1. Identify the grain in your dimensional design using the business needs as a guideline. You should then indicate relative storage requirements for the grain using the statistics for the data sources. Using the cardinality estimates provided, you should determine either the fact table size or sparsity and then compute the unknown grain size variable. For example, you should compute sparsity if the fact table size is given.

Member : 50,000 member rows + 150 unique customers per special event worksheet = 50150

Service Category : 20

Franchise : 350 rows in table + 300 = 650

Date : 365 days in 1 year

Sales: 150,000 by sales table connected to merchandise

Service Purchase : 100,000 rows per year

Fact Table will have sum of no of rows in sales in table and spreadsheet. i.e 250000

Sparsity estimate:

1 - ( 250,000/ product of dimensions )

(1 – (250,000/ (650\*365\*20) ) = 0.948

The data cube has mostly missing cells with slightly more than 1% of cells with non zero values.