



Data Sleek Data Warehouse Jira

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Executive Summary

The objective of this project was to enhance project management efficiencies by analyzing project performance. To achieve this, we identify 5 Key Performance Indicators (KPIs).

Firstly, we define 3 dimension tables and 2 fact tables. Then, we used these tables to implement the designed KPIs to evaluate the project progress. Afterwards, we used Tableau dashboards to present our findings. Among the visualizations, some of the standout insights obtained include precision in project scheduling and monopolization of resources.

Lastly, we offer comprehensive feedback concerning the challenges encountered during the project, including the absence of specific data regarding project completion rates and progress, coupled with the existence of data gaps, and potential data exclusions. We offer the solutions we have implemented and share the lessons we have gained.

Project Statement

Jira is an issue-tracking software. It plays a critical role in project management by facilitating progress monitoring. For each project in progress, Jira tracks the information of users creating, resolving, and commenting on relevant issues. In this way, Jira increases efficiency and productivity, and thus optimizes the utilization of resources.

The goal of our project is to investigate the effectiveness of Jira in project management. For this purpose, we conduct an in-depth analysis of Jira's data stored within the Data-Sleek data warehouse. The primary analytical tool used for this purpose is Snowflake. The main emphasis of this analysis is on deriving and implementing KPIs, which are customized for the data features generated by Jira. Fundamentally, these KPIs aim to provide actionable insights into project progress through user engagements, thereby improving decision-making and strategic planning.

To better explain these insights, we create dashboards utilizing Tableau. Through visualization, stakeholders can access, interpret, and interact with the generated KPIs to make more clarified and confident business decisions.

Data Dictionary

The Jira database contains 31 tables. The data dictionary, found in Appendix: Table 1, offers an overview of table schema, table names, column names of each table, the position of each column in each table, data types of each column, numeric scale, maximum lengths, whether each column is an identity column, and whether each column can contain NULLs. We manually added two columns to the dictionary to demonstrate whether each column is needed for building target KPIs, and how each column should be renamed for clarity.

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	ORDINAL_POSITION	DATA_TYPE	NUMERIC_SCALE	MAXIMUM_LENGTH	IS_IDENTITY	IS_NULLABLE	Is Needed?	Rename To
DWH_UCLA2024_JIRA	COMMENT	ID	1	NUMBER	0		NO	NO	YES	COMMENT_ID
DWH_UCLA2024_JIRA	COMMENT	ISSUE_ID	2	NUMBER	0		NO	YES	YES	
DWH_UCLA2024_JIRA	COMMENT	AUTHOR_ID	3	TEXT		256	NO	YES	YES	AUTHOR_ID
DWH_UCLA2024_JIRA	COMMENT	CREATED	6	TIMESTAMP_TZ			NO	YES	YES	CREATE_TIME
DWH_UCLA2024_JIRA	ISSUE	ID	1	NUMBER	0		NO	NO	YES	ISSUE_ID
DWH_UCLA2024_JIRA	ISSUE	PROJECT	7	NUMBER	0		NO	YES	YES	
DWH_UCLA2024_JIRA	ISSUE	RESOLVED	10	TIMESTAMP_TZ			NO	YES	YES	RESOLVE_TIME
DWH_UCLA2024_JIRA	ISSUE	CREATED	13	TIMESTAMP_TZ			NO	YES	YES	CREATE_TIME
DWH_UCLA2024_JIRA	ISSUE	PRIORITY	14	NUMBER	0		NO	YES	YES	
DWH_UCLA2024_JIRA	ISSUE	STATUS	19	NUMBER	0		NO	YES	YES	
DWH_UCLA2024_JIRA	ISSUE	CREATOR	25	TEXT		256	NO	YES	YES	ISSUE_CREATOR
DWH_UCLA2024_JIRA	ISSUE	DUE_DATE	28	DATE			NO	YES	YES	
DWH_UCLA2024_JIRA	PRIORITY	ID	1	NUMBER	0		NO	NO	YES	
DWH_UCLA2024_JIRA	PRIORITY	NAME	2	TEXT		256	NO	YES	YES	ISSUE_PRIORITY
DWH_UCLA2024_JIRA	PROJECT	ID	1	NUMBER	0		NO	NO	YES	
DWH_UCLA2024_JIRA	PROJECT	NAME	3	TEXT		256	NO	YES	YES	PROJECT_NAME
DWH_UCLA2024_JIRA	STATUS	ID	1	NUMBER	0		NO	NO	YES	
DWH_UCLA2024_JIRA	STATUS	NAME	3	TEXT		256	NO	YES	YES	ISSUE_STATUS
DWH_UCLA2024_JIRA	USER	ID	1	TEXT		256	NO	NO	YES	USER_ID
DWH_UCLA2024_JIRA	USER	NAME	5	TEXT		256	NO	YES	YES	USER_NAME
DWH_UCLA2024_JIRA	WORKLOG	ISSUE_ID	1	NUMBER	0		NO	NO	YES	
DWH_UCLA2024_JIRA	WORKLOG	TIME_SPENT_SECONDS	6	NUMBER	0		NO	YES	YES	

Figure 1. All Needed Column For Dimensional Modeling

Dimensional Modeling + ERD

Definition of Business or Event Process

In this data warehouse project, the business process is centered on the comprehensive management and tracking of project activities within a JIRA-like system, focusing on the detailed recording and monitoring of issues (tasks or tickets) across various projects from their inception to resolution and closure. Simultaneously, the system meticulously tracks user interactions with these issues, including creation, resolution, and commenting, alongside monitoring overall project progression.

The overarching goal is to perform nuanced analysis on Project Management and User Performance, aiming to capture critical data points related to scheduling, resource allocation, and progress tracking, as well as evaluating user productivity, work quality, and contributions towards team or organizational objectives. By doing so, this process seeks not only to optimize project management and workflow efficiency but also to enhance team performance and support strategic decision-making, thereby providing vital insights into project efficiency and empowering organizations to pinpoint areas for training, development, and improvement to foster increased efficiency and productivity.

Definition of Grain (Level of Details)

The grain of the data model is defined as the most detailed level at which the data is captured. In this scenario, the grain is established at two levels based on the two primary actions:

- **Issue Grain:** Each record represents an individual issue, capturing every aspect of its lifecycle, from creation to resolution. This level details who created the issue, what the issue entails, when it was created and resolved, and how long it took to resolve. This grain allows us to measure project progress, cycle time, and overall project health.
- **Comment Grain:** Each record represents a single comment made on an issue. This level documents who made the comment, on which issue, and when, providing insight into user engagement and communication patterns within the project management process, serving as a proxy for user activity and contribution to issue resolution.

Definition of Dimensions and Facts

Dimensions

- **User Dimension (User_Dim):** Identifies 'who' is involved in the process. This dimension helps in analyzing user activity, identifying top performers, and areas needing

improvement.

- Attributes include User_Key, User_ID, and User_Name.
- **Issue Dimension (Issue_Dim):** Captures 'what' is happening, 'when' it starts and ends, and 'how long' it takes. This dimension is pivotal for tracking project progress, issue priority, and resolution efficiency.
 - Attributes include Issue_Key, Issue_ID, Project_Name, Issue_Creator, Issue_Priority, Issue_Status, Create_Time, Resolve_Time, Time_Spent_Seconds, and Due_Date.
- **Comment Dimension (Comment_Dim):** Details 'who' interacts and 'when'. This dimension focuses on user engagement through comments on issues.
 - Attributes include Comment_Key, Comment_ID, Create_Time, and Author_ID.

