

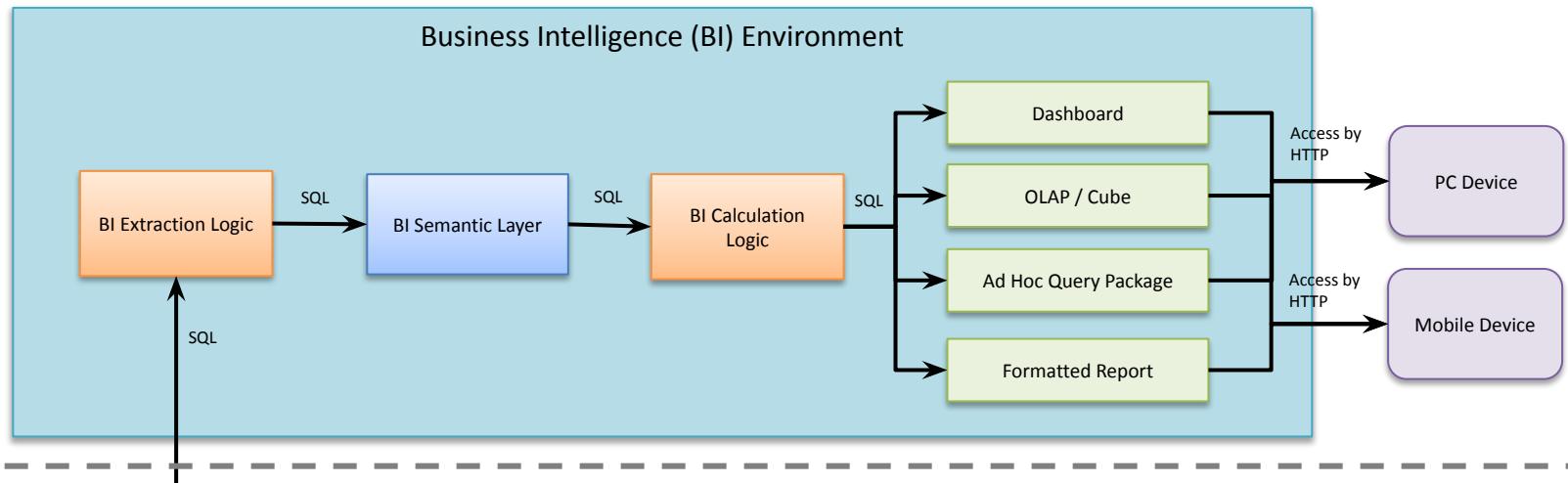
Data Architecture Design

AWS & BI Data

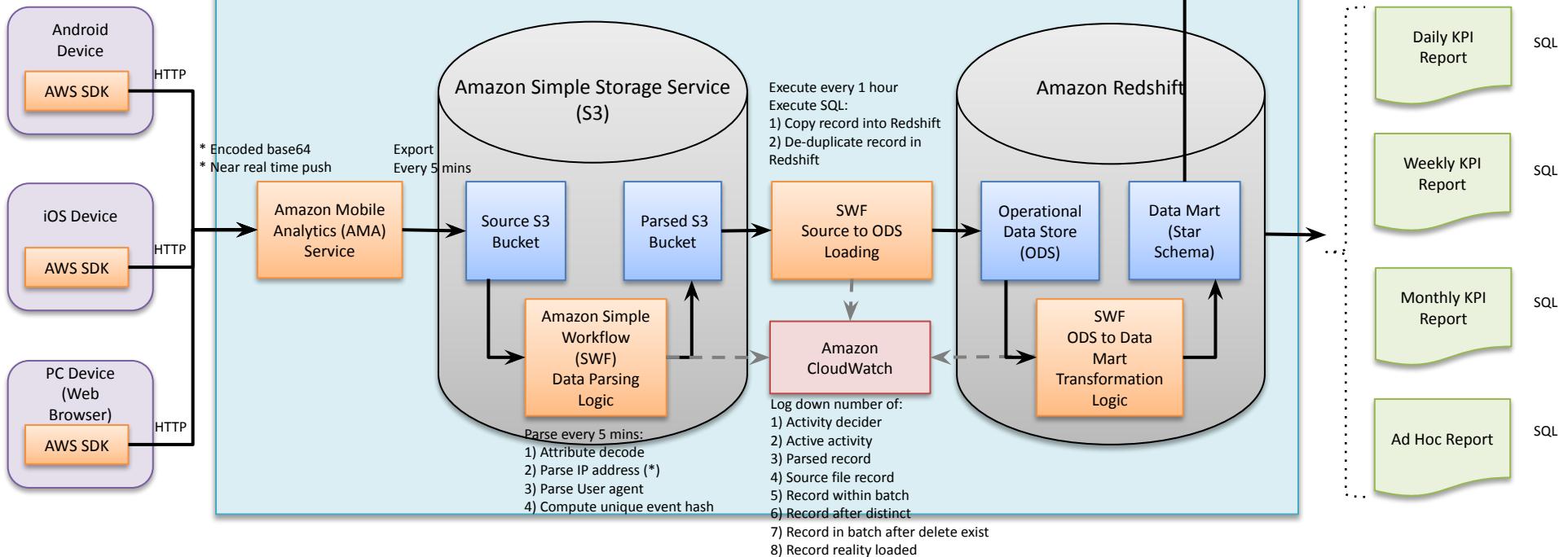
Flow Diagram

Demo

BI



AWS

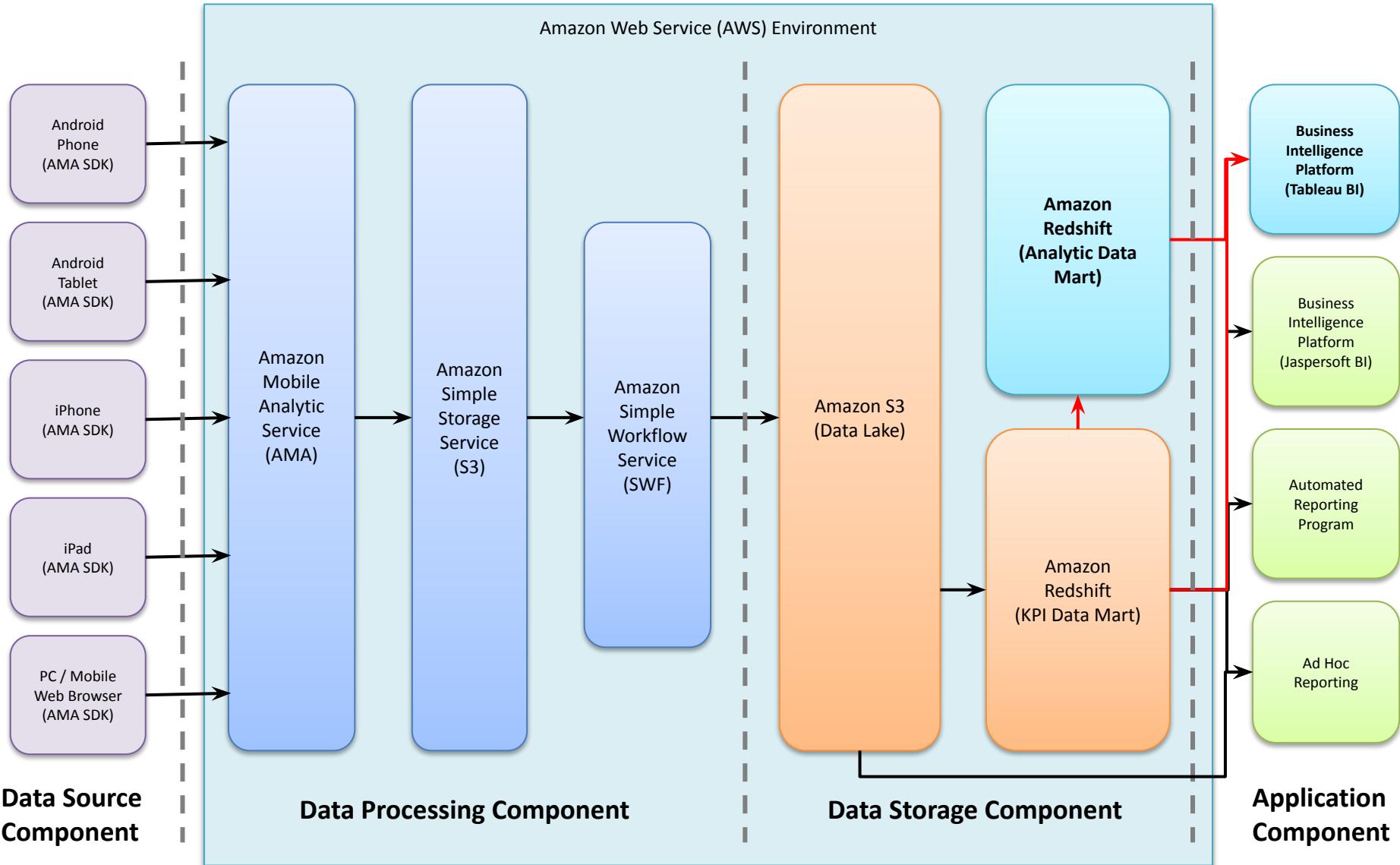


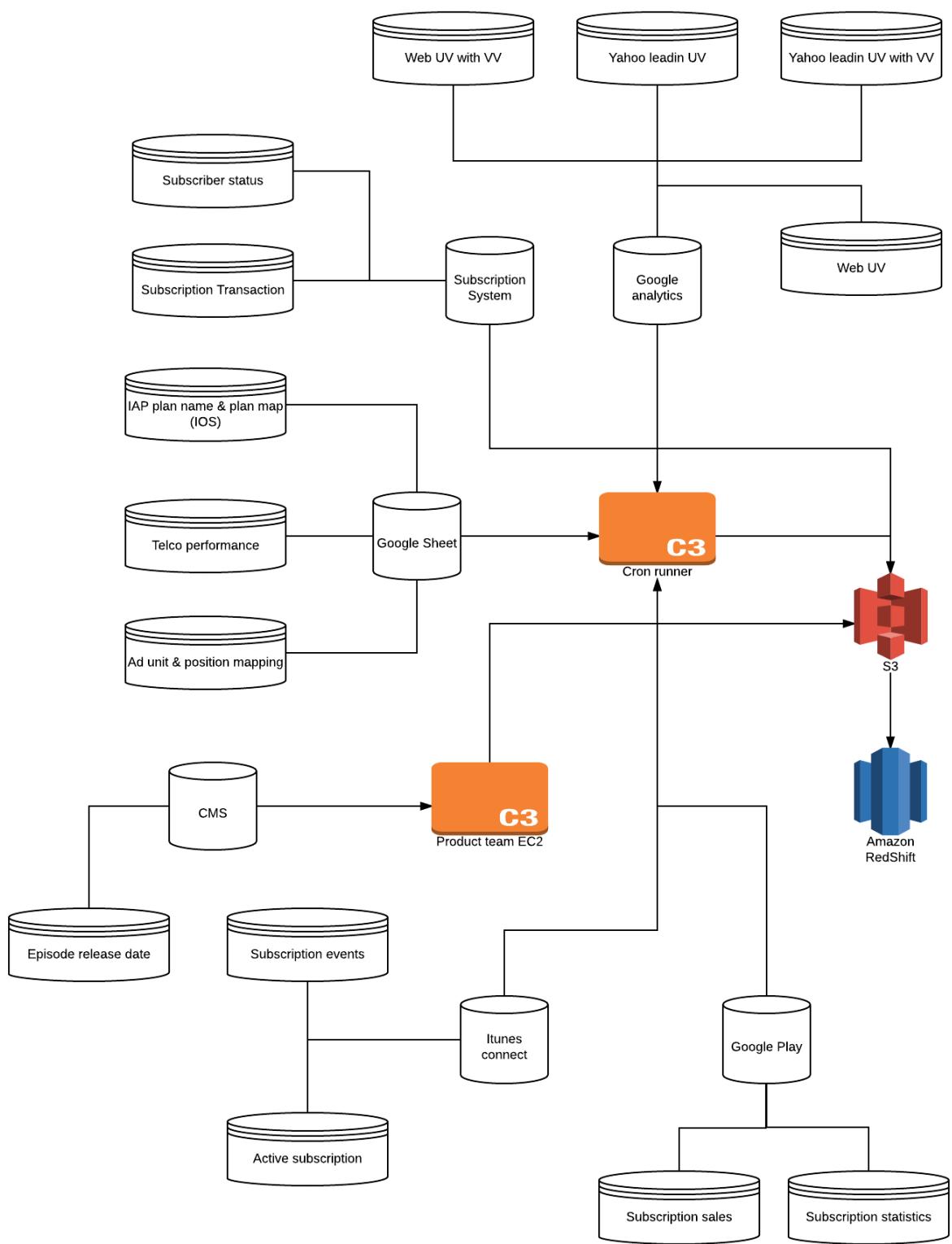
Source

