# Operational Intelligence Supporting Online Growth at John Lewis

# John Lewis

## **Executive summary**

The John Lewis Partnership includes Waitrose supermarkets, a production unit and a farm, as well as John Lewis, the largest department store in the UK. The company's brand is synonymous with customer service and trust. John Lewis needed a solution that would give it operational visibility across its entire infrastructure, enable it to address issues before they could hurt the company's reputation for superior customer service and support rapid growth for its billion-pound website, **johnlewis.com**. Since deploying Splunk Enterprise, the company has seen benefits, including:

- Real-time operational insights
- Enhanced customer experience on the John Lewis website
- · Prevention of revenue loss

### **Why Splunk**

For John Lewis, uptime is critical because of the direct impact on sales. Any delay in resolution can negatively impact customer experience and revenue, especially on the website. In order to troubleshoot, the IT team used custom scripts and multiple monitoring tools. However, with limited staff resources, support requests had to be prioritized, leading to slower responses. The team couldn't proactively detect and correct anomalies. In some cases, they were constrained in identifying crucial issues quickly, occasionally resulting in lost revenue.

John Lewis has a multi-site architecture, with each of its two datacenters using Splunk forwarders to collect data from multiple sources for indexing. This indexed data is then accessed via Splunk search heads with job servers for scheduled tasks and processes. John Lewis also uses Splunk DB Connect to augment its machine data with structured data from relational databases.

John Lewis initially deployed Splunk software for alerting, direct searching and graphing. Since launching its new e-commerce platform, John Lewis has been using Splunk Enterprise for highly complex analytics, including trend analysis, visualizations, customer behavior modeling, incident analysis, problem management and complex alerting. Splunk dashboards provide Operational Intelligence, along with views into the overall health of the website.

#### **Industry**

Retail

#### **Splunk Use Cases**

- Business analytics
- IT operations
- · Application delivery

#### **Challenges**

- Lack of operational visibility across entire infrastructure
- Overreliance on manual processes and traditional troubleshooting tools requiring specialized knowledge
- Risk of slower mean time to resolution (MTTR) times negatively impacting customer experience, brand reputation and revenue
- Need to compare real-time and historical data in order to proactively detect and address anomalous behavior

#### **Business Impact**

- Improved troubleshooting and faster resolution of issues, preventing revenue loss
- Real-time operational insights into infrastructure enable John Lewis to make better business decisions during critical periods
- Smooth introduction of new enhancements to johnlewis.com
- Operational Intelligence fed into capacity planning for peak times
- More accurate modeling of customers' journey through the John Lewis website, resulting in an enhanced customer experience

#### **Data Sources**

- E-commerce applications
- Web server logs
- Middleware logs
- DB logs
- Service management applications
- · Cloud applications

### **Splunk Products**

- Splunk Enterprise
- · Splunk DB Connect

# Streamlined troubleshooting and application delivery for improved customer experience

Using Splunk Enterprise, John Lewis discovered that its customers' interactions with the new website were not necessarily linear. The team was able to provide insights to the business on how customers were actually navigating the site, enabling John Lewis to make changes that optimized search and have led to a more streamlined and user-friendly website.

Splunk software has enabled John Lewis to capture more revenue by monitoring drop-offs and payment failures, which can occur for a variety of reasons, ranging from fraud to incorrect credit card details. Now, whenever drop-offs are greater than a baseline figure, an alert triggered in Splunk Enterprise allows IT to rapidly investigate root cause.

Additionally, whenever John Lewis rolls out a new application or service, the team now monitors its health and performance using Splunk software. This helps foster even greater collaboration between IT and the business on creating cutting-edge dashboards to gain Operational Intelligence and continue to improve the customer experience.

## Supporting rapid sales growth and tracking site performance

On Black Friday in 2013, John Lewis more than doubled its previous record for a single day's transactions on its website. The team used Splunk Enterprise to report on how core systems coped under the added pressure, incorporating this information into capacity planning for subsequent peak days.

During the Christmas 2013 clearance event, the busiest period of the year for John Lewis, Splunk Enterprise was a key component in the company delivering the best online performance in its history. "Our Splunk dashboards over the Christmas period were like looking at a NASA operations control center."

### Paul Coby, CIO

John Lewis

Online sales grew 23 percent over the previous year's holiday period. Splunk software helped inform important operational and marketing decisions in real time, such as when to promote and communicate certain items or campaigns, based on traffic to different areas of the site. John Lewis also used Splunk Enterprise to balance customer experience response times with the need to throttle website traffic, all in real time.

# Improved operational visibility leads to superior customer experience

In summary, John Lewis is using Splunk Enterprise to gain improved Operational Intelligence and support rapid growth for its billion-pound website, **johnlewis.com**. The company can now quickly identify and resolve potentially costly issues and ensure that its website is delivering the best possible customer experience. By using Splunk software to analyze and dashboard a number of website metrics, John Lewis is also able to make key business decisions in real time to support its site during high-volume shopping events.

Download Splunk for free or get started with the free cloud trial. Whether cloud, on-premises, or for large or small teams, Splunk has a deployment model that will fit your needs.





