	Detail	Question	Answer
Stage 1: Empathize	5W1H	Who will be viewing this Dashboard?	1. Production Manager 2. Production Employee 3. Purchasing Manager 4. Purchasing Employee
		What problem does this dashboard solve?	Evaluate vendors on: order cost, order time, order status.
		When and where will stakeholders view this Dashboard?	1. Production Manager: view this dashboard to know how many products the company imports each month from which vendor, from which it can forecast the purchase quantity for the next year. 2. Production Department and Purchasing Department including managers and employees: view the dashboard in the supplier evaluation meeting, to know which vendor is currently purchasing the most products, how much the cost is,... From there, it is also possible to consider optimizing the cost of purchasing raw materials and ordering time.
		Why do stakeholders need this Dashboard?	1. See which products are being purchased the most. 2. See which products have the highest total purchase cost. 3. See which suppliers the company is buying the most products from. 4. Develop strategies to optimize costs and time.
		How did the stakeholder achieve the goal?	1. Know which month/quarter the company orders the most products, from there make a plan to order products in a timely manner, optimizing ordering costs. 2. If the company wants to optimize costs, it can consider comparing the current vendor's price with the prices of companies in the same industry. From there, it can consider renegotiating the price with the vendor or switching to a new vendor.
	Discover dataset	How many Dim tables are there?	There are 4 Dim tables.
		How many Fact tables are there?	There are 3 Fact tables.
	Evaluating and cleaning datasets	Is there anything unusual in the data?	The data is normal.
		How many rows are in the table? How many are distinct unique?	1. Fact_Purchasing_OrderHeader: 4.012 records/PurchaseOrderID distinct unique. 2. Fact_Purchasing_OrderDetail: 8.845 records/PurchaseOrderDetailID distinct unique 3. Fact_Purchasing_ProductVendor: 460 records, ProductID 265 distinct/113 unique 4. Dim_Vendor: 104 records/BusinessEntityID distinct unique 5. Dim_Product: 265 records/ProductID distinct unique 6. Dim_Categogy_Product: 295 records/ ProductID distinct unique 7. Dim_Date: 1.256 records/Date distinct unique

Stage	Category	Question/Item	Answer/Detail
Stage 2: Define POV	Northstar Metric	What value you want to measure?	Order fulfillment rate.
		When does value delivery succeed?	Products have been stocked.
		What is Northstar Metric name?	%Order_Fulfillment
		Why do you choose this metric?	Shows the vendor with the highest order fulfillment rate. From there, the Vendor can be evaluated.
	Define Point of View	Dimension data group	1. Vendor: vendor name, PreferredVendorStatus
	Growth Formula	Northstar 1 Formula	%OrderFulfillment = COUNT(Complete)/COUNT(Status)
Stage 3: Ideate	Brainstorming	View 1: Vendor Performance	1. Evaluate Orders by on-time delivery and order fulfillment rate. 2. Reject rate of each vendor. 3. Average number of days late by month. 4. On time rate of each vendor.
		View 2: Spend Vendor	1. Total purchase by month. 2. Total purchase amount and cost type. 3. Compare total purchase amount from vendors.
	Structure Idea	Vendor Performance: Evaluate vendor performance.	1. %Order_Fulfillment: card 2. %Ontime: card 3. %Rejected: card 4. AverageLeadTime: card 5. number_latedays: card 6. Rejected: 100% stacked column chart 7. Complete: 100% stacked column chart 8. Ontime: 100% stacked bar chart 9. Late: 100% stacked bar chart
		Spend Vendor: Evaluate and Compare total purchase amount from vendors.	1. %Order_Fulfillment: card 2. Total purchase: card, line chart, treemap 3. Stocked Quantity: card 4. SubTotal: card, 100% stacked bar chart 5. TaxAmt: 100% stacked bar chart 6. Freight: 100% stacked bar chart
Stage 4: Prototype	Build a complete report	1. Choose the color of the report theme. 2. Choose the type of chart suitable for the questions. 3. Presentation layout of each part of the report (chart arrangement, size, color,…)	This part is immediately shown in the report.
Stage 5: Review	Review each part of the report	Review each part of the report	This part is immediately shown in the report.