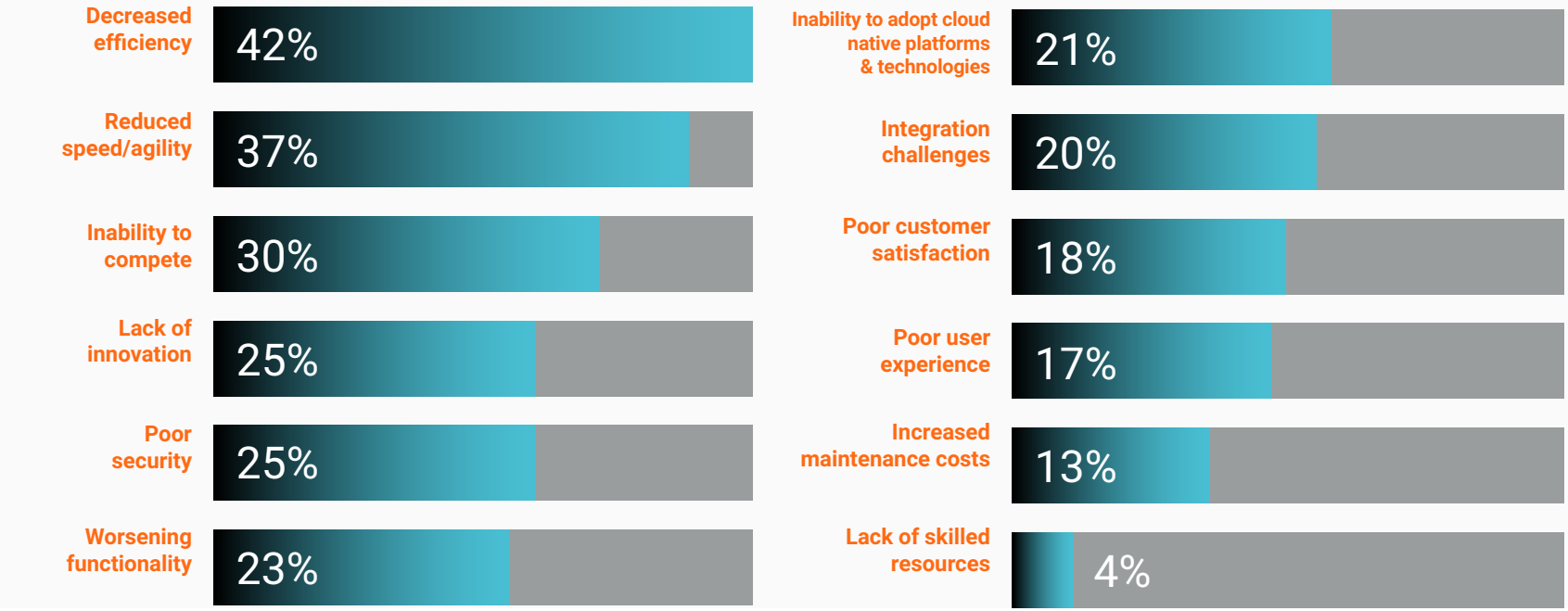
— Data and AI Director,
Energy Industry, Canada

Some 30% of data leaders plan to focus on moving their on-premises workloads to the cloud, with an equal amount working to implement DataOps. Closely following, 29% of respondents plan to onboard data management use cases such as data integration, data quality, master data management and data governance. 29% of data leaders also said performing streaming data analytics is next on their agenda. Data leaders undoubtedly have a lot on their plates next year, which needs to be enabled by AI-powered cloud modernization.

Why Cloud Modernization Will Fuel the Next Phase of the AI Era

Tech leaders and business executives already recognize the critical role cloud modernization plays in deploying, operationalizing and scaling AI in their organizations.

How would your organization be impacted if you postponed modernizing legacy data infrastructure to the cloud?



Modernizing on-premises workloads to the cloud will make compliance and reporting more efficient because data will be more clearly classified. 76% of data leaders said their effort to modernize data and applications to the cloud and establish a strong AI presence is a cloud-first mandate from the boards of directors and IT, rather than a bottom-up effort from line-of-business leaders, analytics teams or cross-functional teams.

"We want to reduce electronic waste."

— IT Manager,
Healthcare, Australia

A database manager for a U.S. retailer said he hoped that the cloud modernization process would enable his enterprise to centralize and consolidate its IT infrastructure, resulting in reduced complexity and improved inventory management. That sentiment was echoed by several other respondents who see 2024 as the year they will be able to unlock the potential of AI at a far more granular level than has been available in the past.

Historically, AI was a large-system application and not modifiable by database managers. Now, organizations can adapt AI for focused applications — such as tuning analytics, updating software development lifecycle processes visualization tools, replicating and distributing data across geographies and offloading mundane operations — so that the IT staff can focus on more mission-critical operational issues.

From a cybersecurity perspective, **AI will provide better insights into essential security controls** that protect cloud-based data, such as disaster recovery and business continuity efforts, threat analysis, real-time encryption, vulnerability scanning and reducing third-party risks.

