### Overview

Tuesday, December 24, 2024 9:01 AM

Assessment GL String: 20020-01000-USASS800-101800



Treasury x RAD Prop...



Treasury x RAD - Nex...

### Next project to follow: Corporate Security

From: Alex Schmidt <alex schmidt@uhg.com>

Sent: Wednesday, December 18, 2024 12:09 AM

To: Hirsch, Marilyn V <marilyn.hirsch@uhg.com>; Mattson, Courtney O <courtney.mattson@uhg.com>; Reed Farha, Rebecca C <rebecca\_c\_reed@uhg.com>; Jonczyk, Michael <michael\_jonczyk@uhg.com>; Eichelman, Andrew B <andrew\_b\_eichelman@uhg.com>

Cc: Rickberg, Ingrid <ingrid.rickberg@uhg.com>; Schutter, Janice A <janice\_schutter@uhc.com>; Keis, Patrick D <patrick\_d\_keis@optum.com>; Ziegenfuss, Joe <joe\_ziegenfuss@optum.com>; Mukerjee, Probir K Frobir\_k\_mukerjee@optum.com>; Gehlen, Jason <jason.gehlen@uhg.com>
Subject: Treasury x RAD - Next Steps (Project Medici)

Hi folke

Thank you for a productive and insightful session last week. Your input was essential in helping me understand how RAD could deliver an Analytics Platform as a Service (AaaS) to Treasury, providing streamlined, forward-looking analytics to drive better decisions and efficiency.

The goal of our session was to take a user-centric approach to identifying your challenges and opportunities. This foundation allows me to scope the right solution and set the stage for a long-term roadmap that prioritizes actionable insights, predictive capabilities, and trusted reporting. If interested you'll find a brief recap below my signature.

For now I need to schedule a final set of working sessions that take me "soup to nuts" on your critical reports and related data stacks you want for 2025; then I can present a resource SOW. Please don't hesitate to share any additional thoughts or priorities ahead of that discussion.

### Forward Plan: Building the AaaS Roadmap to "Optimize Cash Effectively"

### Phase 1: Finalize Scope (3-4 Weeks)

- Clarify Priorities: Align on the top 3-5 reporting outputs Treasury needs first (and timing).
- · Audit Current State: Assess systems, data sources, workflows, and tools specific to these outputs.
- · Define Roles: Establish responsibilities across Treasury, partners like FP&A, and RAD for delivering AaaS successfully.
- Model Solutions: Architect Analytics pipeline based on toy-model versions of key databases and front-end BI products.

### Follow-Up Session:

- Purpose: Present the SOW, priorities, and resource needs.
- Focus: Validate outputs, timelines, and ownership to move into planning.

### Phase 2: Resource and Fund (TBD)

- Secure infrastructure and resourcing investments for people, tools, and processes.
- Confirm funding to enable phased execution, starting with priority reporting outputs.

### Phase 3: Build and Deliver (TBD)

- Address Data Silos: Integrate critical data sources into RAD's cloud environment.
- · Automate Reporting: Pilot automated solutions for key reports (e.g., cash flow, liquidity).
- Deliver Insights: Develop predictive models and forward-looking dashboards to enable strategic decisions.

Looking forward to working with you to deliver an Analytics Platform as a Service that supports Treasury's strategic goals.

Best, Alex

## **Meeting Recap**

### 1. Problems Identified:

- Data Silos: Disconnected systems and duplication inhibit agility and efficiency.
- Data Completeness & Timing: Delays and inaccuracies undermine decision-making.
- System Performance: Limitations slow processes and increase manual work.
- Backward-Looking Reporting: A lack of proactive, predictive insights limits strategic responsiveness.

### 2. Vision for Success:

Treasury leadership envisions a future where:

- Insights are Actionable: Better decisions on cash holdings, borrowing, and risk management.
  - Reporting is Predictive: Proactive diagnostics and forecasts reduce surprises.
- Data is Trusted and Simplified: Streamlined reporting builds confidence and reduces complexity.

### 3. Prioritized Outputs:

- Cash Management: Visibility into assets, liabilities, and funding needs.
  Risk & Liquidity Analysis: Dynamic tools to identify exposures and optimize liquidity.
- Simplified Decision Support: Actionable reporting for trade-offs and relative value analysis.

## 4. Path Forward:

- Data Sources: Integrate key platforms like Quantum, ATOM, and EPM into a centralized environment.
- Processes: Streamline forecasting, reconciliation, and reporting workflows.
   Tools: Optimize and consolidate foundational tools like Power BI and SQL for maximum efficiency.

People: Align roles across Treasury, partners like FP&A, and RAD to support execution and outcomes.

### Introduction

Wednesday, December 25, 2024 6:12 PM

#### Opportunity ID: 0704231

Opportunity Name: RAD Treasury Assessment

+++++++++++++ Alex Schmidt Patrick Whitmer Jason Gehlen Geoffrey Crossley Brad Gerdin Sandra Jannetty

.....

### RE: Assessment work for the Treasury Analytics





### Dave- thanks for the update

- 1. I know he hasn't approved budget for Implementation phase. Hence, we are trying to secure ECIF funding to maintain the momentum
  - a. Alex doesn't want to lose the momentum and is looking into options as well
- 2. Alex and I spoke on Friday and I had offered him to do a rapid assessment for the Treasury scope
  - a. Treasury reporting is 100% manual per Alex, there are no systems
  - b. Assessment will require a different lens more from capturing the high-level requirements scope of reporting done via Excel, data sources used, high-level entity model and ETL scope, high-level quantification of manual effort for various tasks on a regular basis etc.

Expires 3/23/2025

c. Using these h/l requirements, define the future state roadmap how the RAD ecosystem can be expanded and utilized to meet the business needs of the Treasury reporting team. And do so in a manner such that RAD database becomes a SSOT for Treasury and other Finance functions that could get layered in over a period of time

Expires 3/24/2025

d. I have requested Alex to secure small funding to pay for this rapid assessment over 3 weeks or so

Please put time on the calendar for Jan 2 for 3 of us to talk through this.





Treasury x RAD - Next Steps (Project Medici)

145 KB Hi Dinesh, Dave, and John,

Treasury x RAD Proposal.vD.pdf

I have Marilyn's buy-in for a scoping effort like we did in Phase 0 for RAD for Treasury.

I headlined that it would likely cost around \$25k mark. I know ours was less, but just in case I added buffer.

This Project is going to be much different than what we did for RAD for a couple reasons; as Treasury...:

- 1. has far less mature data capability infrastructure
- 2. does not have an Analytics team (yet... idea is to fund more resources to us)
  - o has the ideal opportunity to use our infrastructure, workflows, and managerial headcount
- 3. has access to rather sensitive banking data
- 4. has on the one hand a very complex/diverse source ecosystem yet on the other hand much less complexity and sophistication needs for Analytics [and no Product work]

In our sessions, I was able to delegate to Patrick and Grant largely; this won't be possible, as they are not familiar with Treasury. However, Patrick and I will need to be heavily involved in the scoping discussions and meetings.

I can get you more up to speed on background and current state of reporting when you have time.

If we can get this in the books; I think Corporate Security might be not far behind!

Best. Alex \*\*\*\*\*



To O Hirsch, Marilyn V; O Mattson, Courtney O; O Reed Farha, Rebecca C; O Jonczyk, Michael; O Eichelman, Andrew B

CC Rickberg, Ingrid; O Schutter, Janice A; O Keis, Patrick D; O Ziegenfuss, Joe; O Mukerjee, Probir K; O Gehlen, Jason

1 You forwarded this message on 12/18/2024 2:04 PM.

#### Hi folks.

Thank you for a productive and insightful session last week. Your input was essential in helping me understand how RAD could deliver an Analytics Platform as a Service (AaaS) to Treasury, providing streamlined, forward-looking analytics to drive better decisions and efficiency.

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For now I need to schedule a final set of working sessions that take me "soup to nuts" on your critical reports and related data stacks you want for 2025; then I can present a resource SOW. Please don't hesitate to share any additional thoughts or priorities ahead of that discussion.

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- Deliver Insights: Develop predictive models and forward-looking dashboards to enable strategic decisions.

Looking forward to working with you to deliver an Analytics Platform as a Service that supports Treasury's strategic goals.

Best,

Alex

## **Approvals**

Tuesday, January 21, 2025 6:54 PM





Thanks Dave,

The SOW captures the work quite well, I believe my added color today during our meeting doesn't necessarily need to be added in - largely semantics such as "Treasury Analytics" team, which doesn't exist @

Best

From: Cheema, Dave <<u>dave.cheema@optum.com</u>2 Sent: Friday, January 17, 2025 3:58 PM

To: Alex Schmidt <alex schmidt@uhg.com>
Cc: GoligitalfromHello godigitalfromhello@uhgarure.onmicrosoft.com>; Shin, John S <<u>John.shin@optum.com</u>>; Johnson, Scott D <a href="mailto:scott.di.ohnson@optum.com">scott.di.ohnson@optum.com</a>; Johnson, Scott D <a href="mailto:scott.di.ohnson.di.ohnso

I'm sorry, here it is...

Thanks & regards, Dave Cheema

From: Alex Schmidt calex schm

Sent: Friday, January 17, 2025 5:35 PM

To: Cheema, Dave <dave.cheema@optum.com

Cc: GoDigitalfromHello <godigitalfromhello@uhgazure.onmicrosoft.com>; Shin, John S <john.shin@optum.com>; Johnson, Scott D

⊕ ← Reply ← Reply All → Forward

Subject: RE: SOW Approval requested: RAD Treasury Assessment

Hi Dave.

Where is the attached SOW?

We are good to go financially, but just wanted to peak at it.

### RE: SOW Approval requested: RAD Treasury Assessment



### **RAD Treasury Assessment**

SOW & Pricing Proposal

Hello Alex

Thank you for choosing the Optum Advisory- Digital Transformation team to help support for your continued effort to modernize RAD Data Platform. Attached you will find the SOW & Pricing Proposal for the RAD Treasury Assessment for the duration of 4 weeks.

Please let me know if you have questions. I appreciate your trust in our team to support you.

### Snapshot:

- . Ask: RAD Treasury Assessment
- Duration: 1/20/2025 2/21/2025
   Total Cost Estimate: \$25,000

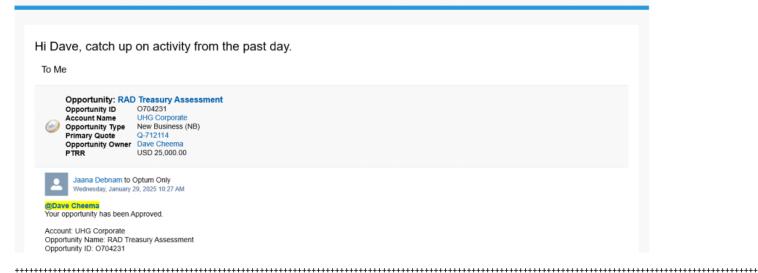
### Next Steps:

- 1. Review the attached SOW for scope, pricing, terms, and conditions
- Review the attached SOW for scope, pricing, terms, and conditions
   If you agree with the terms, simply respond to this email with "Reviewed and agree."
   You will receive an email notification from Optum's 'ITRAC Tool' for your formal online app this SoW
   The Finance team member too need to provide their approval via 'Intake Tool'.
   Please confirm the name of your Finance Team member along with the GL string for billing.
- - a. GL String:
  - BU: 20020
  - OU: 01000
  - Dept: 101800 Location: USASS800
  - b. Finance Contact: Courtney O Mattson| courtney.mattson@uhg.com

### OAS Digital Transformation Key Business and Technical Contacts:

- John Shin
- Dinesh Malhotra
- Dave Cheema

Expires 4/30/2025



Term Sheet Update for O704231, RAD Treasury Assessment



#### Term Sheet Process Update

Please see below for the current status of your term sheet. You will be notified as your term sheet progresses through the approval process. Please reply to bob.clements@optum.com with any questions.

