# DevPanel Case Study: Kaplan Early Learning Company

Accelerating HIPAA-Compliant Azure Migration with Automation



# **Executive Summary**

Kaplan Early Learning Company, a leading international provider of educational products and services for children from birth through 6th grade, serves school systems, childcare centers, and federally supported programs across the United States. When Kaplan needed to migrate a student portal to Microsoft Azure with full HIPAA compliance and multi-environment flexibility, the complexity of the infrastructure requirements threatened to derail their timeline and stretch their development resources thin.

By partnering with DevPanel, Kaplan transformed what could have been a months-long infrastructure project into a streamlined deployment completed in weeks, allowing their

development team to focus entirely on building educational solutions rather than managing cloud infrastructure.

# The Challenge

#### **Complex Azure Migration Requirements**

Kaplan Early Learning Company faced a critical business requirement: migrating their existing student portal to their own Microsoft Azure account while maintaining strict HIPAA compliance standards. The educational technology company needed to handle sensitive student data securely while providing seamless access to educational resources.

#### **Multi-Environment Architecture Needs**

Beyond the basic migration, Kaplan required a sophisticated infrastructure setup that included:

- Development, testing, staging, and production environments
- Full HIPAA compliance across all environments
- Secure API endpoints for integration with existing educational applications
- Scalable architecture to handle variable API loads
- Robust backup and disaster recovery systems

#### **Resource and Timeline Constraints**

The project presented significant challenges:

- Limited internal DevOps resources for Azure cloud infrastructure
- Tight timeline requirements from a new front-end consuming the API
- Need to maintain focus on core educational product development
- Complex compliance requirements that demanded regular security audits

#### The DevPanel Solution

#### **Comprehensive Azure Automation Platform**

DevPanel provided Kaplan with a complete automation platform designed to integrate development tools and processes under one umbrella, introducing automation while embedding security checks and eliminating bottlenecks. The solution delivered:

- Automated Infrastructure Provisioning: Complete Azure environment setup using Terraform scripts
- HIPAA-Compliant Architecture: Built-in compatibility with HIPAA and other compliance standards

- Multi-Environment Management: Dynamic creation of dev, test, stage, and production environments
- Integrated Security Framework: Comprehensive security measures following industry best practices and that integrates seamlessly with Microsoft Defender for Cloud
- Developer Collaboration Tools: Capability to onboard contractors without granting direct Azure access

#### **Rapid Deployment Process**

DevPanel's automation eliminated the traditional infrastructure setup bottlenecks:

- Infrastructure as Code: Terraform scripts automated the complete Azure setup
- Container Orchestration: HELM charts managed Kubernetes deployments
- Configuration Management: Ansible scripts automated environment provisioning
- Integrated API Architecture: Pre-built API endpoints for seamless application integration

#### **Azure Managed Services**

DevPanel uses fully managed services for infrastructure that delivers 99.99% uptime SLA with a number of regulatory compliance, including HIPAA.

- 1. Kubernetes: Azure Kubernetes Service (AKS)
- 2. MySQL Database: Azure Database for MySQL
- 3. Network: Azure Virtual Network (VNet)
- 4. Load Balancer: Azure Load Balancer
- 5. Object Storage: Azure Blob Storage
- 6. Log Management: Azure Log Analytics
- 7. Monitoring and Alerting: Azure Monitor
- 8. Security Management: Microsoft Defender for Cloud

### Implementation Results

#### **Dramatic Time Savings**

The DevPanel implementation delivered unprecedented efficiency gains:

- Infrastructure Setup: What traditionally required 3-4 weeks of manual Azure configuration was completed in under 30 minutes
- **Environment Provisioning**: Multiple dev, test, and stage environments created dynamically rather than requiring weeks of manual setup
- **API Architecture**: Built-in API infrastructure eliminated weeks of development, implementation, testing, and debugging time
- Overall Timeline: Complete project delivery in weeks instead of the projected months

#### **Enhanced Security and Compliance**

DevPanel's automated approach ensured robust security from day one:

