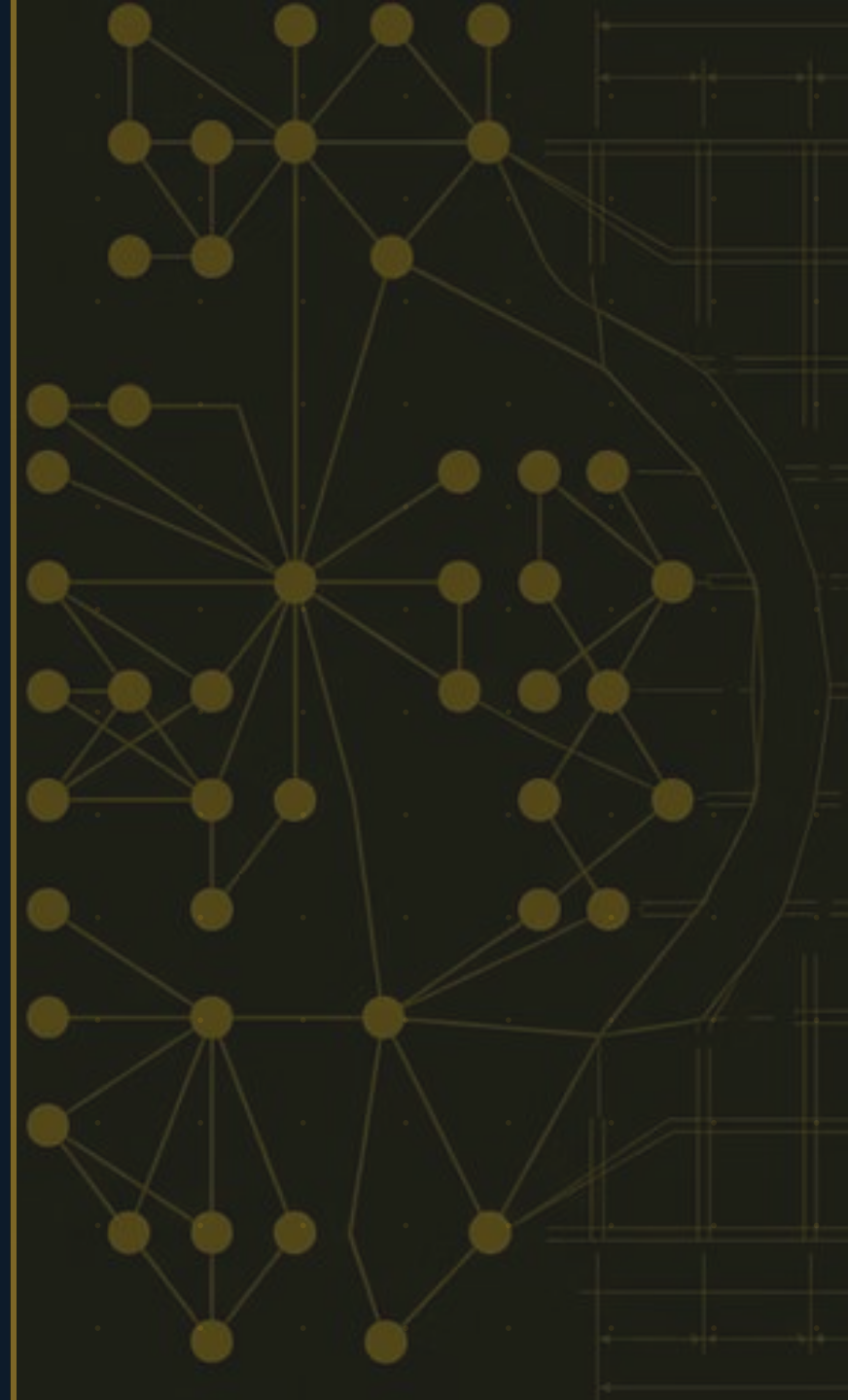


STRATEGIC IT OPERATIONS & ENTERPRISE IMPLEMENTATION

Architecting IT Operations at Scale

Case Study: Digital Transformation & Multi-Site Infrastructure in Public Healthcare

ISSSTE — MEXICAN STATE WORKERS INSTITUTE · 1995–2011



Scale Dashboard

Operating a critical public healthcare IT environment requires balancing extensive geographic scale with zero-downtime reliability.

