

Project design Phase

Problem solution fit

In our project, “Tableau Performance Optimization & Dashboard Monitoring”, we observed that users frequently encounter slow dashboard loading, delayed visualizations, and system lag, especially when working with large datasets or complex visualizations. These performance issues are often caused by factors such as excessive data rendering, unoptimized queries, improper joins, inefficient calculations, and poor data modeling. As a result, data analysis becomes time-consuming, error-prone, and less effective, which can hinder business decision-making.

To overcome these challenges, our project focuses on systematic monitoring and optimization techniques, including:

Query Optimization:

Analyzing and rewriting Tableau queries for efficiency.

Reducing unnecessary aggregations and calculations performed on large datasets.

Field & Filter Management:

Removing unnecessary fields and calculations that add overhead.

Applying filters at the source level instead of in Tableau to reduce rendered data.

Dashboard Design Optimization:

Limiting the number of visualizations per dashboard to reduce rendering time.

Using context filters and efficient chart types to improve load speed.

Pre-aggregating data wherever possible to avoid on-the-fly heavy calculations.

Problem solution fit template :

CUTTING IDEA	<p>1. CUSTOMER SEGMENTS CS</p> <ul style="list-style-type: none"> • Who is your target audience? • Describe the main customers or users who face the problem you're solving. 	<p>2. CUSTOMER CONSTRAINTS CC</p> <ul style="list-style-type: none"> • What limitations or constraints do your customers face? • Are there time, money, or technical constraints?
AVAILABILITY / BUDGET	<p>3. JOBS TO BE DONE / PROBLEM JP</p> <ul style="list-style-type: none"> • What are the major problems your customers face? • Describe the key challenges and tasks your customers need help with. 	<p>4. PROBLEM ROOT CAUSE PC</p> <ul style="list-style-type: none"> • Why do these problems exist? • Identify the underlying reasons behind the problems.
AVAILABLE SOLUTIONS	<p>5. AVAILABLE SOLUTIONS AS</p> <ul style="list-style-type: none"> • What current solutions are available? • How are customers currently solving the problem? 	<p>6. BEHAVIOR BE</p> <ul style="list-style-type: none"> • How do customers currently act to address the problem? • Describe how users behave and the solutions or alternatives they use.
YOUR SOLUTION	<p>7. TRIGGERS TG</p> <ul style="list-style-type: none"> • What events trigger the problem for customers? • Describe the situations that prompt the need to find a solution. 	<p>6. BEHAVIOR BE</p> <ul style="list-style-type: none"> • How do customers currently act to address the problem? • Describe how users behave and the solutions or alternatives they use.
YOUR SOLUTION	<p>9. YOUR SOLUTION YS</p> <ul style="list-style-type: none"> • What is your solution to the problem? • Describe how your solution will effectively solve the customer's problem considering their constraints and needs. 	<p>10. EXAMPLES OF BEHAVIOR EB</p> <ul style="list-style-type: none"> • What specific behavior changes will occur with your solution experience and actions. • Describe how your solution will realistically improve your customer's experience and actions.