Next-level business intelligence for retail supply chains



The world of supply chain and logistics is rapidly growing and building resilient and sustainable supply chains has become a key priority for companies in every industry, and every region of the world. The COVID-19 pandemic, along with extreme weather patterns, and other challenges, pushed existing supply chains to the brink and exposed the weakness of current designs and execution. What does it take to create resilient and sustainable supply chains?



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The retail industry in particular has seen challenges with worker availability, distribution, safety and health mandates and customer journey digitalisation. When creating a resilient and sustainable supply chain the following should be taken into account:

Supply Chain Design

- Product innovation: this process has by far the biggest impact on building a resilient and sustainable supply chain. It starts with the decisions on which (reusable) materials/ ingredients/components are being used, what packaging material is required, where to source from and finally it determines the production process and therefore the energy consumption. Currently no company is capable of considering all these constraints holistically and therefore only makes point decisions.
- Supply network design: retailers are using this process to make decisions on the distribution network and the recycle and return process.

As a retailer running a complex supply chain, you don't need to stick with the status quo. Your transformation can be achieved by leveraging data to power individualised processes, which will set your company apart from the pack.

Supply Chain Monitoring

- Track & Trace: most retailers have only a connection to their direct suppliers, but lack information on their suppliers' suppliers and their locations. Building an effective track & trace process requires a network of companies sharing information, with technology such as satellite information for deforestation, water, agriculture and mining efforts, which can enable an ongoing monitoring process.
- Analytics & Reporting: collecting all this information requires a scalable data lake and the integration of many data sources.

Supply Chain Operations

• Risk prediction: having the data available enables the possibility of predicting risks. This information can be used to determine inventory levels and a much faster response to increasing risk levels.

• Disruption management: currently retailers are only making short term decisions based on cost impacts. Disruption management needs to take risk management and sustainability information into account to guide supply chain professionals.

Actionable insights As digital activity in this industry rises, it leads to an explosion of data across multiple organisational functions. This data is often siloed and imperfect, making it difficult for retailers to make the most accurate and best business decisions. The goal is to build next-level business intelligence on a scalable, secure, and integrated data platform. That means capturing data and break down silos with a serverless, highly scalable data warehouse, creating actionable insights to make better decisions and managing and governing data and insights in an integrated platform.

Google Cloud's BigQuery and Looker solution can help drive actionable insights and support better business decisions:

- Scalable, secure & governed: BigQuery is a highly scalable, fully managed enterprise data warehouse solution with gigabyte- to petabyte-scale storage and SQL queries. It secures data with access controls and compliance assurance support. Looker is a flexible, lightweight unified data platform to support thousands of users with minimal maintenance, and can be hosted in any cloud or on-premises.
- Integrated actionable insights: BigQuery enables you to operationalise machine learning and predict business outcomes easily without the need to move your data from the data platform. Looker offers an out-of-the-box BI application and APIs to power custom data applications and integrate insights into downstream workflows.

BigQuery and Looker can also help you unlock benefits using custom data experiences:

- Accelerate time to value: save 70% of your analysts' time by leveraging Looker's modern modeling to understand customer behaviour faster1.
- Significantly lower costs: lower your organisation's total cost of ownership by 26-34% in three years2.
- Democratise insights: empower employees to answer their own questions without asking an analyst, to enable data-driven decision making across the bank.

Leveraging data

In addition, Manhattan Active® Supply Chain leverages the power of Google Cloud to also solve for a resilient and sustainable supply chain. Manhattan Active Supply Chain is a single, cloud-native application, built on Google Cloud, that includes Manhattan Active Warehouse Management, Manhattan Active Labour Management and Manhattan Active Transportation Management to help drive true system convergence across every element of distribution and transportation.

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Voor meer informatie, ga naar <u>manh.nl</u> More information on <u>manh.com/en-nl</u>

Sources:

1 Based on internal Looker benchmarks, last updated Q1 2020.

2 ESG, The Economic Advantages of Google BigQuery versus Alternative Cloud-based EDW Solutions, September 2019