Technical Specification Document

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# 1. Document Information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document Title | Project Name | SAP System/Release Version | Client Name | Prepared By (Author, Department) | Document Version & Date |
| ZSALES\_REPORT Technical Specification | Sales Reporting Enhancement | [To be filled] | [To be filled] | PWC AI Asset | [To be filled] |

# 2. Introduction

This document provides the technical specification for the SAP ABAP executable report program ZSALES\_REPORT. The objective is to outline the design and implementation details for retrieving, calculating, and reporting sales order data, including total and average sales, with summary outputs per region and product. The scope covers the development of selection screens for region, sales organization, and date range, as well as the generation of the summary report. The intended audience includes SAP ABAP developers, technical consultants, and project stakeholders involved in the sales reporting enhancement project.

# 3. Transport Management

|  |  |  |  |
| --- | --- | --- | --- |
| Development Package | Transport Request Number | Sequence/Dependency | Description |
| [To Be Filled] | ZTR\_56789 | [To Be Filled] | CTS request: ZTR\_56789. Includes program, includes, variants, and custom tables. |

# 4. Requirement Overview

The business requires a solution to efficiently retrieve and summarize sales order data from the SAP system. The objective is to provide users with a report that displays total and average sales, broken down by region and product, with the ability to filter results by region, sales organization, and date range. This will enable better visibility into sales performance and support informed decision-making.

# 5. Solution Approach

1. The solution is implemented as an SAP ABAP executable report (ZSALES\_REPORT) that retrieves sales order data directly from the database.  
2. Selection screens are provided to allow users to filter the report by region, sales organization, and date range, ensuring relevant and targeted data retrieval.  
3. The program calculates total and average sales, and generates a summary report with breakdowns per region and per product, delivering actionable insights in a user-friendly format.

# 6. SAP Object Details

|  |  |  |  |
| --- | --- | --- | --- |
| Object Type | Object Name | Description | Related Main Program/Module |
| Executable Report | ZSALES\_REPORT | Main program to retrieve, calculate, and report sales order data | ZSALES\_REPORT |
| Include Program | ZSALES\_INC | Include containing reusable logic or routines for the sales report | ZSALES\_REPORT |

# 7. Data Declarations & SAP Tables Used

|  |  |  |  |
| --- | --- | --- | --- |
| Declaration Name | Data Type/Object | Description | Usage Context |
| gv\_sales | i | Holds the sales value for calculations | Used in calculating total and average sales |
| gv\_total | i | Accumulates the total sales value | Used in generating summary report totals |
| gv\_avg | p DECIMALS 2 | Stores the average sales value with 2 decimal places | Used in calculating and displaying average sales |
| zsales\_order | TABLES statement (database table) | Custom table containing sales order header data | Read for retrieving sales order data |
| zsales\_item | TABLES statement (database table) | Custom table containing sales order item data | Read for retrieving sales item data |

# 8. User Interface Details

|  |  |  |  |
| --- | --- | --- | --- |
| Screen Field | Type | Default Value | Description |
| p\_date | Parameter | sy-datum | Date parameter, defaults to current date |
| s\_region | Select-Option | None | Region selection for sales orders |
| p\_sales\_org | Parameter | None | Sales organization for sales orders |

# 9. Processing Logic & Control Flow

- The program begins by presenting selection screens to the user, allowing input for region, sales organization, and date range.  
- It retrieves sales order data from the database based on the selection criteria provided.  
- The program calculates total sales and average sales from the retrieved data.  
- It generates a summary report that includes totals per region and per product.

# 10. Logic Block Summary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Block Name | Type | Purpose | Input Params | Output Params | Calls Made | Description |
| Selection Screen Handling | Logic Block | Capture user input for region, sales organization, and date range | region, sales organization, date range | None | None | Presents selection screens and collects user input for filtering sales order data |
| Data Retrieval | Logic Block | Retrieve sales order data from the database | region, sales organization, date range | sales order data | None | Fetches sales order data based on user-provided selection criteria |
| Sales Calculation | Logic Block | Calculate total and average sales | sales order data | total sales, average sales | None | Processes retrieved data to compute total and average sales |
| Report Generation | Logic Block | Generate summary report with totals per region and product | total sales, average sales, sales order data | summary report | None | Produces a report summarizing totals per region and per product |

# 11. Detailed Logic Block Descriptions

Selection Screen Handling  
1. Display selection screens to the user for input fields: region, sales organization, and date range.  
2. Capture the user's input for these fields to be used as selection criteria.  
  
Data Retrieval  
1. Use the input values for region, sales organization, and date range to query the database.  
2. Retrieve sales order data that matches the provided selection criteria.  
  
Sales Calculation  
1. Take the retrieved sales order data as input.  
2. Calculate the total sales from the data.  
3. Calculate the average sales from the data.  
  
