



Business School
UNIVERSITY OF COLORADO DENVER

Information Systems Program

Module 8

Developing Business Data Models

Lesson 2: Analyzing Narrative Problems

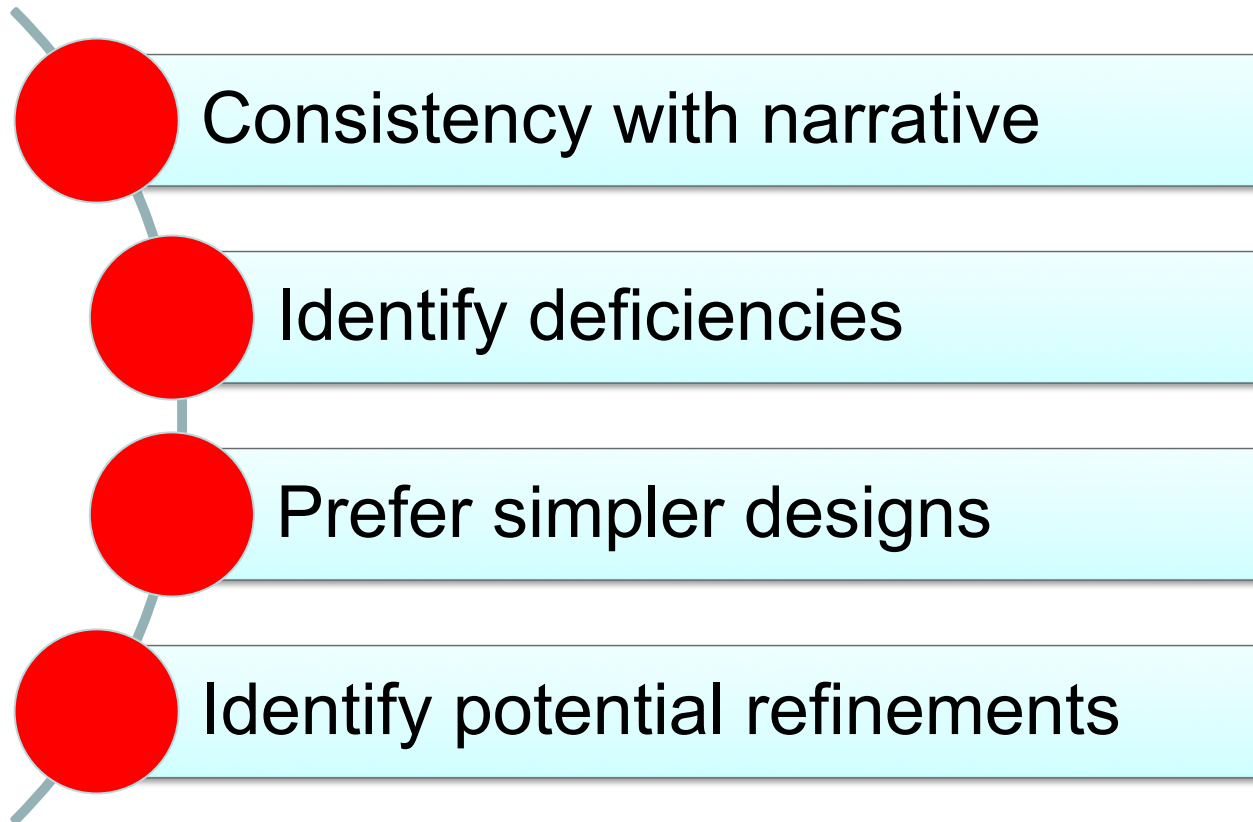


Lesson Objectives

