ZEUS SDi Supply Chain Analytics Guidebook

Introduction

Welcome to the ZEUS Supply Chain Analytics Guidebook, a comprehensive resource to understanding the key operational metrics and KPIs tracked by SDI, the leading digital supply chain company. This e-book is a must-read for anyone seeking to optimize their supply chain operations and gain a competitive edge in today's fast-paced business environment.

At SDI, we are firm believers in data literacy and the benefits of having a data-literate workforce. With increasing amounts of data being generated every day, it has become essential for businesses to understand and make use of this data to stay ahead of the competition. By promoting data literacy, we aim to equip our workforce and our clients with the skills and knowledge needed to make informed decisions based on data-driven insights.

ZEUS Analytics is a powerful tool that provides real-time visibility into your supply chain operations, allowing you to identify bottlenecks, optimize workflows, and improve overall efficiency. With detailed technical explanations of the metrics and KPIs tracked by **ZEUS Analytics**, this e-book will not only help you unlock the full potential of your supply chain operations but also help you develop those valuable data literacy skills.

By understanding how to interpret and analyze data, you can gain a deeper understanding of your business operations, make better-informed decisions, and, achieve your career goals.

Whether you are a supply chain manager, operations analyst, or a business owner looking to gain a competitive edge, the **ZEUS Supply Chain Analytics Guidebook** has something for everyone. From inventory management and order fulfillment to transportation logistics and customer service, this e-book covers all the critical aspects of supply chain operations.

We have put together this e-book with the aim of sharing our knowledge and expertise with the wider business community. Our hope is that it will inspire you to take a closer look at your supply chain operations, develop valuable data literacy skills, and make the necessary changes to optimize your processes and achieve your business goals.

Thank you for choosing the **ZEUS Supply Chain Analytics Guidebook**. We hope this comprehensive guide will provide you with valuable insights and strategies to optimize your supply chain operations and drive success in your business.

What's Inside

Your ZEUS Supply Chain Analytics Guidebook will cover several **relevant topics** that directly impact your day-to-day operations:

Key Metrics in MRO

FM Spare Parts

Tail Spend

PPE

Store Essentials

Other GNFR

Why Dimensions Matter
## *The Role of Contextualization in Supply Chain Metrics*

This guide will provide you with the foundation required to incorporate data-driven decision-making into your daily workflows as a supply chain expert.

As we dive into metrics, KPI's and what they mean you will see many of these numbers distributed on a graph sliced by a certain dimension. **A dimension is a data attribute that allows users to segment data and take a more nuanced approach to their analysis.**

In our daily lives, we might ask questions like "What do I spend on food each month?" In this scenario, what we are looking for can be broken down across three data points:

➜ *How much money do I spend?* This is a measure that would be the sum of our total purchases. This would not be specific to a type of purchase or time period.

➜ *How much money do I spend on food?* This metric requires a dimension that describes the purchase. If the data exists to flag, the transaction is flagged as "food", and we can leverage it to create this metric.

➜ *How much money did I spend on food this month?* This requires an additional slice of information, the purchase date. Luckily if you are using credit card data and it's detailed enough to provide the transaction type, you can bet you will have a transaction date.

Food Spend by Month
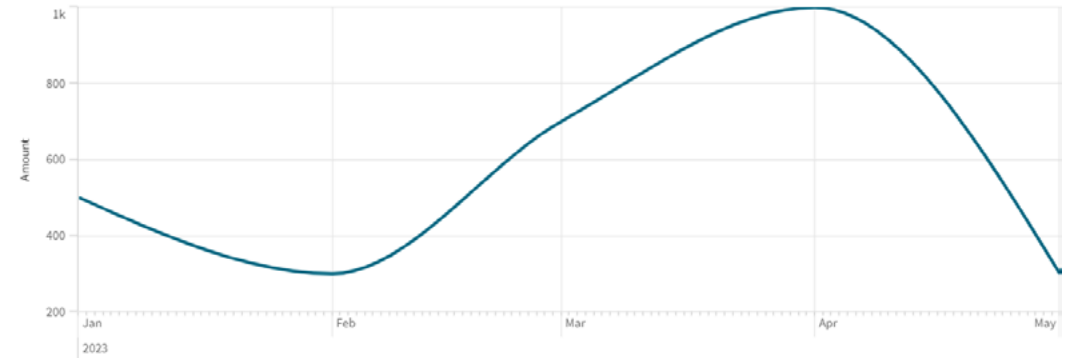
Spend by Transaction Type by Month
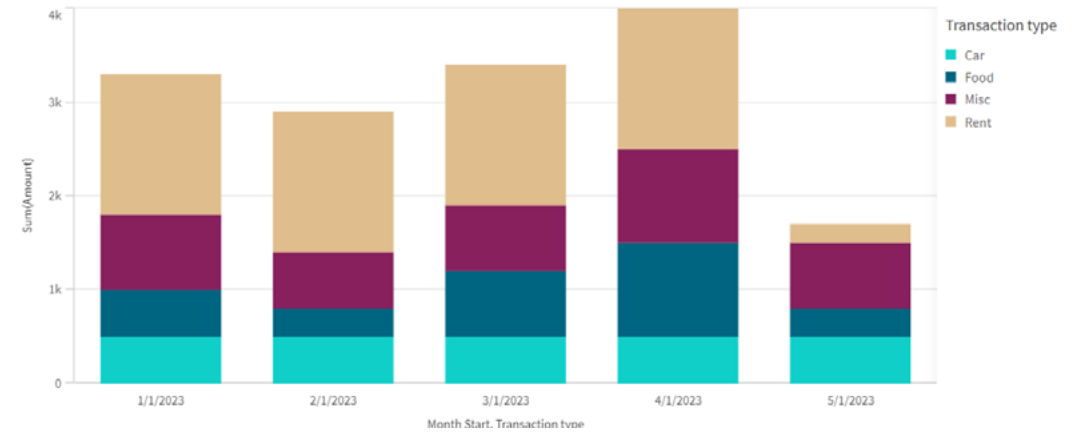
Grouping this data on a line graph, with month on the X axis and $ spent on the Y axis is excellent way to **pinpoint $ values spent by month** on food. In the above example you can see that food spend is wildly fluctuating month over month, introducing volatility into the monthly budgeting process. Further analysis conducted by creating a stacked bar graph with X being month, Y being spend and the chunks of the graph representing a third value, transaction type, help us understand what portion of our monthly spend is comprised of food.

Why Dimensions Matter — *continued*

The most common dimensions used in ZEUS Analytics are:

➡ Time: Week, Month, Year, etc.
➡ Client
➡ Site
➡ Vendor
➡ Manufacturer
➡ Item Category
➡ Business Unit
➡ Employee name: Buyer, Technician, Manager, etc.
➡ Inventory type: Stock/Non-Stock Breakdown
➡ Purchase Type: Catalog, Non-Catalog

While measures in this book will be aggregations or calculations of numbers, as described above they don't mean much without the context that dimensions provide. To provide context to the dimensions above, some common measures will be repeatedly used throughout ZEUS Analytics.

Common measures that will be broadcast across many dimensions include:

➡ Count of Purchase Orders/ PO Lines/ Requisitions/ Req Lines
➡ Sum of Spend
➡ Sum of Inventory Value
➡ Number of Items
➡ The above-mentioned metrics in terms of Percentage of total, sliced by dimensions in previous section

Operations Metrics

In supply chain management, operations refers to the **processes and activities** involved in the planning, sourcing, making, delivering, and returning of products or services to customers. These operations play a crucial role in ensuring that the supply chain runs smoothly and efficiently, and they involve various stages such as procurement, production, inventory management, logistics, and customer service.

Some examples of operations in supply chain management include:

Procurement Operations:

This involves the sourcing and purchasing of raw materials, goods, and services required for production. Examples include selecting suppliers, negotiating contracts, and managing supplier relationships.

Production Operations:

This involves the manufacturing or assembly of products. Examples include production planning, quality control, and managing the production process.

Inventory Operations:

This involves managing inventory levels and optimizing the flow of goods through the supply chain. Examples include forecasting demand, setting safety stock levels, and managing stock replenishment.

Logistics Operations:

This involves the transportation and distribution of products. Examples include route planning, carrier selection, and managing transportation costs.

Customer Service Operations:

This involves ensuring that customers receive their products on time and that any issues are resolved quickly. Examples include order management, tracking shipments, and managing returns and exchanges.

Effective management of these operations is essential for supply chain efficiency, cost reduction, and customer satisfaction.
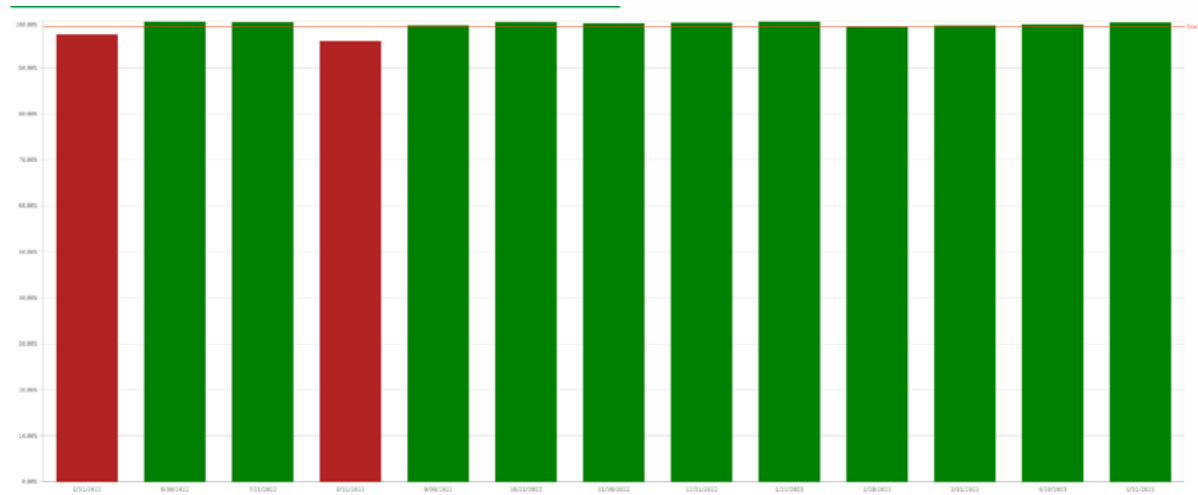
Cycle Count

Cycle Count $

Cycle Count $ measures the fiscal impact of inventory cycle counting activities. **Cycle counting is a technique for auditing inventory levels by regularly checking a small subset of inventory items at a time, rather than conducting a full physical inventory count.**

The Cycle Count $ KPI measures the financial value of the inventory that is audited through cycle counting activities, expressed as a %.

To determine what needs to be counted throughout the year an inventory utilization code matrix is developed. Below are some sample criteria for each code, and frequency of count for each:

➔ Utilization Code A: Top 70% extended usage value (4 times per counting period)

➔ Utilization Code B: Next 30% extended usage value (2 times per counting period)

➔ Utilization Code C: No usage with on hand value (1 time per counting period)

➔ Utilization Code D: For no inventory / no usage (not counted)

To improve this KPI, organizations can implement various strategies, such as increasing the frequency or scope of cycle counting activities, improving the accuracy of inventory records and systems, and providing training and support to employees involved in inventory management.

Overall, the "Cycle Count $" KPI is important in supply chain management because it **provides insight into the financial impact of inventory cycle counting activities and the effectiveness of inventory management practices.** By tracking this KPI over time and improving cycle counting activities, organizations can improve accuracy, reduce costs, and deliver better results for customers.

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Cycle Count $ Variance

Cycle Count $ Variance measures the financial variance or difference between the physical inventory count and the inventory records for a specific cycle counting period.

Cycle counting is a technique for auditing inventory levels by regularly checking a small subset of inventory items at a time, rather than conducting a full physical inventory count. The Cycle Count $ Variance KPI measures the financial value of the discrepancies or errors found during a cycle counting period.

For example, if an organization has an inventory record that indicates it has 100 units of a certain product in stock, but a cycle count reveals that only 90 units are present, the Cycle Count $ Variance would be calculated as the difference in value between the two numbers. If the product has a unit cost of $10, then the Cycle Count $ Variance would be $100. A high Cycle Count $ Variance KPI indicates that the organization is facing challenges with inventory accuracy, which can result in stock-outs, overstocks, and other issues.

Similar cycle count related KPI's include:

Cycle count piece metric:

KPI which measures the impact of cycle counts expressed as a % of total quantity rather than a dollar value.

SKUs To Be Counted:

Number of SKUs due to be counted in upcoming cycle counts.

SKUs Counted:

The number of SKUs already counted through cycle count process.
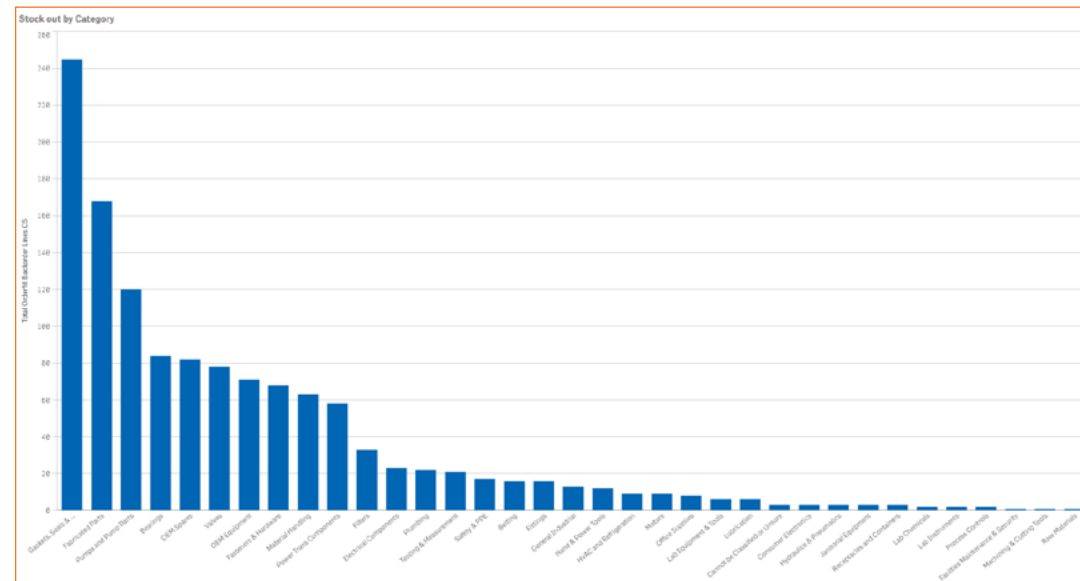
Fill Rate

Fill Rate

Fill Rate measures the **percentage of customer orders fulfilled with the complete requested quantity of products within a specified time.**
Fill rate is important in supply chain management because it provides insight into the organization's ability to meet customer demand and deliver products on time. A high fill rate indicates that the organization is effectively managing inventory levels, minimizing stock-outs, and ensuring that products are delivered to customers promptly.

For example, if an organization receives 100 customer orders, but is only able to fulfill 90 of them with the complete requested quantity of products within the specified time, the fill rate would be calculated as 90%. A higher fill rate indicates that the organization is meeting customer demand more effectively.