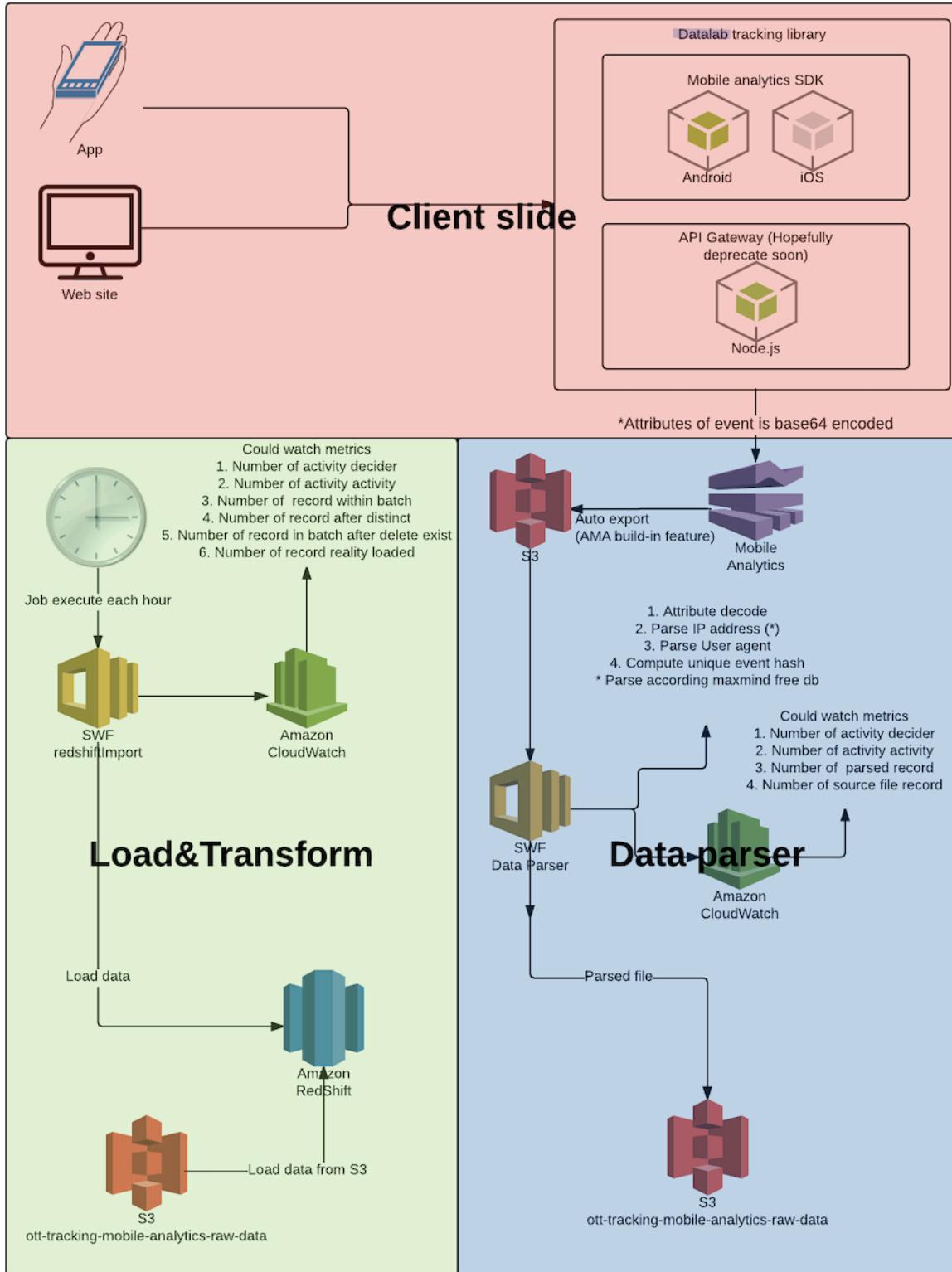
Calculation

Result

Data Infrastructure Architecture Demo

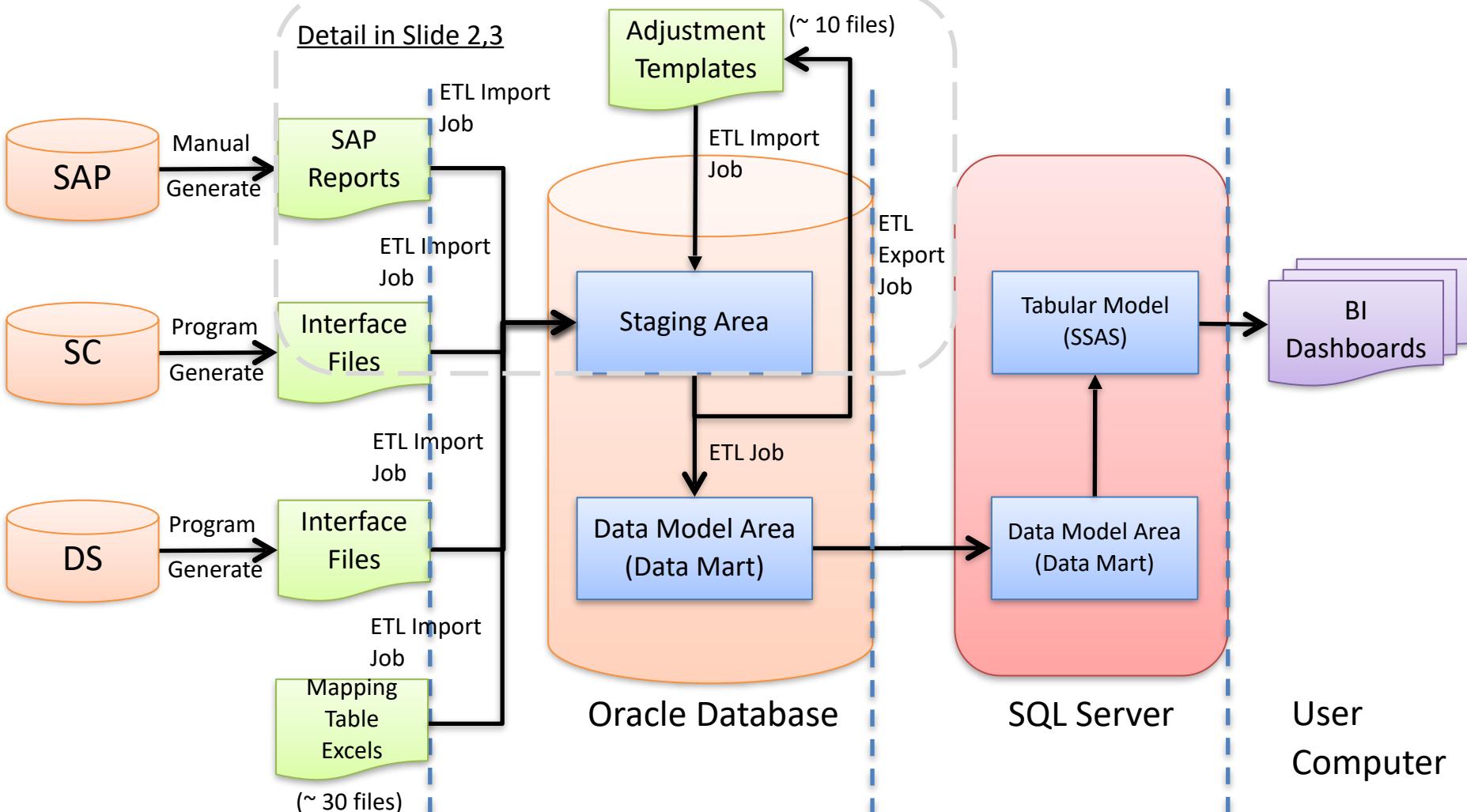






System Data Flow Diagram

- Authorised users to input manual adjustments



