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Schibsted Media Group migrates to Amazon Web Services (AWS) to support business expansion

With 55 brands and more than 5,000 employees across five countries, Schibsted Media Group is the largest media group in Scandinavia. With many digital brands, the group provides leading online marketplaces and builds world-class media houses.

Schibsted has acquired more than a dozen other media companies during the past five years, expanding its business portfolio beyond traditional print publishing and classified advertising. Schibsted's current business goal is to sell services across user communities gained in the acquisitions. Consolidating, integrating, and reliably scaling operations are the primary IT challenges in support of that goal.

Results

– Fully migrated SAP S/4HANA landscape centralized business activity across Schibsted companies

– 200 VMware virtual machines migrated to AWS with upgraded infrastructure

– 30 phased migration waves completed without disrupting the business

– Increased flexibility and scalability to power ambitious corporate growth plans

Unlocking the value of acquisitions

Achieving value from corporate acquisitions usually hinges on finding synergies between the new and existing parts of the organization. As cloud infrastructure architect at Schibsted, Ken Sivertsen knows that developing those synergies often requires the unification of corporate systems—to enable both unified business processes and consolidated IT operations.

Ken explains what this implies for Schibsted's IT strategy: "We're building a modern, unified digital platform that can support the broad and constantly evolving needs of our various brands and services. As we continue to grow through acquisition, we want the flexibility to be able to quickly integrate new acquisitions and rapidly pivot to seize new opportunities in the market."

For Schibsted, owning IT infrastructure was becoming a costly brake on supporting business expansion. Ken could not sustainably collocate the IT estates of acquired companies in Schibsted's on-premises data center. And from the financial perspective, Schibsted no longer wanted to have capital locked up in the form of physical servers and multi-year software licenses, which threatened to block agile IT changes needed to support business decisions. Consuming Software-as-a-Service (SaaS) and Platform-as-a-Service (PaaS) promised far more flexibility, scalability and agility.

Migrating operations to cloud was an obvious choice. "Schibsted's strategy is to be a cloud-native company," says Ken. "We no longer want to own the infrastructure, because that's holding us back from exploring new ways of working. With a cloud-native model, you can easily change direction when new business opportunities emerge, switching services on or off as you wish. You can also quickly plug into third-party services. That flexibility in IT aligns perfectly with the acquisitive nature of our business."

Planning the transformation

Ken's challenge was to move all infrastructure that supports customer-facing digital services and core business systems, including finance, HR, editorial, and advertising. In short, everything vital to the smooth-running of the company and delivery of its products and services would run in Schibsted's own Amazon Web Services (AWS) landing zone.

The existing infrastructure was split across two physical locations in Oslo, Norway: "D6" in the basement of one of the group's printing press facilities, and "D7" in a third-party data center around 12 miles away. These two locations were set up as a single logical entity, so that Schibsted could restart workload in the remaining location if one center suffered an outage. In the primary center, there were approximately 200 (mostly virtualized) systems across 30 physical servers.

Schibsted chose Kyndryl™ to design and deliver a comprehensive cloud migration solution for the AWS landscape. To minimize risk and maintain flexibility for the future, Kyndryl proposed using VMware HCX to lift-and-shift the existing VMware® environment to a VMware Software-Defined Data Center (SDCC) solution on AWS in Stockholm. At the same time, the team would rebuild the SAP S/4HANA enterprise resources planning systems on EC2 infrastructure in that same AWS landing zone.

Planning the transformation

"Kyndryl ran two proof-of-concept exercises to give us confidence that the proposed approach would be fast and risk-free," says Ken. "Their consultants worked closely with our application owners to determine the order of migrations, starting with the least critical and sensitive systems."

In addition to interviews with application owners, the Kyndryl Cloud Migration and Modernization (CMM) Practice Team used the VMware vRealize Network Insight tool during the discovery phase to understand all the connections and dependencies between different Schibsted systems. Based on this information, Kyndryl proposed a set of migration groups or waves—typically 5-7 servers in each wave, or 30 migration waves in total.

"For each wave, Kyndryl would provide all the details and ask us to propose a maintenance window in which the migration could take place, to minimize disruption," says Ken. "They would then migrate the relevant VMs to what is effectively a duplicate of our internal VMware landscape on the AWS cloud, and then simply change the IP addresses of the migrated systems."

