

Varsity Sports System - Azure Migration Charts Package

Purpose: Shows the transformation from on-premises infrastructure to Azure cloud services

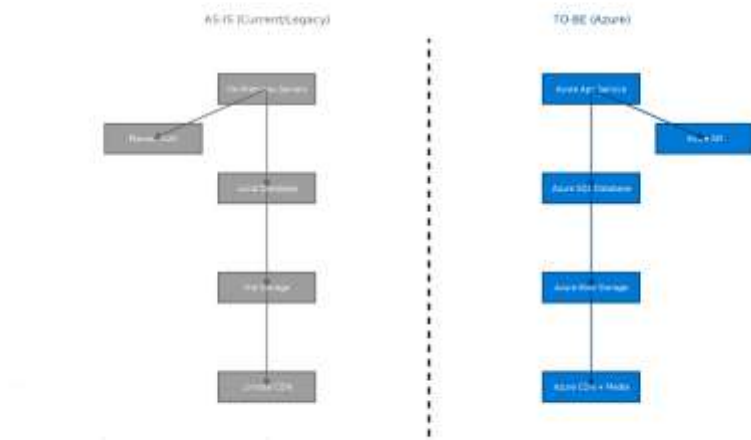
AS-IS (Current System):

- On-Premises Servers
- Local Database Server
- File Storage Server
- Manual Authentication System
- Limited/No CDN

TO-BE (Azure Architecture):

- Azure App Service (scalable web hosting)
- Azure SQL Database (managed database)
- Azure Blob Storage (cloud file storage)
- Azure Active Directory (enterprise authentication)
- Azure CDN + Media Services (livestream delivery)

Varsity Sports System Architecture: AS-IS vs TO-BE



2. Module Dependency Flow Diagram

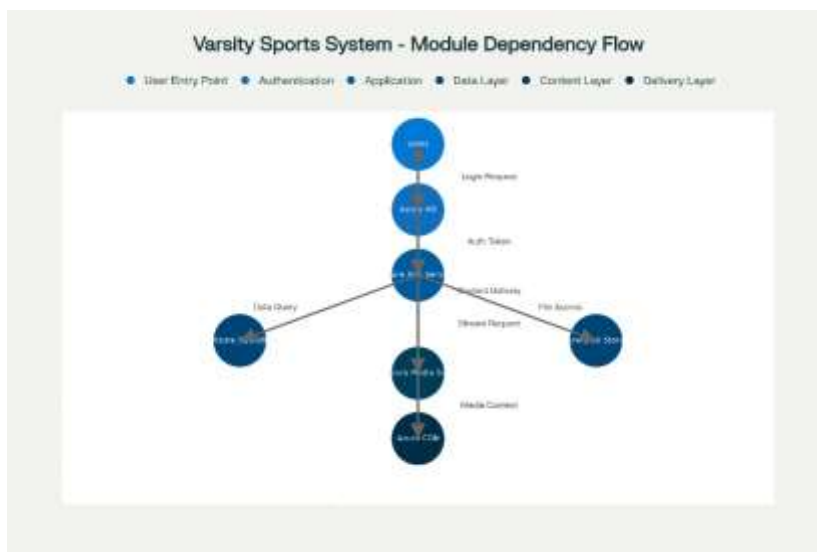
Purpose: Visualizes how core modules interact and depend on each other

Flow Sequence:

1. Users → Azure AD (authentication)
2. Azure AD → App Service (verified access)
3. App Service → SQL Database (data queries)
4. App Service → Blob Storage (file access)
5. App Service → Media Services (livestream requests)
6. Media Services → CDN (content distribution)
7. CDN → Users (content delivery)

Key Dependencies:

- Authentication layer (Azure AD) protects all services
- App Service acts as central hub coordinating all backend operations
- CDN optimizes content delivery for livestream performance



3. Migration Roadmap Timeline

Purpose: Detailed 18-week migration plan with phases and milestones

Phase 1: Planning & Assessment (Weeks 1-2)

- Requirements gathering
- Azure account setup
- Cost analysis completion
- **Milestone:** Requirements document approved

Phase 2: Database Migration (Weeks 3-5)

- Schema migration to Azure SQL
- Data transfer and validation
- Connection string updates
- **Milestone:** Database fully migrated

Phase 3: Application Migration (Weeks 6-8)

- Deploy backend to Azure App Service
- Configure Azure AD authentication
- API integration and testing
- **Milestone:** Application deployed

