Amdocs Network Division

Amdocs Zero Touch Network Automation

Improving network operations by using network data insights and automation

Marilena Kostakioti

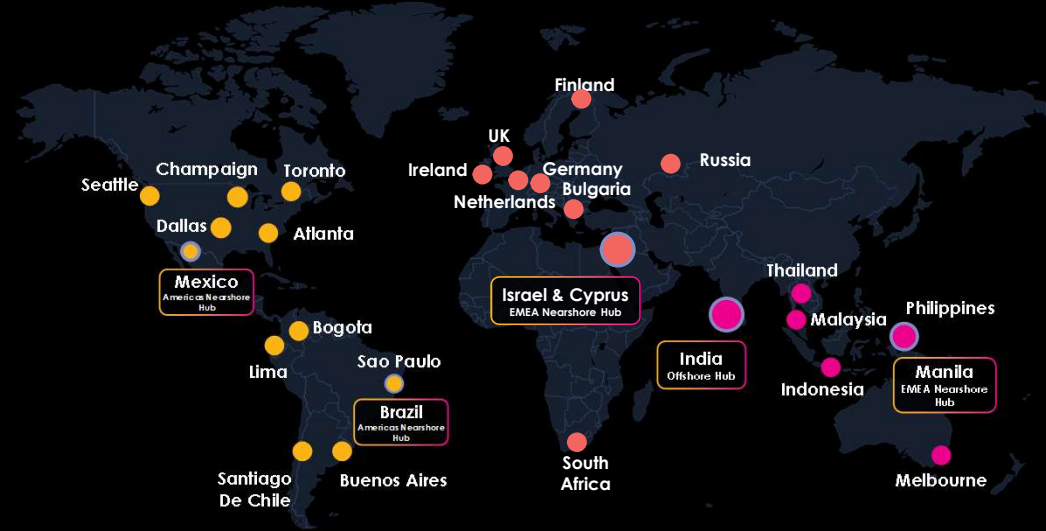Sales Operations Manager EMEA & APAC

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Amdocs Network Solutions

Serving Those Who Shape the Future Network

Operating, Transforming and Modernizing Networks for 20+ years

Special expertise to improve Operations for multi-national, Galaxy Service Providers

Americas
- United States
- Brazil
- Canada
- Other Countries

EMEA
- United Kingdom
- Germany
- Other Countries

APAC
- Australia
- China
- Malaysia
- Taiwan
- Other Countries

Map locations:
- Seattle
- Champaign
- Toronto
- Dallas
- Atlanta
- Mexico — Americas Nearshore Hub
- Bogota
- Lima
- Sao Paulo
- Brazil — Americas Nearshore Hub
- Santiago De Chile
- Buenos Aires
- Finland
- UK
- Ireland
- Netherlands
- Germany
- Bulgaria
- Russia
- Israel & Cyprus — EMEA Nearshore Hub
- South Africa
- India — Offshore Hub
- Thailand
- Malaysia
- Indonesia
- Philippines
- Manila — EMEA Nearshore Hub
- Melbourne

Amdocs Networks by Numbers

1 Billion+	2000+	100+	24 X 7	6	300k +
Tech Investment	Network Experts	CSP Clients	Support	Nearshore Hubs	Sites Delivered

Industry Trends #1 – Network Automation and Network Analytics

Drivers

Network Complexity
With the introduction of 5G, Beyond 5G, Edge, Cloud, SDN the traditional network is becoming complex to operate and manage

Reduce OpEx
Through the introduction of automation reduction of human intervention for operational processes

