

A Mini Project Report on

# **“Flipkart Products Analysis Using Tableau”**

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## C E R T I F I C A T E

This is to certify that (*Shubham Kokane, Shreyas Soni, Piyush Wadi*) has successfully completed the project entitled “Flipkart Products Analysis Using Tableau” in the fulfillment of B. E. (Computer Engineering) LP-IV and this work has been carried out in my presence.

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## **ABSTRACT**

Online market analytics is the process of using analytical tools to provide analysis of business trends, patterns, and performance in the retail industry. Online superstore business analytics allows us to leverage data-driven insight from the business and the customers to improve the customer experience, increase the sales, and optimize operations. Successful e-commerce organizations leverage insight about their customers, products, and operations derived from retail analytics tools to make better decisions around marketing, sales, and operations. With online store analytics, we gain a single source of truth about customers, their preferences of product, and the profit analysis.

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# **1. INTRODUCTION**

Online store analysis is the process of using analytical tools to provide analysis of business trends, patterns, and performance in the retail industry. Online business analytics allow us to leverage data-driven insight from the business and the customers to improve the customer experience, increase the sales, and optimize operations.

Flipkart is one of the leading online stores in India right now. Flipkart products analysis can deliver actionable intelligence to positively inform every aspect of its business — from sales of their top selling products and marketing to supply chain, inventory, and customer behavior. Analysis tools like Tableau can help us to identify the most valuable customer cohort, as well as their product preferences. With the help of retail data analytics, we can identify products that sell best, forecast sales and future demand, and better control cash flow. Analysis tools like Tableau can support our efforts to improve operational performance and customer experience. Successful retail organizations leverage insight about the customers, products, and operations derived from retail analytics tools to make better decisions around marketing, sales, and operations.

## **2. MOTIVATION**

With online stores becoming major players in retail stores, from its analysis, we gain a single source of truth about the customers, their buying preferences, and their online and offline engagement with the brand. Along with this the other benefits of this analysis includes gaining insights on the customer behaviour and the pattern. This insight can help us build stronger relationships by informing the types of offers and experiences we provide. It also helps to enhance the customer experience with the store and online market, serving to attract and retain a more loyal customer following. This analysis will help in anticipating the demands and trends to forecast for the future sales and generate more revenue. And finally it can help in improving and optimizing in store operations.

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### **3. PROBLEM STATEMENT**

Flipkart(Online store) Analysis on dataset for analysing sales, discounts and categories and orders using Business Intelligence tools such as Tableau. Business Intelligence projects use Tableau to create reports, and then use the it to share their reports with others.

### **4. OBJECTIVES**

Tableau is a windows-desktop-based application for PCs and desktops, primarily for designing and publishing reports to the Service. Here we are analyzing the Data with the help of Tableau Public. Tableau Desktops can be customized to create visualization; which will display the analytics you need to answer crucial business questions.

### **5. SOFTWARE AND HARDWARE REQUIREMENTS**

#### **5.1 SOFTWARE REQUIREMENTS:**

1. Tableau V2021.1
2. Dataset (Flipkart Product Analysis-2016)

#### **5.2 HARDWARE REQUIREMENTS:**

1. Hard Disk: minimum of 1GB of available hard disk space.
2. Memory: recommended 4GB
3. Operating System: *Windows 7, 8.1, 10; Windows Server 2008 R2, 2012.*

## 6. Tool: Introduction

Tableau is a powerful and fastest growing data visualization tool used in the Business Intelligence Industry. It helps in simplifying raw data into a very easily understandable format.

Data analysis is very fast with Tableau and the visualizations created are in the form of dashboards and worksheets. The data that is created using Tableau can be understood by professionals at any level in an organization. It even allows a non-technical user to create a customized dashboard.

The best feature Tableau are

- Data Blending
- Real time analysis
- Collaboration of data

The great thing about Tableau software is that it doesn't require any technical or any kind of programming skills to operate. The tool has garnered interest among the people from all sectors such as business, researchers, different industries, etc.