Facts

- **Comment Fact (Comment_Fact):** Records 'how many' comments are made on 'what time' by 'whom', linking comments to users and issues. This fact table enables the analysis of user engagement and communication within projects.
 - Attributes include Comment_Key, User_Key, Issue_Key, and Comment_Quantity.
- **Issue Fact (Issue_Fact):** Captures 'how many' issues are being managed, their resolution status, and time metrics. This fact table is crucial for evaluating project management efficiency, including cycle times, project completion rates, and issue resolution effectiveness.
 - Attributes include Issue_Key, User_Key, Issue_Quantity, Issue_Overdue, Cycle_Time, and Issue_Completed.

Entity Relationship Diagram (ERD)

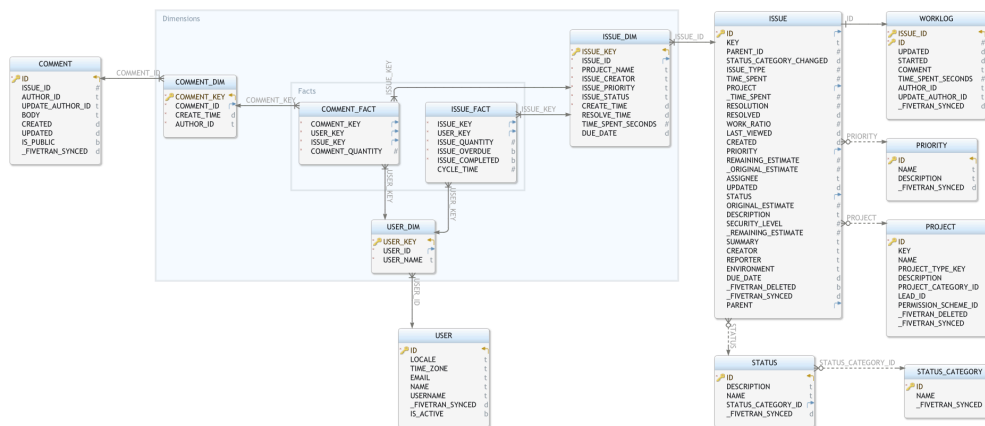


Figure 2. Star Schema + Entity Relationship Diagram

Data Transformation

Dimension Tables

- **User Dimension (User_Dim):** This table is populated from the "DWH_UCLA2024_JIRA"."USER" table in the source system. A sequence named 'USERS' is used to generate a unique 'User_Key' for each row. The fields populated are 'User_ID' and 'User_Name' which are directly extracted from the source table fields 'ID' and 'NAME', respectively.
- **Issue Dimension (Issue_Dim):** This table is populated from the "DWH_UCLA2024_JIRA" schema, using tables 'Issue', 'Priority', 'Status', 'Status Category', 'Project', and aggregating from 'Worklog' table for the 'Time_Spent_Seconds'. A unique 'Issue_Key' is generated using the 'ISSUES' sequence. Fields populated include 'Issue_ID', 'Project_Name', 'Issue_Creator', 'Issue_Priority', 'Issue_Status', 'Create_Time', 'Resolve_Time', 'Time_Spent_Seconds', and 'Due_Date'. The priority and status are joined from their respective tables, and time spent is calculated as a sum from the 'Worklog'.
- **Comment Dimension (Comment_Dim):** This table is populated using data from the "DWH_UCLA2024_JIRA"."COMMENT" table in the source system. A sequence named 'COMMENTS' is used to generate a unique 'Comment_Key' for each row. The fields populated are 'Comment_ID', 'Create_Time', and 'Author_ID'. The 'Create_Time' and 'Author_ID' are directly extracted from the source table fields 'Created' and 'Author_ID', respectively.

Fact Tables

- **Comment Fact Table (Comment_Fact):** This table links the dimensions together and includes an additional field related to comments. It is populated by joining the user, issue, and comment dimension tables. The fields populated include keys from the dimension tables ('User_Key', 'Issue_Key', and 'Comment_Key') and 'Comment_Quantity' (number of comments per user per issue, which is 1).
- **Issue Fact Table (Issue_Fact):** This table links the User and Issue dimensions together and includes additional fields related to issues. It is populated by joining the issue and user tables. The fields populated include keys from the User and Issue dimension tables ('Issue_Key' and 'User_Key'), 'Issue_Quantity' (number of issues per user, which is 1), 'Issue_Overdue' (a boolean derived by checking if the date of 'Resolve_Time' is after 'Due_Date' to determine if the issue was overdue), 'Cycle_Time' ('Time_Spent_Seconds' from Issue dimension), and 'Issue_Completed' (a boolean derived by checking if the 'Issue_Status' is 'Done' to determine if the issue has been closed).

Produce KPIs using Fact and Dim

1. Activity Level: Numbers of issues created, resolved, and closed per project

These metrics measure the activity level, serving as an indicator of project engagement and problem-solving effectiveness. By tracking these numbers, the areas that require additional resources or process improvement can be identified, which ensures that the projects stay on track and that issues are addressed promptly.

- **Number of Issues Created per Project** is queried by summing the 'Issue_Quantity' and grouped by 'Project_Name' from the 'Issue_Fact' table.

	PROJECT_NAME	...	NUM_CREATED_ISSUE
1	ALT Consulting		1
2	AMI Entertainment		16
3	Act Now Technologies		2
4	AdAction		39
5	Aestuary		135

Figure 3. First 5 Rows of SQL Query Output in Number of Issues Created per Project

- **Number of Issues Resolved per Project** is queried by summing the 'Issue_Quantity' where they are resolved ('Resolved_Time' is not NULL) and grouped by 'Project_Name' from the 'Issue_Fact' table.

	PROJECT_NAME	NUM_RESOLVED_ISSUE
1	AMI Entertainment	11
2	Act Now Technologies	2
3	AdAction	26
4	Aestuary	94
5	Auto Rescue Solutions	45

Figure 4. First 5 Rows of SQL Query Output in Number of Issues Resolved per Project

- **Number of Issues Closed per Project** is queried by summing the 'Issue_Quantity' where they are completed('Issue_Completed' = TRUE) and grouped by 'Project_Name' from the 'Issue_Fact' table.

	PROJECT_NAME	NUM_CLOSED_ISSUE
1	AMI Entertainment	13
2	Act Now Technologies	2
3	AdAction	30
4	Aestuary	126
5	Auto Rescue Solutions	48

Figure 5. First 5 Rows of SQL Query Output in Number of Issues Closed per Project

2. User Activity (number of issues created per user, number of issues resolved per user, number of issues commented per user, and number of comments created per user)

These KPIs track various metrics related to individual user actions within the project management system. By analyzing data such as the number of issues each user creates, resolves, or comments on, high performers and areas where team members may need further support or training can be identified. This KPI is crucial for understanding team dynamics and improving individual performance, contributing to the overall success of the projects.

