Tableau

By Rayapatis

Rajeswar Rayapati

- 8+ years of professional experience
- A Data Geek
- Tableau, SQL, PLSQL
- Loves solving problems
- Passionate about Tableau
- Mad about LODs

My Social Presence

- Youtube Channel - https://www.youtube.com/c/Rayapati/
  - 3200+ Subscribers
- LinkedIn Profile - https://www.linkedin.com/in/rayapati/
  - 6300+ Followers
- Tableau Public - https://public.tableau.com/app/profile/rajeswar.rayapati
  - 100+ Followers
- Website - www.rayapatianalytics.com

What do Data Beholds

- Every Business is producing Data and crunching the Data makes you understand the Business that you never knew existed before
- Data Driven Decision Making
- What are the high Days and low Days of Business?
- Why Big Bazar started Wednesday Markets?
- How to identify a returning customer?
- How to measure business using KPIs
- What are the Bottlenecks of a Business?
- All these questions about a business lies in the Data But how do we find answers to these Questions?

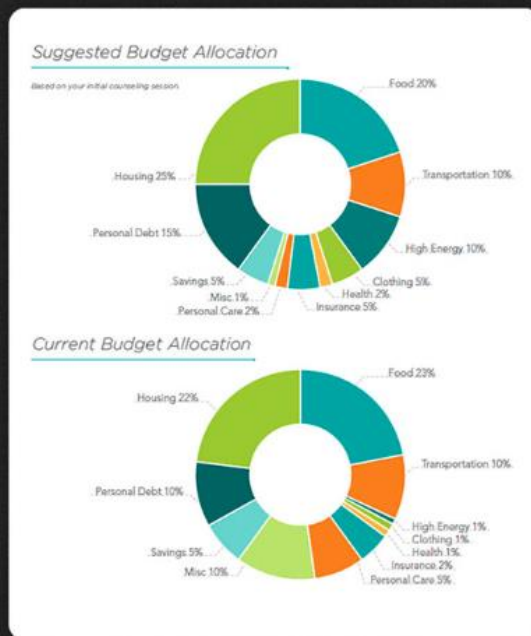# Every Business has its own Story to tell

- Data is just collection of Facts and Dimensions
- But when Sliced and Diced correctly, you can always tell a very good story
- But what is the best way to tell a Story?
- How many of you read Tinkle? I still remember Shikari Shambu, Supandi, Kalia the Crow. What is great about them?
- It is not just a story but the characters are very realistic. They had a profound effect on me.
- I have always been a fan of telling a story with pictures in my childhood
- But my Professional Experience is not much different
- I still try to tell stories but by DATA VISUALIZATION

Why Data Visualization

Which Tells a better Story?

Which info is Faster to grab and easy to remember?

Sub-Catego..	Profit	Sales
Accessories	41,937	167,380
Appliances	18,138	107,532
Art	6,528	27,119
Binders	30,222	203,413
Bookcases	-3,473	114,880
Chairs	26,590	328,449
Copiers	55,618	149,528
Envelopes	6,964	16,476
Fasteners	950	3,024
Furnishings	13,059	91,705
Labels	5,546	12,486
Machines	3,385	189,239
Paper	34,054	78,479
Phones	44,516	330,007
Storage	21,279	223,844
Supplies	-1,189	46,674
Tables	-17,725	206,966
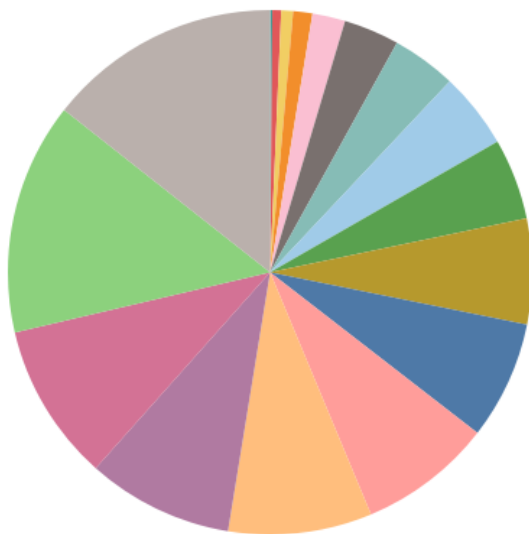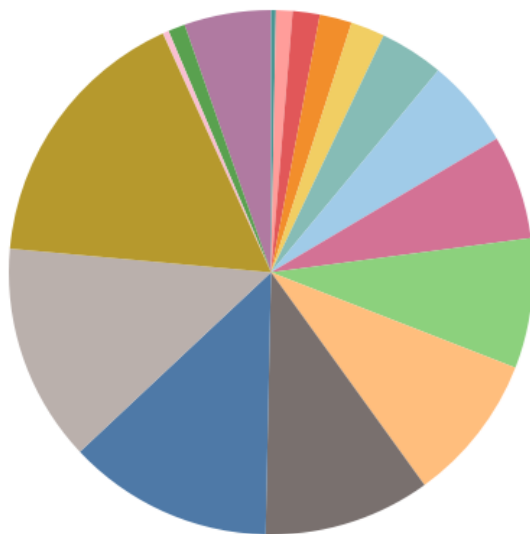
Lets click on the URL and see what it has to offer

