**KPIs at Inditex 📊**

1. **Project Description**

This project aims to analyze and improve visualization of the Key Performance Indicators (KPIs) presented on yearly basis to a MAERSK customer, INDITEX (the leading fashion retailer). The main goals are to enhance operational efficiency, customer satisfaction, and overall business performance through data-driven insights and strategic recommendations.

1. **Project Overview**

To provide you with a little bit of context, starting point of this project has involved a comprehensive study of Maersk RAW DATA already available for year 2024, on EXCEL file = KPIs2024 RAW DATA.

This data shows the containers delivered in INDITEX Lelystad distribution centers (in Netherlands), and other relevant transport data like VESSEL NAME, ETA, ATA, CARRIER, TRANSPORT MODE, EXTRA STOPs and other important DATES which are tracked by the company to analyze teams performance.

Hence, the focus has been put on total numbers of containers delivered under different characteristics and on the lead times for different measurements considered relevant for a fast fashion retailer like INDITEX.

Firstly, data was transformed into a table. Empty values and possible errors were cleaned.

Secondly, a descriptive data analysis was conducted. At this point, TIMING calculations (columns P to AF) and INVOICING calculations (columns AG to AU) were included. To continue with that, the Invoicing TAB was created in a separate sheet to be able to sum up and apply different formulas, to obtain rates automatically calculated for different haulers.

Thirdly, the different pivot tables were created (in the sheet PIVOTS), thinking about what kind of data that was relevant and useful. All tables were named for easy reference and some insight about the KPI objective of good and bad was also detailed (following a traffic light scheme).

Finally, the DASHBOARD tab, shows the big numbers, graphs and different charts. Slicers were also added at this point and all data got interconnected. Visualization is clean and easy. Next step would be to present these findings to the customer INDITEX, to ease strategic decision-making moving forwards for 2025.

1. **Project Structure**

An excel file called RAW DATA is the starting point of this project. Its name is self-explanatory about its content.

Another file called PROJECT 1 – Transport Performance ITX-MAERSK is also available, and this is the main file to check. In this one the following tasks were conducted, in this same order:

* 1. Data Transformation and Cleaning
  2. Descriptive Data Analysis
  3. Dashboard
  4. Explanatory Analysis

So, you can navigate freely on this excel file for the different parts of your interest.

1. **Requirements**

* A computer with internet connection to be able to visualize a GitHub repository.
* Tools for data analysis and result visualization (Microsoft Excel).

1. **Results and Conclusions**

After conducting an evaluation of different pivot tables, numbers and charts, the following can be concluded:

* Over 2.500 containers were delivered in Dutch distribution centers (Lelystad), all arriving to Rotterdam port via ocean transportation.
* Over 50% of total containers were delivered in the first 48h after vessel arrival.
* Nearly a 30% of inland transportation was done by BARGE, considered more environmentally friendly than trucking.
* ETA to availability was 32h on average, and this gives us an idea about average berthing times of vessels. This makes even more valuable our previous insight about over 50% of containers being delivered in the first 48h because it means there was a huge efficiency and timing optimization.
* Average data for availability to SLOT is 20h, so warehouses have been able to absorb all container deliveries in less than one day in general.
* ATA to unloading for all containers is at 52,5h average, so despite the other 46% of containers were delivered after first 48h, we see there is no big deviation, so makes us think that not many went over 96h.
* Peak season happened during September, October and November. These months present more container deliveries than the rest of the year.
* Average hauler delay was at 20minutes, which is something reasonable for a 2h trucking trip and all possible inconveniences that can be encountered.
* All haulers have similar rates and average of this transportation flow is around 550e.
* Waiting times suffered have been insignificant if we consider, we are looking at yearly numbers.

1. **Next Steps**

* Continuous monitoring of KPIs to ensure sustained and improved performance. Maybe a monthly version can be created or adapted to increase frequency of review, moving from yearly to quarterly or monthly.
* Regular updates and adjustments to the Dashboard based on new data and insights.
* Expansion of the KPI improvement plan to other areas of the business.

1. **Contributions**

Contributions are welcome so please direct message for sharing your feedback on how to improve this work.

1. **Author**

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https://github.com/JOMARCO4/LABORATORIO