10:05–10:30 | Enterprise Leadership Council Lightning Keynotes

SUNIL KHANDEKAR

Chief Enterprise Development Officer

AMPLIFY

DAN SNYDER

Chief Principal Architect

UPMC
LIFE CHANGING MEDICINE

NABIL BITAR

Head of Network Architecture,
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Bloomberg LP

Enterprise Leadership Council Lightning Keynotes | Introduction

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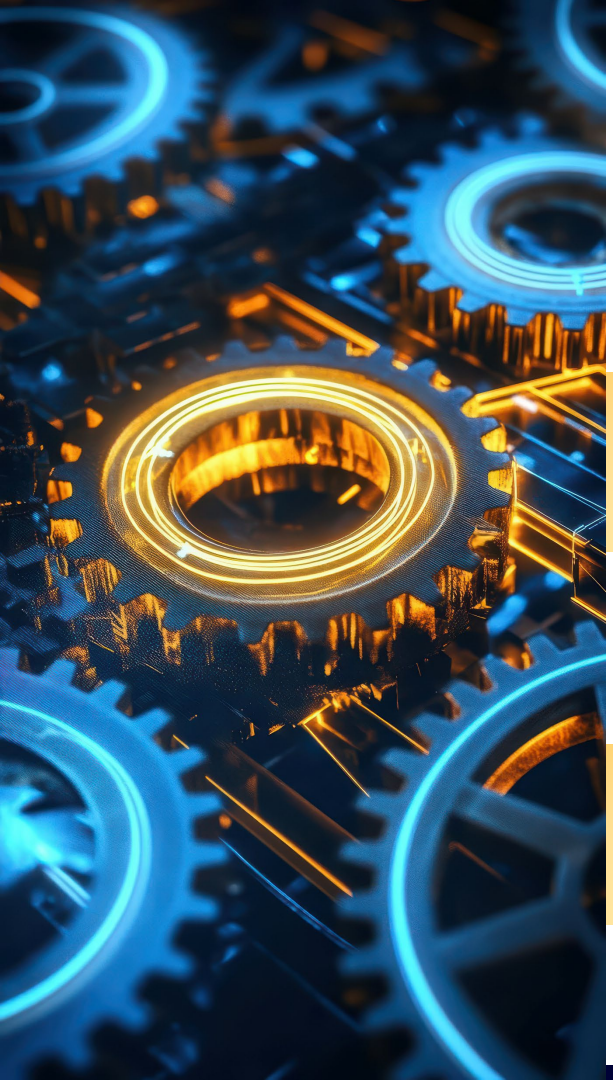


Enterprise Leadership Council(ELC): Driving Enterprise Innovation

Automation Gap Challenge

ELC addresses automation gaps between enterprise IT and service provider networks causing manual coordination.

Standardizing APIs

The council standardizes APIs to enable seamless, automated supply chain interactions from edge to cloud.

Driving Agility and Security

Business and operational APIs support scalability, agility, and security in provisioning and fault management.

Collaborative Innovation

ELC fosters collaboration among service providers and technology suppliers to align networks with business needs.

Enterprise Leadership Council (ELC)

Nabil Bitar
Head of Network Architecture, Office of the CTO, Bloomberg LP

Roger Berg
Vice President, North America Research and Development, Denso

Maxime Bruynbroeck
Head of Network Operations, Decathlon

Chris Carmody
SVP, Information Services Division, UPMC

Daniel Foo
Head of Grabber Technology Solutions, Grab

Alejandro Fuster Tozer
SpainDC

Michael Jenkins
Strategic Negotiator, Google Global Enterprise Networks

Amin Jerraya
SVP, Head of IT Digital Engagement & Infrastructure, Siemens Healthineers

Mark Looker
Managing Director, Head of Voice & Data Network Service, Morgan Stanley

Amo Mann
Chief Architect, Accenture

Raleigh Mann
SVP, Technology , Williams-Sonoma, Inc.

