

Ideation Phase

Date	21 October 2023
Team ID	Team - 591276
Project Name	Project - Pediatric Allergies Unveiled: A Tableau Exploration Of Prevalence And Demographics
Maximum Marks	4 marks

Problem statement:

"Despite the increasing prevalence of pediatric allergies and their significant impact on children's well-being, there exists a critical gap in comprehensive understanding, awareness, and effective data-driven interventions. Parents of children with allergies, healthcare professionals, and policymakers are faced with ongoing challenges in managing and mitigating the risks associated with pediatric allergies. The lack of clear allergen labeling, inconsistent allergen-free options, and inadequate awareness contribute to heightened anxiety, preventable allergic reactions, and hindered social and educational experiences for children. To address these issues, there is a pressing need for a data-driven solution that provides insightful geospatial and demographic visualizations to enhance awareness, education, and policy development. This project aims to unveil the hidden nuances of pediatric allergies and empower stakeholders with the knowledge required for informed decision-making, ultimately improving the well-being and safety of children affected by allergies."

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No	Parameter	Description
1	Problem Statement (Problem to be solved)	The problem is the lack of comprehensive data and insights on the prevalence and demographics of pediatric allergies, hindering effective intervention and awareness strategies.

2	Idea / Solution description	<p>Our solution involves a multi-step approach to address this issue:</p> <ul style="list-style-type: none"> a. Data Collection: Gather relevant data from healthcare institutions, surveys, government agencies, and research studies on pediatric allergies. Ensure the data covers a wide range of demographic variables. b. Data Cleaning and Preparation: Clean and preprocess the data to remove inconsistencies and outliers. Standardize the data to ensure consistency. c. Data Visualization: Utilize Tableau to create geospatial visualizations to depict the regional distribution of pediatric allergies, and time-series visualizations to track changes in prevalence over time. Compare prevalence rates among different age groups, regions, and genders. d. Interactive Dashboards: Build interactive dashboards to present the data and insights in an engaging and user-friendly manner. e. Storytelling: Create a compelling narrative that explains the significance of the data and its implications for healthcare and public awareness.
3	Novelty / Uniqueness	<p>What sets our project apart is the combination of advanced data visualization techniques and a comprehensive dataset. This holistic approach provides a unique and insightful view of pediatric allergies.</p>

4	Social Impact / Customer Satisfaction	<p>The project will have a significant social impact by:</p> <ul style="list-style-type: none"> a. Empowering medical professionals with data-driven insights for better patient care. b. Informing policymakers' decisions for targeted interventions and healthcare policies. c. Providing parents with a clearer understanding of pediatric allergies, leading to improved care and awareness.
5	Business Model (Revenue Model)	<p>Our primary focus is on social impact and public health. As of now, there isn't a direct revenue model. However, potential revenue streams could arise in the future through partnerships or data sharing.</p>
6	Scalability of the Solution	<p>The solution is highly scalable and can be expanded to cover more regions or address additional healthcare-related issues. As we gather more data and insights, we can contribute to a broader understanding of various health challenges.</p>

