Figure 1

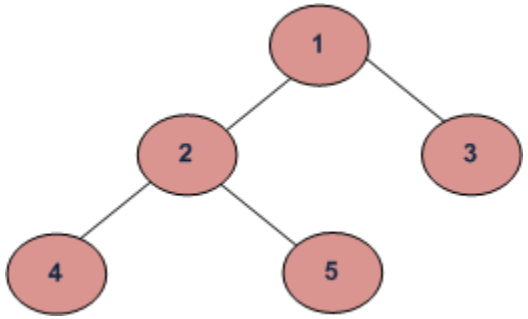

Figure 2

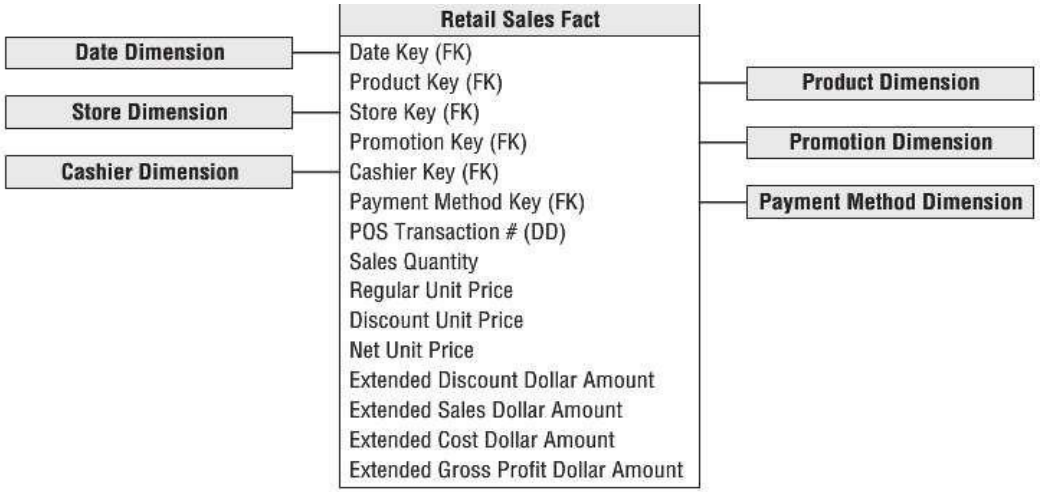

Figure 3

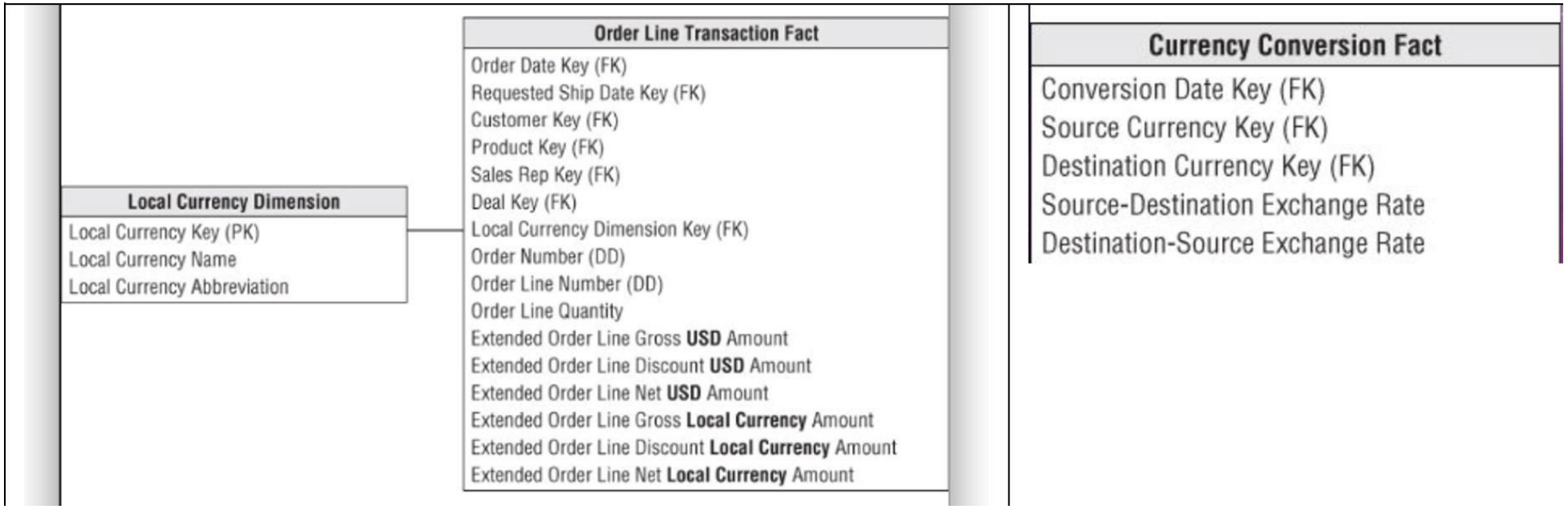
Order Line Transaction Fact
Order Date Key (FK)
Requested Ship Date Key (FK)
Customer Key (FK)
Product Key (FK)
Sales Rep Key (FK)
Deal Key (FK)
Local Currency Dimension Key (FK)
Order Number (DD)
Order Line Number (DD)
Order Line Quantity
Extended Order Line Gross USD Amount
Extended Order Line Discount USD Amount
Extended Order Line Net USD Amount
Extended Order Line Gross Local Currency Amount
Extended Order Line Discount Local Currency Amount
Extended Order Line Net Local Currency Amount
Local Currency Dimension
Local Currency Key (PK)
Local Currency Name
Local Currency Abbreviation
Currency Conversion Fact
Conversion Date Key (FK)
Source Currency Key (FK)
Destination Currency Key (FK)
Source-Destination Exchange Rate
Destination-Source Exchange Rate

