Qlik

The Essential Guide to Modern Supply Chain Analytics

It's a new era for supply chains. A data-driven one.

Supply chains have been modernizing for years. But today, the pressure to digitize is greater than ever. Global competition, extreme weather, increasing customer expectations, and mounting regulatory action – together with disruptions from the pandemic – have made it critical to gain visibility and in-the-moment agility at every point in the chain.

Succeeding in this environment requires a particular approach to data – one that continuously funnels real-time information from suppliers, partners, warehouses, and stores to analytics for instant insights that enable immediate, informed action.

Unfortunately, traditional business intelligence solutions were never intended for real-time decision-making; they primarily answer known questions using historical data. And that won't give you the visibility or the agility you need to manage complex and ever-changing operations.

In a 2021 global survey from Deloitte,[1] CPOs named supply assurance as their biggest challenge:

41%
had to expedite shipping to keep critical supply chain flowing

36%
said suppliers are failing to meet new requirements

32%
said they're losing revenue due to supply shortages

The business outcomes of Qlik.

In an IDC survey of 1200 global organizations,[3] a majority of businesses with strong data-to-analytics pipelines reported increases in key metrics:

76%
operational efficiency improved

75%
revenue increased

74%
profit increased

It's time for a modern approach to data.

Good news: Advances in data and analytics technology are driving remarkable innovation in both the delivery and the consumption of data. It's now possible to establish in-the-moment awareness of your supply chain – and your business – through real-time information that triggers immediate action. At Qlik®, we call this informed action.

Tap into the pulse of your supply chain at every moment, enabling you to take instant, informed action as the data changes. And Qlik works in conjunction with your enterprise network applications, so that far more stakeholders can benefit from real-time analytics.

> "Companies today find themselves with supply chains designed for a world that no longer exists . . . [They] need greater visibility, agility, and flexibility to address today's crises and prepare for tomorrow's." [2]

ERNST & YOUNG

Top 5 benefits of Qlik for supply chains.

In the era of distributed global supply chains, your stakeholders have to be tightly coordinated to give you the flexibility, resiliency, and rapid time-to-market you need. Creating end-to-end visibility is key to effective collaboration across multi-enterprise business networks.

Qlik empowers your enterprise to create an end-to-end analytics data pipeline so you can get a complete picture of your supply chain – and act on what you see – at any given moment. With Qlik, your supply chain operations can:

1 Identify and resolve supply chain disruptions farther upstream

2 Monitor supplier performance on delivery, price, and service

3 Strengthen negotiations and partnerships to sharpen competitive edge

4 Better manage inventory cost, inventory turns, cycle counts, inventory on hold, stockouts, and reorders

5 Create new value by generating adjacent revenue streams through products, services, and business models
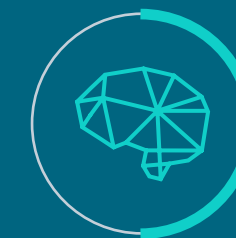
50%

Through 2024, 50% of supply chain organizations will invest in applications that support artificial intelligence and advanced analytics capabilities.[4]

GARTNER

How Qlik solutions transform supply chains.

Qlik combines disparate data sources in real time for in-depth, multisource analysis and AI-powered automation, reducing friction in the supply chain and allowing your stakeholders to:

OPTIMIZE INVENTORY MANAGEMENT TO BETTER MATCH SUPPLY AND DEMAND AND REDUCE COSTS

With greater visibility up and down your supply chain, including near-real-time demand-sensing and ongoing insight into supplier production, you can minimize the uncertainties between supply and demand. As a result, you can reduce stockouts, optimize safety-stock levels, lower carrying costs, and (ultimately) increase customer satisfaction. You can also anticipate inventory trends and needs through predictive analytics.

- Enable demand-driven inventory management
- Maximize production efficiency
- Manage product and process quality
- Ensure regulatory compliance
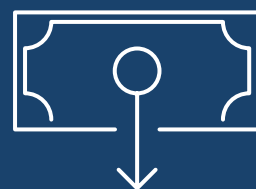
DEMOCRATIZE FORECASTING AND PLANNING FOR BETTER RESULTS

Bring together and analyze data from enterprise resource planning (ERP), supply chain management (SCM), forecasting, manufacturing execution system (MES), and other internal systems – as well as external sources like third-party logistics and consumer demand solutions – so everyone affected by or contributing to supply chains can work together with real-time visibility into the planning and forecasting process.

