

## 2. Data vs. Information: Airlines

- There is a lot of information that airlines databases store in order to function. There are many elements of data that without context it would mean nothing. For example, if we would just be given 1,500 we would not know what it means. It could mean miles travelled, price of a ticket, price for filling up a gas tank. But with a bit more context, USD 1,500, then it is more likely that it is the price for a ticket. Another example, if we would just be given the name of a city: Tokyo, we do not know if this is the destination to reach, the departing place, or if it is a connecting place for a flight. Without organized information, Airlines will not be able to function and would most likely go out of business. No customer wants to travel to the wrong place or be overcharged. It is also not profitable for the airline to make mistakes based on ambiguous data.

## 3. Hierarchical vs. Network Data Models:

- The hierarchical model is like a family tree. It was the first data model. The network model is similar but it eliminates duplicates. The problem with these models compared to the relational model is that they did not support high query languages. XMLA is a good way to store data if it will be shared across the Internet. Else, it can create confusion/ambiguity regarding the type of data it represents and what tag should be nested.