New Services ; Reduced TTM
Ability to deploy and manage new services based on NFV, MEC and Network Slicing quickly
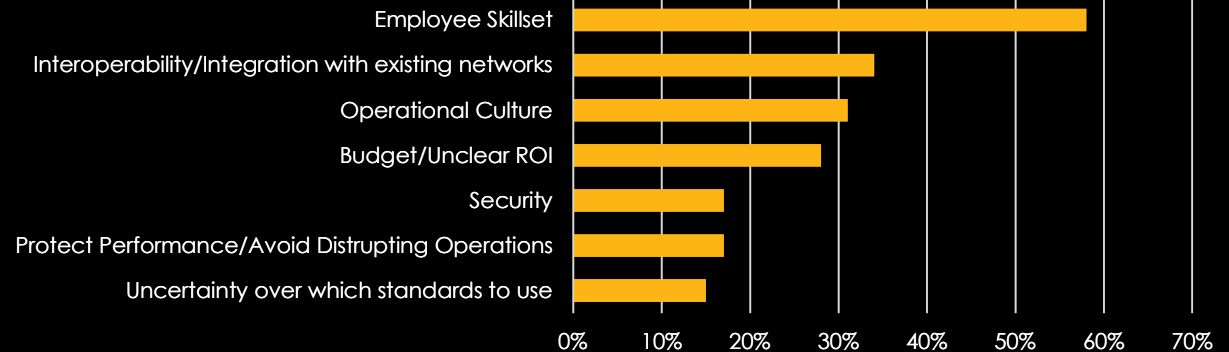
Improve Customer Experience
QoS of different services deployed for a customer across network eco-system
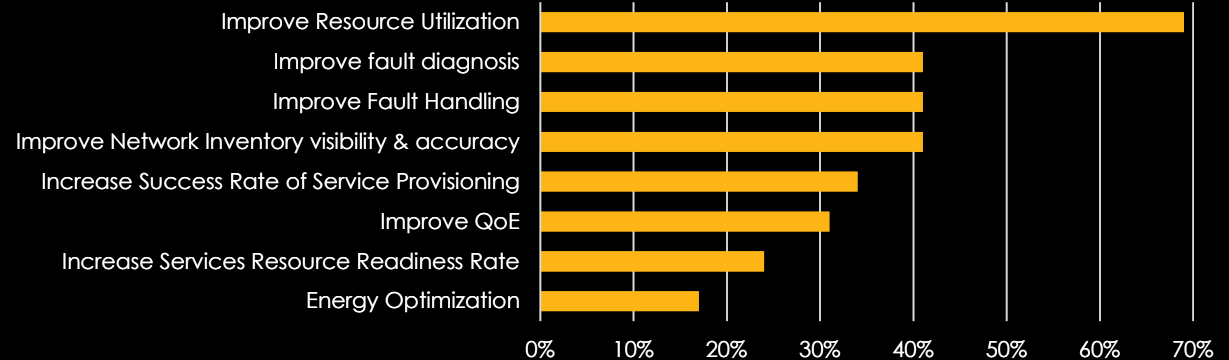
Simplified Operations
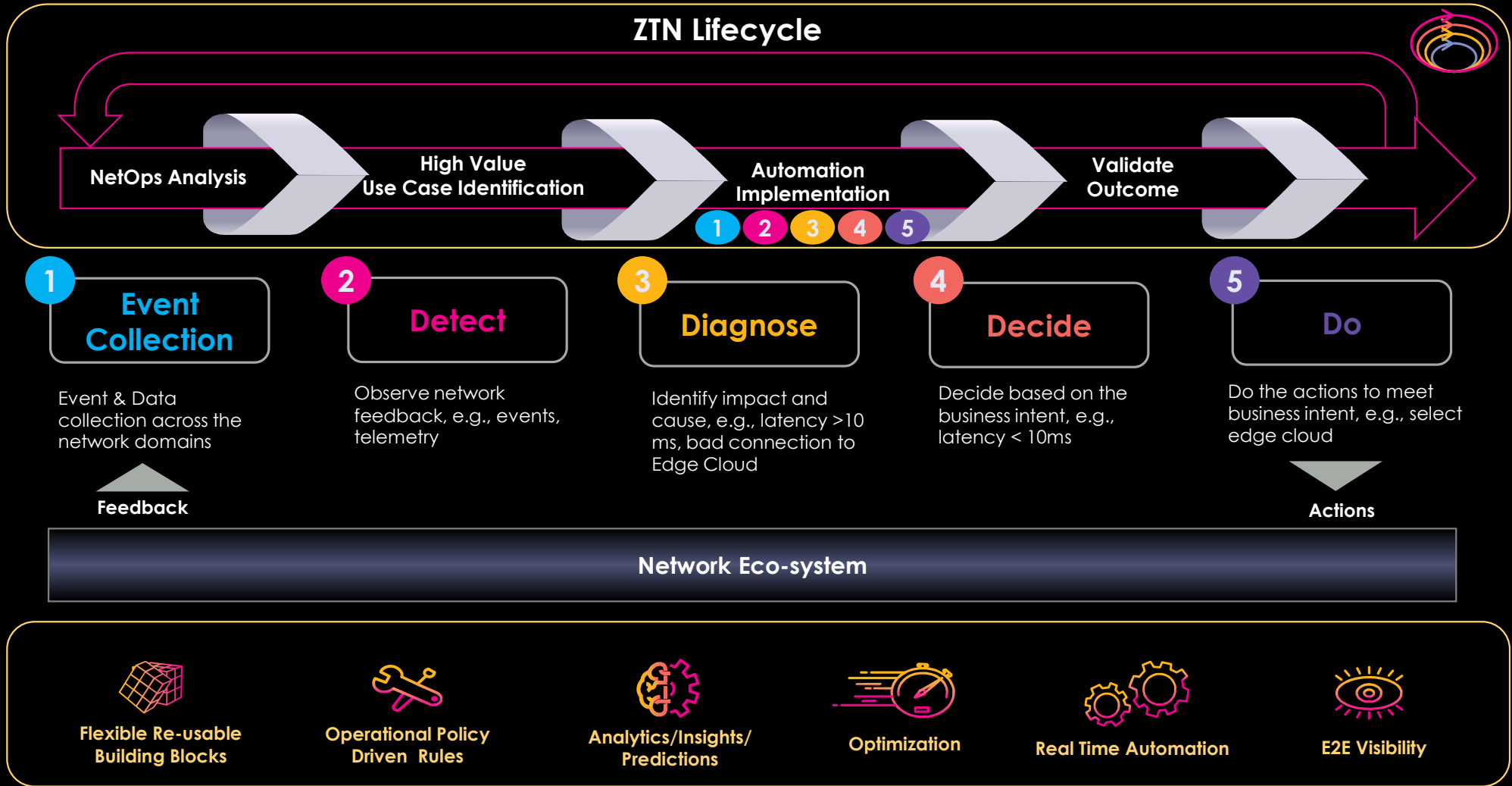Single operations group with visibility across services and networks