Figure 4

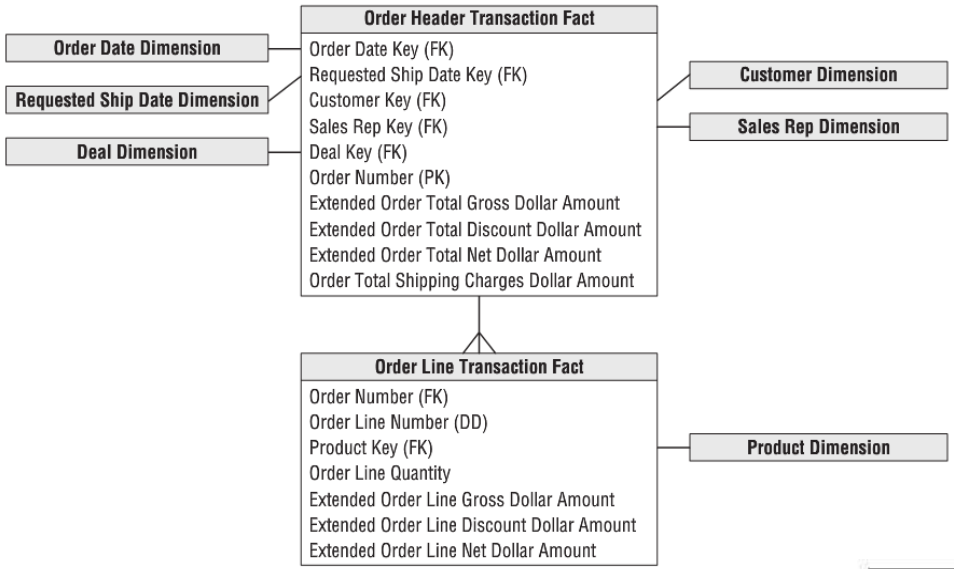

Figure 5

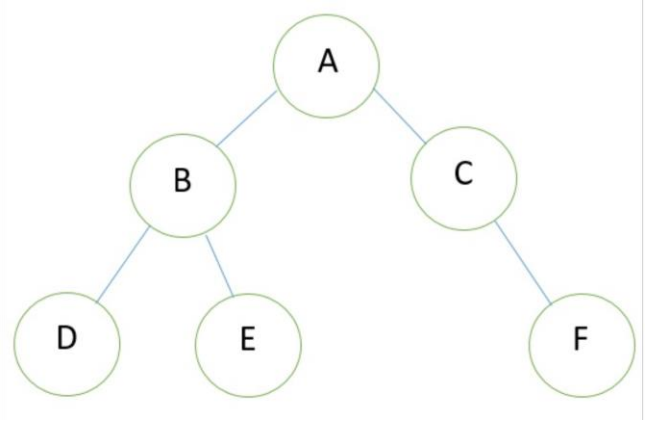

Figure 6

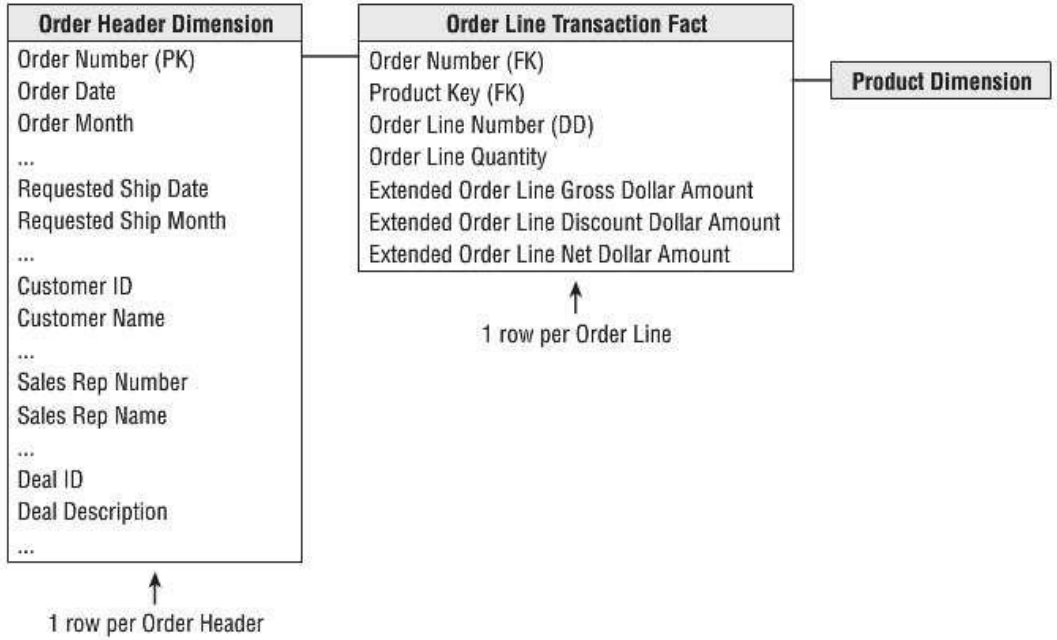

Figure 7

Original row in Product dimension:

Product Key	SKU (NK)	Product Description	Department Name
12345	ABC922-Z	IntelliKidz	Education

Updated row in Product dimension:

Product Key	SKU (NK)	Product Description	Department Name
12345	ABC922-Z	IntelliKidz	Strategy

Figure 8

Original row in Product dimension:

Product Key	SKU (NK)	Product Description	Department Name	...	Row Effective Date	Row Expiration Date	Current Row Indicator
12345	ABC922-Z	IntelliKidz	Education	...	2012-01-01	9999-12-31	Current

Rows in Product dimension following department reassignment:

Product Key	SKU (NK)	Product Description	Department Name	...	Row Effective Date	Row Expiration Date	Current Row Indicator
12345	ABC922-Z	IntelliKidz	Education	...	2012-01-01	2013-01-31	Expired
25984	ABC922-Z	IntelliKidz	Strategy	...	2013-02-01	9999-12-31	Current

Figure 9

Original row in Product dimension:

Product Key	SKU (NK)	Product Description	Department Name
12345	ABC922-Z	IntelliKidz	Education

Updated row in Product dimension:

Product Key	SKU (NK)	Product Description	Department Name	Prior Department Name
12345	ABC922-Z	IntelliKidz	Strategy	Education