- Increase demand forecasting accuracy
- Connect supply planning with demand
- Optimize production planning
- Advance priorities with executive insights
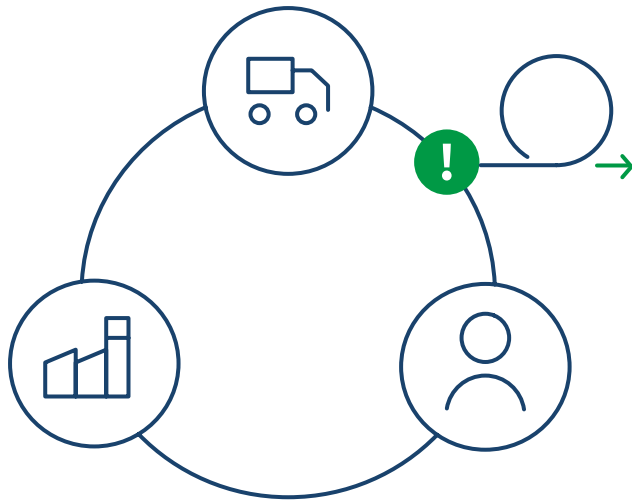
INSTANTLY ADAPT TO DISRUPTION

Even with your own house in order, disruptions along the supply chain have ripple effects. With Qlik, you can generate predictive insights into known and unknown disruptions, better understand the causes behind the disruptions, visualize the effects throughout your business, and model automated responses so that when a disruption happens, your supply chain immediately adapts.
In this way, your supply chain "learns" from disruptions and applies AI to avoid or mitigate them.

- Increase on-time in-full (OTIF) orders

- Proactively solve for impact by better understanding drivers and what "levers to pull" to change outcomes for the better

- Achieve higher sales revenue

- Improve customer experience and loyalty

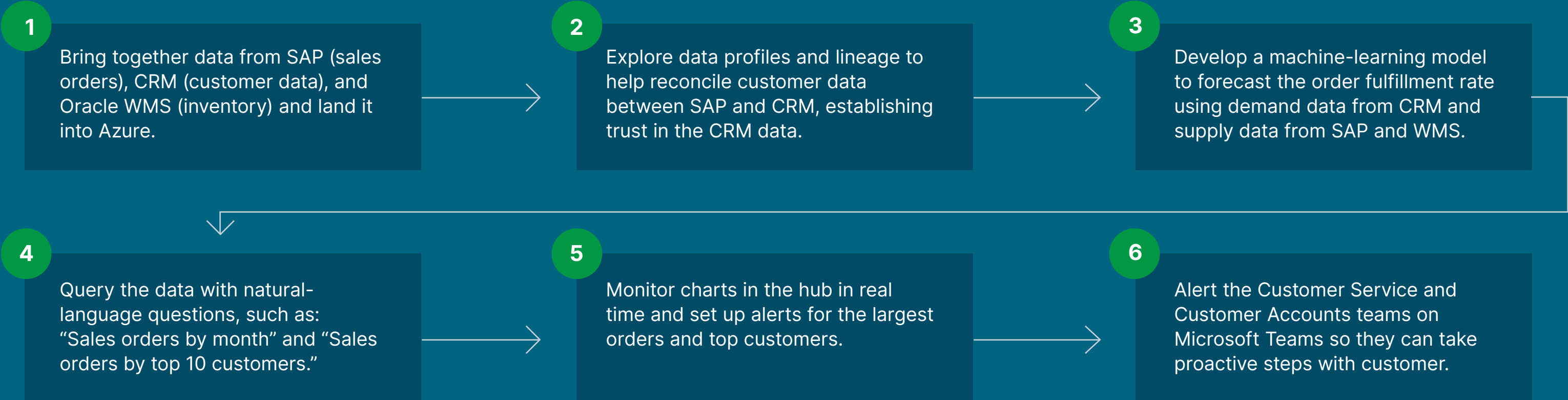- Improve margins and lower cost of goods sold (COGS)
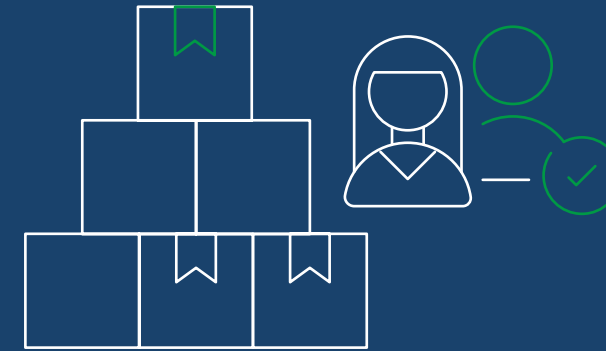
STREAMLINE FULFILLMENT AND WAREHOUSING

Creating an efficient, customer-centric supply chain requires analyzing customer preferences, channel availability, safety-stock levels, inventory carrying costs, delivery times, and much more. With Qlik, you can seamlessly support an omnichannel customer experience, creating the lean warehousing and distribution model omnichannel requires while controlling transportation and logistics costs. Inventory management teams can establish alerts and automation to streamline fulfillment to drive cost efficiency and satisfaction.