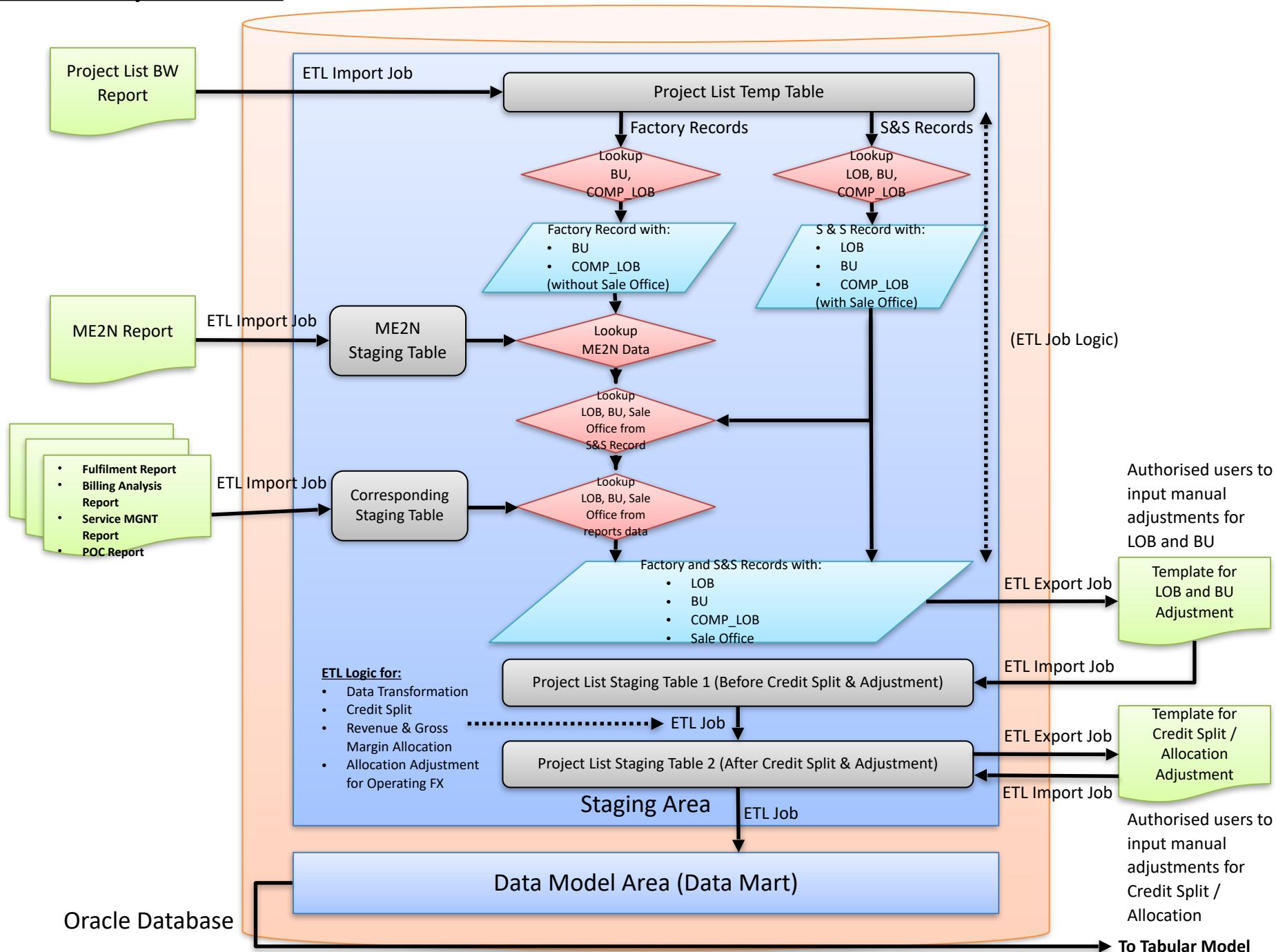
- Client IT Team

- ETL Development Team
- Oscar Lee

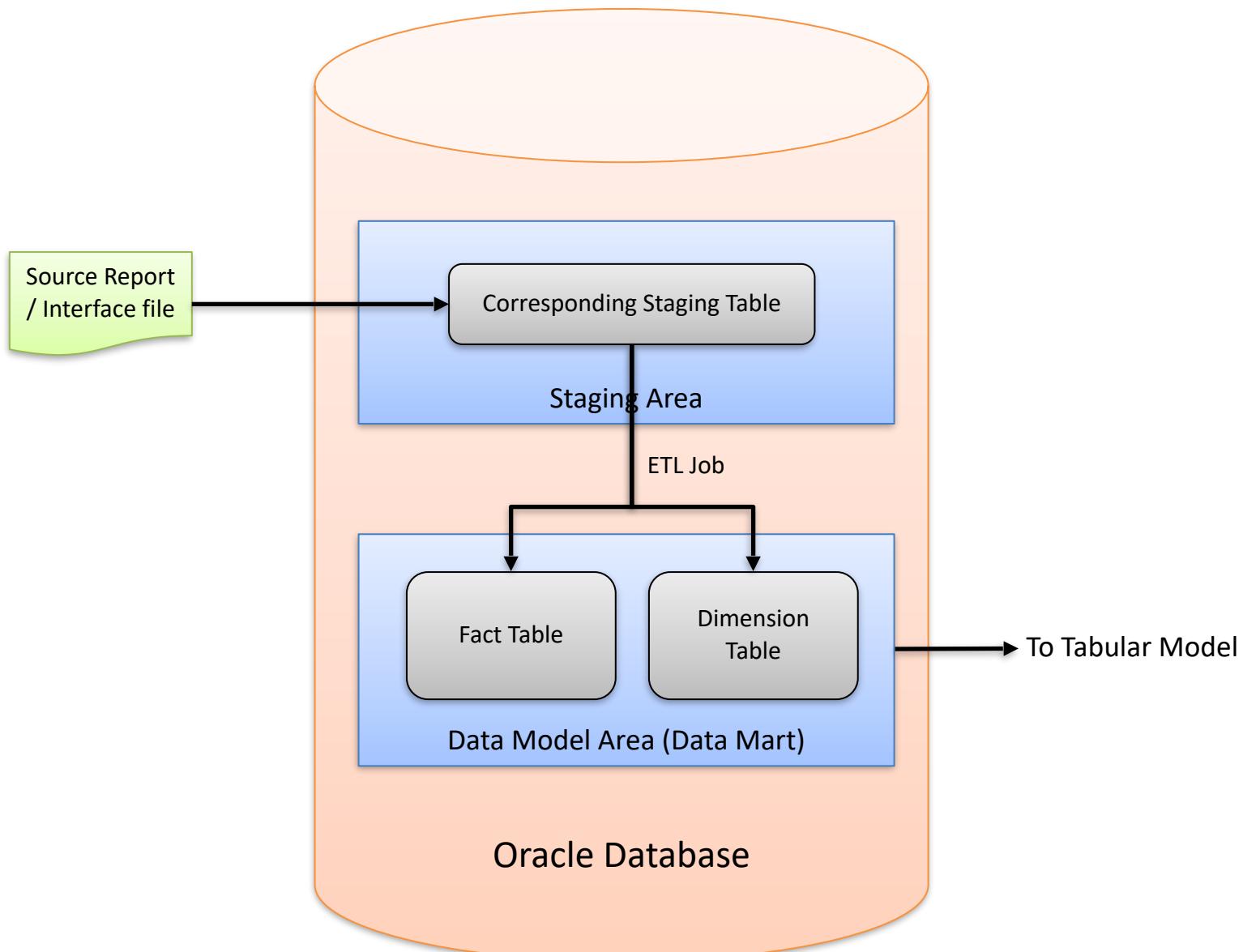
- Microsoft Project Team

- Microsoft Project Team
- Oscar Lee

Data Flow of Project List Records



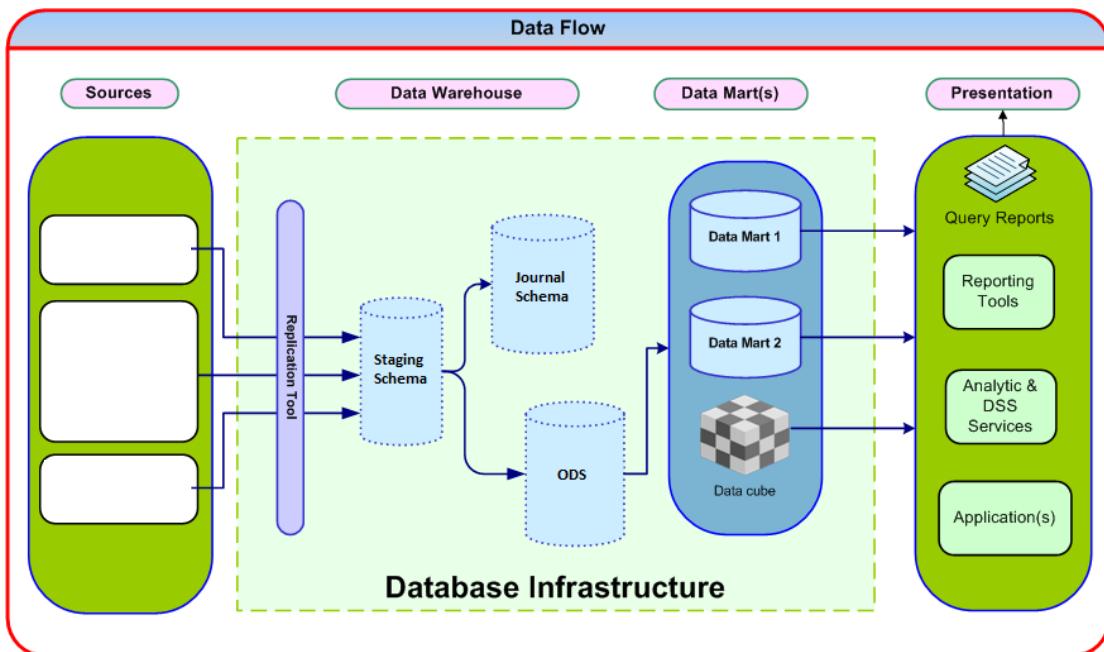
