Using Data to Deliver Success in Retail

splunk> | Google Cloud

Retail has faced its challenges in the past decade

Retail has faced its challenges in the past decade. From the decline of brick and mortar to fast production, consumers' lower price point expectations, reduced margins and rapid digital transformation, today's retailers have a lot to manage. Mix in a pandemic, increased operational complexity, and some very vocal social media users, and you'll find delivering an exemplary customer experience both online and off is more important than ever. The best retailers are innovating through these challenging times to push themselves ahead of the market.

Network and digital service outages cause revenue loss and damage brand value. Cloud monitoring and data analysis are now baseline expectations for protecting your brand and preventing revenue loss from outages and service degradations. Customers expect always-on availability. This means retailers must proactively identify and restore services before they impact the customer experience. If retailers want to stay relevant in this fast-changing world, the online and offline experiences can no longer be siloed from one another. Fortunately, there are solutions that deliver the one-business processes and end-to-end visibility retailers need to thrive.

> **"The pandemic collapsed into three months a process of adopting e-commerce that otherwise would have taken 10 years in the U.S. ... more than half of all consumers intend to continue using curbside pickup and grocery-delivery services after the pandemic is over."**
>
> — The Wall Street Journal

"One-business" is retailers' new mantra

Today's customers expect a safe and seamless buying experience, regardless of how they shop. COVID-19 has ramped up touchless purchasing and buying online while picking up curbside. Customers expect the buying experience, wherever it starts and stops, to be painless.

While America is shifting rapidly toward more e-commerce, companies are scrambling to catch up:

Building infrastructure quickly and moving to the cloud has helped retailers innovate faster, stay relevant, and compete, mitigating the issues brought by the pandemic.

3 in 10

Only three in 10 executives rate their organization as digitally mature.

(Deloitte)

80%

By 2024, 80 percent of purchases will be conducted without touching public structures or hardware, and without being in close contact with another person.

(Gartner)

65%

Buy online, pick-up in store (BOPIS) services increased 65 percent at the onset of the pandemic, from 15 to 25 percent of orders, a trend that continued through the holiday season.

(Adobe)

The impact of COVID-19

COVID-19 has forced retailers to transform their operations in order to meet changing customer demands and comply with local health regulations, such as:

Capacity limitations

Distancing

Lockdowns

Contactless payments

These challenges have driven increases in online shopping and delivery, including curbside pickup. Shoppers expect a strong online and offline presence, excellent inventory management, and fast delivery — even during a pandemic.

Forget fast retailing. Since the onset of this pandemic, customers are much more interested in safe retailing.

— KPMG
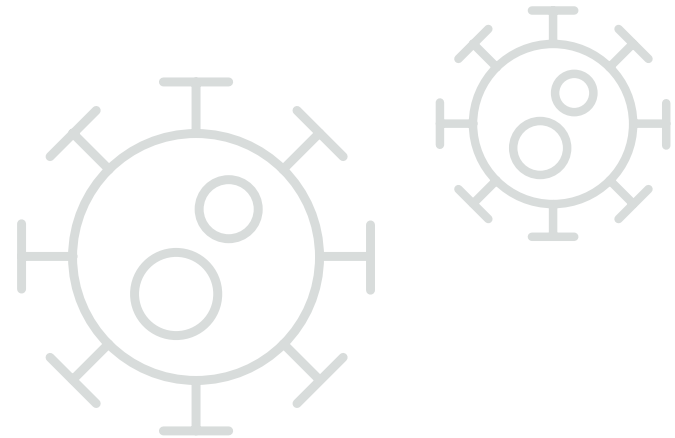
Infrastructure challenges

Retailers were struggling with infrastructure challenges before the pandemic, but COVID-19 has exacerbated multiple problems. The time, effort, and cost of maintaining a reliable infrastructure have grown considerably due to consumers shopping across channels and hobbies (such as bread-making) going viral, leading to unexpected peaks in demand for certain types of products. Retailers don't have enough visibility throughout their system, and this lack of information is hurting them.