#### **Current Status:**

**Fully Executed** 

Comments or Follow Up Items:

### Approval Progress

\*Pre-Approval Requested: Submitted for Approval: 2025-01-22 Purchaser Business Approved: 2025-01-22 Purchaser Finance/Acct Approved: 2025-01-22 Provider Accounting Approved: 2025-01-22 OI Finance DOA Review Complete: 2025-01-22 Provider Finance Approved: 2025-01-22

ral process so this step may be skipped for some term sheets

## Thank you.

Optum Advisory Operations ·

RE: Pricing Approval Request - O704231 RAD Treasury Dev Test & Deploy



Cc: GoPayerTechnology <GoPayerTechnology@uhgazure.onmicrosoft.com>; Shin, John 5 < john.shin@optum.com> Subject: Pricing Approval Request - 0704231 RAD Treasury Dev Test & Deploy

Please review and approve the attached Pricing Proforma for the RAD Treasury Dev Test & Deploy project.

The attached Pricing Proforms is for the implementation phase of the RAD Treasury Data Modernization project, which is a part of a larger RAD Data Modernization program. This proje will last 6 months. This phase's pricing is based on the findings of the assessment phase of the same project.

Please review the fixed-fee w/ 10% contingency pricing and provide your approval as appropriate.

Please let me know if you have any questions/concerns. Thanks in advance.

Dave Cheema .....

 $\vee$ Term Sheet

Update fo... RAD Treasury Assessment Page 6



### Term Sheet Update fo...

Term Sheet Update for O705067, RAD Treasury Reporting & Analytics - Cloud Data Foundation





Term Sheet Process Update
Please see below for the current status of your term sheet. You will be notified as your term sheet progresses through the approval process. Please reply to <a href="https://doi.org/10.1007/journal.com/">https://doi.org/10.1007/journal.com/</a> with any questions.

Expires 8/3/2025

#### **Current Status:**

Fully Executed

Comments or Follow Up Items:

Approval Progress

\*Pre-Approval Requested: 2025-04-24
Submitted for Approval: 2025-04-25
Purchaser Business Approved: 2025-04-29
Purchaser Finance/Acct Approved: 2025-04-30
Provider Accounting Approved: 2025-05-05
Provider Faccounting Approved: 2025-05-05
Provider Finance Approved: 2025-05-05
\*Not all Purchaser Finance Contacts require a pre-approved proc ess so this step may be skipped for some term sheets

Thank you, Optum Advisory Operations

### Approach

cember 25, 2024 6:53 PM

Data sources																		
Name	Location	Current access mechanism	Access Credentials	Frequency	Data Source type	Size	Documentation	Data Quality	Data Model (DDL)	Integration Method	Technology(s)	Related Cost	Current Use Cases	Potential gaps/opportunities	Challenges	Workarounds	Desired State	Comments

#### Additional Assessment Aspects:

- Explore existing data landscape including data sources, data quality, data model, data integration methods, technologies, and related costs
   Current business use cases being addressed
   Operational model and related costs
   Potential gaps / opportunities for business and operations

- 4. Potential gaps / opportunities for business and operations

  5. Effectiveness: achieving its intended purpose and meeting user needs

  6. Efficiency, resource utilization, such as CPU, memory, and disk usage

  7. Reliability: consistency and reliability over time

  8. Security, authentication, authorization, data encryption, and access controls

  9. Scalability: can system meet demand elasticity

  10. Manitariability: ease of maintaining and updating the system

  11. Compatibility: ability to integrate with existing infrastructure and support interoperability.

  12. Cost effectiveness: evaluate ICO and explore efficiency opportunities

  13. Performance: perfains to the speed within which it can complete a unit of work

  14. Performance: perfains to the speed within which it can complete a unit of work

  15. User Experience ased of use, intuitiveness, and accessibility

  16. Integration: ability to integrate with order systems or platforms

  17. Stakeholder Feedback: Feedback form users, administrators, and other stakeholders

  Approach to data platform migration

- Approach to data platform migration

   Assessment

   Design

   Development

   Testing

   Deployment

   Production Acceptance Testing

   Sunset existing processes

Sunset existing processes
Assessment
Purpose
Determine the size of the problem
Complexity of the problem
Pattern types
Note: Assessment does not concern with the implementation details - that comes in the design phase
What we need

Source System	Data Source Type		Comments
	(Flat file, Excel, REST API, SQL/Oracle, ECG, JSON, etc.)	(daily, weekly, monthly, quarterly, yearly)	

- Data folders structure
  Treasury

   Quantum

   Bank Balances

   I File of type Excel/CSV, 1 time, daily
  Bank I File of type Excel/CSV, 1 time, daily

   Target balance and concentration cash flow

   I File of type Excel/CSV, 1 time, daily

   ePAM

   CEQ Balances

   I File of type Excel/CSV, 1 time, daily

   Interest Rates

   I File of type Excel/CSV, 1 time, daily

   Interest Rates

   I File of type Excel/CSV, 1 time, daily

   Interest Rates

   I File of type Excel/CSV, 1 time, daily, or 4 emails, daily Need to discuss logistics with Brian P Blake

   ICS

  - 1 File of type Excel/CSV, 1 time, monthly
     2 PeopleSoft
     1 File of type Excel/CSV, 1 time, daily
     Dividends
     1 File of type Excel/CSV, 1 time, monthly

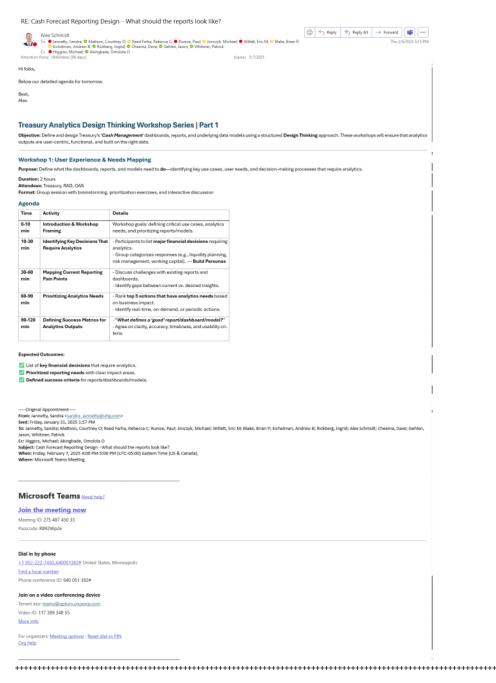
- Title of type Excel/CSV, 1 time, monthly

  Total: 11 files

  1. 11 data sources
  2. Create solution befinition befinition of design
  a. Create high level architecture diagram
  3. Create Per, Fest, Deploy
  a. Create schema(s)
  c. Create schema(s)
  c. Create schema(s)
  c. Create schema(s)
  c. Create landing zone
  i. Use folder structure provided, with Hot, Cool, Cold, and Archive tiers
  i. Hot tier Data is accessed or modified frequently.
  2) Cool tier Data is infrequently accessed or modified schema(s)
  3) Cold tier An online tier, for storing data that is rarely accessed or modified, should be stored for a minimum of 90 days
  3) Cold tier An online tier, for storing data that is rarely accessed or modified, should be stored for a minimum of 90 days
  4) Archive tier An offline tier for storing rarely used data, can take hours to retrieve, data should be stored for a minimum of 180 days
  d. Create medallion architecture tables and views
  e. Create parameterized data pipelines
  f. Conduct unit testing
  g. Migrate historical data
  h. Process delta daily datasets
  h. Build out production environment
  J. Migrate data to preduction existing major claims.
- Nigrate data to production
   K. Create system testing
   Conduct Production Acceptance Testing (mainly client, OA support only)
   Decommission existing like processes

## **Emails**

Friday, February 7, 2025 2:28 PM



### Individual Design Sessions



### Good evening Team,

I will send out calendar holds shortly; please feel free to bump them around to suit your schedule, my initial goal is to meet as soon as possible.

Kindly forward any reporting you would like to in-scope for the purpose of "Optimizing Cash Effectively" to Sandy so she can file it with us.

### Stakeholder Sessions

Each session will focus on a specific function within Treasury to ensure customized solutions for your needs.

Stakeholder Group	Focus Area	Key Person	

Each session will focus on a specific function within Treasury to ensure customized solutions for your needs.

Stakeholder Group	Focus Area	Key Person
Investment Team	Maximize value of investable assets and protect capital	Courtney Mattson
Statutory Capital Management	Optimize statutory capital towards credit ratings and maximize cash flow	Paul Runice
Enterprise Risk Management	Identify, prioritize, and measure capacity to withstand risks	Michael Barton
Capital Markets and Treasury Accounting	Manage capital structure, financial risks, and fund the enterprise	Michael Jonczyk
Cash Management	Ensure bank accounts are funded and optimize cash levels	Eric Willett
Financial Planning and Analysis (FP&A)	Projections, budgeting, forecast- ing, and providing explanations for variances	Andrew Eichelman
Treasury Solutions	Establish and maintain payment and cash flow infrastructure	Rebecca Reed Farha
Treasury Operations	Manage daily cash flow through bank accounts and anticipate fu- ture excess cash	Sandra Jannetty

### Session Plan

The mini session (max. 45 minutes) will focus on your specific role within Treasury to capture your unique needs for analytics. I will push to align on what specific reports, dashboards, and models should look like, do, and interact like.

STEPS	GUIDING QUESTIONS	EXPECTED OUTCOME
1. ROLE & CONTEXT	What Treasury decisions rely on your reporting/dashboards?	Clear understanding of user needs.
2. STATUS QUO REVIEW	IF YOU HAVE CURRENT REPORTING/EXAMPLES – How does this reporting meet your needs?	Critique of current state reporting w/ examples.
3. IDEAL FUNCTIONALITY	What insights should these reports provide? How should it enable decision-making?	Defined goals for analytics outputs.
4. VISUAL & INTERACTION DESIGN	What format works best? What filters/drilldowns are needed?	Details for sketches/wireframes of key reports.
5. DATA & INTEGRATION	What data is needed? Where does it come from?	Data sources & potential integration gaps.
6. WRAP-UP	Open Time for Feedback and/or Planning	Confirmation of any additional/next steps.

### Deliverables for Phase 2

At the end of these sessions, based on your feedback and requirements we will build:

- . Mockups of your reports, dashboards, and models.
- A list of required data elements mapped to source systems.
- A planning document for prioritizing and acquiring the Treasury data.

Best, Alex

From: Alex Schmidt

Sent: Monday, February 10, 2025 3:36 PM

To: Jannetty, Sandra <<u>sandra jannetty@uhg.com</u>>; Mattson, Courtney O <<u>courtney.mattson@uhg.com</u>>; Reed Farha, Rebecca C <<u>rebecca c reed@uhg.com</u>>; Runice, Paul <<u>paul runice@uhg.com</u>>; Jonczyk, Michael <<u>michael jonczyk@uhg.com</u>>; Willett, Eric M <<u>eric m willett@uhg.com</u>>; Blake, Brian P <<u>brian p blake@uhg.com</u>>; Eichelman, Andrew B <<u>andrew b eichelman@uhg.com</u>>; Rickberg, Ingrid <<u>ingrid.rickberg@uhg.com</u>>; Cheema, Dave <<u>dave.cheema@optum.com</u>>; Gehlen, Jason <<u>jason.gehlen@uhg.com</u>>; Whitmer, Patrick <<u>patrick whitmer@uhc.com</u>>; Akingbade, Omolola O <<u>lola akingbade@uhg.com</u>>; Higgins, Michael <<u>michael.higgins@uhg.com</u>>; Barton, Michael A <<u>michael barton@uhg.com</u>>

Subject: RE: Workshop 1

Hi folks,

Thanks again for your time and patience on Friday; it was a great ending to a long week!