- Enable omnichannel management

- Create a lean warehousing and distribution model

- Control transportation and logistics costs

Anticipate and solve for supply chain disruptions.

Let's look at a common challenge for Chief Purchasing Officers (CPOs) – a lack of raw materials for order fulfillment due to supply chain disruptions. How can Qlik change the game? By enabling CPOs to:
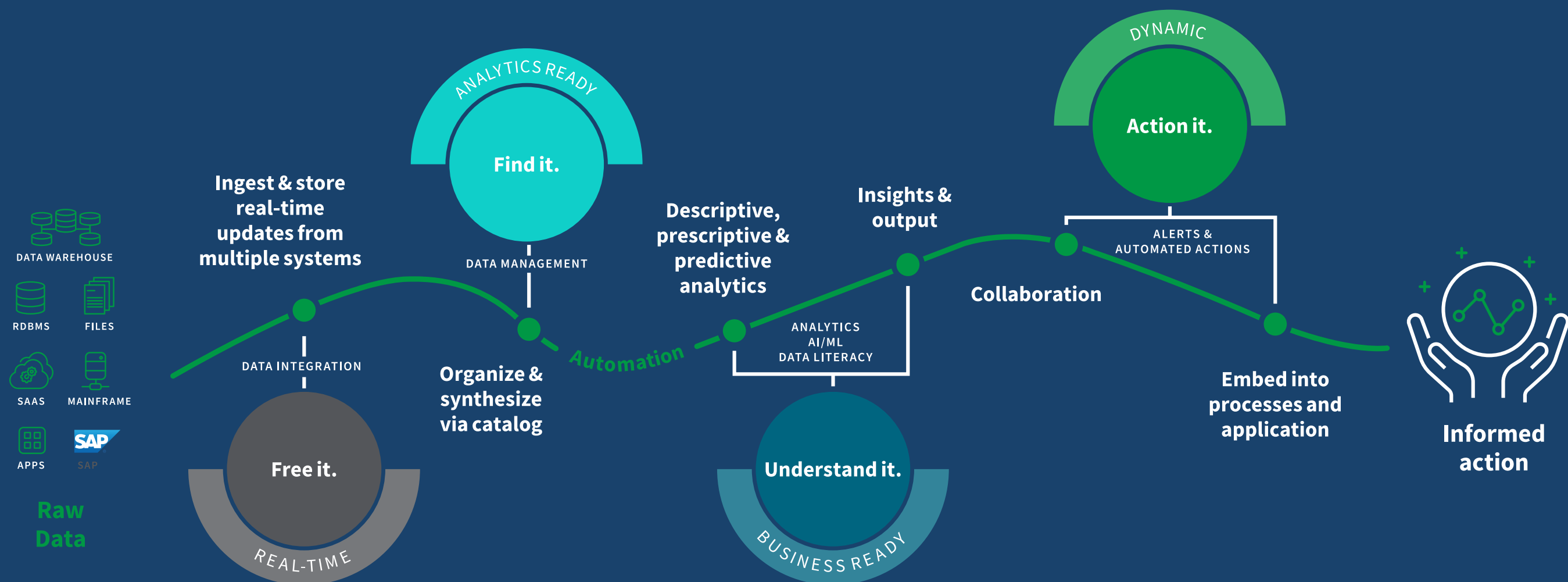
1 Bring together data from SAP (sales orders), CRM (customer data), and Oracle WMS (inventory) and land it into Azure.

2 Explore data profiles and lineage to help reconcile customer data between SAP and CRM, establishing trust in the CRM data.

3 Develop a machine-learning model to forecast the order fulfillment rate using demand data from CRM and supply data from SAP and WMS.

4 Query the data with natural-language questions, such as: "Sales orders by month" and "Sales orders by top 10 customers."

5 Monitor charts in the hub in real time and set up alerts for the largest orders and top customers.

6 Alert the Customer Service and Customer Accounts teams on Microsoft Teams so they can take proactive steps with customer.

