**Instructions for the Breakout Activity**

Objective: Use the provided datasets to evaluate employee productivity and collaboration and determine what insights you can derive from the data, and what additional data points would improve your decisions?

Time**:** 15 minutes

### Task 1 - Identify Relevant & Irrelevant Data Points

* Review the dataset fields and descriptions
* Discuss which fields are most relevant for decision-making
* Identify and disregard irrelevant fields that do not add value

### Task 2 - Assess Data Quality

Evaluate the dataset using these data quality dimensions:

* **Completeness** – Are key fields missing data?
* **Accuracy** – Could any fields be inaccurate or outdated?
* **Relevance** – Do all fields align with the decision goal?
* **Consistency** – Are any data points ambiguous or conflicting?
* **Timeliness** – Is the data recent and actionable?

### Task 3 - Propose Additional Data Points

Consider what’s missing to make the dataset more useful:

* **Contextual information** – What external factors impact productivity?
* **Trends & benchmarks** – Could comparisons improve insights?
* **Organizational factors** – What internal dynamics should be included?

**Data Tables and Fields**

**Work Output Metrics**

**Source:** Weekly reports submitted by team leads

**Update Frequency:** Monthly

**Notes:** Includes data on task completion rates and time-to-completion averages

**Table Metadata:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Field Name** | **Employee ID** | **Department** | **Completed Tasks** | **Deadlines Met** | **Avg. Time to Complete Tasks** |
| Data Type | String | String | Float | Percentage (Float) | Hours (Float) |
| Range | Alphanumeric | Text | 0 – No upper limit | 0-100 | 0- No upper limit |
| Description | A unique identifier for each employee | The department where the employee works (e.g., Sales, IT) | The number of tasks completed by an employee over a specific period | The percentage of deadlines met for assigned tasks | The average number of hours it takes an employee to complete a task |
| Example | EID001 | Marketing | 15 | 85 | 4.2 |

**Employee Engagement Metrics**

**Source:** Annual engagement survey and HR program participation records

**Update Frequency:** Annually

**Notes:** Turnover rate reflects voluntary departures from the previous year

**Table Metadata:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Field Name** | **Employee ID** | **Department** | **Engagement Score** | **Participated in Development Programs** | **Voluntary Turnover Rate** |
| **Data Type** | String | String | Float | Percentage (Float) | Percentage (Float) |
| **Range** | Alphanumeric | Text | 1.0 – 5.0 | 0-100 | 0-100 |
| **Description** | A unique identifier for each employee | The department where the employee works (e.g., Sales, IT) | A score from engagement surveys, reflecting employee satisfaction or motivation | The percentage of employees who participated in training or development programs | The percentage of employees who voluntarily left the organization |
| **Example** | EID002 | HR | 4.3 | 75 | 8.5 |

**Operational Metrics**

**Source:** Employee time-tracking software and system logs

**Update Frequency:** Weekly

**Notes:** Utilization rate is calculated based on system usage during work hours

**Table Metadata:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Field Name** | **Employee ID** | **Department** | **Meetings Attended** | **Hours Logged (Billable / Non-Billable)** | **Tool Utilization Rate** |
| **Data Type** | String | String | Per week (Float) | Float | Percentage (Float) |
| **Range** | Alphanumeric | Text | 0 – No upper limit | 0 – No upper limit | 0 -100 |
| **Description** | A unique identifier for each employee | The department where the employee works (e.g., Sales, IT) | The average number of meetings attended by an employee each week | The ratio of billable to non-billable hours logged by the employee | The percentage of time an employee utilizes key tools or systems |
| **Example** | EID003 | IT | 6 | 1.75 | 90 |

**Team Collaboration Metrics**

**Source:** Team project logs and peer feedback surveys

**Update Frequency:** Quarterly

**Notes:** Collaboration ratings are based on anonymized survey responses

**Table Metadata:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Field Name** | **Team ID** | **Department** | **Cross-Functional Projects Completed** | **Peer Feedback Score** | **Avg. Collaboration Rating** |
| **Data Type** | String | String | Quarterly (Float) | Float | Float |
| **Range** | Alphanumeric | Text | 0 – No upper limit | 1. - 5.0 | 1. - 5.0 |
| **Description** | A unique identifier for each team | The department where the team works (e.g., Sales, IT) | The number of projects completed in collaboration with other teams | A score reflecting how well team members perceive each other's collaboration and communication | An average rating of the team’s collaboration effectiveness |
| **Example** | TID001 | Sales | 4 | 4.2 | 4.5 |