Functional Test Plan

REVISION HISTORY					
Ver.	**Description of Change**	**Author**	**Date**	**Approved**	
				Name	**Effective Date**
1.1	Draft version	Hanna Yaruk	27-Apr-2022		
1.2	Initial version	Hanna Yaruk			

1. Introduction

This document describes strategies and techniques to plan, organize and perform testing Reporting solution and Data Visualization (Power BI dashboard “Sales”, Power BI dashboard “Cost”, Power BI dashboard “Stocks”) Web Application of the project within the proof of concept.

The purpose of this document is to act as a means of communicating the following:

- Define the testing methodology and strategy
- Define the scope of the functional
- Define the test environment
- Identify functionality that will not be tested (out-of-scope) and determine limitations
- Identify quality criteria and risks

This plan will provide information on key aspects of the Functional testing of the project.

2. Scope of Work

2.1. Components and Functions to be Tested

#	Application/ component name	Function name
1	Reporting and Visualization	
1.1		Report Functionality Verification
1.2		Report Graphical User Interface Verification
1.3		Mobile version Verification
1.4		Security Verification
1.5		Performance Testing

2.2. Components and Functions Not to be Tested

#	Application/ component name	Function name	Reference/Comment
1	Reporting and Visualization		
1.1		- Backend testing	No access to backend data

3. Entry Criteria

- Design Requirements, Functional and Non-functional Specifications completed and approved by the responsible person;
- DQ Checklist developed and finalized;
- Don't deliver any major changes in the code at least 3 days prior to the DEMO;
- Test Environment is ready and available;

- Data loaded to the EDW test;
- Power BI Reports are available;
- Implemented Report deployed to the test environment;
- The roles are given to the users, the access to the list of users is provided;
- Smoke Test passed.

4. Risks Assessment

The following risks have been identified and the appropriate action identified to mitigate their impact on the project. The severity of the risk is based on how the project would be affected if the risk was triggered. The impact is what milestone or event would cause the risk to become an issue to be dealt with.

#	Risk	Severity	Impact	Possible Resolution
1	Two members of testing team are on sick leave/on vacation/are not available more than 3 days	Critical	Quality of the software; Delays in implementation date	Decrease the scope of the project or use 2 more people for the term of team absence
	System crash on simultaneous connections	High	Delays in implementation date	Using stable software

5. Quality and Acceptance Criteria

- All functionalities of each separate Power BI dashboard should work as it was described in the functional requirements specification. All visuals display correct data
- There should be no any discrepancies between defined design requirements and developed design in the particular report
- Only defined in the Non-functional requirements specification users can have access to Power BI dashboards; Unauthorized user is not be able to access to Power BI dashboards; Only users assigned to specified group have access to Power BI dashboards areas allowed for this group
- Execution time of each Power BI dashboard area is less than time limitations defined in the Non-functional requirements specification.

6. Test Approaches

6.1.1. Smoke Test

- Taken into account in Entry Criteria

6.1.2. Critical Pass Test

Title	Data Quality Dimension	Steps	Expected Result

Time testing	Consistency	Time the opening of the dashboard.	No more then 5 seconds
The color matches the company logo	Validity	Look at the Power BI dashboard. Compare the color scheme with the approved palette	The color palette meets the stated requirements
Visual accuracy	Consistency	Calculate available data on the table dashboard. Compare with data on visuals	Data match
Switching between visuals using buttons	Validity	Press Ctrl+ left mouse button on the button	The visuals switch according to the button
Visual sorting with a slicer “Years”	Validity	Choose the first type of sorting. Check the data. Choose the next point of sorting. Check the data. Repeat with all the variant of the slicer	The data is changed according to the slicer
RLS role "America"	Validity	Enter under the user with role "America". Check the visuals. Change the country in the slicer to any European country. Check the data	The data applies to United States. No changes with slicer changing
The color matches the company logo	Validity	Look at the Power BI dashboard. Compare the color scheme with the approved palette	The color palette meets the stated requirements

6.2. Bug and Documentation Tracking

Tools described in the section 7.3 Test Tools will be used for bug reporting and documentation tracking. The bug metrics and statistics will be included in the test results reports.

7. Resources

7.1. Key Project Resources

#	Project Role	Name, e-mail, location
1	Delivery Manager/Project Manager	Name, Email, Location
2	Project Coordinator	Name, Email, Location
3	Scrum Master, System Architect	Name, Email, Location

7.2. Test Team

#	Project Role	Name, e-mail, location
1	Data Quality Engineer	Anzialika Versu
		Petr Malafeev
		Mike Jobs
		Julia Serko

7.3. Test Tools

#	Tool	Comment
1	Power BI Premium	Environment for testing dashboards
2	Power BI Mobile	Environment for testing mobile dashboards
3	Jira	Working with bug reports. Time Tracking System
	Testrail QA	Maintenance of test documentation