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# **Supply Chain Management Overview**



Supply chain management ("SCM") describes the management of the flow of goods, including the movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption

### **Planning & Procurement**

- Tools to enhance supply & demand visibility and create reliable forecasts
- Source materials in an efficient and cost-effective manner



Operations Planning, Spend
Management, Enterprise Networks

## **Management & Fulfillment**

- Provide a set of procedures for management of warehouse inventory with the goal of minimizing cost and fulfillment times
- Order fulfillment applications are designed to automate sales order processing from capture to invoice and settlement



Warehouse Management, Inventory Management, Fulfillment

# **Logistics & Delivery**

- The care and transportation of goods throughout the supply chain process
- Manage costs through more efficient planning and logistics



Transportation Management, Freight, Fleet Management

## **Optimization and Risk Assessment**

- · Make the supply chain more adaptable and resilient through increased visibility and optimization tools
- · Monitor risks throughout the supply chain process and vet vendors and collaborators



SCM Visibility, Optimization Tools, Vendor Risk

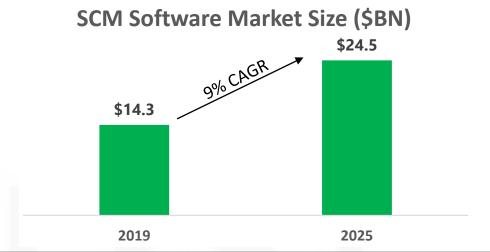


# Massive Market Undergoing Structural Change



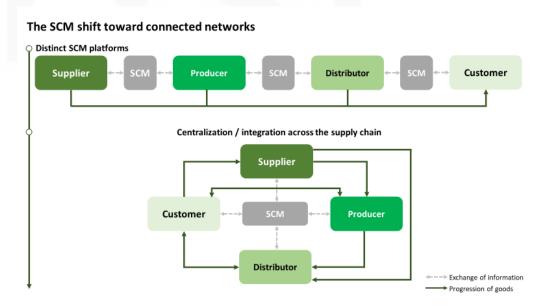
An Industry Increasing In Size...

- The global supply chain management software market was estimated to be \$14.3 billion in 2019 and is forecasted to grow to \$24.5 billion by 2025 (9% CAGR)[1]
- Growth driven by increased proliferation of ecommerce sales, industry automation, and a more complicated supply chain



...And Complexity

- The traditional supply chain framework was largely linear and rigid, which resulted in a lack of transparency, traceability, and collaboration across the entire value chain
- The industry is undergoing a shift towards a more interconnected network model, which creates more efficiency but also results in a more complicated system of interconnections, necessitating integrated supply chain solutions



Sources: [1] Pitchbook



# **Key Trends Driving Software Adoption**



# **Commerce is Changing**



Growing Dominance of E-Commerce: The rise of multi/omni-channel commerce and proliferation of direct-to-consumer brands has caused online orders to increase exponentially in terms of volume, speed, and complexity

The "Amazon Effect": Amazon's relentless focus on end-user experience and wide stream success has elevated buyer expectations and is forcing competitors to adapt their own supply chains to meet new demand and expectations



- <u>Traditional brands and retailers:</u> Looking to integrate their physical stores with their online presence
- New Age / Digitally Native Brands: Only exist online and need to leverage technology to efficiently reach their customers

# **Driving Supply Chain Digitization**



<u>Collaboration & Connectivity:</u> Digitization of the supply chain allows for stakeholders to remain connected throughout each stage – **APIs** are becoming increasingly important in SCM, as they ensure seamless access to data and thus drive better decision making



Data-Driven Adaptability / Risk Management: Agile supply chains bend, but don't break. The modern supply chain leverages a variety of data sources (i.e., connected assets, cargo, and warehouses) to make decisions in real-time and manage risk



<u>Automation:</u> Supply chain automation refers to systematizing part or all of a workflow to improve processes. Tools being leveraged range from **robotics**, **IoT**, artificial intelligence, automation equipment and predictive analytics - all of which improve productivity

# **COVID Impact**



94% of the Fortune 1000 companies experienced disruption to their supply chains as a result of COVID in Q4 2020<sup>[1]</sup>

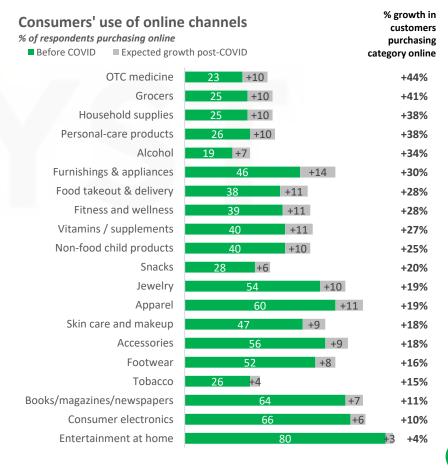
 Mass lockdowns caused a large spike in online order volume and put unprecedented stress on supply chains in 2020, leading to an accelerated adoption of technology across the supply chain that will have long-lasting impacts