## Workshop Recap

- 1. Understanding Treasury's Cash Management Functions Mapping out the roles, objectives, and priorities of different Treasury teams.
- 2. Defining Key Analytics Needs Exploring what decisions Treasury teams need to make and how analytics can support them.
- 3. Identifying Challenges in Reporting & Data Highlighting gaps in current dashboards, variance analysis, and data sources.

### **Next Steps**

- 1. Execute Individual Design Sessions Align on key stakeholders, finalize session dates, and workshop.
- Start Mockups Based on Workshop Insights Create wireframes for review.

#### Next Steps

- 1. Execute Individual Design Sessions Align on key stakeholders, finalize session dates, and workshop.
- 2. Start Mockups Based on Workshop Insights Create wireframes for review.
- 3. Hold a Follow-Up Group Session Consolidate feedback and refine outputs before moving into data integration hierarchy planning.
- 4. Prioritize which dashboards and features to prototype first (e.g., Cash Forecasting & Liquidity Management as MVP).

Concurrently we are already kicking off defining data pipelines for ingesting key Treasury datasets into RAD's cloud with Data Engineering & IT.

@Jannetty, Sandra has been working on corralling your team's cash-respective status quo reporting, please do supplement if you don't think your functions are covered.

For record-keeping I will also leave you with a high-level recap of my takeaways below my signature. I am also going to begin pushing key documentation to our Teams channel and continuously update – first example: Treasury Personas.xlsx

Please keep an eye out for my meeting invite to you personally, it will include a full agenda and mental preparation guide.

Lastly, this is a continuous work of art, so please always feel free to comment and nit-pick anywhere, as we iterate to getting to a full-truth and final scoping. Consider everything a draft until we collectively agree.

Thanks, Alex

## **Executive Summary of Key Findings**

### Objective of Workshop #1:

This session aimed to map out the ideal future state of Treasury analytics by identifying key decision-making processes, reporting needs, and data challenges. The goal was to take a user-centered design approach to ensure that the final dashboards, reports, and data science models enable actionable insights and proactive financial management.

### Key Themes from the Discussion

### 1. Treasury's Core Analytics & Decision Areas

Treasury leaders outlined their key functions, emphasizing areas where data-driven insights are critical:

- · Cash & Liquidity Management: Understanding cash positioning, forecasting cash needs, and optimizing liquidity.
- · Risk Management & Hedging: Identifying exposure, tracking hedge effectiveness, and mitigating financial risks.
- Variance Analysis & Scenario Planning: Explaining deviations from expected cash flows and simulating different financial scenarios.
- Investment & Capital Markets: Managing short-term investments, aligning funding strategies, and optimizing returns.

## 2. Current Reporting & Data Challenges

The Treasury team described several pain points that hinder their ability to make fast, informed decisions:

- . Data Silos & Fragmentation: Multiple systems (Quantum, ATOM, EPM) result in disconnected insights.
- · Backward-Looking Reporting: Many reports focus on historical reconciliation rather than future-oriented decision-making.
- Manual Workflows: Data extraction and reconciliation still require significant human effort, leading to inefficiencies.
- Lack of Standardized Variance Analysis: No common framework exists to explain cash movements and deviations across teams.

## 3. Defining Success: What the Future State Should Look Like

Treasury leaders defined success as:

- Proactive, forward-looking analytics (cash forecasting, risk simulations).
- Actionable insights that drive better financial decisions (not just static reports).
- Automated, real-time reporting with self-service drilldowns.
- Standardized variance analysis that Treasury teams can use across all business units.

-----Original Appointment-----

From: Alex Schmidt

Sent: Friday, February 7, 2025 12:34 PM

To: Alex Schmidt; Jannetty, Sandra; Mattson, Courtney O; Reed Farha, Rebecca C; Runice, Paul; Jonczyk, Michael; Willett, Eric M; Blake, Brian P; Eichelman, Andrew B; Rickberg, Ingrid; Cheema, Dave; Gehlen, Jason; Whitmer, Patrick; Akingbade, Omolola O; Higgins, Michael

Cc: Barton, Michael A Subject: Workshop 1

When: Friday, February 7, 2025 12:30 PM-2:15 PM (UTC-08:00) Pacific Time (US & Canada).

Where: Microsoft Teams Meeting

## Microsoft Teams Need help?

### Join the meeting now

Meeting ID: 224 181 244 115 Passcode: e8N3FX9k

### JOIN THE HIGERING HOW

Meeting ID: 224 181 244 115 Passcode: e8N3FX9k

### Join on a video conferencing device

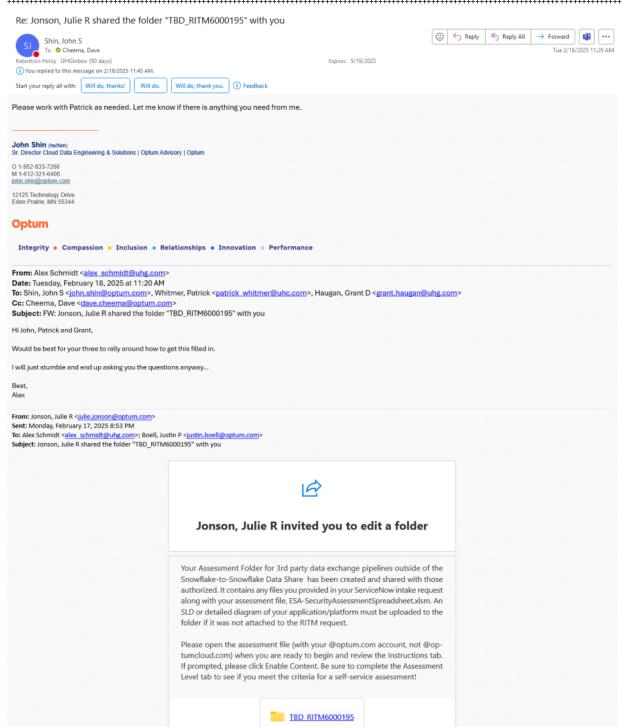
Tenant key: teams@optum.onpexip.com

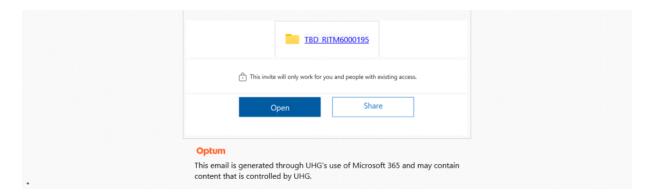
Video ID: 115 500 884 23

More info

For organizers: Meeting options

Org help





### **RE: Priorities**





Thank you for this reply. No worries about yesterday.

I understand your concerns around decision making. I'm hoping that you can grab sufficient historic data to test new forecasting models against actual cashflows to see how they perform and make iterative improvements. We can all learn from this method.

Expires 5/19/2025

I'm looking forward to taking this afternoon!

Sandy

From: Alex Schmidt <alex schmidt@uhg.com> Sent: Tuesday, February 18, 2025 11:36 AM To: Jannetty, Sandra <sandra jannetty@uhg.com>

Cc: Gehlen, Jason < jason.gehlen@uhg.com >; Cheema, Dave < dave.cheema@optum.com >

Subject: RE: Priorities

Hi Sandy,

I am sorry I didn't get to a formal response on this yesterday, it was tougher than I had anticipated without childcare for the day.

Yes, we will absolutely rally around these priorities; though we must keep an eye on the "ecosystem" such a forecasting tool/analytical capability lives in.

The risk of using predictive modeling that ultimately supports go/no-go decisions around financing are too high for us to not know "how the meat grinder works" 😇

We are in a good position to zoom into the narrowed scope now!

Best. Alex

From: Jannetty, Sandra <sandra jannetty@uhg.com> Sent: Sunday, February 16, 2025 12:19 PM To: Alex Schmidt <alex schmidt@uhg.com>

Subject: Priorities

Hi Alex.

I am really enjoying working with you and the team! You're all so impressive!

I understand that the design sessions exposed a vast scope of opportunity and caused you concern over the use of Excel and the inherent risks. While you and the team digest the information from these sessions, along with the numerous reports and spreadsheets provided, I want to reinforce the priorities for us. I do think you know the priorities, I just want to make sure we're not distracted by all the opportunities in front of us.

Our first priority is for data analytics and predictive modeling to better forecast cash flows and identify excess cash. Next is Reporting for cash and cash equivalents balances and forecasted balances by bucket (DDA, Pool, MMkt, Cash Desk).

I thought it would be helpful to provide you with Courney's Goal for this initiative:

### Execution (CM)

Execution - Continuous evaluation of deliverables to assess impact and efficiency: is it still necessary, is best in class," could it/should it be automated and/ outsourced, what are we not doing that we should? Relentless focus on capacity for new opportunities to assist business and add value.

- Operational Excellence Quality in all that we do

  Efficient and timely execution

  Simplify and reduce complexity of free up time and capacity for more meaningful work.

  Treasury Focus to Shift from Execution to Insights in order to do this, every area will need to focus on forecasting and planning and find ways to execute more automatically.

  Move from point estimates in certain areas to range based

- Simplify and reduce complexity o free up time and capacity for
- more meaningful work

  5. Treasury Focus to Shift from Execution to Insights In order to do this, every area will need to focus on forecasting and planning and find ways to execute more automatically

   Move from point estimates in certain areas to range based

  - Move towards automated cash reconciliation earlier and focus on 30, 60, 90, 13-week cash forecasting with an ability to drill down to BU levels
  - More meaningful and real-time reporting to allow for better

More meanings, a marker or the state of the state of

I'm looking forward to your report-out to the Design Team.

I'm in MN from February 18-28th. I'm bracing for the cold temperatures!

#### Sandy

Sandy Jannetty | Vice President, Treasury Operations & Services, UnitedHealth Group UnitedHealthcare Center CT039-004B, 185 Asylum Street, Hartford, CT 06103 (office) 860.702.5551 | (fax) 860.702.5565 | (email)Sandra jannetty@uhg.com



RE: Quantum Data



Expires 5/25/2025

② ← Reply ← Reply All → Forward 📦 …

See comments below based on discussions we had with Dom and Eric last week:

- Transaction Reports If we provide "Daily" transaction reports going forward, we have no way to provide a differential report. That means, we can only provide YESTERDAY's transactions. If a file was late, and we needed to see two day's transactions for a particular bank or account, it would never appear. Business unit changes that occur mid-month would typically appear retroactively on the MTD reports, also, but would not get captured on a daily file until the day of the change.

  Belance Reports – Similar situation – If we provide daily balances, missing data or changes from the previous day would not be captured

From: Jannetty, Sandra <sandra jannetty@uhg.com>

Sent: Monday, February 24, 2025 11:18 AM To: Cheema, Dave <dave.cheema@optum.cor

Cc: Sutherland, Dawn C <dsutherl@uhg.com>; Bostick, William T <william.bostick@uhg.com>; Willett, Eric M <eric\_m\_willett@uhg.com>; Morais, Domingos\_D <domingos\_D <domingos\_D <domingos\_D <domingos\_D <domingos\_D <domingos\_D <download\_page.

Subject: Quantum Data

What is the landing site where you want us to send the Quantum data to you?

Bill has collected some historical data that he is ready to transmit to you, probably via QuickConnect.

- o All Transactions for December 2024 and January 2025. He will have February 2025 for you next week.
- o He will soon have Daily Balances for you for these periods as well.

Please provide feedback to this entire group on your ability to handle the volume of this data as it will help inform how much history we can provide. We are considering going back to July 2024, or January 2024. We have also discussed 3 years of history, so we need to understand the value and feasibility of this. Alex is working with three years of data for two legal entities right now to do some forecasting modeling. This work will also inform the value add of each prior period to the accuracy of the forecast

Bill is working to create a daily extract of Transactions and Balances for transmission to your landing site. These daily files will be scheduled to transfer to your landing site automatically. We are targeting to start this daily transmission in March.