Data Flow of Non Project List Records



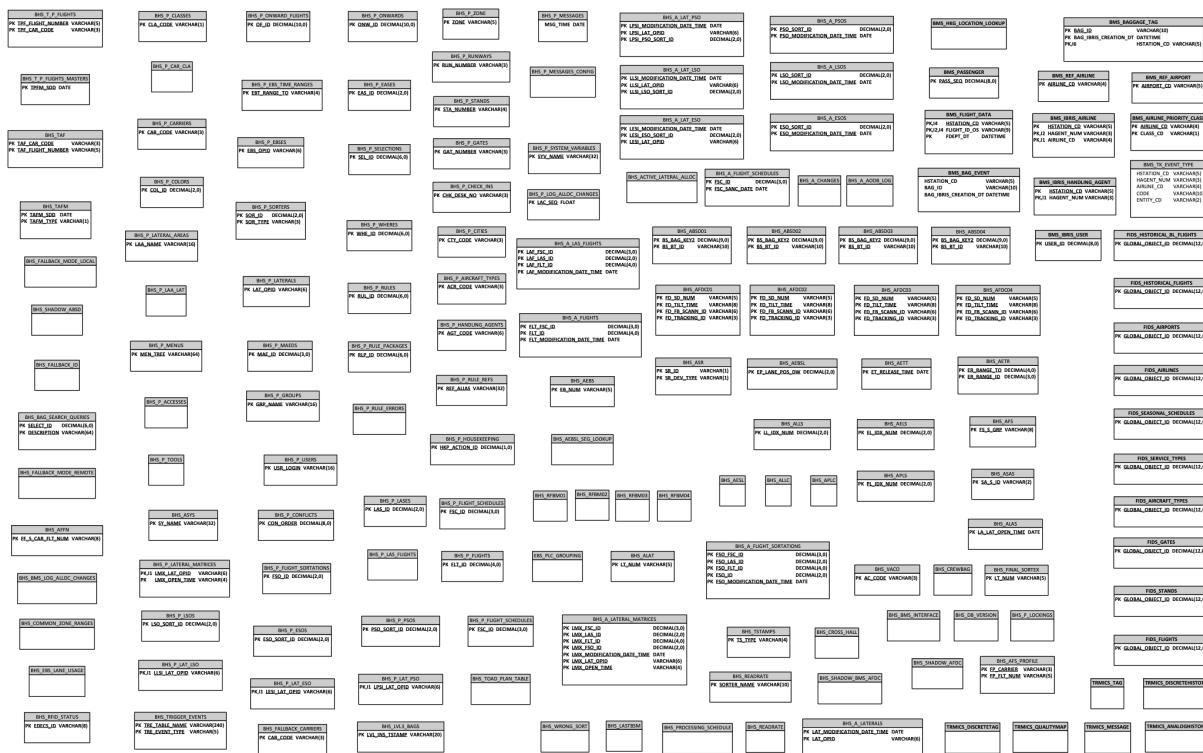
Data Modelling

Database infrastructure

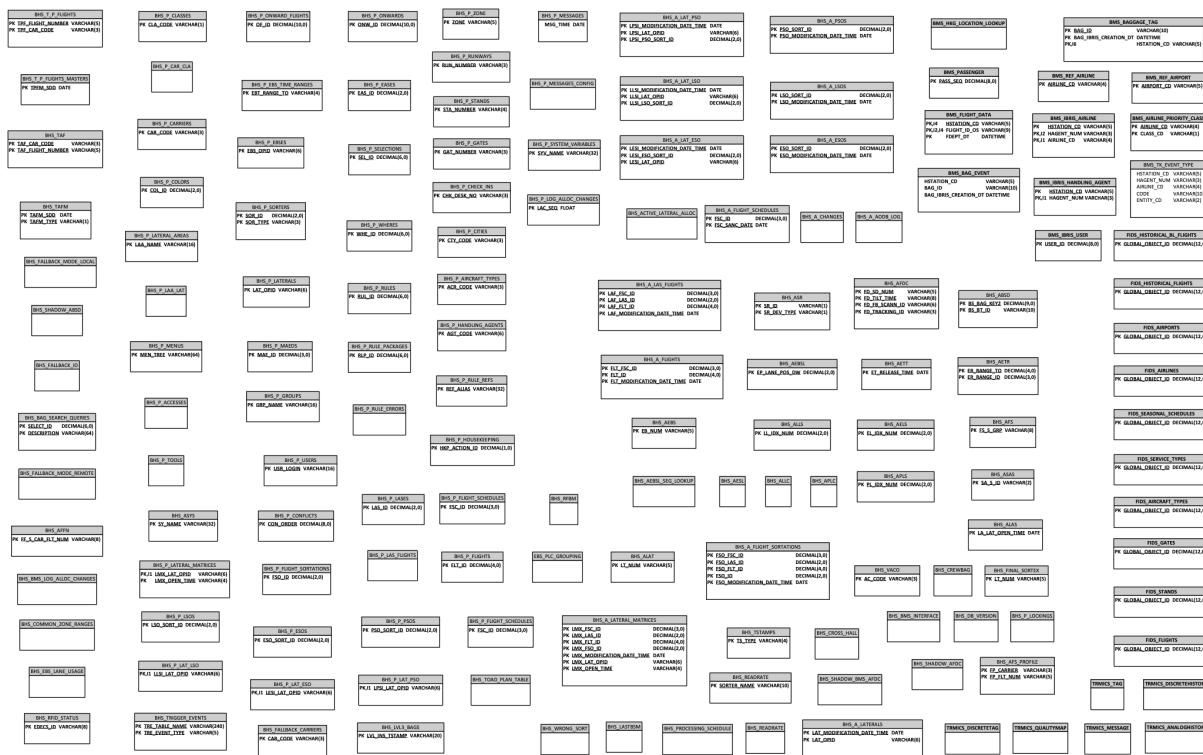
The following diagram depicts the mechanism for data replication:



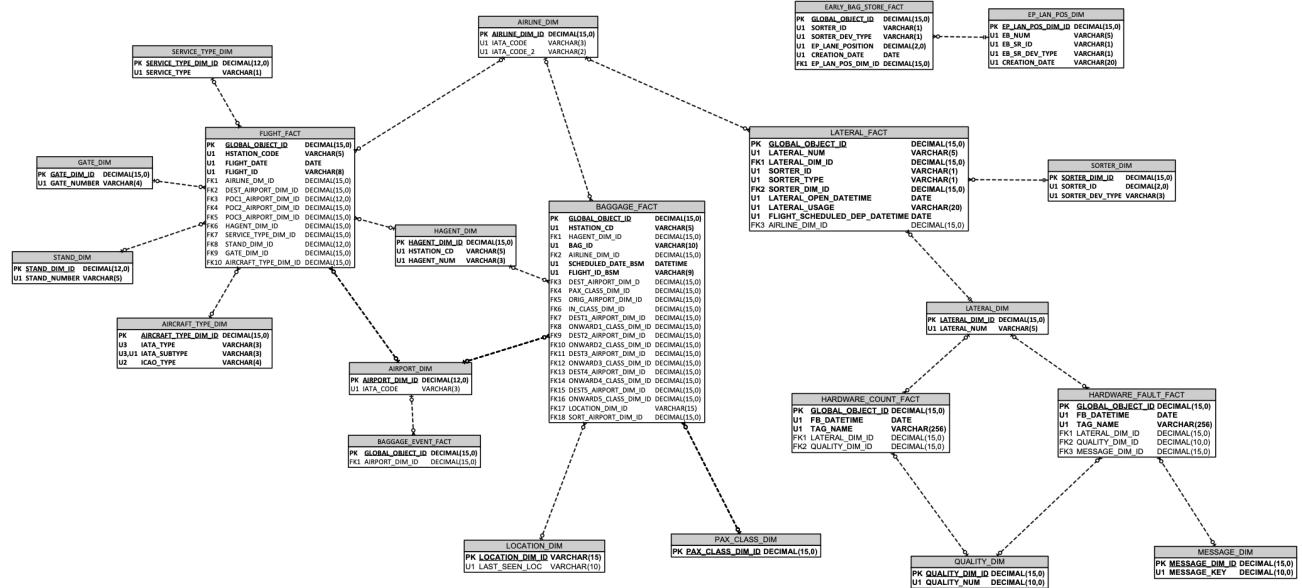
Staging Schema

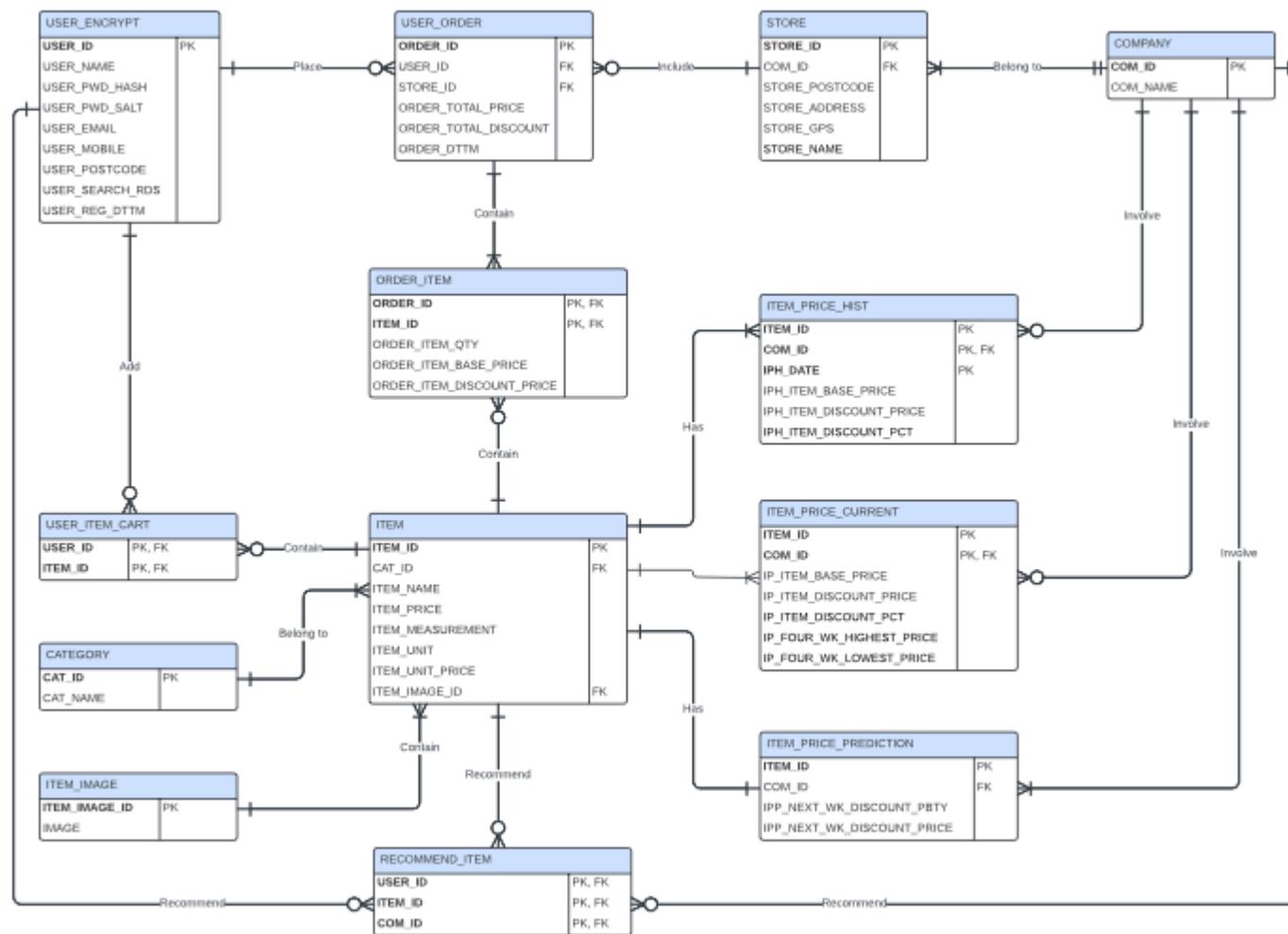


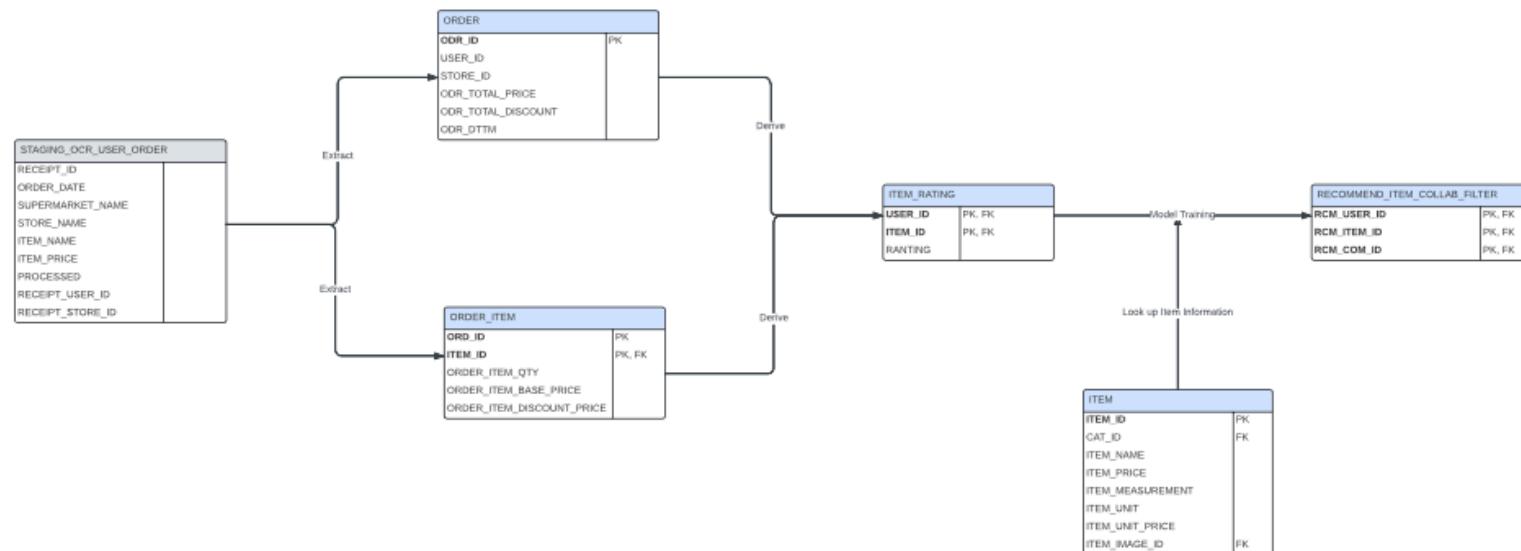
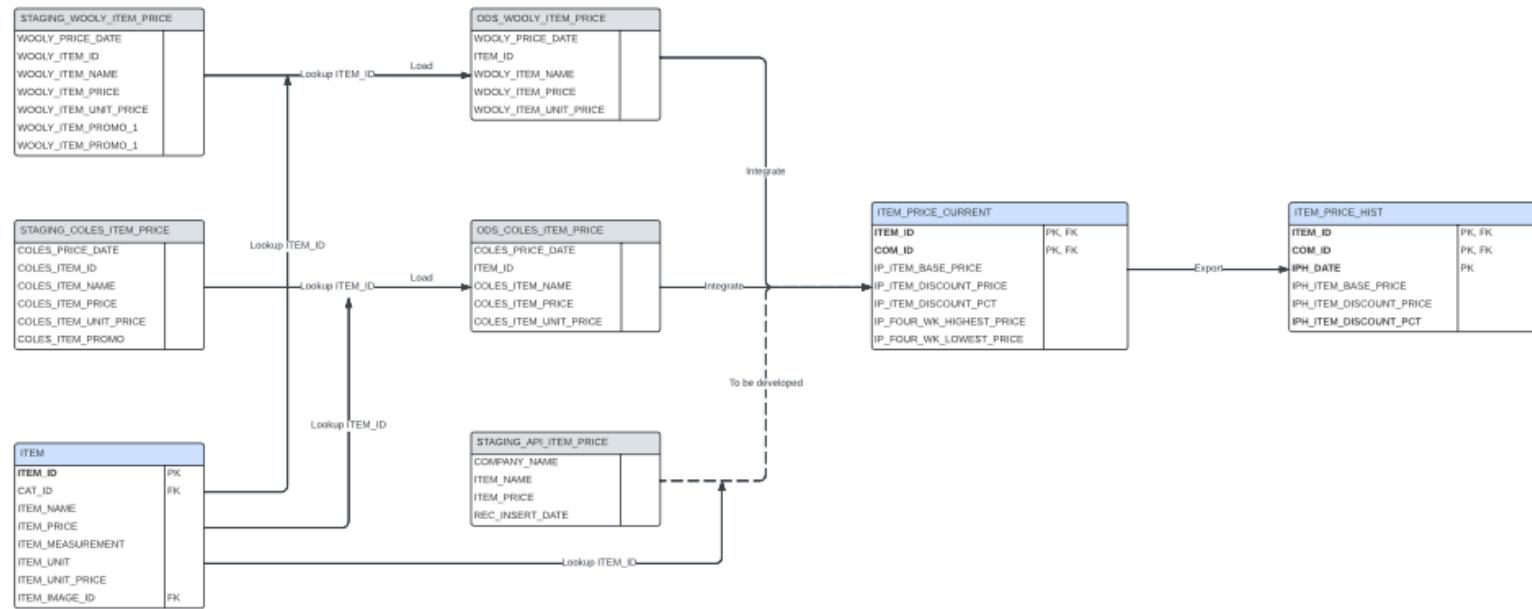
Journal Table Schema



