Here's a table outlining the data science scenarios for three different problem domains:

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| --- | --- | --- | --- | --- |
| Problem Domain | Problem | Which data to collect | How to store the data | Insights/Decisions |
| Education | Improving student performance | - Student attendance records - Academic performance data (grades, test scores) - Teacher evaluations | - Student information system database - Cloud-based storage for scalability | - Correlation between attendance and academic performance - Identify areas for improvement in teaching methods or curriculum - Evaluate teacher effectiveness based on student feedback |
| Vaccination | Managing vaccination distribution | - Vaccine distribution data (location, quantity) - Demographic data (age, health conditions) - Vaccination appointment scheduling data | - Centralized database for vaccine distribution - Secure cloud-based storage for appointment scheduling | - Optimize vaccine distribution based on demand and demographics - Ensure equitable access to vaccination appointments - Monitor vaccination coverage and identify areas with low uptake |
| Productivity | Increasing workplace efficiency | - Time tracking data (hours worked, tasks completed) - Project management data (task assignments, deadlines) - Employee feedback surveys | - Time tracking software database - Project management tools (e.g., Trello, JIRA) - Employee feedback platform | - Identify time-wasting activities and areas for process improvement - Allocate resources effectively to meet project deadlines - Improve employee satisfaction and engagement based on feedback |

In each problem domain, the data collected is specific to the goals of addressing the problem. The data is stored in appropriate databases or cloud-based storage solutions to ensure scalability, security, and accessibility. Insights and decisions derived from the data include optimizing strategies, improving processes, and making informed decisions to achieve the desired outcomes in each domain.