- **Number of Issues Created per User** is queried by summing the 'Issue_Quantity' and grouped by 'User_Name' from the 'User_Fact' table.

	USER_NAME	NUM_CREATED_ISSUE
1	Ahmed Garhy	1
2	Amy Wang	4
3	Andrew Moore	3
4	Andy	36
5	Antun	37

Figure 6. First 5 Rows of SQL Query Output of Number of Issues Created per Project

- **Number of Issues Resolved per User** is queried by summing the 'Issue_Quantity' where they are resolved ('Resolved_Time' is not NULL) and grouped by 'User_Name' from the 'Issue_Fact' table.

	USER_NAME	NUM_RESOLVED_ISSUE
1	Ahmed Garhy	1
2	Amy Wang	3
3	Andrew Moore	3
4	Andy	35
5	Antun	31

Figure 7. First 5 Rows of SQL Query Output of Number of Issues Resolved per User

- **Number of Issues Commented per User** is queried by counting distinct 'Issue_Key' and grouped by 'User_Name' from the 'Comment_Fact' table.

	USER_NAME	NUM_COMMENTED_ISSUE
1	Adnan Haider	1
2	Ahmed Garhy	12
3	Alex Yarosh	20
4	Amy Wang	3
5	Andrew Moore	14

Figure 8. First 5 Rows of SQL Query Output of Number of Issues Commented per User

- **Number of Comments Created per User** is queried by summing the 'Comment_Quantity' and grouped by 'User_Name' from the 'Comment_Fact' table.

	USER_NAME	NUM_COMMENTED_ISSUE
1	Adnan Haider	1
2	Ahmed Garhy	13
3	Alex Yarosh	192
4	Amy Wang	4
5	Andrew Moore	27

Figure 9. First 5 Rows of SQL Query Output of Number of Comments Created per User

3. Project Completion Rate

This key performance indicator quantifies the proportion of projects that are finalized within the projected time frame. It serves as a gauge for evaluating the precision of project schedules and the effectiveness of project implementation. An increased completion rate signifies meticulously planned projects and proficient management, whereas a diminished rate may suggest the necessity for enhanced planning or resource distribution strategies.

- **Project Overall Overdue Rate** is queried by calculating the percentage of overdue tasks, which is defined by summing 1's if the issues are overdue ('Issue_Overdue' = TRUE), divided by summing 1's if the issues are completed ('Issue_Completed' = TRUE), from the 'Issue_Fact' table, renamed to 'Overdue_Rate'.

	OVERDUE_RATE
1	0.002589

Figure 10. SQL Query Output of Project Overall Overdue Rate

- **Project Overall Completion Rate** is queried by calculating the percentage of completed tasks, which is defined by summing 1's if the issues are completed ('Issue_Completed' = TRUE), divided by summing 'Issue_Quantity', from the 'Issue_Fact' table, renamed to 'Completion_Rate'.

	COMPLETION_RATE
1	0.787462

Figure 11. SQL Query Output of Project Overall Completion Rate

4. Cycle Time

This KPI measures the average duration needed to resolve an issue from the moment it is created until it is closed. This metric is instrumental in identifying bottlenecks within the workflow and

understanding how effectively a team addresses problems.

- Cycle Time is queried by averaging the 'Cycle_Time' from the 'Issue_Fact' table.

	...	AVG(CYCLE_TIME)
1		16245.829787

Figure 11. SQL Query Output of Cycle Time

5. Project Monitoring: Project progress and status based on issue statuses, priorities, and due dates

This KPI offers a quick overview of the general condition of projects by monitoring the status of issues, their priorities, and their respective deadlines.

- **Project Status Based on Issue Statuses** is queried by displaying texts “In Progress”, “Done”, or “To Do” according to values of 'Issue_Status' from the 'Issue_Fact' table, grouped by 'Project_Name', renamed to 'Project_Status'. If 'Issue_Status' has other values, including NULLs, we assume the issue is still “In Progress.”

	PROJECT_NAME	PROJECT_STATUS
1	ALT Consulting	In Progress
2	AMI Entertainment	In Progress
3	Act Now Technologies	Done
4	AdAction	In Progress
5	Aestuary	In Progress

Figure 12. First 5 Rows of SQL Query Output of Project Status Based on Issue Statuses

- **Overdue Rate of Each Project** is queried by calculating the percentage of overdue issues of each project, which is defined by summing 1's if from the Issue_Fact table, if the issues are overdue ('Issue_Overdue' = TRUE), divided by summing 1's if the issues are completed ('Issue_Completed' = TRUE), from the 'Issue_Fact' table, grouped by 'Project_Name', renamed to 'Overdue_Rate'.

	PROJECT_NAME	OVERDUE_RATE
1	AMI Entertainment	0.000000
2	Act Now Technologies	0.000000
3	AdAction	0.000000
4	Aestuary	0.031746
5	Auto Rescue Solutions	0.000000

Figure 13. First 5 Rows of SQL Query Output of Overdue Rate of Each Project

- **Completion Rate of Each Project** is queried by calculating the percentage of completed

issues of each project, which is defined by summing 1's if the issues are completed ('Issue_Completed' = TRUE), divided by summing 'Issue_Quantity', from the 'Issue_Fact' table, grouped by 'Project_Name', renamed to 'Completion_Rate'.

	PROJECT_NAME	COMPLETION_RATE
1	ALT Consulting	0.000000
2	AMI Entertainment	0.812500
3	Act Now Technologies	1.000000
4	AdAction	0.769231
5	Aestuary	0.933333

Figure 14. First 5 Rows of SQL Query Output of Completion Rate of Each Project

Data Visualization & KPI Insights

KPI 1: Activity Level

- Created vs. Resolved Issues Per Project** (top left bar chart in Figure 15): This chart compares the number of issues created and resolved for each project. The projects are listed on the y-axis, and the number of issues is on the x-axis. The project "Data Sleek" has the most created issues, 772, whereas "Upwork Client Development" has the most resolved issues, 553.
- Closed vs. Resolved Issues Per Project** (top right bar chart in Figure 15): This chart looks similar to the first but focuses on closed issues vs. those that are specifically resolved. This suggests that while issues are closed, they may not be resolved.
- The bubble charts in Figure 15 visualize the number of issues created, closed, and resolved for each project. The size of the bubble represents the quantity, and the color likely corresponds to the project name.

