Assignment 1 Part 3
By: Cristan Lansang

The most detailed grain is the combination of individual supplier, individual product, and date.

- 350 Franchise Rows,200 Franchise Postal Codes : Total = 350

- 20 ServiceCategory Row,1 Special Event Row Total = 21

- Days per year: 365, Total = 365

- 50000 Member Rows, 150 Member Rows*200 Franchises , 10 MemberType ,500 Member Zip Codes Rows ,Total   = 50000 + 150*200 = 80000

- 500 Merchandise Rows, Total= 500

- 100,000 Service Purchase Rows,(300*200) Special Events Purchase,450,000 Contains Rows

- Total Fact Table Size Increase   =   610000

Sparsity estimate:

1 - (fact table size / product of dimensions)

$(1 - (610000 / (350*21*500*365*80000)) = 0.99999999431$

The data cube has less than   1%   non zero cells.