AI FOR NETWORK LEADERS

POWERED BY SELECTOR

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New York City

AI Network Intelligence for Real-Life Network Heroes.

Strategic Imperatives for Infrastructure Leaders in an ***AI-Enabled*** World

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Agenda

- The Status Quo Bias
- **Adoption Patterns** *and the Business*
- Enter **Agentic NetOps**
- Where are **Vendors** today?

The Status Quo Bias

How much has really changed?

The Year is 2008, and Network Operators everywhere rely heavily on CLI for troubleshooting…

It's now 2025 - Looking back, how much has **"really"** changed with how we do Network Operations?

"If it ~~ain't broke,~~ don't fix it!"

^

ain't on fire at this second

The Status Quo Bias

Status Quo Bias and the Cost of Network Outages

$400 billion annual cost of downtime for the Global 2000 companies, equating to 9% of their profits.

Splunk + Oxford Economics: The Hidden Costs of Downtime

Average cost of an unplanned outage is **$14,056 per minute / $840,000 per hour** – A 10% increase from 2022

EMA Research - IT Outages: Cost and Containment

The hardest hit sector is Retail, with an **average annual cost of $287 million** *(Global 2000)*

Queue it - The Cost of Downtime

Humans Lead the Way

> Drawing on 25 years of data, Uptime estimates that human error, whether directly or indirectly, contributes to a significant majority ranging from **two-thirds to four-fifths** of all downtime incidents.

Uptime Intelligence - Annual Outage Analysis

Adoption Patterns *and the Business*

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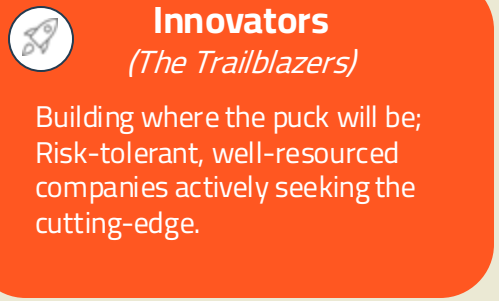
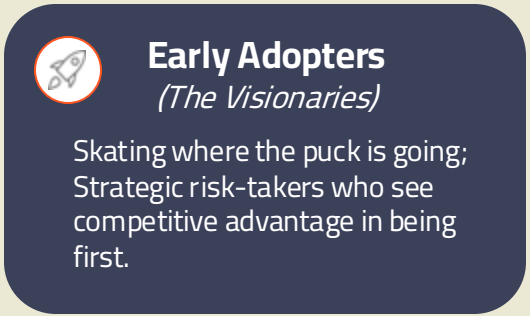
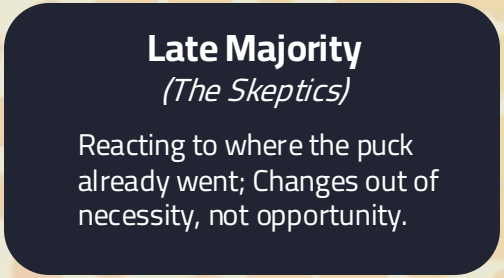
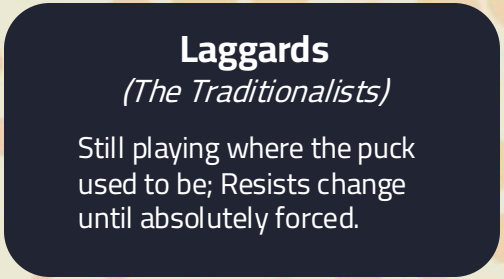
Diffusion of Innovations Theory









Adoption Patterns *and the Business*

Pre-MCP Orchestration of Capabilities

The **Great Wall** Era

Vendor Relationships

- Long-term, monolithic partnerships
- Extensive RFP processes
- Custom integrations = consultant army
- Switching vendors means starting over

Integration Methodology

- Point-to-Point API Connections
- Custom Middleware / High cost
- Extended duration per vendor
- Data silos / limited cross-system communication

Decision Making

- IT-driven, committee-based
- Focus on “enterprise-grade” stability over innovation
- “Nobody gets fired for buying Cisco”

Adoption Patterns *and the Business*

Post-MCP Orchestration of Capabilities

The **Plug-and-Play** Era

Vendor Relationships

- Agile, modular partnerships
- Rapid evaluation process
- Plug-and-play mentality
- Portfolio approach; multi-vendor

Integration Methodology

- Standardized protocols; Think MCP / A2A
- Natural Language Interfaces
- Real-time data sharing = cross platform intelligence
- Composable designs; Mix and match capabilities

Decision Making

- Business-user driven with IT enablement
- Test, fail, and scale fast philosophy
- Innovation; Competitive pressure increases appetite

Enter **Agentic NetOps**

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Definition, Goals, and Characteristics

Goal-driven Agents with memory, planning, and the **ability** to **make decisions**.