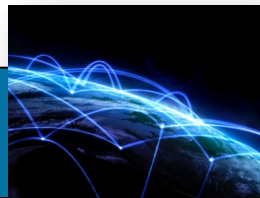
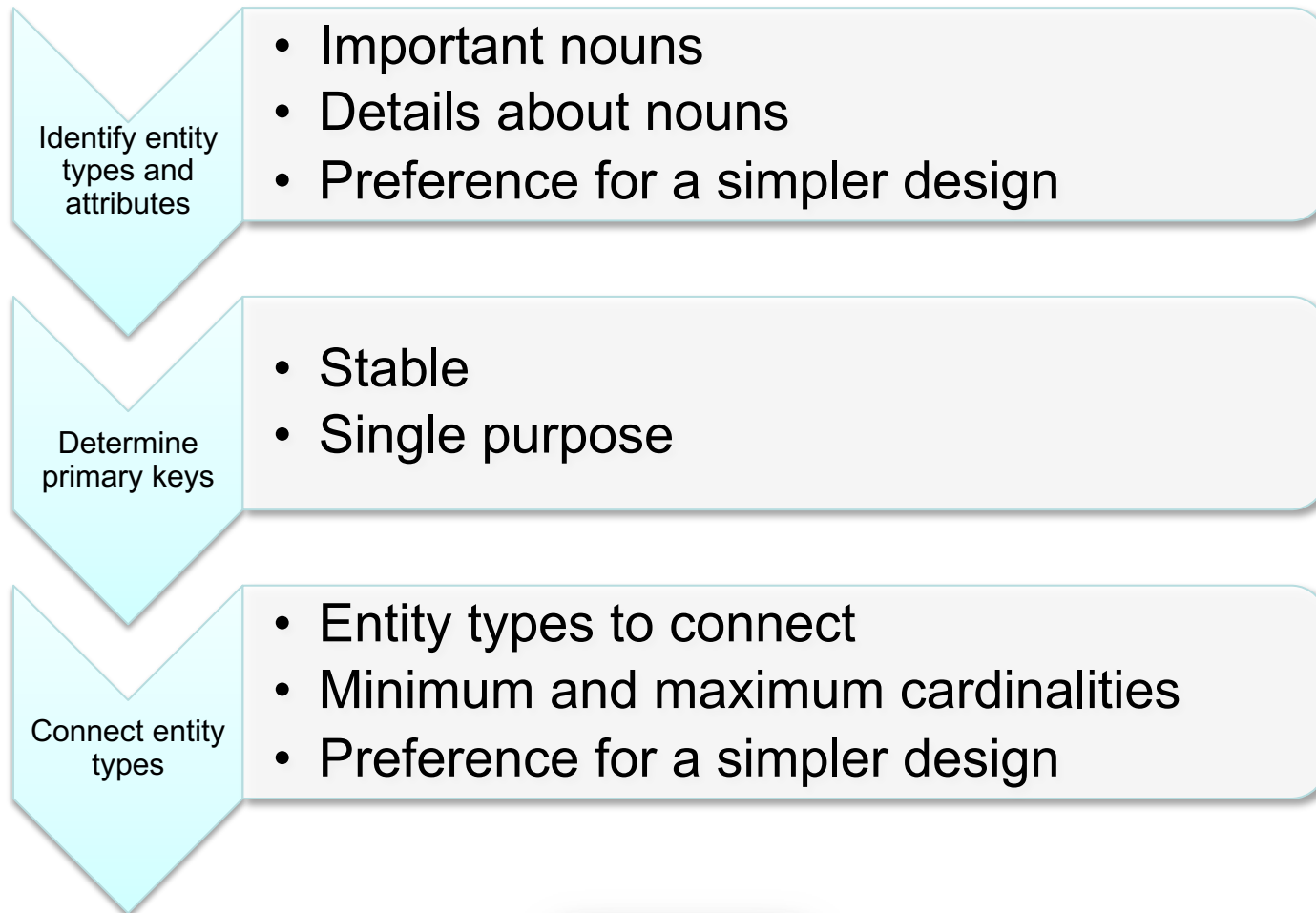
- Explain goals and steps of narrative problem analysis
- Apply steps on a practice problem
- Reflect on limitations of narrative problem analysis



