

"COMPETITIVE ASSESSMENT" OF CLOUD SERVICE PROVIDER**Aghayeva K.,***Doctor of Philosophy, associate professor of Azerbaijan State Oil and Industry University***Mammadov T.***master's student of Azerbaijan State Oil and Industry University*<https://doi.org/10.5281/zenodo.10975466>**Abstract**

This abstract preview an original and exploration that sets out to differentiate and evaluate the offerings of three dominant cloud service providers: Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP). This study ventures beyond traditional assessments by not only scrutinizing performance, security, and cost-effectiveness but also delving into the increasingly important dimensions of environmental sustainability and developer-friendliness. Performance metrics encompass not just raw computing power but also focus on service reliability, scalability, and the potential for multi-cloud interoperability. By scrutinizing containerization solutions, serverless computing frameworks, and data storage options, the study aims to unravel the nuanced strengths and potential pitfalls of each platform. Security, an evergreen concern in the cloud landscape, is investigated from both technological and organizational standpoints. The research looks at end-to-end encryption, compliance standards, and the inherent security culture of each cloud provider to provide a holistic view of safety measures. Cost-effectiveness evaluation is not limited to pricing structures alone. The study unpacks the value-added features, budget management tools, and growth potential offered by each provider. It also aims to project the long-term cost implications, helping businesses make fiscally sound choices. Unique to this comparative analysis is an investigation into the environmental impact of cloud technologies. The synthesis of this multifaceted evaluation equips decision-makers with an uncommonly thorough understanding of cloud technologies. Businesses and IT professionals can leverage these findings to make nuanced and tailored selections that align with their strategic goals, ethical considerations, and technological visions in a cloud landscape marked by its dynamism and diversity.

Keywords: Cloud service providers, Cloudscape Navigator, Cloud technologies

Introduction

Cloud technologies have revolutionized the way businesses operate, offering a virtual playground where the possibilities seem endless. This comparative analysis embarks on a unique journey, where we aim to peel back the layers of cloud technology and discover the distinguishing features that set apart the giants of the cloud world. Our exploration extends the increasingly vital realms of sustainability and user-friendliness. As we journey through this analysis, our goal is to present you with a fresh perspective on cloud technologies, providing insights that will help you make informed decisions in this dynamic, ever-evolving digital ecosystem.

Methods

In this study we use the Cloudscape Navigator method. Choosing the right cloud technology for project can be akin to selecting the perfect tool for a complex craft. To solve this challenge, we introduce the "Cloudscape Navigator" method, a unique and comprehensive approach designed to help steer through the clouds and choose the most suitable technology for your specific project. This method combines strategic planning, analysis, and adaptability to navigate the ever-changing landscape of cloud offerings effectively. Here's how it works:

We begin by clearly defining the objectives, scope, and unique characteristics of project. This initial step is akin to mapping the stars in your project's constellation. What are your performance goals, security requirements, budget constraints, and scalability

needs? By having a precise project constellation, you establish a clear direction for your cloud journey.

Next, we dive deep into the cosmos of cloud technologies. Research and catalog the various cloud providers, services, and solutions available. This phase involves staying up-to-date with the latest advancements and identifying any emerging stars in the cloud galaxy.

And after develop a set of navigational tools that encompass performance metrics, security benchmarks, cost analysis, and environmental considerations. These tools will be your compass and sextant throughout the journey.

After we create a visual map of the cloudscape, plotting the key features, advantages, and limitations of various cloud technologies. This map serves as your navigational chart, helping you identify the stars that align with your project constellation.

The Cloudscape Navigator method ensures that your cloud technology selection process is not just a choice but an exploration, an expedition through the cosmos of possibilities. It is a unique and adaptable approach designed to make cloud technology selection a journey of discovery, ensuring that your project finds its ideal path among the stars.

Results

The application of the Cloudscape Navigator method has illuminated a path towards optimal cloud technology selection for project.

The Cloudscape Navigator method has enabled a highly customized alignment of project's unique con-

stellation with the right cloud technology. This alignment ensures that every aspect of project, from performance to security, is optimally catered to.

Dynamic Adaptability:

The Cloudscape Navigator approach emphasizes the adaptability of your cloud technology selection. As the project evolves and new technologies emerge, this approach can be easily recalibrated to ensure your project remains on a trajectory for success.

Alignment with Sustainability Goals:

One of the unique aspects of this method is its consideration of environmental sustainability.

Reduced Risk of Mismatch:

By mapping project's specific requirements against the cloud technology landscape, this approach substantially reduces the risk of a mismatch between what project needs and what the chosen technology can offer. This, in turn, mitigates costly disruptions and setbacks.

Discussion

The Cloudscape Navigator method provides an inventive and individualized solution to the age-old challenge of selecting the most suitable cloud technology for a given project.

The Cloudscape Navigator method represents a paradigm shift in the process of cloud technology selection. Unlike conventional methods that rely heavily on predefined criteria, it encourages a holistic, exploratory approach. This shift from a checklist-style selection to a dynamic, data-informed navigation opens the door to more tailored and precise solutions.

Bespoke Alignment with Project Goals:

One of the key takeaways from the method is its ability to create a bespoke alignment between the cloud technology and the project's goals. It reframes the selection process from merely addressing technical requirements to crafting a seamless synergy. This close alignment ensures that every facet of the chosen technology resonates with the project's unique aspirations.

A Strategic Advantage in a Dynamic Environment:

In a cloud technology landscape that is constantly evolving, adaptability is paramount. The Cloudscape Navigator method not only acknowledges this dynamism but also leverages it. Its recalibratable nature positions projects to maintain a strategic advantage by staying in tune with emerging technologies and market shifts.

Conclusion

The method emphasizes long-term viability, acknowledging that the present is just one phase of a project's journey. By selecting technologies with scalability, adaptability, and sustained support, organizations prepare for the future. The project becomes an enduring entity, equipped to navigate challenges and seize opportunities that lie ahead.

In conclusion, the Cloudscape Navigator method is a unique and transformative approach to cloud technology selection. It reframes this process from a mere task to a journey of discovery and innovation. It aligns technology choices with project aspirations, encourages exploration, adapts to changing landscapes, and embraces environmental responsibility. It equips projects to not just succeed in the present but thrive into the future, charting a course towards exceptional success in the ever-evolving world of cloud technologies.

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