Next, Bill will work on extracting bank account target balances to transfer to the landing site.

Sandy

### Notes

Wednesday, February 12, 2025 8:02 PM

Treasury Operations: Sandra Jannetty

Brian Soller's team:

Keis, Patrick D Andrews, Tim

Probir K Mukerjee

Treasury data sources: Keis, Patrick D, Andrews, Tim, Probir K Mukerjee

Cash Management: Eric Willett

 ${\bf Quantum\ is\ a\ cash\ management\ system,\ comes\ from\ PeopleSoft\ General\ Ledger.}$ 

Created by FIS; has Treasury workstation; manages parts of Treasury

Quantum is used daily

SMEs: Dom Morais and Dawn Sutherland

PAM (Princeton Asset Management) is for derivatives and accounting, SME: Brian Blake

PAM is system of records for Brian & team

Has open database, have access can connect to it.

Export module is typically used to access database; a 3rd party tool. Citrix is used to connect to it

PAM is monthly

Peoplesoft SMEs: Patrick W. and Jason G.

PeopleSoft - what type of a database is it?

PeopleSoft data is stale

Only some parts of PeopleSoft are needed - a monthly job.

Average balances are more useful than month end balances

To query: Essbase - GL tool (Excel add-in) - not sure if it is really need

ATOM has bank account information and GL structure, have same thing in Peoplesoft

SME: Brian Blake to forecast cash flow, Dawn Sutherland, and Becky Reed

Need to understand what PAM and ATOM

ATOM and PAM to hold off for a while

Bloomberg something we also may need to look at it

Quantum & Forecasting Hierarchy. SME: Probir M. Regulated forecasting - 70-80 can go up to 400 Non-regulated forecasting - all rolled into one Jillian has dividend forecasting data

- $\label{eq:Q.Decomposition} \textbf{Q.} \quad \text{Is commercial paper and the debt managed in Quantum or a different system?}$
- $R. \quad \mbox{Michael Jonczyk} \ \mbox{and Brian Blake response: Yes, Quantum and Excel}$

International cash may be an issue. **Owen Mahani's??** team is using it. Interest are another issue

Business Operation	BO SME(s)	System	Description	Database	Table	SME(s)	Notes
Treasury Operations	Sandra Jannetty						Optimal CEQ levels to fund operations     Real-time tracking of excess cash for short-term investments
Treasury Data Sources	<ul><li>Patrick D Keis</li><li>Tim Andrews</li><li>Probir K Mukerjee</li></ul>						Patrick Keis, is REST API is available for Essbase PeopleSoft?
Cash management	Eric Willett						
	Dom Morais     Dawn Sutherland	Quantum	Cash management system, comes from PeopleSoft General Ledger Created by FIS Has Treasury workstation Manages parts of Treasury Quantum is used daily				Q. Is commercial paper and the debt managed in Quantum or a different system? R. Michael Jonczyk and Brian Blake response: Yes, Quantum and Excel
	• Probir Mukerjee • Jillian?	Quantum & Forecasting Hierarchy	Regulated forecasting - 70-80 can go up to 400 Non-regulated forecasting - all rolled into one Jilian has dividend forecasting data				
	Patrick Whitmer     Jason Gehlen	Peoplesoft	PeopleSoft data is stale Only some parts of PeopleSoft are needed Runs a monthly job Average balances are more useful than month end balances To query: Essbase - GL tool (Excel add-in) Need connection to Essbase in Oracle; should be standard REST API connection?	Oracle			Talk to Tim Andrews to get direct access to PeopleSoft  Need to talk to Patrick Keis about REST API availability. Will discuss in 2/17/25 meeting
	Brian Blake	PAM (Princeton Asset Management)	Used for derivatives and accounting PAM is system of records for Brian & team Brian & team have access to it Can connect to it Export module is typically used to access database Citrix is used to connect to it PAM runs monthly	Open database			
	Owen O'Mahoney Or Owen Mahoney	International Cash	Owen Mahoney team in Ireland is using it				

Meeting notes - 02/17/2025 Quantum & ePAM · Scope - all cash · dbTools to connect to direct database access · SQL database AGS Database tool · FIS is a complex table • Transmit data via ECG and drop it to the desired Bill to get connected with Eric to determine the scope Eric Willett will define the scope • Patrick W. will work with Tim Andrews (everything)- PeopleSoft - what details are you looking for account code Jayanthi: UAIS is the platform. Can you give more info? Is it for internal or external client. UAIS documentation at https://docs.hcp.uhg.com/united-ai-studio/overview They also have hcp chat gcp to ask questions on hcp documentation Treasury Dataset priority (3) ← Reply ≪ Reply All ij → Forward Whitmer, Patrick To Cheema, Dave Thu 4/10/2025 9:55 PM Retention Policy UHGInbox (90 days) Expires 7/9/2025 1) You replied to this message on 4/10/2025 9:59 PM. Hey Dave, My 1:1 with Jason moved to Friday, but here is my take on the priorities right now: 1) Quantum Transactions 2) Bank Balances 3) Target Balance and Concentration Cash Flow 4) The 7 ePam files (in any order) 5) ICS file 6) PeopleSoft file 7) Dividends 8) DDA Interest Rates move onto the ePam files while we are waiting on #3 if we finish the first 2 before we get to 3.

May change slightly after my conversation with Jason, but the important takeaway is to get the 3 Quantum files done first (if possible, I know we are still waiting on #3 above). We can

Thanks, Patrick ++++++++++++++++++++ • Dom Morais Quantum • Cash management system, comes from PeopleSoft General Ledger • Dawn Sutherland • Created by FIS

Quantum is a cash management system, comes from PeopleSoft General Ledger.

• Has Treasury workstation · Manages parts of Treasury Quantum is used daily

ICS data source is also going to be PeopleSoft

# Colors

Thursday, October 10, 2024 7:17 PM

Green - #00b050 Yellow - #ffff96 Red - #ff0909 Royal Blue - #348dcd Navy Blue - #00226b

### Miscellaneous

Saturday, December 28, 2024 12:43 PM

#### Assessment

Collect, Analyze & Assess Current state for each data source

Define & Design

Dev, Test, & Deploy

PAT

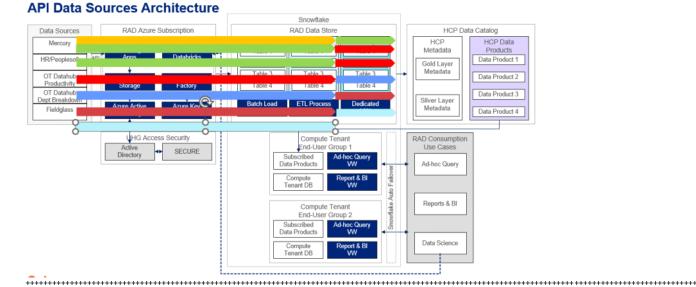
Decom

### Proposed approach

- 1. Collect:
  - a. Data source domains
  - b. Data source types
  - c. Data sources
  - d. Name | Location | Access Mechanism | Access Credentials | Data source Type | Frequency | Expected Volume | Challenges | Documentation | Desired State | Notes
- 2. Identify data source patterns
  - a. Data Migration
  - b. Data Ingestion
  - c. Data Transformation
- 3. Define & Design future state
  - a. Define process architectures and dataflows
  - b. Identify processes, platforms and tools/services
  - c. Data Architecture patterns
  - d. Databases, data schemas, and data tables/views
- 4. Effort Estimates
  - a. Create estimates for Definition & Design phase (remainder est. will be created during Definition & Design phase)
- 5. Findings, Approaches, and Solutions
  - a. Document findings and proposed approaches and solutions
  - b. Review internally and with Treasury SMEs
  - c. Make Treasury leadership presentation
- 6. Secure Approval
- a. Get client approval before proceeding further

......

ECIF SoW Draft for RAD



### Assessment

- Program Management Milestones
  - Start Date: January 21, 2025
  - o End Date: February 28, 2025 (6 weeks)
- **Current state** 
  - Explore existing data landscape
  - Current business use cases being addressed
  - Operational model and related costs
  - o Potential gaps / opportunities for business and operations
- Key Outcomes
  - o Future state Architecture vision
    - Integrate Treasury Analytics use cases with existing RAD platform
  - o Definition & Design Estimates
    - Estimates for Definition & Design phaseSolution Definition & Design

### **Definition and Design**

- Program Management Milestones
  - Start Date: March 3, 2025
  - o End Date: April 11, 2025 (6 weeks)

### Activities

- Define cloud solution patterns identifying the cloud tech stack and appropriate usage of each tool
- Create detailed solution design for data acquisition & data integration to populate Bronze, Silver, and Gold data into RAD Treasury Data Platform for all data sources
- o Create estimation of effort for Dev, Test, and Deployment phase of program

## • Key Outcomes

- Cloud solution patterns and tech. stack to implement use cases
- o Solution design for data acquisition & data integration to populate RAD Treasury Data Platform for all data sources
- o Effort estimates for development phase of the program

#### Development

#### Program Management Milestones

- Start Date: April 14, 2025End Date: July 31, 2025 (16 weeks)

#### Activities

- Development of cloud data solution patterns & tools based on use cases
- Data ingestion and data pipelines frameworks
- o Review and finalize end-to-end cloud infrastructure components
- $\circ \quad \text{Implement solutions for data acquisition \& integrations to populate medallion architecture tables for all data sources}$
- Validate results

### Key Outcomes

- Ready-to-run end-to-end cloud infrastructure components

- Validated results

### Deployment

### Program Management Milestones:

- Start Date: August 1, 2025End Date: September 26, 2025 (~8 weeks)

#### Activities

- Review and refine Production environment
- Migrate historical data
- Setup delta data ingestion and integration
   Create detailed effort estimates for PAT & Decommission phases of program
- Define & implement the HCP Data Catalog based data consumption model for RAD Treasury Data Platform
- o Develop automations for infrastructure & code deployment using terraform and CI/CD capabilities in GitHub

### • Key Outcomes:

- Migrated historical data
- Infrastructure to run delta data ingestion and integration
   Detailed estimation of effort for PAT & Decommission phases of the program
- HCP Data Catalog based data consumption model for RAD Treasury Data Platform
- o Automated infrastructure & code deployment

### **Production Acceptance Testing & Decommission**

#### · Program Management Milestones:

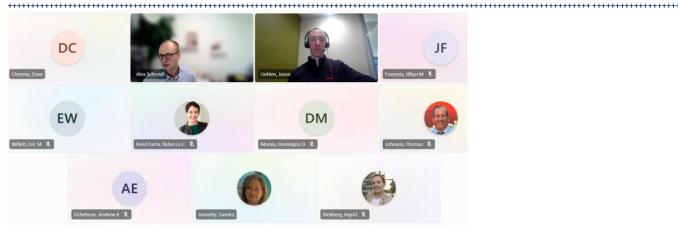
- o Start Date: September 29, 2025
- o End Date: November 28, 2025 (~9 weeks)

### Activities

- o Conduct parallel testing and validation of cloud data pipelines to ensure data outcomes are equivalent to current state expectations
- o Perform testing of data consumption use cases to ensure continuity compared to current state
- o Decommission of on-premises solution after complete sign-off of PAT

### · Key Outcomes:

- Tested and validated cloud data pipelines to ensure outcomes are equivalent to current state expectations
- Validated data consumption use cases to ensure continuity of current state
- o Client sign-off of Production Acceptance Testing (PAT)
- o Turned off on-premises solution