- HIPAA Compliance: Full adherence to HIPAA administrative, physical, and technical safeguards
- Automated Security: Built-in security scanning and monitoring integration
- Compliance Documentation: Comprehensive audit trails and compliance reporting
- Secure Access Controls: Role-based access management without exposing Azure credentials

#### **Operational Excellence**

The solution provided ongoing operational benefits:

- 24/7 DevOps Support: Access to DevPanel's expert team for infrastructure management
- Automated Scaling: Auto-scaling capabilities to handle variable student loads
- Backup and Recovery: Automated backup systems with disaster recovery planning
- Monitoring and Alerts: Comprehensive monitoring with automated alerting systems

# The DevPanel Advantage: By the Numbers

#### **Setup and Configuration Time Savings**

- **Traditional Azure Setup**: 3-4 weeks for Drupal configuration, Kubernetes setup, database configuration, networking, load balancers, storage, backups, and security
- **DevPanel Automation**: Less than 30 minutes using Terraform scripts and HELM charts
- **Time Saved**: 95% reduction in initial setup time

#### **Environment Management Efficiency**

- Manual Environment Creation: Multiple weeks per environment for dev, test, and staging setups
- **DevPanel Dynamic Provisioning**: Minutes per environment using Ansible automation
- Ongoing Management: 20-40 hours saved monthly through automated operations

#### **Architecture Development Acceleration**

- **API Infrastructure**: Weeks of development, testing, and security implementation eliminated through pre-built architecture
- Integration Testing: Streamlined through standardized, tested API endpoints
- Security Implementation: Automated rather than manual configuration and testing

### **Team Productivity Enhancement**

- **Developer Focus**: 100% focus on educational application development rather than infrastructure concerns
- Collaboration: Seamless contractor onboarding without Azure access management complexity
- **Project Management**: Simplified oversight through unified DevPanel dashboard

# Key Benefits Realized

#### **Accelerated Time-to-Market**

Kaplan achieved their academic year deadline through DevPanel's rapid deployment capabilities, launching their enhanced student portal on schedule while maintaining all required compliance standards.

#### **Cost Optimization**

By eliminating the need for specialized Azure DevOps hiring and reducing infrastructure management overhead, Kaplan achieved significant cost savings while gaining access to enterprise-level expertise.

#### **Enhanced Security Posture**

DevPanel's comprehensive security measures and industry best practices provided Kaplan with a security framework that exceeded their internal capabilities while ensuring ongoing compliance.

#### Scalability and Flexibility

The automated infrastructure provides Kaplan with the ability to scale resources dynamically, supporting their growing student base while maintaining optimal performance and cost efficiency.

#### **Strategic Technology Partnership**

Beyond software tools, DevPanel provided Kaplan with a committed technology partner, offering ongoing support, innovative solutions, and exceptional service for their educational technology initiatives.

## **Looking Forward**

The successful Azure migration has positioned Kaplan Early Learning Company for continued growth and innovation in educational technology. With DevPanel managing their cloud infrastructure, Kaplan's development team can focus entirely on creating innovative educational experiences for children and educators worldwide.

The partnership demonstrates how intelligent automation and expert DevOps support can transform complex cloud migrations from overwhelming technical challenges into streamlined business enablers, allowing educational organizations to focus on their core mission of enhancing children's learning experiences.

# About the Companies

#### **DevPanel**

DevPanel is an all-in-one platform for accelerating web development, effortlessly deploying applications, and seamlessly managing cloud environments. As an AWS Certified Technology Partner with expertise in Azure and Kubernetes, DevPanel helps organizations improve productivity, eliminate mistakes, improve security, increase reliability, and reduce costs through advanced automation systems.

#### **Kaplan Early Learning Company**

Founded in 1951, Kaplan Early Learning Company is a leading international provider of educational products and services for children from birth through 6th grade. The family-owned company serves school systems, childcare centers, federally supported programs, and US military child care programs worldwide, with a mission to champion play as a transformative learning experience.

For more information about DevPanel's Azure automation solutions, visit <u>DevPanel.com</u> or email <u>contact@devpanel.com</u> for a consultation on your cloud infrastructure needs.