Chema San José
Head of Data & AI Architecture, Santander Digital Services

Neal Secher
Independent

Jonathan Sheldrake
VP, IT Infrastructure and Services, Burberry

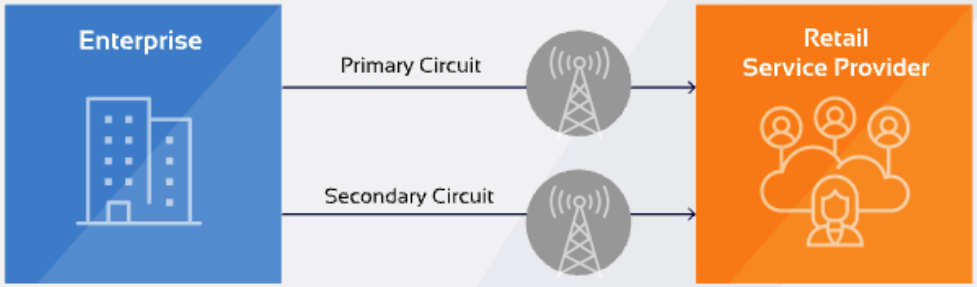
Drew Yates
Head of Network Services, TD Bank

VERTICALS

- Financial Services
- Automotive
- Sports Retailer
- Healthcare
- SuperApp
- Webscale
- Medical Tech
- Investment Banking
- Home goods Retailer
- Fashion Retailer
- Consulting

CIM API: Accelerating Service Automation

Circuit Impairment & Maintenance (CIM) Service API



- **Fastest-Approved Standard:** The CIM API is the fastest-approved standard in Mplify's history, highlighting urgent automation needs.
- **Real-Time Notifications:** CIM API delivers timely, automated notifications on circuit impairments and maintenance schedules.
- **Standardized Machine Interface:** Replaces inefficient calls and emails with a uniform, machine-readable interface for service automation.
- **Improved Network Reliability:** Integration of CIM reduces downtime and enhances operational responsiveness and service restoration.

Cybersecurity Alert(CSA) API: Automated Threat Alert Notification

- **Industry First:** The CSA API for cybersecurity notifications is an industry first initiative started by the ELC.
- **Real-Time Notifications:** The CSA API will enable Service Providers and Enterprises to exchange threat-related information in real-time and take appropriate mitigation actions.
- **Use cases:** Identity Mgmt, NG Firewall, DoS, Data security and more…
- **Improved Network Security:** The integration of CSA will create a robust network for enterprises' core business.

MVP Ready!
Palo Alto Networks & Prodapt will showcase a Demo

ELC Calls to Action: SASE & LSO Manifestos

SASE Certification Framework

Urges SASE certification for secure, scalable enterprise connectivity with integrated cybersecurity and network services.

LSO Manifesto Automation

Promotes the adoption of standardized APIs to replace manual processes with automated, real-time interactions between enterprises and service providers.

Strategic Connectivity Transformation

Together , the manifestos foster a resilient and agile digital ecosystem with certified interoperability and business alignment.

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FORMERLY MEF

AIOps: Empowering Enterprise Network Teams

Strategic Importance

AIOps is a critical tool empowering enterprise network teams with advanced operational capabilities.

Standardized Requirements

ELC defines essential requirements to guide technology suppliers in developing effective AIOps tools.

Seamless Integration

AIOps tools must integrate smoothly with existing network infrastructure for operational efficiency.

Enhanced Operational Agility

AIOps accelerates AI-driven network management enhancing agility and predictive maintenance.

Join the Movement

Call to Action: The Enterprise Leadership Council urges stakeholders to collaborate for a better digital future.

Closing Automation Gap: Efforts focus on closing the automation gap to create agile and scalable ecosystems.

Foundation for Innovation: Standardized APIs and AIOps requirements set the foundation for enterprise innovation.

Community and Future Building: The ELC fosters a community for continuous improvement and future connectivity building.

Securing a Massive Health Care Network – Managing Millions of IoT Devices

DAN SNYDER

Chief Principal Architect

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UPMC by the Numbers

- Global leader in providing patient care, insurance and research
- 40+ Hospitals and 800+ outpatient sites.
- 110,000+ employees
- 4 Million+ health insurance members
- Top 10 in NIH funding programs with University of Pittsburgh

UPMC network overview

- 1800+ Routers
- 7000+ Switches
- 26,000+ Wireless access points
- 400+ Firewalls

UPMC connectivity overview

- 800 Gbps to public cloud
- 400 Gbps to internet
- 1.2 Tbps between primary data centers
- 40+ Compact data centers
- 3 DWDM rings in PA (700km)

Current standard of connectivity for a large site

- 2 or 4 x 100G to the site
- 2x100G uplinks from IDF to MDF
- Access layer connectivity 1|2.5|5|10G
- Wireless 802.11ac to 802.11be
- Sub-second failover

What is the challenge?

