LESOTHO REVENUE AUTHORITY HACKATHON – 2021

BIG DATA

BACKGROUND

Data analytics are extremely important for managers. They improve decision-making, increase accountability, benefit financial health, and help them predict losses and monitor performance. There are several challenges that can impede managers' ability to collect and use analytics. There are countable challenges that businesses experience and those include the amount of data being collected. With today's data-driven organizations and the introduction of big data, risk managers and other employees are often overwhelmed with the amount of data that is collected. An organization may receive information on every incident and interaction that takes place on a daily basis, leaving analysts with thousands of interlocking data sets.

With this large amounts of data available, it is difficult to dig down and access the insights that are needed most. When employees are overwhelmed, they may not fully analyse data or only focus on the measures that are easiest to collect instead of those that truly add value. To be understood and impactful, data often needs to be visually presented in graphs or charts. While these tools are incredibly useful, it's difficult to build them manually. Taking the time to pull information from multiple areas and put it into a reporting tool is frustrating and time-consuming.

The next issue is trying to analyse data across multiple, disjointed sources. Different pieces of data are often housed in different systems. Employees may not always realize this, leading to incomplete or inaccurate analysis. Manually combining data is time-consuming and can limit insights to what is easily viewed.

Finally, analytics can be hard to scale as an organization and the amount of data it collects grows. Collecting information and creating reports becomes increasingly complex. A system that can grow with the organization is crucial to manage this issue.

PROBLEM STATEMENT

Kyrgyzstan Revenue Authority (KRA) has shared five .csv data files inside the local directory. Using the shared data set, help KRA management team to make appropriate and financially healthy real-time decisions to improve tax compliance. The solution should be capable of understanding and adapting to the new business trends. As a highly skilled and trusted Data Architect in Kyrgyzstan, grant all stakeholders access to aesthetically pleasing dashboards (including graphs & charts).