Success Story

Ben-Gurion University Successfully Migrates “Moodle” Learning Platform from Azure to AWS with Ness Technology, Achieving Greater Stability, Performance, and 15% Cost Reduction

Beer Sheva, Israel – March 2025 – Ben-Gurion University of the Negev (BGU), one of Israel’s leading research and higher-education institutions, has successfully completed a full migration of its “Moodle” learning management system (LMS) from Microsoft Azure to Amazon Web Services (AWS). The project was designed and delivered by **Ness Technology**, an AWS Advanced Consulting Partner specializing in cloud Transformation & Modernization and Digital Transformation.

About Ben-Gurion University (BGU)

Ben-Gurion University of the Negev is a top-tier academic and research institution known for its excellence in Science, Engineering, Medical studies, Computer science, Humanities, Social Sciences, Desert studies etc. Serving tens of thousands of students, BGU is a leader in innovation and digital learning solutions, supporting a wide range of academic, administrative, and research activities. Its online learning platforms—including “Moodle”—play a critical role in delivering academic content, managing coursework, and ensuring continuous access to educational resources.

Customer Challenge – Moving “Moodle” from Azure to AWS

BGU identified the need to modernize and enhance the reliability and stability of its “Moodle” platform as student usage increased significantly in recent years. The university faced inconsistent performance on its previous Azure environment, particularly during peak academic periods such as semester openings and exam seasons. These performance bottlenecks led to slow load times, interrupted access to course materials, and high usage costs.

Additionally, the existing architecture lacked the flexibility and cost-efficiency required for rapid scaling. BGU’s IT team also sought more advanced automation capabilities and better visibility into system health and performance metrics. Without addressing these issues, the university risked ongoing disruptions to online learning, reduced student satisfaction, and increased operational overhead for IT and support teams.

Partner Solution – Ness Technology

Ness Technology partnered with BGU to design and execute a full migration of the “Moodle” platform from Azure to AWS, leveraging a robust, scalable, and highly available cloud architecture. The solution was built around AWS-native services to ensure long-term performance, cost optimization, and operational efficiency.

The migration architecture utilized **Amazon EC2** for scalable application servers, **Amazon RDS for MySQL** to deliver a managed, resilient database layer, and **Amazon S3** for secure storage of course files, media, and backups. High availability and load balancing were enabled through **Elastic Load Balancer (ELB)** and **Availability Zones (AZ)**.

To streamline deployment and environment management, Ness Technology also migrated On-Premise Web portal (based on Umbraco platform), which could not meet its current needs, to AWS cloud.

During pre-migration, Ness Technology conducted a comprehensive assessment of BGU’s existing Azure environment, including performance baselines, database analysis, risk mitigation planning, and proof-of-concept testing. Ness Technology provided end-to-end project management, technical implementation, data migration, application validation, and user acceptance testing. Post-migration, Ness Technology delivered full stabilization services, 24/7 monitoring, performance fine-tuning, and knowledge transfer to BGU’s IT team to ensure smooth long-term operations.

Results and Benefits

The migration was completed within **three months**, enabling BGU to modernize its learning platform with zero unplanned downtime. Following the move to AWS, BGU reported a **20% improvement in system performance**, including faster page loads, quicker database queries, reliable access during high-traffic periods and cost saving.

From an operational perspective, AWS automation and managed services reduced ongoing maintenance and licensing costs by approximately **15%**, enabling the IT department to redirect time and resources toward other projects rather than infrastructure troubleshooting. The new environment provides improved observability, enhanced security controls, and effortless scalability to support future growth in student usage and online learning demands.

About Ness Technology

Ness Technology is one of Israel's largest and most prominent Information Technology and Digital service providers. This is attributed to its hundreds of loyal customers and partners and to its over 5,000 professional employees, who are the most valuable asset of the company.

For the past 25 years, our employees have been the driving force behind our ability to execute our core business and deliver substantial value to our customers.

Since its incorporation, Ness has established itself as a key player in the Information technology and digital services space in Israel by offering to its steadily growing customer base a unique combination of diverse business models, technology expertise, and strategic collaborations with the leading global software and hardware vendors.

Ness Technology is a leading technology and consulting company specializing in cloud migration, digital transformation, AI, and enterprise IT solutions. As an **AWS Advanced Consulting Partner with certified cloud architects and migration specialists**, Ness delivers end-to-end services across assessment, architecture, implementation, and long-term managed cloud operations. With deep expertise in public sector, education, and enterprise modernization, Ness supports organizations in accelerating innovation and achieving operational excellence in the cloud.

Links for the new “Moodle” system of BGU

https://moodle.bgu.ac.il/moodle/local/mydashboard/
