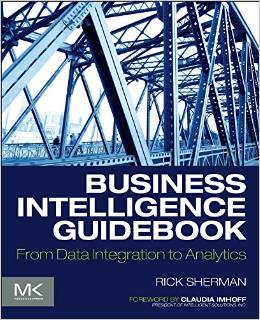
**Business Intelligence Guidebook**



**BI Dimension Model - Detailed Design Template**



Northeastern University, Boston

BI Dimension Logical Model –

Detailed Design Template

Contoso Retail Project

Date: April 2018

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Raj Ravindra Phadke

Sponsor(s): Prof. Richard Sherman

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Labdhi Shah

Palak Agrawal

Table of Contents

[BI Dimensional Logical Model Design 4](#_Toc403907239)

[DATA STORE: [Retail\_DW] 4](#_Toc403907240)

[ Source to Target Mapping 5](#_Toc403907241)

[ CONSTRAINTS 6](#_Toc403907242)

[ INDEXES 7](#_Toc403907243)

[ DATA STORE LOGICAL MODEL 8](#_Toc403907244)

[Approvals 10](#_Toc403907245)

[Appendix: Background Materials 11](#_Toc403907246)

[Authors and contributors 11](#_Toc403907247)

# BI Dimensional Logical Model Design

## DATA STORE: [NAME]

Data Store: Contoso Retail Database

Schema Type: Relational Database Schema

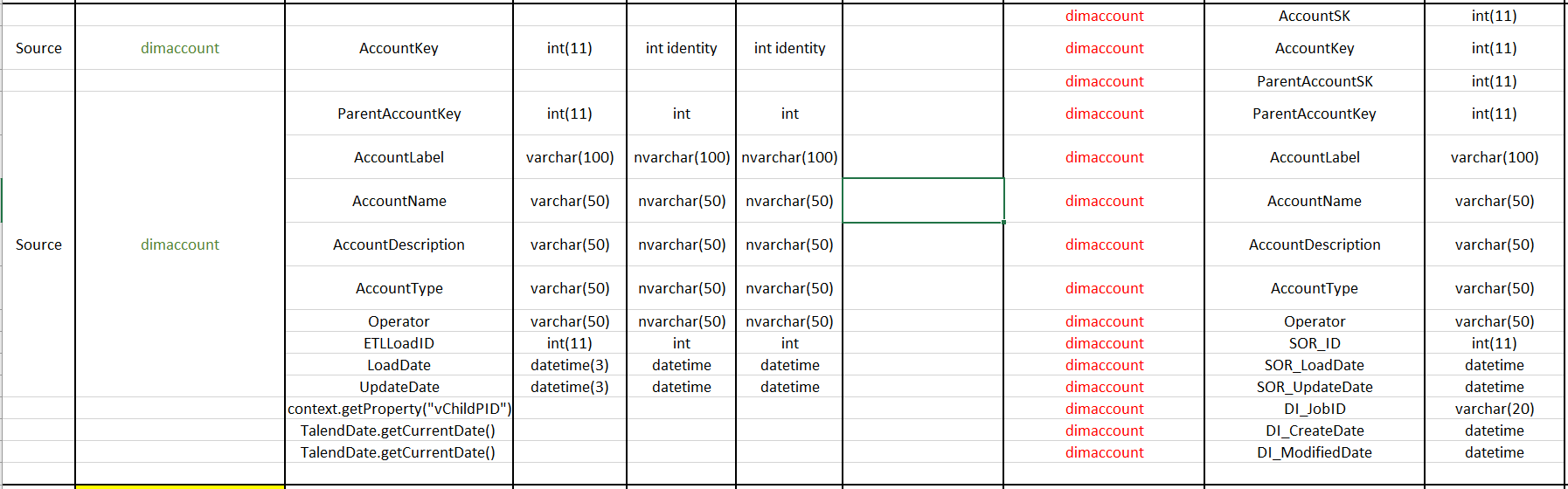
Description: Retail\_DW Final Project

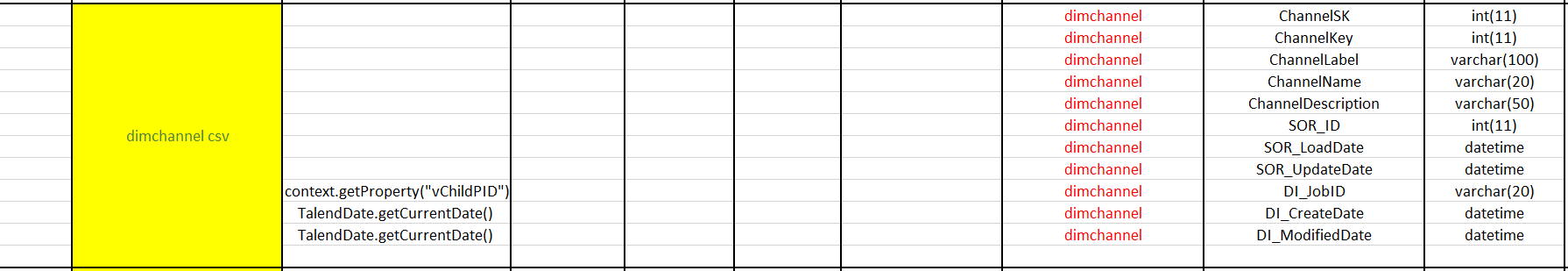
Status: Final Submission

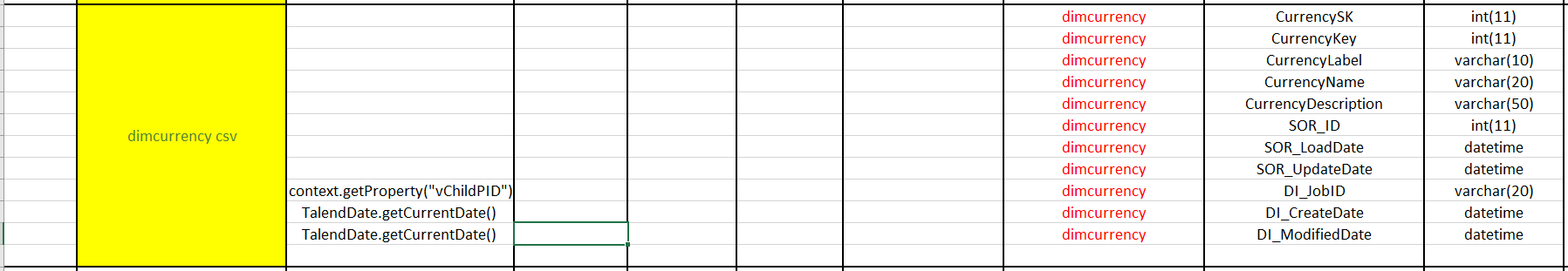
Last Updated: 04/28/2018

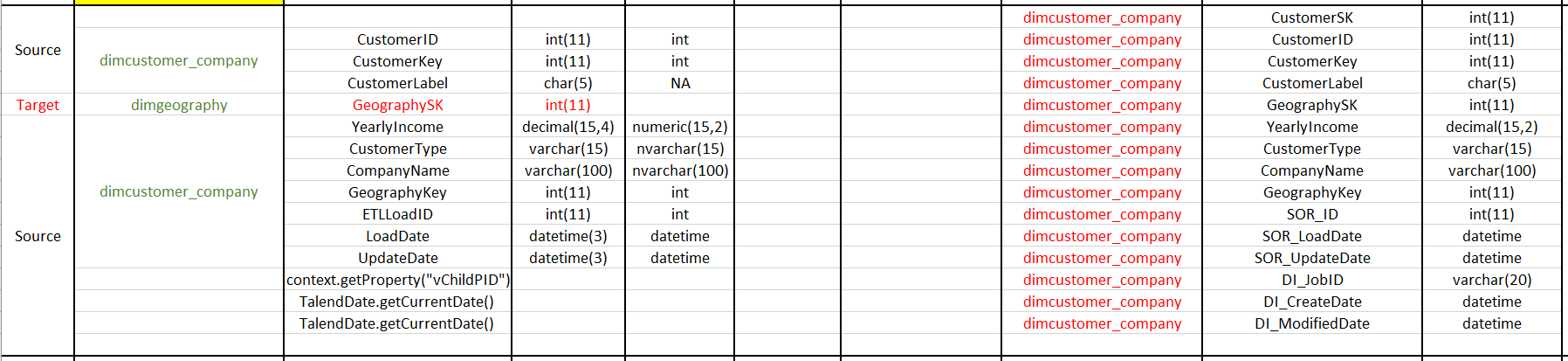