"Cloud modernization allows organizations to speed up their application development and automate deployment processes."

— Director of Enterprise Architecture, Aviation, United States

Users' Perspectives: Data Leaders' Expectations and Goals

We have looked at various trends for cloud modernization with AI, but let's consider what some of our respondents — your colleagues and peers — have to say about their expectations, plans and goals.

"We want to implement a modern data architecture (e.g., data fabric, data mesh, modern data stack), application modernization and data management modernization (e.g., data integration, data quality, master data management, data governance)."

—Executive Vice President, Energy Industry, United States

"The expectation is that cloud modernization would provide us with better control and visibility into our resources and their usage."

— Director of Big Data, Financial Services, Germany

"Our company wants cloud modernization to provide access to a wide range of advanced technologies, such as artificial intelligence, machine learning and big data analytics."

— CIO, Insurance Industry, France

"We need excellent cloud-based analytics platforms for real-time data analysis and decision-making."

— Deputy CIO, Government, Japan

"Our goal is continuous improvement in introducing new features, services and technology."

— CIO, Mining, Canada

"It should provide us with better options for implementing automated backup testing to ensure data recoverability."

— Data Director, Retail, Canada

"We want to improve our cloud application development by [enhancing] quick application deployment."

— Director, Digital Analytics, Financial Services, United States

"Cloud modernization should allow us to respond to changing business needs and optimize our resources."

— Director, Data Management, Hospitality Industry, United States

"Capability around implementing disaster recovery plans that are more resilient and flexible."

— CIO, Entertainment Industry, Japan

Users' Perspectives: Data Leaders' Expectations and Goals

"The company wants to access a wide range of advanced technologies that the cloud provides, such as artificial intelligence, machine learning and big data analytics."

— CIO, Aviation, France

"Cloud modernization should provide us with better options for implementing traffic routing and load balancing for improved performance."

— Director, Data Analytics and Automation, Financial Services, United States

"A cloud migration should enable our company to reduce infrastructure costs by leveraging cloud-based, serverless computing."

— Director of Operations and Data Analytics, Publishing and Printing, United States

"We are looking for better and improved security posture and provide better data protection measures."

—CTO, Energy Industry, France

"Cloud-based orchestration and automation tools for improved resource management."

— CIO, Financial Services, France

"Capability around implementing disaster recovery plans that are more resilient and flexible."

— CIO, Entertainment Industry, Japan

"The company is focused on responding to changing business needs and avoiding over-provisioning or under-provisioning of resources."

— Director of Clinical Analysis, Healthcare, United States

Conclusion

Cloud modernization allows PowerCenter customers to implement AI-powered automation to improve efficiency and scalability; drive innovation and integration with other modern technologies; manage costs; and offer enhanced analytics for data analysis and improved performance. This research identified four areas where data leaders like you are focused on gaining an advantage by implementing cloud modernization:

1. Enhance cloud operations
Using a cloud-native data architecture, you can quickly onboard new data management use cases and adapt flexibly to changing business requirements.

2. Secure data
Establishing a secure and trusted cloud-native data platform can strengthen your cybersecurity profile, mitigate risk with an integrated, cloud-based approach that aligns with zero-trust principles and refine compliance reporting capabilities.

3. Reduce costs
Delivering modern cloud services can lessen your need for on-premises computing infrastructure and reallocate that funding to strategic cloud partners while lowering your overhead costs. This reduces capital expenditures by moving costs to operational expenditure budgets with a consumption-based pricing model.

4. Futureproof your data platform
Implementing AI-powered cloud modernization positions you to embrace new technologies and capabilities as they become available. Among the AI-enhanced applications mentioned frequently by respondents are analytics; security orchestration, automation and response (SOAR); data visualization; software development and deployment; data classification; and cloud-native development and containerization.

Methodological Notes

The State of Cloud Modernization: Informatica 2024 Report was conducted by Energize Marketing among 300 senior-level executives at companies using Informatica PowerCenter, including CDOs, CIOs, chief analytics officers, IT and information archiects, and data warehouse executives from North America, Europe, and APAC, in November 2023, using an email invitation and an online survey.

The results of any sample are subject to sampling variation. The magnitude of the variation is measurable and is affected by the number of interviews and the level of the percentages expressing the results. For the interviews conducted in this particular study, the chances are 95 in 100 that a survey result does not vary, plus or minus, by more than 5.6 percentage points in North America, Europe and APAC from the result that would be obtained if interviews had been conducted with all persons in the universe represented by the sample.

About Us

Informatica (NYSE: INFA) brings data and AI to life by empowering businesses to realize the transformative power of their most critical assets. When properly unlocked, data becomes a living and trusted resource that is democratized across your organization, turning chaos into clarity. Through the Informatica Intelligent Data Management Cloud™, companies are breathing life into their data to drive bigger ideas, create improved processes, and reduce costs. Powered by CLAIRE®, our AI engine, it's the only cloud dedicated to managing data of any type, pattern, complexity, or workload across any location — all on a single platform.

Where data & AI come to

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