Challenges

Bar chart — Challenges:
- Employee Skillset
- Interoperability/Integration with existing networks
- Operational Culture
- Budget/Unclear ROI
- Security
- Protect Performance/Avoid Distrupting Operations
- Uncertainty over which standards to use

(x-axis: 0% to 70%)

Top Operational Outcomes Expected

Bar chart — Top Operational Outcomes Expected:
- Improve Resource Utilization
- Improve fault diagnosis
- Improve Fault Handling
- Improve Network Inventory visibility & accuracy
- Increase Success Rate of Service Provisioning
- Improve QoE
- Increase Services Resource Readiness Rate
- Energy Optimization

(x-axis: 0% to 70%)

Source: Telco Network Automation Survey – 2022

Amdocs Network Solutions

Amdocs Approach to ZTN

ZTN Lifecycle

NetOps Analysis → High Value Use Case Identification → Automation Implementation → Validate Outcome

1 **2** **3** **4** **5**

1 **Event Collection**

Event & Data collection across the network domains

▲ Feedback

2 **Detect**

Observe network feedback, e.g., events, telemetry

3 **Diagnose**

Identify impact and cause, e.g., latency >10 ms, bad connection to Edge Cloud

4 **Decide**

Decide based on the business intent, e.g., latency < 10ms

5 **Do**

Do the actions to meet business intent, e.g., select edge cloud

▼ Actions

Network Eco-system

Flexible Re-usable Building Blocks

Operational Policy Driven Rules

Analytics/Insights/ Predictions

Optimization

Real Time Automation

E2E Visibility

Network Optimization Suite - ActixOne

ActixOne is Enterprise analytics driven scalable platform providing a unified workspace for all network's performance analysis and optimization activities. It supports key network datasources and addresses various of use cases with focused SW modules. Centralized platform. Multi-vendor & Multi-technology.

