AN INNOVATIVE CUSTOMER SUCCESS STORY

ubique. GROUP

INNOVATIVE
DIFFERENT ON PURPOSE.

Ubique Group is a global furniture company and pioneer in online home furnishings, operating multiple brands including Flash Furniture, BizChair, Emma+Oliver, and others. With products available across four continents and partnerships with major retailers worldwide, Ubique Group launches over 500 innovative products annually and serves customers through both direct e-commerce channels and distribution operations.

Facing frequent system outages that disrupted revenue and eroded customer trust, Ubique Group needed to transform their aging Windows-based infrastructure into a reliable, resilient platform capable of supporting global growth. Their reactive operational model, undefined disaster recovery capabilities, and manual database management created risk and inefficiency that threatened business continuity. Innovative Solutions, an AWS Premier Tier Services Partner, partnered with Ubique Group to modernize infrastructure, implement enterprise-grade disaster recovery, and establish proactive monitoring that transformed IT operations from a source of business risk into a strategic enabler of growth.

This case study explores how infrastructure modernization, business-aligned disaster recovery planning, database optimization, and proactive monitoring enabled Ubique Group to achieve 98% uptime while reducing operational costs and establishing a foundation for continued global expansion.

BUSINESS OBJECTIVES

Ubique Group's global growth strategy required reliable, resilient technology infrastructure:

1	**Eliminate Revenue-Impacting Outages:** Transform system reliability from a business liability into a competitive advantage by achieving consistent uptime and eliminating the frequent, prolonged outages that disrupted e-commerce and distribution operations.
2	**Establish Business Continuity Capabilities:** Define recovery requirements aligned to business needs and implement disaster recovery architecture that protects against regional failures while meeting defined RTO and RPO objectives.
3	**Reduce Operational Overhead:** Migrate from manual database management and reactive infrastructure operations to managed services and proactive monitoring that reduce costs and free resources for strategic initiatives.

THE CHALLENGE

Ubique Group's existing technology environment created operational risk and inefficiency that threatened business growth:

Frequent System Outages: The company experienced regular and prolonged system outages that directly impacted revenue streams and damaged customer trust. These reliability issues stemmed from aging infrastructure running on legacy EC2 hardware and limited visibility into system performance. IT teams operated in a reactive mode, firefighting problems as they occurred rather than preventing issues proactively. As the business scaled globally, outages became increasingly disruptive across both e-commerce platforms serving direct customers and distribution systems supporting retail partners.

Undefined Disaster Recovery: Leadership lacked clear business continuity plans and recovery requirements were undefined, leaving the organization exposed to substantial risk during failures. There was no formal disaster recovery environment, no tested failover procedures, and no alignment between business needs and technical capabilities. The company couldn't answer basic questions about how long systems could be down or how much data loss was acceptable, creating uncertainty around business continuity and compliance obligations.

Manual Database Operations: SQL Server databases running on EC2 instances required heavy manual oversight for patching, backups, scaling, and performance tuning. This inflated operational costs by requiring specialized DBA resources and pulled technical teams away from strategic initiatives. Database management consumed significant time and attention while remaining a source of performance issues and operational risk. The manual approach didn't scale with business growth and created single points of failure around key personnel.

Inefficient Infrastructure Sizing: Infrastructure was either over-provisioned, wasting budget on unused capacity, or under-provisioned, creating performance bottlenecks during seasonal demand spikes. The lack of elasticity and cost governance meant Ubique Group couldn't efficiently scale to match business needs. Fixed capacity planning couldn't accommodate the variable demand patterns of global e-commerce and distribution operations, resulting in either degraded customer experience or unnecessary infrastructure spend.

Limited Observability: Without comprehensive monitoring and alerting, IT teams lacked real-time visibility into system performance, resource utilization, and emerging issues. Problems were discovered by end users rather than operations teams, and troubleshooting required time-consuming manual investigation. The reactive posture meant small issues escalated into major outages before teams could intervene, and root cause analysis was difficult without historical performance data.

THE PARTNER SOLUTION: COMPREHENSIVE INFRASTRUCTURE MODERNIZATION

Innovative Solutions designed and implemented a multi-faceted modernization program that addressed reliability, disaster recovery, database operations, cost optimization, and observability through integrated AWS services and best practices.

Proactive Monitoring and Observability

Innovative deployed New Relic's monitoring platform across all critical Windows workloads, providing real-time visibility into application performance, infrastructure health, and user experience. The platform monitors key metrics including CPU utilization, memory consumption, disk I/O, network performance, application response times, and database query performance, with customized dashboards for different stakeholder groups.

Infrastructure Modernization

All Windows EC2 instances were migrated from legacy hardware to modern AMD-based instances, improving stability, performance, and cost efficiency. The migration included comprehensive testing to validate application compatibility and performance characteristics on the new instance types. Modern instances provide better performance-per-dollar ratios, improved network throughput, and enhanced security features compared to legacy hardware.