To improve this KPI, organizations can implement various strategies, such as improving demand forecasting and planning, optimizing inventory levels to minimize stock-outs, and improving order fulfillment processes to ensure that products are delivered to customers in a timely manner.

Overall, the "Fill Rate" KPI is important in supply chain management because it provides insight into the organization's ability to meet customer demand and deliver products on time. By tracking this KPI over time and improving inventory management and order fulfillment practices, organizations can increase customer satisfaction, improve sales, and deliver better results for their business.

Fill Rate – Critical Spare

Fill Rate - Critical Spare measures the **percentage of critical spare parts orders that are fulfilled with the complete requested quantity of products within a specified time.**
This KPI is specific to spare parts that are critical to the operation of key assets in a facility. A high fill rate for critical spares indicates that the organization is effectively managing spare parts inventory levels, minimizing downtime, and ensuring that the necessary parts are available when needed.

For example, if an organization receives 100 critical spare parts orders, but is only able to fulfill 80 of them with the complete requested quantity of products within the specified time frame, the fill rate for critical spares would be calculated as 80%. A higher fill rate indicates that the organization is better able to maintain operations and minimize downtime due to equipment breakdowns or other issues.

To improve this KPI, organizations can implement various strategies, such as improving spare parts forecasting and planning, optimizing inventory levels to minimize stock-outs, and improving order fulfillment processes to ensure that critical spare parts are delivered to the necessary locations in a timely manner.

Overall, the Fill Rate - Critical Spare KPI is one of the most important in supply chain management because it **provides insight into the organization's ability to maintain operations and minimize downtime due to equipment breakdowns or other issues.** By tracking this KPI over time and taking action to improve spare parts management and order fulfillment practices, organizations can improve operational efficiency, reduce costs, and ultimately deliver better results for their business.

Inventory Turn – Non-Critical Spare

Inventory Turn - Non-Critical Spare measures the number of times non-critical spare parts inventory is sold and replaced in a given time.

This KPI is specific to organizations that need to maintain a non-critical spare parts inventory to support production or maintenance operations. Non-critical spares are parts that are not necessary for critical operations or can be replaced without causing significant downtime. A high inventory turnover ratio for non-critical spares indicates that the organization is effectively managing spare parts inventory levels, minimizing carrying costs, and ensuring that the necessary parts are available when needed.

For example, if an organization sells and replaces its non-critical spare parts inventory **four times in a year**, the inventory turnover ratio for non-critical spares would be calculated as 4. A higher inventory turnover ratio indicates that the organization is better able to manage inventory levels and minimize carrying costs associated with excess inventory.

To improve this KPI ensure inventory forecasting is accurate, analyze inventory for slow moving or obsolete items.

Associated Metrics
➜ On Time Delivery
➜ Slow Moving / Obsolete
➜ Delivered Not Received
➜ Cycle Count Variance

Inventory Value

Inventory Value

A crucial operational KPI, Inventory value refers to the **monetary worth of the inventory** held by an organization to support its ongoing operations and maintenance activities. This value is determined by calculating the cost of all MRO materials, spare parts, and supplies present in the inventory.

Monitoring inventory value as a KPI helps organizations assess the efficiency of their MRO supply chain management. A high inventory value can indicate excessive stock levels, leading to increased carrying costs, obsolescence risks, and capital tied up in inventory. On the other hand, a low inventory value may imply potential stock-outs, impacting operational continuity and productivity.

By tracking inventory value, organizations can **optimize their inventory levels to strike a balance between having enough stock to meet demand and minimizing excess holding costs.** This KPI aids in inventory control, streamlining procurement processes, reducing lead times, and improving overall operational efficiency. Additionally, it provides insights into inventory turnover rates, allowing organizations to identify slow-moving or obsolete items that need attention.

Ultimately, monitoring inventory value as an operational KPI enables MRO supply chain managers to make data-driven decisions, optimize inventory investment, and maintain a well-functioning supply chain that supports smooth operations and minimizes costs.

To Improve this KPI

→ Optimize demand forecasting: Accurate demand forecasting helps in aligning inventory levels with actual requirements. By leveraging historical data, market trends, and predictive analytics, organizations can reduce the risk of stock-outs or overstocking, thereby improving inventory value.

→ Implement efficient inventory management systems: Investing in modern inventory management systems, such as inventory tracking software and automated replenishment systems, can enhance visibility and control over inventory. These systems enable real-time monitoring, efficient order placement, and better inventory turnover, leading to improved inventory value.

→ Streamline supplier relationships: Collaborating closely with reliable suppliers and establishing strategic partnerships can positively impact inventory value. Negotiating favorable terms, such as flexible delivery schedules and vendor-managed inventory programs, can help reduce lead times, minimize stockholding costs, and enhance overall supply chain efficiency.

Associated Metrics

→ Fill Rate

→ Order Cycle Time
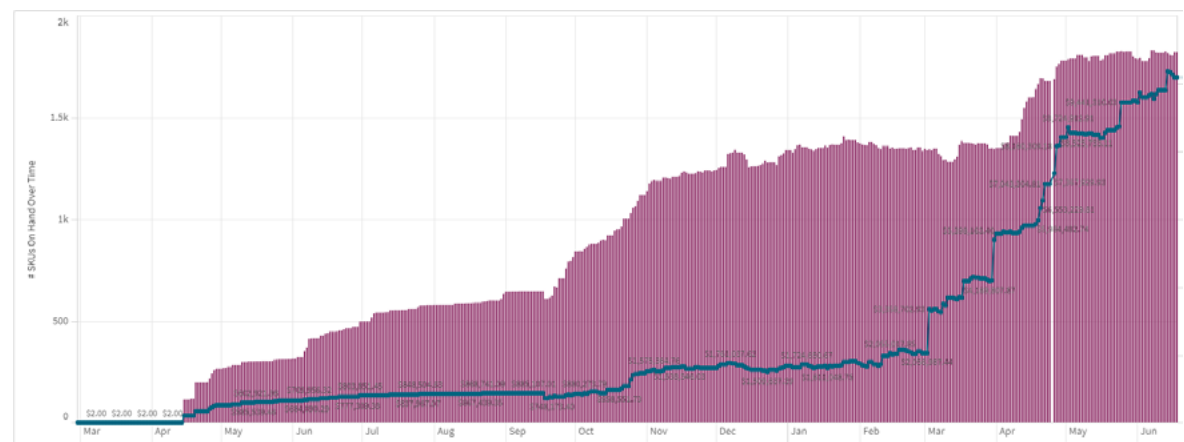
Note: This chart shows a warehouse inception as it is stocked up. Mature MRO organizations can expect to see far less volatility and explosive growth if properly managed.

Slow Moving & Obsolete Inventory

Slow moving inventory items are those that have a **low rate of consumption or turnover.** They tie up valuable capital and storage space, potentially leading to increased carrying costs and reduced cash flow. On the other hand, obsolete inventory items are no longer usable or relevant due to changes in technology, equipment, or discontinued products. They pose a risk of financial loss and can hinder operational efficiency.

To improve this KPI

To improve slow moving and obsolete inventory, regular inventory analysis should be performed to identify low-demand and outdated items. Sales data, demand patterns, and market trends will all contribute to this proactive decision-making. Develop efficient strategies for liquidating or disposing of such items, utilizing discounts, promotions, and collaborations with liquidators or secondary markets to recover value and free up space. Enhance demand forecasting accuracy and optimize inventory levels through data-driven insights and close collaboration with suppliers. These measures help minimize carrying costs and improve overall operational efficiency

Associated Metrics
➜ Inventory Value
➜ Days Since Last Used
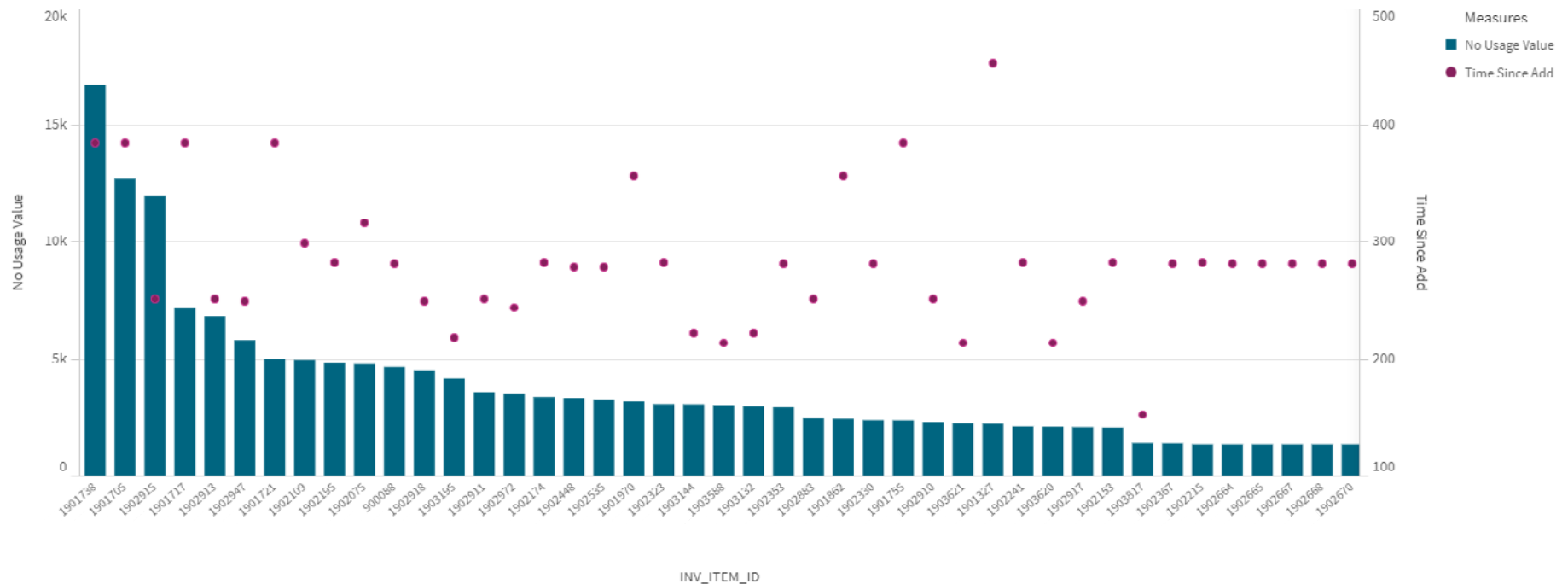
SKUs

Total SKUs measures the total number of unique items or products in inventory. This KPI provides a measure of the breadth and complexity of the inventory held by the company and is an important metric for inventory management.

Examples of Total SKUs KPI include:

➔ **Total Inventory SKUs:** This KPI measures the total number of unique items or products in the company's inventory. For example, if a company has 1,000 unique items in inventory, the Total SKUs is 1,000.

➔ **Online Catalog SKUs:** This KPI measures the total number of unique items or products listed in the company's online catalog. For example, if a company has 5,000 unique items listed in its online catalog, the Total SKUs is 5,000.

By monitoring the Total SKUs KPI, supply chain managers can gain insight into the complexity of their inventory and identify opportunities for optimization. A higher Total SKUs may indicate that the company is carrying excess inventory, which can lead to higher costs and decreased efficiency.

However, a lower Total SKUs may also indicate that the company is not offering enough variety to its customers, which can lead to lost sales. The Total SKUs KPI is an important metric for maintaining the right balance between inventory levels and customer demand.

To improve this KPI

If looking to improve the # of SKUs in inventory OR a catalog, a rationalization project should be undertaken to determine what truly needs to be in inventory, what is slow moving or obsolete, or what is not being purchased and can therefore be removed from inventory / a catalog.

Associated Metrics

➔ Catalog %

➔ Cleansed %

➔ Catalog Count

➔ Slow Moving & Obsolete

Total SKUs	Total Clients	Total Sites	Suppliers Sourced to SKUs	SDI SKU PO Count	SDI SKU Total Quantity	SDI SKU Total Spend (USD)
1.24M	43	125	10.95k	743.1k 353.5k 24 Month SDI SKU PO Count	149.2M 54.54M 24 Month SDI SKU QTY	674.1M 340.7M 24 Month SDI SKU Total Spend

Distinct Item Count by Client > Site
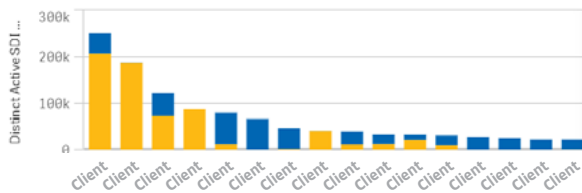
Distinct Item Count by Supplier
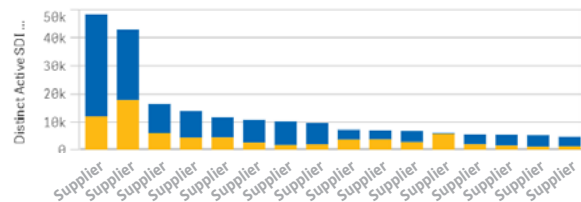
Distinct Item Count by Category

Non-Rush Orders
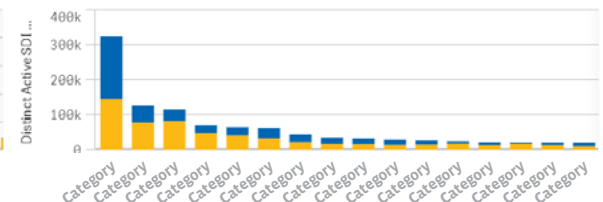
Non-Rush Orders by Buyer Id
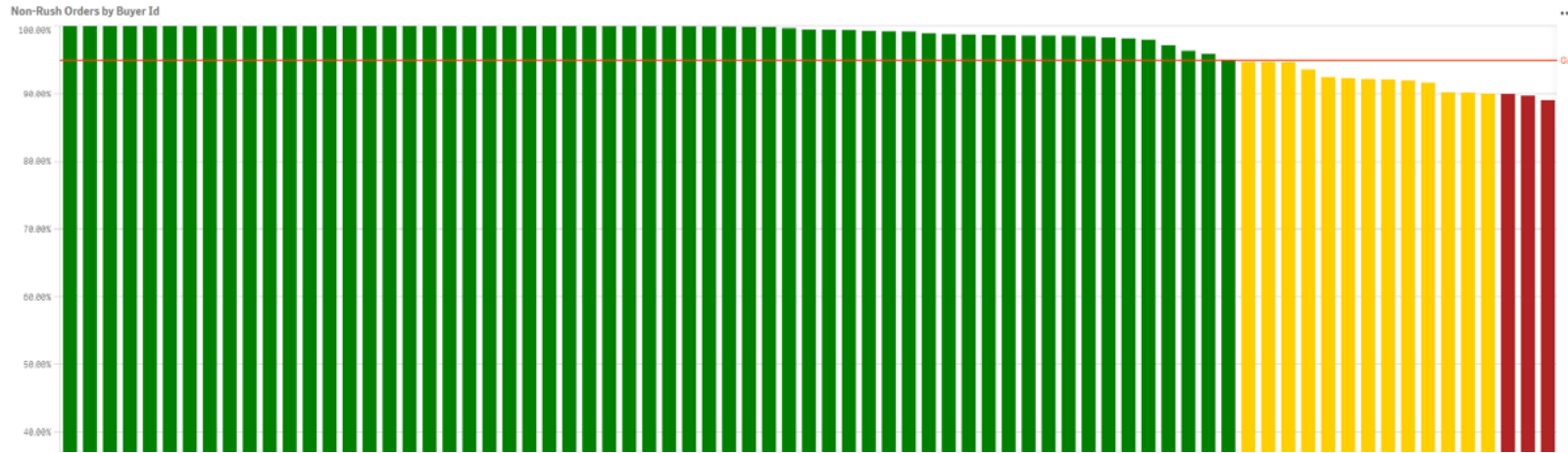
Non-Rush Orders measures the percentage of orders not classified as rush orders. Rush orders are orders that require expedited processing and delivery due to time constraints or urgent customer needs. Non-rush orders, on the other hand, are orders that can be processed and delivered within **standard lead times**.