Figure 10

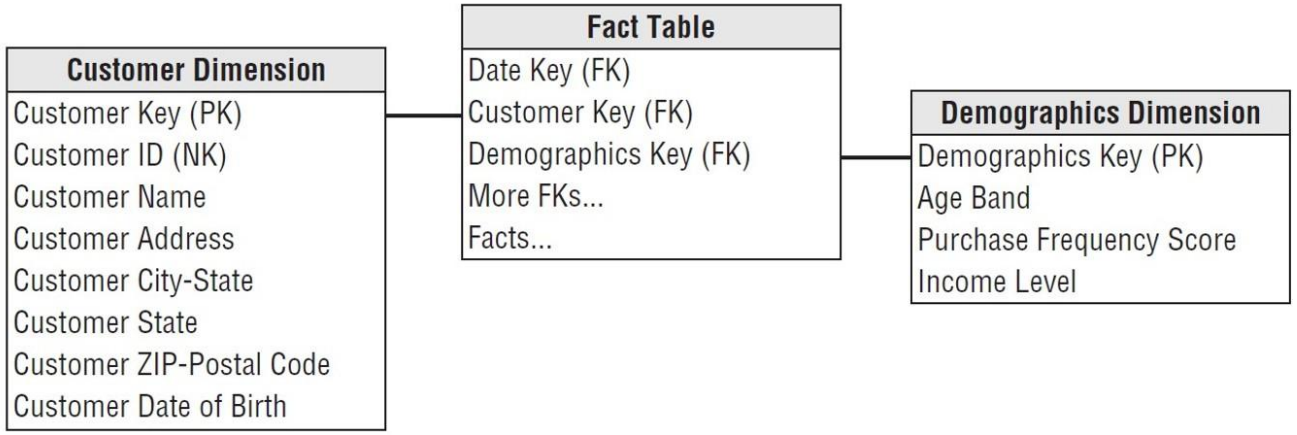

Figure 11

Original row in Product dimension:

Product Key	SKU (NK)	Product Description	Historic Department Name	Current Department Name	...	Row Effective Date	Row Expiration Date	Current Row Indicator
12345	ABC922-Z	IntelliKidz	Education	Education	...	2012-01-01	9999-12-31	Current

Rows in Product dimension following first department reassignment:

Product Key	SKU (NK)	Product Description	Historic Department Name	Current Department Name	...	Row Effective Date	Row Expiration Date	Current Row Indicator
12345	ABC922-Z	IntelliKidz	Education	Strategy	...	2012-01-01	2013-01-31	Expired
25984	ABC922-Z	IntelliKidz	Strategy	Strategy	...	2013-02-01	9999-12-31	Current