What outcomes can you expect to see as a result of this use case?

- Increased sales order fulfillment and revenue
- Lower COGS and higher gross margins
- Fewer customer order fulfillment issues
- Better customer satisfaction and loyalty

End-to-end Data Pipeline

Qlik enables you to create an end-to-end analytics data pipeline, giving supply chain teams access to the real-time data they need to drive growth, profitability, and business resilience. Close the gaps between data, insights, and action with the only cloud platform built for infomred action.

DATA WAREHOUSE

RDBMS   FILES

SAAS   MAINFRAME

APPS   SAP

Raw Data

Ingest & store real-time updates from multiple systems

DATA INTEGRATION

ANALYTICS READY

Find it.

DATA MANAGEMENT

Free it.

REAL-TIME

Organize & synthesize via catalog

Automation

Descriptive, prescriptive & predictive analytics

Insights & output

ANALYTICS AI/ML DATA LITERACY

Understand it.

BUSINESS READY

Collaboration

DYNAMIC

Action it.

ALERTS & AUTOMATED ACTIONS

Embed into processes and application

Informed action

Qlik success stories.

aramark

With data siloed in thousands of locations, the global food services company needed better visibility into its operations. They built a single platform – including a mobile app – to deliver real-time insights to users anywhere. As a result, they:

- Reduced overtime hours
- Significantly reduced food waste
- Improved forecasting

"Companies today find themselves with supply chains designed for a world that no longer exists . . . [They] need greater visibility, agility, and flexibility to address today's crises and prepare for tomorrow's."

PAVAN ARORA
Chief AI Officer

Direct Relief

When COVID-19 hit, this global relief organization had to quickly respond to surging needs for personal protective equipment (PPE) in healthcare facilities around the world. They worked with Qlik to build an app that:

- Combines real-time COVID-19 data with global medical facility and partner data
- Uses geoanalytics to predict increases in PPE demand by partners near hot zones
- Prioritizes shipments to places where PPE is needed most

"The result was an invaluable data analysis application, updated in real time, which allows Direct Relief to constantly track the changing dynamics of COVID-19."

ANDREW SCHROEDER
Vice President of Research and Analysis

Greene Tweed

With a vital need for instant access to consistent data, the manufacturing company implemented Qlik Data Integration for data warehouse automation and Qlik Sense® for data analysis. As a result, they're seeing:

- Predictive analytics with a 90-day accuracy of 95%
- Streamlined productivity, sales, and customer service
- Rapid action on KPIs

"On-time delivery metrics for each plant get triggered if things are below a certain threshold."

DAVID HUFNAGLE
Manager of Enterprise Data and Analytics

J.B. HUNT

The transportation company uses Qlik Data Integration to enable real-time insights into operations and assets, providing analytics-ready data quickly to multiple user groups without deploying an army of data engineers. As a result, they're seeing:

- Improved user experience
- Reduction in latency to just minutes
- Efficiencies gained through automation

"We're seeing more real-time data in J.B. Hunt 360, which gives shippers and carriers up-to-the-minute information on how they are performing."

JOE SPINELLE
Director Engineering and Technology

Take an active approach to your supply chain.

Qlik enables you to shift from a passive set of tools to an active system that delivers information in real time and compels immediate action. So you can get in front of events as they unfold – and use your supply chain as a lever for competitive edge.

DATA SERVICES

Free data from its silos, bringing it together from multiple systems, from both on-premise and cloud sources. And give users the power to easily find the data they need – with information on its origins – and publish it to your analytics tool for immediate use.

ANALYTICS SERVICES

Empower users at any skill level to freely explore data with boosts from AI, combined with the industry's most powerful analytics engine. Perform the best analysis possible on your data in real time, delivering the insights you need to the right person at the right moment.