For clear understanding, data analytics in tableau can be classified into two section

1. Developer Tools: The Tableau tools that are used for development such as the creation of dashboards, charts, report generation, visualization fall into this category. The Tableau products, under this category, are the Tableau Desktop and the Tableau Public.
2. Sharing Tools: As the name suggests, the purpose of the tool is sharing the visualizations, reports, dashboards that were created using the developer tools. Products that fall into this category are Tableau Online, Server, and Reader.

## 6.1 Architecture of Tableau:

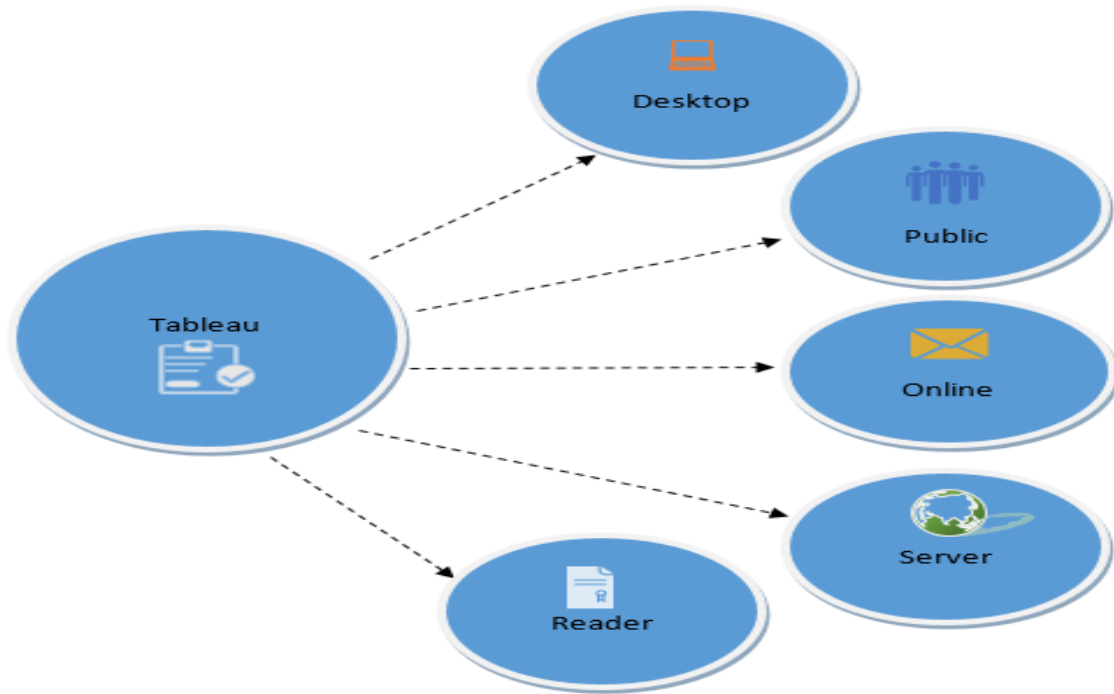
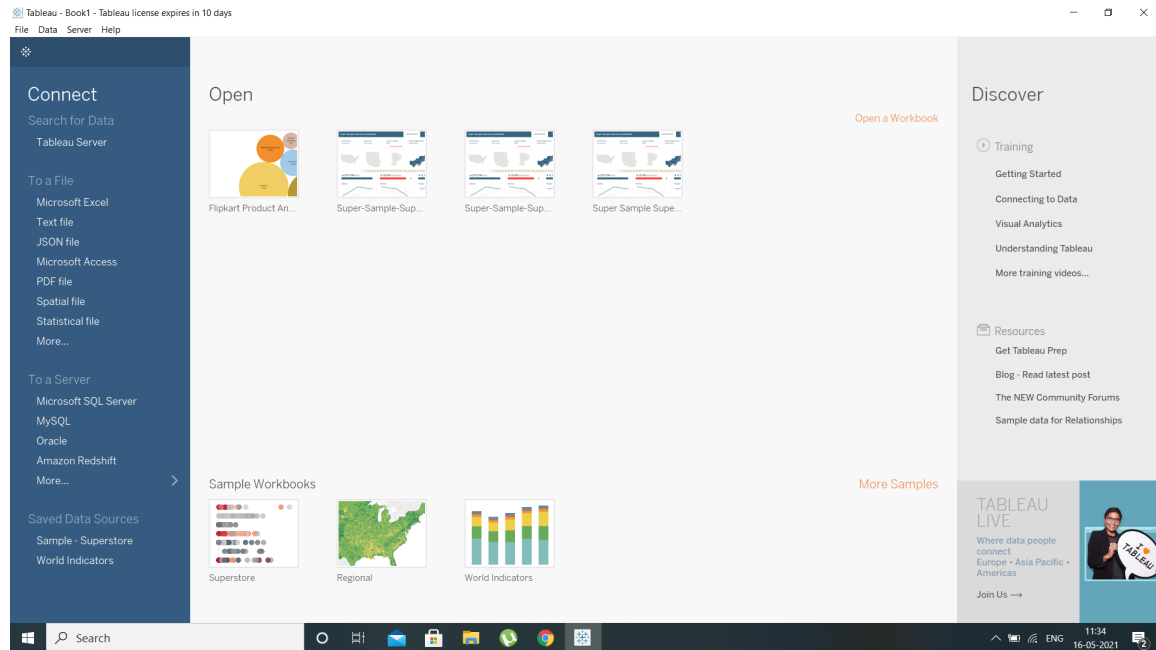