While merging online and offline marketplaces, discrepancies in prices have become even more prolific and costly. According to a 2020 Anyline survey, "The problem is pervasive enough that as of September 1, 2020, the U.S. state of Michigan enacted the Michigan Price Scanner Law, requiring a seller who charges more than the displayed amount for an item to refund the difference between the amount charged and the price displayed plus a "bonus" ten times the difference, with a minimum of $1.00 and a maximum of $5.00. If the seller refuses to give the buyer both the refund and the bonus, the buyer may bring a lawsuit to recover actual damages or $250.00, whichever is greater, plus reasonable attorney fees up to $300.00."

Creating a cohesive customer experience online and offline, while making sure system outages and checkout failures do not occur, brings even more challenges. Without sufficient troubleshooting and data analysis, operational performance can suffer.

As digital sales increase, retailers must also track online traffic growth and website performance to keep up with demand. It's crucial for retailers to understand what's going on across both e-commerce and brick and mortar operations. Retailers must adopt an innovative approach to technology to make sure they have the information they need.
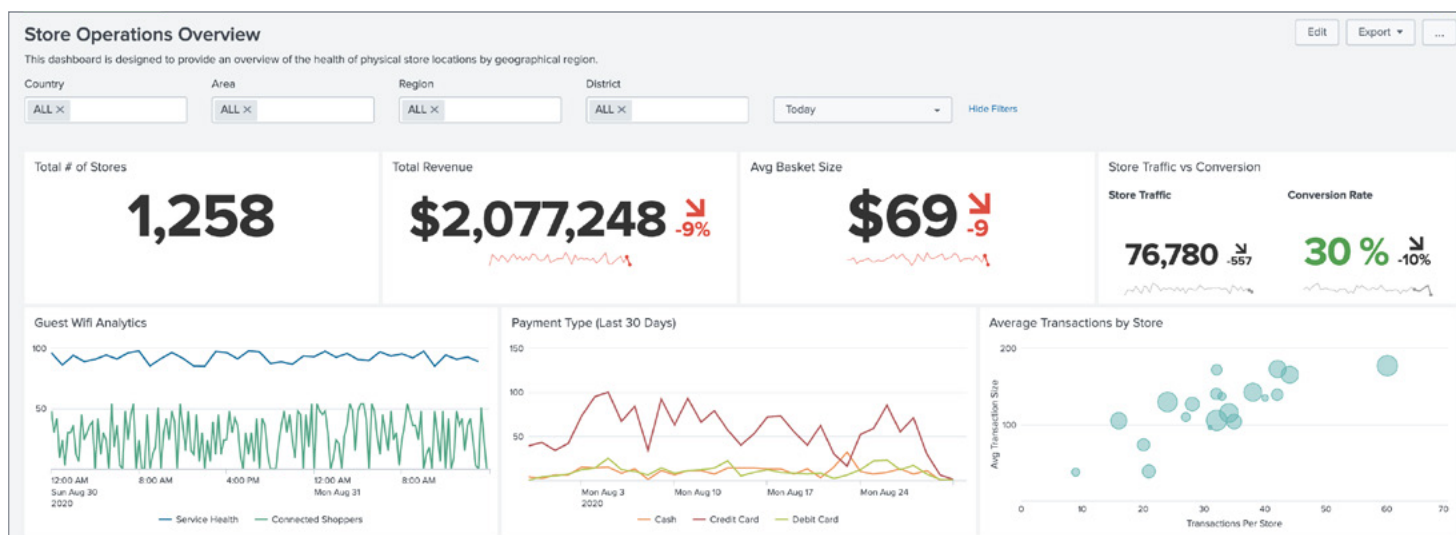
Increasing complexity of operations

One of the biggest challenges for retailers is a lack of clarity around data and operations driven by the growing complexity in consumer habits. People just aren't buying the way they used to.