- • Is commercial paper and the debt managed in Quantum or a different system? If different, which one?
  - Mainly Quantum & also Excel
  - · Quantum FIS created it; has Treasury workstation, Used to manage parts of Treasury
    - o Dawn Sutherland SME
  - ATOM
    - o Dawn Sutherland and Becky Reed's teams are using it
  - PAM (Princeton Asset Management)
    - o Brian Blake contact person
    - o PAM is primary system for accounting. Has open database.
    - o What type of database is used for it? Open database
    - o How do you connect to it Have access and can connect to it. There is an export module that is used to typically access the database. It is a 3rd party tool. Connect to it via Citrix.
    - o How is data extracted out of it? Using export module and pulled into Excel

tput) Macro(s)	Excel Sheets within Macros	Notes	Input Data	Source
sk Performance Data.xlsx		Update ACN4 tab with current month data (first three columns are formulas so make sure they are calculating correctly for all rows) Update Bank Account data with the opportunities report data set for the current month (Make sure columns have not changed, if they have be sure to make adjustments) Update the NonTWS Account data tab with the aggregated data from Denise Terry (Make sure columns have not changed, if they have be sure to make adjustments) Filter the ANC4 tab to non-bank in column C and then remove issue types that are securitized, bank loans, market funds, or other types that wouldn't represent bank exposure. Then filter issuer name to all those that include Bank in the name. Ignore issuer name Optum Bank If there are any securities in the filtered rows that appear to be a bank, add the ticker information and rating info on the lookup tab appropriately (be sure to check if we already have it but the name or ticker is slightly different). Then add that new name to the reporting tab and pull down formulas.		
ata & Technology.xlsx				
gement Working Files				
FransactionReport_BU_ sx				
y Market Tracker.xlsm		Contains macros		
BNYM LDP Bank		I:\Cash_Management\NMMT Sheets\BNYM LDP.xlsx		
Check		I:\Cash_Management\New Corp Worksheet.xlsx		
HistoricalA				
DDADumpA PasteRow12BelowLastBusi essDay	n	I:\Cash_Management\NMMT Sheets\DDA DumpA.xlsx		
PoolWorksheetP		I:\Cash_Management\NMMT Sheets\Pool File.xlsx		
ecast end Forecast as of klsx				
C Benefits Plan of TX - J.xlsx				
vorksheet.xlsx				
Month ICS Forecast sent				
ports				
collapse		Instructions:  1. Login to peopleSoft and pull the new Legal Cash report. Run the report to excel.  2. run from period 0 to the previous month end.  3. June = 6  4. Save the file over previous for the new data. S:\Cashinvt\Investment Mgmt \Cash Balance - PS Report\Cash Balances BS_Data\Legal Cash PS Data.xlsx  5. Copy formulas from previous month over to a new tab for the new month in the Data tab.  6. Copy, paste values over the previous month data in the Data tab to keep previous data. If you do not do this, you will lose previous months data.  7. Run the below macro to update the Cash Data  8. Run the below macro to update the Unit Tree. (need to add manually now)  9. Review New Combination Check tab in Cash Data tab. If there are any "Need to Add", you will add the BU information to the BUs tab. If there is a new cash account, you will need to add to the Cash Account tab.  10. If there are new BUs, you will need to add new rows at the bottom of the data tab.  11. Get the Cash & Cash Equivalents from the balance sheet. (T:\Treasury\BS Legal\BS_LEGALMMYY.xlsm) Open up the tabs to find the cash and cash equivalents.  12. Click the 3 as seen below to expand the data to find the cash and cash equivalents.  13. NEW CASH ACCOUNT NAMES ON BS LEGAL DOC  14. Paste the BS cash and cash equivalents number to the yellow box, this is a balance check to ensure we have all accounts in the data tab.		
HideBlankColumn DollarsCents UpdateCashData		Directory: "S:\Cashinvt\Investment Mgmt\Cash Balance - PS Report\Cash Balances BS_Data"     File: "S:\Cashinvt\Investment Mgmt\Cash Balance - PS Report\Cash Balances BS_Data\Legal Cash PS Data.xlsx"		
HideBlank DollarsCer	nts	nts	14. Paste the BS cash and cash equivalents number to the yellow box, this is a balance check to ensure we have all accounts in the data tab.  Column  Ints  Directory: "S:\Cashinvt\Investment Mgmt\Cash Balance - PS Report\Cash Balances BS_Data"  File: "S:\Cashinvt\Investment Mgmt\Cash Balance - PS Report\Cash Balances	14. Paste the BS cash and cash equivalents number to the yellow box, this is a balance check to ensure we have all accounts in the data tab.  Column  Ints  Directory: "S:\Cashinvt\Investment Mgmt\Cash Balance - PS Report\Cash Balances BS_Data"  File: "S:\Cashinvt\Investment Mgmt\Cash Balance - PS Report\Cash Balances BS_Data\Legal Cash PS Data.xlsx"

example.xlsx			
Treasury Shared Documents			
01.2025 DDA Opp.xlsx			
01.2025 DDAIntECR&CEQ.xlsm			
	aGetUnitTreeTable	Directory: "T:\Treasury\PAMReports" File: Workbooks.Open Filename:="T:\Treasury\PAMReports\Unit Trees.xlsx"	
	bGetLegalEntityTable	Directory: "T:\Treasury\PAMReports" File: "T:\Treasury\PAMReports\Legal Entities.xlsm"	
	cGetCustAcctTable	Directory: "T:\Treasury\PAMReports" File: "T:\Treasury\PAMReports\Cust Acct Table.xlsx"	
	dGetPoolBal	Directory: "T:\Treasury\PAMReports" File: "T:\Treasury\PAMReports\" & Folder & "\Pool\PoolCustodyRec" & CurMonth & EoMDay & CurYear & ".xlsm"	
	eGetBNMData	Directory: "T:\Treasury\PAMReports"  File:  "T:\Treasury\PAMReports\" & Folder & "\BNM Custody Recon\Processed Account  Detail Files\Account_Detail" & CurMonth & CurDay & CurYear & ".txt"	
	fGetMTDPoolRates	File: "T:\Treasury\PAMReports\DDA Interest Info\" & CurYear & "\" & CurMonth & "." & CurYear & "\Forecast\" & CurMonth & "." & CurYear & "Pool Rates MTD.xlsm"	
	fGetMEPoolRates	File: "T:\Treasury\PAMReports\" & Folder & "\Pool\Pool Yields " & CurMonth & CurDay & CurYear & " Uhgrp6nm.xlsx"  Has password	
	gWD1GetBankBals	File: "E:\MTD_Reports\Archive\All " & PriorYear & " Month End Reports\" & PriorMoText & " " & PriorYear & "\MTD_BankBalanceReport.xlsx"  File: E:\MTD_Reports\Archive\All " & CurYear & " Month End Reports\" & CurMoText & " " & CurYear & "\MTD_BankBalanceReport.xlsx"	
	hGetDDAList		
	iGetBNMPoolList		
	jCreateOptTbl		
	xxUpdateBankCalcTab		
01.2025 Mmkt.Pool Inc.xlsm			
	EnterPortMgrCUSIP		
	GetPamPortTable	File: "T:\Treasury\PAMReports\PAM Portfolio Table.xlsm"	
	GetIncEarnBuild	File: "S:\Cashinvt\Reconciliation\Builders\IncEarnBuilder.xlsm"	
	GetSecTranBuild	File: "S:\Cashinvt\Reconciliation\Builders\SecTranBuilder.xlsm"	
	GetMTDPoolRates	File: Path & "\" & MoYr & " Pool Rates MTD.xlsm"	
	GetMEPoolRates	File: "T:\Treasury\PAMReports\" & Folder & "\Pool\Pool Yields " & CurMonth & CurDay & CurYear & " Uhgrp6nm.xlsx"	
	GetNTSTIFRates	File: Path & "\" & MoYr & " NT STIF Rates.xlsm"	
	GetOtherRates	File: Path & "\" & MoYr & " Other MMF Rates.xlsm"	
	GetBNMRates	File: Path & "\" & MoYr & " BNM Rates.xlsm"	
	GetFXAve	File: "S:\Cashinvt\InterCo Loans\CurrencyDataBase.xlsx"	
Banking Exposures 11.30.2024.xls		File: Banking Exposures 11.30.2024	

Treasury

Quantum ePAM PeopleSoft Dividends

Interests

Cashflow Management

Inflows Outflows

Outflow Dividends

Historical data Daily/weekly/monthly

What should be the naming standards

Emails - how should they be handled?

Do you think we should get Sandy's input as well?

+++++++++++++++++++++++++++++++++++++++	***************************************								
Meeting Title	Date Time	Attendees	Body						
Kickoff meeting - Treasury RAD Assessment	1/21/2025 1:30PM - 2:00 PM	Alex Schmidt; Whitmer, Patrick	Alex, Patrick,  The purpose of this meeting is to determine the logistics (scope, available collaterals, and SMEs availability) for the Treasury RAD Assessment project.  Note: If this timeslot does not work for you, please suggest a better suited time.						
Treasury RAD Assessment	1/27/2025 2:00 PM - 3:00PM	Alex Schmidt; Whitmer, Patrick	Please feel free to invite whomever you deem appropriate. Thank you.						
Working session - RAD Treasury Assessment project	2/4/2025 4:00 PM - 4:30 PM	Alex Schmidt; Gehlen, Jason	Alex, Jason,  The purpose of this meeting is to devise a plan to determine the overview, approach, collection of necessary data						