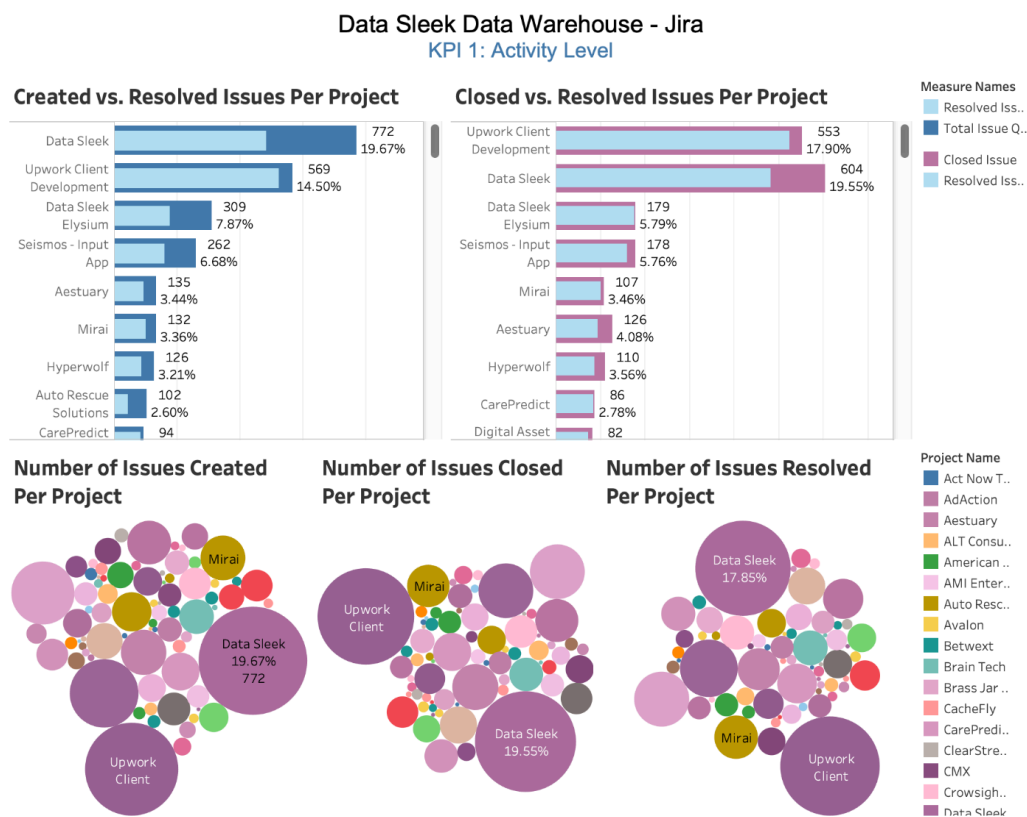


Figure 15. Activity Level Dashboard Screenshot

Suggestions: Jira may consider allocating more resources toward projects with more issues to improve productivity. Examining the reason and solving “closed but not resolved issues” may help improve management effectiveness.

KPI 2: User Activity

- Created vs. Resolved Issues Per User** (top left bar chart in Figure 16): This chart compares the number of issues created and resolved by individual users. Melissa Alvarez dominates this chart; she created 1,218 issues (31.04% of the total) and resolved a significant number as well.
- Number of Comments Created vs. Number of Issues Commented On Per User** (top right bar chart in Figure 16): This chart measures user engagement through comment creation and the number of different issues they've commented on. The four bubble charts demonstrate the comparison within each category separately. The bubble size represents the quantity, and the color likely corresponds to the user.

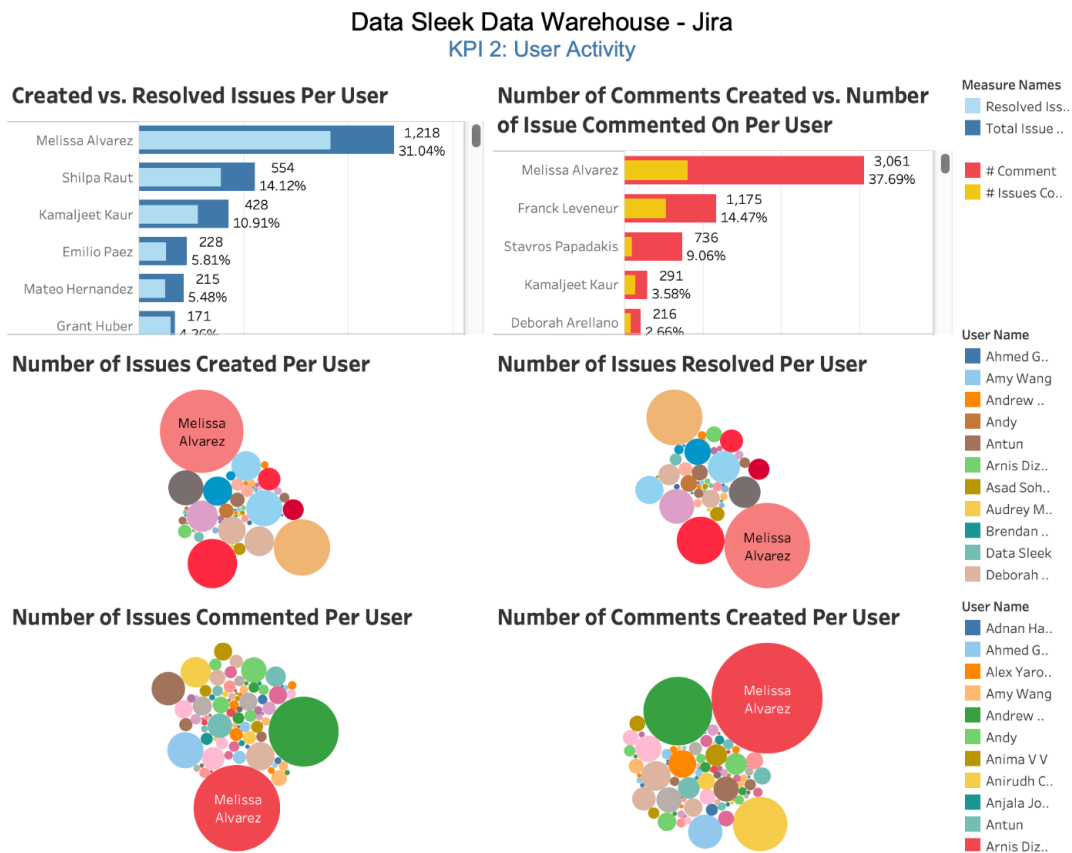


Figure 16. User Activity Dashboard Screenshot

Suggestions: Most issues were created and resolved by a small group of users. Improving working efficiency for less productive users would increase team productivity. Most comments are also created by a small group of users. Jira may consider enhancing the engagement of the less active users.

KPI 3: Project Completion Rate

- **Project Overall Overdue Rate** (left pie chart in Figure 17): This chart indicates the proportion of tasks or issues that are overdue. The vast majority, 99.80% (3,916 tasks), have been completed on time. Only a very small portion, 0.20% (8 tasks), represents overdue completions.
- **Project Overall Completion Rate** (right pie chart in Figure 17): This chart shows the overall completion rate for tasks or issues. 78.75% (3,090 issues) have been completed, indicated by the red section. The remaining 21.25% (834 issues), indicated by the blue section, have not been completed.