Figure 12

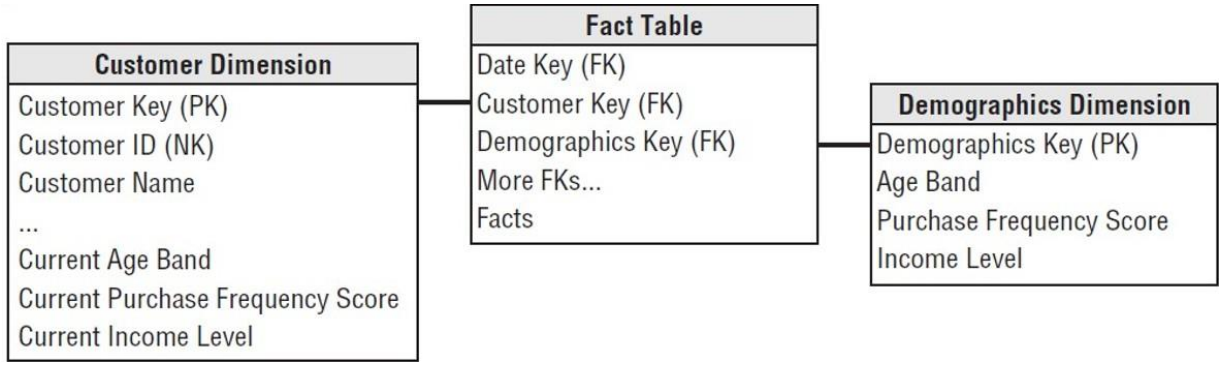

Figure 13

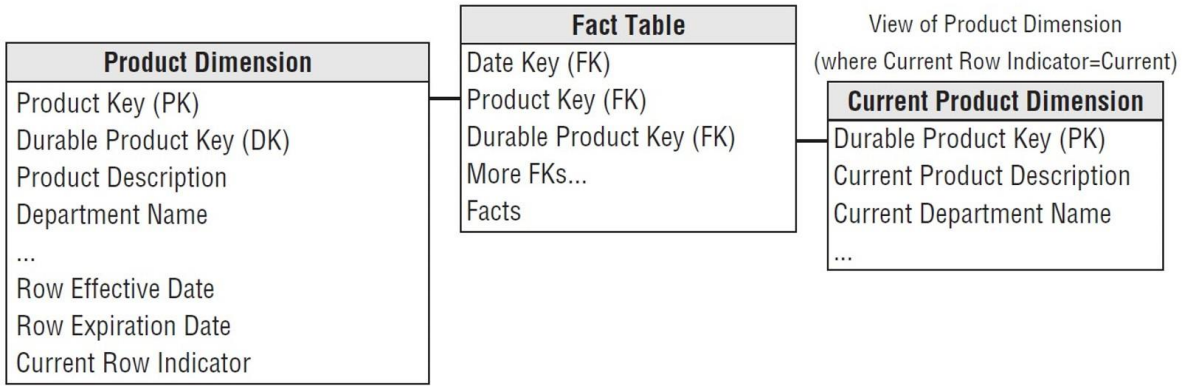

Figure 14

Business Processes	Atomic Granularity	Metrics	Date	Product	Vendor	Contract Terms	Employee	Warehouse	Carrier
Purchase Requisitions	1 row per requisition line	Requisition Quantity & Dollars	X	X	X	X	X		
Purchase Orders	1 row per PO line	PO Quantity & Dollars	X	X	X	X	X	X	X
Shipping Notifications	1 row per shipping notice line	Shipped Quantity	X	X	X		X	X	X
Warehouse Receipts	1 row per receipt line	Received Quantity	X	X	X		X	X	X
Vendor Invoices	1 row per invoice line	Invoice Quantity & Dollars	X	X	X	X	X	X	
Vendor Payments	1 row per payment	Invoice, Discount & Net Payment Dollars	X	X	X	X		X	