"As travel has become more difficult since the COVID-19 pandemic, purchasing behavior has developed in favor of proximity," according to Global Trade's Petit Philippe in Retail: The 5 Big Challenges to Overcome in 2021. He adds, "This strong demand for proximity has, in fact, led to reconsidering points of sale as vectors of reasoned consumption," and refers to the need for a "phygital approach," handling local stock with digital commerce.

In order to maintain a consistent, always-on e-commerce experience, retailers need be able to perform:
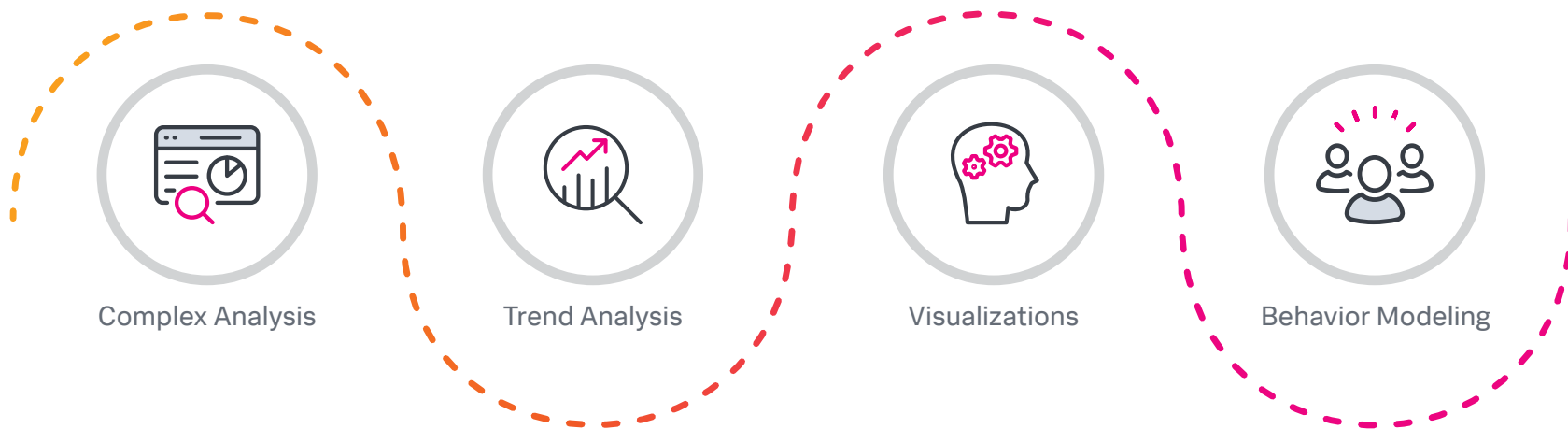
This customer order process data should be available across the e-commerce platform so that retailers can immediately identify the root cause of third-party payment provider checkout failures. Alerts will trigger when the "drop-offs" hit the pre-configured threshold for investigation.

Retailers can face less obvious issues as well. Tracking website performance, including page loading times, uptime, visits, and visitors, is crucial. Tracking alerts on error logs across applications and systems can help you predict and mitigate site outages. Ever been told something was in stock, only to arrive and find it gone? Make sure your customers don't get the wrong information by analyzing critical productivity metrics from the fulfillment floor.

Complex Analysis   Trend Analysis   Visualizations   Behavior Modeling

Prepare for traffic spikes

Handling operational complexity can be problematic, especially during peak times like the holiday season or special shopping events. Businesses need to quickly scale up during the holidays and ramp down once they're over.