Report Generation  
1. Use the calculated total and average sales, along with the sales order data.  
2. Generate a summary report that includes totals per region and per product.

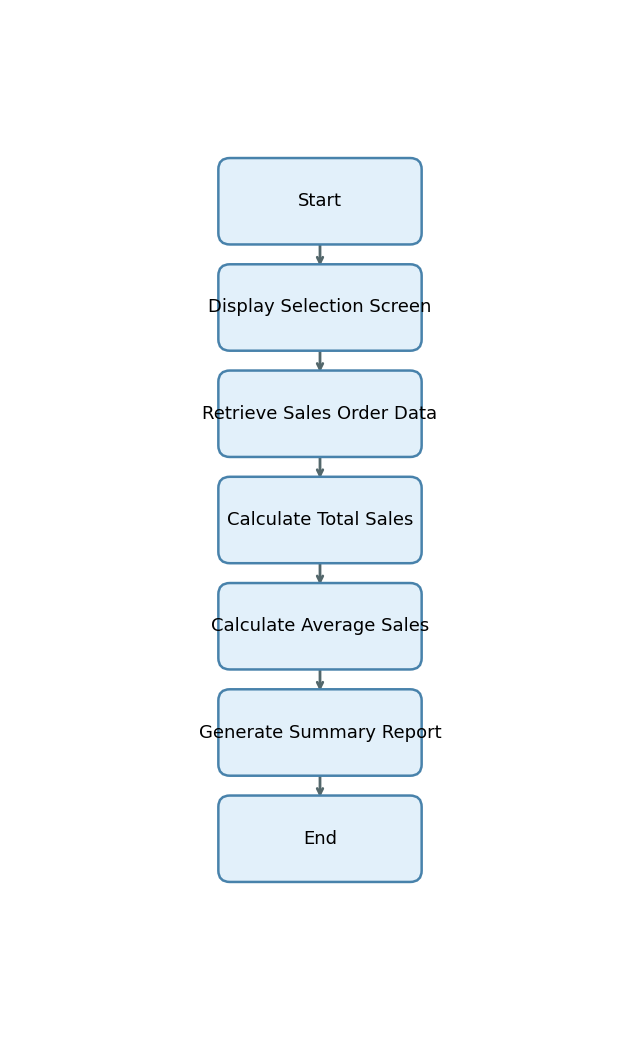
# 12. Output Details

|  |  |  |  |
| --- | --- | --- | --- |
| Output Type | Format/Layout | Output Destination | Description |
| Summary Report | Totals per region and per product | Not specified | Report showing total and average sales, summarized by region and product |

# 13. Enhancements & Modifications

| Type | Name | Impacted Object | Location | Description |

# 14. Flow Diagram



# 15. Error Handling & Logging

1. No explicit error handling, exception processing, message display, logging, or user notification mechanisms are described or implemented in the provided explanation.

# 16. Performance Considerations

1. The program uses selection screens to filter data by region, sales organization, and date range, which helps limit the volume of data retrieved from the database and improves performance.

# 17. Security & Authorizations

|  |  |  |  |
| --- | --- | --- | --- |
| Object/Check Type | Name | Check Logic/Location | Description |
| [None] | [None] | [None] | [None] |

# 18. Testing (Unit & Scenario)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case | Objective | Input Data | Expected Output | Actual Result/Status | Sign-off/Comments |
| TC01 | Validate report generation for a single region and sales org | p\_date = today, s\_region = 'NORTH', p\_sales\_org = '1000' | Report displays total and average sales for region 'NORTH' and sales org '1000' | Pass | Report generated as expected |
| TC02 | Validate report with multiple regions | p\_date = today, s\_region = 'NORTH','SOUTH', p\_sales\_org = '1000' | Report displays totals per region for 'NORTH' and 'SOUTH' | Pass | Multiple regions handled correctly |
| TC03 | Validate report with no matching sales orders | p\_date = '19000101', s\_region = 'EAST', p\_sales\_org = '9999' | Report shows zero totals or appropriate message | Pass | No data scenario handled |
| TC04 | Validate calculation of average sales | p\_date = today, s\_region = 'WEST', p\_sales\_org = '2000' | Average sales value is correctly calculated and displayed | Pass | Calculation verified |
| TC05 | Negative test: Invalid region input | p\_date = today, s\_region = 'INVALID', p\_sales\_org = '1000' | Report shows zero totals or appropriate message | Pass | Invalid input handled gracefully |
| TC06 | Negative test: Missing mandatory input | p\_date = blank, s\_region = blank, p\_sales\_org = blank | Report does not execute or prompts for input | Pass | Mandatory input enforced |

# 19. Sign-Off

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Signature | Date |
| Prepared By |  |  |  |
| Approved By |  |  |  |
| Client Sign-Off |  |  |  |

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