Fig 6.1 Tableau Product Suite

- **Tableau Desktop** – Tableau Desktop has a rich feature set and allows you to code and customize reports. Right from creating the charts, reports, to blending them all together to form a dashboard, all the necessary work is created in Tableau Desktop.
- **Tableau Public** – By the word "Public," it means that the workbooks created cannot be saved locally, in turn, it should be saved to the Tableau's public cloud which can be viewed and accessed by anyone.
- **Tableau Online** – As the name suggests, it is an online sharing tool of Tableau. Its functionalities are similar to Tableau Server, but the data is stored on servers hosted in the cloud which are maintained by the Tableau group.
- **Tableau Server** – To share dashboards in the Tableau Server, you must first publish your work in the Tableau Desktop. Once the work has been uploaded to the server, it will be accessible only to the licensed users.
- **Tableau Reader** – Tableau Reader is a free tool which allows you to view the workbooks and visualizations created using Tableau Desktop or Tableau Public. The data can be filtered but editing and modifications are restricted.

**Fig 7 Tableau Product Suite**



## • 7. STEPS OF IMPLEMENTATION WITH OUTPUT

### 7.1 Data

View Data: flipkart sample 2016 (flipkart sample 2016)

10,000 rows ☐ Show aliases

Brand	Category Drilldown	Category1	Category2	Category3	Created Timestamp	Description
Aloha	Clothing	Clothing	Women's Clothing	Lingerie, Sleep & Swimwear	2016-03-25 22:59:23 +0000	Key Features of Aloha Solid Women's Cy
FabHomeDecor	Furniture	Furniture	Living Room Furniture	Sofa Beds & Futons	2016-03-25 22:59:23 +0000	FabHomeDecor Fabric Double Sofa Bed (
AW	Footwear	Footwear	Women's Footwear	Ballerinas	2016-03-25 22:59:23 +0000	Key Features of AW Belles Sandals Wed
Aloha	Clothing	Clothing	Women's Clothing	Lingerie, Sleep & Swimwear	2016-03-25 22:59:23 +0000	Key Features of Aloha Solid Women's Cy
Scions	Pet Supplies	Pet Supplies	Grooming	Skin & Coat Care	2016-03-25 22:59:23 +0000	Specifications of Scions All Purpose Armt
Eternal Gandhi	Eternal Gandhi Super Series Crystal Paper Weight...	Eternal Gandhi Super Series Crystal Paper Weight...	Null	Null	2016-03-25 22:59:23 +0000	Key Features of Eternal Gandhi Super Se
Aloha	Clothing	Clothing	Women's Clothing	Lingerie, Sleep & Swimwear	2016-03-25 22:59:23 +0000	Key Features of Aloha Solid Women's Cy
FabHomeDecor	Furniture	Furniture	Living Room Furniture	Sofa Beds & Futons	2016-03-25 22:59:23 +0000	FabHomeDecor Fabric Double Sofa Bed (
dilli bazaar	Footwear	Footwear	Women's Footwear	Ballerinas	2016-03-25 22:59:23 +0000	Key Features of dilli bazaar Belles, Corj