https://luminocity3d.org/WorldPopDen/#3/13.75/49.04

- With one Map and a Legend, this website tells a lot about the Density of the World's Population
- First take away, the Population is not spread across all over the world but is concentrated at only few points
- Southern Asia has high density of Population
- Zoom in to understand that each City level density of the Data
- All of this in one interactive image
- That's the power of Visualization

Why Tableau?

- How many of you want to Travel in a Driverless Car?
- I am in just for the thrill and also I don't know how to drive a Car
- For me the "Janjhat" of driving will be solved
- Same why introduction of Tableau made Data Visualization a Layman term
- You need not know all the technicalities to start working on Data
- You need not write Queries also. Tableau writes them for you
- Tableau will even suggest a graph for you
- Tableau helps you share your DATA STORY with the world
- Data Analysis has become PLUG and PLAY

Gartner's Magic Quadrant

Leader from the past 7 years in a market where you see new BI tool every other day

Tableau Journey as I see

Tableau has three phases according to me

- Pre 10.5
- 10.5 to 2020.1
- 2020.2 and above

Till 10.5 Tableau is just like any other BI tool for me but from 10.5 with LODs, I started fantasizing Tableau and with introduction of Relationships in Tableau, I am madly in love with it.

You can call this course Tableau - my Love Story

Want more...

- VIZQL - DIY kit for Data Analysis
- .hyper - Bullet Train in Data Engines
- Columnar Database Model - High Data compression
- Cross DB Joins

Design Flow in Tableau
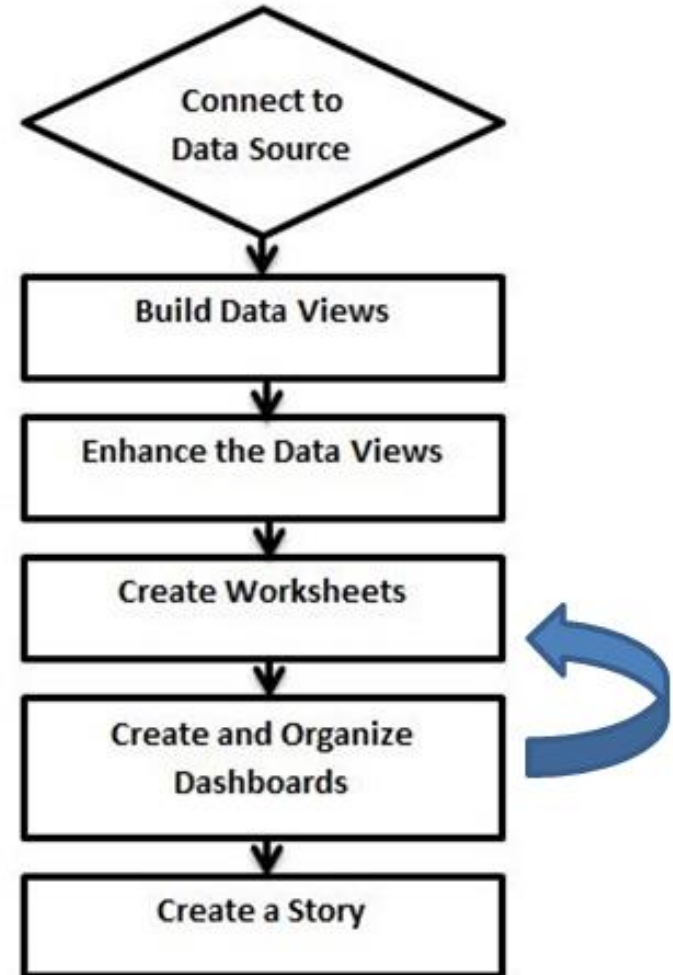
Scenario-Based Tableau Training

What is Scenario-Based Tableau Training?