		Assessment project. Thank you.
2/10/2025 3:00 PM - 4:00 PM	Alex Schmidt; Gehlen, Jason; Whitmer, Patrick; Jannetty, Sandra; Crossley, Geoffrey M; Gerdin, Bradley G; Willett, Eric M; Johnson, Thomas; Franzoia, Jillian M; Blake, Brian P; Morais, Domingos D; Eichelman, Andrew B CC: Alex Schmidt; Gehlen, Jason; Whitmer, Patrick; Jannetty, Sandra; Crossley, Geoffrey M; Gerdin, Bradley G; Willett, Eric M; Johnson, Thomas; Franzoia, Jillian M; Blake, Brian P; Morais, Domingos D; Eichelman, Andrew B	The purpose of this meeting is to get consensus of the scope, overview, approach, timeline and expectations for the RAD Treasury Assessment project.  Please feel free to forward this meeting invite to anyone deemed appropriate. Thank you.
2/11/2025 12:00 - 12:30 PM	Keis, Patrick D; Andrews, Tim; Whitmer, Patrick; Mukerjee, Probir K; Jannetty, Sandra CC: Alex Schmidt	Recurring
2/12/2025 1:00PM - 1:30 PM	Blake, Brian P; Jonczyk, Michael CC: Alex Schmidt; Jannetty, Sandra; Whitmer, Patrick; Gehlen, Jason; Edelstein, Joshua	Brian, Michael, I have the following questions: I have the following questions: Is commercial paper and the debt managed in Quantum or a different system? If different, which one? Do you guys know anything about ATOM? Are your team(s) using it? If yes, we would like to learn about it? If not, do you know who might be using it? Brian, does you team use PAM? If yes - what type of database is used for it? how do you connect to it? how is data extracted out of it?
2/12/2025 3:30 PM - 4:00 PM	Whitmer, Patrick ; Gehlen, Jason	Patrick, Jason,  The purpose of this meeting is to determine what to extract out of PeopleSoft database, how to extract it and who are the SMEs we need to work with? Thank you.
2/14/2025 10:30 AM - 11:00 AM	Whitmer, Patrick	The purpose of this meeting to plan on how to group various stakeholders to conduct effective and efficient meetings. Also, I have some questions regarding PeopleSoft as well that I'd like to some clarifications on. Thank you.
2/19/2025 12:00 PM - 12:30 PM	Mukerjee, Probir K; Morais, Domingos D ; Sutherland, Dawn C CC: Alex Schmidt; Whitmer, Patrick; Gehlen, Jason; Jannetty, Sandra; Joshi, Srijan; Bostick, William T	Probir, et al, We're in the process of re-platforming and re-writing Treasury reports. We need some information regarding Quantum. For example: •What type of database it has? •How do we connect to it? •What language can be used to read data from it? •How do you get data out from it? •What is the forecasting hierarchy in it?
2/24/2025 11:00 AM - 11:30 AM	Sutherland, Dawn C; Bostick, William T CC: Jannetty, Sandra; Alex Schmidt; Whitmer, Patrick	The purpose of this meeting is to determine if we can get data from the data source.
2/24/2025 4:00 PM - 4:30 PM	Willett, Eric M <eric_m_willett@uhg.com>; Gehlen, Jason <jason.gehlen@uhg.com>; Kennedy, Lynelle <lynelle_kennedy@uhg.com>; Franzoia, Jillian M <jillian_franzoia@uhg.com> CC: Jannetty, Sandra <sandra _jannetty@uhg.com="">; Alex Schmidt <alex_schmidt@uhg.com>; Whitmer, Patrick <patrick_whitmer@uhc.com></patrick_whitmer@uhc.com></alex_schmidt@uhg.com></sandra></jillian_franzoia@uhg.com></lynelle_kennedy@uhg.com></jason.gehlen@uhg.com></eric_m_willett@uhg.com>	The purpose of this meeting is to identify dividends data source(s) for the Treasury Reports and dashboards. Thank you.
		Patrick, Asit, The purpose of this meeting is to align our understanding on creating folders for the Landing Zone of the Treasury data and to provide access credentials to the client. The following is the proposed folder structure that we'd like to be created.  Treasury  • Quantum • Balances • Transactions • ICS • Interest Rates • Target balance and concentration cash flow • ePAM • PeopleSoft • Dividends • Email (Brian) – Hold off this for now – have to discuss logistics with Brian P Blake
2/27/2025 4:30 PM - 5:00 PM	Alex Schmidt <alex_schmidt@uhg.com>; Whitmer, Patrick <patrick_whitmer@uhc.com>; Gehlen, Jason <jason.gehlen@uhg.com></jason.gehlen@uhg.com></patrick_whitmer@uhc.com></alex_schmidt@uhg.com>	Sorry for setting up a very late afternoon meeting. But I couldn't find any other empty timeslot that will work for everyone. Thanks in advance for your understanding.  Anyhow, the purpose of this meeting is to formalize the scope of this effort and define the division of responsibility.
2 1 2 1 2 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2	2/12/2025 1:00PM - 1:30 PM 2/12/2025 1:00PM - 1:30 PM 2/14/2025 10:30 AM - 11:00 AM 2/19/2025 12:00 PM - 12:30 PM 2/24/2025 4:00 PM - 4:30 PM 2/27/2025 11:45 AM - 12:15 PM	CC: Alex Schmidt; Gehlen, Jason; Whitmer, Patrick; Jannetty, Sandra; Crossley, Geoffrey M; Gerdin, Bradley, Gwillett, Eric M; Johnson, Thomas; Franzola, Jillian M; Blake, Brian P; Morais, Domingos D; Eichelman, Andrew B Keis, Patrick D; Andrews, Tim; Whitmer, Patrick; Mukerjee, Probir K; Jannetty, Sandra CC: Alex Schmidt Blake, Brian P; Jonczyk, Michael CC: Alex Schmidt Blake, Brian P; Jonczyk, Michael CC: Alex Schmidt Blake, Brian P; Jonczyk, Michael CC: Alex Schmidt; Jannetty, Sandra; Whitmer, Patrick; Gehlen, Jason; Edelstein, Joshua Whitmer, Patrick; Gehlen, Jason CC: Alex Schmidt; Whitmer, Patrick; Gehlen, Jason; Jannetty, Sandra; Joshi, Srijan; Bostick, William T CC: Alex Schmidt; Whitmer, Patrick; Gehlen, Jason; Jannetty, Sandra; Joshi, Srijan; Bostick, William T CC: Jannetty, Sandra; Alex Schmidt; Whitmer, Patrick William T CC: Jannetty, Sandra; Alex Schmidt; Whitmer, Patrick William T CC: Jannetty, Sandra; Alex Schmidt; Whitmer, Patrick William T CC: Jannetty, Sandra; Alex Schmidt; Whitmer, Patrick William T CC: Jannetty, Sandra; Alex Schmidt; Whitmer, Patrick Whitmer, Patrick Alex Composition, Milliam, Alighia, Franzola, Jilliam A; Jillia

## 2. Vision for Success:

Treasury leadership envisions a future where:

- . Reporting is Predictive
- Data is Trusted and Simplified
- Simplified Decision Support
   Integrate key platforms like Quantum, into a centralized environment.
- Processes: Streamline forecasting, reconciliation, and reporting workflows.
   Tools: Optimize and consolidate foundational tools like Power BI and SQL for maximum efficiency.

### 4. Path Forward:

- Data Sources: Integrate key platforms like Quantum, ATOM, and EPM into a centralized environment.
- Processes: Streamline forecasting, reconciliation, and reporting workflows.
- Tools: Optimize and consolidate foundational tools like Power BI and SQL for maximum efficiency.

  People: Align roles across Treasury, partners like FP&A, and RAD to support execution and outcomes.

From: Jannetty, Sandra <sandra\_jannetty@uhg.com>

Sent: Wednesday, February 26, 2025 12:24 PM

To: Alex Schmidt <alex\_schmidt@uhg.com>; Sutherland, Dawn C <dsutherl@uhg.com>; Cheema, Dave <dave.cheema@optum.com>

Subject: RE: Quantum Data

Thanks Alex.

We received an update from Dawn and Bill today. They are able to set up a daily transmission from Quantum to a drop zone to be determined by Dave Cheema. Two files will be sent daily; 1 for all the transactions and 1 for bank balances at end of day.

Sandy

From: Alex Schmidt <alex schmidt@uhg.com>

Sent: Wednesday, February 26, 2025 11:52 AM

Cc: Bostick, William T < william.bostick@uhg.com >; Willett, Eric M < eric m willett@uhg.com >; Morais, Domingos D < domingos d morais@uhg.com >

Subject: RE: Quantum Data

Hi Sandv.

This is great detail; if what you describe is repeatedly, manually but in a standardized way, processed - then we can automate it and have the same controls in place.

Best

From: Jannetty, Sandra <sandra jannetty@uhg.com>

Sent: Wednesday, February 26, 2025 7:00 AM

To: Sutherland, Dawn C < dsutherl@uhg.com >; Cheema, Dave < dave.cheema@optum.com >

Cc: Bostick, William T < william.bostick@uhg.com>; Willett, Eric M < eric m\_willett@uhg.com>; Morais, Domingos D < domingos D < domingos d\_morais@uhg.com>; Alex Schmidt < alex\_schmidt@uhg.com>

Subject: RE: Quantum Data

Dawn.

Thank you for this explanation.

In my experience the best way to capture updates/changes is to rely on the date field that records when the record was input to the system. This way, if certain transactions are a day or more late, we capture them as new data regardless of the bank transaction date. I believe, in BankData, this field is called the First Date.

Dave and Alex,

We will need some controls to ensure that the data pulled from Quantum is complete and accurate. I'm hoping you will have ideas for such controls. One control that we use in our bank reconciliation system is to calculate the Previous Day's Balance + today's debit transactions imported – today's credit transaction imported = Today's balance; then compare the calculated balance to today's imported balance. We do this for every account to make sure we are not missing any detail transactions.

Sandy

From: Sutherland, Dawn C < dsutherl@uhg.com >

Sent: Monday, February 24, 2025 11:01 AM

To: Jannetty, Sandra <<u>sandra\_jannetty@uhg.com</u>>; Cheema, Dave <<u>dave.cheema@optum.com</u>>

Cc: Bostick, William T < william.bostick@uhg.com >; Willett, Eric M < eric m willett@uhg.com >; Morais, Domingos D < domingos d morais@uhg.com >; Alex Schmidt < alex schmidt@uhg.com >

Subject: RE: Quantum Data

Sandy -

See comments below based on discussions we had with Dom and Eric last week:

- Transaction Reports If we provide "Daily" transaction reports going forward, we have no way to provide a differential report. That means, we can only provide YESTERDAY's transactions. If a file was late, and we needed to see two day's transactions for a particular bank or account, it would never appear. Business unit changes that occur mid-month would typically appear retroactively on the MTD reports, also, but would not get captured on a daily file until the day of the change.
- Balance Reports Similar situation If we provide daily balances, missing data or changes from the previous day would not be captured.

Thanks!

Dawn

From: Jannetty, Sandra < sandra jannetty@uhg.com >

**Sent:** Monday, February 24, 2025 11:18 AM

To: Cheema, Dave < dave.cheema@optum.com >

Cc: Sutherland, Dawn C < dsutherl@uhg.com >; Bostick, William T < william.bostick@uhg.com >; Willett, Eric M < eric m\_willett@uhg.com >; Morais, Domingos D < domingos d\_morais@uhg.com >; Alex Schmidt

<alex schmidt@uhg.com>
Subject: Quantum Data

Subject: Quantum Di

Dave,

What is the landing site where you want us to send the Quantum data to you?

Bill has collected some historical data that he is ready to transmit to you, probably via QuickConnect.

- o All Transactions for December 2024 and January 2025. He will have February 2025 for you next week.
- $\circ\;$  He will soon have Daily Balances for you for these periods as well.

Please provide feedback to this entire group on your ability to handle the volume of this data as it will help inform how much history we can provide. We are considering going back to July 2024, or January 2024. We have also discussed 3 years of history, so we need to understand the value and feasibility of this. Alex is working with three years of data for two legal entities right now to do some forecasting modeling. This work will also inform the value add of each prior period to the accuracy of the forecast.

Bill is working to create a daily extract of Transactions and Balances for transmission to your landing site. These daily files will be scheduled to transfer to your landing site automatically. We are targeting to start this daily transmission in March.

```
Next, Bill will work on extracting bank account target balances to transfer to the landing site.
  Sandy
                ++++++
  ++++++
  Treasury
 Quantum

    Bank Balances

    Bank Transactions

    Target balance and concentration cash flow

ePAM

    Overnight Liquidity

      Interest Rates
ICS

    PeopleSoft

    Dividends

    DDA Interest Rates

  Notes from meeting 2/11/2025 Sandy Jannetty
  Subject: Cash forecasting overview
  Hard to predict future needs for money using current tools and data
  get daily activities
  Data comes from quantum, cash management system
  Key systems: Quantum is key to cash management, General Ledger comes from PeopleSoft, ePAM system from accounting of investments derivitives, Unclear what Courtney uses for investment tracking.
  Any reference tables, mappings, for reference purposes? -
  We have connection to PeopleSoft
  Can we reach to Melissa to get insights into PeopleSoft
  How do you get data out of Quantum today? - We don't have direct connection to go to Quantum. Try Dawn Sutherland and Dom Morais to learn about Quantum database connectivity
  if you need data from ePAM, connect with Brian B. and Bill Bostick
  Patrick - get data from PeopleSoft for GL spend. Rekindle for PeopleSoft connection
  Commericial paper - where is it managed - don't know yet. Brian Blair might know
  Forecast they collect is at the segment level, you get use it to go to the cash flow
  FP&A is used for executive forecasts
  Start small and add conmplexity as needed
  FP&A started to get data for future forecasts, but ran into some issues, hope to discover some alternative sources
  Timing of CMS, inter-company settlements are drivers
  Review remaining presentation for RAD Treasury data modernization deck
  12:30 PM - 1:00 PM
  MTD\_BAI\_TransactionReport\_BU\_55360\_1
  Column: 10
  Rows: 247
  Quantum Transaction Data
       Columns: 11
       Rows: 405K
  New Money Market Tracker - 31 sheets, sheet Graph has 1557 columns, HistoricalA has 1067 columns, and Forecast has Columns: 498
      Daily SUmmaryP
           columns: 10
           rows: 628
       Daily Totals
           Columns: 21
           Rows: 308
       HistoricalA
           Columns: 1067
           Rows: 308
       DDA DumpA
           Columns: 10
           Rows: 1918
       Pool WorksheetP
           Columns: 12
           Rows: 55
       BNYM LDP
           Columns: 8
           Rows: 178
       Excess Cash
           Columns: 4
           Rows: 6
       Cash Desk
           Columns: 8
           Rows: 84
       Loans and ICS Held
```