Get real-time visibility. Uncover predictive insights. Trigger alerts when data changes. And take informed action in the moment – with confidence.
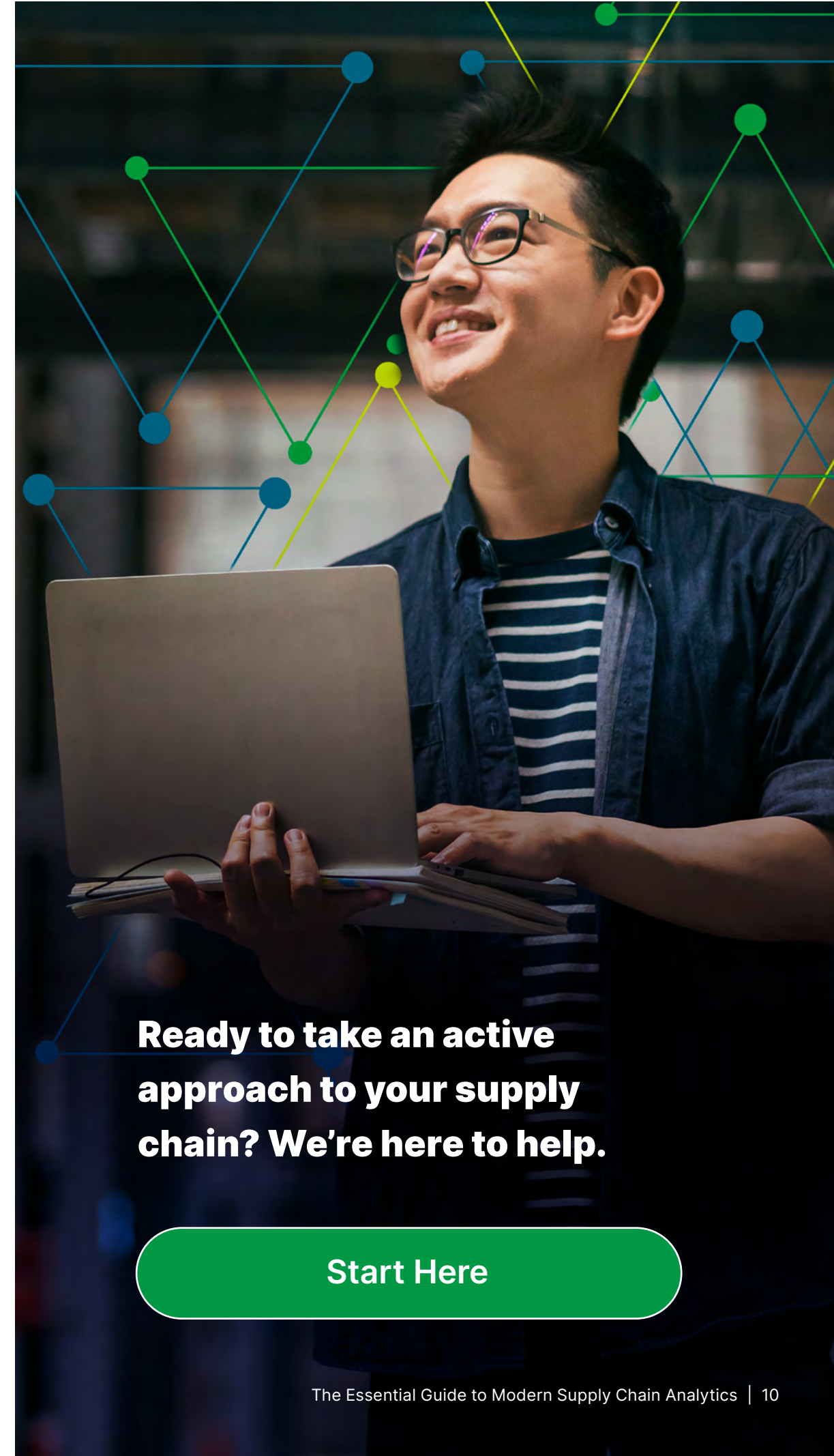
Ready to take an active approach to your supply chain? We're here to help.

Start Here

About Qlik

Qlik transforms complex data landscapes into actionable insights, driving strategic business outcomes. Serving over 40,000 global customers, our portfolio leverages advanced, enterprise-grade AI/ML and pervasive data quality. We excel in data integration and governance, offering comprehensive solutions that work with diverse data sources. Intuitive and real-time analytics from Qlik uncover hidden patterns, empowering teams to address complex challenges and seize new opportunities. Our AI/ML tools, both practical and scalable, lead to better decisions, faster. As strategic partners, our platform-agnostic technology and expertise make our customers more competitive.

qlik.com

[1] Deloitte Global 2021 Chief Procurement Officer Survey, "Using agility to address changing chief procurement officer priorities," 23 April 2021.

[2] Ernst & Young, Sachin Lulla & Dheera Anand. "Can a supply chain digital twin make you twice as agile?" 1 March 2021.

[3] IDC InfoBrief, sponsored by Qlik, "Data as the New Water: The Importance of Investing in Data and Analytics Pipelines," June 2020.

[4] Gartner, "Gartner Predicts the Future of Supply Chain Technology", Feb 2021.

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