Team Responsible for Design: Team 5

**Source To Target Mappings:**

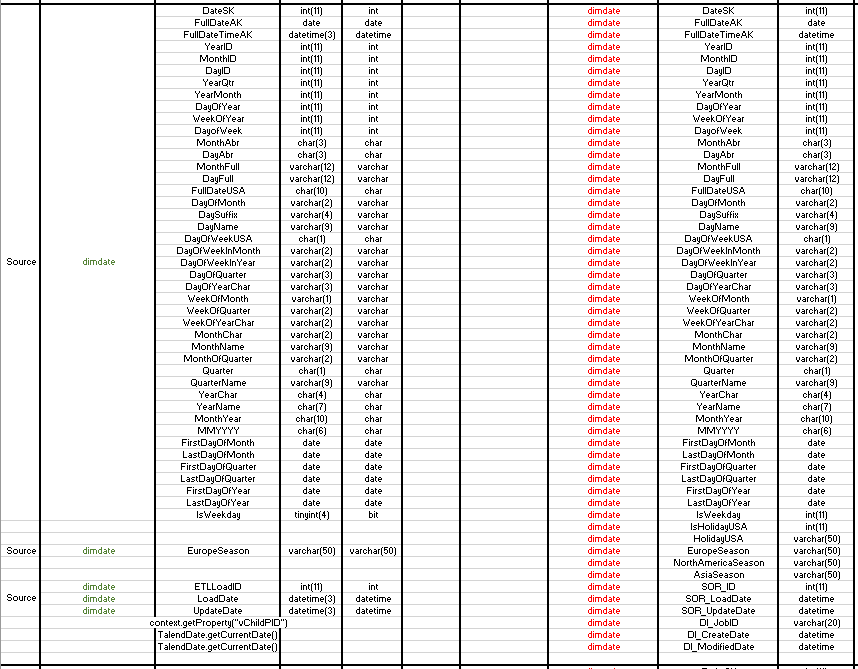


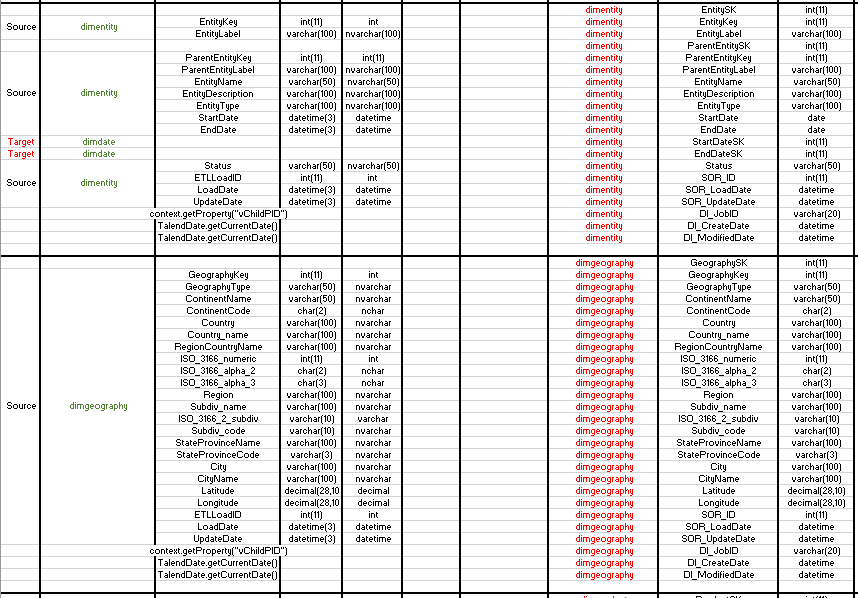


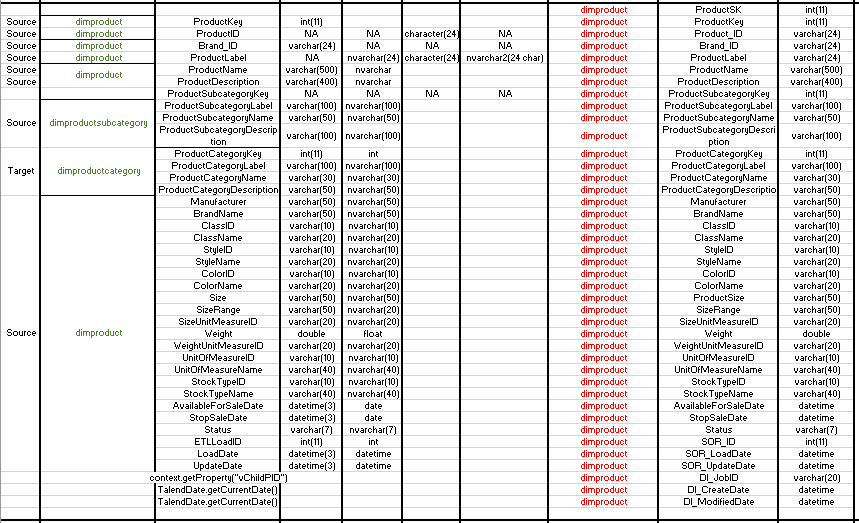


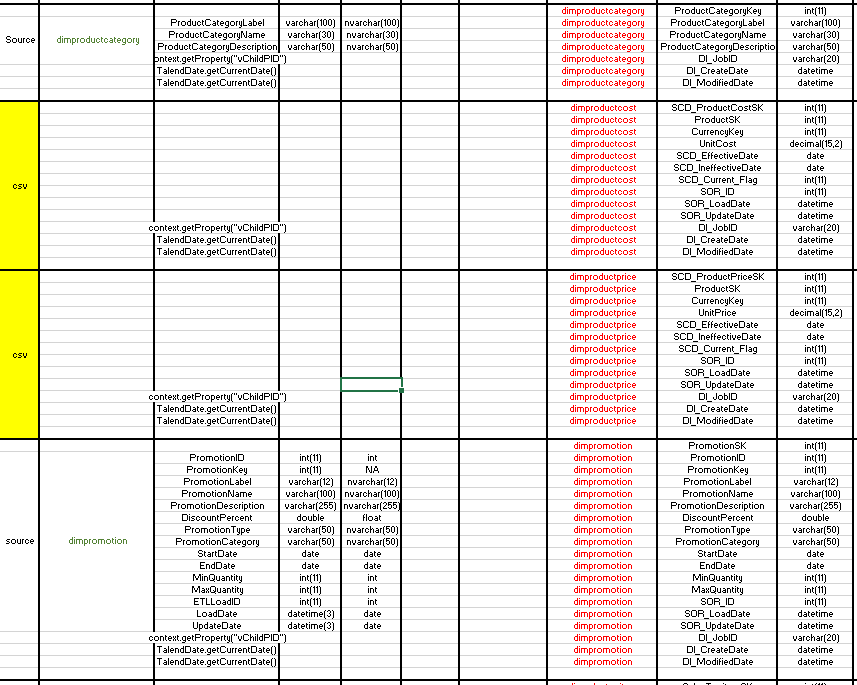


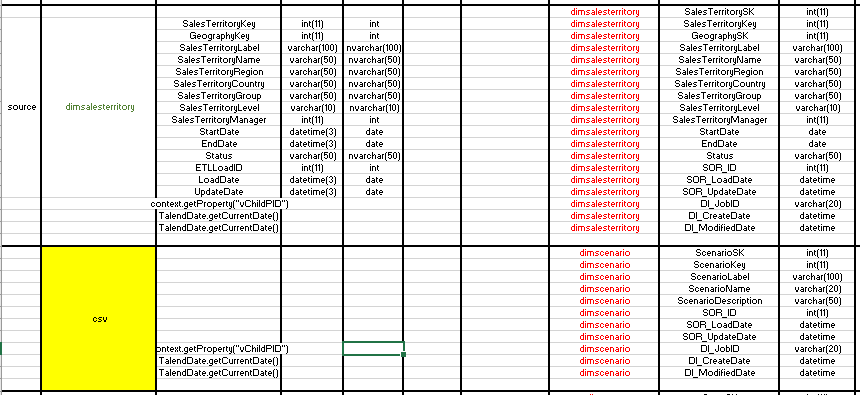


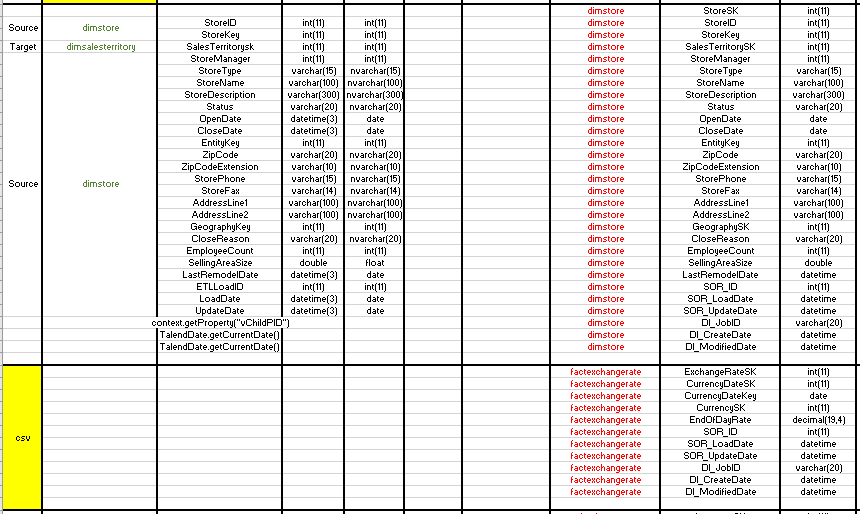


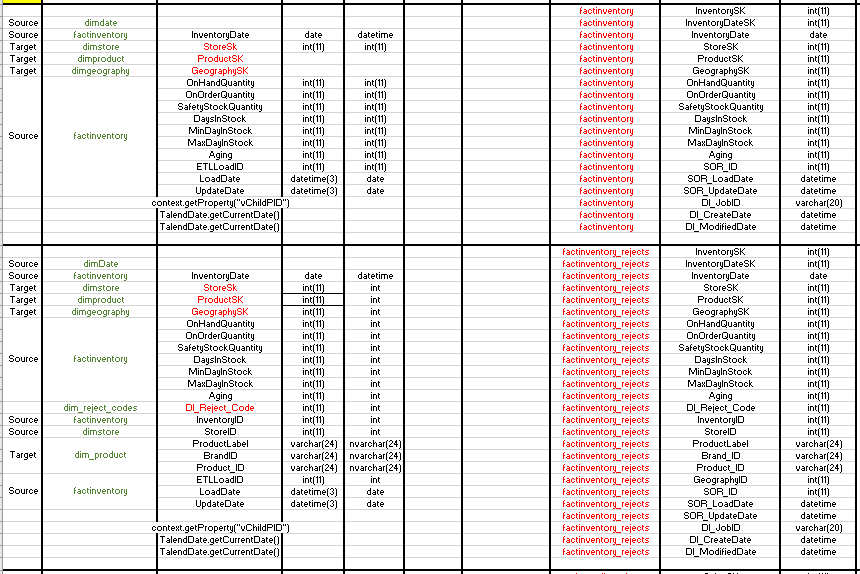


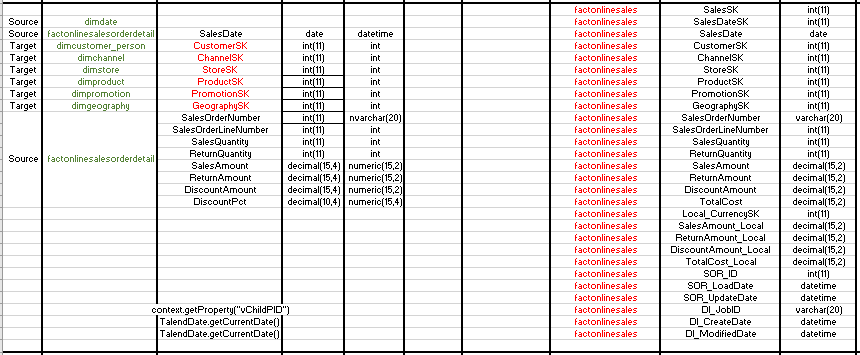


