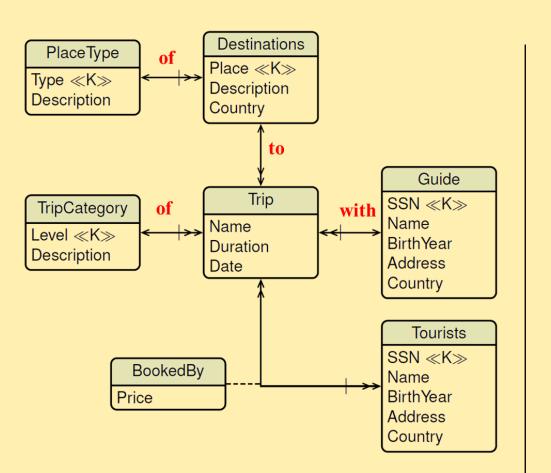
## TRAVEL AGENCY: REQUIREMENTS ANALYSIS



The travel agency is interested in a DM for analyzing the travel behavior of tourists.

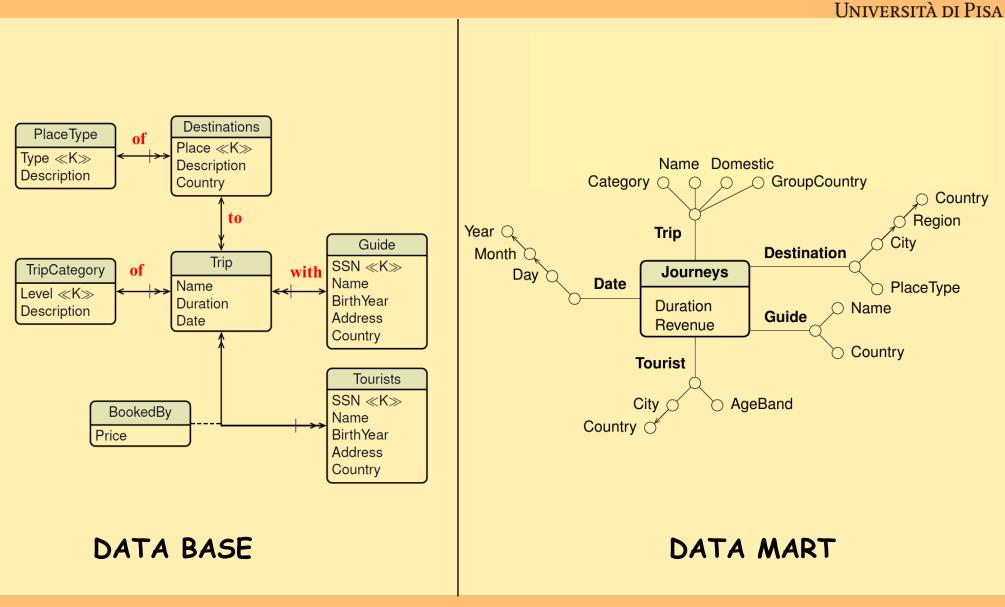


- 1. Total number of tourists and average trip duration for Florence, **by** age band
- 2. Total number of tourists for domestic trips, by age band, by country.
- Total number of tourists, by trip name and category, by group country (alternative: age band, guide, country).
- 4. Average trip revenue for tourists of a trip category level 1 in Toscana, by type of destination, and by year.
- 5. Number of trips by place type, by month, and by guide country.

Γ	Requirement	Dimensions	Measures	Metrics_	
1	. Total number of tourists and average trip duration for Florence, <b>by</b> age band				Università di Pisa
2	. Total number of tourists for domestic trips, <b>by</b> age band, <b>by</b> country.				
3	. Total number of tourists, <b>by</b> trip name and category, <b>by</b> group country (alternative: age band, guide, country).				
4	. Average trip revenue for tourists of a trip category level 1 in Toscana, <b>by</b> type of destination, and <b>by</b> year.				
5	. Number of trips <b>by</b> place type, <b>by</b> month, and <b>by</b> guide country.				
	Fact Granularity				
	Description				

Preliminary dimensions

## TRAVEL AGENCY: CONCEPTUAL DESIGN



DW: Data Models



### EXERCISE: DESIGN LOGICAL SCHEMA!

Name Domestic Category Q GroupCountry  $\cap$ ○ Country Region Year Q Trip City Destination Month Journeys Day Date PlaceType  $\cap$ Duration ○ Name Guide Revenue Country Tourist City C AgeBand Country 🔿 DFM SCHEMA

#### STAR SCHEMA

DW: Data Models



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# TRAVEL AGENCY: SOLVE BUSINESS QUESTIONS WITH SQL



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#### The travel agency is interested in a DM for analyzing the travel behavior of tourists.

- 1. Total number of tourists and average trip duration for Florence, **by** age band
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- 5. Number of trips by place type, by month, and by guide country.

SQL QUERIES ON STAR SCHEMA

### ADDITIONAL REQUIREMENTS



- 6. Total revenue by distinct tourist
- 7. Total number of distinct tourists by year.

# SQL QUERIES ON (MODIFIED) STAR SCHEMA

DW: Data Models