ODS Schema





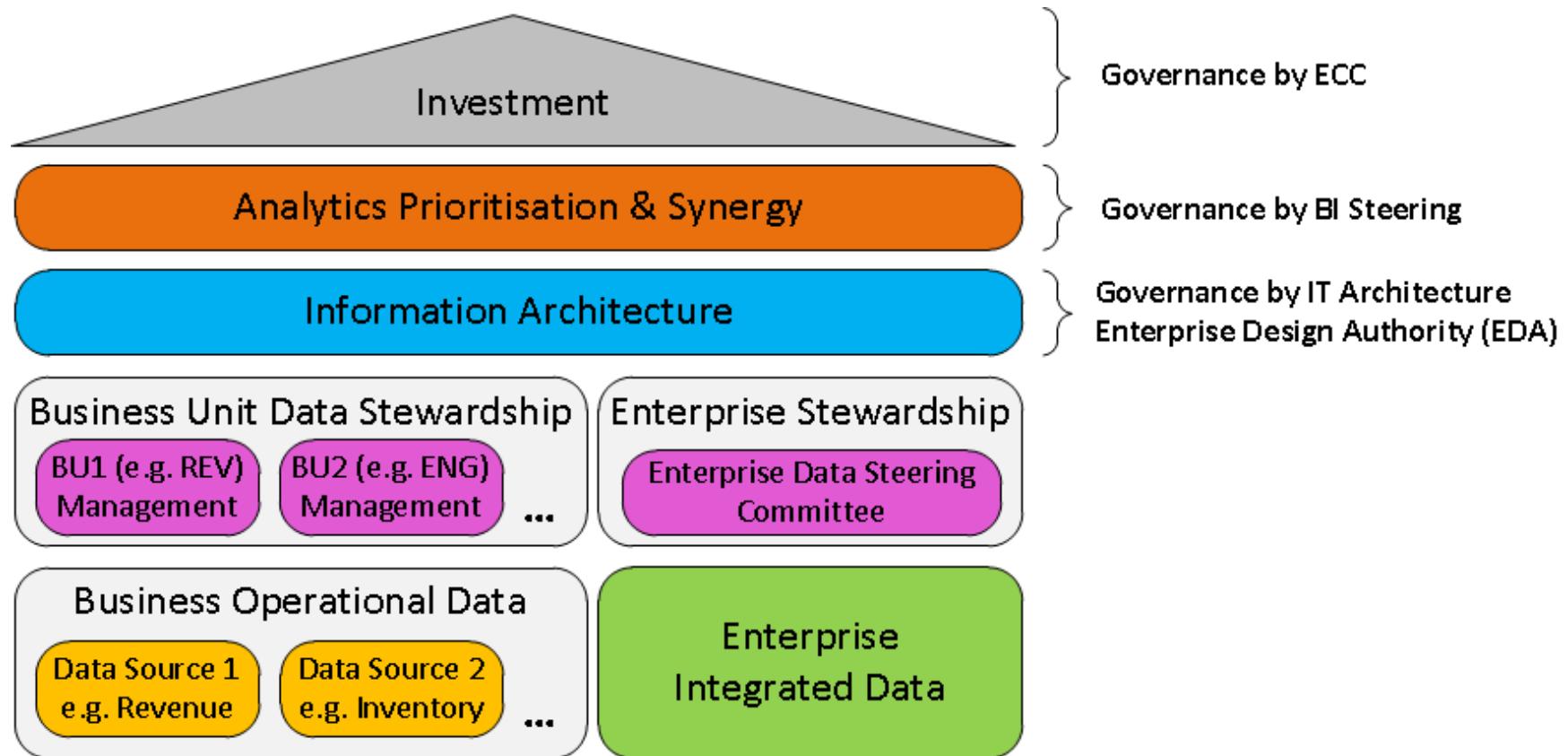


Data Governance

Data Ownership

- Data Ownership and Stewardship is critical to successful BI and must be driven by Business
- Ownership of data is independent of the physical platforms or databases it resides in
- Architecture & Technology should be governed by Enterprise Design Authority

Proposed Data Governance Framework



To be further defined:

- What data should be classed as “Enterprise” and how should this be governed? e.g. data where there is no single agreed owner e.g. Flight Schedule, Customer etc.
- Membership of BI Steering committee

Business Owners

BI Dashboards / Reports Owners

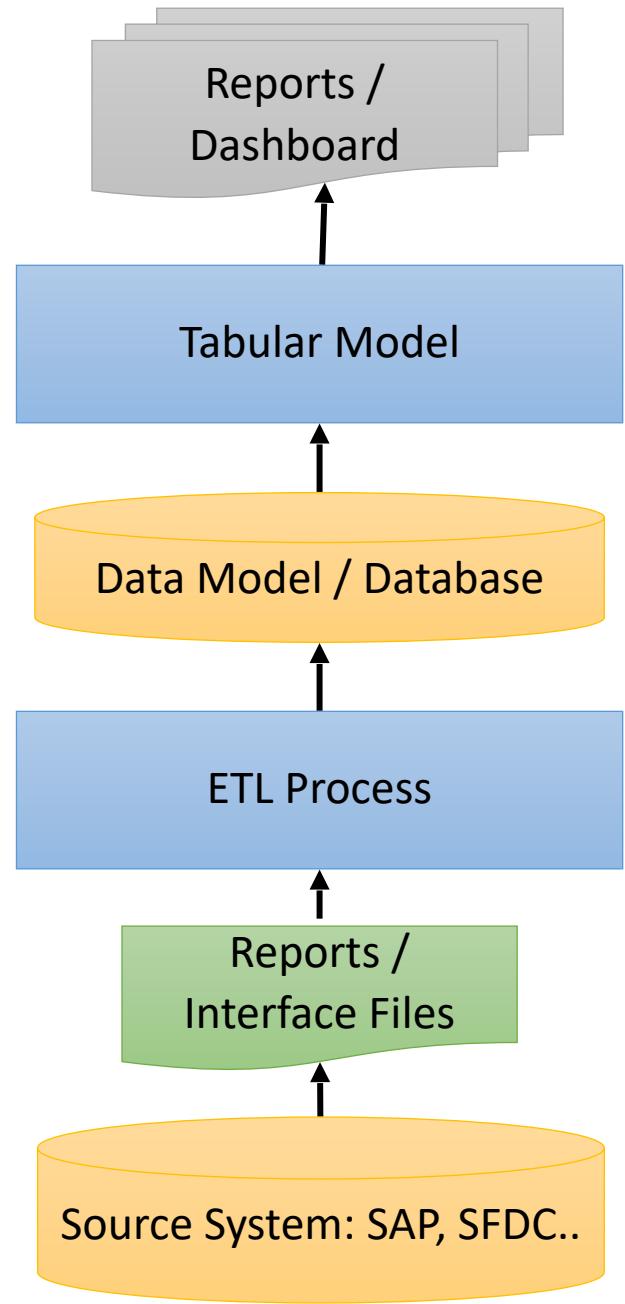
Duty:

1. Support business logic enquiry for existing reports / dashboards.
2. Provide business logic for new business requirement.
3. Approve enhancement / bug fix request for any change on the reports / dashboards.
4. Different reports / dashboard would have different owner according region or department.

Source Reports Owners

Duty:

1. Support business logic enquiry for existing source reports.
2. Provide support on source report for new business requirement.
3. Different reports might have different owner according region or department.



IT Owners

System Analyst – BI (IT Support Contact Point)

Duty:

1. Troubleshoot BI related error.
2. Troubleshoot data issue on reports / dashboard.
3. Modify Tabular according to business requirement.
4. Create / Modify reports & dashboard according to business requirement.

System Analyst – ETL

Duty:

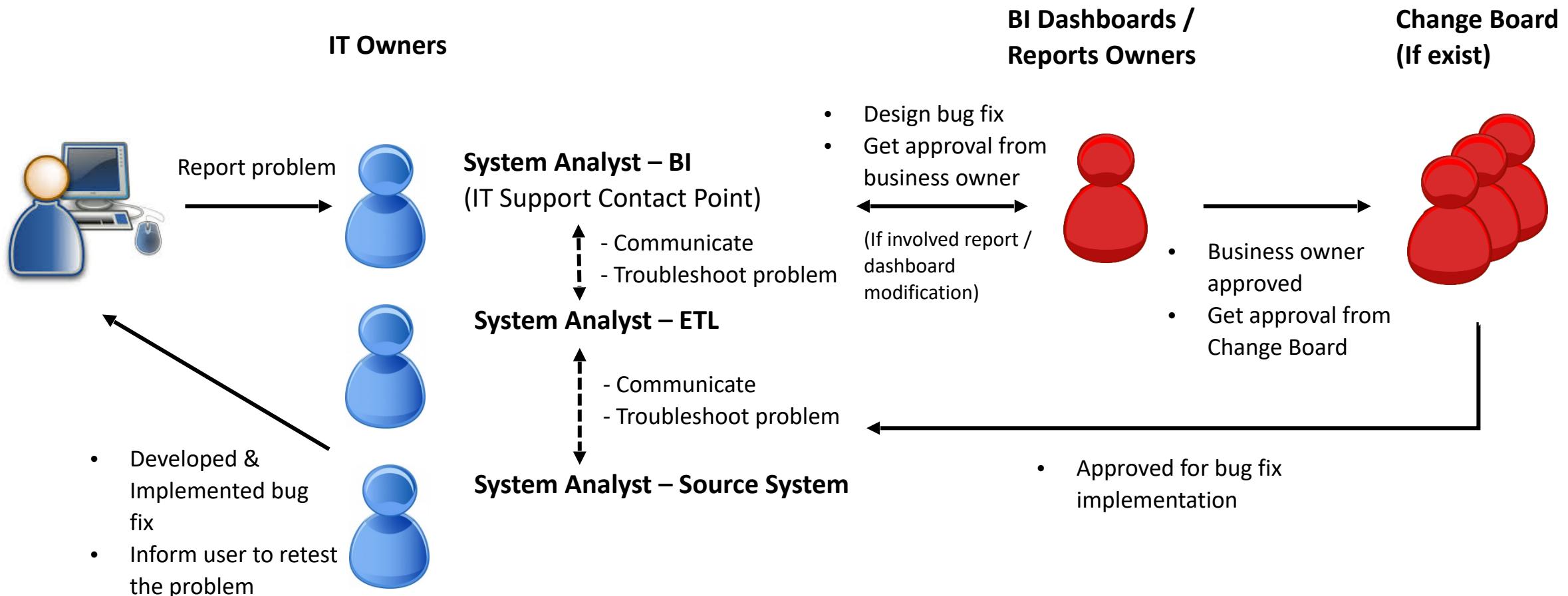
1. Troubleshoot ETL job error.
2. Troubleshoot data issue of data model.
3. Create / Modify ETL jobs according to business requirement.
4. Modify data model / database table according to business requirement.

