

Revolutionizing Retail Curation:

**Taking the next step
towards your Full Stack
Observability and
Contextual AI goals**



In the world of retail, with its abundant technology and scarce on-site IT support, cutting-edge network management no longer hinges on the simple question of whether the network is up or down. Today, the solution lies in comprehensively delving into the intricacies of user experiences and application performance. Full Stack Observability (FSO) is a transformative tool that does just that, with analysts pointing to this emerging technology as pivotal in 2024-2025 — making it one for retailers to actively embrace for significant benefits.

The innovative solution of FSO offers immediate cost-saving potential, with as much as a 30 percent reduction in operational budgets through intelligent automation. This strategic shift liberates resources from routine operations, fostering a focus on innovation. Simultaneously, it detects business impacting issues more proactively, such as credit card transaction failures or optimizing point of sale (POS) systems and in-store Wi-Fi, all with low or no IT support on-site.

Taking it a step further, combining the power of integrating AI with FSO ensures prioritizing seamless interactions for customers. Tools to emulate user experiences ensure that applications and services work flawlessly.

With the evolving landscape of smart technologies, reliance on POS systems and the demand for high-quality in-store Wi-Fi, network management is complicated. Considering today's retail market dynamics, seizing the transformative potential of FSO is crucial for success in 2024-2025.



30%

immediate cost-saving reduction potential in operational budgets is provided by FSO.



“The table stakes today have gone far beyond just whether the network is working.”

VINCENT SCIARRA
CEO, Acumatica

The Evolving Landscape of Network Management Challenges

Addressing growing complexities beyond traditional network functionality has become paramount. The shift toward FSO represents a transformative approach in monitoring applications, infrastructure and network functionalities. By consolidating these elements into a unified system, businesses can overcome the limitations of traditional siloed tools.

“The table stakes today have gone far beyond just whether the network is working,” said Vincent Sciarra, CEO of Acumatica. “It isn't simply performance, it's user experience — the performance that users are deriving from the network.”

FSO not only fosters faster issue resolution but also enhances cross-functional collaboration, paving the way for a more efficient and responsive operational environment. The adoption of machine learning and AI further contributes to proactive anomaly detection, allowing organizations to preemptively address emerging complexities before they escalate.

“Using AI tools, we will know a problem before the store customer experiences it,” said Sciarra.

FSO's Crucial Role: Transcending the Gap in Modern Retail IT

In technology-rich retail environments, the scarcity of on-site IT support poses a unique set of challenges. AI enables a proactive resolution using the next evolution of site reliability engineering. This proves especially beneficial in retail settings where numerous locations lack dedicated IT personnel.

"The number-one issue in retail, in an age when customers expect a seamless experience, is low level or no IT support on site," said Sciarra. Problems with credit card transactions, POS systems, grocery store smart technology, in-store Wi-Fi — especially in the luxury retail sector where shoppers from abroad demand excellent connectivity — could stem from multiple root causes.

And it's not just at the store level, FSO provides an overview of the connection of retail site to the data center or the cloud - where on-site is just a piece of the infrastructure.

"What may seem like a problem with the printer is something else. Quickly detecting the problem resolves it that much faster and supports that location. That's really where the value of these tools really shine."

By using machine learning to understand and predict behavior across different branches, FSO becomes a strategic ally in navigating the complexities of retail technology. It ensures a proactive and centralized approach to issue resolution. This leads to cost savings and empowers retailers to focus on core business objectives, making the most of their technological investments.



From Silos to Synthesis: Embracing Change at the Dawn of a Paradigm Shift

From simple monitoring to contextual AI, it's crucial to move to a more comprehensive focus on user experience. It is no longer binary — simply whether the network is up or down. It's about determining how a line of code may be impacting other downstream events and pointing to the root cause immediately.

In today's landscape where end-user satisfaction is paramount, Acuative's new approach captures the nuances of user interactions, addressing complex issues affecting the overall experience. Shifting toward a holistic user experience evaluation involves considering the entire stack, from end-users to applications and infrastructure. FSO's unified approach to monitoring transcends the limitations of traditional siloed tools. By encompassing the entire application stack, including end-user experiences, it provides a comprehensive view of the interconnected components. FSO introduces a new era where businesses can proactively manage their digital landscapes, ensuring optimal performance and elevating the overall quality of the user experience.

"Many managed service providers today are not even thinking about this way of transacting and managing networks. We're at the maturing stages, committed to remaining on the cutting edge of all of this new technology."

VINCENT SCIARRA
CEO, Acuative

Beyond Noise: Statistics Speak to the Urgency of FSO Adoption

FSO is integral to delivering efficient managed services and Acuative's commitment to early adoption of this cutting-edge technology is a driving force behind its success. Powered by Cisco and backed by insights from industry leaders such as Gartner and Forrester, Acuative is at the forefront of this revolution.

Forrester acknowledges that confusion and misunderstanding about observability are rampant and asserts that the first step is to define observability as:

"An inherent ability of an entity to allow exploration and analysis through immutable externalized outputs. Exploration of its characteristics and behavioral patterns provides real-time visibility; real-time and historical analysis interprets and infers the internal state and operations to provide insights and actionable information."

Gartner defines observability and application performance monitoring (APM) as *"software that enables the observation and analysis of application health, performance and user experience. The targeted roles are IT operations, site reliability engineers, cloud and platform teams, application developers, and product owners."*



75%

of technologists face more IT complexity than ever and wrestle with overwhelming data noise.

Cisco is leading the way with its new FSO platform, a vendor-agnostic solution that harnesses the power of the company's full portfolio. Cisco asserts that FSO is critical in today's digital-first business environment:

"It gives IT teams control, prioritizing issues affecting users, revenue, business risks, and costs. It minimizes tool sprawl and makes problem-solving faster and simpler."

