



526 Data Warehousing

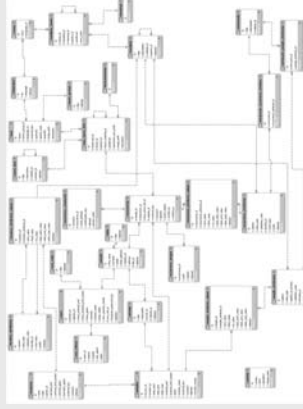
March 26, 2019
Week 10 Presentation

Week 10: Dimensional Modeling: Denormalization

- We will cover
 - Denormalization

Dimensional Modeling Fundamental Concepts: Make it Simple

- 3NF: Immensely useful in operational processing (OLTP)
- However, it's too complicated for users to use.
- Unpredictable queries cause performance problems



3NF

Week 10: Dimensional Modeling: Denormalization

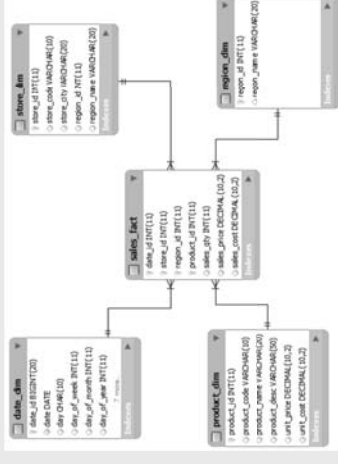
- We will cover
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Dimensional Modeling Fundamental Concepts: Make it Simple

- Dimensional modeling came to a rescue in the presentation layer
- Dimensional modeling provides
 - Understandability
 - Query performance
 - Resilience to change
- Making it simple via Denormalization

Dimensional Model



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Dimensional Modeling

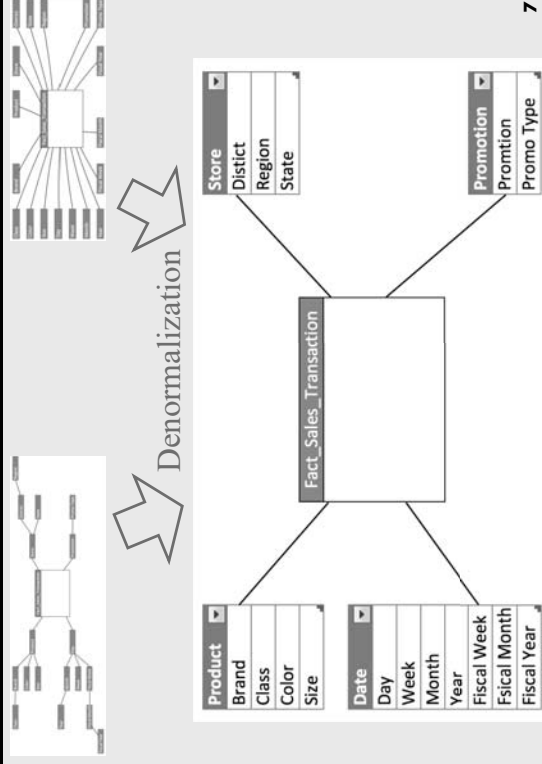
Fundamental Concepts: Make it Simple

- Widely accepted model for presenting analytic data
- Techniques for making database simple through denormalization
- “We sell *products* in various *stores* in different *regions* and measure our performance over *time*”: emphasis on
 - Products, Stores, Regions, and Time
 - Performance: sales volume, profit
 - Make a simple modeling
- Simple modeling is important
 - Resist temptation to over-engineer

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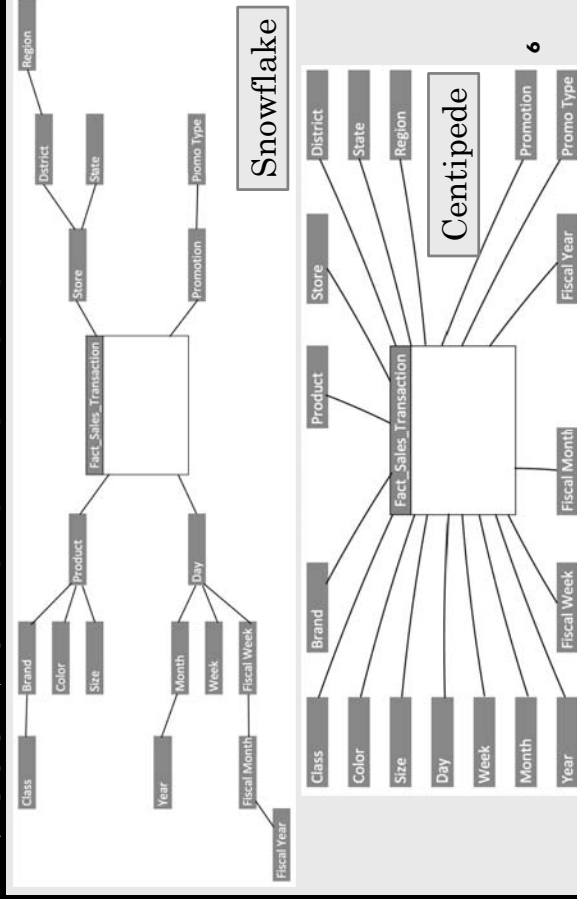
Avoid Snowflake or Centipede Model

via Denormalization (cont’d)



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Avoid Snowflake or Centipede Model via Denormalization



Week 10: Dimensional Modeling: Denormalization

Question?

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