**Problem 5**

The summarizability problems are

1) Incomplete dimension-fact relationship for franchise: The spreadsheet lacks franchise information so additional data collection is required.

2) Member type is incomplete for members. Some members do not have member types (guests and corporate event customers). This problem can be resolved by default values for guests and corporate customers.

3) Incomplete rollup for location dimension elements because zip codes in member table do not have city and state.

4) The membership date applies only to members, not corporate customers and guests. There is no solution for this incompleteness.