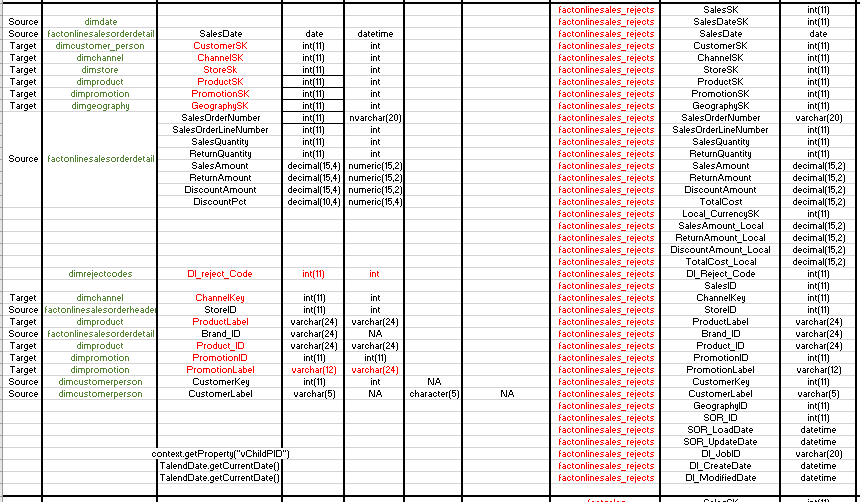


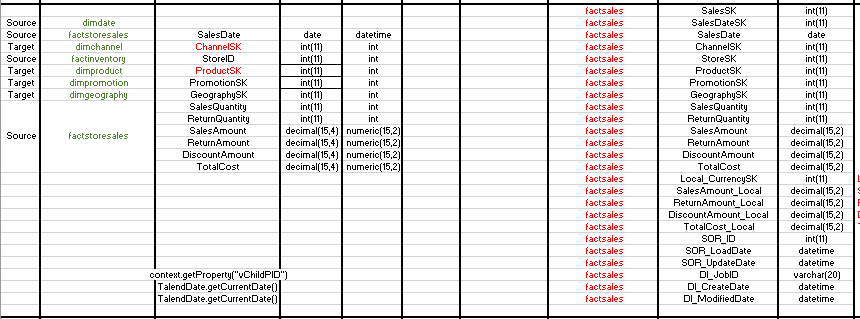


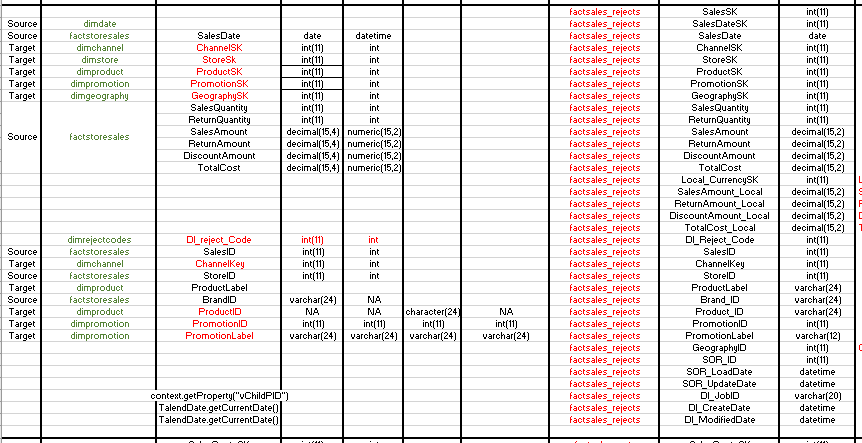


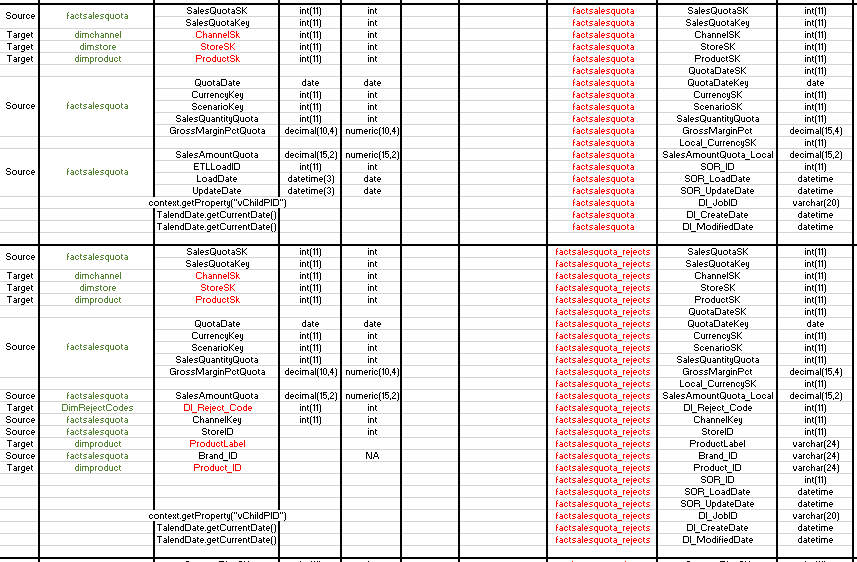


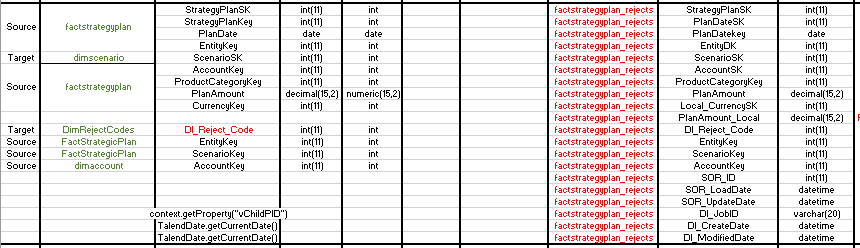












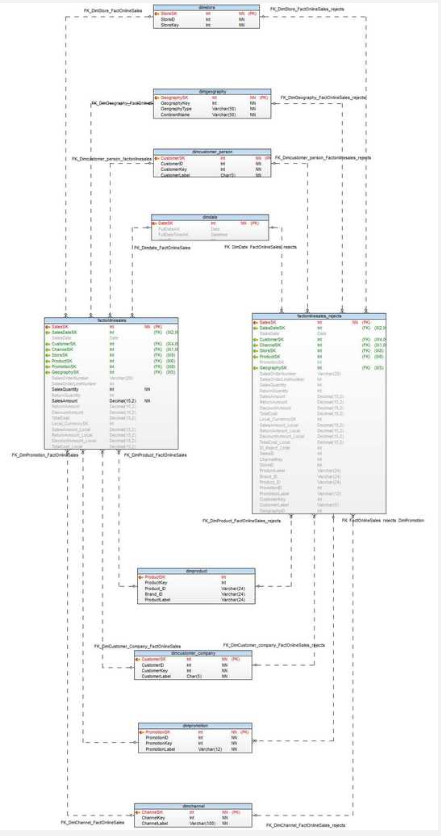
### DATA STORE LOGICAL MODEL

**Fact Inventory**

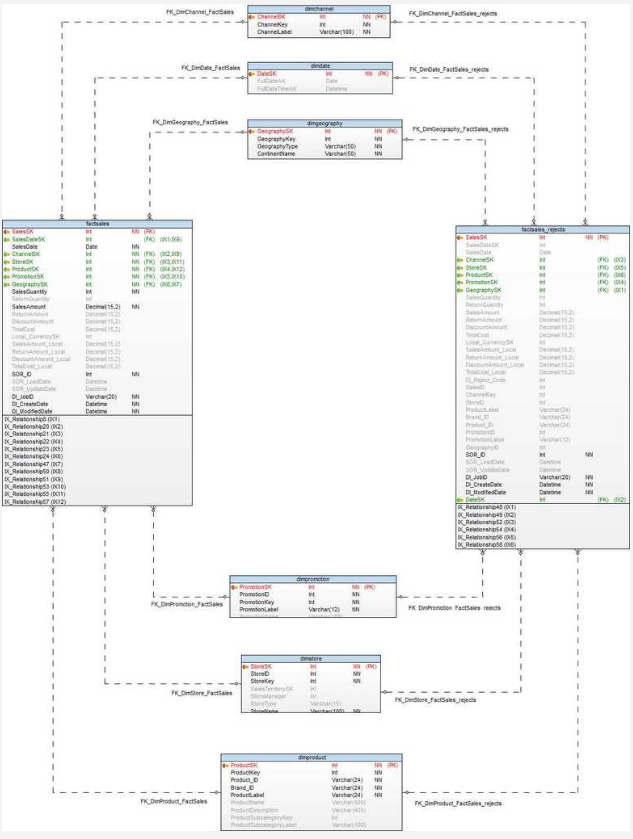


Figure 1: Example of a Data Store's Logical Data Model

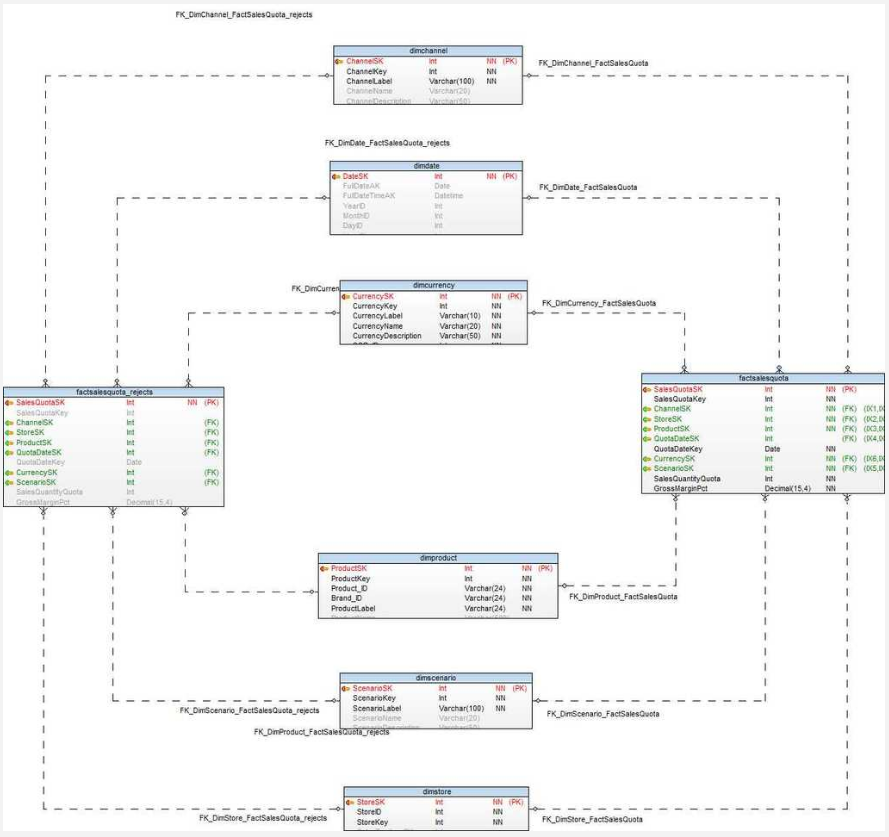