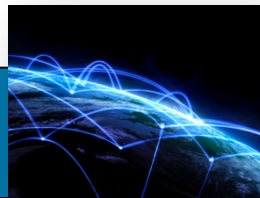
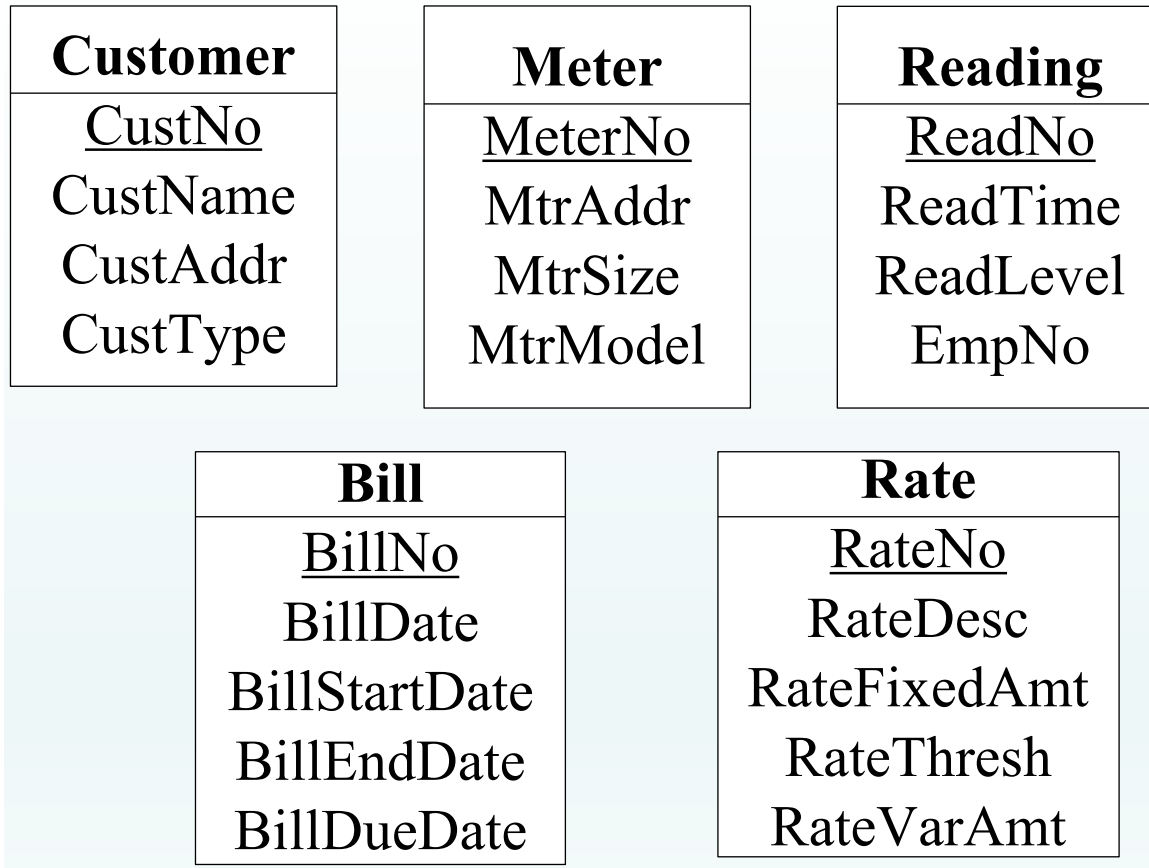
Goals of Narrative Problem Analysis



Steps of Narrative Problem Analysis



Problem Narrative Example (I)



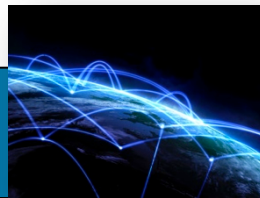
Government Identifiers

- Widely used for tax returns and government benefits
- Avoid for primary keys
 - Privacy concerns
 - Prohibited by organization policies
 - Sometimes violate single-purpose tenet
- May need to store as an attribute for government compliance

