Analyzing Discrepancies Between Dashboard Reports

We compared variances for billed hours and in the EA Team Dashboard (ETD) compared to the Resource Management Dashboard (RMD)

The month-by-month data was downloaded from the RMD, and a Python script was used to label records in each month and concatenate the data into a single file (ea\_legacy\_fiscal\_year\_by\_month.xlsx). Here, this file contains the billable hours (WIP\_Hours) for the given month in the 2024 fiscal year (WIP\_Month). A person-per-person check was done to compare how an individual advisor’s reported billable hours were reported in RMD (WIP\_Hours\_RMD) and ETD (WIP\_Hours\_ETD).

Out of 42 individually tested advisory colleagues in the month of August 2023:

* 20 showed no variance between billable hours across the two dashboards.
* 8 did display variance in billable hours between the two dashboards.
* 14 advisors were in the RMD but not in the ETD.

The trend seems to be that hours do not match for all clients where realization was not 100%. An additional observation was that 100% realization was more often prevalent in later months than earlier ones.

Here’s an example of the variance we found:

Adeola Akinrinade reported 156.3 billable hours in RMD but 168 billable hours in ETD:

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Figure 1: Reported Hours in RMD

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Figure 2: Reported Hours in ETD

In speaking with Garrett, he explained that:

When we receive the SAP data, it’s all at the transaction level and tied to a Transaction ID. Initially when we established the dashboard logic for this feed, we were getting duplicate Transaction IDs for the same number of hours worked on the same client and created dashboard logic to zero out the duplicate. We assumed that this was how SAP was accounting for write ups and write downs.

When we looked further this week though it appears that in some cases, changes are being made to the work package, cost center, and that worked value is being moved from one work package to another.

Garrett has removed the logic and now it is pulling everything flatly as work value and worked hours. After the new logic was applied, the collected data was updated to produce an Excel sheet called EA Legacy Billable Hours Comparison (By Month).xlsx. However, variances in hours being recorded in RMD & ETD were still present.

The Billable Hours tab has hours per advisor per month. The column *Variance* is a difference between the reported hours in RMD (*WIP\_Hours\_RMD*) and reported hours in ETD (*WIP\_Hours\_ETD*). The column Variance\_Type measures the four types of variance situations:

1. Good: The absolute value of the variance is < 0.5
2. Missing – Good: Advisors who were recorded in one system but not another, but the number of billable hours in the recorded system is 0 (resulting in no variance)
3. Missing – Bad: Advisors who were recorded in one system but not another, but the number of billable hours in the recorded system is nonzero (resulting in some variance)
4. Bad: The absolute value of the variance is >= 0.5

The distribution of records in each category are as follows:

1. Good: 1787 of 3446 records
2. Missing – Good: 1392 of 3446 records
3. Missing – Bad: 129 of 3446 records
4. Bad: 138 of 3446 records

This results in 267 of 3446 (7.7%) of records contributing towards the total variance among the two dashboards [i.e., Missing – Bad and Bad variance levels]. The distribution of variance per practice group and practice and provided in the pivot, and is shown below in Figure 3.

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Figure 3: distribution of variance per practice group and practice

The practice group Strategy & Transformation Service accounts for 4947 out of 7491 (66%) of total variance in hours, with Strategy & Management Consulting contributing towards 54% of the total variance alone. This was further investigated in the sheet Pivot – STS.

* Variance Type: ‘Missing – Bad’ records accounted for 3124 hours of variance.
* Advisory colleagues Bryan Diem and Marta Voda contributed the most hours of variance, with 760 and 400 hours; respectively. Both colleagues had entries in RMD but not in ETD.
* Title: Seniors (1408) and Directors (1033) contributed towards the most variance in hours.
* Location: Minneapolis (1326) and San Mateo (1482) contributed towards the most variance in hours.

Here are some examples after the new logic was applied for an employee:

For the Bad variance types, the individual cases were investigated. In January 2024, advisor Srinivas Kotha reported 63 RMD billable hours vs 56.5 billable hours. The client breakdowns can be found below:

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Figure 5: REPORTED HOURS IN ETD FOR Srinivas Kotha during january 2024

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Figure 6: REPORTED HOURS IN RMD FOR SRINIVAS KOTHA during January 2024

February 2024 shows a stark contrast between billable hours for Bryan Diem with 138 billable hours in RMD and only 7 billable hours in ETD. The client breakdowns are shown below.

A screen shot of a graph

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Figure 7: REPORTED HOURS IN ETD FOR Bryan Diem DURING February 2024

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Figure 8: REPORTED HOURS IN RMD FOR BRYAN DIEM DURING FEBRUARY 2024

Variance was also considered by month. The month-by-month variances are presented below.

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Figure 4: Month by Month Breakdowns of Dashboard Variance

By applying filters to the pivot table, the Missing – Bad variance type contributes towards the majority of variance, with 5793 of 7490.96. This refers to total hours coming from one dashboard but not reported in the other for the indicated month.