

CASE STUDY



Global Communication Company Consolidates Data Centers

Reduces Costs and Complexity by Centralizing IT

Client:

The client is a strategic holding company of a leading global marketing and corporate communication conglomerate. Their branded networks and specialty firms provide advertising, strategic media planning and buying, digital and interactive marketing, direct and promotional marketing, public relations, and other specialty communication services to over 5,000 clients in more than 100 countries.

Executive Overview

An American holding company with more than 1,000 marketing and communication companies needed to centralize IT operations to reduce costs, simplify the environment, and set new standards for best-in-class technology services.

Consolidating IT services for agencies accustomed to operating separate and distinct IT environments was a challenge.

They purchased and set up two world-class data center facilities with over 500,000 square feet, consolidated services, eliminated redundancies, and architected a multi-tenant environment with chargeback capabilities.

Business Objectives:

- Deliver faster and more effective service offerings to clients
- Lower support and maintenance costs
- Improve energy management
- Optimize standards and control

Fortune Ranking:

196

Project Goals:

- Simplify IT services to two data centers domestically (and a third in London)
- Virtualize to at least 75%
- Build-out two new data centers
- Zero downtime
- Implement fully redundant infrastructure
- Centralize email
- Centralize IT talent

Before Consolidation

Our client needed to migrate servers from agency offices ranging in size from a few dozen to a few thousand employees, with each agency having its own IT practices, processes, email, and corporate culture.

David-Kenneth Group was engaged to migrate the largest and most complex agencies in North America.

The overall infrastructure environment included 30 data center locations with over 4,000 servers and 30,000 email accounts. The IT landscape was extremely diverse with sites supporting a few dozen to hundreds of servers with variant technologies, operating and data security systems, and IT support and practices. Some of the agency servers had operating systems no longer being supported.

These agencies frequently competed for client accounts.

A dynamic that naturally created tight controls by end users to protect the confidentiality of their client data. Consequently, a data center consolidation that required unifying common IT services aggravated an already tense dynamic.

Additionally, the build-out of services for the new world-class facilities unintentionally produced differences in design and process and created redundancies in core services like financials.

Key Findings and Solutions**Standardization Unifies Disparate Processes**

The first order of business was to standardize IT processes common to all the agencies. David-Kenneth Group customized our existing tools and templates for all of the agencies' needs with enough flexibility to exclude specifics not relative to every agency.

"Risk is a part of every data center consolidation and complexity exacerbates this reality."

Complexity Requires Complete IT Transparency

Complete IT discovery was executed to uncover and inventory all of the servers, applications, and services at each agency and to understand the types of centralized services that would be needed in a consolidated environment. A data gathering, sharing, and monitoring tool was set up as a repository for all consolidation documents and made accessible by agency IT staff and the data center team. This ensured everyone was working from the same set of data and a clear process for tracking action items.

Complexity Simplified & Risks Mitigated

Risk is a part of every data center consolidation, and complexity exacerbates this reality. We simplified the environment by locking down configurations and making no upgrades during consolidation. Predefined migration plans and rollback plans were established in the event risks were realized, and we instituted thorough testing.

Furthermore, agencies IT staff were on board with both the plans and the testing. By ensuring rigid control, aggressive risk management, and robust contingency planning, we prevented any unplanned outages.

Cloud Technology and Multi-Tenant Architecture Integrated Common IT Services

Leveraging the cloud to provide SaaS services allowed for rapid self-provisioning of cloud compute and storage, as well as edge services, while allowing logically separated instances for separate configurations, data, and user management by the agencies.

Managing the cultural shift

The agencies' concerns were neutralized with an explanation about the facts of our public/private processes and architected solution. Each agency was on-boarded individually to the new



I liken you to the Houston NASA team – cool, calm, collected and just moving things forward!"

— VP Information Services

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multi-tenant platform for common services in order to prevent any impact to other agencies. With each successive consolidation we demonstrated the predictability of success and used that to leverage growing confidence and counter the next agencies' concerns.

Unintentional Differences Resolved

We addressed the disparities between the consolidation facilities, such as different supported versions of virtualization, by correcting the architectural design and consolidating core services. These efforts reduced support and maintenance burdens. A unified solution also avoided excess infrastructure and configuration and ensured all systems were leveraging the most current and powerful infrastructure.

Creativity Equals Savings

Initially, the focus was on the agencies and systems that presented the most complex consolidation challenges. In some cases, legacy or less common technologies were not supported by the new data center infrastructure nor were they compatible with the new data center security policies. We were able to find alternative solutions that minimized the impact on end-users with only moderate software and license costs.

By consolidating such a large and diverse population, a multitude of savings could be captured. We consolidated agreements on licensing, circuits, and more to leverage the best available pricing.

We lowered monthly operational costs significantly by increasing density 34% and improving power usage effectiveness (PUE), actually beating the industry's best standard of 1.2 PUE. While it seems counterintuitive, we were able to offer the broadest range of services with improved uptime and security by simplifying the overall environment.

- Reduced new service deployment time by 56%
- Retired 26% of servers and virtualized 75%
- Reduced energy consumption by 42% and PUE below 1.2
- Increased density 34%

Results After Consolidation

All 200 agencies were successfully migrated to the new central data center with zero downtime or interruption to services, including support of core retail activities during Black Friday and the holiday season.

Broad ranges of services were consolidated including financial back-end processing, mail, DNS, storage, backup, applications, connectivity, and more. A fully redundant hardware infrastructure for servers, networking, storage and security was also implemented.

The consolidation gave our client a greater ability to adjust to market changes and best meet the ongoing service needs of their agencies. They improved security, scalability, and redundancy and reduced maintenance and upgrade costs with a leaner and more capable support team.

They are now positioned to meet the ongoing service needs of the agencies they service with an improved ability to customize services with best-in-class technology offerings that can robustly compete in a global, digital marketplace.