

Sustainability in the Digital Age

The Role of Unified Data Management and Intelligent Cloud Adoption in Reducing Enterprise Carbon Emissions



In the digital age, where data fuels business operations and innovation, enterprises find themselves grappling with a burgeoning challenge - the carbon footprint of their digital infrastructure. Many might not realize the scale of the carbon emissions generated by data centers. As data storage and processing demands escalate, so do the energy requirements of data centers, particularly on-premises infrastructure. This situation poses a significant dilemma - the more data a business accumulates, the greater its carbon footprint becomes.

Addressing this environmental concern requires not only a commitment to sustainability but also innovative strategies like Unified Data Management and Intelligent Cloud Adoption. They offer a holistic approach that helps enterprises reduce their carbon emissions, making eco-conscious data management a reality. Unified Data Management (UDM) optimizes data storage and processing, streamlining resources and reducing the energy footprint of data centers. By minimizing data sprawl and efficiently managing information, UDM can substantially lower carbon emissions associated with data operations. Intelligent Cloud Adoption is another revolutionary step towards sustainability. It leverages the power of the cloud, which can be inherently more energy-efficient than traditional on-premises solutions. Cloud providers are increasingly investing in renewable energy sources, making cloud adoption a greener choice for businesses.

The collaborative effort between a Fortune 20 Energy Company and Data Dynamics serves as a compelling example of how the convergence of Unified Data Management and intelligent cloud adoption synergized to streamline data while reducing energy consumption. This transformation steered the company towards a more environmentally responsible era, where both data efficiency and carbon reduction are achieved while retaining the digital agility necessary for success in the digital age.

Case Study: From Emission to Efficiency

How Intelligent Cloud Adoption Paved the Path to 35% Reduction in Operational Emissions, Empowering a Fortune 20 Energy Company to Lead in Sustainability and Environmental Responsibility.

For a Fortune 20 energy company, the urgent need to reduce carbon footprints and drive cost improvements led to a transformative cloud adoption initiative. With a commitment to accelerate their net-zero ambition and significantly lower emissions while maintaining operational cash flow through bioenergy growth, the company turned to Data Dynamics. Implementing their innovative unified data management platform alongside Cloud Data Management Capabilities Framework (CDMC™), Data Dynamics provided a comprehensive solution for structured cloud migration, ensuring data security, compliance, and unprecedented scalability.

Business Need

Global Data Center Consolidation and Sensitive Information Identification

- **Rapid Carbon Footprint Reduction:** A pressing need to swiftly reduce carbon footprints to meet ambitious environmental goals.
- **Driving Cost Improvements:** Implementing measures to optimize costs and enhance operational efficiency.
- **Cloud Data Center Consolidation:** Transitioning data centers to the cloud to reduce carbon emissions while maintaining data accessibility.
- **Net-Zero Ambition:** Pursuing a net-zero target by 2050 or sooner across all aspects of their operations, production, and sales.

Challenges Faced

Overcoming Azure Data Migration Delays and Data Center Closure

- **Azure Data Migration Delays:** Costing tens of millions of dollars, migration delays in Azure posed considerable financial hurdles.
- **Data Center Closure:** Closing a 600 TB data center and migrating data to Azure NetApp Files (ANF) proved to be a complex undertaking.
- **Data Ownership and Access:** Ensuring proper ownership and access rights during a tight 45-day migration timeframe.
- **Manpower and Expertise:** Navigating the complexities of the migration process required specialized manpower and migration expertise.
- **Performance Lags and Scalability:** Ensuring seamless performance and scalability during the migration process.
- **Metadata and Security Loss:** Safeguarding data metadata and security throughout the transition.

Solution Offered



Empowering Cloud Adoption with Intelligent Data Management

Data Dynamics offered their unified data management platform, leveraging the CDMC™ framework and proprietary practices:

- **Structured Unstructured Data:** Employing a unified approach to unlock data-driven insights, enhance data security, and ensure compliance and governance.
- **Reimagined Cloud Migration:** Transitioning from traditional "Lift and Shift" to intelligent, data-driven migrations for a more efficient and effective process.
- **Assured In-Year ROI:** Optimizing storage and mitigating risks to ensure a return on software investment within 12 months.
- **Unparalleled Scale and Compute Power:** Building compatibility with scalable cloud applications and APIs for enhanced flexibility, zero-latency, downtime, and cost savings.

Business Impact

Strengthening Compliance and Centralized Data Management

- **600 TBs of Data Migrated in 20 Days:** By efficiently migrating a staggering 600 TBs of data within a tight 20-day timeframe, the company demonstrated their commitment to swift and effective cloud adoption.
- **35% Reduction in Operational Emissions:** The strategic cloud migration significantly contributed to a substantial 35% reduction in operational emissions, accelerating the company's path towards their net-zero ambition.
- **400% Growth in Low Carbon Energy Projects:** Embracing environmentally friendly low carbon energy projects saw an extraordinary 400% growth, reinforcing the company's commitment to sustainable practices.
- **60% Savings through Improved TCO:** Leveraging the intelligent data-driven migration approach, the energy company achieved an impressive 60% savings in total cost of ownership (TCO), optimizing their financial resources.
- **3X Faster Migrations and 10X Increase in Productivity:** With the implementation of the Cloud Data Management Capabilities Framework and proprietary practices, the company experienced migrations that were three times faster, boosting productivity by tenfold.
- **Recognized Data Center Closure Savings:** The successful closure of the 600 TB data center, coupled with smooth migration to Azure NetApp Files (ANF), resulted in recognized savings of tens of millions of dollars, demonstrating a prudent financial approach.

Conclusion

Data Dynamics' intelligent cloud adoption not only contributed to reducing carbon emissions and advancing the energy company's sustainability goals but also had a significant positive impact on their financial performance. With swift data migration, remarkable cost savings, and increased productivity, the Fortune 20 energy company showcased their commitment to environmental stewardship and efficient data management practices. By leveraging innovative solutions and embracing low-carbon energy projects, the company emerged as a frontrunner in the quest for a greener future while ensuring continued success in the ever-evolving energy sector.

About Data Dynamics

Data Dynamics is a leading provider of enterprise data management solutions, helping organizations structure their unstructured data with their Unified Unstructured Data Management Platform. The platform encompasses four modules- Data Analytics, Mobility, Security, and Compliance. Proven in over 300 organizations, including 28 Fortune 100, the Platform uses a blend of automation, AI, ML, and blockchain technologies and scales to meet the requirements of global enterprise workloads. With Data Dynamics, enterprise customers can eliminate the use of individual point solutions with siloed data views. Instead, they can utilize a single software platform to structure their unstructured data, unlock data-driven insights, secure data, ensure compliance and governance and drive cloud data management. Ultimately, the company's vision is to help enterprises achieve data democratization so that users, no matter their technical background, can instantly access, understand, and derive maximum insights from unstructured data sprawls.