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Course Name: DATA ANALYTICS

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Date: 8/21/23

**QSTN a**

**Compare and Contrast:**

* For new users and non-data analysts, Power BI is typically thought to be simpler to use.
* Tableau is regarded for having a more difficult learning curve, it is more popular with seasoned data analysts.

|  |  |
| --- | --- |
| **Tableau** | **Power BI** |
| It’s not a Microsoft product | It’s a Microsoft product |
| Tableau BI performs better when handling large amounts of data (Salijeni et al., 2021) | Power BI can only manage a certain amount of data. |
| The Tableau platform is renowned for its ability to visualize data (Marella et al., 2023). In Tableau, 24 different types of visualizations can be used. | Power BI provides a wide range of data points for data display. Digging deeper into the dataset, it is providing more than 3500 data points (Marella et al., 2023). |
| Uses calculated fields for calculations and analysis | For calculating and analysis, Power BI makes use of DAX language (Salijeni et al., 2021) |
| In Tableau, the embedding report is a real-time challenge. | With Power BI, embedding reports is simple. |

**Difference between Excel and Python Power BI**

Power BI began as an Excel add-on and is now a cloud-based suite of business intelligence and data visualization tools (Salijeni et al., 2021). Its stated objective is to "create a data-driven culture with business intelligence for all."

Power BI is an easy win for individuals who currently use Microsoft products because it makes use of Microsoft systems like Excel, Azure, and SQL to do this (Marella et al., 2023). The platform's drag-and-drop functionality and over 100 connectors make it easy and dynamic to work with

**Types of Databases**

**QSTN b**

* Relational Databases- Create structured tables of data with established linkages. MySQL, PostgreSQL, and Microsoft SQL Server are a few examples.
* NoSQL Databases- Organize data that is semi- or unstructured such as document Stores and graph databases (Marella et al., 2023).
* Graph databases-for storing and querying data with complex relationships.

**QSTN c**

**Considerations for Choosing a Data Analysis Tool**

* Data Volume
* Cost Data visualization
* user level skills
* Integration
* Scalability
* Support and Community
* Security and Compliance

**References**

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