This KPI is important for organizations to track because rush orders can have a significant impact on supply chain operations, such as **increased processing costs and reduced production capacity**. By tracking the percentage of non-rush orders, organizations can better plan and allocate resources to manage supply chain operations efficiently.

For example, if an organization processes 80 non-rush orders out of 100 total orders, the percentage of non-rush orders would be calculated as 80%. A higher percentage of non-rush orders indicates that the organization is better able to manage production and delivery schedules, reduce the cost of expedited processing and delivery, and allocate resources more effectively to meet standard lead times.

To improve this KPI

Organizations can implement various strategies, such as improving demand forecasting and production planning, streamlining order processing and fulfillment processes, and implementing effective inventory management practices to reduce stock-outs and expedited processing needs.

Overall, the "Non-Rush Orders" KPI is important in supply chain management because it provides insight into the effectiveness of an organization's **production planning, order processing, and delivery operations**. By tracking this KPI over time and improving supply chain operations, organizations can improve operational efficiency, reduce costs, and deliver better results for their business.

*Associated Metrics*
➜ Freight Costs
➜ Piece Price Savings

Order Cycle

SDI

Order Cycle Time measures the **time it takes to fulfill a customer order from the time the order is placed until the product is delivered to the customer**, compared to customer expectations, and expressed as a percent. If the order was processed and delivered on time, it is a pass, otherwise fail.

Order Cycle Time is important because it helps supply chain managers understand the speed and efficiency of their supply chain operations. This KPI usually presents the average time, in days or hours, it takes to fulfill an order.

Examples of Order Cycle Time Metric KPIs:

➔ *Total Order Cycle Time:* This KPI measures the time it takes to fulfill an order from the time the order is placed to the time the product is delivered to the customer. It includes all the processes involved in fulfilling an order, including procurement, manufacturing, transportation, and delivery.

➔ *Manufacturing Lead Time:* This KPI measures the time it takes to manufacture a product once the order is placed. It includes all the processes involved in manufacturing the product, such as sourcing raw materials, assembling the product, and performing quality control checks.

➔ *Order Processing Time:* This KPI measures the time it takes to process an order once it is received. It includes all the processes involved in processing an order, such as order entry, credit checks, and order verification.

➔ *Shipping Time:* This KPI measures the time it takes to ship a product once it has been manufactured and is ready for delivery. It includes all the processes involved in shipping the product, such as packaging, labeling, and transportation.

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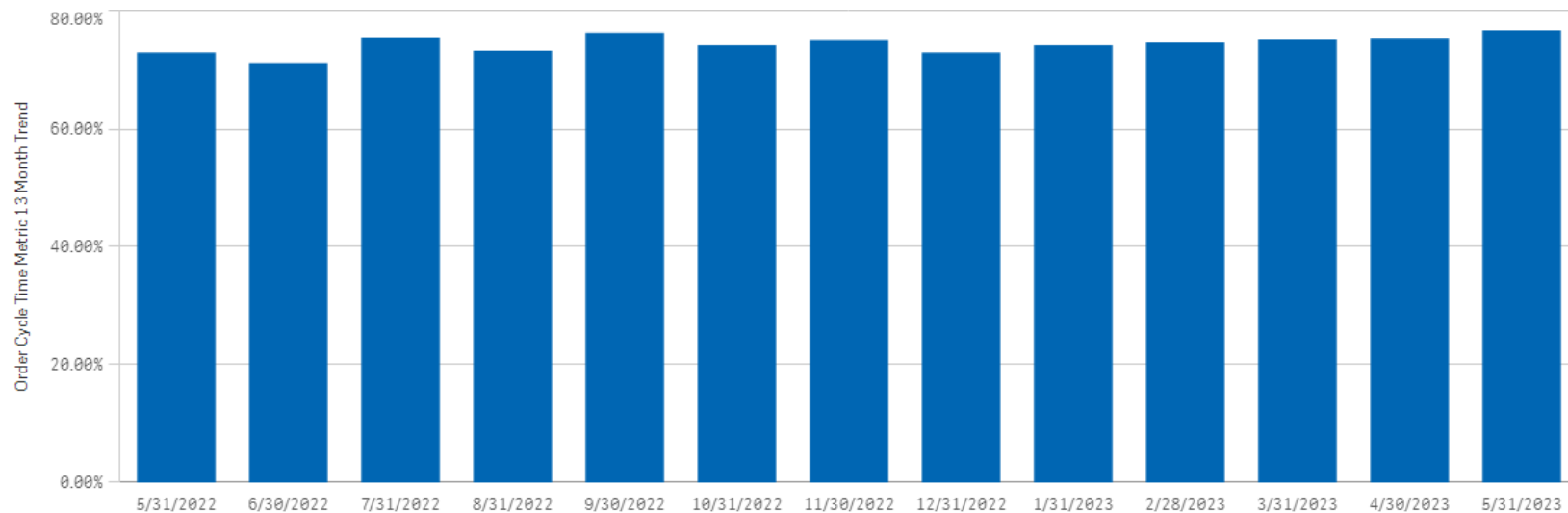
Order Cycle Time – Mean Business Days & Median Business Days

Order Cycle Time - Mean Business Days and Median Business Days are similar metrics expressed in days rather than percentages. These breakdowns can better help us root cause issues and implement solutions.

By monitoring the Order Cycle Time, supply chain managers can identify areas of the supply chain where there are delays or inefficiencies and take corrective actions to improve the overall performance of the supply chain. This KPI is important for measuring the effectiveness of supply chain operations and making informed decisions on how to optimize the supply chain.

To improve this KPI, ensure orders are sourced quickly and efficiently. Working with preferred supplier partners shows a direct correlation in receiving goods on or before the expected due date.

Time to Approval (Minutes) measures the time taken to approve a request or order. This KPI measures the time elapsed from the moment a request or order is submitted to the time when it is approved by the relevant personnel or department. For example, if a PO is submitted at 10:00 AM and is approved at 11:00 AM, the Time to Approval is 60 minutes.

Time to Dispatch (Minutes) measures the time taken to dispatch goods after they have been ordered or requested. This KPI measures the time elapsed from the moment a request or order is approved to the time when the goods are dispatched for delivery.

Examples of Time to Dispatch KPIs:
➔ **Order Dispatch:** This KPI measures the time taken to dispatch an order after it has been approved. For example, if an order is approved at 10:00 AM and the goods are dispatched at 11:00 AM, the Time to Dispatch is 60 minutes.

By monitoring the Time to Approval KPI and Time to Dispatch KPIs, supply chain managers can **identify bottlenecks in the approval process and take corrective actions to improve the overall efficiency of the supply chain.** A lower Time to Approval KPI indicates that the approval process is faster, reducing the lead time for the request or order to be fulfilled. This KPI is essential for maintaining customer satisfaction, reducing stock-outs, and optimizing inventory levels.

To improve this KPI
Ensure that approvals are set at the appropriate levels, routed to the correct person and if an order is stuck in approval status, escalate to the appropriate level.

Associated Metrics
➔ Mfg Accuracy %
➔ Category Accuracy %
➔ Piece Price Savings

Req to PO Time

Req to PO Time SDI NSTK measures the **time it takes for a purchase requisition to be converted into a purchase order** for a non-stock order. This measure is expressed as a percent based on client service level agreements and typically has either a 24- or 48-hour requirement. A longer req to PO time allows sourcing agents more time to acquire quotes and explore piece price savings, at the sacrifice of speed.

By monitoring the Req to PO Time SDI NSTK KPI, supply chain managers can identify areas where there are delays or inefficiencies in the procurement of non-stock items using the SDI process. A shorter Req to PO Time SDI NSTK KPI indicates that the SDI process is efficient and that non-stock items can be obtained quickly, reducing the need for carrying high inventory levels. This KPI is important for

ensuring that non-stock items are available when needed to meet customer demand and avoid stockouts, and for reducing the cost of carrying inventory.

Requisition to Purchase Order Time: This KPI measures the time it takes for a purchase request to be converted into a purchase order. It includes all the processes involved in converting a requisition to a purchase order, such as approving the requisition, creating the purchase order, and sending it to the supplier.

To improve this KPI, ensure buyers have expertise in the products they are buying. If a requisition is submitted without enough information to make a purchasing decision, a request for more information should be sent immediately. When sourcing products,

Req to PO Time/PO Time SDI by Month
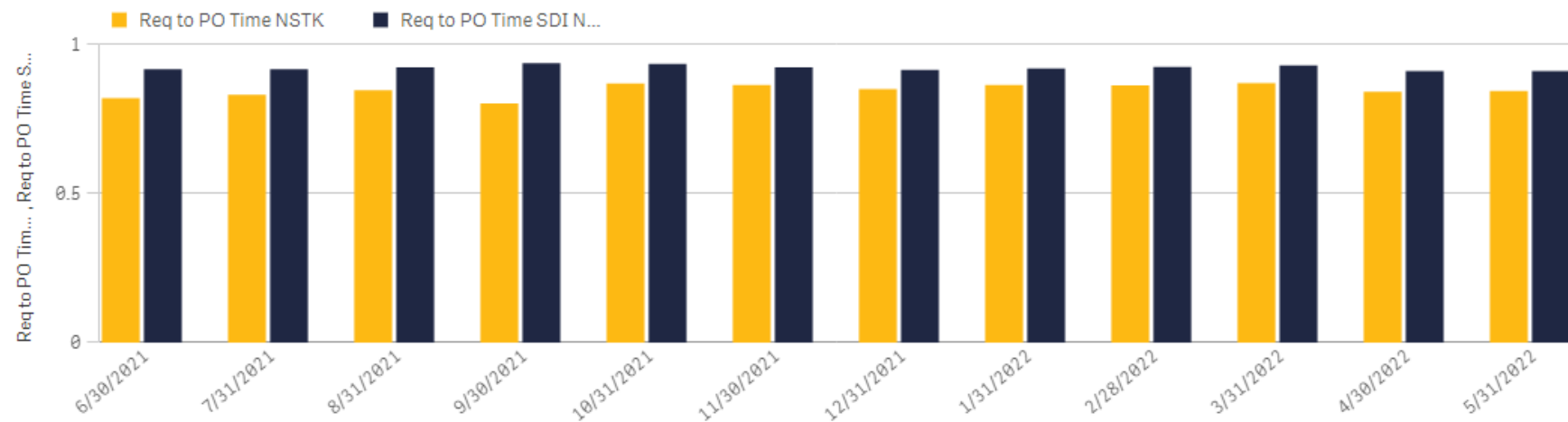
a shorter req to PO time typically means less quotes which can translate to less savings. For this reason, it's a balancing act to ensure operations hit SLA targets without immediately accepting at the first quote received.

Purchase Order Acknowledgment Time: This KPI measures the time it takes to receive acknowledgment of the purchase order from the supplier. It includes the time taken by the supplier to review the purchase order and provide confirmation that they can fulfill the order using the SDI process.

Client Approval Req-Non Stock measures whether or not the cycle time of orders that require approval from clients are meeting service level agreements. Since client approvals are a portion of the purchasing process that SDI doesn't control, understanding the role client approvals play in other metrics such as Req to PO, On-time delivery and others is crucial.

The Client Approval Req-non stock KPI helps supply chain managers to track and analyze the efficiency of their non-stock item procurement process.

To calculate the Client Approval Req-non stock KPI, the total number of non-stock items that require client approval is divided by the total number of non-stock items ordered or purchased. The resulting percentage is then tracked over time to identify trends and areas for improvement in the supply chain process.

Associated Metrics
→ Mfg Accuracy %
→ Category Accuracy %
→ Piece Price Savings
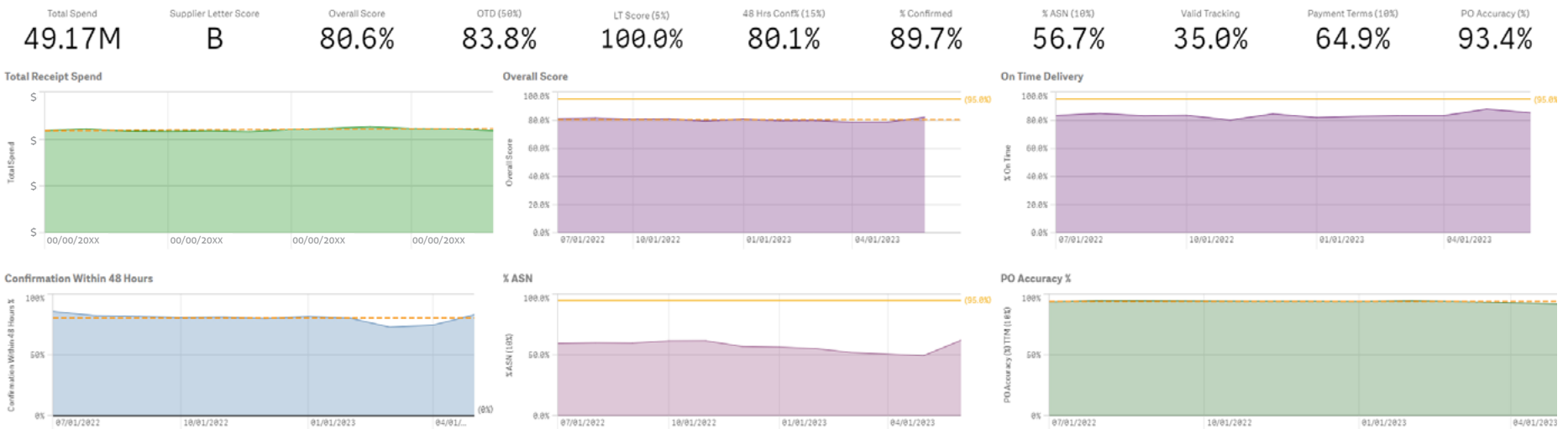
Procurement Metrics

Procurement in the MRO supply chain is the process of **sourcing, purchasing, and acquiring** essential MRO materials, spare parts, and supplies. It encompasses selecting reliable suppliers, negotiating contracts, and ensuring timely delivery of high-quality products at optimal prices. Procurement holds strategic value for organizations as it directly influences operational continuity, cost management, and overall supply chain efficiency.