**FactOnlineSales:**



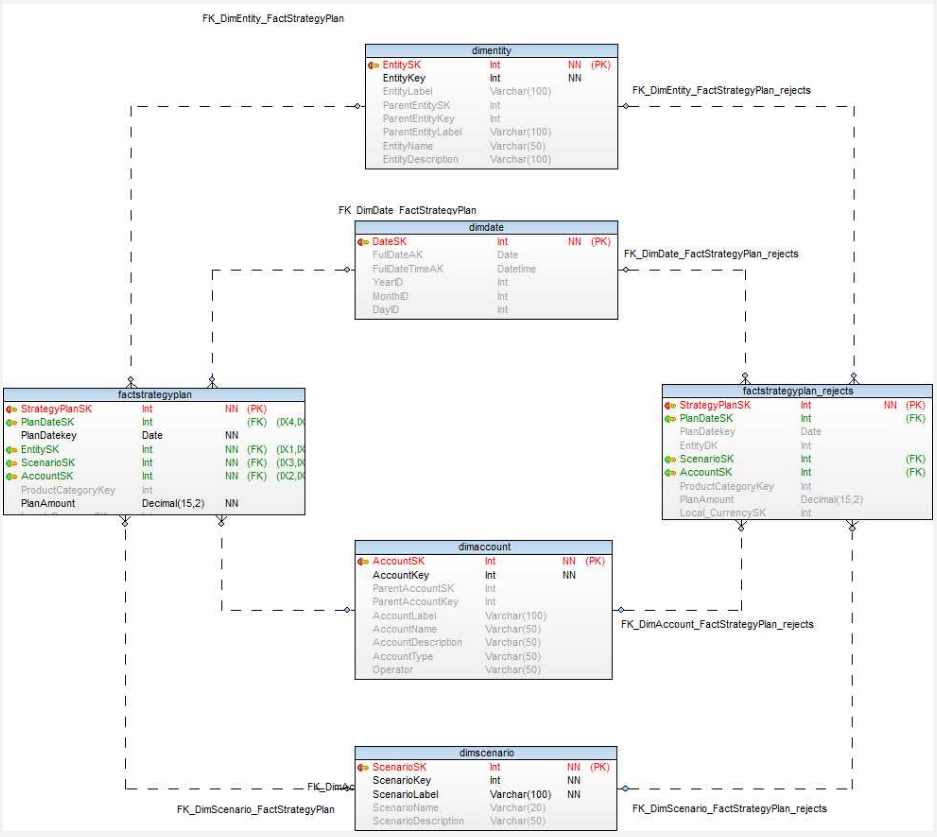
**FactSales:**



**FactSalesQuota:**



**FactStrategyPlan**



## Challenges Faced:

* To perform error handling, we first performed **Data Profiling** which included Source to Target Mappings. This is a very important and primary step in Data Integration.
* In this Contosa Retail Project we have used **Data Ingestion Services** inorder to handle effective & ineffective dates, new row for updating current records.
* **Data Ingestion Services used in our project include:**

1. Change Data Capture in the form of Audit columns
2. Slowly changing dimensions (Type 2 in DimProductCost, DimProductPrice)
3. Referential Lookups

* In order to perform String to Integer data conversion’s we used String.valueOf()
* Also to parse from BigDecimal to Int we used intValueExact()
* For implementing conformed date dimension, we used Integer.parseInt(TalendDate.getCurrentDate())
* We have used NumberSequence inorder to implement the functionality of AutoIncrement

# Appendix: Background Materials

## Authors and contributors

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**Special Thanks for guiding us through the project:**

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