PMO report - 2 - Functional Specification

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PMO Report Dashboard

Document Information

Functional Analyst
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VERSION	DATE	MODIFIED BY	DESCRIPTION
0.01	12 Oct 2023	Abidemi Raji	Initial draft
0.02	19 Oct 2023	Abidemi Raji	Updated
0.03	04 Nov 2023	Abidemi Raji	Updated with list of requirements and alternative tables
0.04	17 Nov 2023	Abidemi Raji	▪ Updated scope and requirements to include only SBS project portfolio dashboard ▪ Descoped 15 additional KPIs

1.0 Overview

Business Context and Application Overview

Provide an overview of the app (e.g Domain, key processes, purpose of the app, etc)
Application User Profile

Describe the key User profiles that exist for the application.

General role/Viewer role:

Approver role:

Target Users:

As examples: Controllers / Accountants

VERSION	DATE	MODIFIED BY	DESCRIPTION
0.01	dd.mm.yyyy	<Insert name>	Initial draft

Application Type

Data Product Type	☑ Dashboard ☐ Report ☐ Advanced analytics ☐ AI ☐ Others <specify which one>
Technologies	☐ BW ☑ Tableau ☐ Qliksense ☑ Talend ☐ Dataiku ☐ Others <specify which one>
Data Sources *Note: list of all applications and various environment*	☐ SAP PF1 (Production environment) ☐ SAP WP1 ☐ SAP PI1 ☐ BW (versions) ☐ iCare CRM ☐ CORE CRM ☑ Others <Accolade>

Application Overview

Domain: Programme Management / Finance

Main stakeholders: Service Delivery Managers (SDM), Pool Leads, Product Managers, Program Managers, PMO, Leadership Team (LT)

Business objective/value: Use data sourced from internal databases to create KPIs, determine project financial or execution status and provide decision useful information to stakeholders eliminating the need for manual intervention .

Main function: The dashboard is a visualization tool which provides authorized users with information on project financial and operational status. Various KPIs are also created using data sourced from Accolade and enriched with derived indicators to provide a complete overview to users.

The SBS Project Portfolio dashboard is used by the PMO team to monitor project deliverables, provide project financial summary and present any risks and issues. It provides a single source of information to the team and stakeholders on project KPIs, execution status, risk and issues over a specific period.

Application Contact Details

Role (if applicable)	Name	Department	Email
Product Owner	1. Claire Bazin 2. Dominique de Gouberville		
Technical Product Owner			
Users	Service Delivery Managers (SDM), Pool Leads, Product Managers, Program Managers, PMO, Leadership Team (LT)		

Sign-Off / Approval

Role (if applicable)	Name	Department	Email	Sign-Off
Product Owner	Claire Bazin			
Product Owner	Dominique de Gouberville			
Project Manager	Mauricio Nagahama	Project Manager • Delivery | DATA, ANALYTICS & AI PLATFORM_ECO	mauricio.nagahama@solvay.com	
Technical Sign off	Fernando Girante	Data Architect • Data & Analytics & AI Platform | DATA, ANALYTICS & AI PLATFORM_ECO	fernando.girante@solvay.com	
Technical Sign off	Anon Kasemvilas	Data Engineer • Data architecture & engineering_ECO | DATA, ANALYTICS & AI PLATFORM_ECO	anon.kasemvilas@solvay.com	
Technical Sign off	Maxime Marboeuf	Data science & AI_ECO | DATA, ANALYTICS & AI PLATFORM_ECO	maxime.marboeuf-ext@solvay.com	

Application Access Rights

Access to the PMO dashboard depends on the user's profile which ensures that the user is allowed to perform the requested action (e.g. Run reports and download results). The user profiles (“normal user” and “advanced user”) at the same time correspond to the privileges granted according to the Business Unit the user belongs to using Single Sign On functionality

Department	GBU Code	Role	Right	Comments

Business Context

Scope:

In-Scope

This document covers the requirements for the PMO Dashboard to be migrated onto Tableau

- Main dashboard visualisation and filters
- Access to data post corporate action (split)

- Access to the dashboard

Out Of Scope

- Data Sourcing requirements are out of scope of this document.

2.0 Business Process

Capture the business process that the application supports . This can be describe through a process diagram or a business capability model.

The PMO team regularly monitors the overall financial and operational status of several programmes and projects within the organisation and provide update to stakeholders on project or programme status. The team needs the capability to extract and transform data seamlessly for the required parameters that have been pre-defined as part of the reporting process.

