International Engineering Leadership & Strategic Technology Pivot

Case Study: Telepathy.ai VP of Engineering Role

Executive Summary

Directed a complex international engineering transformation across Singapore and Zurich while managing challenging business dynamics between Telepathy.AI and its strategic customer, StellaAutomotive.com. Guided the sunset of a six-year proprietary conversational AI stack in favor of a modern OpenAI-based, agentic LLM architecture, transforming fragmented operations into a unified, resilient engineering organization. Results included $500K annual cost savings, 99.9% uptime, and the ability to scale from 120K to 340K calls per month across a distributed 70-engineer workforce.

Strategic Challenges

- **Platform Instability**: Downtime measured in days each month, with customers often the first to detect issues. No observability across core dependencies (Kafka, Asterisk, proprietary AI back end).
- **Operational Complexity**: 30 Kubernetes clusters (10 per environment) due to architectural anti-patterns; staging more expensive than production; DevOps bottlenecked as sole deployment gatekeepers.
- **Runaway Costs**: $120K/month AWS and $18K/month Datadog, both trending upward without cost attribution or accountability.
- **International Organizational Fragmentation**: ~70 engineers distributed across Singapore and Zurich, lacking unified accountability; cultural tendency toward "agree-to-disagree" slowed alignment.
- **Strategic Technology Obsolescence**: Six years invested in proprietary AI technology that lagged behind industry advances, requiring a decisive pivot despite sunk costs.
- **Velocity Crisis**: One-month release cycles with manual QA. Most H2 2024 features never enabled in production despite rapid growth in customer demand (**120K → 340K calls per month** by March 2024).

Leadership Strategy

International Team Unification

- **Cultural Alignment**: Shifted from architect-driven mandates to a **"First Team" leadership model**, creating unified accountability across Singapore and Zurich.
- **Geographic Rationalization**: Made the strategic decision to close the Zurich office, consolidating around Singapore to reduce organizational inefficiency and accelerate delivery.

Strategic Technology Leadership

- **Proprietary Sunset**: Directed the decommissioning of the **six-year proprietary AI platform** and migration to an **OpenAI-based LLM stack**, balancing technical debt retirement with improved scalability and time-to-market.
- **AI-First Engineering**: Embedded AI-native workflows into engineering practices, re-positioning the platform for LLM-driven innovation.

Complex Stakeholder Management

- **Business Relationship Insulation**: Maintained delivery quality and morale despite difficult Telepathy–StellaAutomotive dynamics, shielding engineering teams from organizational turbulence.
- **Resource Optimization**: Delivered efficiency gains and cost reductions even under budget constraints and competing priorities.

Measurable Results

- **Reliability**: Improved uptime from ~90% to **99.9%**, eliminating recurring Monday service degradations through predictive fleet scaling and SLI/SLO adoption.
- **Cost Optimization**:
  - AWS reduced from **$120K → $60K/month** (50%).
  - Datadog reduced **66%**.
  - Software licenses reduced **79%**.
  - Total: **$500K annual savings** sustained through Azure migration.
- **Infrastructure Simplification**: Consolidated **20+ clusters → 6** (Dev/Stage/Prod per tenant), with seamless **AWS→Azure migration** executed in 3.5 months and **zero downtime**.
- **Velocity**: Release cycles accelerated from **1 month → 2 weeks**; QA integrated into platform teams; agile practices standardized.
- **Scalability**: Supported **150% traffic growth** (from **80 → 220 dealerships**) while maintaining reliability and cost discipline.
- **External Validation**: Earned **Microsoft Reference Partner status** via successful Azure migration.

Executive Decision Framework

- **International Workforce Management**: Balanced cultural sensitivity with operational necessity; retained key engineering talent while reducing fragmentation.
- **Technology Strategy Pivot**: Demonstrated executive discipline by discontinuing proprietary technology when market evolution rendered it uncompetitive.
- **Leadership Model Evolution**: Replaced hierarchical command with distributed **First Team** leadership, enabling better cross-site collaboration and faster decision-making.

Transformation Under Pressure

- **Operational Excellence**: Implemented centers of excellence, incident response frameworks, and continuous improvement processes across distributed teams.
- **Strategic Partnership**: Executed an AWS→Azure migration in 3.5 months with zero customer downtime, establishing credibility with Microsoft and industry partners.
- **Sustainable Foundation**: Built enduring engineering practices and architectures resilient to both technical and organizational disruption.

Leadership Insights

- **Global Teams**: International engineering organizations succeed through unified accountability, not geographic compromise.
- **Technology Strategy**: Competitive advantage requires prioritizing market alignment over sunk costs—retiring the proprietary AI platform enabled rapid LLM adoption and 3x faster development.
- **Resilience**: Technical excellence and team cohesion create stability even in turbulent business contexts.

Sustainable Impact Legacy

Established a **repeatable framework for engineering excellence** capable of operating in complex international and business environments. Demonstrated that disciplined leadership can align technology strategy, operational rigor, and cultural unification to deliver measurable results: **enterprise growth (80 → 220 dealerships)**, **$500K annual savings**, and **99.9% reliability**—all achieved while modernizing the AI platform for long-term competitiveness.