Visualizing Sustainability: A Cognos-Based Analysis Of Global Trends (2000-2023)

Business Problem

The Sustainable Development Report (SDR) reviews progress made each year on the Sustainable Development Goals since their adoption by the 193 UN Member States in 2015. At the halfway mark to 2030, the Sustainable Development Report 2023 takes stock of progress made and discusses priorities to restore and accelerate SDG progress. Published on the eve of the 2023 Paris Summit for a New Global Financial Pact, this year's edition focuses specifically on the need to scale up development finance and to reform the global financial architecture to support the SDGs.

Business Requirement

To effectively navigate and contribute to sustainability goals, there is a critical business requirement for visualizing sustainability data. Firstly, businesses need clear and accessible visualizations to comprehend the comprehensive impact of their operations on the environment, society, and economy. These visualizations should go beyond traditional metrics, incorporating diverse data sets to provide a holistic view. Secondly, businesses require dynamic visualizations to track their progress in real-time, enabling them to adapt strategies promptly and make informed decisions based on current environmental and social indicators. Thirdly, visualization tools must facilitate the communication of sustainability efforts to stakeholders, including customers, investors, and employees, in an engaging and transparent manner. In essence, the business imperative for visualizing sustainability lies in fostering a deeper understanding, facilitating informed decision-making, and communicating transparently to align with evolving global expectations for responsible corporate practices.

Literature Survey

The literature on visualizing sustainability underscores the critical role that effective visual representations play in advancing our understanding and addressing complex environmental, social, and economic challenges. Scholars emphasize the need for innovative visualization techniques to bridge the communication gap among diverse stakeholders, ranging from policymakers and businesses to the general public. Existing research highlights the challenges associated with conveying the intricacies of sustainability through conventional means and advocates for the integration of advanced technologies, data analytics, and standardized metrics. Furthermore, studies emphasize the importance of real-time, interactive dashboards that facilitate continuous monitoring and adaptation in response to dynamic changes. Collaboration between data scientists, sustainability experts, and visualization designers is recognized as pivotal for creating impactful visualizations that resonate with audiences. The literature survey reveals a growing recognition of the potential of visual storytelling and the urgent need for unified platforms that amalgamate diverse data

sources, visualization tools, and educational resources to foster a holistic understanding of sustainability.

Social or Business Impact

The visualization of sustainability data holds profound social and business impacts by fostering a deeper understanding of environmental and social challenges while simultaneously driving strategic decision-making for organizations. Socially, it promotes awareness and education among diverse stakeholders, empowering them to make informed choices that align with sustainable values. Visualizations act as powerful communication tools, bridging the information gap and inspiring collective action toward shared sustainability goals. From a business perspective, effective sustainability visualization enhances transparency, building trust with customers and investors who increasingly prioritize responsible business practices. It enables organizations to identify inefficiencies, optimize processes, and implement targeted interventions to reduce environmental impacts.