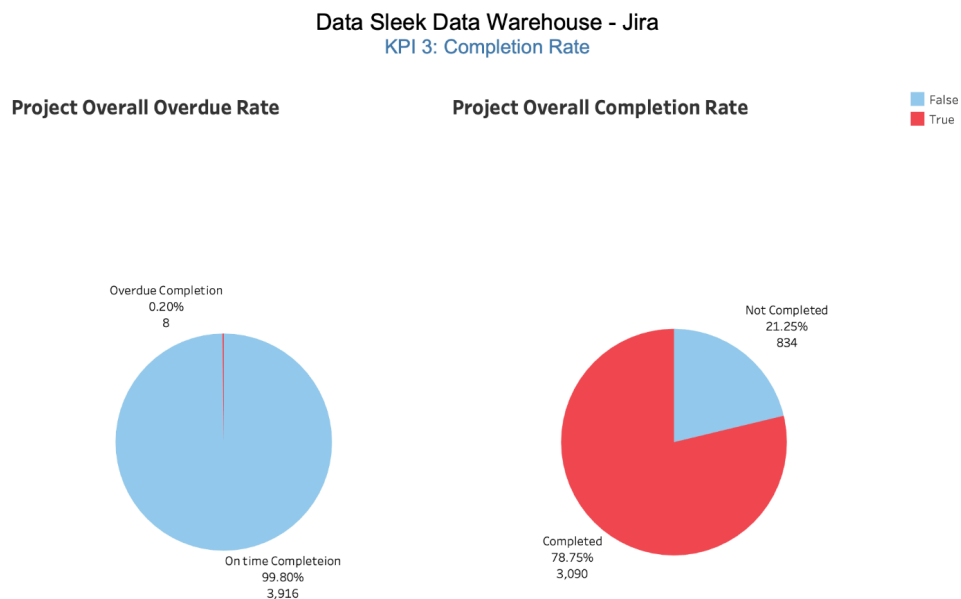


Figure 17. Project Completion Rate Dashboard Screenshot

Suggestions: Jira seems to have great schedule management. The project completion rate would increase as Jira increases productivity through other perspectives.

KPI 4: Cycle Time

- **Cycle Time Per Issue** (Bar Chart in Figure 18): This chart displays the cycle time, in minutes, for individual issues, identified by their Issue ID. The cycle times vary significantly, with an average of 271 minutes.
- **Average Issue Cycle Time Per Project** (Tree Map in Figure 18): The tree map visualizes the average issue cycle time per project, with the size of each rectangle representing the relative magnitude of the average cycle time. "Pondera Services" has the highest average cycle time of 1,020 minutes, indicating that, on average, it takes longer to resolve issues in this project. The tree map's color coding and size differences provide an immediate visual comparison between projects. As demonstrated in Figure 19, moving the cursor onto each project would generate a bar plot showing the cycle time of the issues in the project.
- **Average Issue Cycle Time Per User** (Bubble Chart in Figure 18): This bubble chart represents the average cycle time per user, with the size of each bubble corresponding to the user's average cycle time for resolving issues. According to Figure 20, the user "Haitong Huang" has a significantly larger bubble, with an average cycle time of 3,880 minutes, suggesting that the issues this person works on take much longer to resolve. Moving the cursor onto each user would generate a bar plot showing the cycle time of the issues that this user worked on.

Data Sleek Data Warehouse - Jira KPI 4: Cycle Time

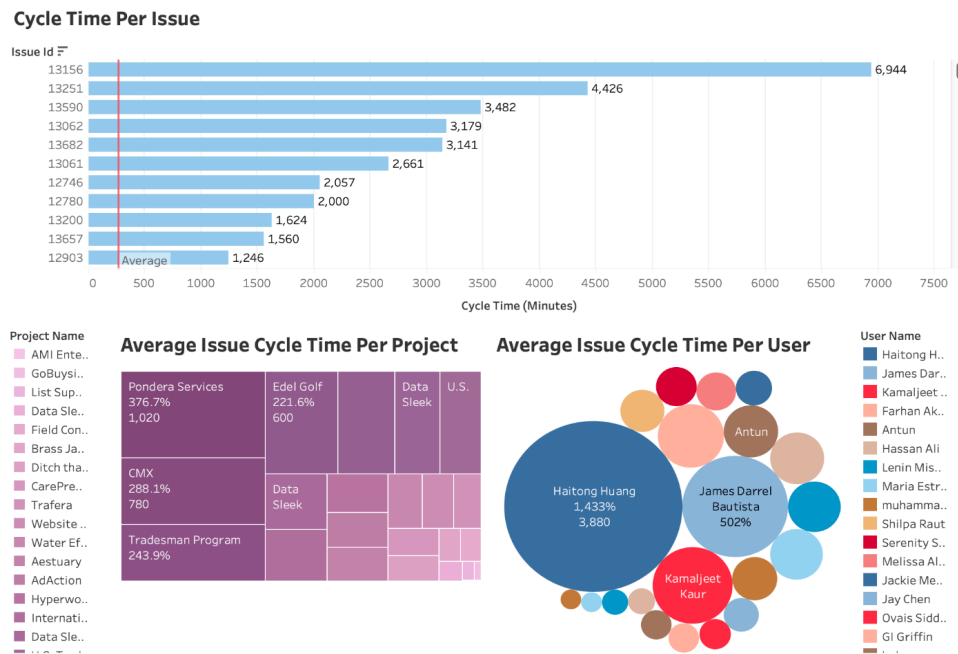


Figure 18. Cycle Time Dashboard Screenshot

Data Sleek Data Warehouse - Jira
KPI 4: Cycle Time

Cycle Time Per Issue

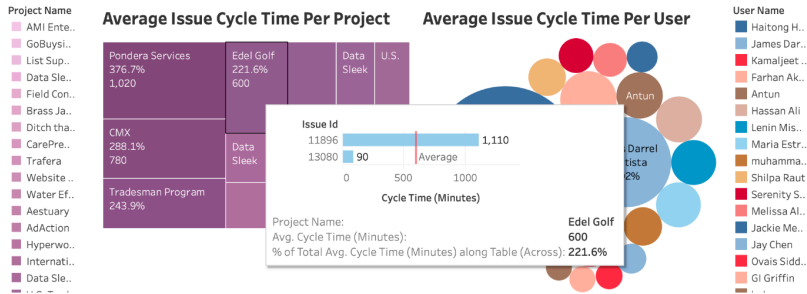
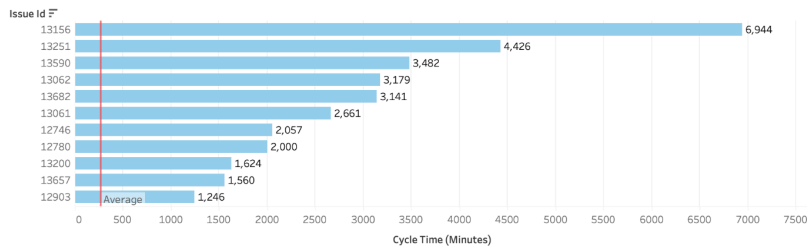


Figure 19. Issue Cycle Time by Project (Edel Golf)

