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Augmented and mixed reality based decision support tool for the integrated resource plan

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Abstract:

In today's era, enormous amounts of data are generated and the means to visualize this data is becoming a challenge. Data visualization is an important support tool that allows one to make informed decisions. This paper attempts to provide a possible solution to this major challenge. The solution presented is a data analytic tool capable of visualizing complex data by leveraging the fourth industrial revolution technologies, augmented and mixed reality. Using the disruptive nature of these technologies, it could provide an application that is more intuitive and immersive to the end-user. Moreover, we focus the solution in the energy domain by exploring methods in enhancing energy data visualization to support decision-making of South Africa's Integrated Resource Plan (IRP).