- Regulatory compliance
- GDPR/HIPAA/NIST
- BCSI (FGA,NFPA 99, etc)

Shadyside Hospital

- 520 Beds
- Over 1 million sq/ft
- 89k total devices
- 66k devices
- 23k guest devices

What are the device types?

- Guest internet
- IoT
- Voice
- Building systems
- Clinical network
- General network

What is available in the market?

- Research
- Standards
- Vendor solutions

What is the issue?

- OUI says vendor x
- Profiling says vendor x workstation
- Reality PET/CT machine

How are we addressing the issue?

- All devices that are added to the network need an EA review and approval. Lasts 1 year.
- Devices are registered in BioMed DB or CMDB.
- Arp tables
- NAC (802.1x or MAB)

What is needed?

- A better way to identify devices
- Regulatory requirements need updated

Questions?

Conscious Networks that Prevent Guilt and Heal Fast With AI-Driven Network Operations (AIOps)

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Head of Network Architecture, Office of the CTO

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Outline

- Traditional vs AI driven operations
- AI capabilities for operations
- Key use cases
- AIOps functional building blocks
- Industry needs and Mplify

Complex Operational Environments – Posing Operational Challenges

- Highly distributed applications
- Diverse applications and systems
- Diverse network and network security solutions

When a problem happens

Multiple operation groups debugging problems and sharing information in virtual room

Traditional vs AI Driven Operations

Traditional Operations – human intensive	AIOps - AI Driven Operations
Alarm Overload	Alarm reduction – correlation and consolidation
Static thresholds on metrics	Contextual dynamic thresholds
Dashboards (e.g., graphs, logs) searched and examined by humans	Pull in and zoom into relevant data aligned with events in time and space
Information/Data ontology and topology – for human correlation	Ontology and topology used for automated correlation
Reactive	Predictive and reactive
Syntax driven interaction – system specific	Semantic interaction
Reasoning and correlation by humans	Reasoning & correlation done by systems
Remediation – human driven	Automation - human supervised or autonomous, generative or retrieved

Data quality is fundamental to either, and it is Operations' responsibility

AIOps- ML and LLM Capabilities for Operations

Relegating to machines and algorithms what they can do best

- Telemetry processing at scale
- Seasonal anomaly detection
- Ontology, topology, time and space-based correlation
- Codified human knowledge
- Information generation and retrieval
- Semantically driven human interactions