Specifically, the PMO team objectives are:

- Portfolio Monitoring: The team requires the capability to monitor projects and programmes that are Open or Closed within a defined time period in order to determine status, be aware of risks to project delivery and provide decision useful information to stakeholders.
- Data sourcing: The PMO team sources project operational and financial data from Accolade (Solvay internal DB) and vshare.
- Reporting: The PMO team requires the capability to create reports from the data extracted from Accolade/vshare, highlighting several defined KPIs to provide updates on project financial and operational status.
- Automation: The extraction, refresh and KPI update process are to be performed without manual intervention.

2.1 Challenge/Opportunities

Clearly articulate the specific problem or opportunity that the application is addressing within the business by leveraging from data. This should be a concise and well-defined statement that captures the essence of the challenge or opportunity that the application is trying to solve by providing insight from the data.

The new PMO dashboard in Tableau will provide authorised users with the capability to leverage multiple data sources within Solvay to review Financial and Operational performance of programmes and projects within a 3.5 year rolling window and have instant access to KPIs, with automated data refresh, eliminating the need for any manual interference.

- E ffective presentation of data: The PMO team require the capability to present KPIs and project status information in an automated fashion, showing the most impactful metrics.
- Consolidated reporting: A single source pf reporting Financial and Operational status of projects and programmes including KPIs
- Eliminate manual spreadsheets: The reporting process should not involve manual intervention

3.0 Application Feature Overview

Information about the existent features in the application.

Feature	Description	Latest uppdate in production (DD/MM/YYYY)

4.0 Business Objects

This section should contain a table with the business objects used in the reports with links to the business object definition in LeanIX. The purpose is to ensure that all DA&AI Products adhere to a centrally maintained list of business objects and definitions to allow us to achieve our digital ambitions. For any questions about business objects and LeanIX, contact Data Governance or the Enterprise Information Architect.

Data Domain	Business Object (in LeanIX)	Business Object Definition (only use when the object is not yet in LeanIX)
ex: Marketing & Sales	*ex: Customer*	

Functional Description

Dashboard

Data Attributes and Mapping: https://docs.google.com/spreadsheets/d/1zaJ5Q87nML7v4CHXhNf3qcng_4EzJ0pKWVPr0OyzUCo/edit#gid=1844818474

Data Product Type	☑ Dashboard ☐ Report ☐ Advanced analytics
Technologies	☐ BW ☑ Tableau ☐ Qliksense ☑ Talend ☐ Dataiku ☐ Others <specify which one>
Data Sources *Note: list of all applications and various environment*	☑ Accolade ☐ SAP PF1 (Production environment) ☐ SAP WP1 ☐ SAP PI1 ☐ BW (versions)

Data Input

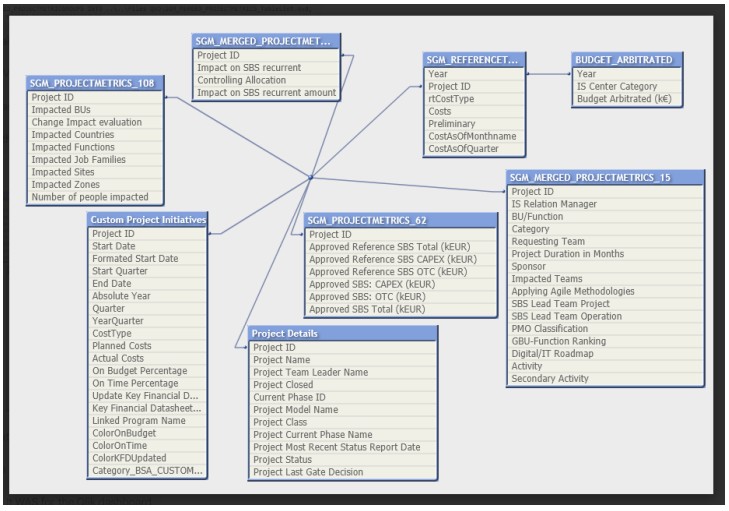
As-Is Data Sources (including the nature of the data and what is it needed for):

