1. The dimensions in the problem are reasonably clear. Franchise, Member, Merchandise, calendar, and Service are dimensions. Customer, Franchise and product come from the ERD and the sample spreadsheet. The calendar dimension is a standard data warehouse dimension. Calendar is a hierarchical dimension. Email can be parsed to be hierarchical as part of the Customer dimension.

* Franchise
  + FranchId: ERD only
  + FranchPostalCode: ERD only
  + FranchModelType: ERD only
* Member
  + MmbrId: ERD only | Corporate Customer Id (spreadsheet)
  + MmbrName (Member table) | Corporate Customer Name (spreadsheet)
  + MmbrEmail: ERD only; hierarchical (top level domain → second level domain → local part)
* Merchandise
  + MercId: ERD only
  + MercName (Suppler table)
  + MercType: ERD only
* Calendar
  + Date columns in the ERD (MmbrDate, SaleDate, and ServPurchDate) and spreadsheet (Event Date); hierarchical (year → month → day)
* Service:
  + ServPurchId: ERD only
  + ServCatId (ERD)
  + ServCatName: ERD only