# Azure Cost Optimization Report

## Overview

This report summarizes the cost-saving opportunities identified using \*\*Azure Advisor\*\* for the existing resource group `rg-sample-ci`.

Azure Advisor provides personalized recommendations based on resource usage, configuration, and billing data to help reduce unnecessary spend.

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## 1. Virtual Machines

### Issue

- VM `vm-dev-eastus` runs continuously though used only during office hours.

### Recommendation

- Configure \*\*Auto-shutdown\*\* in the VM settings or schedule start/stop via \*\*Azure Automation\*\*.

- Alternatively, switch to \*\*B-series (burstable)\*\* VM type.

### Estimated Monthly Savings

- ₹2,000 / month

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## 2. Managed Disks

### Issue

- Disk `disk-old-backup` is unattached and incurring cost.

### Recommendation

- Delete the unused disk or move it to \*\*Azure Blob Cool tier\*\* for archival.

### Estimated Monthly Savings

- ₹300 / month

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## 3. App Service Plan

### Issue

- `asp-test-plan` is underutilized with one small test web app.

### Recommendation

- Downgrade to \*\*Basic\*\* or \*\*Free\*\* tier.

- Consolidate multiple low-traffic apps into one App Service Plan.

### Estimated Monthly Savings

- ₹1,000 / month

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## 4. Azure SQL Database

### Issue

- Database `sqldb-demo` uses only 10% of allocated DTUs.

### Recommendation

- Switch from \*\*Standard 100 DTU\*\* to \*\*Basic/Serverless\*\* tier.

- Enable \*\*Auto-pause\*\* for development/test environments.

### Estimated Monthly Savings

- ₹1,500 / month

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## 5. Storage Accounts

### Issue

- `stlogs-prod` stores rarely accessed logs in \*\*Hot\*\* storage.

### Recommendation

- Change to \*\*Cool\*\* or \*\*Archive\*\* tier.

- Implement \*\*Lifecycle Management Policies\*\* to automatically move data between tiers.

### Estimated Monthly Savings

- ₹500 / month

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## 6. Additional Recommendations

- Use \*\*Azure Reservations\*\* for predictable workloads (1-year or 3-year commitments can save up to 72%).

- Apply \*\*Azure Hybrid Benefit\*\* if you already have Windows Server or SQL Server licenses.

- Monitor spend continuously using \*\*Cost Management + Budgets\*\*.

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## ✅ Summary of Savings

| Category | Resource | Savings (₹/month) |

|-----------|-----------|-------------------|

| Virtual Machine | vm-dev-eastus | 2,000 |

| Managed Disk | disk-old-backup | 300 |

| App Service Plan | asp-test-plan | 1,000 |

| SQL Database | sqldb-demo | 1,500 |

| Storage Account | stlogs-prod | 500 |

| \*\*Total Estimated Savings\*\* | — | \*\*₹5,300 / month\*\* |

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## 📈 Outcome

After implementing the above optimizations, the organization can reduce monthly Azure spend by approximately \*\*₹5,300\*\*, improve operational efficiency, and maintain optimal performance for all workloads.