Currently the PMO Dashboard is implemented in Qlikview. Data is sourced from Accolade_SBS_Portal using two main queries (SGM_CUSTOM_VIEW, SGM_CORE_Project Details) and a Stored Procedure (RSP_QV_GetMergedMetricsForGroupID) which uses GROUPID_SYS as a parameter .

```
//****************************************************************//
// Version Number: 13.3.02.300 //
// Copyright © 2001-2021 Sopheon PLC. All rights reserved. //
//****************************************************************//

//#################### WARNING ###################################//
//WARNING: Do not modify this file.
//This file is used by more than one QVW file and modification
// may result in a corrupted load script for multiple QVWs.
//################################################################//

MERGED_PROJECTMETRICGROUPS:
LOAD *;
SQL EXEC RSP_QV_GetMergedProjectMetricGroups;

LET vNumRows = NOOFROWS('MERGED_PROJECTMETRICGROUPS');

FOR i = 0 to $(vNumRows) - 1

        LET vGroupID = PEEK('GroupID_SYS', $(i), 'MERGED_PROJECTMETRICGROUPS');
        LET vGroupName = 'Merged ' & PEEK('GroupName_SYS', $(i), 'MERGED_PROJECTMETRICGROUPS');

        [$(vGroupName)]:
        SQL EXEC RSP_QV_GetMergedMetricsForGroupID $(vGroupID);

        STORE [$(vGroupName)] INTO [..\..\Files QVD\SGM_MERGED_PROJECTMETRICS_$(vGroupID).qvd];
        DROP TABLE [$(vGroupName)];

NEXT

STORE MERGED_PROJECTMETRICGROUPS INTO ..\..\Files QVD\SGM_MERGED_PROJECTMETRICS_TableList.qvd;
DROP TABLE MERGED_PROJECTMETRICGROUPS;
```

AS-IS Tables
SGM_CUSTOM_VIEW
SGM_CORE_Project Details
SGM_PROJECTMETRICS_15
SGM_PROJECTMETRICS_62
SGM_PROJECTMETRICS_94
SGM_PROJECTMETRICS_108

As-Is Data Model:



Target State Data Model:

The target state data sourcing model will re-use existing data model (queries and Stored Procedures) as well as include additional calls to the Database using GroupID_SYS as shown below.

	As-Is	To-Be	Comments
Database	Accolade_SBS_Portal	Accolade_SBS_Portal	

Stored Procedure	RSP_QV_GetMergedMetrics ForGroupID	RSP_QV_GetProjectMetricsForGroupID	
Parameter	GroupID_SYS	GroupID_SYS	
Query /Tables	SGM_CUSTOM_VIEW	SGM_CUSTOM_VIEW / CRV_Initiative _V3	
	SGM_CORE_Project Details	SGM_CORE_Project Details / CRV_ZG etProjectDetails	
	GroupID_SYS: 15, 62,94,108	GroupID_SYS: 15,62,94,103	Execute the stored procedure iteratively, with the different parameters to obtain the different results sets needed for the scope of the project
Query /Tables	Budget Arbitrated	Budget Arbitrated	*Results on this table empty. To be validated

Target State Data Sourcing:

Business Concept	Database Object	Link to output specification	Comments
SGM_CUSTOM_VIEW	CRV_Initiative_V3	CUSTOMISED_VIEW_FILTERCON	<comment or description of the concepts in the table>
SGM_CORE_Project Details	CRV_ZGetProjectDetails	CORE_PROJECT_DETAILS_FILTERCON	
SGM_PROJECTMETRICS_15	Exec RSP_QV_GetProjectMetricsForGroupID 15	SGM_PROJECTMETRICS_15_FILTERCON	
SGM_PROJECTMETRICS_62	Exec RSP_QV_GetProjectMetricsForGroupID 62	SGM_PROJECTMETRICS_62_FILTERCON	
SGM_PROJECTMETRICS_94	Exec RSP_QV_GetProjectMetricsForGroupID 94	SGM_PROJECTMETRICS_94_FILTERCON	
SGM_PROJECTMETRICS_108	Exec RSP_QV_GetProjectMetricsForGroupID 103	SGM_PROJECTMETRICS_103_FILTERCON	

Transformation Rules (for each of the data source in the previous point):