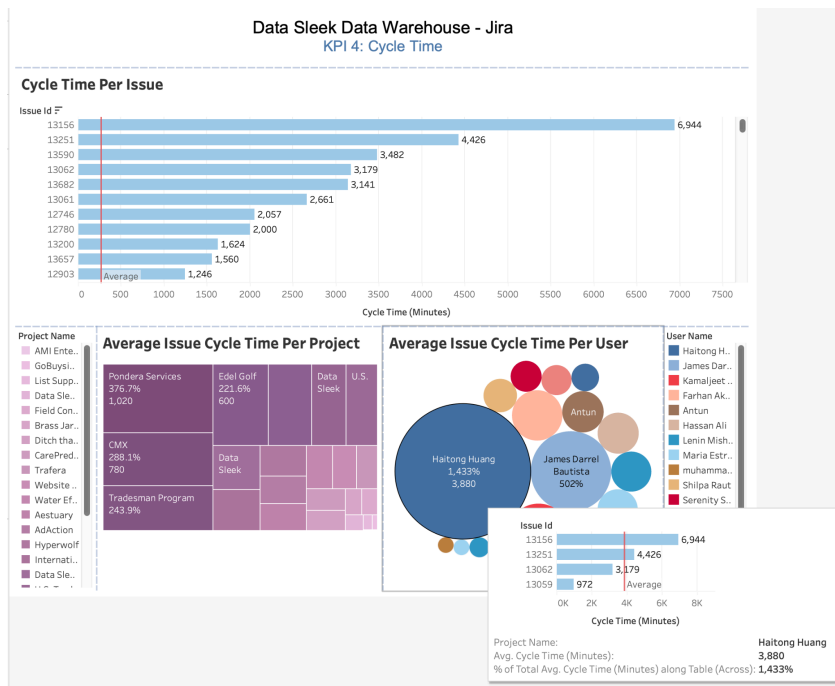


Figure 20. Issue Cycle Time by User (Haitong Huang)

Suggestions: Allocating more resources to issues and projects with longer cycle times would help improve the project competition rate. Users with issues that have longer cycle times may need help or additional training to improve productivity.

KPI 5: Project Monitoring

- Project Status** (Bar Chart in Figure 21): The bar chart lists projects and displays the count of issues in different statuses: "To Do," "In Progress," and "Done." "Data Sleek" has the most issues in progress (604) and the most issues done (151). This suggests it's a large and active project. "Upwork Client Development" also has a significant number of issues, with the majority (553) being done and a smaller portion in progress or to do. Other projects such as "Data Sleek Elysium," "Seismos - Input App," and "Aestuary" show a mix of issue statuses.
- Project Status Percentage** (Pie Chart in Figure 21): This pie chart shows the overall status of issues across all projects in terms of percentage completion. The majority of issues, 78.75% (3,090 issues), are marked as "Done." A small fraction, 6.47% (254 issues), are "In Progress." The "To Do" percentage is the remaining 14.78%.

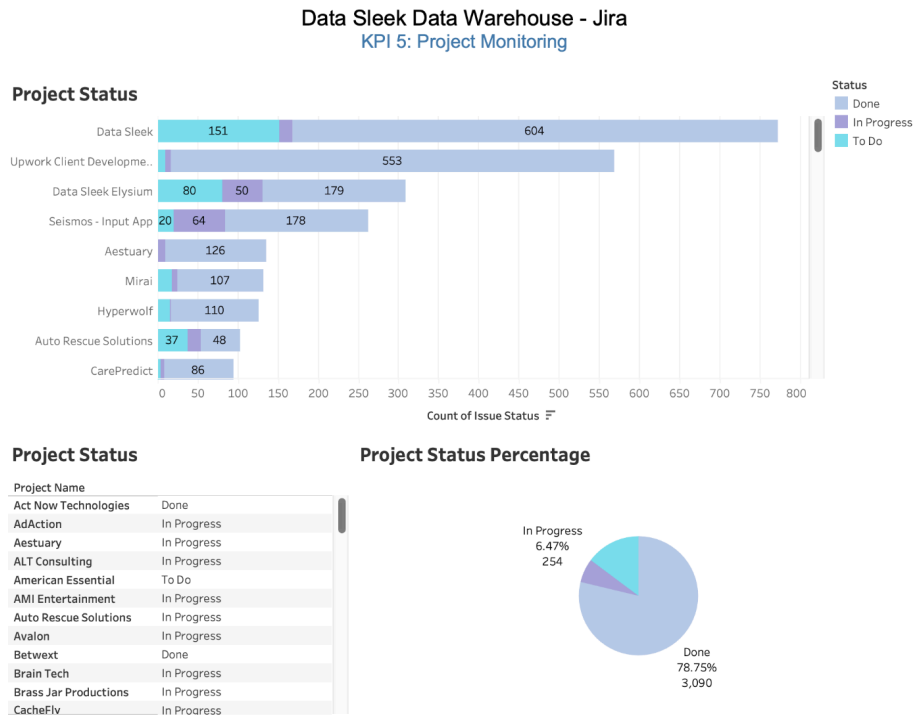


Figure 21. Project Monitoring Dashboard Screenshot

Suggestions: In general, Jira has more “to do” issues than “in progress” issues. Starting on some of the to-dos would enhance the project completion rate.

Visualization Summary

In this analysis, we delve into three key insights: project scheduling accuracy and resource monopolization. By understanding these insights and implementing appropriate strategies, organizations can enhance project management practices and drive greater success in project execution.

The success rate of completing projects on time, with a 99% adherence to deadlines, underscores the effectiveness of the project scheduling and management processes. This high level of adherence indicates that the due dates were well-designed and realistic, allowing for successful project completion within the specified timelines. To maintain this level of efficiency and adherence to deadlines, consider the following actions:

- **Continuous Evaluation:** Continuously evaluate and adjust project deadlines based on evolving project requirements, resource availability, and external factors. Regularly review the accuracy and feasibility of project timelines to ensure they remain realistic and achievable.
- **Risk Management:** Proactively identify and mitigate potential risks that could impact project timelines. Incorporate risk management strategies into project planning to minimize disruptions and maintain adherence to deadlines.

However, several projects and users are monopolizing a significant portion of the cycle time, while others only have as few as one relevant issue. This dominance is impeding the efficiency and progress of other projects. To address this issue, consider implementing the following recommendations:

- **Resource Allocation Review:** Assess the allocation of resources across projects to ensure a fair distribution of time and manpower. Identify projects or users that are monopolizing resources disproportionately and redistribute them accordingly.
- **Prioritization Framework:** Establish a clear prioritization framework that takes into account project importance, urgency, and impact. This ensures that high-priority projects receive the necessary attention without monopolizing resources unnecessarily.
- **Cycle Time Analysis:** Conduct a thorough analysis of cycle times for each project to identify bottlenecks and inefficiencies. Use this data to streamline processes and optimize resource utilization.

By ensuring realistic project deadlines and resource monopolization through fair allocation, organizations can enhance their project management capabilities. By implementing the recommended actions, organizations can streamline processes and optimize resource utilization, ultimately leading to improved project outcomes and stakeholder satisfaction.

Project Challenges

Three key challenges emerged: the determination of grain, the lack of direct data for project completion rate and progress, and the presence of missing/incomplete data. In this section, we delve into the strategies we utilized to address these challenges and the valuable lessons we gleaned while navigating the intricacies of data analysis in the project management sphere.

The determination of grain posed a significant challenge in our project, as different KPIs exhibited varying levels of granularity. To address this issue, we created two distinct fact tables with different grain sizes. The Comment Fact table was structured so that each row represented a unique comment, while the Issue Fact table was designed such that each row represented a different issue. This approach allowed us to maintain the integrity of the data and accurately capture the different levels of detail required for analysis. By segregating comments and issues into separate tables based on their granularity, we ensured a comprehensive and coherent data framework for analysis.

