

# Redundancy Restored. Outages Eliminated.



## Business Objective

Business Challenge A 50-rack data centre with N+1 electrical and cooling redundancy suffered 40–50% rack shutdown during a planned primary UPS maintenance bringing 20–25 production racks offline for 8–9 hours, causing significant manufacturing downtime.

## BUSINESS NEED

### Identify the Root Cause of Unplanned Shutdown

- Determine why racks on a redundant N+1 system went offline during a single-source maintenance event.

### Restore Proper Power Redundancy

- Correct the distribution of primary and secondary power sources across all 50 racks to ensure true redundancy.

### Prevent Recurrence Through Change Governance

- Implement monitoring, smart PDUs, and change management to eliminate undocumented infrastructure drift.

## SOLUTION & IMPACT

### 8-9 Hour Outage Risk Permanently Eliminated

- Root cause confirmed: both power feeds on one UPS. Fault identified and corrected before next maintenance window.

### Full N+1 Redundancy Restored Across 50 Racks

- Corrected power distribution gave the client verified failover capability at every rack.

### Real-Time Monitoring and Change Governance Deployed

- Smart PDUs and change management controls prevent future undocumented infrastructure drift.

## Conclusion

Technavious transformed a costly production outage into a resilience milestone for the Indian automotive manufacturer. A thorough physical audit exposed a fundamental power distribution flaw invisible to the operations team, corrected it before the next maintenance window, and installed the governance framework needed to keep it that way permanently.