As the system the literally runs the Schibsted business, SAP S/4HANA required the most work to migrate. Kyndryl built a new production landscape on AWS in Sweden and a disaster recovery (DR) landscape on AWS in Ireland, with secure real-time replication of data between them using AWS Transit Gateways. Hundreds of Schibsted users access the SAP applications either through a web browser or through a remote desktop service.

As systems are migrated over in each successive wave, Kyndryl assumes responsibility for monitoring and maintaining the underlying cloud infrastructure. On each virtual machine, a monitoring agent checks pre-defined thresholds such as CPU, memory and disk utilization, and alerts are propagated through to NetCool® to Schibsted's Service Now system for automated ticketing that notifies a support team. Kyndryl uses Red Hat® Ansible® to increasingly automate server administration tasks, including patching and security scanning.

Securing and protecting operations

Kyndryl worked with an AWS security team since the earliest design phases of the Schibsted solution, maximizing security in Schibsted's cloud environment and applying the principle of least privileges to restrict access to systems and encryption for both at rest and in transit data protection. Kyndryl extended Schibsted's on-premises implementation of Microsoft® Active Directory to create a hybrid single sign-on (SSO) user authentication solution that also covers the AWS environment.

Kyndryl's Site Reliability Engineering (SRE) experts ensure high availability of Schibsted's systems on AWS. VMware hosts are deployed within a single AWS Availability Zone (AZ) and use VMware vSphere Clustering to automatically restart any failed nodes, helping to keep business-critical applications active at all times. All data, including VMware images, are replicated to a second AZ using IBM® Spectrum Protect, enabling Schibsted to recover services in the unlikely event of a full data center outage.

Kyndryl's Managed Applications experts are managing Schibsted's SAP applications. By joining 5,000 other enterprises that run their SAP environments on AWS, Schibsted benefits from Amazon's enormous ongoing investments in its global cloud infrastructure. Using custom-built SAP automation tooling from AWS, Kyndryl enables the Schibsted team to focus less on routine administration and more on adding value to the business within their SAP application landscape. And with real-time replication of SAP S/4HANA data, AWS ensures that Schibsted's SAP landscape always delivers up-to-the-second business information to users. Equally, AWS offers extremely high levels of security around SAP landscapes, boasting more security standards and compliance certifications than any other cloud provider—a vital benefit given the value of Schibsted's business data.

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- Ken Sivertsen, Cloud infrastructure architect

Enabling the corporate growth strategy

Having helped Schibsted virtualize their on-premises environment with VMware, Kyndryl could rely on VMware tools they had used many times before to plan and complete migration of Schibsted systems to AWS. This substantially reduced risk. The target VMware environment built on AWS was practically identical to the source environment in Schibsted's own data centers, so there were no concerns around compatibility or reliability. In fact, given the newer hardware at AWS, the only change was improved performance and availability.

"In migrating our VMware systems to AWS, Kyndryl ensured very low disruption to our normal business processes while opening up possibilities for enhanced performance and scalability," says Ken. "If we wish to increase the performance or capacity of any given system, we can easily and transparently assign more AWS resources to it. We are also reducing the total cost of ownership for these systems—for example, by taking advantage of the highly cost-efficient AWS S3 storage buckets instead of using costly on-premises storage."

Schibsted has already shut down one of its two data centers; when the migration is finalized and the company can shut down the second, almost all its IT infrastructure will be replaced by flexible virtual resources on the cloud. This will free up capital for investment in new services, as well as providing the flexibility to onboard new corporate acquisitions rapidly and easily. The chosen approach using VMware permits full multi-cloud flexibility, which will enable subsidiaries to use other cloud service providers if they wish, without any restrictions on development or operations.

"Our successful migration to AWS with Kyndryl really opens up new horizons for Schibsted," says Ken. "We have achieved our initial goals of increased flexibility at lower costs, so the group can pursue its growth ambitions without the restrictions imposed by our previous on-premises infrastructure. And more importantly, we've unlocked a host of new possibilities for the future. While our existing VMware systems on AWS will continue to support exceptional customer experiences, we can now also easily rebuild those applications to make them cloud-native. That gives us a strategic advantage as the business grows, both organically and through acquisitions, because we'll be able to introduce new services faster and respond more flexibly to changing customer expectations."

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