



Business School
UNIVERSITY OF COLORADO DENVER

Information Systems Program

Module 8

Developing Business Data Models

Lesson 4: Design Transformations II

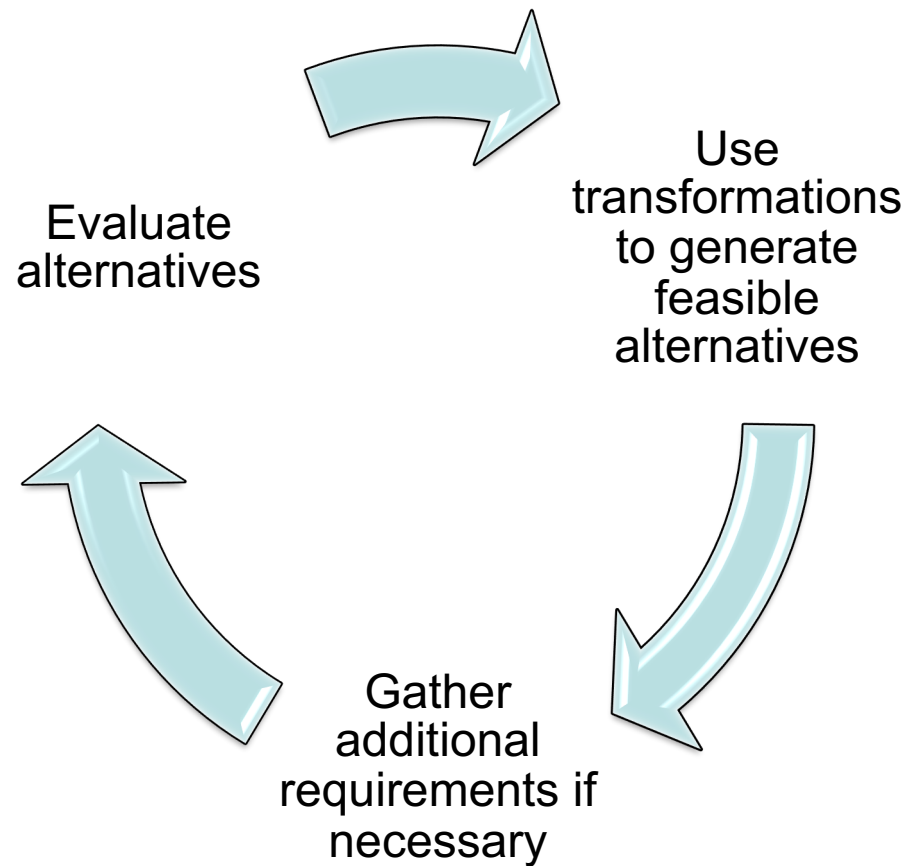


Lesson Objectives

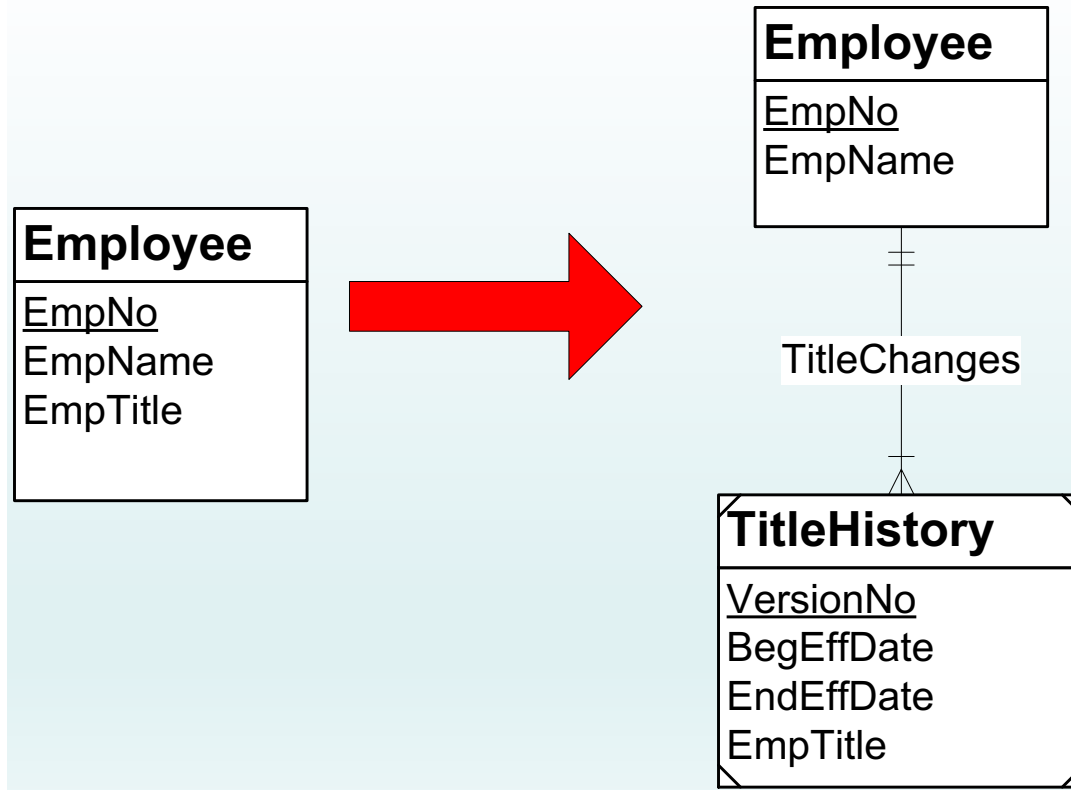
- Understand the importance of generating and evaluating alternative designs
- Explain a situation for using each transformation
- Apply each transformation