The information gathered through procurement activities is crucial in constructing **Wave plans**, which are used to plan and execute strategic projects. Wave plans consider the availability of necessary MRO items, lead times from suppliers, and inventory levels to ensure the seamless execution of maintenance and repair projects. By aligning Procurement Wave plans with the overall supply chains strategy, organizations can optimize resource allocation, minimize downtime, and enhance project outcomes while maintaining cost-effective operations.

Supplier Score Metrics

A Balanced Supplier Scorecard is a **performance management tool that combines multiple metrics and key performance indicators (KPIs) to provide a comprehensive view of supplier performance across different functions and measurements.** It is designed to align strategy with supplier goals and objectives and to provide a framework for measuring and managing performance over time.

A supplier scorecard typically includes a mix of metrics, such as confirmation rate, on-time delivery (OTD), lead time score, payment term score, Advanced Shipping Notice (ASN), and PO accuracy. It provides a balanced view of a supplier's performance, considering both short-term performance and longer-term strategic objectives.

Total Spend	Supplier Letter Score	Overall Score	OTD (50%)	LT Score (5%)	48 Hrs Conf% (15%)	% Confirmed	% ASN (10%)	Valid Tracking	Payment Terms (10%)	PO Accuracy (%)
49.17M	B	80.6%	83.8%	100.0%	80.1%	89.7%	56.7%	35.0%	64.9%	93.4%

The purpose of a supplier scorecard is to help organizations make better decisions and drive continuous improvement by providing a holistic view of performance across different areas. It allows organizations to track progress toward strategic goals and identify areas for improvement, and make data-driven decisions that are aligned with organizational objectives.

To develop and implement a supplier scorecard, organizations typically work with cross-functional teams to identify key metrics and KPIs, develop performance targets, and establish reporting and monitoring processes. Effective communication and engagement with stakeholders are also critical to ensure buy-in and alignment with organizational objectives.
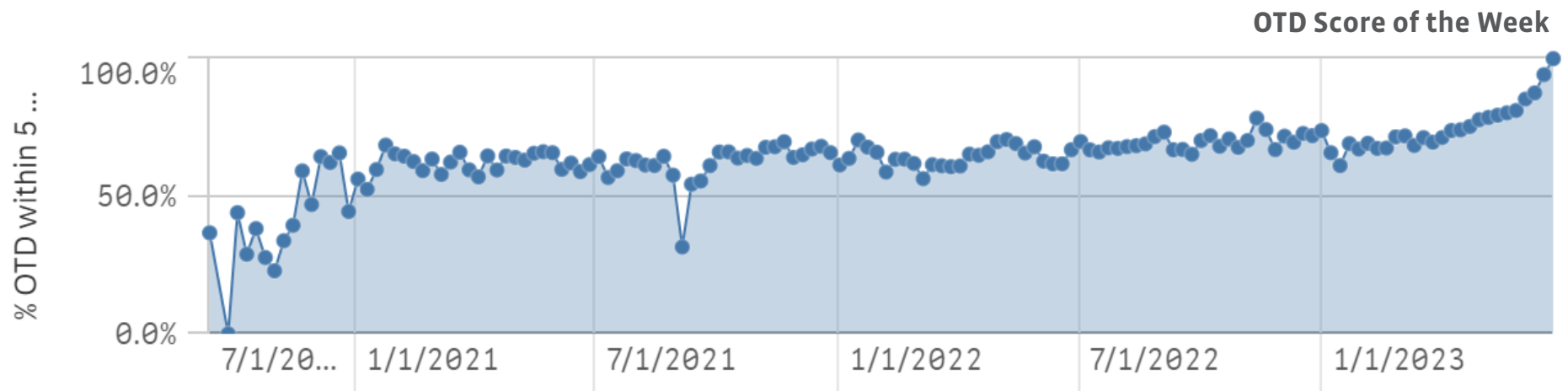
Associated Metrics:

➜ Overall Supplier Score
➜ Supplier Letter Score

On-Time Delivery (OTD)

On Time Delivery (OTD) is a performance metric measuring the percentage of orders or shipments delivered to the customer or destination on or before the agreed-upon delivery date. In the supply chain industry, on-time delivery is critical to maintaining high levels of customer satisfaction, minimizing inventory carrying costs, and ensuring the smooth flow of goods through the supply chain.

To calculate OTD, the **actual delivery date is compared to the first delivery date confirmed by the vendor** for each order or shipment. If the delivery is made on or before the first confirmed delivery date, it is considered on-time. If the delivery is made after the requested date, it is considered late or delayed.

OTD is an important metric for both buyers and suppliers as it helps to **ensure that products or services are delivered on time and in accordance with the customer's expectations.** It is typically tracked and monitored closely to identify potential problems or issues in the supply chain, and to identify opportunities for improvement in areas such as transportation, logistics, and inventory management.

OTD Score of the Week

A PO (Purchase Order) due date is the date by which the ordered goods or services are expected to be delivered by the supplier to the buyer. The due date is typically specified on the purchase order itself and is agreed upon by both the buyer and supplier during the purchasing process.

The PO due date is an important component of the supply chain process as it helps to ensure that the buyer has sufficient inventory or resources on hand to meet their own production or service delivery schedules. It also helps the supplier to plan their own production, logistics, and delivery schedules to ensure that they meet the agreed-upon delivery date.

In some cases, the PO due date may be negotiable or subject to change based on factors such as changes in demand, supply chain disruptions, or other unforeseen circumstances. In such cases, the buyer and supplier may need to communicate and collaborate closely to adjust delivery schedules and ensure that any changes are communicated and accounted for in a timely manner. Associated Metric: % Past Due Orders

To improve this KPI items should be sourced to preferred suppliers with a history of performance. Collecting and pinging tracking numbers from partner suppliers improves visibility into product delivery allowing organization to adjust expectations if an item will be late, and to be alerted when a package is marked delivered by a carrier. A PO (Purchase Order) due date is the date by which the ordered goods or services are expected to be delivered by

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Associated Metrics:
- ➜ % OTD by First Promised
- ➜ % OTD within 5 Days
- ➜ Days PO to DLV
- ➜ On-Time Delivery NSTK
- ➜ OTD (%): TTM (50%)
- ➜ Requested by OTD - NSTK
- ➜ % Past Due Orders

PO Confirmation

A **PO Confirmation** is a document sent by a supplier to a buyer in response to a purchase order. It serves as a formal acknowledgment that the supplier has received and reviewed the purchase order and that they agree to fulfill the order as specified.

The PO confirmation typically includes **important details** such as the order number, the delivery date, the quantity and description of the products or services being ordered, the price per unit, and any applicable terms and conditions. The confirmation may also include additional information such as shipping or tracking information, special instructions, or any changes or modifications to the original order that have been agreed upon.

The PO confirmation is an important part of the supply chain process as it helps to ensure that both the buyer and supplier are on the **same page** regarding the details of the order. It can also help to reduce errors, prevent misunderstandings, and improve overall communication and collaboration between the parties involved.

To improve PO Confirmations, POs should be placed with suppliers who have demonstrated a capability to accurately confirm orders when received through electronic means such as EDI. If a supplier does not currently have capabilities and is a potential strategic partner, these capabilities can be developed.

Associated Metrics
- → % Confirmed
- → % PO Lines Confirmed
- → % PO Lines Open Past 48 Hours Not Confirmed
- → Acknowledged (%): TTM (5%)
- → Average Confirmation Lines per Week
- → Unconfirmed PO Lines
- → Confirmation within 48 Hours

Advanced Shipping Notice (ASN)

An **Advanced Shipping Notice** (ASN) is a document or electronic message that provides detailed information about a pending delivery of goods. It is typically sent by a supplier or a shipping carrier to a buyer or receiver in advance of the shipment's arrival.

The ASN typically includes information such as the **quantity and type of products being shipped, the expected delivery date and time, the carrier's name and tracking number**, and any special instructions or handling requirements.

The ASN is an important part of the supply chain process as it allows the receiver to prepare for the shipment and plan for its arrival, ensuring that the goods are received and processed as efficiently as possible. The use of ASNs can help reduce errors, improve inventory management, and enhance overall supply chain visibility and efficiency.

To improve this KPI, orders should be placed with preferred suppliers who have shown the ability to provide advanced shipment notifications promptly. In an increasing number of cases, suppliers can provide tracking numbers along with advanced shipment notifications for full visibility into the shipment.

Associated Metrics

➔ % ASN (5%)
➔ ASN %
➔ Days PO to ASN
➔ Verified Tracking %

Overall Score by Week

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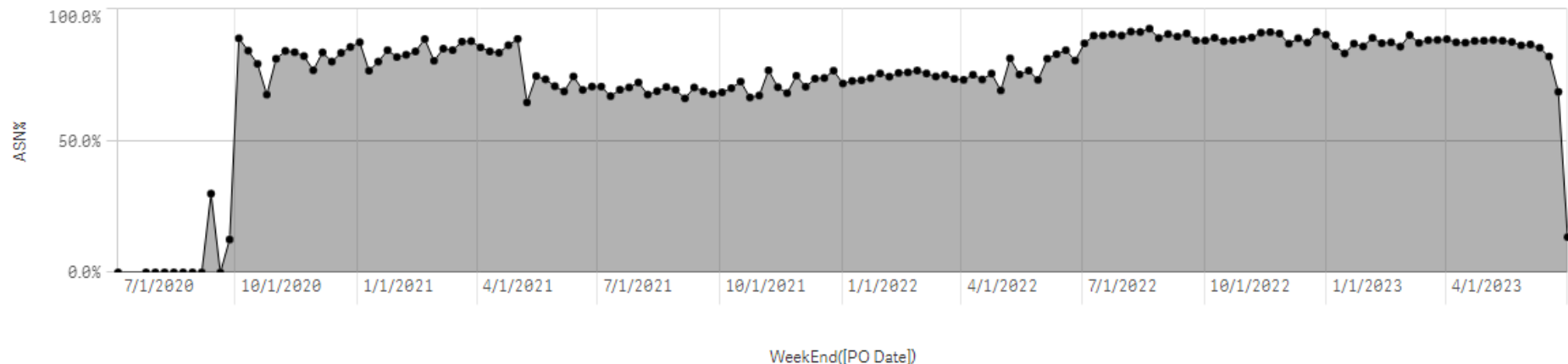
PO Accuracy

PO Accuracy measures whether data points such as price and quantity match throughout the process of placing, confirming and invoicing of a purchase order. By tracking the PO Accuracy supply chain managers can identify areas where the PO process is not working efficiently and where improvements can be made.

For instance, a low PO accuracy can indicate issues with vendor performance, communication, or data management. By addressing these issues, companies can improve the accuracy of their purchasing process, reduce the risk of overpayment or underpayment to suppliers, and prevent discrepancies in inventory levels.

Examples of PO Accuracy KPIs in supply chain management:

Total POs:
This KPI measures the number or percentage of POs that were accurately fulfilled over the last twelve months. For instance, if a company issued 100 POs in the last twelve months, and 90 of those POs were fulfilled without errors, the PO Accuracy KPI would be 90% or 90/100.

Spend:
In terms of spend, this KPI measures the total amount of money spent on POs that were accurately fulfilled over the last twelve months. For instance, if a company spent $1,000,000 on POs in the last twelve months, and $900,000 of that spend was for POs that were accurately fulfilled, the PO Accuracy would be 90% or $900,000/$1,000,000.

Vendor Performance:
In terms of vendor performance, this KPI measures the accuracy of PO fulfillment by vendors over the last twelve months. For instance, if a company has ten vendors, and nine of those vendors accurately fulfilled 100% of their POs over the last twelve months, the PO Accuracy for vendor performance would be 90% or 9/10.

Associated Metrics
➔ ACK = Invoice
➔ ACK = PO

Ack=PO

Ack=PO stands for Acknowledgment to Purchase Order. It measures whether a supplier acknowledges a purchase order after it has been sent by the company. By improving the Ack=PO, companies can ensure that purchase orders are **acknowledged in a timely manner**, which can help to improve the speed and reliability of their supply chain processes.

For example, if the ACK=PO is consistently low, it may indicate that there are issues with the supplier or supply chain processes that need to be addressed. Conversely, if the Ack=PO for the trailing twelve months is consistently high, it indicates that the supply chain processes are working efficiently.

Associated Metrics
➔ ACK = Invoice
➔ PO Accuracy (%)

PO=Invoice

PO=Invoice stands for Purchase Order to Invoice;
it measures whether a PO matches the supplier invoice. By tracking the performance of this KPI over time, companies can identify trends in their PO=Invoice TTM and take action to improve their tracking the performance of this KPI over time, companies can identify trends in their PO=Invoice TTM and take action to improve their supply chain processes.

For example, if the PO=Invoice TTM for the trailing twelve months is consistently low, it may indicate that there are issues with the supplier or supply chain processes that need to be addressed. Conversely, if the PO=Invoice TTM for the trailing twelve months is consistently high, it indicates that the supply chain processes are working efficiently.

Associated Metrics
➜ PO = Invoice
➜ ACK = PO

Payment Terms

Payment terms refers to the agreed-upon conditions under which a buyer will make payment to a supplier for goods or services received. It outlines the timeline and method of payment, and any discounts or penalties that may apply for early or late payment.

Payment terms are an important aspect of supply chain management as they can impact cash flow, inventory levels, and overall business performance. They are typically negotiated between buyers and suppliers as part of the procurement process and maybe based on factors such as the volume of goods purchased, the creditworthiness of the buyer, and prevailing market conditions. Common payment terms in the supply chain industry include:

➜ **Net payment terms:** payment is due a set number of days after receipt of goods or invoice.
➜ **Cash on delivery (COD):** payment is made at the time of delivery.
➜ **Advance payment:** payment is made in advance of delivery or shipment.
➜ **Partial payment:** payment is made in installments over a period of time.
➜ **Letter of credit:** payment is guaranteed by a financial institution and released upon delivery of goods or services.

Effective payment term management requires clear communication and agreement between buyers and suppliers, accurate and timely invoicing and payment processing, and ongoing monitoring and management of cash flow and financial performance

To improve this KPI
Organizations can work with suppliers to negotiate more favorable payment terms. Suppliers will see an increase in payment terms as a benefit to purchasing organizations as it increases their working capital, so it's reasonable that a supplier may ask for volume guarantees or some price concessions in exchange for this ask.

Associated Metrics
➜ Payment Term Score TTM (5%)

Lead Time

Lead time refers to the amount of time it takes for a product or component to move through the supply chain from the point of order to the point of delivery. It includes the time required for production, transportation, customs clearance, and other processes involved in getting the product to the customer.

Lead time is an important metric in supply chain management as it helps buyers and suppliers to **plan and coordinate** their activities and ensure that products are delivered on time. It can also help to minimize inventory costs by ensuring that products are ordered and delivered in a timely and efficient manner.

Lead time may vary depending on a range of factors such as the complexity of the product, the location of suppliers and customers, the mode of transportation used, and any regulatory or customs requirements. By accurately estimating lead times and building in appropriate buffer times, supply chain stakeholders can **reduce the risk of stock-outs, delays, and other disruptions** that can negatively impact customer satisfaction and business performance.