Retailers can also struggle to integrate data from multiple sources and handle dynamic infrastructure scaling when necessary. Adopting new technology can feel overwhelming when there are already too many processes.
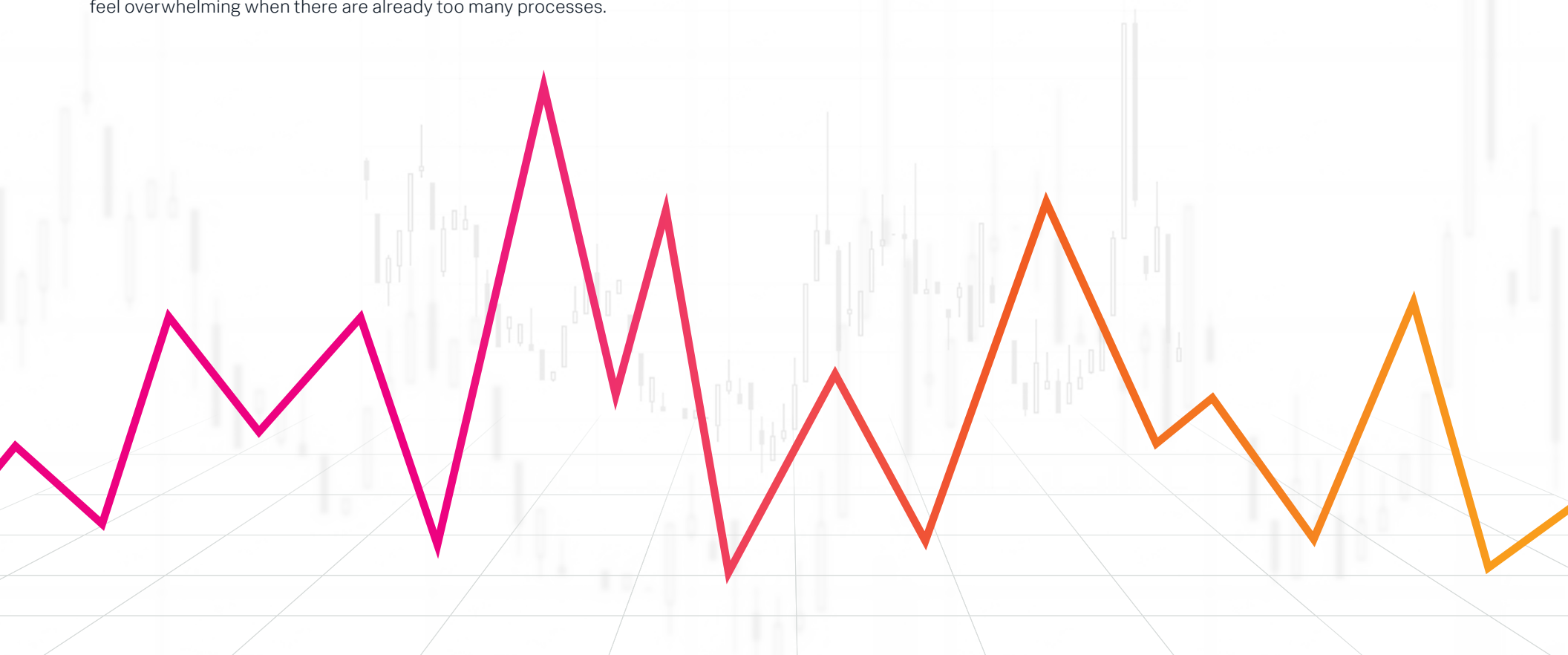
Operational data for retailers is mission critical

Margins will be challenged even more in the next few years. Unprecedented unemployment, underemployment, and the overall financial impact of COVID-19 on much of the population is curbing consumer spending. Shoppers are looking for ways to save money, which means spending less.

Retailers require clear information to optimize digital with brick-and-mortar and sustain profit margins. Operational data is the key to surviving and thriving — it can reveal important trends and information about customers and stores. Data analysis can uncover details that people can miss because they can't see the full scale of operations.

According to a recent McKinsey report, "COVID-19 has accelerated...changes almost overnight, leaving most retailers' supply chains unprepared to respond. As retailers look to the future, they will need to contend with consumers' expectation for seamless omnichannel fulfillment, as well as retailers' own increasing productivity pressures."

