Many companies are moving data to the cloud, and while doing so, they prefer modernized platforms. This begets the question—is data modernization driving cloud adoption, or vice versa?
“As we help clients migrate their data and modernize their underlying compute infrastructure on the Data Cloud, I encourage them to think about what is on the horizon. What is next? And what is the business value that one could be continuously gaining?”

Nitin Mittal | AI Growth Offering Leader, Principal, Deloitte Consulting LLP

According to a recent Data Modernization and Cloud Computing Survey, 91 percent of companies surveyed are keeping their data on cloud platforms and more than half of those companies see data modernization as a key component or reason for cloud migration. Instead of treating it as a straight lift and shift of the data from a legacy environment, organizations are looking at the Data Cloud as a new means of modernizing their ability to manage information.
“Given that data is the linchpin of AI, analytics, and other cognitive technologies, companies must consider augmenting their strategies to ensure that they’re embracing both cloud and data simultaneously to help better position their businesses, now and in the future.”

ASHISH VERMA | Global Data Analytics and Modernization Market Offering Leader, Principal, Deloitte Consulting LLP

What is the Data Cloud?

In today’s world, data silos make harnessing the value of data time-consuming and expensive. Governance and collaboration are also often impossible to achieve across so many different technologies and clouds. The Data Cloud is a network that connects customers, partners, data providers, and service providers—enabling them to share rapidly growing data sets in secure, governed, compliant ways. The Data Cloud is enabled by Snowflake’s platform and is populated with data from customers and other data providers that use Snowflake to store, access, and share data.

Organizations can leverage the Data Cloud to help reduce silos, mitigate risk, and simplify cumbersome data sharing methods. But data modernization is not without its challenges.

What to consider when modernizing your data:

<table>
<thead>
<tr>
<th>Potential drivers</th>
<th>Potential benefits</th>
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<tr>
<td>&gt;$10k cost per terabyte for in-house data centers</td>
<td>Up to 50% reduction of storage, computing, and infrastructure costs</td>
</tr>
<tr>
<td>70% of data goes unused</td>
<td>&gt;75% more elasticity and agility</td>
</tr>
<tr>
<td>&gt;55% of organizations need to adapt legacy infrastructure and skill sets</td>
<td>&gt;50% lower cost of operations</td>
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AI can enable greater business value

With the volume, velocity, and variety of data in the Data Cloud, it is not possible to process and analyze through sheer human effort. Through the power of artificial intelligence, organizations can surpass previously imagined value creation opportunities by generating value across five key levers:

**Intelligent automation:** Automate the “last mile” of automation by removing humans from low value and often repetitive activities (often in service of machines)

**Hyper-intelligent insights:** Improve understanding and decision making through analytics that are more proactive, predictive, and able to see patterns in increasingly complex sources

**Transformed engagement:** Change the way people interact with technology, allowing businesses to engage on human terms rather than forcing humans to engage on machine terms

**Fueled innovation:** Redefine “where to play” and “how to win” by enabling creation of new products, markets, and business models

**Fortified trust:** Secure the franchise from risks such as fraud and cyber, improve quality and consistency, and enable greater transparency to enhance brand trust

A recent Deloitte survey of 2,700+ executives uncovered that AI gives organizations a competitive advantage and most organizations are making plans to harness AI more broadly.

- **64%** Believe that AI enables a competitive advantage over their competitors
- **54%** Are spending 4x more than last year on AI initiatives
- **74%** Plan to integrate AI into all enterprise applications within three years
- **76%** Anticipate that AI will substantially transform their organization within three years

“Today, every enterprise is looking to digitally engage customers, stakeholders, suppliers, vendors, or anyone else in their value chain—they can enable and fuel it with artificial intelligence.”