Columns: 14 Rows: 315 Dashboard Columns: 6 Rows: 3

> Columns: 498 Rows: 64

Graph

```
nuws. ɔ
     Forecast
         Columns: 498
         Rows: 64
    Graph
         Columns: 1557
         Rows: 3
    01.21 Div Forecast
         Columns: 14
         Rows: 70
     Dividend Infusions
         Columns: 5
         Rows: 523
    LT Balances
         Columns: 6
         Rows: 219
    Loan Limits 4.9.24
         Columns: 13
         Rows: 107
     LT Transfer 24 and Later
         Columns: 7
         Rows: 171
     LT Summary 2025
         Columns: 14
         Rows: 31
     LT Summary 2024
         Columns: 14
                  Data Raw: 405591 rows
Quantun Transaction Data
                  AccountNo, ValueDate,
                                                         Absolute Val, BankCode,
                                                                                   WSheetCatCode,
BUnit, OurBank,
                                           Amount,
                                                                                                      Currency,
                                                                                                                   Reference,
                                                                                                                                Description1
Based on Jason's feedback from vesterday's meeting:
    Alex want to produce a report (13 week cash forecast) on RAD Treasury Data Platform as soon as possible
     Need to shorten the detailed design and specifications duration
    Only one dataset from Quantum - Quantum Transaction Data
    Manually drop source data into the Azure Blob Storage
Quantum is the most widely used data source in Treasury
Connect to it using Export module via Citrix
It is challenging to get data out of Quantum
01.2025 DDA Opp.xlsx, 01.2025 DDAIntECR&CEQ.xlsm
2025 Dividend Forecast as of 1.21.2025.xlsx
New Corp worksheet.xlsx has 18 sheets, sheet UHG has 1743 columns, and UHS has 685 columns
Sheets: 18
    UHG
         Column: 1743
         Rows: 96
    ICS
         Columns: 122
         Rows: 381
    Final Balances
         Columns: 167
         Rows: 25
     Non reg
         Columns: 12
         Rows: 52
    RX ACH
         Columns: 16
         Rows: 260
    UHS
         Columns: 685
         Rows:
Rolling 24 Month ICS Forecast sent 02.04.25.xlsx
Quantum is a cash management system, comes from PeopleSoft General Ledger.
Created by FIS; has Treasury workstation; manages parts of Treasury
Quantum is used daily
SMEs: Dom Morais and Dawn Sutherland
Quantum - FIS created it; has Treasury workstation, Used to manage parts of Treasury - O Dawn Sutherland SME
• Cash management system, comes from PeopleSoft General Ledger
• Created by FIS
• Has Treasury workstation
• Manages parts of Treasury
· Quantum is used daily
15 Reports
Cash Manangement Working Files
     MTD_BAI_TransactionReport_BU_55360_1.xlsx
```

New Money Market Tracker.xlsm

Hard to predict future needs for money using current tools and data

Quantum is the main data source used in Treasury's cash management system  $\,$ 

It comes from PeopleSoft General Ledger

Created by Fidelity Investment Services (FIS)

Treasury can connect to the PeopleSoft database using Treasury workstation It manages parts of Treasury

Creates 23 reports

BNYM LDP.xlsx

DDA DumpA.xlsx

Pool File.xlsx

Legal Cash PS Data.xlsx

BS\_LEGALMMYY.xlsm

Legal Cash PS Data.xlsx

CashBalanceBS New.xlsm

Unit Trees.xlsx

Quantum Transaction Data - 11 columns, 405K rows

New Corp worksheet.xlsx - 18 sheets, sheet UHG has 1743 columns, and UHS has 685 columns

New Money Market Tracker - 31 sheets, sheets Graph has 1557 columns, HistoricalA has 1067 columns, and Forecast has Columns: 498

MTD\_BAI\_TransactionReport\_BU\_55360\_1.xlsx (by BU), runs Daily

Difficulty getting data out of Quantum

Quantum is used daily

Data Source	Purpose	Connectivity	Reports	Frequency	SMEs	Highlights & Challenges
Quantum is the main data source used in Treasury     It comes from PeopleSoft General Ledger     Created by Fidelity Investment Services (FIS)	Cash management system     Manages parts of Treasury	Connect to the PeopleSoft database using Treasury workstation	Produces 23 reports	Daily	Dom Morais     Dawn Sutherland	Quantum Transaction Data - 11 columns, 405K rows New Corp workshetxJsx - 18 sheets, sheet UHG has 1743 columns, and UHS has 685 columns New Money Market Tracker - 31 sheets, sheet Graph has 1557 columns, HistoricalA has 1067 columns, and Forecast has Columns; 498 MTD_BAI_TransactionReport_BU_55360_1.xlsx (by BU), runs Daily Difficulty getting data out of Quantum
Princeton Asset Management (ePAM)	Accounting of investments derivatives	Has open database Have access to it Connect to it using an export module - a 3rd party tool, via Citrix and pulled into Excel	Creates 10 reports	Monthly	Brian Blake	Creates Unit Trees.xlsx, Legal Entities.xlsm, Cust Acct Table.xlsx, PoolCustodyRec <ate>ate&gt;xlsm, Account_Detail<ate>ate&gt;txt, Pool Rates, MTD.xlsm, Uhgrp6nm.xlsx, PAM Portfolio Table.xlsm IncEarnBuilder.xlsm, SecTranBuilder.xlsm reports Reports are referenced in macros of 01:2025 DDAIntECR&amp;CEQ.xlsm and 01:2025 Mmkt.Pool Inc.xlsm reports</ate></ate>
• ICS	Rolling 24 Month ICS Forecast	Data is pulled from various sources	Creates 2 reports	Daily/ Monthly		Excel sheets: Loans and ICS Held - a sheet in New Money Market Tracker.xlsx report; 14 Columns wide     ICS - a sheet in New Corp worksheet.xlsx report; 122 columns wide
PeopleSoft	Extract Quantum data	Connect to PeopleSoft database using Treasury workstation	Data feed	Monthly	Patrick Whitmer     Jason Gehlen	PeopleSoft General Ledger data is used to extract Quantum data
Dividends	Dividends forecasting	Uses Excel	Produces 3     reports	Monthly	Lynelle Kennedy     Jillian Franzoia	There is no database containing data information They give numbers at every quarter end Used to create 2025 Dividend Forecast as of 1.21.2025.xlsx and Dividend Funding Summary 8.28.2024.xlsx reports Dividend Infusions is a sheet in New Money Market Tracker.xlsx workbook
DDA Interest Rates	Produce DDADumps	Uses Excel	Creates 4 reports	Monthly	Brian Blake & team	Produce DDA DumpA.xlsx report 01.2025 DDA Opp.xlsx 01.2025 DDAIntECR&CEQ.xlsm Pool Rates MTD.xlsm

Princeton Asset Management (ePAM) system for accounting of investments derivatives

- Has open database.
- $\circ \quad \text{Have access to it and connect to it using an export module a 3rd party tool, via Citrix and pulled into Excel} \\$
- o Creates 10 reports
- o ePAM runs Monthly
- o Brian Blake contact person

Unit Trees.xlsx
Legal Entities.xlsm
Cust Acct Table.xlsx
PoolCustodyRec <date>.xlsm</date>
Account_Detail <date>.txt</date>
Pool Rates MTD.xlsm
Uhgrp6nm.xlsx
PAM Portfolio Table.xlsm
IncEarnBuilder.xlsm
SecTranBuilder.xlsm

### Dividends

Forecast for dividends and I think it's an Excel Dividend forecast changes every month Runs Monthly 2025 Dividend Forecast as of 1.21.2025.xlsx Dividend Funding Summary 8.28.2024.xlsx

Lynelle and Jillian are SMEs

PeopleSoft

Runs monthly

Patrick W. and Jason G. SMEs

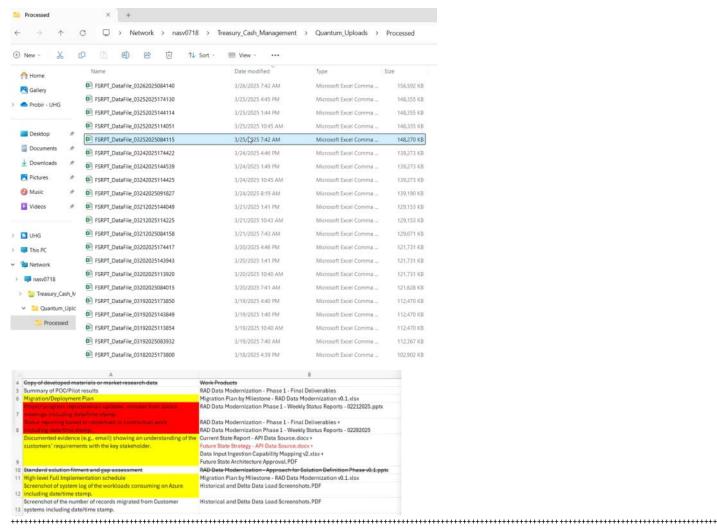
Alex Schmidt is out of office and may not respond

 $\underline{\text{https://uhgazure.sharepoint.com/sites/OIAdvisory/staff/SitePages/Term-Sheet-Submission-Tool.aspx}}$ Hi Dinesh there still seems to be a really bad understanding of the Treasury data scope on Dave's side I am extremely concerned we have now lost Treasury leaderships confidence I am in India and it's 3am I will have Jason call you Alex - worth getting the right people together and talking thru the delta in common understanding What are you hearing in terms of 'bad understanding of Treasury data' and from whom? Does Patrick have the appreciation for Data - as Dave has been working very closely with Patrick as well and he has been reviewing and verifying the scope. I understand from Dave he has reviewed the work product with Patrick and Jason both I reviewed that work product last week with Dave and John Would help me also understanding the delta Curious - what got communicated to Treasury leadership resulting in loss of their confidence. Dave is not communicating with that team since your last comm om this topic Alex Schmidt 4:53 PM Jason is gng to reach out to you now and give you the run down Ask him to call me on cell - I have stepped away from desk abd will be back in 20 mts They had a review and Jason and Patrick very clearly told Dave his data scoping was grossly inaccurate and overstated And Dave cannot provide the source data sample files he used to scope I have to try to sleep now as it's 330 here but Jason is intimately involved