Effective lead time management requires close collaboration between buyers and suppliers, clear communication of expectations and requirements, and ongoing monitoring and adjustment of supply chain processes to ensure that lead times are optimized, and product delivery is timely and reliable.

To improve this KPI
Historical lead times of suppliers should be analyzed and used to identify items with extended lead times and opportunities for resourcing from another supplier. If an item is critical or vendor lead times are becoming an issue, an item can be brought into inventory and stored, or inventory min's & max's can be adjusted to ensure the product will be available for consumption when needed.

Associated Metrics

➜ LT Score (%) TTM (5%)

Valid Tracking

Valid tracking in the supply chain industry is the ability to **track and trace the movement of goods or products from origin to destination**. It involves technology such as Tracking Numbers, barcodes, RFID tags, or GPS tracking devices to provide real-time visibility into the location and status of shipments as they move through the supply chain.

Valid tracking enables supply chain stakeholders such as buyers, suppliers, logistics providers, and customers to **monitor** and **manage** the movement of goods, **ensure** on-time delivery, and quickly **identify** and **resolve** any issues or delays that may arise. It can also help to **improve** inventory management, **reduce** the risk of loss or theft, and **enhance** overall supply chain visibility and efficiency.

To ensure valid tracking, it is important to have accurate and up-to-date information on shipment details such as the carrier, shipment ID, expected delivery date, and any relevant customs or regulatory information. This information should be communicated and shared among all supply chain stakeholders in a timely and transparent manner to ensure that everyone has access to the information they need to effectively manage their operations.

To improve this KPI

Organizations should work with suppliers to capture this data at time of shipment, particularly those that electronically communicate ASN's. Purchase order terms can also be updated instructing recipients to provide tracking information and use preferred carrier to drive compliance.

Associated Metrics

➜ % PO's with Valid Tracking (5%)
➜ Verified Tracking %

Supplier Contracts

A supplier contract is a **legally binding agreement between a buyer and a supplier** that outlines the terms and conditions of their business relationship. The contract typically includes details such as the price and quantity of goods or services to be supplied, the payment terms, delivery schedules, quality standards, warranties, and any other terms that are relevant to the specific business transaction.

Supplier contracts are an important part of the supply chain process as they help to establish clear expectations and responsibilities for both the buyer and supplier. They can also help minimize misunderstandings and disputes and provide a framework for resolving any issues that may arise during the business relationship.

Supplier contracts may be negotiated and customized to meet the specific needs and requirements of the buyer and

may be short-term or long-term in duration depending on the nature of the business relationship. They may also include provisions for renewing or extending the contract and mechanisms for terminating the contract if needed.

To improve this KPI

Organizations need to understand what items are most important to put under contract, whether due to price, lead time or availability concerns. Once the universe of items that should be contracted is known, market basket type sourcing events can be conducted to see which suppliers are able to provide and who has the most favorable terms.

Associated Metrics
➜ % PO Key Under Contract
➜ Active Supplier Contracts
➜ Contract $
➜ Current Year Contract Flg Spend
➜ Current Year Program Contract Spend
➜ Total Spend Under Contract
➜ Total Supplier Contracts

Program Contract Spend by Supplier
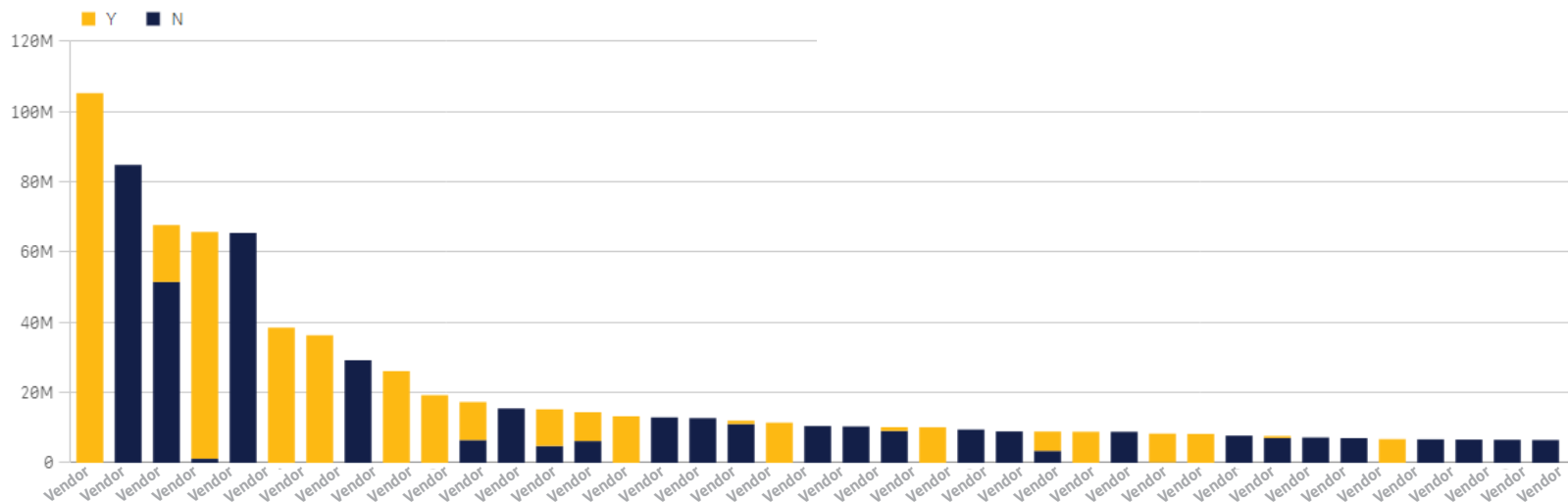
Freight

Freight cost is the cost associated with the **transportation of goods** or products from one location to another. In the supply chain industry, freight cost is an important component of the overall cost of goods sold and can have a significant impact on profitability.

Freight costs may vary depending on a range of factors such as the mode of transportation used (e.g. truck, rail, air, sea), the distance traveled, the weight and volume of the goods being shipped, and any additional fees or charges such as customs duties or insurance costs. Freight costs can be calculated and managed in many ways, depending on the needs and requirements of the buyer and supplier.

For example, some companies may negotiate shipping rates with carriers based on the volume of shipments they make, while others may use freight brokers or logistics providers to help them find the most cost-effective shipping options.

To improve this KPI
Effective management of freight costs is critical to maintaining profitability and competitiveness in the supply chain industry and may involve strategies such as optimizing shipping routes, consolidating shipments, and leveraging technology to improve visibility and efficiency in transportation and logistics operations.

Associated Metrics
➜ % PO's with Freight Associated
➜ Freight Spend
➜ POs with Freight Associated
➜ Spend % with Freight Associated
➜ Spend with Freight Associated

Freight Spend by Bill Vendor
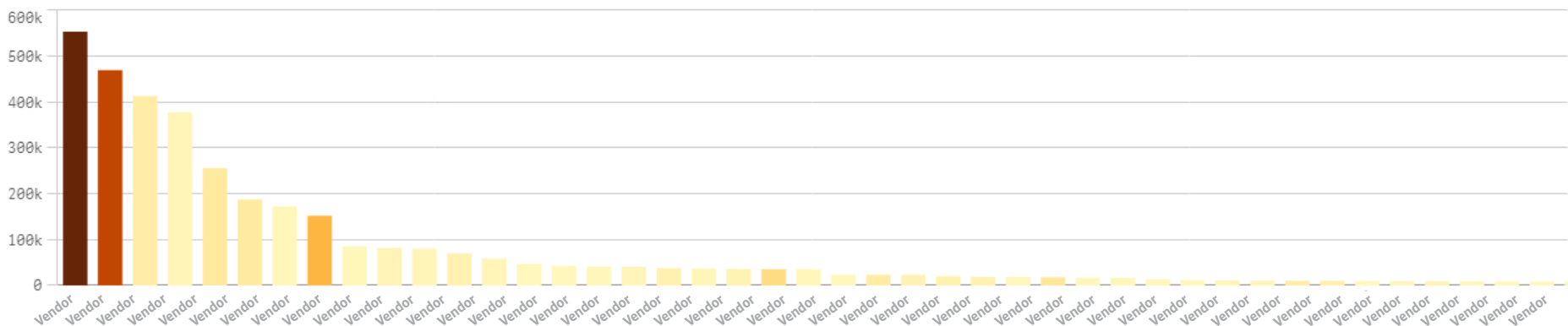
Open POs

An Open PO refers to a purchase order that has been issued by a buyer to a supplier but has **not yet been fulfilled or closed**. It represents a contractual agreement between the buyer and supplier for the delivery of goods or services at an agreed-upon price and under specified terms and conditions.

Open PO metrics are an important tool in supply chain management as they provide **visibility and control** over the purchasing process, enabling buyers to track their orders and manage their inventory more effectively. They also help suppliers to plan their production and delivery schedules, ensuring that they have the resources and capacity to meet their obligations under the purchase order.

POs may remain open for varying periods depending on the transaction's nature and the specific terms and conditions of the purchase order. In some cases, they may be used to facilitate ongoing or recurring purchases, while in other cases they may be closed once the goods or services have been delivered and accepted by the buyer.

If an order is still open and undelivered after the first confirmed due date, it is considered past due. The past due metric is the inverse of the on-time delivery metric, showing the % of orders that is later than expected.

To improve this KPI

Items should be sourced to preferred suppliers with a history of performance. Collecting and pinging tracking numbers from partner suppliers improves visibility into product delivery allowing organization to adjust expectations if an item will be late, and to be alerted when a package is marked delivered by a carrier.

Associated Metrics
→ % PO Lines Open Past 48 Hours
→ % PO Lines Open Past 48 Hours Not Confirmed
→ Average Days Open
→ Average Days Open PO Aging
→ Open PO NSTK

Open PO's Aging Summary

Operating Busin... 🔍	Open PO History... 🔍			
	On Time	4 to 7 days	7 to 10 days	Greater than 10
BUSINESS UNIT	70.55%	4.02%	2.76%	22.67%
BUSINESS UNIT	18.96%	-	-	81.04%
BUSINESS UNIT	49.46%	5.27%	3.63%	41.64%
BUSINESS UNIT	49.12%	5.07%	3.48%	42.33%
BUSINESS UNIT	41.25%	5.31%	3.33%	50.11%

Expedition/Expedited

Expedition refers to the process of **accelerating the delivery** of goods or products to meet urgent or time-sensitive needs. It involves expediting the movement of goods through the supply chain, often by bypassing some of the standard procedures or processes to ensure faster delivery.

Expedition may be necessary when there are **unexpected changes** in demand, disruptions in supply chain operations, or other unforeseen circumstances that require urgent action to ensure that goods are delivered on time. It may involve using alternative shipping methods, prioritizing certain orders over others, or expediting customs clearance processes to ensure that goods can be delivered as quickly as possible.

While expedition can be an effective way to meet urgent delivery needs, it may also involve additional costs such as rush shipping fees or other charges. As such, it is important for supply chain stakeholders to carefully evaluate the costs and benefits of expedition and weigh them against the potential impact of delayed delivery or other disruptions to the supply chain.

To improve this KPI

Clear communication on delivery expectations and the technology to transmit updates are critical. If an order is placed urgently a supplier should understand the ask, confirm availability, ship as soon as possible and provide a tracking number. If this process is followed and expectations do not change after placement of the expedition of the order is not needed.

Associated Metrics

➔ Average Expedite Lines per Week
➔ Distinct PO Lines Expedite

Expedite Lines by Vendor
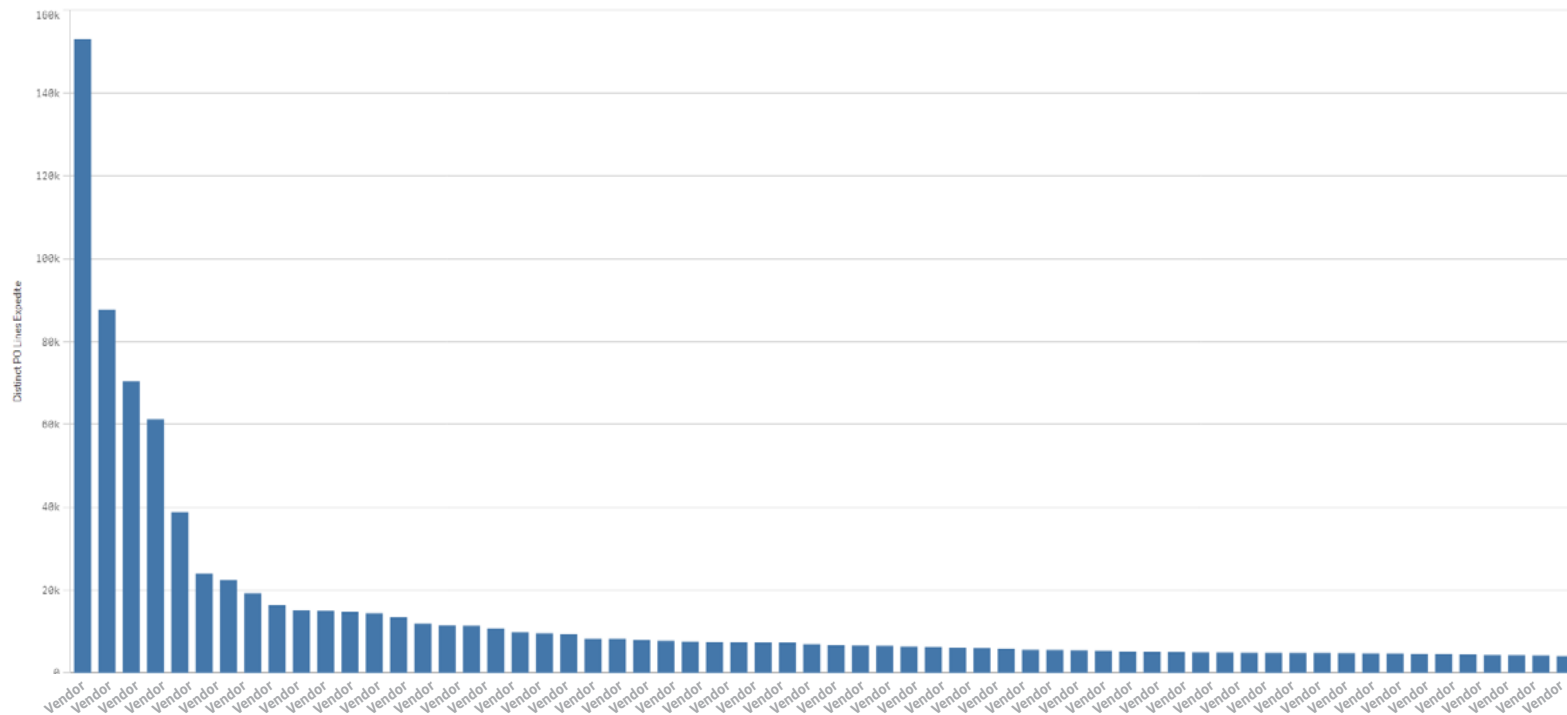
Preferred Suppliers

Preferred suppliers are companies or vendors selected by a buyer or organization as their preferred or **primary sources** of goods or services. These suppliers are typically chosen based on a range of factors such as quality, price, delivery time, reliability, and the overall value they provide to the buyer's supply chain operations.