Phase 4: Storage & CDN Setup (Weeks 9-11)

- Blob Storage configuration
- Azure CDN setup
- Media Services livestream integration
- **Milestone:** CDN and streaming active

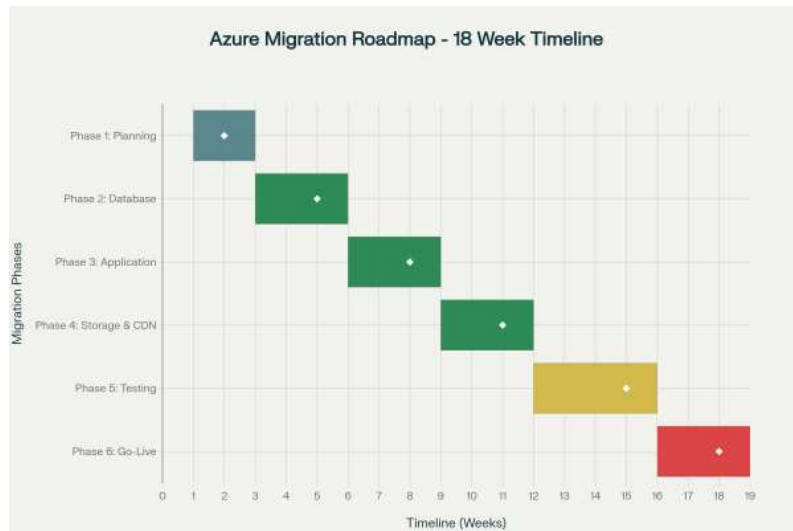
Phase 5: Testing & Optimization (Weeks 12-15)

- Load and performance testing
- Security audit
- Optimization tuning
- **Milestone:** Testing sign-off

Phase 6: Go-Live & Support (Weeks 16-18)

- Production cutover

- User training sessions
- Monitoring and alerting setup
- **Milestone:** Production live



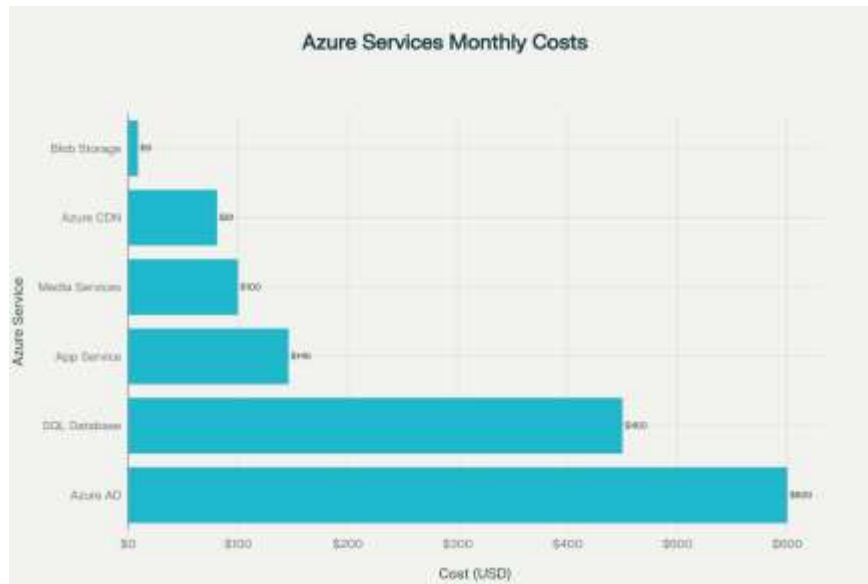
4. Azure Service Costs Breakdown

Purpose: Monthly operational costs per Azure service

Cost Summary (Monthly):

- Azure AD (100 users): \$600
- Azure SQL Database (General Purpose): \$450
- Azure App Service (Premium P1v3): \$146
- Azure Media Services (Livestreaming): \$100
- Azure CDN (1TB transfer): \$81
- Azure Blob Storage (500GB Hot): \$9

Total Monthly Cost: \$1,386



5. Migration Cost Timeline

Purpose: Shows cost evolution during the 6-month migration period

Cost Progression:

- **Month 1** (Planning): \$250
- **Month 2** (Database Migration): \$550
- **Month 3** (App Migration): \$846
- **Month 4** (Integration): \$1,027
- **Month 5** (Full Testing): \$1,777 (peak)
- **Month 6** (Production Stable): \$1,677

Key Insight: Costs peak during Month 5 due to parallel testing and full service load, then stabilize in production

