Key Insights for respective Dashboards**:**

**Insights based on the Optimisation in Supply Chain Management (Tableau Dashboard):**

* Overall, the quantity of pallets allocated and returned is increasing. This is a positive trend, indicating that the supply chain is meeting demand effectively.
* The East region has the highest average quantity of pallets allocated and returned, followed by the North, South, and West regions. This suggests that the East region is a key driver of supply chain activity.
* Jammu and Kashmir has the highest average quantity of pallets allocated and returned among states, followed by Uttar Pradesh, Madhya Pradesh, and Andhra Pradesh. This highlights specific areas with high supply chain activity.
* The average quantity of pallets allocated and returned per month fluctuates throughout the year. This indicates seasonality in supply chain activity, with potentially higher demand during specific months.
* The dashboard also forecasts the quantity of pallets for the coming year. This information can be valuable for planning production, inventory management, and logistics.

**Recommendations:**

* Investigate the reasons behind the regional and state-level variations in pallet quantities. Eg: Are there specific factors driving the higher volumes in certain areas?
* Analyze the product types being shipped to each region or state. This could help explain variations in pallet quantities and identify opportunities for optimization.
* Consider incorporating data on shipping costs into the dashboard to provide a more comprehensive view of supply chain efficiency.
* Regularly update the dashboard with new data to track progress, identify emerging trends, and inform ongoing optimization efforts.

**Insights based on the Optimisation in Supply Chain Management (Power BI Dashboard):**

* **Total Pallet Supply:** The overall pallet supply seems consistent across the months, with 2.75 million pallets reported for January. However, further investigation into specific regions or states might reveal variations.
* **Regional Distribution:** The East region holds the highest share of the total pallet supply, accounting for 264,320 pallets (approximately 9.6%). This is followed by the North region (28.38%), the West region (33.35%), and lastly, the South region (28.67%).
* **State-Level Variations:** Within each region, there are notable differences in pallet supply by state. For instance, in the South region, Karnataka leads with 555,816 pallets, followed by Gujarat (545,857 pallets) and Maharashtra (396,405 pallets).
* **Transaction Types by Quarter:** The dashboard shows the count of transaction types by quarter, but without further context or explanation, it isn’t easy to interpret the meaning or significance of this data.
* **Order Trends:** The QTY of pallets ordered seems to fluctuate throughout the year, with no clear upward or downward trend. However, October appears to have the highest number of orders placed (around 10,000 pallets).

Actionable Recommendations:

* Investigate the reasons behind regional and state-level variations in pallet supply. For eg: Are there specific factors driving higher volumes in certain areas? Understanding these variations can help optimize storage and distribution strategies.
* Analyze seasonal trends in pallet supply. Identifying peak and low periods can help with production planning, inventory management, and logistics adjustments.
* Explore the reasons behind the dominance of allotment transactions. Is this due to specific industry requirements or contract terms? Understanding the context behind transaction types can inform future planning and potentially identify opportunities for more flexible pallet allocation.
* Monitor pallet supply levels closely. Regularly tracking supply levels, especially during peak and low periods, can help ensure timely responses to potential stock shortages or surpluses.

**Insights based on the Optimisation in Supply Chain Management (Google Looker Studio Dashboard):**

* Average Quantity: The average quantity of a product is 43.02, while the average quantity of a city is 64.0k. This suggests that the dashboard might be tracking product movement across different cities.
* Availability: The availability of both products and cities seems to be represented by the same value (43.02). This could indicate that product availability is linked to the availability of cities they are shipped to or stored in.
* Top Product-Cities: The table lists the top cities with their corresponding product quantities, return quantities, and other details. Ahmedabad appears to be the city with the highest total quantity (303,579) and return quantity (-351,797) for product AD100000.
* The dashboard seems to focus on product movement and availability across cities, but the specific purpose or goal behind this data is unclear. Understanding the context would help in interpreting the insights more effectively.