Nitin Mittal | AI Growth Offering Leader, Principal, Deloitte Consulting LLP
Human and machine collaboration can take organizations to new heights

As AI technologies standardize across industries, an increasing number of companies are moving from experimentation to AI at scale, increasing the lead versus late adopters. Data leaders are no longer just optimizing the data environment but rather thinking about how to use their data as an asset.

That includes a better understanding of the problems they are trying to solve and applying AI and machine learning to solve it, rethinking the way that humans and machines interact within working environments.

Those companies that can move from simply gathering and analyzing data via human hypotheses to enabling proactive AI/ML across the organization will be better able to derive value from the Data Cloud.

AI experimentation
- Siloed application
- Building expertise
- Modernizing data

AI at scale
- High impact use cases
- Defining ROI clarity
- Establishing governance

AI-fueled organization
- Enterprise-wide adoption
- Insights-driven decision making
- Trustworthy AI

“There is a paradigm shift from organizational capabilities being driven by what technology allows them to do to technology not being a limiting factor. It’s the art of the possible.”

CHRISTIAN KLEINERMAN | SVP Product, Snowflake
The Data Cloud is just the start of the journey to becoming an AI-fueled organization

“...What we’ve seen over the last few years is a significant uptake in investments from our clients in data topics—embedding data products and services at the heart of their strategy, adopting cloud data platforms, experimenting with AI—and then finding ways to incorporate that into their business and drive it to scale. While these are very powerful concepts, they also bring complexity into the organization that must be managed.”

FRANK FARRALL | AI & Ecosystem Leader, Principal, Deloitte Consulting LLP
AI-fueled organizations deploy AI systematically to lead to better outcomes

An AI-fueled organization employs data as an asset to deploy AI across the enterprise in a human-centered and ethical way.

- Utilizes data as an asset for autonomous decision making through real-time processing, learning, and acting.
- Creates human-centered digital experiences, enabling seamless human with machine interactions.
- Deploys AI across every core business process with a reimagined operating model to fully capture the potential of AI.
- Utilizes partnerships and ecosystems to drive innovation and growth.
- Utilizes a holistic ethical AI framework to generate trust across stakeholders.
- Employs a diverse talent ecosystem enabled by a culture of innovation that rewards ingenuity and risk-taking to leverage future of work insights and reimagine work.

Potential outcomes:
- Rapid decision making
- Productive and fulfilled workforce
- Supercharged performance
- Enhanced customer experience
- Faster innovation
Those organizations who are able to embrace AI in a human-centered and ethical way across the enterprise are gaining a competitive edge. They are leveraging data to make the human experience simpler, faster, and more personalized. And moving from table stakes innovation to meaningful, sustainable, cultural transformation.

The Snowflake Data Cloud

Snowflake’s Data Cloud enables organizations to pursue the frontiers of data modernization by reducing data silos created within organizations, and scattered throughout their subsidiaries, business ecosystems, geographies, and the one or more public cloud providers they use. By unlocking the latent value of data, the Data Cloud empowers organizations to capitalize on market drivers; drive decision making with faster, actionable insights; and create new revenue streams by monetizing previously siloed data.

With the help of Snowflake’s platform, organizations can easily unify, integrate, analyze, and share their data within the Data Cloud and execute a number of critical workloads, including data engineering, data warehousing, data lakes, data science, data sharing, and building and operating data applications. Unlike traditional data infrastructures, Snowflake’s platform scales instantly and near-infinitely, and enables any organization to operate across different public clouds and regions as a single cloud, while helping satisfy industry and regional data privacy requirements.
As a Snowflake Elite Services Partner, our alliance combines the advanced capabilities of Snowflake’s platform with Deloitte’s recognized leadership in strategy, analytics, and technology services to help businesses speed up their migration to the cloud while reducing costs and increasing agility.

Visit www.deloitte.com/us/snowflake to learn how together, Deloitte and Snowflake are empowering the next frontier of data modernization.

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1 Deloitte, Data Modernization and Cloud Computing Survey, 2019  

Deloitte.

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