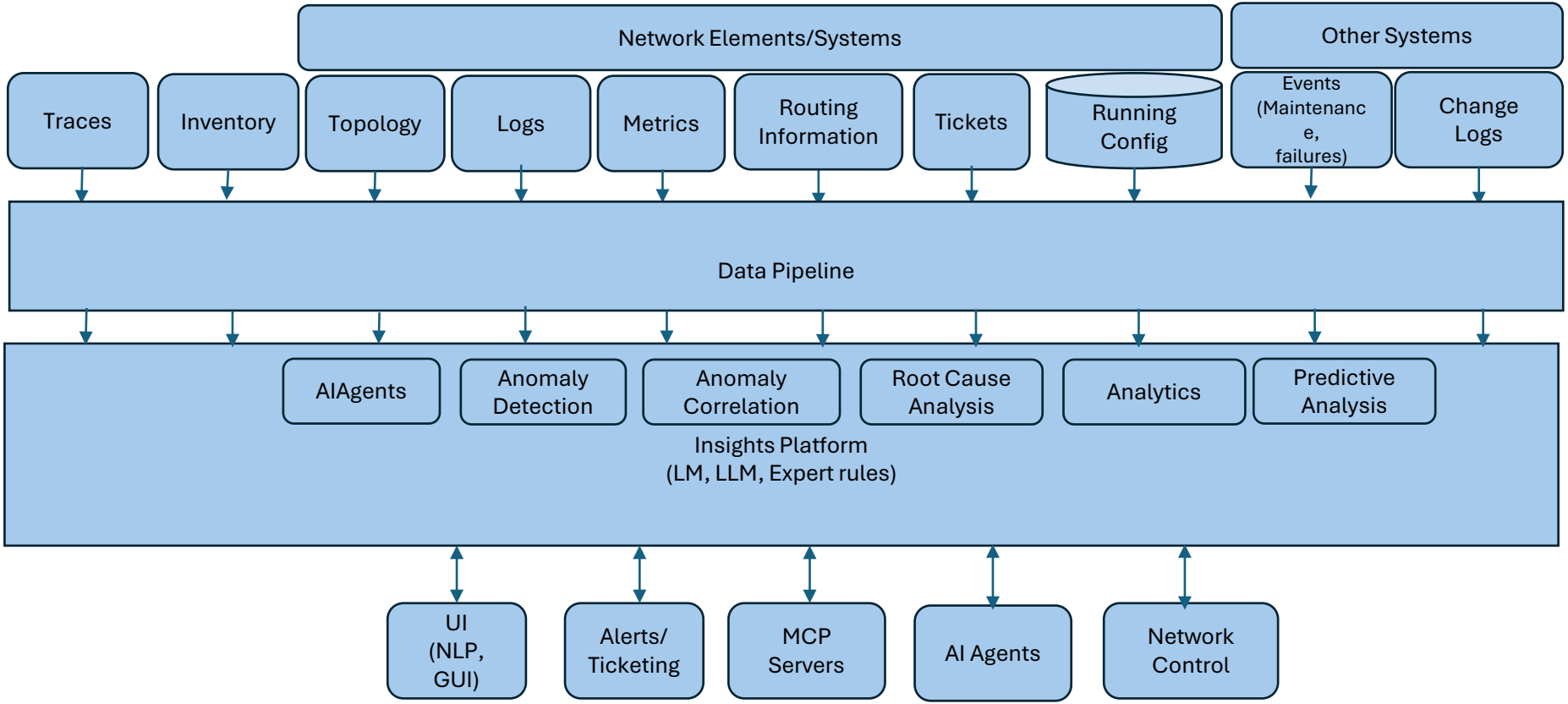
- **Contributing to Mean Time to Remediation (MTTR) reduction**
- **Augmenting human expertise**
- **Alleviating human intensive and mundane tasks**
- **Autonomously driving, when allowed**

ML: Machine Learning
LLM: Large Language Models

AIOps – Some Key Use Cases

- Reduction of Mean Time To Insights (MTTI) and Remediation (MTTR) - Anomaly detection, correlation, causality analysis and remediation
- Data and knowledge systemization, retrieval, and analysis (tickets, runbooks, tribal knowledge)
- Improved productivity & onboarding of systems and people – NLP based human-system interaction
- Contextual information retrieval and generation

AIOps Building Blocks



Industry State and Challenges

	Network Equipment Providers	AIOps Solution/Platform Providers	Enterprise Challenges
Use cases	Vendor specific	- Pre-existing - Custom - Multi-vendor/systems	- Awareness - Definition - Multi-vendor/system
Meta Data	Proprietary	Onboarding customer data and telemetry enrichment	- Data quality and consistency - Onboarding
Telemetry	Vendor specific	- pre-existing - Onboarding customer telemetry	- Coverage - Awareness - Data quality - Onboarding
Enterprise systems	Selective integration with commercial solutions	- Selective integration with commercial solutions - Custom	- Onboarding
Adoption	Increasing	Somewhat limited in network space	- Awareness/Education - Strategy - Execution

AIOps - Typical Phases

- Phase 1: Proof of Value (POV) - build the business case
- Phase 2: Use cases in Operations, augmented intelligence to operations
- Phase 3: Supervised remediation automation
- Phase 4: Selective and increasing remediation autonomy

What Does the Industry Need to Accelerate AIOps Adoption in Enterprises?

Where Mplify could potentially contribute to advancing AIOps

- Definition of use cases and associated values
- Easing enterprise data onboarding and integration in solutions/platforms
  - Identification of metrics, logs and associated use cases
  - Standardized meta data definition
  - Standardized interfaces between data pipeline/data sources and Insights platforms
  - Standardized topology representation
  - Standardized ontology, ticket and runbook structure - knowledge base
- Network-focused (expert) language models
- Motivate NLP use for managing network elements and systems
- Model Context Protocol (MCP) servers and AI agent catalogue

The Enterprise Leadership Council is working on a document describing the needs and requirements across the ecosystem (network equipment providers, service providers, AIOps solution providers, AIOps platform providers)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