Business-Aligned Disaster Recovery Architecture

Innovative led detailed workshops with stakeholders from e-commerce, distribution, finance, and executive leadership to establish business requirements for disaster recovery. Through structured analysis of business processes, revenue impact, and operational dependencies, the team defined Recovery Time Objectives (RTO) of four hours and Recovery Point Objectives (RPO) of one day that balanced business needs with cost considerations.

The disaster recovery architecture implements multi-region replication with the primary production environment in AWS US-East-1 (North Virginia) and disaster recovery environment in US-West-2 (Oregon). Automated CloudFormation scripts enable rapid infrastructure recreation in the DR region, ensuring recovery within the four-hour RTO even in the event of complete regional failure. Network configurations, security groups, IAM roles, and application dependencies are all codified and tested regularly through DR drills.

N2WS backup software provides automated snapshot scheduling, cross-region replication, and retention management for all critical data volumes. Automated backup policies ensure Ubique Group meets its one-day RPO requirement while maintaining data integrity and compliance with retention policies. The backup solution includes application-consistent snapshots for databases, automated testing of backup integrity, and granular recovery capabilities that support both full disaster recovery and individual file restoration.

Regular disaster recovery testing validates failover procedures, identifies gaps in documentation, and ensures teams can execute recovery within defined objectives. Runbooks document step-by-step procedures for different failure scenarios, and tabletop exercises keep teams prepared for actual incidents.

Managed Database Services Migration

Innovative initiated a phased migration of SQL Server workloads from self-managed EC2 instances to Amazon RDS for SQL Server, offloading operational overhead to AWS managed services. The migration strategy prioritized databases based on business criticality, operational complexity, and potential cost savings, with comprehensive testing at each phase to ensure application compatibility and performance.

Amazon RDS eliminates manual tasks including patching, backups, scaling, and performance monitoring through automated management. Multi-AZ deployments provide high availability with automatic failover, while read replicas support reporting workloads without impacting production databases. Standardized parameter groups and option groups ensure consistent configurations across database instances, while IAM integration and encryption at rest strengthen security posture.

The managed service approach significantly reduces the need for specialized DBA resources, allowing technical teams to focus on application development and business value rather than database administration. Built-in monitoring through CloudWatch and Performance Insights provides visibility into query performance and resource utilization, enabling proactive optimization without manual intervention.

Cost Optimization and Elastic Scaling

Innovative implemented comprehensive cost optimization through right-sizing analysis, reserved instance purchasing, and elastic scaling policies. Detailed analysis of historical utilization patterns identified over-provisioned resources that could be downsized and under-provisioned resources that needed capacity increases. Reserved instances for predictable baseline workloads provide significant cost savings compared to on-demand pricing.

Auto Scaling policies dynamically adjust capacity based on demand, ensuring performance during seasonal spikes while reducing costs during low-traffic periods. Scaling policies are tuned to business patterns including daily cycles, weekly variations, and seasonal trends in e-commerce and distribution operations. Cost governance guardrails including budgets, alerts, and automated responses prevent runaway spending while maintaining performance.

The elastic infrastructure enables Ubique Group to support global growth and seasonal demand variations without over-provisioning for peak capacity year-round. This elasticity provides both cost efficiency and performance assurance, eliminating the trade-off between budget constraints and customer experience.

ARCHITECTURE OVERVIEW

The modernized infrastructure operates as an integrated system where monitoring, disaster recovery, managed services, and elastic scaling work together to deliver reliability and efficiency:

Operational Workflow: New Relic continuously monitors all Windows workloads, databases, and application performance, collecting metrics and analyzing patterns. When anomalies or threshold violations are detected, automated alerts notify operations teams through integrated incident management workflows. Teams use real-time dashboards and historical data to diagnose issues quickly and implement fixes before users are impacted. Regular capacity planning reviews use monitoring data to optimize resource allocation and identify opportunities for cost savings.

Disaster Recovery Readiness: N2WS executes automated backup schedules daily, creating application-consistent snapshots of all critical volumes and replicating them to the Oregon region. CloudFormation templates defining the complete production environment are version-controlled and tested regularly through DR drills. In the event of a regional failure, operations teams execute documented runbooks to provision infrastructure in Oregon using CloudFormation, restore data from the most recent snapshots, and redirect traffic to the DR environment—all within the four-hour RTO.

Database Operations: Amazon RDS manages all routine database operations including automated backups with point-in-time recovery, patching during defined maintenance windows, performance monitoring through CloudWatch and Performance Insights, and automatic failover to standby instances in different availability zones. Operations teams focus on query optimization and schema design rather than infrastructure management, while built-in security features including encryption and network isolation protect sensitive data.

Elastic Scaling: Auto Scaling groups monitor application load and automatically adjust EC2 capacity to match demand. During seasonal peaks or marketing campaigns, additional instances launch automatically to maintain performance. During low-traffic periods, excess capacity terminates to reduce costs. Reserved instances cover baseline capacity while on-demand instances handle variable demand, optimizing the cost-performance balance.

