

Theme parks are in the business of creating wonderful memories.

A mass-media corporation's theme park subsidiary recently enlisted the help of Capgemini to overhaul its legacy data infrastructure to create even more remarkable experiences that their visitors will cherish long after returning home.

The company knew that migrating its existing databases and related processes to a modern cloud environment would empower workers at their many theme parks around the world. The older, on-premises data infrastructure was outdated, required ongoing maintenance, and couldn't provide the depths of actionable insights available through modern transformative solutions.

Capgemini helped the theme park giant build and deploy a brand-new data system using Microsoft Azure, the cloud computing platform, and integrating additional functionalities to address the company's unique needs. **Client:** A mass-media company

Region: USA

Industry: TMT

Client challenges:

A major theme park company's outdated, on-premises data infrastructure required regular maintenance and offered limited visibility.

Our approach:

Capgemini migrated all data and related processes to a newly created ecosystem on cloud, integrating a wide range of Microsoft Azure capabilities.

Business outcomes:

- Greater scalability
- Strengthened security
- Operational efficiency
- Real-time insights

The problem with legacy data systems

Updating or scaling the company's existing data management system would have been costly and resource intensive, and wouldn't produce data reports quickly or with visualizations. Also, integration with modern applications would be either difficult or impossible.

The heart of the problem was that the internationally renowned vacation destination was still storing data on SQL Server, Microsoft's on-premises database management system, and using its Data Transformation Services (DTS) tool, which had limited interoperability with modern systems.

The company valued its relationship with longtime Capgemini partner Microsoft and wanted to continue using its services, but needed a transformation partner to help coordinate its migration to the more advanced tools.

A new data ecosystem on cloud

Capgemini's multiple-pronged engagement transferred the client's data from SQL Server to Azure Synapse Analytics, a platform that combines data warehousing and big data analytics, maintaining data integrity and minimizing downtime.

The team migrated reporting functionalities from the .net application to Microsoft Power BI, a user-friendly data visualization tool. Then it held training sessions on running reports and analyzing data easily.

Replacing DTS, Azure Data Factory (ADF) and Azure Databricks were used for data orchestration (including workflow automation) and data processing respectively. ADF and Databricks were configured to work together as a comprehensive data management solution for the various theme parks.

Capgemini's engineers integrated these platforms and tools – Synapse, Power BI, ADF, and Databricks – so they could form a cohesive and efficient data ecosystem. Rigorous testing was needed to validate functionality, performance, and security.

A staggering number of resources and assets – both preexisting and newly created – were migrated to the system: 199 source files, 176 Synapse tables, 54 ADF jobs, 22 Databricks notebooks, 38 Power BI reports, and one Power App.

Capgemini followed secure file transfer protocol (SFTP) to move the files to a designated SFTP server. Requiring encryption and secure authentication, SFTP ensures compliance with standards, protection of data, and strong network security without additional firewall updates or complex configurations.

Capgemini is leading a refresh of the Power BI dataset, which involves processing and enhancing up to 80 million records. The refresh for each record lasts about 10 seconds.

Throughout this process, great quantities of raw data are being transformed into engaging dashboards and rich reports that generate actionable insights for decision-makers throughout the organization.





Heightened capabilities: Speed, scalability, flexibility, security

Moving from legacy systems to customized modern data ecosystem on cloud improved the company's capabilities in several areas.

Using an intuitive user interface, employees can execute database queries to retrieve specific data about the theme parks in wide-ranging reports. The process is much faster, and the reports are richer and more accurate.

As the parks expand and change over time, the company can scale this Azure-based solution easily, accommodating growing data volumes and user demands. It's a future-facing solution that anticipates the industry's fast pace.

It provides greater flexibility and accessibility than the parks had experienced before. Many non-customer-facing employees can work remotely while still accessing all the data they need for their roles.

The solution is reducing the costs of maintaining infrastructure. With a clearer view of what's needed, the parks can proactively address any issues before they become problems. This includes monitoring ride equipment, managing transportation services, scheduling repairs, and so forth.

The baseline security of Azure Synapse Analytics and its supplemental applications establish strong network segmentation boundaries and identity authentication systems that secure cloud services and restrict resource access. But the partnership took additional steps to classify sensitive data for heightened protection against cyber threats with encryption, at rest or in transit, whenever appropriate. The overall security is now much stronger.

A distinct solution for a celebrated brand

To stay competitive, it's important for any large organization to keep its data systems up to date. Enhanced data capabilities have the power to improve the customer experience, supercharge operational efficiency, predict maintenance needs, optimize inventory levels, ensure guest safety, and fuel strategic decision-making.

Capgemini helped the client act in all these areas by migrating its massive datasets to a newly created cloud environment that incorporates and customizes many of Microsoft's cutting-edge Azure services. It's this combination of technologies into a unique solution that addressed the theme park giant's particular needs that is driving significant impact.

The benefits include the following:

- Greater scalability
- Strengthened security
- Operational efficiency
- Real-time insights.

With this solution, the theme park workers can worry a less about the logistics of running a theme park and focus on what they do best: delighting guests with experiences they cannot get anywhere else.



About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, generative AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2024 global revenues of €22.1 billion.

Get the future you want | www.capgemini.com