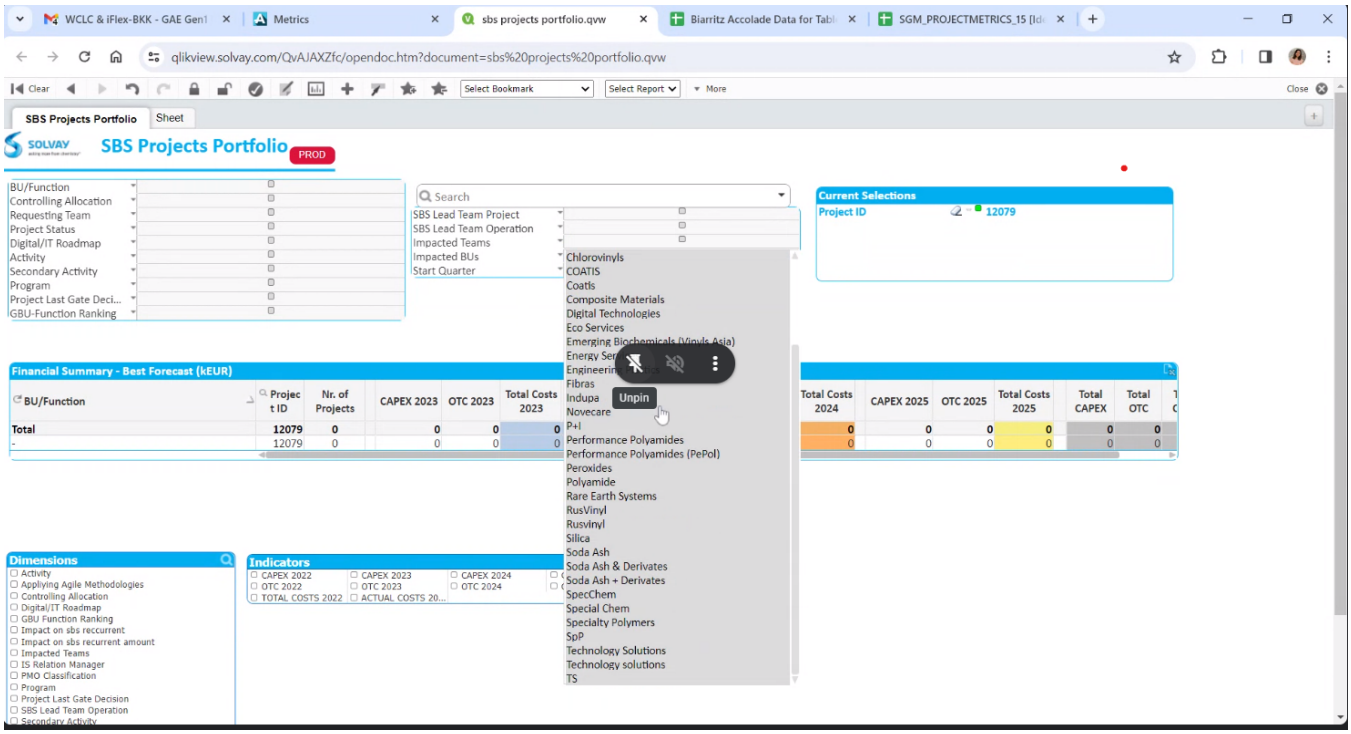
In the target state, additional filters to the data extract are required to be implemented in the result of the **SGM_CORE_Project Details / CRV_ZGetProject Details** query

a. Extraction rules and filters:
    i. Project Closed Date >= 3.5yrs
    ii. Project Closed = 0
b. Exception handling rules (how do we handle when data does not come in the format we need) : Normal exception handling rules apply
c. Enrichments (normally joins)
d. Aggregation rules

Visualization

Graph name	Description	Link
Main Dashboard	SBS Project Portfolio: Project Details	SBS_Project_Portfolio_Visualisation

PMO Dashboard AS-IS Visualisation:

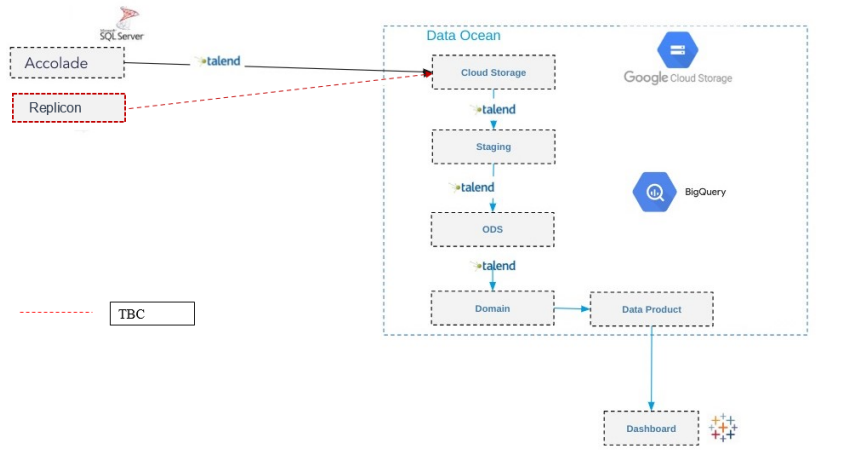


Dashboard filters:

- Roadmap
- accountable (Business)
- Product Manager/ Service Delivery Manager
- Platform/product
- Objective
- Project Manager
- Status
- Program
- Financial Treatment
- Project prioritization
- Start Quarter
- Monthly status date
- Financial up-to-date

6.0 System view (Architecture)

The purpose of this part is to describe the physical components that supports the functionalities of the product. From that point of view, this part should capture and visualizes the physical components of the data products such as backend, front end, data providers, libraries for ML models, etc.



Functional Requirements

Requirement #	Requirement Group	Requirement Title	Description/User Story	Acceptance Criteria
Data_Sourcing_1	Data Sourcing	**Source validated, complete and correct data from Accolade for the PMO dashboard visualisation**.	As an authorised SBS Dashboard user I want to have access to correct and complete data on the financial and operational status of SBS projects and programmes in the PMO Dashboard	▪ Data in the current state is migrated successfully to target state including all primary and secondary data
Visualisation_Dashboard_Main_2	Visualisation and User Experience	**Create a Dashboard with Summary Table and Project Details (Main Dashboard)**	As **an authorised SBS Project Portfolio dashboard user** , I need to see the overview of financial and operational details of projects using multiple filters and by dimensions	
Visualisation_Filters_3	Visualisation and User Experience - Dashboard Filter	**Implement filters to display relevant decision useful information for users**	As an authorised SBS Dashboard user I want to have the capability to display data and navigate the the SBS Project Portfolio dashboard using the following filters: - Roadmap - Accountable (Business) - Product Manager/ Service Delivery Manager - Platform/product - Objective - Project Manager - Status - Program - Financial Treatment - Project prioritization - Start Quarter - Monthly status date - Financial up-to-date	
Visualisation_Table_4	Visualisation and User Experience - Dashboard Summary Table	**Display summary table of financial and operational status of projects and programmes**	As an authorised SBS Dashboard user I want to have a summary table which contains the financial and operational status of projects /programmes, in the dashboard.	
Visualisation_Filters_5	Visualisation and User Experience - Additional Table Dimensions	**Create dimensions to filter project data**	As an authorised SBS Dashboard user I want to have the capability to display data and navigate the the KPI Report Table on the SBS Project Portfolio dashboard using the following filters: ▪ Activity ▪ Applying Agile Methodologies ▪ Controlling Allocation ▪ Digital/IT Roadmap ▪ GBU Function Ranking ▪ Impact on SBS Recurrent ▪ Impact on SBS recurrent amount ▪ Impacted Teams ▪ IS Relation Manager ▪ PMO Classification ▪ Program ▪ Project Last Gate Decision ▪ SBS Lead Team Operation ▪ Secondary Activity ▪ Sponsor	

Visualisation_Filters_6	Visualisation and User Experience - Additional Table Indicators	**Implement additional indicators filter for KPI Report Table**	As an authorised SBS Dashboard user I want to have the capability to display data and navigate the the KPI Report Table on the SBS Project Portfolio dashboard using the following indicators: • CAPEX & Year (Today()-1) • CAPEX & Year (Today()) • CAPEX & Year (Today()+1) • CAPEX & Year (Today()+2) • OTC & Year (Today()-1) • OTC & Year (Today()) • OTC & Year (Today()+1) • OTC & Year (Today()+2) • TOTAL COSTS & Year (Today()-1) • ACTUAL COSTS & Year (Today()-1) • TOTAL COSTS	
Visualisation_Table_7	Visualisation and User Experience - KPI Report Table	**Implement colour coded visualisation display on KPI report table**	As an authorised SBS Dashboard user I want to have the capability to display colour coded traffic light KPIs (Red, Amber Green) on the KPI Report Table: • On Budget • On Time • Financials Up To Date	
Visualisation_Table_8	Visualisation and User Experience - Dashboard Search Functionality	**Create search field to support dashboard filter**	As an authorised SBS Dashboard user I want to have a search capability on the dashboard, to support the main filters ▪ SBS Lead Team Project ▪ SBS Lead Team Operation ▪ Impacted Teams ▪ Impacted BUs ▪ Start Quarter	
Attribute_Change_9	Data Maintenance - Attribute Correction	**Rename data fields on Dashboard**		

7.0 Non-functional Descriptions

Please populate the relevant section and delete those that are not applicable.

