

<b>Student Name/ID Number:</b>	Francis Roel L. Abarca – BDSE-0922-113
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<b>Unit Assessor:</b>	Ei Thandar Khaing
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**Learner declaration**

I certify that the work submitted for this assignment is my own and research sources are fully acknowledged.

Student signature:

*Francis*

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## Task Wise Solutions:

### 1. Microsoft Corporation

#### a. Microsoft Power BI

##### i. Functionalities

Microsoft Power BI is a unified, scalable platform for self-service and enterprise business intelligence (BI). It allows users to connect to and visualize any data, and seamlessly infuse the visuals into the apps they use every day. It also offers extensive data connectors, enabling users to connect directly to hundreds of on-premises and cloud data sources.

##### ii. Benefits

Power BI provides end-to-end data protection, ensuring better protection of your data across Power BI reports, dashboards, and datasets. It also interoperates with the Microsoft technology you already trust, allowing you to use your data productively.

##### iii. Reason

Microsoft Power BI would be a great choice for the Windows Insider Division as it provides a comprehensive business intelligence solution that integrates well with other Microsoft technologies. It would allow the division to visualize and analyze their data effectively, leading to more informed decision-making.

##### iv. Impact

The transition to Power BI would involve migrating existing data sources and reports to the Power BI platform. This could require some initial effort, but the intuitive interface and extensive support resources provided by Microsoft should help ensure a smooth transition.

### 2. Meta

#### a. Apache Cassandra

##### i. Functionalities

Apache Cassandra is a highly scalable, high-performance distributed database designed to handle large amounts of data across many commodity servers, providing high availability with no single point of failure. It offers robust support for clusters spanning multiple datacenters, with asynchronous masterless replication allowing low latency operations for all clients.

##### ii. Benefits

The benefits of using Apache Cassandra include its ability to handle large amounts of data, its high availability and fault tolerance, and its strong consistency model. It also provides operational simplicity and easy data distribution across multiple data centers and cloud availability zones.

iii. Reason

Meta, formerly known as Facebook, handles massive amounts of data. Apache Cassandra's ability to scale, perform, and maintain a high level of uptime is likely why Meta uses it.

iv. Impact

The impact of using Apache Cassandra at Meta is significant. It allows Meta to ensure a seamless user experience by providing uninterrupted service, even when dealing with massive data loads or in the event of server failures. This can lead to increased user satisfaction and engagement on their platforms.

3. Pfizer Inc.

a. SAS

i. Functionalities

SAS provides a wide range of functionalities including data management, advanced analytics, multivariate analysis, business intelligence, and predictive analytics. It also offers numerous built-in functions for data analysis and processing.

ii. Benefits

SAS is known for its high data security, and it provides a protected environment for algorithm testing. It also offers excellent customer support.

iii. Reason

For a pharmaceutical company like Pfizer, which deals with a vast amount of data, SAS's strong data management and advanced analytics capabilities would be extremely beneficial. Its high data security would also be crucial for protecting sensitive information.

iv. Impact

Pfizer was able to carry out intricate data analysis and produce insights that may enhance company R&D, product quality, and customer pleasure by using SAS. Additionally, it would support Pfizer in maintaining its intellectual property and adhering to legal requirements. SAS could also improve Pfizer's innovation and decision-making by supplying accurate and useful data.

4. Fujitsu LTD

a. Tableau

i. Functionalities

Tableau offers a range of functionalities that can enhance productivity, data governance, and scalability of data insights across an organization. Some key features include:

- Tableau Accelerators

- These are ready-to-use dashboards that can be customized to fit unique use cases, accelerating time to value.
- Bins
  - This feature groups continuous data into discrete intervals, simplifying data analysis.
- Tableau Catalog
  - It catalogs all data assets and sources into one central list and provides metadata for fast data discovery.
- Data Stories
  - This tool summarizes key insights in a clear and concise manner, providing automated plain-language explanations to dashboards.

## ii. Benefits

The benefits of using Tableau include:

- Fast-tracking research
  - Tableau saves valuable time by providing months' worth of data instantly.
- Streamlining search
  - It helps select the best Business Intelligence (BI) and Data Management software tailored to unique business needs.
- Objective and impartial insights
  - Tableau provides insights that are immune to vendor bias and marketing fluff.

## iii. Reason

The reason for Fujitsu LTD to use Tableau could be its powerful data visualization and analytics capabilities. Tableau's features can help Fujitsu LTD make data-driven decisions, understand complex datasets, and gain valuable insights into their data.

## iv. Impact

Using Tableau at Fujitsu LTD might have a big impact. It can boost productivity, facilitate data-driven decision-making, and offer insightful information that can inform business strategy. The precise effect, though, might vary based on how Fujitsu LTD uses Tableau's features in their business.