Statistics help tell the story. Cisco reports that 75 percent of technologists face more IT complexity than ever and wrestle with overwhelming data noise — without the ability to draw insights and act fast enough to resolve issues. It also states that 53 percent of organizations intend to unify observability across critical IT domains, such as infrastructure, network, applications, cybersecurity and digital experience.

Tailoring for Retail: Customized FSO Solutions

Acuative's collaboration with multiple partners allows for extensive customization to meet retail clients' specific needs. The company's proactive stance in adopting emerging technologies, including AI for incident resolution, illustrates how it is staying ahead in the industry's tech evolution.

Adopting FSO is not just about switching from one vendor's tool to another. It's about transcending the limitations and inefficiencies of the fragmented, multi-tool approach altogether.



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Beyond Standard Procedures: FSO's Reality of 99% Uptime through AIOps

FSO leverages AI assist to streamline resolving network issues. When a problem arises, AI assist steps in, providing intelligent instructions or fixing it. Instead of relying solely on predetermined standard operating procedures, AI assist uses machine learning algorithms to analyze historical data and current network conditions. This offers context-specific and adaptive guidance.

The transition to AI for IT operations, or AIOps, marks a pivotal shift. "The system detects anomalies or outliers in the incoming data, but instead of manual troubleshooting that takes hours, we upload it, and AIOps provides an intelligent answer, performing fast root cause analysis. This is a significant operational saving for both the operations team and the business," said Hosam Mutlag, CTO for Acuative in the Middle East. "This directly influences business outcomes. Achieving 99% or 98% uptime is now a reality, resulting in less downtime and an enhanced user experience. It's about more than just monitoring; it's about understanding and optimizing the entire ecosystem for a seamless digital experience." Contextual AI becomes the new normal to correlate what is happening in the business.

AI-Powered Autonomy: Transforming Incident Resolution with FSO Integration

AI assist marks a significant shift toward automated incident resolution. Unlike traditional methods that may involve manual diagnosis and intervention, AI-powered systems can autonomously detect anomalies and irregularities in the system's behavior. In the journey towards automation, AI assist evolves to handle incidents proactively. This speeds up incident response and reduces reliance on human resources, leading to more efficient and effective management of IT incidents.

The technology is improving rapidly and ushering in a new future. "It's like self-driving cars — you'll have a self-driving system," said Mutlag. "The AI will detect the problem and fix it, and that will be a huge cost savings and minimize operational errors."

Real-World Efficiency Revolution, Savings Through FSO Implementation

In a notable government initiative for digital transformation, a prominent Middle Eastern government leveraged FSO to enhance the efficiency of its critical services. By implementing FSO across various departments, including health and interior ministries, the government achieved significant cost savings. The streamlined monitoring and observability not only reduced downtime but also optimized resource utilization, leading to a 25 percent reduction in operational costs, said Mutlag.

Pivotal Solutions for Retail: Transforming Retail Operations and Revenue Streams

In terms of POS systems, these are critical components for retailers, and any glitches can directly impact customer experience and revenue. FSO preemptively identifies and addresses issues within POS systems.

Challenges in credit card transactions and POS systems range from potential security risks to the need for seamless functionality. In working with the largest point-of-sale provider in the Middle East, FSO was pivotal in monitoring transactions and application functionality. Credit card transactions involve sensitive data, and any disruptions can lead to financial and reputational losses.

FSO provides a comprehensive solution, allowing real-time monitoring of transactions, network infrastructure, and application behavior. It enables the detection of anomalies and ensures that any issues affecting credit card transactions are swiftly identified and resolved.

Additionally, tools that emulate user experiences play a crucial role. By simulating various transaction scenarios and user interactions, these tools help ensure that applications function seamlessly. This proactive approach, coupled with FSO, contributes to a robust and reliable POS environment, mitigating challenges and fostering a positive user experience in credit card transactions and retail operations.



Strategic Solutions for Multi-Location Challenges: Benefits for Retail and Beyond

Retailers, particularly those with numerous locations, contend with the challenge of managing dispersed networks and a multitude of applications. Other industries such as branch banking, specific manufacturing sectors and healthcare, which also lack IT personnel at each site, stand to gain as well.

New Ventures Unleashed: The Power of FSO Customization in Retail

These cutting-edge solutions can be customized to suit each client's needs. The investment in time and effort in implementation reaps rewards immediately, especially with POS systems. Acuitive recently did this for one of the largest retailer POS providers in Saudi Arabia, and the client quickly discovered the advantages of the customer behavior data generated. "It's opened doors for that business because they can monitor the behavior of the user from beginning to end — how they interacted at every point," said Mutlag. "That has created new opportunities, and they've started a new venture."



Seizing the Moment: Championing Seamless Retail Experiences

As FSO and AI emerge as groundbreaking forces reshaping the industry's future, it's clear that a new era of retail network management evolution has just arrived. Never has prioritizing user experiences and interconnected components been more crucial. The leap forward for user experience and business evolution is unparalleled.

At the dawn of this revolution, businesses that seize the moment, navigate complexities and champion the future of network management will emerge as the new leaders of seamless, exceptional retail experiences.

It's impact you can feel. With significant business cost savings, an FSO solution could be self-funded.



Acuative's Observability solution brings infrastructure monitoring (ITIM), logs, application performance monitoring (APM), and SaaS monitoring together into a single platform to provide organizations with complete visibility across their customer experience, employee productivity, and digital infrastructure pillars. Acuative can help with a Business Value Assessment and provide full consultancy services to navigate your FSO journey.

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