

Go On, Blame the Wi-Fi: A Cisco FSO Success Story

jds

CISCO

CUSTOMER OVERVIEW

With hundreds of stores across Australia, processing over 21 million customer transactions per week, this consumer retail brand depends heavily on system reliability.

PRIMARY INDUSTRY

Retail

PRIMARY SOLUTION

- AppDynamics
- ThousandEyes

THE SITUATION

The Customer, a prominent retailer with hundreds of stores across Australia, relies heavily on nearly 10,000 handheld Portable Data Terminal (PDT) devices, which are instrumental in streamlining floor operations. During a CEO tour of selected stores, floor staff expressed their ongoing frustrations regarding the frequent disconnects, delays and errors being experienced when using the PDT's, which run an in-house developed application that communicates with a central server via Wi-Fi. This prompted an immediate investigation, which revealed suboptimal Wi-Fi coverage, highlighting the need for an overhaul of the outdated Wi-Fi infrastructure.

THE PROCESS

Being determined to resolve the issue, our Customer allocated \$30m towards implementing a new Wi-Fi solution, aimed at improving coverage, speed, and reliability across their stores. However, post-upgrade, complaints from staff persisted, resulting in two executive-level escalations per week from the CEO. Acknowledging the need for a more precise diagnosis, JDS was engaged and immediately turned to cutting-edge Cisco tools - AppDynamics and ThousandEyes. These solutions would provide a holistic view of the network ecosystem, enabling JDS to identify and address the root cause of the ongoing problems.

"It was critical that we were able to identify the root cause of the issue in a timely and cost-effective manner. The solution enabled immediate resolution and operational transformation through data-driven decision making."

KEY CHALLENGES

Throughout the process, the internal network team encountered the following challenges:

- > The initial assumption that upgrading the Wi-Fi infrastructure would solve the problem proved incorrect.
- > Increasing pressure from the CEO to resolve the issue promptly.
- > Difficulty pinpointing the exact cause of performance issues without the availability of comprehensive data.

THE SOLUTION



Using AppDynamics and ThousandEyes, the JDS team of Cisco experts collected data from various sources within the Customer environment, including PDT devices, the Wi-Fi network, cloud providers and application servers. This comprehensive dataset allowed for a thorough analysis, ultimately revealing two distinct issues:

> **Outdated PDT firmware:** A portion of the PDT devices were operating on outdated firmware that was incompatible with the new Wi-Fi infrastructure. This led to frequent disconnections and reconnections between the devices and access points.

> **Hardware defect in specific PDT series:** A particular series of PDT devices was prone to a hardware defect that generated excessive application traffic, causing the application to either stall indefinitely or crash entirely. As a result of harnessing the capabilities of AppDynamics and ThousandEyes to gain visibility into the broader environment, JDS was able to pinpoint the exact cause of the problem, and the Customer implemented a simple and effective solution.



"Cisco FSO, AppDynamics and ThousandEyes have not only saved time and money, but also restored a reputation for providing efficient and reliable services. I would highly recommend these solutions to any organisation facing similar technical challenges."

THE OUTCOME



The execution of Cisco FSO (Full Stack Observability), powered by AppDynamics and ThousandEyes, led to significant outcomes for the Customer:

> **Improved operational efficiency and agility:** The Customer was able to identify and resolve the issue faster, mitigating employee frustrations and restoring operational efficiency.

> **Validated root cause analysis:** By gaining visibility of concrete data and evidence, the JDS team was able to invalidate original assumptions, and accurately pinpoint the problem's root cause.

> **Measurable employee experience:** The implementation of business dashboards now allows the Customer to measure and track the employee experience, ensuring ongoing satisfaction and productivity.

The transformative power of data-driven solutions resolved the Customer's Wi-Fi and PDT issues, whilst saving them time, resources and their reputation by focusing on the right remediation actions.

ABOUT JDS

Established in 2003, JDS Australia ensures IT platforms and systems are secure, available, and performing as required by enterprises and their customers.

With an entirely local team of 100+ employees, JDS has the trusted skills and experience to ensure IT works and Australian business carries on.



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