7.1 Usability

Usability is about the ease with which a User can learn to start using the solution and the ease with which they can use the system. In addition to ease of learning and ease of use, usability also includes areas such as ease of recall, error avoidance and handling, accessibility among others e.g., 99% of metadata entry Users who have use the Maintenance Dashboard should be able to change filters, extract etc., when required. Maintenance data will be centrally stored in the Google Cloud platform, which will be available to other applications e.g., and Dashboards if needed.

7.2 Regulatory Compliance

Software systems must comply with legal and regulatory e.g., GDPR requirements, this can change depending on country, organisation industry and / or region. The software systems must be secure from unauthorized access. The Maintenance Dashboard will comply with Solvay's regulations and compliance e.g., access only granted to authorized Users.

- The Dashboard will comply with Solvay's regulations and compliance e.g., access only granted to authorized Users.
- Maintenance data will be split between either SCO or ECO, and Users will only have authority to one Entity data

7.3 Security

Security refers to essential aspects that assure a solution and its components will be protected against unauthorized access or malware attacks. Important considerations related to security aspects of a system are User authentication, User authorization or User access privileges, data theft, malware attacks, data encryption, and maintaining audit trails, e.g., only Users with administrator access shall be able to create new accounts and assign data access privileges to the new accounts e.g.,

- *All data will be encrypted in the dashboard*
- *Only authorised Users / Administrative Users will be able to access data.*
- *Maintenance data will be split between either SCO or ECO, and Users will only have authority to one Entity data.*

7.4 Performance

Performance defines how fast a software system or a particular section of it responds to certain User actions under a certain workload. In most cases, this metric explains how long a User must wait before the target operation happens e.g., the page renders, a transaction is processed, etc., given the overall number of Users now. Performance requirements may describe background processes invisible to Users, e.g., backup and speed of data transfers.

7.5 Reliability

Reliability is the ability of a solution or its component to perform its required functions without failure under predefined conditions for a specified time / period. Reliability can possibly be specified in terms of average time system runs before failure occurs, percentage of operations completed successfully within a time / period, maximum acceptable failure probability, or number of failures within a period. Reliability aspects are in reference to (but not limited to) evaluation of the system to be considered as reliable, classification of reliability defining failures vs. regular failures, and the impact of failure on business operations. The Maintenance Dashboard will display data from the previous refresh of data.

7.6 Scalability

Scalability refers to the degree to which a solution can evolve to handle increased amounts of work. The increased amount of work could be in terms of the user base, transactions, data, network traffic, or other factors e.g., the system should be able to handle an additional load of a maximum of 5,000 Users every month for the next 6 months without any noticeable performance impacts.

7.7 Compatibility

Interoperability is the degree to which the solution is compatible with other components. It is a measure of how effectively the system interoperates with other software systems and how easily it integrates with external hardware devices.

Interoperability aspects to be discussed during elicitation are in reference to (but not limited to) software systems to be interfaced with along with data / messages to be exchanged and any standard data formats, hardware components to be integrated with, and any standard communication protocols to be followed e.g., Order Management system will push the order file into a secured file transfer protocol server from where it will be loaded into the system through a daily job. To guarantee between Google Cloud platform and SAP BW Queries e.g., BW_QRY_MVPMOR01_0002, Solvay has introduced a new tool called Xtract (Xtract).

7.8 Availability

Availability is the degree to which the solution is operable and accessible when required. It is a measure of time during which the system is fully operational e.g., available for use and sometimes included as a Service Level Agreement (SLA) considering its criticality to the business, e.g., the system shall be at least 99% available on weekdays between 09:00 to 18:30 Central European Time (CET).

7.9 Refresh of the Data

Frequency, data, and time of the data refresh in the data product.

Data shall be sourced from the Accolade database 4 times per day (CET) => 6am, 12am, 6pm and 12pm

Tableau refresh in PREPROD and PROD => 4 times per day (CET) => 6:15am, 0:15am, 6:15pm and 12:15pm

Storage of the Data

1. The final copy of the sourced data shall be stored on a daily basis
2. Stored data shall be made available on request by an authorised user within the PMO team with appropriate permissions.