Having preferred suppliers can offer many benefits to a buyer, including increased **efficiency**, improved **consistency** in product or service quality, better **pricing** and terms, and more streamlined **communication** and collaboration. Preferred suppliers are often given priority over other vendors when it comes to fulfilling orders, and they may also receive other benefits such as longer-term contracts, increased volume of business, and more favorable payment terms.

To become a preferred supplier, a company typically needs to demonstrate a track record of performance and reliability, as

well as a strong commitment to meeting the buyer's needs and requirements. They may also need to undergo a thorough evaluation process to ensure that they meet the buyer's standards and expectations.

To improve this KPI
Organizations should be constantly analyzing existing suppliers' performance while keeping their eyes open for new potential preferred partners. Since supplier performance is significantly higher with preferred suppliers than those that aren't, maintaining a balance of the right group of suppliers with the right capabilities to deliver best in class performance is critical.

Associated Metrics
- ➜ % Open PO Lines with Preferred Suppliers
- ➜ Preferred Supply PO Lines %
- ➜ Preferred Supplier Spend
- ➜ Preferred Suppliers - 80% of Spend

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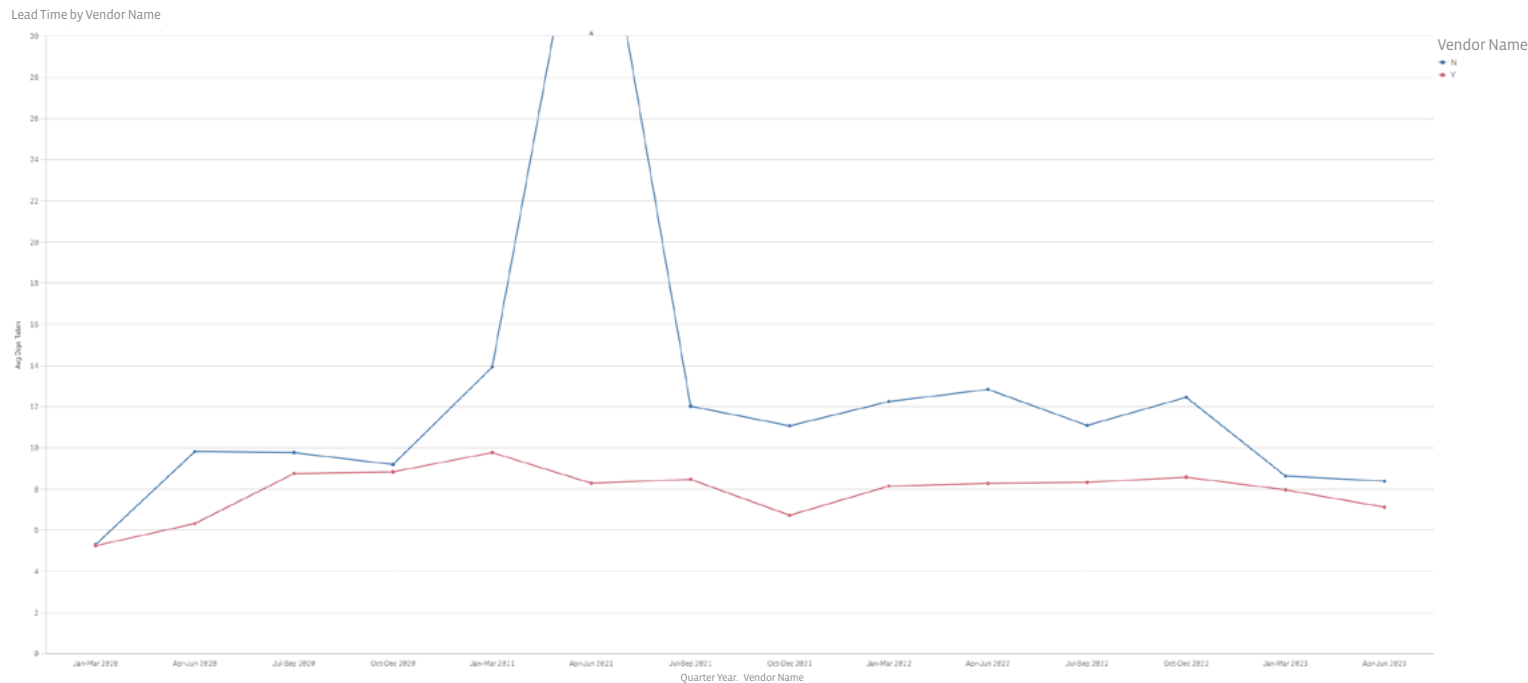
P-Card Transactions

P-card orders in the supply chain industry refer to **purchases made using a purchasing card** or P-card. A P-card is a corporate credit card used by authorized employees to purchase goods and services for their organization. P-card orders are typically used for low-value, high-volume purchases such as office supplies, small equipment, and travel expenses.

P-card orders can help streamline the procurement process by reducing paperwork and administrative costs associated with purchase orders and invoices. P-card orders can also present certain risks and challenges, such as the potential for fraud or misuse, lack of visibility into spending, and limited control over purchasing decisions. As such, effective P-card order management requires robust policies and procedures, appropriate training and communication, and ongoing monitoring and reporting to ensure that P -card orders are being used appropriately and in accordance with organizational policies and procedures.

To improve this KPI
Procurement organizations need to understand where a P-Card is being used and why. If the company has a robust MRO/GNFR/Indirect strategy, P-Card spend is an indicator of end users shopping around the program, forgoing the benefits of the organization's strategy.

Associated Metrics
➜ P-Card Transactions Over Time
➜ Stores Placing P-Card Orders

P-Card Spend & Transactions by Supplier
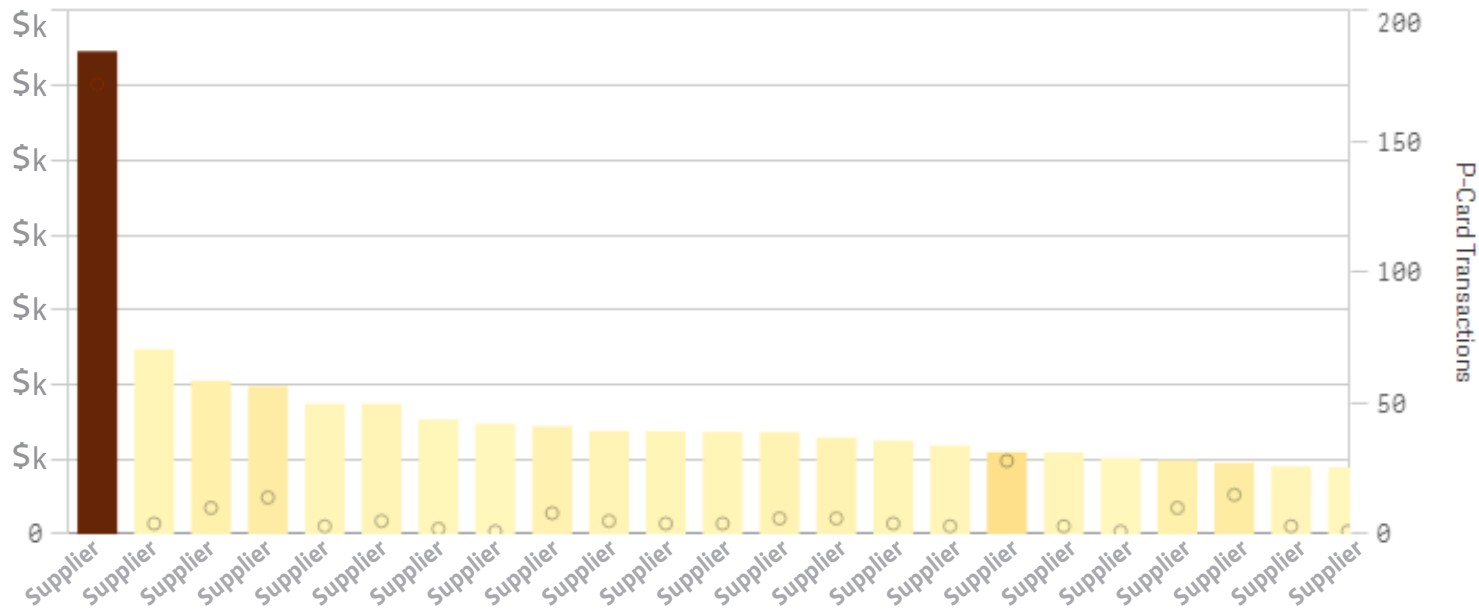
Quality/Accuracy

Quality and accuracy metrics play a crucial role in the success of other operational metrics in the MRO supply chain. These metrics serve as foundational elements that ensure the reliability and integrity of the data and processes used to measure other performance indicators. By maintaining high levels of quality and accuracy throughout the supply chain, organizations can derive meaningful insights and make informed decisions based on reliable information.

For instance, accurate and reliable data in item catalogs is fundamental to metrics such as inventory turnover ratio or stockout rate. If the item catalog contains incorrect or incomplete information, it can lead to inaccurate calculations and misinterpretation of inventory performance. By ensuring data quality and accuracy, organizations can have confidence in the metrics derived from the item catalogs, enabling them to make better-informed decisions regarding inventory management and stock optimization.

Three-Way Match and Match Exceptions

Three-way match is a process commonly used in procurement and accounting to **ensure the quality and accuracy** of purchased goods and services.

The three-way match involves comparing three different documents:

→ *Purchase Order (PO):* This is a document that outlines the details of the items being purchased, including the quantity, price, and delivery date.

→ *Receipt of Goods/Services:* This document is created when the purchased goods or services are received. It typically includes information such as the date of receipt, the quantity of items received, and any discrepancies or damages that may have occurred during transport.

→ *Invoice:* This document outlines the amount the supplier is charging for the goods or services. It includes information such as the date, quantity, unit price, and total price of the items being invoiced. An example of an 80% successful three-way match in supply chain management could be a company that processes 100 purchase orders for goods or services received from 50 suppliers in a month. Out of these, 80% or 80 purchase orders are matched successfully with the goods received and supplier invoices, while 20% or 20 purchase orders have discrepancies that need to be resolved before payment is made. In this scenario, the three-way match would be considered 80% successful because 80 purchase orders were matched successfully, while 20 purchase orders had discrepancies that needed to be resolved before payment was made. By identifying and resolving these discrepancies, the company can improve the accuracy of its purchasing process and reduce the risk of overpayment or underpayment to suppliers.

Match Exception

Match exception is an operational key performance indicator (KPI) in supply chain management that **measures the number of discrepancies or exceptions** found during the three-way match process. This KPI helps to identify areas where the purchasing process is not working efficiently and where improvements can be made.

An example of distinct POs with match exception KPI in supply chain management:

➔ If a purchase order for parts is received, but the price on the supplier invoice does not match the goods received, the purchase order has an exception.

➔ If an order is placed for 6 units of a product and we are billed for 12 units of the product, the purchase order has an exception.

By tracking distinct POs with match exception KPI, supply chain managers can identify areas where the purchasing process is not working efficiently and where improvements can be made. For instance, a high number of POs with match exceptions can indicate issues with supplier performance or problems with the receiving process. Additionally, by reducing the number of POs with match exceptions, companies can improve the accuracy of their purchasing process, reduce the risk of overpayment or underpayment to suppliers, and prevent discrepancies in inventory levels.

Associated Metrics

➔ ME (%) TTM (10%)

➔ PO Lines w/ ME

➔ Distinct POs w/ ME

➔ Total ME

Lines by Due Date Aging
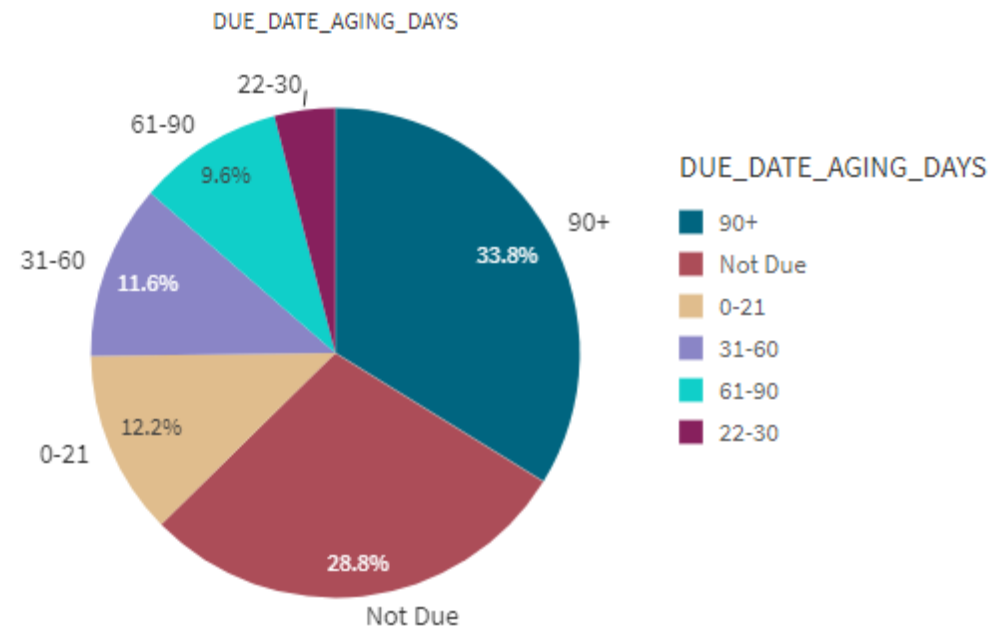
Cleansed Count

"Cleansed Count" is an operational KPI that measures the number of **cleansed item records in a catalog**, reflecting accuracy of master data. Examples of where "Cleansed Count" might be used include:

➔ *Product data management:* Ensuring that all product information such as product names, descriptions, and specifications are standardized across different databases.

➔ *Inventory management:* Checking that items in a warehouse location are correct spec.