System Analyst – Source System

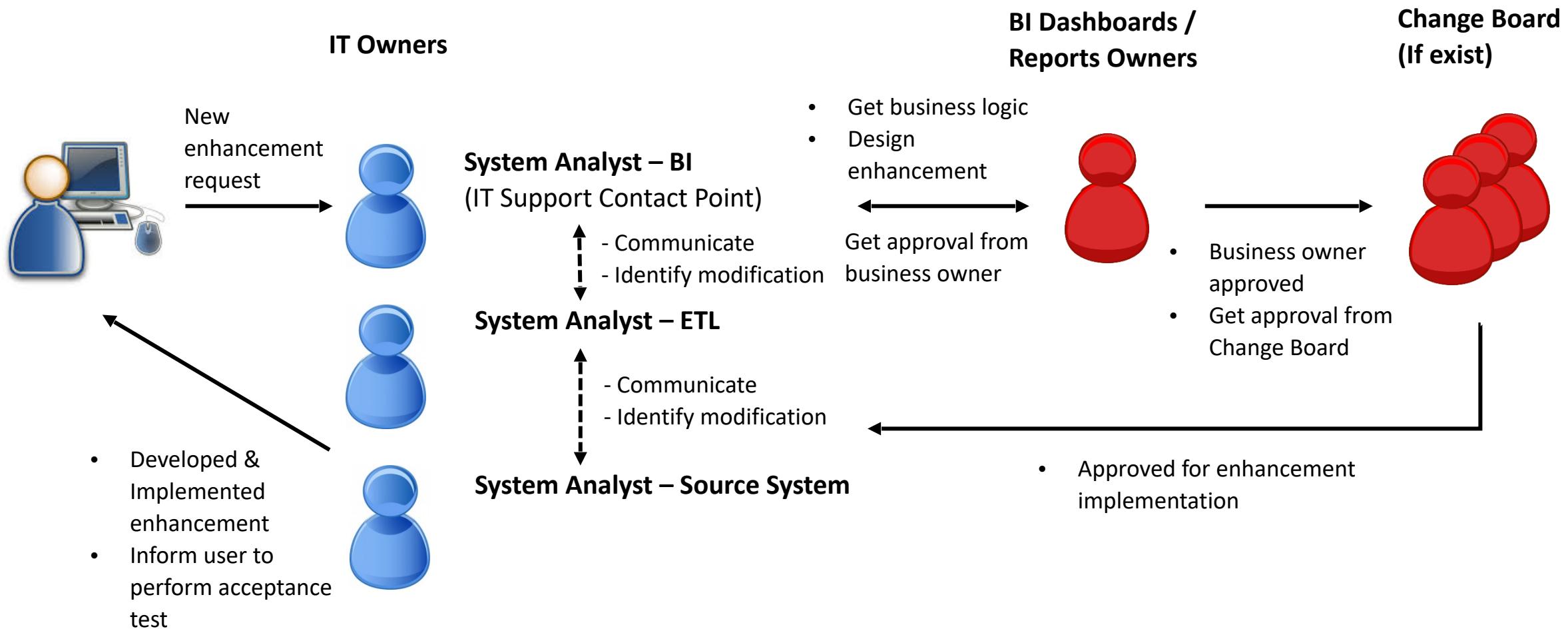
Duty:

1. Troubleshoot source reports, interface files generation and upload problem.
2. Modify source report, interface file's format according to new requirement.
3. Generate new report, interface file according to business requirement.