38

Medical & Administrative
Facilities Managed
(Statewide Regional
Network)

370

LAN Nodes & Telecom
Assets Maintained
(Inventory Baseline)

100%

Digital Coverage Across
All Regional Clinics

24/7

Mission-Critical Public
Healthcare Uptime

The Digital Transformation Mandate

The organization required a massive, zero-downtime leap from siloed, legacy analog systems to a unified, IP-based digital ecosystem.

LEGACY BASELINE (1995)	TARGET STATE (2011)
Infrastructure: Mainframes & Analog Links (64kbps)	High-Availability IP/MPLS WAN (SRNST)
Clinical Data: 100% Physical Paper Trails	Integrated Electronic Clinical Records (ISSSTEMED)
IT Operations: Reactive, Isolated Break-Fix	Standardized, Proactive SLAs & National Telecom Integration

A Three-Pillar Strategy for Modernization

Sustainable transformation in a highly regulated sector requires concurrent upgrades in physical infrastructure, clinical software, and human capability.

1. FOUNDATION — HARDWARE & NETWORK

- Standardization of distributed IT assets
- Comprehensive structured cabling rollouts
- Integration into the National Telecommunications Network (SRNST)

2. CORE — MISSION-CRITICAL SYSTEMS

- Phased rollout of Electronic Clinical Records (ISSSTEMED)
- Integration of PACS/RIS imaging systems
- Centralized web services and digital pharmacy logistics

3. ENABLEMENT — PROCESS & PEOPLE

- Proprietary clinical staff training programs
- Decentralized change management
- Strict IT governance and asset lifecycle management

Executing Multi-Site Network Migration

Headquarters Relocation & Foundation

- Directed the end-to-end physical IT infrastructure for the new State Delegation HQ
- Mapped, deployed, and certified 370 structured voice and data nodes

SRNST Network Migration

- Successfully migrated all 38 regional sites from a legacy VPN to a high-availability MPLS/IP network (Voice, Data, Video)
- Utilized Dual Homing (BGP/OSPF) to run parallel networks during migration, ensuring zero operational downtime

Managing Risk in Life-Critical Systems

Track 1 — Absolute Contingency (Y2K Continuity)

- Led comprehensive hardware BIOS patching and inventory audits
- Established 24/7 “War Rooms” and manual paper contingencies (Plan B) ensuring uninterrupted clinical care



Track 2 — Complex Rollout (ISSSTEMED Clinical Records)

- Directed the phased regional rollout of Electronic Clinical Records across three tiers of care
- Overcame remote connectivity challenges (VSAT satellite) while strictly adhering to federal data privacy standards (NOM-168)



STANDARDIZATION THROUGH CAPABILITY BUILDING

Cutting Incident Response by Half

Technology is only as effective as the people using it. Support processes were optimized by investing in decentralized user literacy.

50%

Reduction in end-user incident response times within six months

120hr

Internal certification program ('Diplomado en Ofimática') designed and delivered

120+

Clinical and administrative employees upskilled

RESULTS

Measurable Outcomes & IT Optimization

Delivery of all primary KPIs across infrastructure, healthcare systems, and organizational efficiency.



100% Network Migration

38 out of 38 work centers successfully integrated into the National Telecom Network.



Full State Rollout

Electronic Clinical Records successfully deployed across all regional medical units.



Standardized Lifecycle

Implemented systematic preventive and corrective maintenance covering all regional IT assets.



Network Modernization

370 voice and data nodes, building the fundamental infrastructure backbone for digital services

Translating Scale to DACH Enterprise Needs

The rigorous principles used to secure and scale public healthcare IT are directly applicable to Europe's complex digital transformation initiatives.

PROVEN EXPERIENCE	DACH ENTERPRISE VALUE
Distributed multi-site infrastructure implementation (38 clinics)	Seamless management of decentralized, global subsidiary networks for the Mittelstand
Public healthcare risk management & strict federal compliance (NOM)	Rigorous adherence to GDPR, DIN/ISO standards, and high-stakes data governance
Legacy to MPLS/IP migration with zero operational downtime	Leading legacy-to-cloud digital transformation initiatives in complex, operational environments

READY TO DRIVE ENTERPRISE TRANSFORMATION

Bridging Complex Infrastructure, Strategic Vision, and Operational Excellence

Strategic IT Operations Management

Project Implementation & Scaling

Cross-Functional Leadership