Aloha	Clothing	Clothing	Women's Clothing	Lingerie, Sleep & Swimwear	2016-03-25 22:59:23 +0000	Key Features of Aloha Solid Women's Cy
Ladela	Footwear	Footwear	Women's Footwear	Ballerinas	2016-03-25 22:59:23 +0000	Key Features of Ladela Belles Brand: LAI
Carrel	Clothing	Clothing	Women's Clothing	Sports & Gym Wear	2016-03-25 22:59:23 +0000	Key Features of Carrel Printed Women's
Scions	Pet Supplies	Pet Supplies	Grooming	Skin & Coat Care	2016-03-25 22:59:23 +0000	Specifications of Scions All Purpose Tea
Aloha	Clothing	Clothing	Women's Clothing	Lingerie, Sleep & Swimwear	2016-03-25 22:59:23 +0000	Key Features of Aloha Solid Women's Cy
Freelance	Pens & Stationery	Pens & Stationery	School Supplies	Water Bottles	2016-03-25 22:59:23 +0000	Specifications of Freelance Vacuum Bott
Aloha	Clothing	Clothing	Women's Clothing	Lingerie, Sleep & Swimwear	2016-03-25 22:59:23 +0000	Key Features of Aloha Solid Women's Cy
FabHomeDecor	Furniture	Furniture	Living Room Furniture	Sofa Beds & Futons	2016-03-25 22:59:23 +0000	FabHomeDecor Fabric Double Sofa Bed (
Style Foot	Footwear	Footwear	Women's Footwear	Ballerinas	2016-03-25 22:59:23 +0000	Key Features of Style Foot Belles baller
Carrel	Clothing	Clothing	Women's Clothing	Sports & Gym Wear	2016-03-25 22:59:23 +0000	Key Features of Carrel Printed Women's
FabHomeDecor	Furniture	Furniture	Living Room Furniture	Sofa Beds & Futons	2016-03-25 22:59:23 +0000	FabHomeDecor Fabric Double Sofa Bed (
Scions	Pet Supplies	Pet Supplies	Grooming	Skin & Coat Care	2016-03-25 22:59:23 +0000	Specifications of Scions Conditioning Co
Aloha	Clothing	Clothing	Women's Clothing	Lingerie, Sleep & Swimwear	2016-03-25 22:59:23 +0000	Key Features of Aloha Solid Women's Cy
dangli	Clothing	Clothing	Kids' Clothing	Boys Wear	2016-03-31 15:22:07 +0000	Specifications of dangli Printed Boy's Rou
SWAGGA	Footwear	Footwear	Women's Footwear	Sports Sandals	2016-03-31 15:22:07 +0000	Key Features of SWAGGA Women Clogs
Kennel	Pet Supplies	Pet Supplies	Toys	Comfort Toys	2016-01-03 20:56:50 +0000	Buy Kennel Rubber Dumbell With Bell - S
Bengal Blooms	Bengal Blooms Rose Artificial Plant with Pot (3...	Bengal Blooms Rose Artificial Plant with Pot (3...	Null	Null	2016-05-11 09:26:02 +0000	Key Features of Bengal Blooms Rose Art
Indecrow	Clothing	Clothing	Women's Clothing	Ethnic Wear	2016-06-24 16:24:13 +0000	Key Features of Indecrow Net Embroider
Shogmania	Pens & Stationery	Pens & Stationery	Diaries & Notebooks	Notebooks	2016-06-24 16:24:13 +0000	Specifications of Shogmania Music Band
Shogmania	Pens & Stationery	Pens & Stationery	Diaries & Notebooks	Notebooks	2016-06-24 16:24:13 +0000	Specifications of Shogmania Music Band
Tiana Diaries	Pens & Stationery	Pens & Stationery	Diaries & Notebooks	Notebooks	2016-06-24 16:24:13 +0000	Specifications of Tiana Diaries 2016-2017
