Inspire...Educate...Transform.

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Tableau- Lab

Tableau

Tableau is business intelligence software that helps people see and understand their data.

Fast Analytics

Connect and visualize your data in minutes. Tableau is 10 to 100x faster than existing solutions.

Ease of Use

Anyone can analyze data with intuitive drag & drop products. No programming, just insight.

Big Data, Any Data

From spreadsheets to databases to Hadoop to cloud services, explore any data.

Smart Dashboards

Combine multiple views of data to get richer insight. Best practices of data visualization are baked right in.

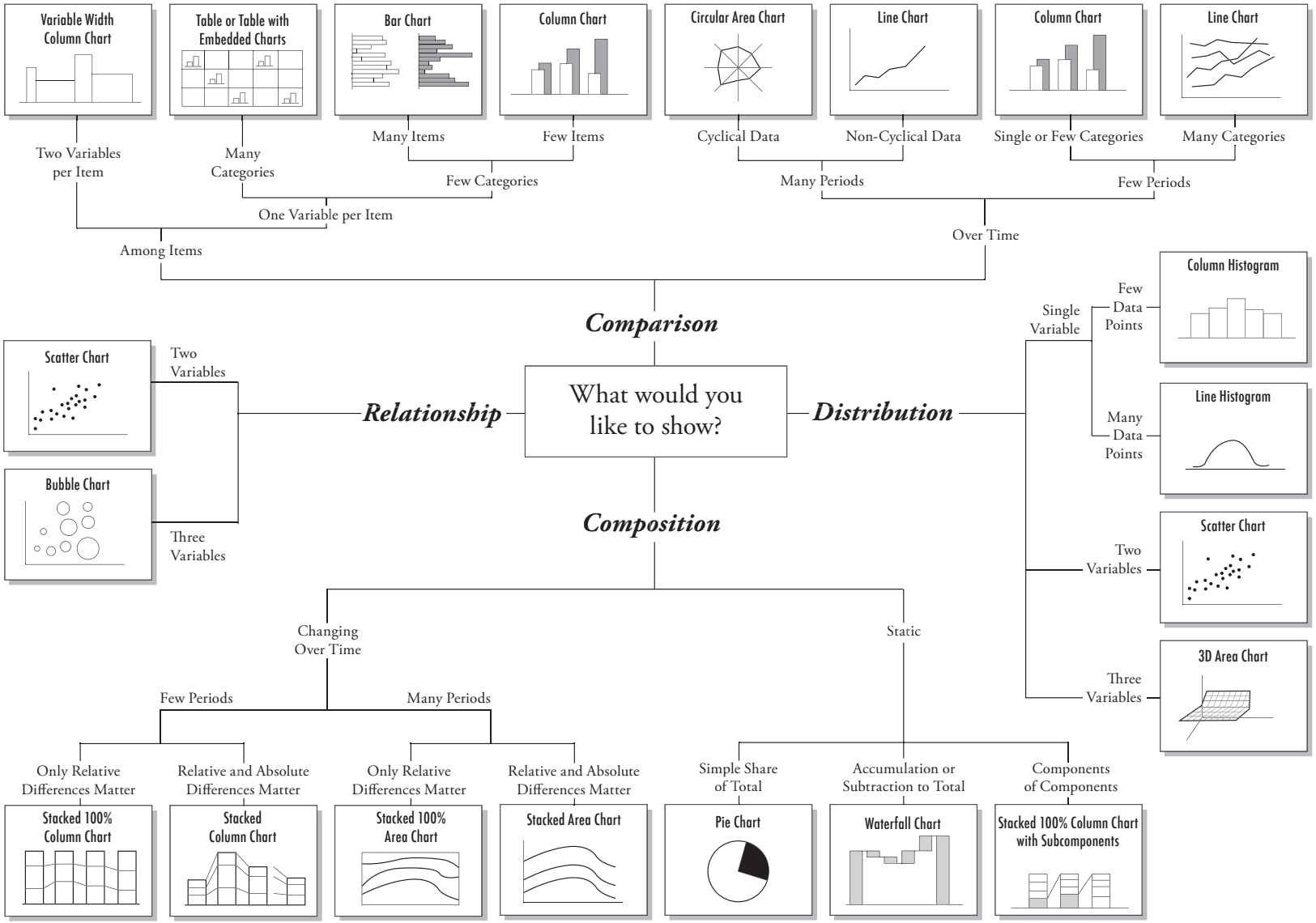
Tableau Data Types

Data Type	Description	Example
STRING	Any sequence of zero or more characters. They are enclosed within single quotes. The quote itself can be included in a string by writing it twice.	'Hello' 'Quoted' 'quote'
NUMBER	These are either integers or floating points. It is advised to round the floating point numbers while using them in calculations.	3 142.58
BOOLEAN	They are logical values.	TRUE FALSE
DATE & DATETIME	Tableau recognizes dates in almost all formats. But in case we need to force Tableau to recognize a string as date, then we put a # sign before the data.	"02/01/2015" "#3 March 1982"

When to choose what kind of plot ?

1 Variable	**Numeric**	**Histogram**
1 Variable	**Categorical**	**Barplot**
2 variables	**Numeric vs Numeric**	**Scatterplot**
2 variables	**Numerical vs Categorical**	**Boxplot**
3 variables	**Color or shape or facet**	
> 3 variables	**Color and/or shape and/or facet**	

Chart Suggestions—A Thought-Starter



Activity

Dataset : AirFares

AirFares Data

S_CODE: starting airport's code
S_CITY: starting city
E_CODE: ending airport's code
E_CITY: ending city
COUPON: average number of coupons (a one-coupon flight is a non-stop flight, a two-coupon flight is a one stop flight, etc.) for that route.
NEW: number of new carriers entering that route between Q3-96 and Q2-97
VACATION: whether a vacation route (Yes) or not (No); Florida and Las Vegas routes are generally considered vacation routes
SW: whether Southwest Airlines serves that route (Yes) or not (No)
HI: Herfindel Index – measure of market concentration (refer to BMGT 681)
S_INCOME: starting city's average personal income
E_INCOME: ending city's average personal income
S_POP: starting city's population
E_POP: ending city's population
SLOT: whether either endpoint airport is slot controlled or not; this is a measure of airport congestion
GATE: whether either endpoint airport has gate constraints or not; this is another measure of airport congestion
DISTANCE: distance between two endpoint airports in miles
PAX: number of passengers on that route during period of data collection
FARE: average fare on that route

Tableau use cases – Airfares dataset

1. Visualization of relationship between Fare and Distance (Scatter plot).
2. Visualization of relationship between Fare and Vacation (Box plot).
3. Average Fare based on the destination city (Bar chart).
4. Visualization on how the Southwest airlines sell tickets for lesser price (Facet plot).
5. Average fare based on hierarchical of source and destination. (hierarchy plot).
6. Fare based on Ecity. Also identify if SW airlines serves that route (Tree map).
7. Create a Dashboard.
8. Create a Story.