Another challenge we encountered was the lack of direct data sources to compute the project completion rate and progress. Traditional methods of calculation were unavailable, prompting the need for an alternative approach. To address this, we leveraged the statuses of issues as indicators of project completion rate and progress. By analyzing the progression of issue statuses over time, we were able to infer the overall project completion rate and progress. Although this method was indirect, it provided valuable insights into the project's advancement and allowed us to effectively track its status despite the absence of direct data sources.

The presence of missing data further complicated our analysis efforts. The original dataset contained numerous null values, significantly impacting the accuracy of our analysis. Unfortunately, there was no immediate solution to address the issue of missing data. Furthermore, there was a tendency to erroneously connect unrelated tables, resulting in potential data omissions. We also found a significant portion of our data appeared null in Tableau, but the data was not absent in the raw tables or query output. After investigation, we found that data had been distorted during integration with Tableau. This realization underscored the importance of meticulous data handling procedures to ensure the accuracy and integrity of subsequent analyses.

Despite facing limitations, we were driven by our dedication to achieving excellence, which led us to devise creative solutions and adjust our methods to fully utilize the data at hand. Reflecting on our experiences, we acknowledge that challenges serve as stepping stones for personal and professional growth. With these lessons in mind, we emerge from this project more resilient and better prepared to navigate the ever-evolving intersection of project management and data analysis.

Appendix

Table 1: Data Dictionary of Data Sleek Jira Schema

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	ORDINAL_POSITION	DATA_TYPE	NUMERIC_SCALE	MAXIMUM_LENGTH	IS_IDENTITY	IS_NULLABLE	Is Needed?	Rename To
DWH_UCLA2024_JIRA	BOARD	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	BOARD	NAME	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	BOARD	TYPE	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	BOARD	_FIVETRAN_SYNCED	4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	BOARD	_FIVETRAN_DELETED	5	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	COMMENT	ID	1	NUMBER	0		NO	NO	YES	COMMENT_ID
DWH_UCLA2024_JIRA	COMMENT	ISSUE_ID	2	NUMBER	0		NO	YES	YES	
DWH_UCLA2024_JIRA	COMMENT	AUTHOR_ID	3	TEXT		256	NO	YES	YES	AUTHOR_ID
DWH_UCLA2024_JIRA	COMMENT	UPDATE_AUTHOR_ID	4	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	COMMENT	BODY	5	TEXT		16384	NO	YES	NO	
DWH_UCLA2024_JIRA	COMMENT	CREATED	6	TIMESTAMP_TZ			NO	YES	YES	CREATE_TIME
DWH_UCLA2024_JIRA	COMMENT	UPDATED	7	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	COMMENT	IS_PUBLIC	8	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	COMMENT	_FIVETRAN_SYNCED	9	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	EPIC	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	EPIC	KEY	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	EPIC	NAME	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	EPIC	SUMMARY	4	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	EPIC	DONE	5	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	EPIC	_FIVETRAN_SYNCED	6	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	FIELD	ID	1	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	FIELD	NAME	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	FIELD	IS_CUSTOM	3	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	FIELD	IS_ARRAY	4	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	FIELD	_FIVETRAN_DELETED	5	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	FIELD	_FIVETRAN_SYNCED	6	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	FIELD_OPTION	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	FIELD_OPTION	PARENT_ID	2	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	FIELD_OPTION	NAME	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	FIELD_OPTION	_FIVETRAN_SYNCED	4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	ID	1	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	MESSAGE	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	UPDATE_STARTED	3	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	UPDATE_ID	4	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	SCHEMA	5	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	TABLE	6	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	START	7	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	DONE	8	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	ROWS_UPDATED_OR_INSERTED	9	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	STATUS	10	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	PROGRESS	11	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	FIVETRAN_AUDIT	_FIVETRAN_SYNCED	12	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	ID	1	NUMBER	0		NO	NO	YES	ISSUE_ID
DWH_UCLA2024_JIRA	ISSUE	KEY	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	PARENT_ID	3	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	STATUS_CATEGORY_CHANGED	4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	ISSUE_TYPE	5	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	TIME_SPENT	6	FLOAT			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	PROJECT	7	NUMBER	0		NO	YES	YES	
DWH_UCLA2024_JIRA	ISSUE	_TIME_SPENT	8	FLOAT			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	RESOLUTION	9	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	RESOLVED	10	TIMESTAMP_TZ			NO	YES	YES	RESOLVE_TIME
DWH_UCLA2024_JIRA	ISSUE	WORK_RATIO	11	FLOAT			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	LAST_VIEWED	12	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	CREATED	13	TIMESTAMP_TZ			NO	YES	YES	CREATE_TIME
DWH_UCLA2024_JIRA	ISSUE	PRIORITY	14	NUMBER	0		NO	YES	YES	
DWH_UCLA2024_JIRA	ISSUE	REMAINING_ESTIMATE	15	FLOAT			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	_ORIGINAL_ESTIMATE	16	FLOAT			NO	YES	NO	

DWH_UCLA2024_JIRA	ISSUE	ASSIGNEE	17	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	UPDATED	18	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	STATUS	19	NUMBER	0		NO	YES	YES	
DWH_UCLA2024_JIRA	ISSUE	ORIGINAL_ESTIMATE	20	FLOAT			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	DESCRIPTION	21	TEXT		8192	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	SECURITY_LEVEL	22	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	_REMAINING_ESTIMATE	23	FLOAT			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	SUMMARY	24	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	CREATOR	25	TEXT		256	NO	YES	YES	ISSUE_CREATOR
DWH_UCLA2024_JIRA	ISSUE	REPORTER	26	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	ENVIRONMENT	27	TEXT		512	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	DUE_DATE	28	DATE			NO	YES	YES	
DWH_UCLA2024_JIRA	ISSUE	_FIVETRAN_DELETED	29	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	_FIVETRAN_SYNCED	30	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE	PARENT	31	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_BOARD	BOARD_ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_BOARD	ISSUE_ID	2	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_BOARD	_FIVETRAN_SYNCED	3	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_BOARD	_FIVETRAN_DELETED	4	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_FIELD_HISTORY	FIELD_ID	1	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_FIELD_HISTORY	ISSUE_ID	2	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_FIELD_HISTORY	TIME	3	TIMESTAMP_TZ			NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_FIELD_HISTORY	VALUE	4	TEXT		8192	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_FIELD_HISTORY	IS_ACTIVE	5	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_FIELD_HISTORY	AUTHOR_ID	6	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_FIELD_HISTORY	_FIVETRAN_SYNCED	7	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_LINK	ISSUE_ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_LINK	RELATED_ISSUE_ID	2	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_LINK	RELATIONSHIP	3	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_LINK	_FIVETRAN_SYNCED	4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_MULTISELECT_HI STORY	FIELD_ID	1	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_MULTISELECT_HI STORY	ISSUE_ID	2	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_MULTISELECT_HI STORY	TIME	3	TIMESTAMP_TZ			NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_MULTISELECT_HI STORY	_FIVETRAN_ID	4	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_MULTISELECT_HI STORY	VALUE	5	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_MULTISELECT_HI STORY	IS_ACTIVE	6	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_MULTISELECT_HI STORY	AUTHOR_ID	7	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_MULTISELECT_HI STORY	_FIVETRAN_SYNCED	8	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_TYPE	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_TYPE	NAME	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_TYPE	DESCRIPTION	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_TYPE	SUBTASK	4	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_TYPE	_FIVETRAN_SYNCED	5	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	ISSUE_WATCHER	ISSUE_ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_WATCHER	USER_ID	2	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	ISSUE_WATCHER	_FIVETRAN_SYNCED	3	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION	ID	1	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	PERMISSION	NAME	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION	TYPE	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION	DESCRIPTION	4	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION	_FIVETRAN_DELETED	5	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION	_FIVETRAN_SYNCED	6	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_HOLDER	_FIVETRAN_ID	1	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	PERMISSION_HOLDER	PERMISSION_SCHEME_ID	2	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_HOLDER	PERMISSION_ID	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_HOLDER	USER_ID	4	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_HOLDER	GROUP_NAME	5	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_HOLDER	PROJECT_ROLE_ID	6	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_HOLDER	USER_CUSTOM_FIELD	7	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_HOLDER	GROUP_CUSTOM_FIELD	8	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_HOLDER	TYPE	9	TEXT		256	NO	YES	NO	