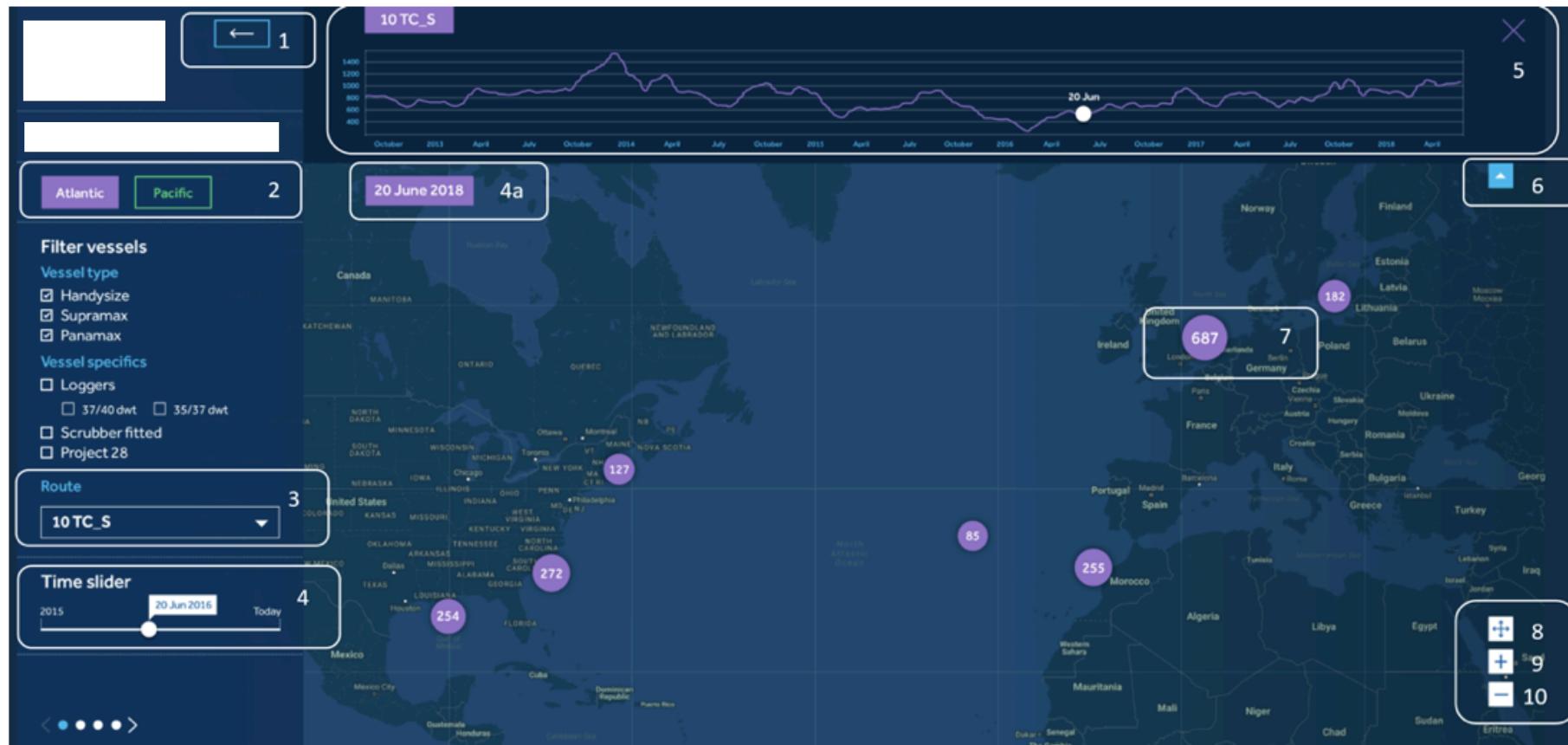
Bug Fix Procedure

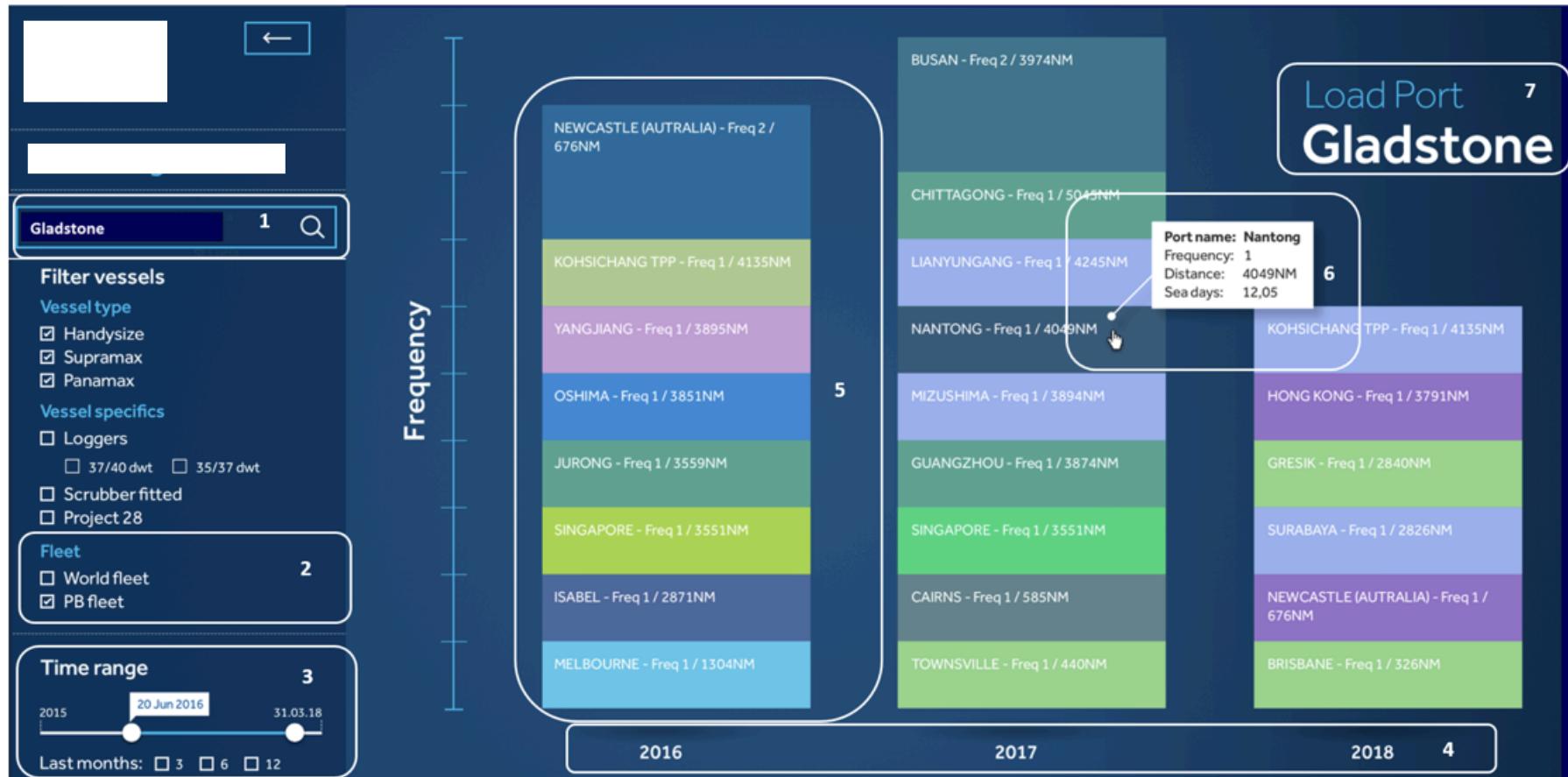


Enhancement Procedure

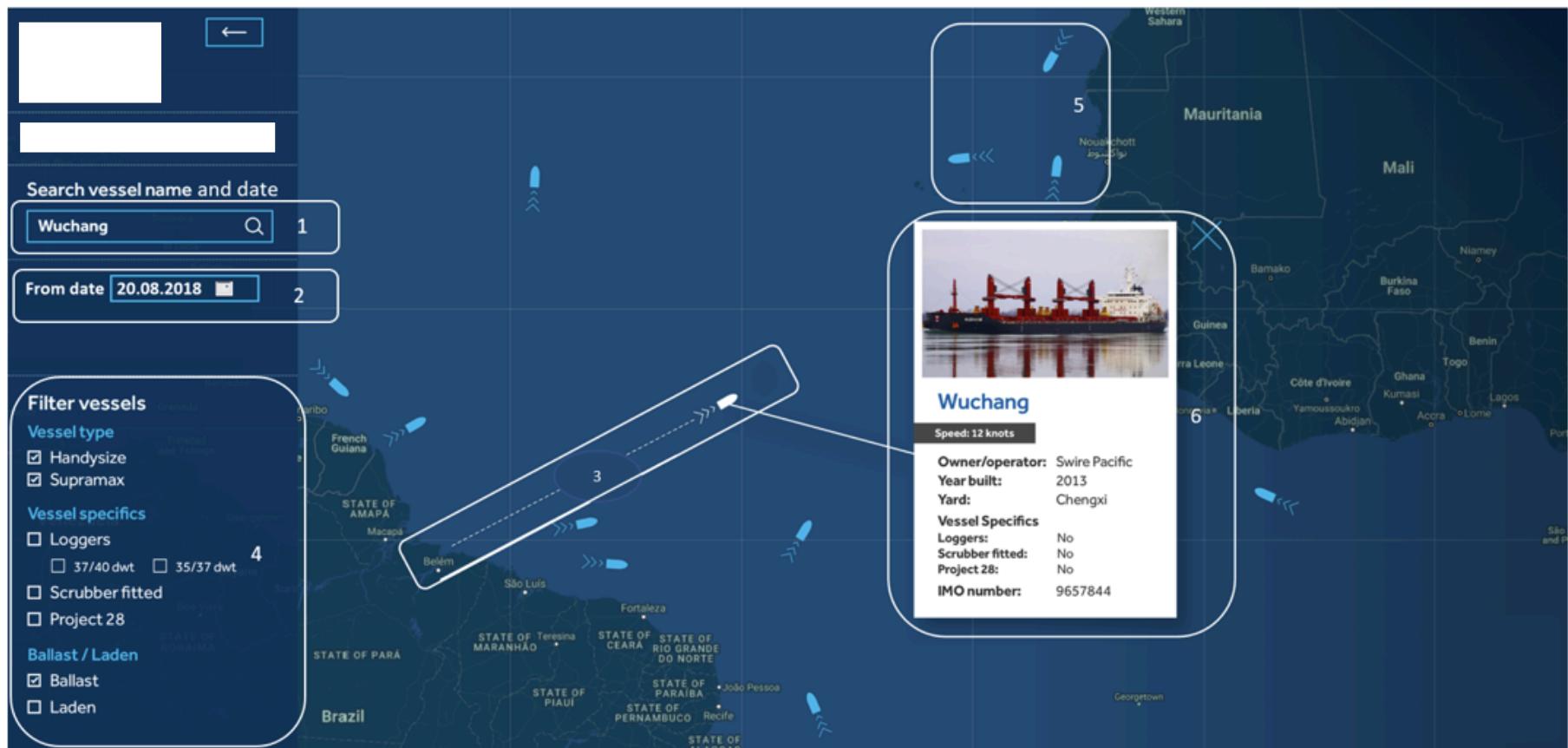


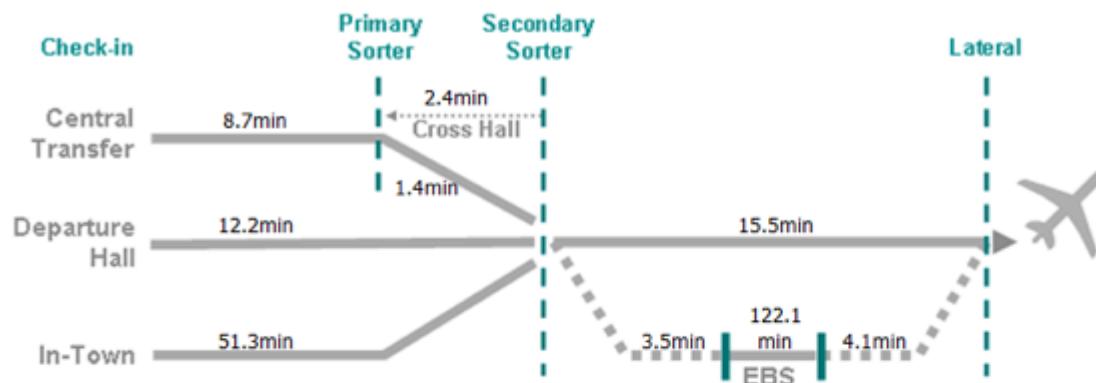
Data Visualisation









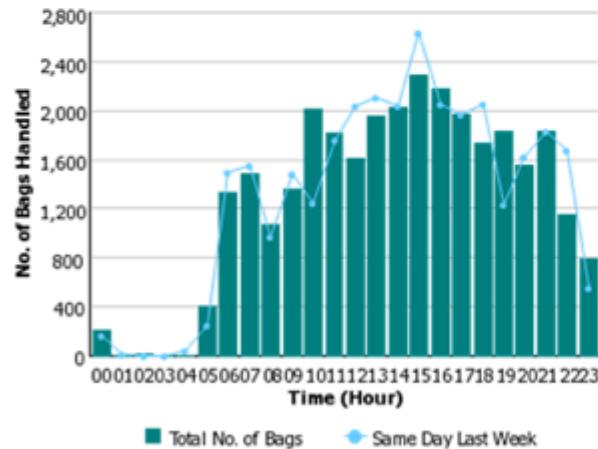


Primary Sorter Summary

Total Baggage Handled on 2013-04-09

Select Sorter(s):*

Current Selection: All Primary Sorters



No Read Information

| DP Name | NR | Total Baggage | NR % | Last Wk % |
|---------|-------|---------------|--------|-----------|
| DP51 | 632 | 8,325 | 7.59% | 10.03% |
| DP52 | 711 | 7,007 | 10.15% | 15.48% |
| DP53 | 972 | 7,728 | 12.58% | 19.21% |
| DP54 | 1,192 | 7,579 | 15.73% | 13.95% |
| Summary | 3,507 | 30,639 | 11.45% | 14.55% |

Problem Late Information

| DP Name | P/L | Total Baggage | P/L % | Last Wk % |
|---------|-----|---------------|-------|-----------|
| DP51 | 88 | 8,325 | 1.06% | 0.44% |
| DP52 | 90 | 7,007 | 1.28% | 0.59% |
| DP53 | 124 | 7,728 | 1.60% | 0.39% |
| DP54 | 147 | 7,579 | 1.94% | 0.70% |
| Summary | 449 | 30,639 | 1.47% | 0.53% |

Secondary Sorter Summary

Total Baggage Handled on 2013-04-09

Select Sorter(s):*

Current Selection: All Secondary Sorters

Secondary Throughput/Cross Hall Bag Summary

| DP Name | Total Baggage | % of Total | Last Wk % | Cross Hall | Cross Hall % | Last Wk % |
|---------|---------------|------------|-----------|------------|--------------|-----------|
| DP61 | 14,610 | 24.08% | 23.20% | 772 | 5.28% | 6.46% |