Retailers increasingly rely on analytics and data computing capabilities. From the need to deliver new digital services to accelerating operational innovations, data is crucial for improving stores online and offline.

Insights into operational data can also help build customer loyalty and increase profits. Improving the overall performance of its stores' infrastructure through data analysis helps a company deliver a better customer experience.

Full visibility of operational data can prevent many problems before they occur by reducing troubleshooting and support time while increasing e-commerce and application reliability. This allows businesses to detect issues that may impact customer experience.

Data is also essential for keeping up with competitors. If retailers don't focus on operational data and start to innovate right now, they'll fall behind competitors and potentially go out of business.

Benefits of using Splunk and Google Cloud

Retailers need reliable, experienced partners that can help them get the most from their data. The combination of Google Cloud's flexible, reliable, and scalable infrastructure and Splunk's Data-to-Everything platform helps retailers deliver a consistent and secure experience for consumers across all channels.

No more silos

Splunk and Google Cloud help retailers bring disparate systems together that are necessary to operate their business. This helps them achieve real-time visibility of their operational and security environments to quickly identify issues that can affect customer experiences.

From ordering and fulfilment to customer and associate experience, Splunk connects the various systems retailers rely on to operate their business. This helps retailers understand how connection points work and allows them to quickly identify the root causes of system and application slowdowns as well as checkout failures. By being able to access and analyze the right information, retailers can accelerate their Mean Time to Detect (MTTD) and Mean Time to Resolution (MTTR), avoiding a negative customer experience and damage to their bottom line.

Scaling has never been easier

Splunk helps companies move to the cloud and re-architect services. It provides visibility across all systems and monitors the entire path to minimize the chance of accidents and outages during the transition. Google Cloud enables retailers to scale technologies and processes with speed as needs arise (for instance, during application updates and when new channels are needed for customer communications).

Retailers can rapidly deliver new digital services at scale without sacrificing quality, availability, and performance. With Google Cloud and Splunk's ability to scale up and down instances and explain what's happening in real-time to resolve issues more efficiently, retailers can handle high traffic whenever it occurs — expectedly or unexpectedly.

Peak visibility

Issues happen, and when they do, Splunk enables you to get to the root cause of a problem quickly and remediate in real-time.

With Splunk, retailers enjoy full visibility into complex development and production environments after transitioning to the platform. By actively compiling and analyzing data, Splunk reduces the chances of downtime for in-store and online operations.

Data wrangling made simple

Data analysis also allows the platform to proactively identify and restore services before they impact the customer experience. Troubleshooting and anomaly detection capabilities prevent outages and service degradations.

The platform's analytics capabilities also help retailers build solutions and scale dynamically. This allows a retailer to more quickly design and tailor solutions to fit their needs.

The platform performs complex analysis, trending, visualizations, and behavior modeling of a customer's entire order process. In addition, it monitors website performance, such as page loading times, uptime, visits, and visitors.

Retailers gain access to AI-based technologies from Google and Splunk, which play an important role in modernizing infrastructure and applications. They also help streamline a customer's journey to build loyalty and repeat shopping.

Clarity increases security

Monitoring with AI means finding anomalies faster and more easily. Cyberattacks are often detected by looking at the actions on the network, such as failed logins, and this information can be instantly passed on to the security team. Today all data is security-relevant data. Through end-to-end visibility, retailers can use data to bolster their security posture.

Choose to Be Better

Today's retailers face numerous challenges as they attempt to create consistent experiences for customers online and in stores. The impact of COVID-19, combined with infrastructure problems and the increasing complexity of operations, has made operational excellence mission critical. Operations data is the key to overcoming these challenges and staying ahead of the competition.

The partnership between Splunk and Google Cloud helps retailers by providing a reliable platform with built-in analytic and AI capabilities. Real-time visibility into operational data and performance metrics enables retailers to not only compete but thrive during this phygital transformation.

See how Splunk and Google Cloud can help you.

Learn More

splunk>®

turn data into doing®