Ideation Phase

Defining the Problem Statements

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Project Name	**6112-Covid-19 Cases Analysis**

Covid-19 Cases Analysis

Problem Definition and Design Thinking

Introduction:

Our mission is to harness the power of data analysis, particularly within the IBM Cognos environment, to address the complex challenges presented by the COVID-19 pandemic. COVID-19 analysis is pivotal in understanding the virus's impact, guiding public health decisions, and providing accurate information to the public. In this document, we will outline our approach to empathizing with stakeholders, defining key challenges, and utilizing a design thinking approach for COVID-19 analysis, with a focus on leveraging IBM Cognos for data cleansing and reporting.

Problem Statement:

Objective: Utilize IBM Cognos for Data Analytics to provide comprehensive insights into COVID-19 data, supporting healthcare professionals, policymakers, and the general public.

Data: Our primary data source is a diverse set of COVID-19 datasets, encompassing infection rates, vaccination progress, healthcare capacity, economic consequences, and more. These datasets will serve as the foundation for our analysis.

Key Challenges:

Data Cleansing: Ensuring that COVID-19 datasets are clean, accurate, and ready for analysis within the IBM Cognos environment.

Multi-faceted Analysis: Conducting comprehensive analysis covering epidemiological trends, vaccination effectiveness, healthcare resource allocation, economic impacts, and societal behavior.

IBM Cognos Integration: Leveraging the capabilities of IBM Cognos for data cleansing, transformation, and reporting to derive meaningful insights**.**Data Communication: Designing clear and accessible reports and dashboards within IBM Cognos to convey complex data findings to different audiences.

Ethical Considerations: Adhering to ethical guidelines and data privacy regulations when handling COVID-19 data and sharing insights.

Design Thinking Approach:

Empathize:

To address the multifaceted challenges of COVID-19 analysis within IBM Cognos, it is imperative to empathize with the diverse stakeholders affected by the pandemic.

Actions:

Conduct interviews with healthcare professionals to understand their data requirements and decision-making processes.

Engage in discussions with policymakers to identify their priorities for data-driven insights.

Listen to the concerns and questions of the general public through surveys and social media sentiment analysis.

Define:

Based on our empathetic understanding, we will define clear objectives and success criteria for our COVID-19 analysis project within IBM Cognos.

Objectives:

Develop data cleansing processes in IBM Cognos that ensure data accuracy and completeness.

Create IBM Cognos dashboards and reports that provide real-time COVID-19 insights.

Produce data-driven narratives and visualizations within IBM Cognos that inform policy decisions.

Ideate:

Brainstorm innovative solutions within the IBM Cognos framework to address the defined objectives.

Actions:

Explore IBM Cognos' data integration capabilities to ensure seamless data access and cleansing.

Investigate advanced reporting and visualization techniques within IBM Cognos for conveying COVID-19 trends effectively.

Consider user-friendly dashboard design principles and storytelling techniques for data communication.

Prototype:

Create prototypes of IBM Cognos data cleansing processes, dashboards, and data stories to validate our chosen approaches.

Actions:

Develop data cleansing workflows within IBM Cognos that enhance data quality.

Build IBM Cognos dashboards that visualize COVID-19 trends and vaccination progress.

Design data-driven narratives and visualizations using IBM Cognos reporting capabilities.

Test:

Evaluate the effectiveness of our IBM Cognos prototypes through rigorous testing and gather feedback from stakeholders.

Actions:

Validate the accuracy and completeness of data cleansing processes in IBM Cognos.

Conduct user testing with healthcare professionals to ensure the usability of IBM Cognos dashboards.

Gather feedback from policymakers on the relevance and impact of our data-driven reports.

Implement:

Once our IBM Cognos prototypes meet the defined objectives and receive positive feedback, proceed with full implementation.

Actions:

Deploy data cleansing processes in IBM Cognos as part of a data pipeline.

Publish real-time IBM Cognos dashboards and reports for public access.

Share data-driven reports with policymakers to influence evidence-based policy decisions.

Iterate:

Continuously improve our COVID-19 analysis tools and strategies within the IBM Cognos environment based on user feedback and evolving data.

Actions:

Monitor the accuracy and efficiency of data cleansing processes and update them as needed.

Engage with stakeholders to gather insights on how our IBM Cognos analysis can better meet their needs.

Stay informed about ethical considerations and adapt our approach accordingly.

Conclusion:

In this document, we have outlined our approach to leveraging IBM Cognos for Data Analytics to address the complex challenges posed by COVID-19 analysis. Our goal is to provide data-driven insights and solutions that support healthcare, inform policy decisions, and empower the public. By following this structured design thinking approach, we aim to create a meaningful impact in the fight against the pandemic, harnessing the capabilities of IBM Cognos for effective COVID-19 data cleansing and reporting.