Sees humans transition from **“In the Loop”**, to **“On the Loop”**, to eventually **“Out of the Loop”**

Detects, analyzes, and remediates network issues in near real-time **(Your 24/7 Agent Driven NOC)**

Well integrated and Insight driven action across multi-vendor infrastructure domains

The Definition

> Goal-driven, autonomous AI agents that operate network tasks and processes independently – from and on behalf of humans.

The Goal

> Transformation to a truly autonomous network with near real time self-healing capabilities that decreases reliance on “human” resources

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Enter **Agentic NetOps**

Vision VS Reality

Gartner®

Agentic NetOps Will

Revolutionize Network Operations

Current Adoption is Near Zero

> Research points out that adoption, today, is less than 1% and describes vendor capabilities as “embryonic”

Slow Automation Progress

> Gartner estimates that two-thirds of network tasks are still performed manually, indicating a multi-year journey just to get to the point where agentic systems are feasible.

Unclear Business Value

> Polling found that 58% of organizations are open to using GenAI but are waiting for “clear use cases with proven business value”.

Enter **Agentic NetOps**

Vision VS Reality

Gartner®

Agentic NetOps Will

Revolutionize Network Operations

Strategic Planning Assumptions

> By 2030, 50% of organizations will use agentic NetOps with minimal human involvement, up from nearly 0% in 2025.

> By 2030, agentic NetOps with a network AI assistant will be the primary UI used in network operations.

> Low adoption rate is primarily due to limited vendor capabilities and organizational readiness to deploy. Mainstream adoption is is expected to take between five and ten years.

Where are **Vendors** Today?

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Pre-MCP Itential

Itential's Platform was ***purpose built*** to orchestrate across federated systems

Inputs	Normalize data from CLI + API *(And now MCP)*
Execution	Single execution platform across teams
Guardrails	Ensure orchestration only runs under the right conditions
Governance	Track who ran what, when, and why

Where are **Vendors** Today?

Itential + MCP

https://github.com/itential/itential-mcp

Dynamic Tool Generation – No hardcoded tool definitions; Tools are generated from Platform's actual services, meaning the tool set adapts to what's deployed rather than being fixed at development time.

Persona-Based Control – Behavioral adaption - AI assistant changes its approach based on which tool it can see via tag configuration.

Adaptive Integration Layer – Triple discovery mechanism with each layer discovering different types of capabilities.

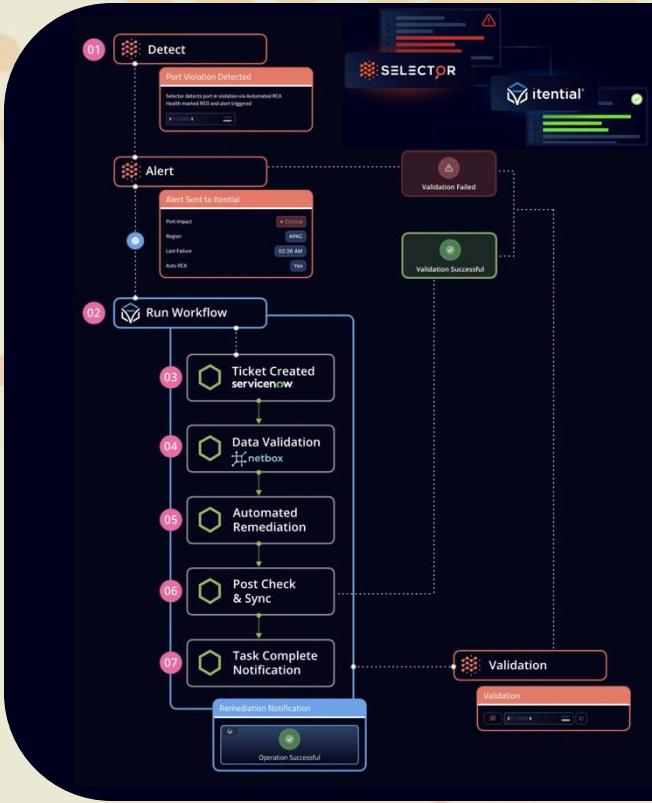
- Code defined tools: Core functionality shipped with server
- Service abstractions: Platform API endpoints wrapped for easier use
- Config-defined tools: Platform specific assets *(workflows, services)*

Where are **Vendors** Today?

Selector + Itential

Selector AI ingests telemetry data and uses its AI to identify and correlate events, pinpointing the root cause of the issue – and triggers Itential with the appropriate context.

Itential receives the trigger and executes any necessary remediation steps across the various systems and domains that are in scope.



Thank You!

Let's Connect

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