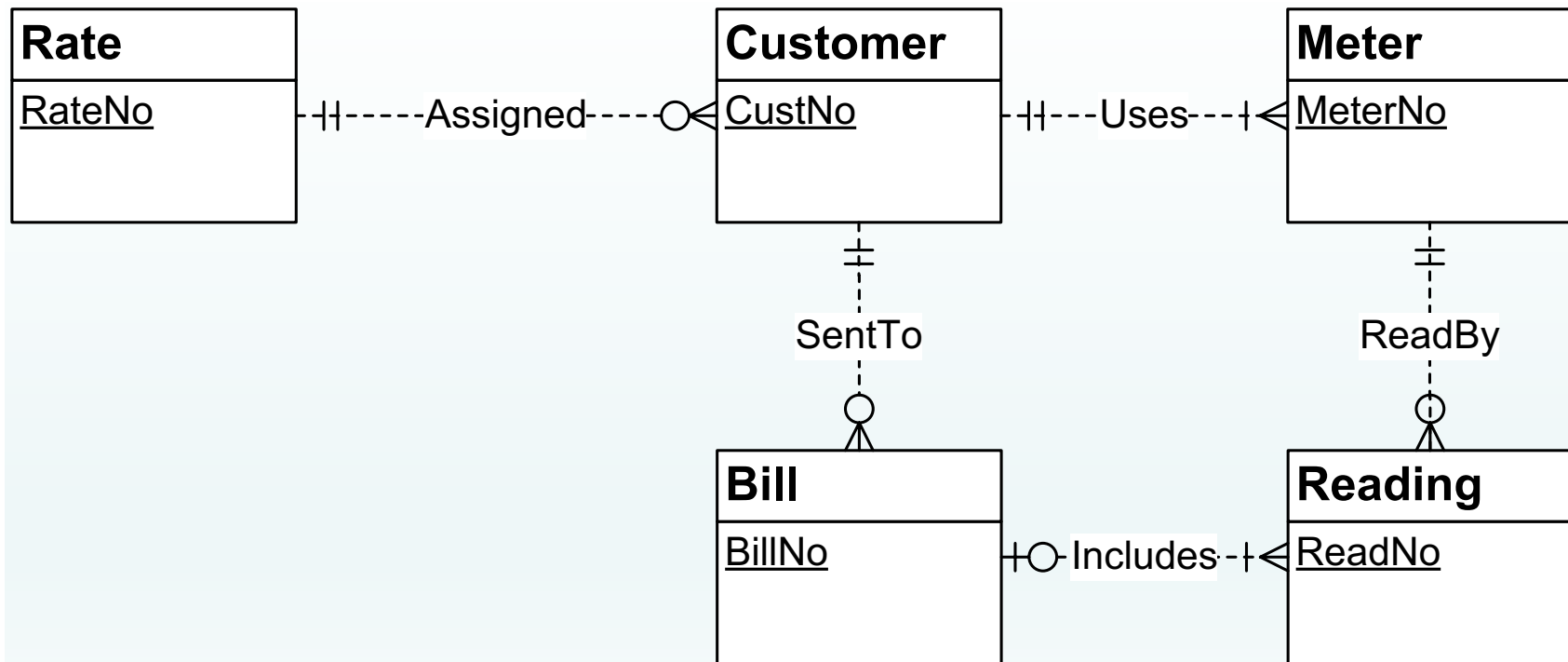


Adding Relationships

- Examine sentences linking nouns representing entity types
- Sentences that involve an entity type having another entity type as a property
- Sentences that involve an entity type having a collection of another entity type

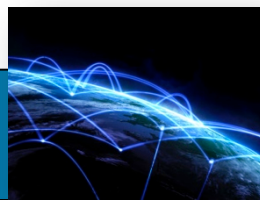


Problem Narrative Example (II)



Relationship Simplification

- Problem statement requires direct or indirect connections
- Hub entity types to simplify
 - Connect other entity types
 - Sometimes associated with important documents
 - Reduce number of direct connections



Summary of Data Modeling Strategies

- Strive for consistency with the narrative
- Preference for simpler designs at least initially
- Use specialized relationships carefully
- Use notation precisely