➔ **Vendor management:** Ensure vendors are providing necessary part data and drive compliance

Associated Metrics

➔ Total Catalog Count

➔ Cleansed Count

➔ Cleansed %
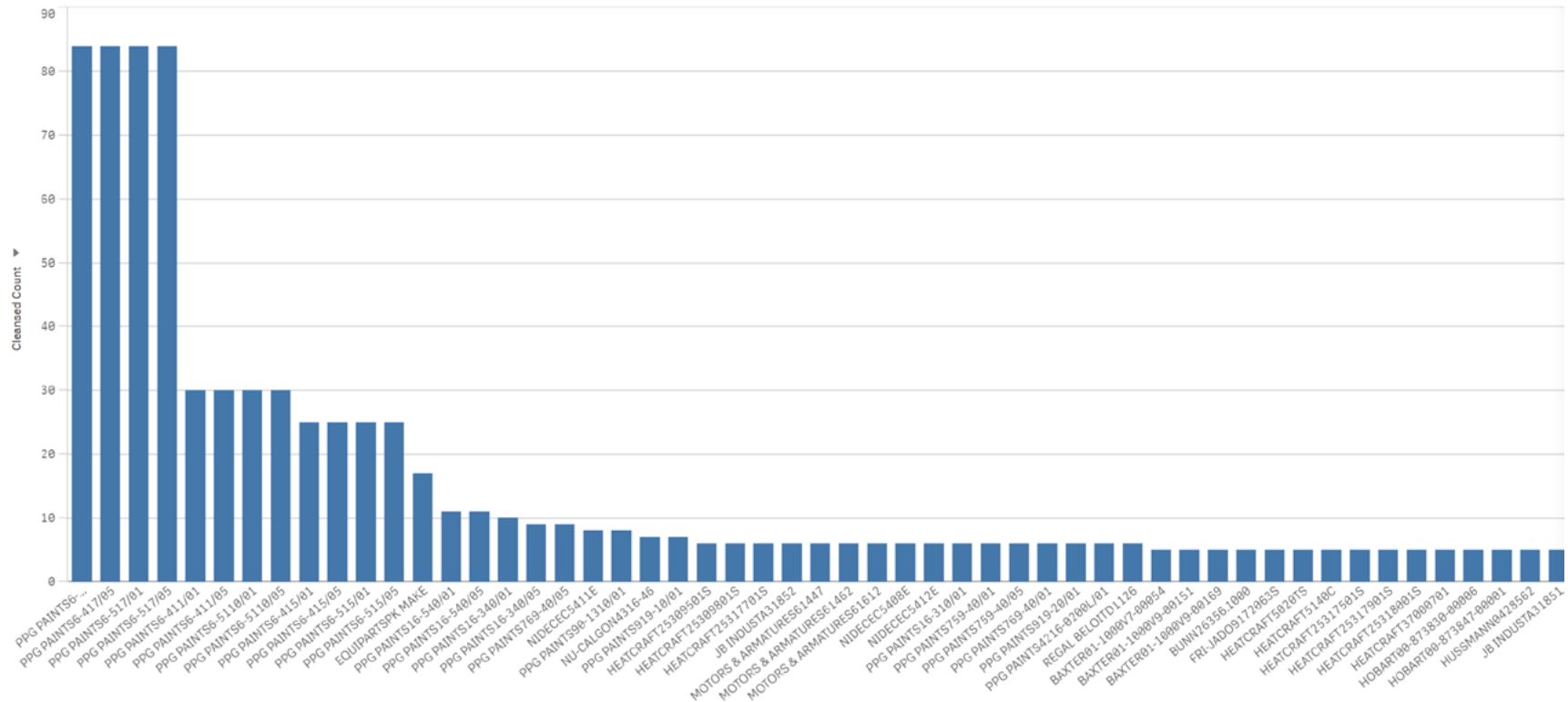
Accurate MFG Information %

Accurate MFG Information is an operational key performance indicator (KPI) in supply chain management that measures the number or percentage of items or purchase order (PO) lines that are **missing manufacturer (MFG) information**, such as part numbers or specifications.

By tracking the Missing MFG Info KPI, supply chain managers can identify areas where the supply chain process is not working efficiently and where improvements can be made. For instance, a high number of missing MFG information can indicate issues with the supplier's performance, communication, or data management. By addressing these issues, companies can improve the accuracy of their purchasing process, reduce the risk of overpayment or underpayment to suppliers, and prevent discrepancies in inventory levels. If item information is missing from transactional records, it significantly impacts supply chain visibility, inhibiting sourcing and Procurement teams.

Examples of Accurate MFG Info KPI in supply chain management include:

Spend: In terms of spend, this KPI measures the total dollars spent on items or PO lines that contain accurate MFG information. For instance, if a company spends $100,000 on items $80,000 had accurate mfg info, 80% of spend has accurate mfg info

Items: In terms of items, this KPI measures the number or percentage of items in a company's inventory containing accurate identifying information. For instance, if a company has 1,000 items in its inventory and 250 of those items are missing MFG information, the mfg accuracy at an item level is 75%.
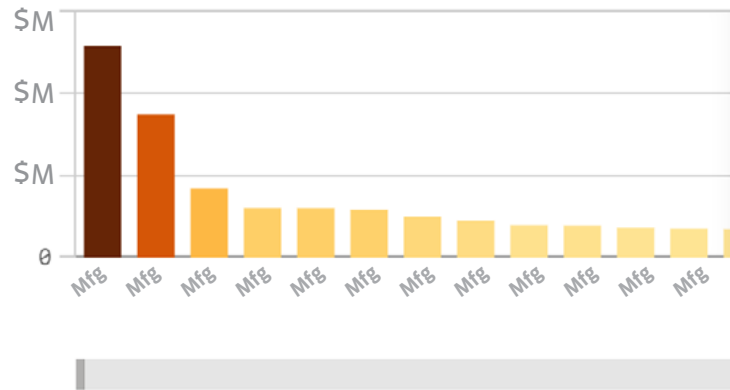
Associated Metrics
➜ % of SKUs Accurate MFG Info
➜ % of SKUs Accurate MFG ID
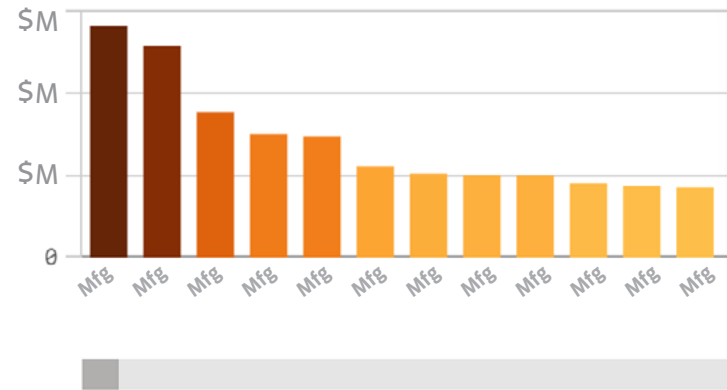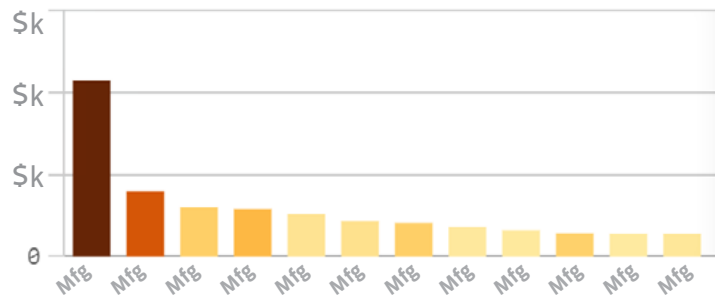➜ % of PO Lines Missing MFG Info
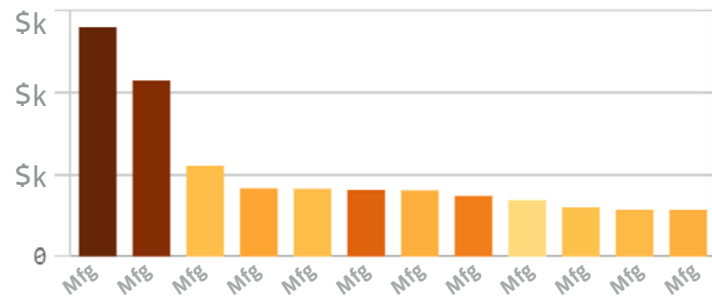➜ Cleansed Count
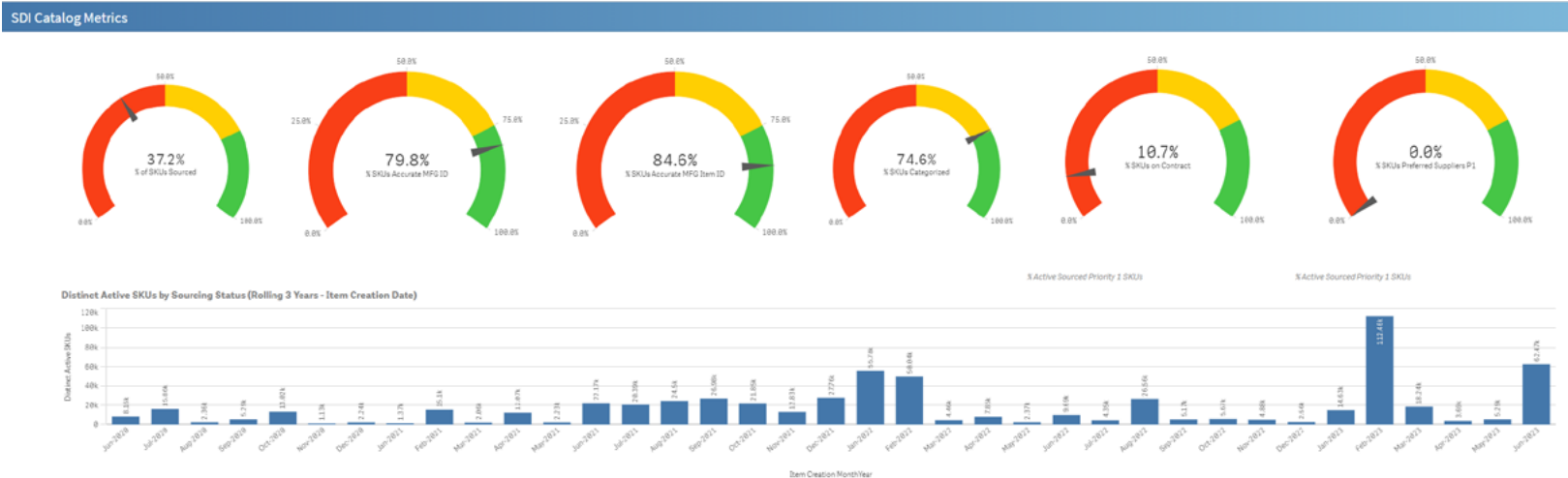
PO Lines with Assets

Total Spend Asset Key

Total Spend Asset Mfg

PO Lines by Asset Key

PO Lines by Asset Mfg

% PO Lines w Asset Info

The operational KPI "% PO Lines with Asset Info" measures the percentage of **purchase order lines that include asset information** such as asset tags, serial numbers, and other relevant information that enables tracking and management of assets, out of the total number of purchase order lines generated.

For example, if an organization generates 100 purchase order lines for IT equipment in a given period, and 80 of those purchase order lines include asset information such as asset tags or serial numbers, then the % PO Lines with Asset Info would be 80%. A higher % PO Lines with Asset Info indicates that a higher percentage of purchase order lines are being tracked and managed effectively.

This KPI is particularly relevant for organizations that rely on assets to deliver their products or services. For example, a manufacturing plant might use this KPI to track how effectively it is managing its production line.

PO Lines with Assets

By maintaining a high **% PO Lines with Asset** Info, the manufacturing plant can ensure that it is tracking its equipment and supplies effectively, minimizing the risk of lost or misplaced items, and maximizing the lifespan and usage of its assets.

To improve this KPI, an organization can implement an asset management system, train staff on the importance of including asset information on purchase orders, and establish clear guidelines and expectations for the tracking and management of assets.

 # PO Lines with Asset Information

The operational KPI "# PO Lines with Asset Information" in supply chain management measures the percentage or number of purchase order lines that include asset information such as asset tags, serial numbers, and other relevant information that enables tracking and management of assets.

For example, in an organization that regularly purchases IT equipment, # PO Lines with Asset Information can be a critical KPI to track how effectively the organization is managing its IT assets. If the KPI is low, it indicates that the organization may not have a robust asset tracking system in place, leading to potential issues such as misplaced or lost equipment, inefficient use of assets, or difficulty in determining the useful life of assets.

To improve this KPI
The organization could implement an asset management system, require asset information to be included on all purchase orders, and establish clear guidelines for the tracking and management of assets. By doing so, the organization can improve visibility into its asset inventory, ensure assets are being used effectively, and minimize the risk of loss or theft.

Distinct Asset MFG + PN

Distinct Asset Mfg. + PN is a KPI that measures the number of assets in the supply chain based on their **manufacturer and part number**. This KPI helps companies to track the number of different types of assets that they are managing in their supply chain, which can be useful for inventory management, asset tracking, and vendor management.

For example, let's say that a company has 500 assets in their supply chain, but upon analyzing the data, they determine that only 250 of these assets are unique based on their manufacturer and part number. The Distinct Asset Mfg. + PN KPI for this period would be 250.

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By tracking the performance of this KPI over time, companies can **identify trends** in the number of unique assets in their supply chain and take action to optimize their inventory and vendor management processes.

For example, if the Distinct Asset Mfg. + PN KPI is consistently low, it may indicate that there are too many duplicate assets in the supply chain, which can lead to inefficiencies and increased costs. In this case, the company may need to reevaluate their inventory management processes and reduce the number of duplicate assets.

Alternatively, if the Distinct Asset Mfg. + PN KPI is consistently high, it may indicate that the company is working with a large number of different vendors and may benefit from **consolidating** their supplier base to improve vendor management and reduce costs.

Associated Metrics
➜ Distinct Asset MFG + PN
➜ Distinct Item
➜ Distinct Serial Numbers

Distinct Asset Serial Numbers

The operational KPI "Distinct Asset Serial Numbers" in supply chain management measures **the number of unique or distinct serial numbers** for assets in the organization's inventory.

This KPI is used to monitor the level of asset tracking and control in the organization. Asset tracking is important in supply chain management because it helps to ensure that the organization can account for all of its assets, prevent losses, and optimize asset utilization.

For example, if an organization has 100 units of a certain product in its inventory, but only 90 of them have unique serial numbers, the Distinct Asset Serial Numbers KPI would be calculated as 90. A higher Distinct Asset Serial Numbers KPI indicates that the organization is effectively tracking and controlling its assets, which can result in improved efficiency and reduced costs.

To improve this KPI
Organizations can implement various strategies, such as implementing an asset tracking system, performing regular audits of assets, and training employees on the importance of asset tracking and control.

Overall, the "Distinct Asset Serial Numbers" KPI is important in supply chain management because it **provides insight** into the level of asset tracking and control in the organization. By tracking this KPI over time and improving asset tracking practices, organizations can reduce costs, prevent losses, and deliver better results for their business.

Categorization Accuracy %

Categorization Accuracy Percentage (%) is a KPI that measures the accuracy of the categorization or classification of goods or services. It compares the assigned category or classification to the correct category or classification and calculates the percentage of categorizations that are accurate. This KPI helps to ensure that goods and services are being **properly categorized**, which can help to improve the efficiency and effectiveness of supply chain processes.

Categorization is critical because it is used by sourcing teams to **drive strategy**. If an electrical item is misclassified as general industrial because it's available from a general industrial provider, buyers will end up paying a premium after that general industrial supplier sources it elsewhere and passes a mark-up on to the end user. Having the item properly classified as electrical would lead to the product being sourced elsewhere, at a lower cost with a better lead time.

By tracking the performance of this KPI over time, companies can **identify trends** in their Categorization Accuracy % and take action to

improve their supply chain processes. By improving Categorization Accuracy %, companies can reduce errors and inefficiencies in the supply chain, which can lead to cost savings and improved customer satisfaction.