KAJCI	Clothing	Clothing	Women's Clothing	Formal Wear	2016-03-03 07:19:26 +0000	Specifications of KAJCI Embroidered Wor
Packman	Pens & Stationery	Pens & Stationery	Office Supplies	Packaging Security Bags	2016-03-03 07:19:26 +0000	Key Features of Packman 8 x 10 inches S
Pick Pocket	Clothing	Clothing	Women's Clothing	Formal Wear	2016-03-03 07:19:26 +0000	Specifications of Pick Pocket Embroidere
Angelfish	Bags, Wallets & Belts	Bags, Wallets & Belts	Bags	Pouches and Pottis	2016-03-03 07:19:26 +0000	Specifications of Angelfish Silk Pouch (Multi
Oye	Clothing	Clothing	Kids' Clothing	Boys Wear	2016-03-03 07:19:26 +0000	Specifications of Oye Boy's Dungee Tee To
Nuride	Footwear	Footwear	Women's Footwear	Casual Shoes	2016-05-26 06:31:26 +0000	Key Features of Nuride Canvas Shoes Me
OM SHIVANOTTI	Home Decor & Festive Needs	Home Decor & Festive Needs	Shoppees	Accessories & Spare parts	2016-05-26 06:31:26 +0000	Key Features of OM SHIVANOTTI Square
Himmilich	Automotive	Automotive	Accessories & Spare parts	Car Interior & Exterior	2016-05-26 06:31:26 +0000	Himmilich ST 381 Magnetic Sun Shade Fi
Raptor	Tools & Hardware	Tools & Hardware	Tools	Hardware & Electricals	2016-04-05 17:56:58 +0000	Raptor BNC-178 BNC Wire Connector (Sil
Vishuud	Vishuud Printed Women's Straight Kurta	Vishuud Printed Women's Straight Kurta	Null	Null	2016-04-05 17:56:58 +0000	Specifications of Vishuud Printed Women
Vishuud	Vishuud Printed Women's Straight Kurta	Vishuud Printed Women's Straight Kurta	Null	Null	2016-04-05 17:56:58 +0000	Specifications of Vishuud Printed Women
Vishuud	Vishuud Printed Women's Anarkali Kurta	Vishuud Printed Women's Anarkali Kurta	Null	Null	2016-04-05 17:56:58 +0000	Specifications of Vishuud Printed Women
BuildTrack	BuildTrack PIR Wireless Motion Sensor - One Swit...	BuildTrack PIR Wireless Motion Sensor - One Swit...	Null	Null	2016-04-05 17:56:58 +0000	Key Features of BuildTrack PIR Wireless
Skayvon	Skayvon SUMMERSIBLE SINGLE PHASE PUMP CONTROLLER...	Skayvon SUMMERSIBLE SINGLE PHASE PUMP CONTROLLER...	Null	Null	2016-04-05 17:56:58 +0000	Key Features of Skayvon SUMMERSIBLE :
MASARA	MASARA Solid Women's Straight Kurta	MASARA Solid Women's Straight Kurta	Null	Null	2016-04-05 17:56:58 +0000	Key Features of MASARA Solid Women's
Vishuud	Vishuud Printed Women's Straight Kurta	Vishuud Printed Women's Straight Kurta	Null	Null	2016-04-05 17:56:58 +0000	Specifications of Vishuud Printed Women
Raptor	Tools & Hardware	Tools & Hardware	Tools	Hardware & Electricals	2016-04-05 17:56:58 +0000	Raptor BNC-047 BNC Wire Connector (Sil
Skayvon	Skayvon SUMMERSIBLE THREE PHASE PUMP CONTROLLER...	Skayvon SUMMERSIBLE THREE PHASE PUMP CONTROLLER...	Null	Null	2016-04-05 17:56:58 +0000	Key Features of Skayvon SUMMERSIBLE :