- Any Tool has two parts of Learning
  - Theoretical Understanding of the Tool
  - Industry level application part of the Tool
- So, Training is divided into two Parts
  - Self Paced Videos - Theoretical Part of Tableau
  - Live Sessions - Scenario-Based Implementation part of Tableau
- What does the Scenarios Cover?
  - Scenarios that reinforce the Tool understanding
  - Most common Scenarios in Real Time
  - Complicated Scenarios that make your resume stronger
  - If you have any Scenario - We can Discuss in the Sessions

What does your Live Sessions look like

- Every Friday evening, Self Paced videos of the Sessions are provided along with the Scenarios that you need to address
- In live Sessions first all your Doubts will be addressed and then Scenarios are discussed with a step by step approach to solution
- Also if you saw a Scenario somewhere and want to discuss, you are welcome

What Bonus do you get in this Training

- Social Profile Building - LinkedIn and Tableau Public
- Interview Help
- Strong Resume Points
- Access to a Telegram Group containing all my Trainees
- Monthly Doubts Session once the Training is provided
- A process to address your complicated Real-time Scenarios

Agenda of the Course

Module 1

- Tableau Introduction
- Tableau Products
- Data Types
- Data Connection-Live, Extract
- Dimensions and Measures
- Parts of the Tableau View
- Building the Basics

- Understanding the granularities and its effect on Tableau
- Multiple Dimensions and Measures in View
- Types of Axis and their Use Cases
- Blended Axis
- Dual Axis

Module 2

- Building Maps and Understanding Geographic Analysis, Custom Geocoding
- Edit locations in maps
- Filtering Concept
- Quick Filters
- Date Filters
- Context Filtering and its area of implementation

- Data Source Filters and Extract Filters
- Parameters
- What are Sets and their implementations
- Binning the Measures
- Grouping the Data
- Hierarchies

Module 3

- Functions in Tableau
  - Number Functions
  - String Functions
  - Date Functions
  - Type Conversion Functions
  - Logical Functions
  - Aggregation Functions
- Basic Calculations
- Cascading Filters
- Sorting the Data in Tableau

Module 4

- Basic Charts in Show Me and marks card
- Shapes
- Background Images in Tableau
- Page Shelf and Animations using it
- Sorting the Data in Tableau
- Dashboards
- Stories

- Actions
  - Filter Actions
  - Highlight Actions
  - Format Options
  - URL Action
  - Set Actions
  - Parameter Actions

Module 5

- Level of Detail Expressions
- Relationships in Tableau and its implementation
- 8 R's of Relationship
- Joins in SQL and Tableau
- Basics of Data Blending
- Issues with Data Blending and Solutions
- Understanding Window Calculations in Tableau

- Types of Table Calculations
- Manual Table Calculations
- Addressing Field and Partitioning Field
- Filtering using Table Calculations
- Advanced Calculations
- Period over Period and Period to Date Calculations
- Regular Expressions in Tableau

Module 6

- Advanced Charts
- Reference Types
- Reference Lines
- Reference Band
- Reference Distribution
- Box Plot
- Order of Operations
- Spatial Analysis
- Forecasting the Data
- Trend Lines

Module 7

- Tableau Server
- Mini Project
- Resume Preparation
- Interview Tips

* Doubts session every Saturday 10 AM

Tableau Products

Tableau products are majorly divided into 3 types
1. Data Cleaning Tools - Tableau Prep
2. Building tools - Tableau Desktop and Tableau Public
3. Sharing Tools - Tableau Server, Tableau Online, Tableau Reader, Tableau Mobile

Tableau Licensing

https://www.tableau.com/pricing/teams-orgs

Tableau Products Installation

Tableau Desktop: https://www.tableau.com/products/desktop/download

Earlier versions : https://www.tableau.com/support/releases

Tableau Public: https://public.tableau.com/en-us/s/download

Tableau Prep: https://www.tableau.com/products/prep/download

Tableau Server: https://www.tableau.com/support/releases/server

Tableau Online: https://www.tableau.com/products/cloud-bi

Tableau Reader: https://www.tableau.com/products/reader

Tableau Mobile:
https://play.google.com/store/apps/details?id=com.Tableau.TableauApp&hl=en_IN&gl=US