Associated Metrics

➡ Categorization Accuracy %
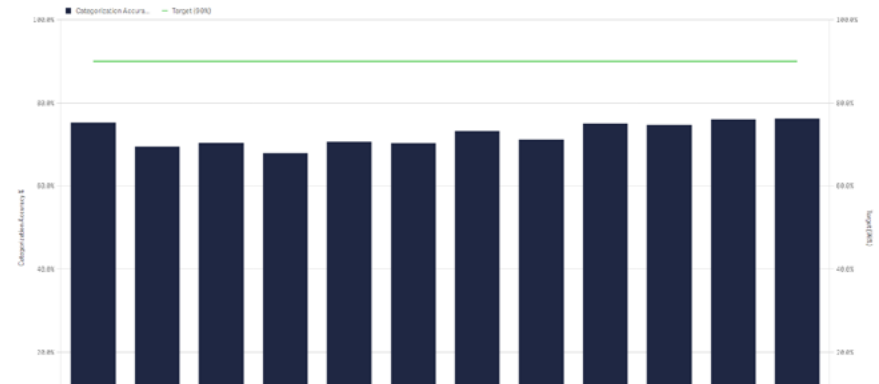
Performance by Site

Site	Q	Total POs	Total PO Lines	MFG ID Accuracy %	MFG Item ID Accuracy %	Categorization Accuracy %	Preferred Supplier PO Lines %	Total PO :
Totals		**000,0000**	**0,000,0000**	**55.9%**	**86.9%**	**29.9%**	**18.0%**	**000**
Site Name		000,000	000,000	40.6%	86.0%	3.6%	0.0%	0,000
Site Name		000,000	000,000	90.4%	95.4%	68.3%	66.3%	0,000
Site Name		00,000	00,000	93.9%	99.6%	54.3%	38.9%	000
Site Name		00,000	00,000	57.5%	71.0%	98.1%	57.3%	000
Site Name		00,000	00,000	50.2%	53.1%	98.1%	65.2%	0,000
Site Name		00,000	00,000	91.0%	97.8%	97.3%	40.0%	0,000
Site Name		0,000	0,000	91.4%	94.3%	82.0%	2.2%	000
Site Name		0,000	0,000	87.6%	98.3%	95.7%	38.4%	000
Site Name		00,000	00,000	64.6%	72.8%	97.5%	58.1%	000

MFG ID Accuracy & MFG Item ID Accuracy

MFG ID Accuracy & MFG Item ID Accuracy are operational key performance indicators (KPI) in supply chain management that measures the accuracy of manufacturer (MFG) identification information in a company's inventory.

Inaccurate MFG identification information can lead to **misidentification** of items, delays in fulfillment, and discrepancies in inventory levels. By addressing these issues, companies can improve the accuracy of their inventory management, reduce the risk of errors in purchasing and receiving, and ensure timely and accurate fulfillment of customer orders.

Examples include:

➜ *Total Items:* This KPI measures the number or percentage of items in a company's inventory that have accurate MFG identification information. For instance, if a company has 1,000 items in its inventory, and 900 of those items have accurate MFG identification information, the MFG ID Accuracy KPI would be 90% or 900/1000.

➜ *PO Lines:* In terms of PO lines, this KPI measures the number or percentage of PO lines with accurate MFG identification information. For instance, if a company has issued 500 PO lines, and 400 of those lines have accurate MFG identification information, the MFG ID Accuracy KPI for PO lines would be 80% or 400/500.

MFG ID Accuracy %

MFG Item ID Accuracy %

55.5%   87.7%
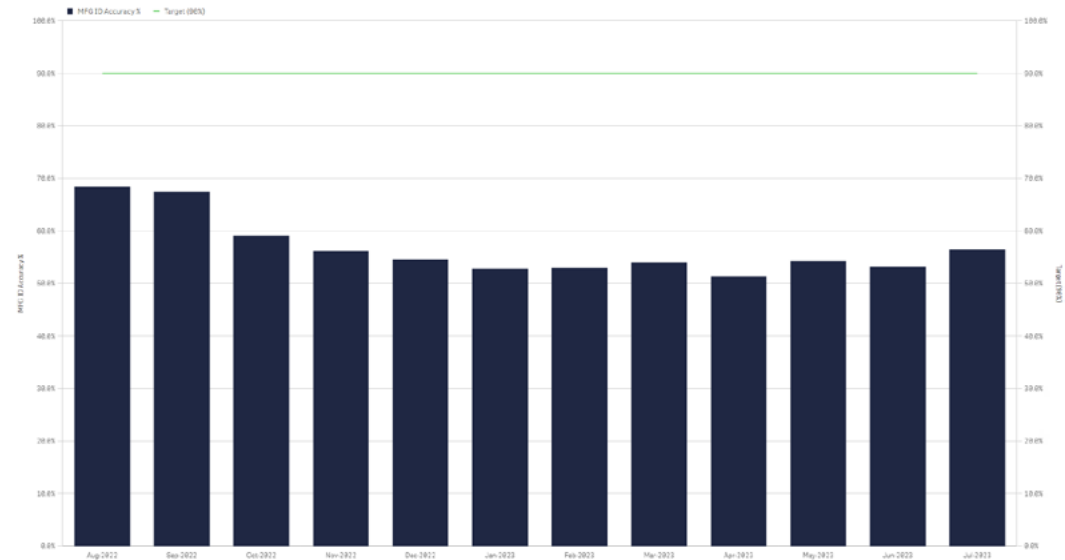
➜ *Vendor Performance:* In terms of vendor performance, this KPI measures the accuracy of MFG identification information provided by vendors. For instance, if a company has ten vendors, and nine of those vendors provided accurate MFG identification information for all items delivered, the MFG ID Accuracy KPI for vendor performance would be 90% or 9/10.

Associated Metrics

➜ MFG ID Accuracy

➜ MFG Item ID Accuracy

Miscellaneous

Miscellaneous metrics, although they may not fit neatly into the Operations, Procurement, or Quality/Accuracy sections of the supply chain, are still vital to track for organizations striving to achieve a best-in-class supply chain operation. These metrics capture important aspects that contribute to overall supply chain excellence and provide valuable insights for decision-making and continuous improvement efforts.

Active Sites

Active sites can be used in supply chain management to measure the number of active locations or facilities where a company's products or services are being delivered or sold. This KPI can help identify areas where the supply chain can be optimized, such as consolidating distribution centers. Additionally, by monitoring active sites, companies can ensure that they are meeting customer demand and delivering products and services in a timely and efficient manner.

Examples of active sites KPI in supply chain management include:

➔ Retail/Facilities Maintenance: number of buildings being maintained

➔ Manufacturing facilities: In the manufacturing industry, active sites may refer to the number of plants or factories that are currently operational. This metric is important because it can indicate the company's ability to produce goods at scale and meet demand.

Associated Metrics

➔ Active Sites

Active Technicians

Active technicians can be used in supply chain management to measure the number of technicians or service providers that are currently active and available to perform repairs or maintenance on products or equipment.

This KPI can help identify areas where additional support or training may be needed, as well as areas where the company may need to hire additional technicians to meet demand. Additionally, by monitoring active technicians, companies can ensure that they are providing timely and effective support to customers, which can improve customer satisfaction and retention.

Examples of active technician KPIs in supply chain management include:

➔ Equipment manufacturers: For a company that produces equipment, active technicians may refer to the number of technicians who are available to provide repairs or maintenance services to customers. This metric is important because it can indicate the company's ability to provide timely and effective support to customers, which can impact customer satisfaction and loyalty.

➔ Retail and Facilities Maintenance: In a retail or FM environment, the number of active technicians helps managers understand the distribution of coverage to repair critical assets across many facilities

➔ Education: In the education space janitorial coverage is critical. Understanding the distribution of resources available through a school system enables one to make the most informed decisions possible.

Associated Metrics

➔ Active Techs
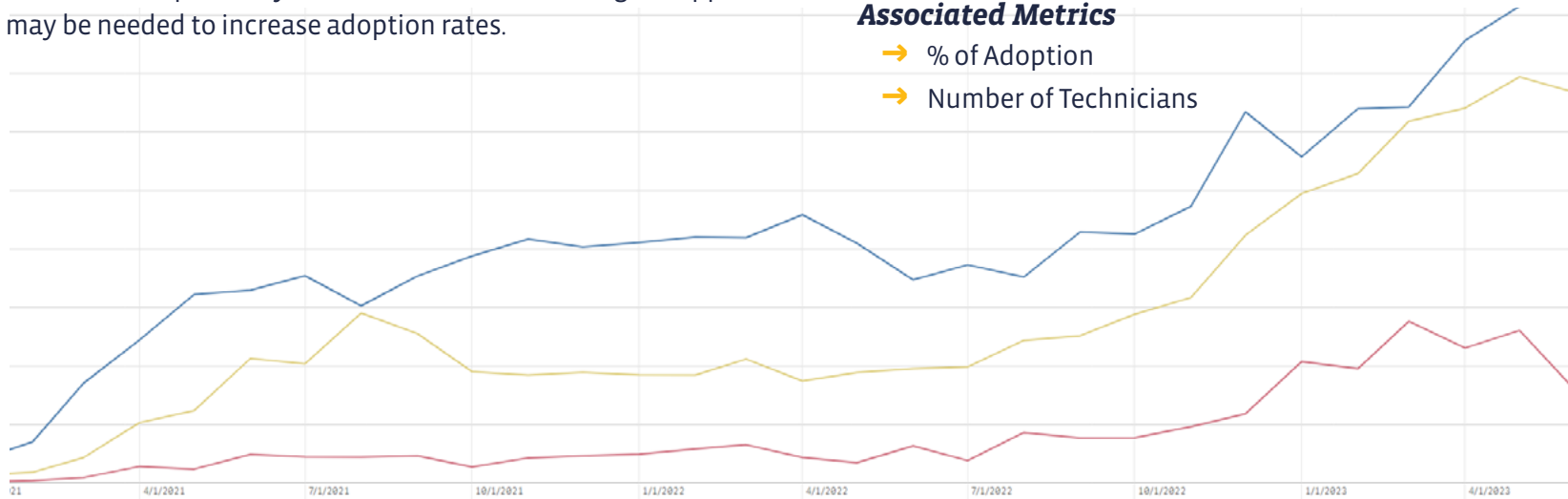
➔ Number of Active Techs

Technician Adoption

"Technician adoption" is an operational KPI (Key Performance Indicator) in supply chain management that measures the **percentage of adoption or usage** of a particular process, system, or technology within the organization. The % adoption KPI would provide a measure of the success of the implementation or roll-out of a new process, system, or technology within the organization, and would help identify areas where further training or support may be needed to increase adoption rates.

An example of where "% adoption" might be used:

➜ Measuring the percentage of employees who use a new supply chain management system or software. For example, if a company has implemented a new order management system, the % adoption KPI would measure the percentage of employees who have been trained and are actively using the system to place an order.

Associated Metrics
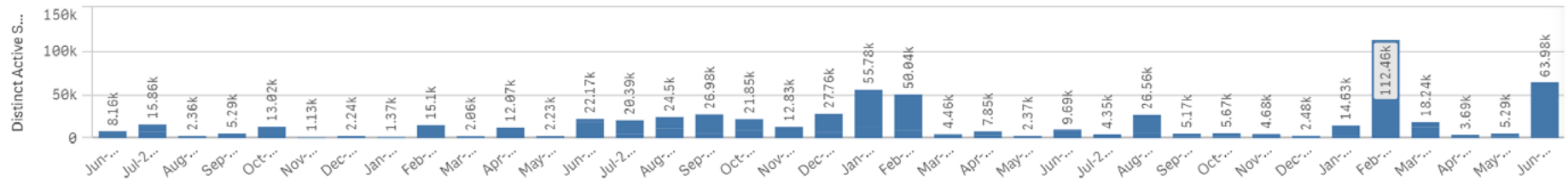➜ % of Adoption
➜ Number of Technicians

Active Techs per Month
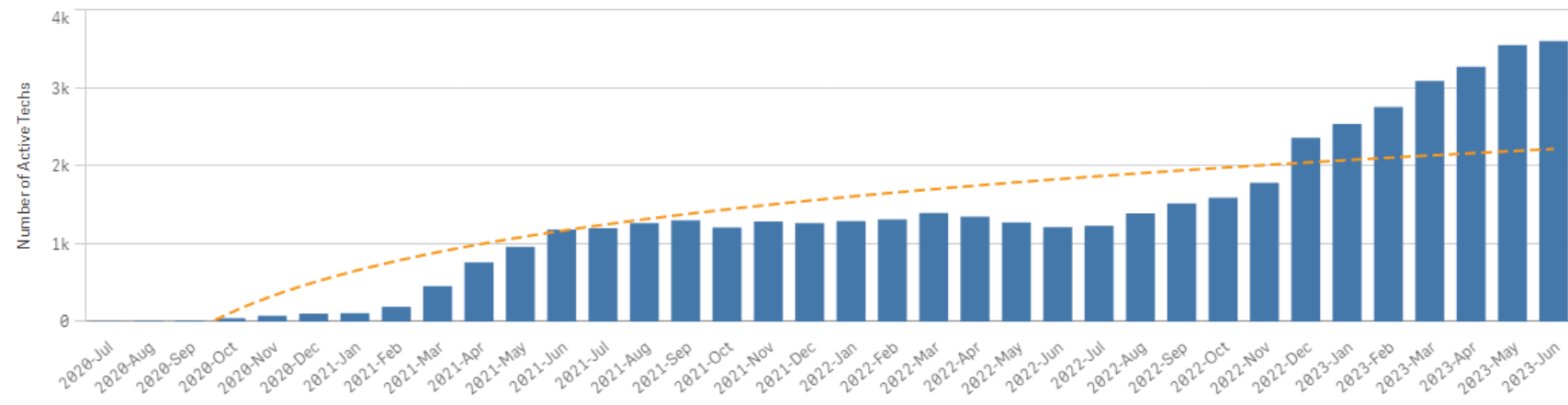
Distinct Item

Distinct Active SKUs by Sourcing Status (Rolling 3 Years - Item Creation Date)

The operational KPI "**Distinct Item**" in supply chain management measures the number of unique or distinct items in an organization's inventory. This KPI is important in monitoring inventory levels and ensuring that the organization has the necessary variety of products to meet customer demand.

For example, if an organization has 100 products in its inventory, but only 50 of them are unique or distinct items, the Distinct Item KPI would be calculated as 50. A higher Distinct Item KPI indicates that the organization has a larger variety of products to offer its customers, which can result in increased sales and customer satisfaction.

To improve this KPI

Organizations can implement various strategies, such as increasing the variety of products offered, improving forecasting and demand planning to ensure that the right products are in stock, and analyzing sales data to identify opportunities for expanding product offerings.

Overall, the "Distinct Item" KPI is important in supply chain management because it provides insight into the variety of products offered by the organization and its ability to meet customer demand. By tracking this KPI over time and improving product offerings and demand planning practices, organizations can increase sales, improve customer satisfaction, and deliver better results for their business.

Associated Metrics:
➜ Stock vs Nstk%
➜ Catalog %