KEY RESULTS

The comprehensive modernization program delivered measurable improvements in reliability, operational efficiency, and cost optimization:

Dramatic Reliability Improvement: System uptime improved from frequent multi-hour outages to consistent 98% uptime month-over-month, protecting revenue streams and customer trust. The combination of infrastructure modernization, proactive monitoring, and disaster recovery capabilities eliminated the reliability crisis that previously threatened business operations. Outage frequency decreased by over 90%, and mean time to resolution for incidents that do occur dropped significantly through better observability and automated responses.

Business-Aligned Disaster Recovery: Clearly defined RTO of four hours and RPO of one day provide leadership with confidence in business continuity capabilities. Multi-region disaster recovery architecture with automated failover procedures has been validated through regular testing and actual regional service disruptions. The company can now meet compliance obligations and customer commitments around data protection and service availability, while documented runbooks ensure teams can execute recovery procedures under pressure.

Reduced Operational Overhead: Migration to Amazon RDS eliminated manual database administration tasks including patching, backups, and performance tuning, reducing operational costs by 40% while improving reliability. Operations teams shifted focus from reactive maintenance to strategic initiatives including application modernization and business capability development. The reduction in specialized DBA requirements allowed reallocation of resources to higher-value activities that directly support business growth.

Proactive Operations Model: New Relic monitoring provides real-time visibility into system performance, enabling teams to detect and resolve issues before they impact users. Alert-driven workflows replaced reactive firefighting, reducing operational stress and improving incident response times. Historical performance data supports capacity planning and optimization, while distributed tracing capabilities accelerate root cause analysis during incidents. The shift from reactive to proactive operations has improved team morale and effectiveness while reducing business risk.

Cost Optimization: Infrastructure right-sizing, reserved instance purchasing, and elastic scaling reduced infrastructure costs by 25% while improving performance and reliability. Auto Scaling eliminates waste from over-provisioning while ensuring capacity during demand spikes, optimizing the cost-performance balance. Cost governance guardrails and monitoring provide visibility and control over spending, enabling accurate financial planning and preventing budget surprises.

Scalability for Growth: Elastic infrastructure and managed services provide a foundation that scales efficiently to support global expansion and seasonal demand variations. The company can pursue new markets, launch additional brands, and handle increasing transaction volumes without technology constraints. The modernized architecture eliminates the need for large upfront infrastructure investments, allowing capital to be allocated to growth initiatives rather than technology overhead.

WHAT THE CUSTOMER IS SAYING

> "The transformation of our infrastructure reliability has been remarkable. We went from frequent outages that disrupted sales and damaged customer trust to consistent 98% uptime that supports our growth strategy. The disaster recovery capabilities give us confidence that we can maintain operations even during regional failures, and the cost optimization has freed up budget for strategic initiatives. Innovative Solutions didn't just fix our immediate problems—they built a foundation that enables our global expansion."
>
> — Ubique Technical Team

CONCLUSION

Ubique Group's infrastructure modernization demonstrates how comprehensive cloud transformation—combining monitoring, disaster recovery, managed services, and cost optimization—can turn technology from a business liability into a strategic enabler. By addressing reliability, business continuity, operational efficiency, and cost management through integrated AWS services and best practices, Innovative Solutions enabled Ubique Group to achieve 98% uptime while reducing costs and establishing a foundation for continued global growth.

The program's impact extends beyond technical improvements to fundamental business value. Consistent reliability protects revenue streams and customer relationships that were previously at risk from frequent outages. Defined disaster recovery capabilities provide confidence in business continuity and support compliance obligations. Reduced operational overhead frees resources for strategic initiatives that drive growth. Cost optimization ensures infrastructure spending supports business priorities rather than consuming budget through waste and inefficiency.

For organizations facing similar challenges—reliability issues that threaten revenue and customer trust, undefined disaster recovery capabilities that create business risk, manual operations that don't scale with growth, or inefficient infrastructure that wastes budget—Ubique Group's modernization provides a compelling blueprint. Proactive monitoring, business-aligned disaster recovery, managed services, and elastic scaling can transform operations while reducing costs and enabling growth.

The modernized architecture has positioned Ubique Group for continued expansion in global furniture markets, with infrastructure that scales efficiently as they add brands, enter new markets, and grow transaction volumes. As they pursue strategic initiatives, the reliable, resilient technology foundation ensures infrastructure supports rather than constrains business objectives.

ABOUT INNOVATIVE SOLUTIONS

To learn more about how Innovative can help your organization design, implement, and manage standardized cloud infrastructure frameworks that accelerate growth and reduce operational complexity, visit innovativesol.com or contact our team to discuss your specific cloud architecture and managed services needs.

Innovative is an AWS Premier Tier Services Partner specializing in cloud technology and digital transformation solutions. With expertise in healthcare technology, cloud migrations, and managed cloud services, we help organizations leverage AWS services to build scalable, secure infrastructure that drives growth and operational efficiency.