Increased Online
Ordering = Here
to Stay

 According to a recent McKinsey study, there is an anticipated ~15-30% growth in consumers who purchase online for majority of retail / shopping categories<sup>[2]</sup>

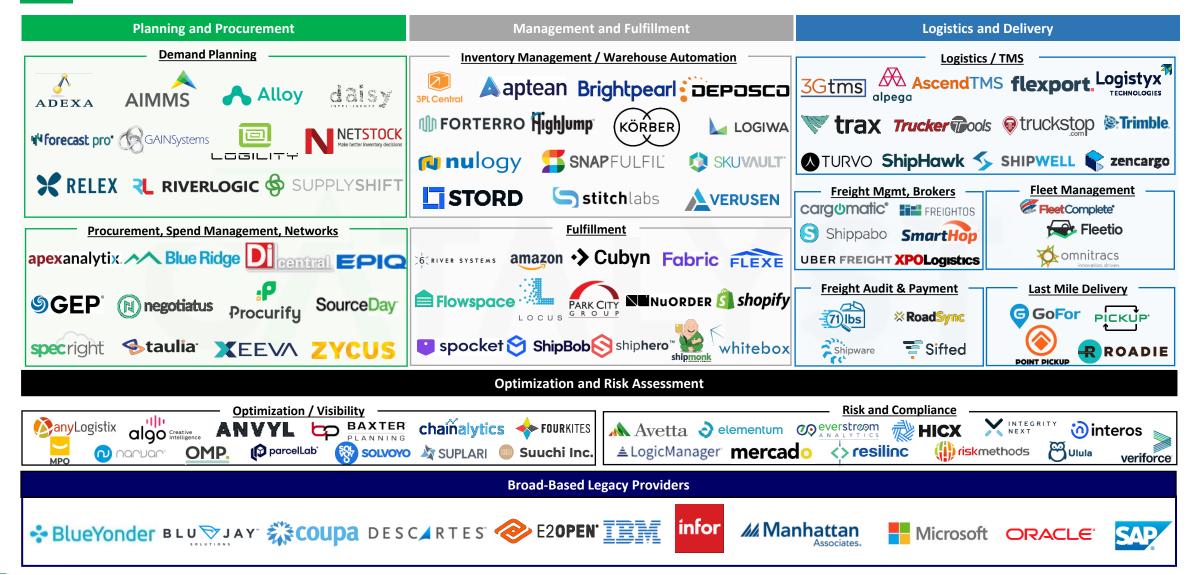
**Emphasis on Resiliency** 

- Prior to COVID, supply chain improvements were desired, but frequently deprioritized by many companies
- During the pandemic a functioning and resilient supply chain became a competitive differentiation
- Supply chain disruptions caused by COVID have renewed focus on supply chain risk & resiliency



# **Supply Chain Management Landscape**





Insight. Research. Results.

# **Supply Chain Management Landscape (Continued)**



#### **Planning and Procurement**

#### **Management and Fulfillment**

## **Logistics and Delivery**

#### **Demand Planning**

Demand planning is a multi-step operational process used to create reliable forecasts. Effective demand planning can guide users to improve the accuracy of revenue forecasts, align inventory levels with peaks and troughs in demand, and enhance profitability for a given channel or product

#### Inventory Management / Warehouse Automation

Warehouse management systems provide a set of procedures for management of warehouse inventory with the goal of minimizing cost and fulfillment times

#### Logistics / TMS

Transportation management systems are focused on transport logistics and facilitate interactions between order fulfillment systems and the warehouse or distribution center

#### **Procurement, Spend Management, Networks**

Procurement applications automate sourcing activities which inform the purchase of goods and services, as well as the actual purchasing activities required to order and receive goods. Spend management tools connect the various procurement activities to create a single view of the spending levels at a company

#### Fulfillment

Order fulfillment is the process of receiving goods, then processing and delivering orders to customers. The process starts with a customer placing an order and ends once they receive it. There are four main types of order fulfillment: in-house, outsourced, dropshipping and hybrid

#### Freight Mgmt, Brokers

Outsourced transportation logistics. Brokers connect drivers with on-demand pickups

#### Fleet Management

Routing, scheduling of deliveries, vehicle dispatching

#### Freight Audit & Payment

Process where the company's freight bills are paid, examined, adjusted and verified for accuracy

### Last Mile Delivery

Transportation of goods from a distribution hub to the final delivery destination

## **Optimization and Risk Assessment**

#### Optimization / Visibility

Analyzes existing supply chain operations to improve increase efficiency and cut costs. Visibility tools provide real-time insights to the SCM process

### **Risk and Compliance**

Identifies and addresses threats to the supply chain and regulatory compliance issues

### **Broad-Based Legacy Providers**

Well established providers that assist companies throughout the supply chain management process



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