Figure 15

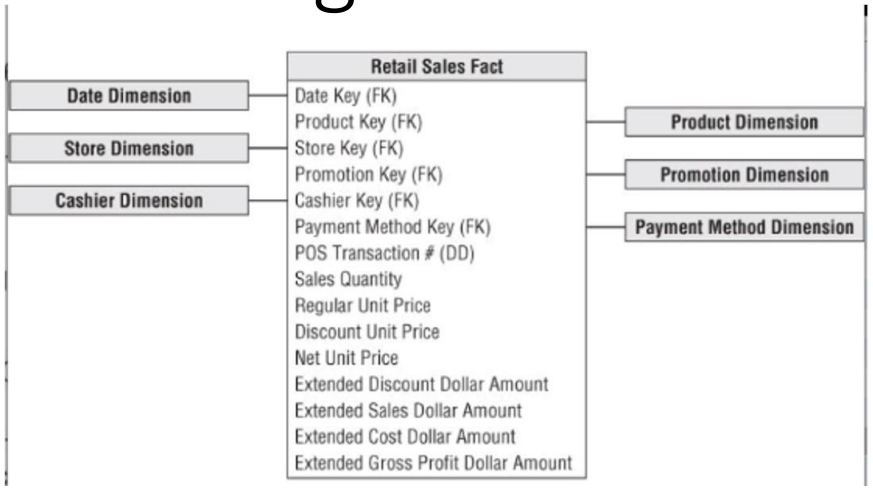

Figure 16

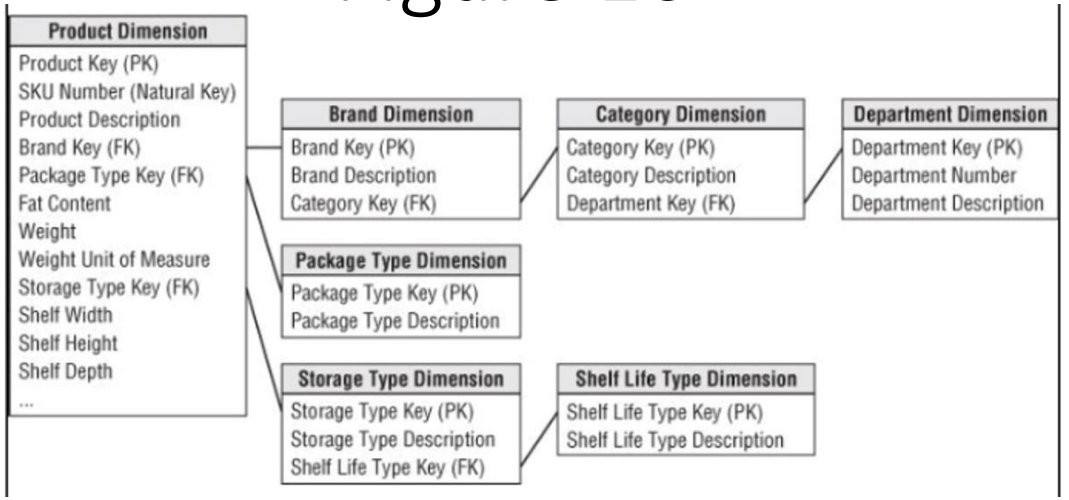

Figure 17

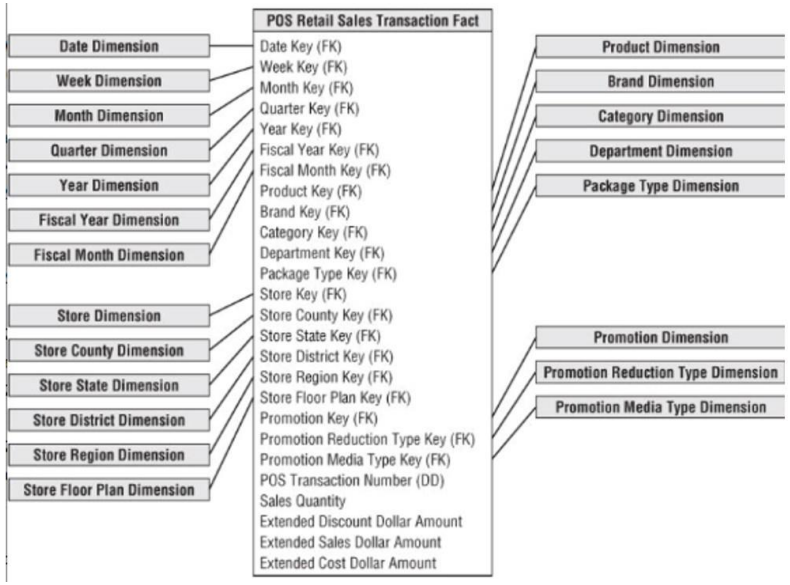

Figure 18

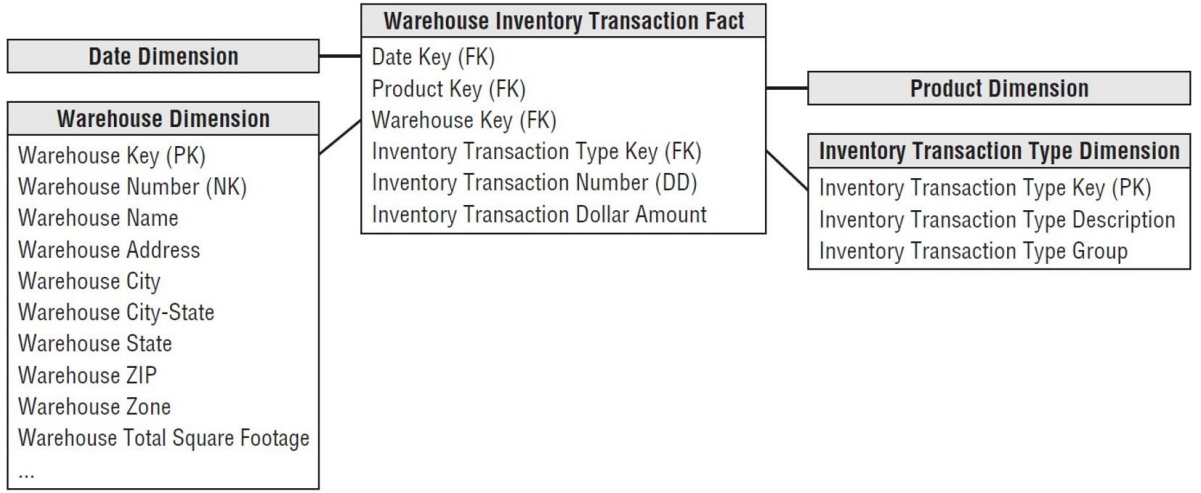

Figure 19

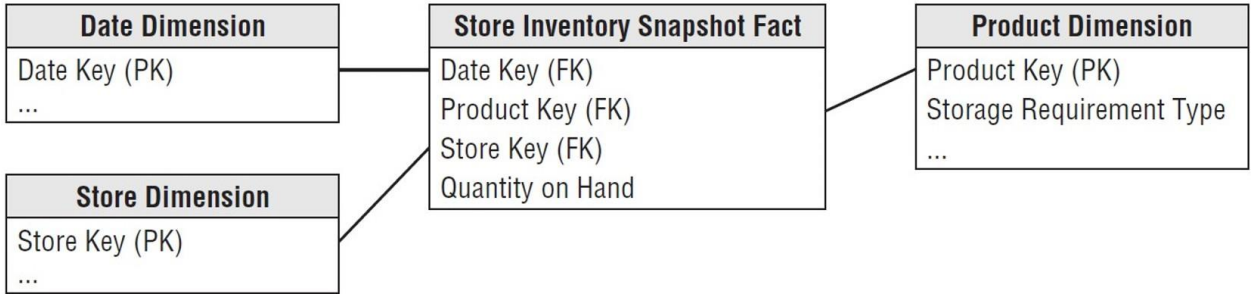

Figure 20

Fact row inserted when lot received:

Lot Receipt Number	Date Received Key	Date Inspected Key	Date Bin Placement Key	Product Key	Quantity Received	Receipt to Inspected Lag	Receipt to Bin Placement Lag
101	20130101	0	0	1	100		

Fact row updated when lot inspected:

Lot Receipt Number	Date Received Key	Date Inspected Key	Date Bin Placement Key	Product Key	Quantity Received	Receipt to Inspected Lag	Receipt to Bin Placement Lag
101	20130101	20130103	0	1	100	2	

Figure 21

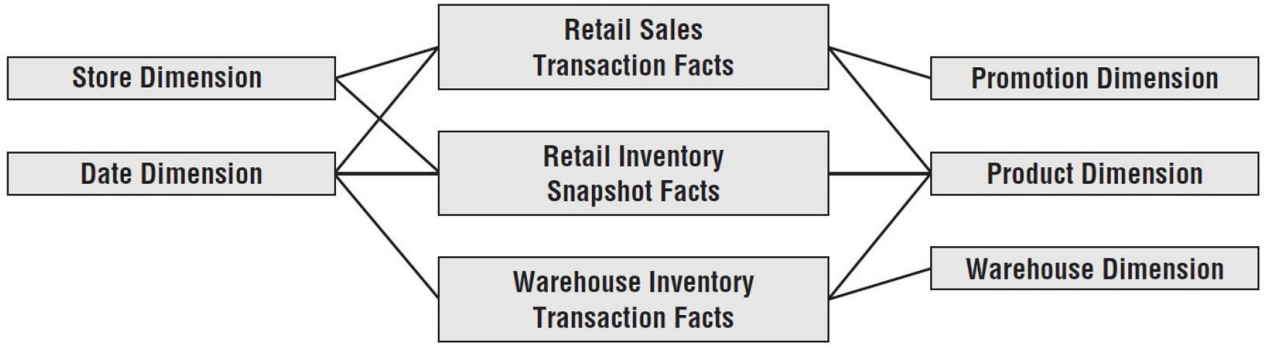

Figure 22

	Transaction	Periodic Snapshot	Accumulating Snapshot
Periodicity	Discrete transaction point in time	Recurring snapshots at regular, predictable intervals	Indeterminate time span for evolving pipeline/workflow
Grain	1 row per transaction or transaction line	1 row per snapshot period plus other dimensions	1 row per pipeline occurrence
Date dimension(s)	Transaction date	Snapshot date	Multiple dates for pipeline's key milestones
Facts	Transaction performance	Cumulative performance for time interval	Performance for pipeline occurrence
Fact table sparsity	Sparse or dense, depending on activity	Predictably dense	Sparse or dense, depending on pipeline occurrence
Fact table updates	No updates, unless error correction	No updates, unless error correction	Updated whenever pipeline activity occurs