| Web | Web | Web | Web |

ActixOne
Analytics & Optimization Platform

| Network Performance Data | Subscriber Trace Data /MDT | Drive Test & Indoor Data | Key Customer Geographic Data | 3rd Party & Business Data |

| GMS | 3G/HSPA+ | LTE | LTE (VoLTE) | LTE – A (CA) | 5G NR | 5G SA |
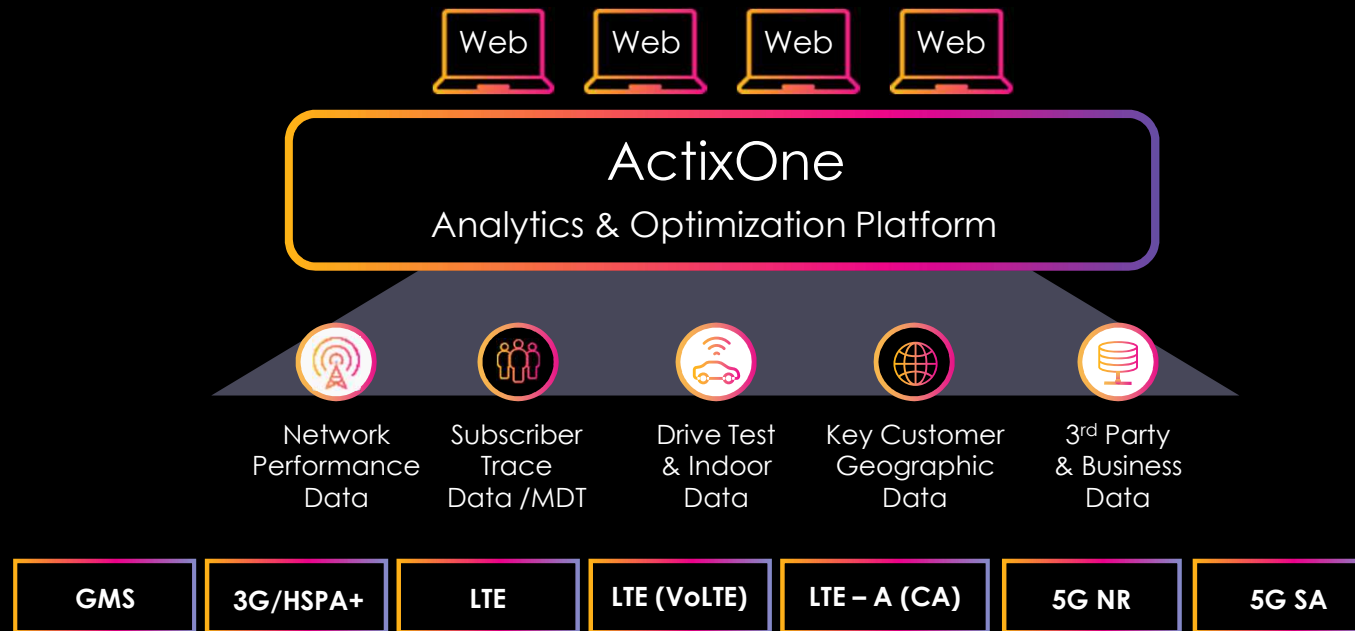
Generative AI in the NW Domain

System/Infra Metrics
- Alerts self-healing (SRE) flow. (a.i. manual tasks in the flow)
- Send Requests to GenAI to get the steps required to fix the systems related issues

①

Best NFs Configuration
- Configuration, best options for the better performance
- vRAN/ORAN NFx
- 5G Core NFs

②

Service Insights
- Define/Set a set of Service metrics for monitoring service SLAs
- Request for Deployment/Auto-scaling best services config to improve SLA

③

Applications User Experience & Edge Placement
- Get a best NFx placement (e.g. Edge) to matched application KPI requirements for latency, speed, QoS)

④

Network queries
- Utilize GenAI driven federation layer to generate databases queries to get network status information (e.g. network elements, devices, sites, services, etc.)

⑤

Problem Resolution
- Provide recommendations for problem resolution (e.g. out of disk space, CPU utilization high, alerts from network, missed KPIs, etc.