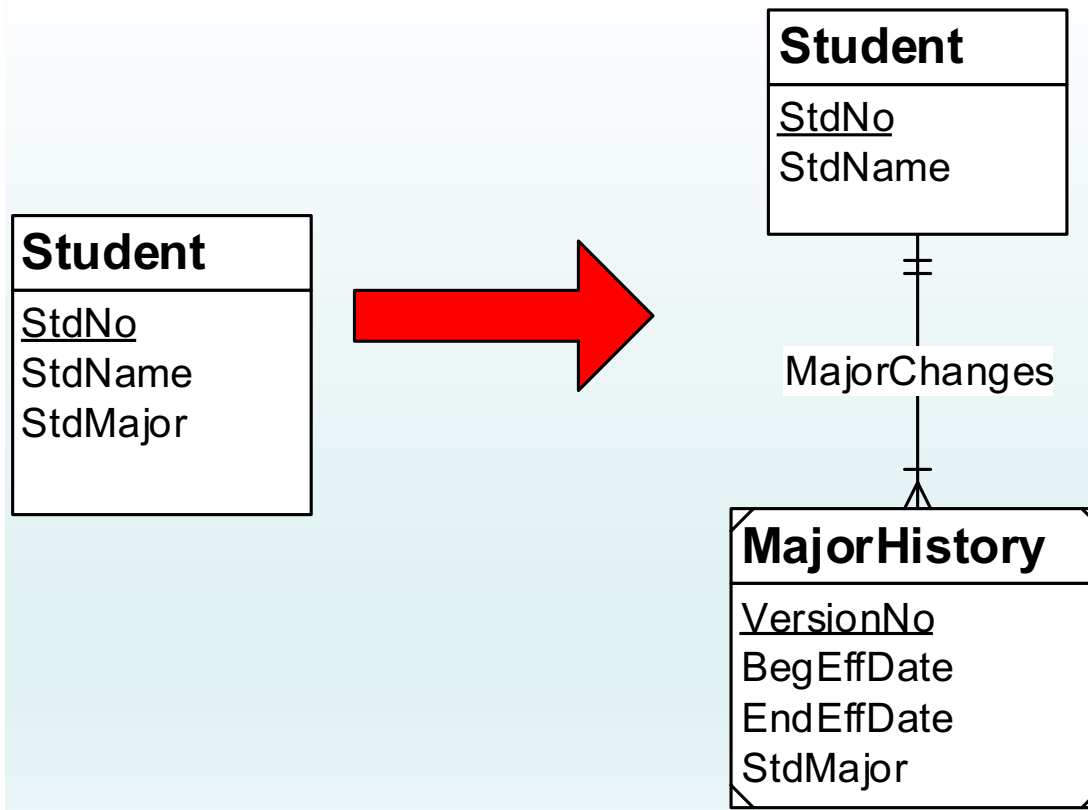
Diagram Refinements



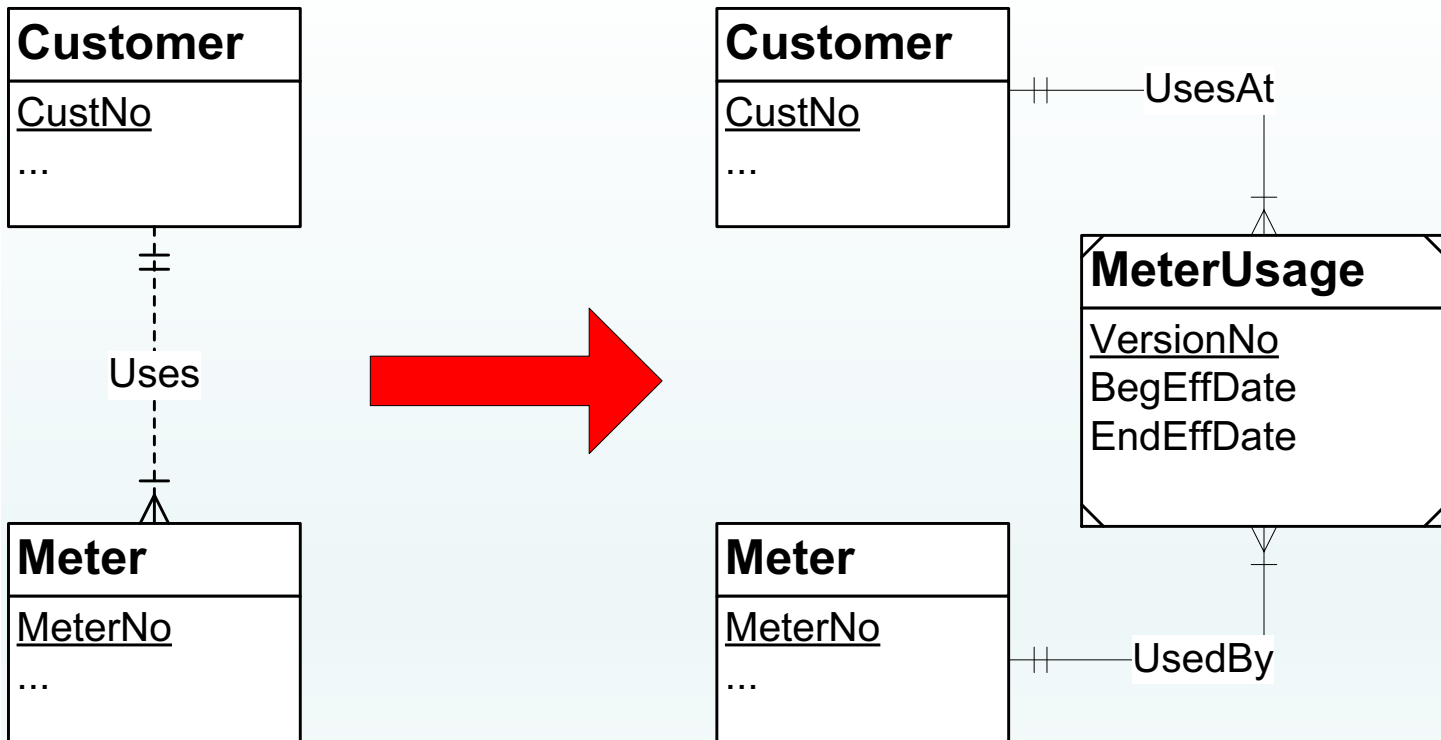
Attribute History Transformation I



Attribute History II



1-M Relationship History



Limited Attribute History

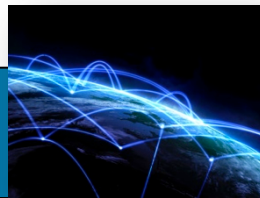
Employee
<u>EmpNo</u>
EmpName
EmpTitle



Employee
<u>EmpNo</u>
EmpName
EmpCurrTitle
EmpCurrTitleBegEffDate
EmpCurrTitleEndEffDate
EmpPrevTitle
EmpPrevTitleBegEffDate
EmpPrevTitleEndEffDate

Reverse Transformations

- Not as common as main transformations
- Typically used for simplification
- Reverse transformations
 - Contract entity type
 - Combine attributes
 - Contract entity type structure
 - Strong entity type to weak entity type
 - Remove history



Summary

- History expansion for attributes
- History expansion for relationships
- Transformation reversing
- Importance in data warehouse design