DWH_UCLA2024_JIRA	PERMISSION HOLDER	_FIVETRAN_SYNCED	10	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION HOLDER	_FIVETRAN_DELETED	11	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_SCHEME	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	PERMISSION_SCHEME	NAME	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_SCHEME	DESCRIPTION	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_SCHEME	_FIVETRAN_DELETED	4	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	PERMISSION_SCHEME	_FIVETRAN_SYNCED	5	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	PRIORITY	ID	1	NUMBER	0		NO	NO	YES	
DWH_UCLA2024_JIRA	PRIORITY	NAME	2	TEXT		256	NO	YES	YES	ISSUE_PRIORITY
DWH_UCLA2024_JIRA	PRIORITY	DESCRIPTION	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PRIORITY	_FIVETRAN_SYNCED	4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT	ID	1	NUMBER	0		NO	NO	YES	
DWH_UCLA2024_JIRA	PROJECT	KEY	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT	NAME	3	TEXT		256	NO	YES	YES	PROJECT_NAME
DWH_UCLA2024_JIRA	PROJECT	PROJECT_TYPE_KEY	4	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT	DESCRIPTION	5	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT	PROJECT_CATEGORY_ID	6	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT	LEAD_ID	7	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT	PERMISSION_SCHEME_ID	8	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT	_FIVETRAN_DELETED	9	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT	_FIVETRAN_SYNCED	10	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_BOARD	BOARD_ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	PROJECT_BOARD	PROJECT_ID	2	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	PROJECT_BOARD	_FIVETRAN_SYNCED	3	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_BOARD	_FIVETRAN_DELETED	4	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE	NAME	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE	DESCRIPTION	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE	_FIVETRAN_SYNCED	4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE_ACTOR	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE_ACTOR	PROJECT_ID	2	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE_ACTOR	PROJECT_ROLE_ID	3	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE_ACTOR	USER_ID	4	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE_ACTOR	GROUP_NAME	5	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	PROJECT_ROLE_ACTOR	_FIVETRAN_SYNCED	6	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	RESOLUTION	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	RESOLUTION	NAME	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	RESOLUTION	DESCRIPTION	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	RESOLUTION	_FIVETRAN_SYNCED	4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	SECURITY_SCHEME	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	SECURITY_SCHEME	NAME	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	SECURITY_SCHEME	DESCRIPTION	3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	SECURITY_SCHEME	DEFAULT_LEVEL_ID	4	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	SECURITY_SCHEME	_FIVETRAN_SYNCED	5	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	SPRINT	NAME	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT	START_DATE	3	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT	END_DATE	4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT	COMPLETE_DATE	5	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT	GOAL	6	TEXT		512	NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT	_FIVETRAN_DELETED	7	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT	BOARD_ID	8	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT	_FIVETRAN_SYNCED	9	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT	STATE	10	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT_BOARD	BOARD_ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	SPRINT_BOARD	SPRINT_ID	2	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	SPRINT_BOARD	_FIVETRAN_DELETED	3	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	SPRINT_BOARD	_FIVETRAN_SYNCED	4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	STATUS	ID	1	NUMBER	0		NO	NO	YES	
DWH_UCLA2024_JIRA	STATUS	DESCRIPTION	2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	STATUS	NAME	3	TEXT		256	NO	YES	YES	ISSUE_STATUS
DWH_UCLA2024_JIRA	STATUS	STATUS_CATEGORY_ID	4	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	STATUS	_FIVETRAN_SYNCED	5	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	STATUS_CATEGORY	ID	1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	STATUS_CATEGORY	NAME	2	TEXT		256	NO	YES	NO	

DWH_UCLA2024_JIRA	STATUS_CATEGORY	_FIVETRAN_SYNCED		3	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	USER	ID		1	TEXT		256	NO	NO	YES	USER_ID
DWH_UCLA2024_JIRA	USER	LOCALE		2	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	USER	TIME_ZONE		3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	USER	EMAIL		4	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	USER	NAME		5	TEXT		256	NO	YES	YES	USER_NAME
DWH_UCLA2024_JIRA	USER	USERNAME		6	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	USER	_FIVETRAN_SYNCED		7	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	USER	IS_ACTIVE		8	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	USER_GROUP	USER_ID		1	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	USER_GROUP	GROUP_NAME		2	TEXT		256	NO	NO	NO	
DWH_UCLA2024_JIRA	USER_GROUP	_FIVETRAN_SYNCED		3	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	VERSION	ID		1	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	VERSION	PROJECT_ID		2	NUMBER	0		NO	YES	NO	
DWH_UCLA2024_JIRA	VERSION	NAME		3	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	VERSION	DESCRIPTION		4	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	VERSION	ARCHIVED		5	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	VERSION	RELEASED		6	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	VERSION	OVERDUE		7	BOOLEAN			NO	YES	NO	
DWH_UCLA2024_JIRA	VERSION	START_DATE		8	DATE			NO	YES	NO	
DWH_UCLA2024_JIRA	VERSION	RELEASE_DATE		9	DATE			NO	YES	NO	
DWH_UCLA2024_JIRA	VERSION	_FIVETRAN_SYNCED		10	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	WORKLOG	ISSUE_ID		1	NUMBER	0		NO	NO	YES	
DWH_UCLA2024_JIRA	WORKLOG	ID		2	NUMBER	0		NO	NO	NO	
DWH_UCLA2024_JIRA	WORKLOG	UPDATED		3	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	WORKLOG	STARTED		4	TIMESTAMP_TZ			NO	YES	NO	
DWH_UCLA2024_JIRA	WORKLOG	COMMENT		5	TEXT		512	NO	YES	NO	
DWH_UCLA2024_JIRA	WORKLOG	TIME_SPENT_SECONDS		6	NUMBER	0		NO	YES	YES	
DWH_UCLA2024_JIRA	WORKLOG	AUTHOR_ID		7	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	WORKLOG	UPDATE_AUTHOR_ID		8	TEXT		256	NO	YES	NO	
DWH_UCLA2024_JIRA	WORKLOG	_FIVETRAN_SYNCED		9	TIMESTAMP_TZ			NO	YES	NO	