

Securing **\$50M+** in Housing Revenue Through Cloud Modernization

Texas A&M University — Department of Residential Housing

Improved transaction processing speed by **30%** across the Residential Housing system serving **11,000+** students in **25+** residence halls.

30% Faster Transaction Processing	\$50M+ Annual Housing Revenue Protected	11,000+ Students Across 25+ Halls	60,000+ University Enrollment
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Industry: Higher Education • Duration: 18 Months • Services: Cloud Migration, App Dev, Cost Optimization, Managed Services

Challenge

Texas A&M University's Department of Residential Housing manages one of the largest campus living operations in the United States. With 25+ residence halls, 11,000+ on-campus residents, and an incoming freshman class of nearly 10,000 students each year, the housing system generates over \$50 million in annual revenue. But the legacy infrastructure powering it was struggling to keep pace.

Problem	Value of Modernization
Oracle PeopleSoft transactions were slow and unreliable during peak periods	Protect and scale a \$50M+ revenue operation with reliable infrastructure
Data silos between housing, billing, and student records	Unify data across housing, billing, and student information systems
On-prem servers lacked scalability for room selection surges	Ensure seamless room selection and move-in for thousands of students
Manual, paper-based processes slowed administrative workflows	Free up IT staff to focus on strategic initiatives

Before & After

BEFORE

The university relied on an aging Oracle PeopleSoft deployment running on legacy on-premises servers. Transaction processing was sluggish during peak housing events. Housing, billing, and student data lived in disconnected silos. Manual processes and outdated integrations created bottlenecks.

AFTER

CloudLogically architected a scalable, cloud-native solution on AWS that integrated seamlessly with PeopleSoft while eliminating bottlenecks. Custom ETL pipelines (AWS DMS + Glue) unified data across systems. Transaction speed improved by 30%, and the platform scaled elastically for peak-period surges.

Pain Points That Resonate with Similar Institutions

Pain Point	Impact
Our PeopleSoft System Can't Handle Peak Loads	Room selection events, fall move-in, and enrollment surges overwhelmed the legacy system, causing timeouts and failed transactions.
Housing and Student Data Live in Silos	Residential housing, billing, financial aid, and student records each operated in disconnected systems.
We're Running on Aging On-Prem Hardware	Physical servers were reaching end of life, requiring constant patching. Scaling meant months of procurement.
Our IT Team Spends Too Much Time Firefighting	Engineers were consumed by infrastructure maintenance and manual data reconciliation.
We Can't Scale for a Growing Student Body	With enrollment surpassing 60,000 and residential demand increasing, the infrastructure had no clear path to scale.

Solution



OLA & Workload Management Assessment: Conducted a thorough Operational Level Agreement and workload assessment to identify bottlenecks, map dependencies, and establish performance baselines.

Scalable Architecture Design: Architected cloud-native solutions on AWS with design reviews ensuring alignment with industry standards. Built for elastic scalability.

Data Pipeline & Integration: Built custom ETL pipelines using AWS DMS and AWS Glue to unify PeopleSoft, housing management, billing, and student information systems.

Optimization & Monitoring: Implemented continuous performance monitoring to sustain the 30% transaction speed improvement during critical periods.

AWS Services Deployed

• Amazon EC2	• Amazon RDS	• Amazon S3
• AWS Lambda	• Amazon API Gateway	• Amazon CloudFront
• Amazon Route 53	• AWS Database Migration Service	• AWS Glue

Timeline of Implementation

Phase	Duration	Activities
Phase 1	Months 1–3	OLA Assessment, workload analysis, architecture design
Phase 2	Months 4–7	AWS infrastructure buildout, ETL pipeline development
Phase 3	Months 8–12	PeopleSoft integration, data migration, and testing
Phase 4	Months 13–18	Optimization, monitoring, mentorship program, and handoff

Investing in the Next Generation

Mentorship & Knowledge Transfer

Beyond the technical deliverables, CloudLogically embedded Computer Science and Corps of Cadets students into the project team as research assistants. These students gained hands-on experience with enterprise-grade AWS architecture, ETL pipeline development, and real-world software engineering practices.

CloudLogically also mentored junior developers and onboarded new team members within the Department of IT, ensuring long-term knowledge transfer and self-sufficiency.

VICE CHANCELLOR RECOMMENDATION

CloudLogically's Aamir Aftab received a formal recommendation from the Vice Chancellor at Texas A&M University in recognition of the exceptional work delivered for the Department of Residential Housing.

— Office of the Vice Chancellor, Texas A&M University

Want results like these? Let's talk.

See how CloudLogically can modernize your institution's infrastructure and protect your revenue.

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