⑥

Network Cloud conversion
- Assistance for conversion of Network functional and application to Cloud

⑦

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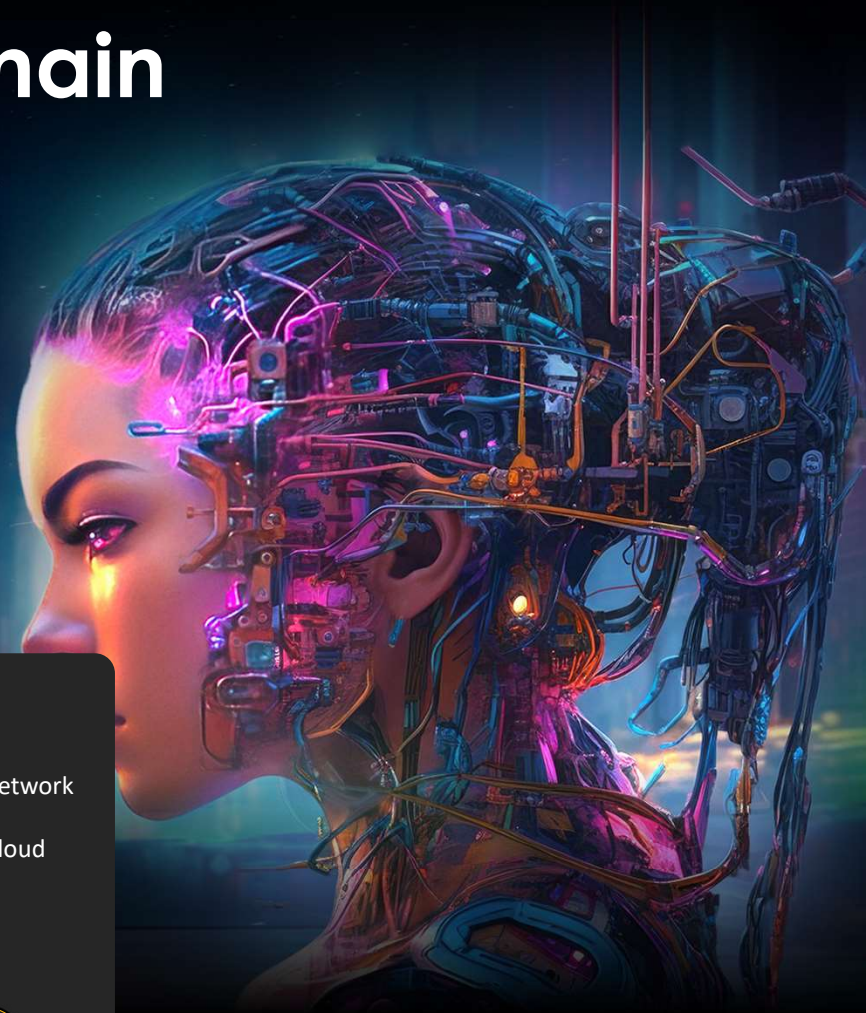
Amdocs Network Platform for Operations (NPO)

Powered by atomIQ

NetOps Single Pane of Glass

Network Functions KPIs

Monitoring

AI, Anomaly Detection, GenAI

Auto Correlation

Ticketing & Automation

Self-Healing

SRE Console

CI/CT/CD Pipeline

No click ticket resolution

Automation
Auto ticket resolution
Self Service,
Automation Packages
OS Patching Automation

Resiliency
Preemptive Monitoring
Self Healing
Utilizing AI/ML to minimize
downtime

AIOps
Single pane of glass
Anomaly Detection
Event grouping
Log mining
Digital Operation
Monitoring self-service

Cloud
Hybrid cloud Management
Platform – utilizing Amdocs
and Cloud native tools
Landing Zone
Infra as a code
Cloud Security

ITSM
Ticket management
Problem management
Change management
Knowledge base
Data Analytics
(BI reports and RCA)

FinOps
Realtime cost anomaly
Budget management
Business correlation

Summary – What Amdocs Brings?

Zero Touch AI Operations

- Technology-driven operations utilizing AI and Machine Learning
- Automation built in and extreme focus on automating process and resolutions
- Enhanced customer experience

End-to-end accountability

- Product and services-led company, managed transformation capabilities
- Service-based engagement, commitment to measurable KPIs
- Central governance & control

Proven Experience

- Executing telecom's largest managed services agreements and operation projects
- Industry recognition as 'Always Delivers' DNA
- Leveraged MSFT and Amdocs and knowledge and innovations

Thank You

Contact Inquires: *NetworkSolutionInquire@amdocs.com*

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