······································				
Meeting Title	Date Time	Attendees	Body	
Working session - RAD Treasury Assessment project	2/4/2025 4:00 PM - 4:30 PM	Alex Schmidt; Gehlen, Jason	Alex, Jason,  The purpose of this meeting is to devise a plan to determine the overview, approach, collection of necessary data sources and information, and the outcome of the RAD Treasury Assessment project. Thank you.	
Data Sources for Treasury reports/dashboards	2/11/2025 12:00 - 12:30 PM	Keis, Patrick D; Andrews, Tim; Whitmer, Patrick; Mukerjee, Probir K; Jannetty, Sandra CC: Alex Schmidt	Recurring	
Treasury reports/dashboards - data sources	2/12/2025 1:00PM - 1:30 PM	Blake, Brian P; Jonczyk, Michael CC: Alex Schmidt; Jannetty, Sandra; Whitmer, Patrick ; Gehlen, Jason; Edelstein, Joshua	Brian, Michael,	
Treasury reports/dashboards - Data Source - PeopleSoft	2/12/2025 3:30 PM - 4:00 PM	Whitmer, Patrick; Gehlen, Jason	Patrick, Jason,  The purpose of this meeting is to determine what to extract out of PeopleSoft database, how to extract it and who are the SMEs we need to work with? Thank you.	
Plan interviews with different stakeholders for Treasury Assessment	2/14/2025 10:30 AM - 11:00 AM	Whitmer, Patrick	The purpose of this meeting to plan on how to group various stakeholders to conduct effective and efficient meetings. Also, I have some questions regarding PeopleSoft as well that I'd like to some clarifications on. Thank you.	
Treasury reports/dashboards data sources	2/19/2025 12:00 PM - 12:30 PM	Mukerjee, Probir K; Morais, Domingos D; Sutherland, Dawn C CC: Alex Schmidt; Whitmer, Patrick; Gehlen, Jason; Jannetty, Sandra; Joshi, Srijan; Bostick, William T	Probir, et al, We're in the process of re-platforming and re-writing Treasury reports. We need some information regarding Quantum. For example: What type of database it has? How do we connect to it? What language can be used to read data from it? How do you get data out from it? What is the forecasting hierarchy in it?	
Data Sources for Treasury reports/dashboards	2/24/2025 11:00 AM - 11:30 AM	Sutherland, Dawn C; Bostick, William T CC: Jannetty, Sandra; Alex Schmidt; Whitmer, Patrick	The purpose of this meeting is to determine if we can get data from the data source.	
Dividends data source(s) for Treasury reports and dashboards	2/24/2025 4:00 PM - 4:30 PM	Willett, Eric M <eric_m_willett@uhg.com>; Gehlen, Jason <jason.gehlen@uhg.com>; Kennedy, Lynelle <lynelle_kennedy@uhg.com>; Franzoia, Jillian M <jillian_franzoia@uhg.com> CC: Jannetty, Sandra <sandra_jannetty@uhg.com>; Alex</sandra_jannetty@uhg.com></jillian_franzoia@uhg.com></lynelle_kennedy@uhg.com></jason.gehlen@uhg.com></eric_m_willett@uhg.com>	The purpose of this meeting is to identify dividends data source(s) for the Treasury Reports and dashboards. Thank you.	

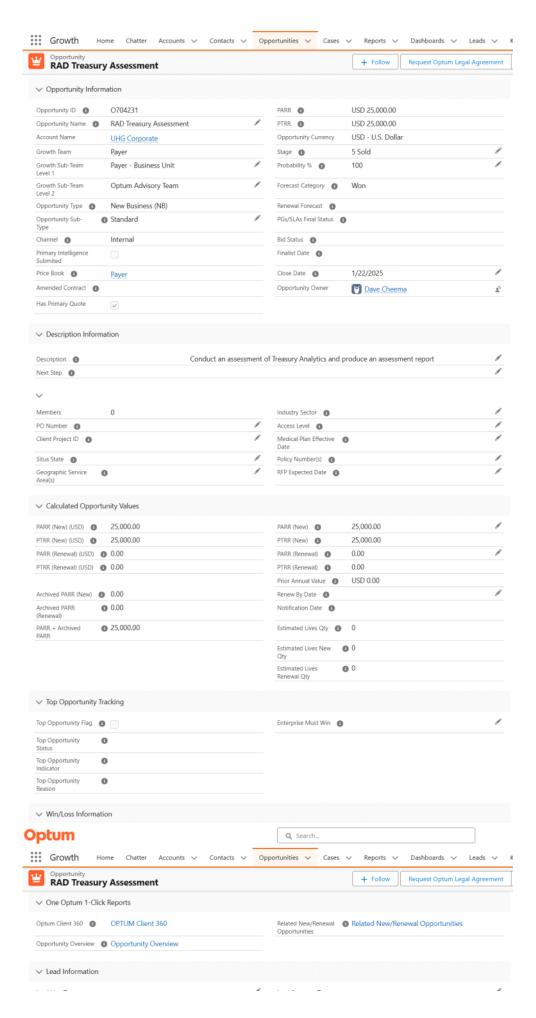
 ${\tt Schmidt < alex\_schmidt@uhg.com>; Whitmer, Patrick}$ 

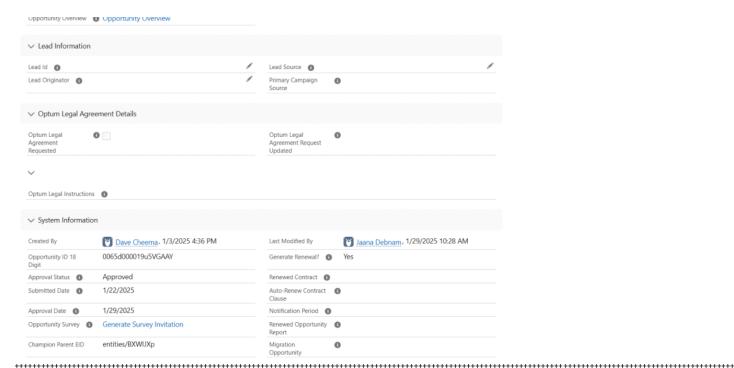
<patrick\_whitmer@uhc.com>



**Dev and Production environment Checklist** Hours/Days Infrastructure code creation Terraform(Plan, validate and apply) 2.5 weeks Setting up Azure virtual network, Blob storage , ADF, Role assignment, IAM role, NSG 1 week SHIR request for VM Grouping creation for Dev/Production in Secure 1-2 Hours Snowflake set up and connectivity request IP whitelisting 3 days CI CD set up for ADF and Snowflake prod environments 1.5 Week RAD service Account Set up for Snowflake Prod environment 1-2 hours Email notification graph API Service principal configuration 2 days ADF blob storage connectivity set up, Linked service connection 2 days Storage Integration set up in Snowflake for Dev/Prod 2 days Data bricks set up via Terraform 4 days SCIM Implementation 2 days Snowflake connectivity, Mount blob storage 3 days GRAPH API for email notification Testing 1 day Linked service, Integration run time testing on ADF instance 2 days Nonuser ID creation, ServiceNow creation Via secure for new application 1 days ADF GitHub Integration and validation 1 days Databricks snowflake connectivity, Mount storage connectivity 2 days Key vault set up for data bricks credentials 1 days

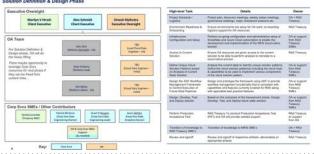
Approvel Status 🚯 Approved Approval Date 0 1/29/2025 Reason for Win/Loss 1 Sub-Reason for Consultant/Broker Win/Loss 1 Win/Loss Narrative 1 🗿 Client Relationship Opportuniti
Quotes \$ - C' t, Y Quote Number ∨ Quote PARR Quote PTRR Contract Effective Date V Created By 1 0-712114 USD 25,000.00 **Optum** Q Search. Growth Contacts ∨ Opportunities ∨ Cases ∨ Reports 🗸 Home Chatter Accounts V Dashboards 🗸 Leads V **RAD Treasury Assessment** + Follow Request Optum Legal Agree





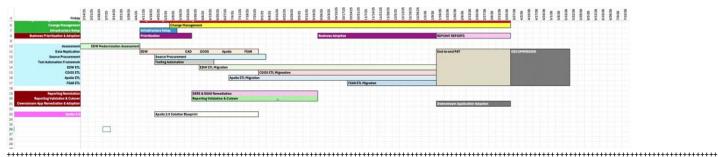
### Project Start-up + Environment & Team Mobilization

# Proposed Staffing, Roles and Responsibilities: Solution Definition & Design Phase

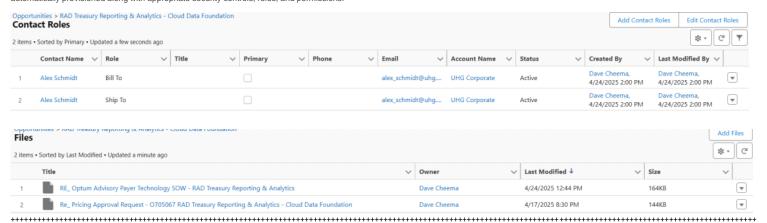


Platform environment Checklist	Hours	
Infrastructure code creation Terraform(Plan, validate and apply)		
Setting up Azure virtual network, Blob storage , ADF, Role assignment, IAM role,NSG		
Grouping creation for environment in Secure		
Snowflake set up and connectivity request IP whitelisting		
CI CD set up for ADF and Snowflake prod environments		
RAD service Account Set up for Snowflake environment	2	
Email notification graph API Service principal configuration	4	
ADF blob storage connectivity set up, Linked service connection	4	
Storage Integration set up in Snowflake for Dev/Prod	4	
SCIM Implementation		
GRAPH API for email notification Testing		
Linked service, Integration run time testing on ADF instance		
Nonuser ID creation, ServiceNow creation Via secure for new application		
ADF GitHub Integration and validation	2	
Databricks snowflake connectivity, Mount storage connectivity		
Key vault set up for data bricks credentials		
Repository set up, secret adding into repo for Azure connectivity		
Databricks Instance administrative tasks , managing permissions		
Total Time		





We deeply value your trust in our expertise and are committed to delivering exceptional product for the RAD Treasury Reporting & Analytics - Cloud Data Foundation project. Upon completion and delivery of this project, RAD Treasury will have a functioning cloud-based data platform ready to serve end-consumers data products via data product subscriptions with proper data and compute resources automatically provisioned along with appropriate security controls, roles, and permissions.



WellMed Central Quality SQL95 Data Modernization project

Based on our time tested experience to achieve a successful out of a data modernization project, we divide the project into the following phases:

Assessment

Solution Definition & Design

Dev, Test & Deploy

Production Acceptance Testing & Decommission

Assessment is the foundational step for a project's successful outcome. It enables us to understand the size of the project, complexities, nuances, special requirements, etc.

It is identify the type of solution it would require, components and services would be needed. Help us identify any POCs we would need to create; help us identify required skillsets, number of resources and the duration to complete it.

Without a detailed assessment, we would not know the size of the problem - it could present a significant risk for the WellMed Central Quality and Optum Advisory.

# Meetings

Tuesday, January 21, 2025 1:57 PM

## Meeting 01/21/2025 with Alex and Patrick

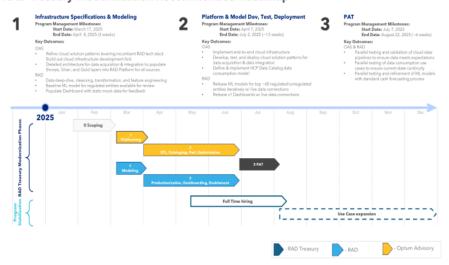
Subject: Introductions and Project Overview

- Treasury manages cash balance of our group and other entities they manage cash
- They have many systems and data repositories
- Their processes are manual, labor intensive and delayed
- They need to modernize their platform and processes
- Treasury report to John Rex
- RAD is their foundation, which needs to be shared with the Treasury
- They don't have IT folks, only have OPS people
- Scope the effort to bring their env. into cloud environment
- · Outcome give a deep recommendation of amount of work in term of time, people and cost
- RAD will support from Patrick and Jason teams
- Let's get Minimal Viable Product, to scope how much effort is involved
- Alex has requested more documentation from the Treasury team
- At core, we will parachute in to walk the walk
- Scope infrastructure
- Treasury team needs some time next week they will be ready

# Alex's Timeline & Approach

Wednesday, March 12, 2025 5:31 PM

## **RAD Treasury Modernization Recommended Roadmap**



Infra: \$100K ECIF Refund: \$150K Client Expecting to pay: \$200K

accounting for <= \$100K for cost he categorized as Infrastructure and ~\$150K offset from ECIF. That makes me think he is expecting something in the \$200K range for this Treasury data work.