**Fig 7.1 Upload Data**

## 7.2 Create visuals, such as charts or graphs, that provide visual representations of the data

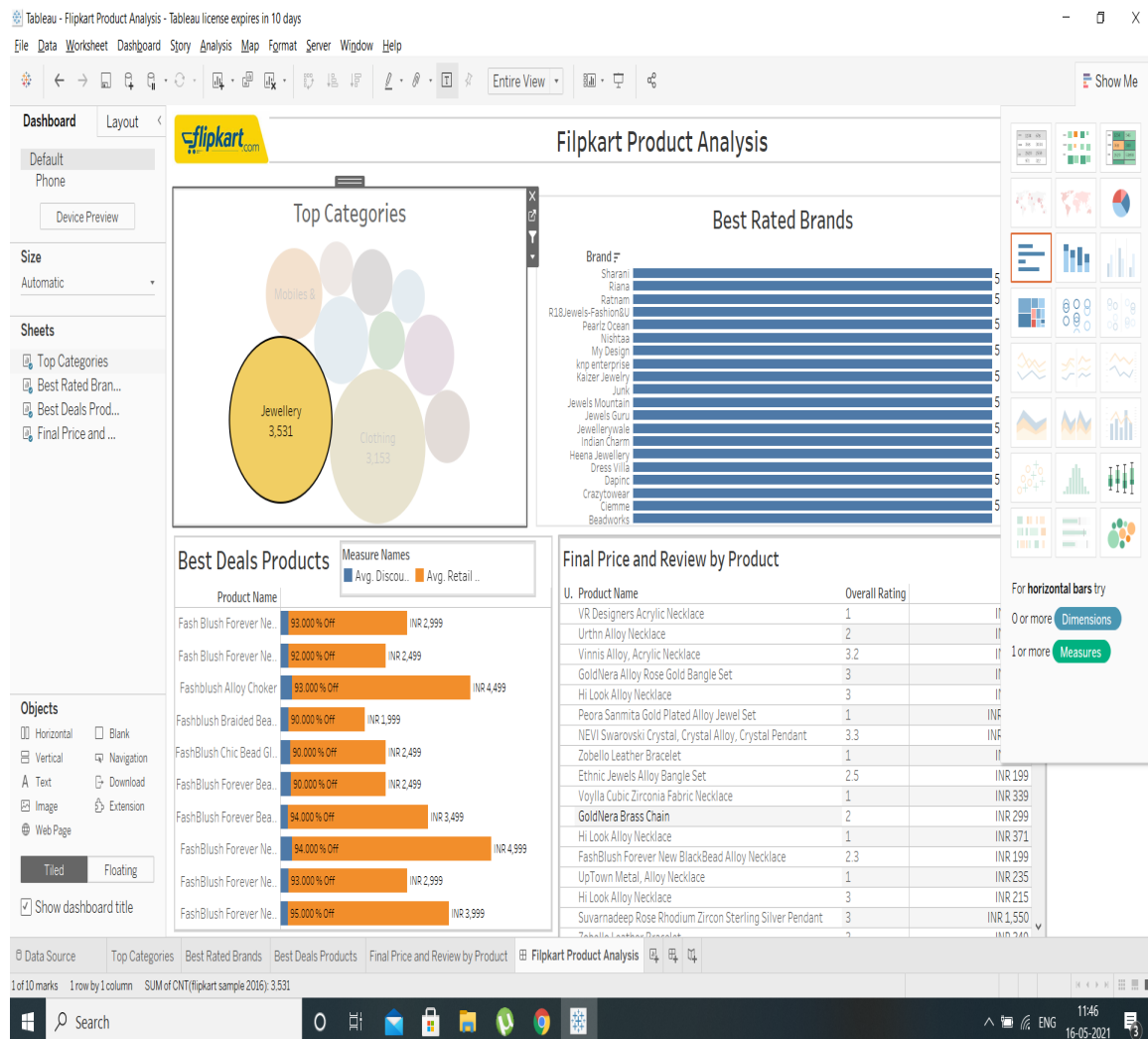


Fig 7.2.1 Dashboard

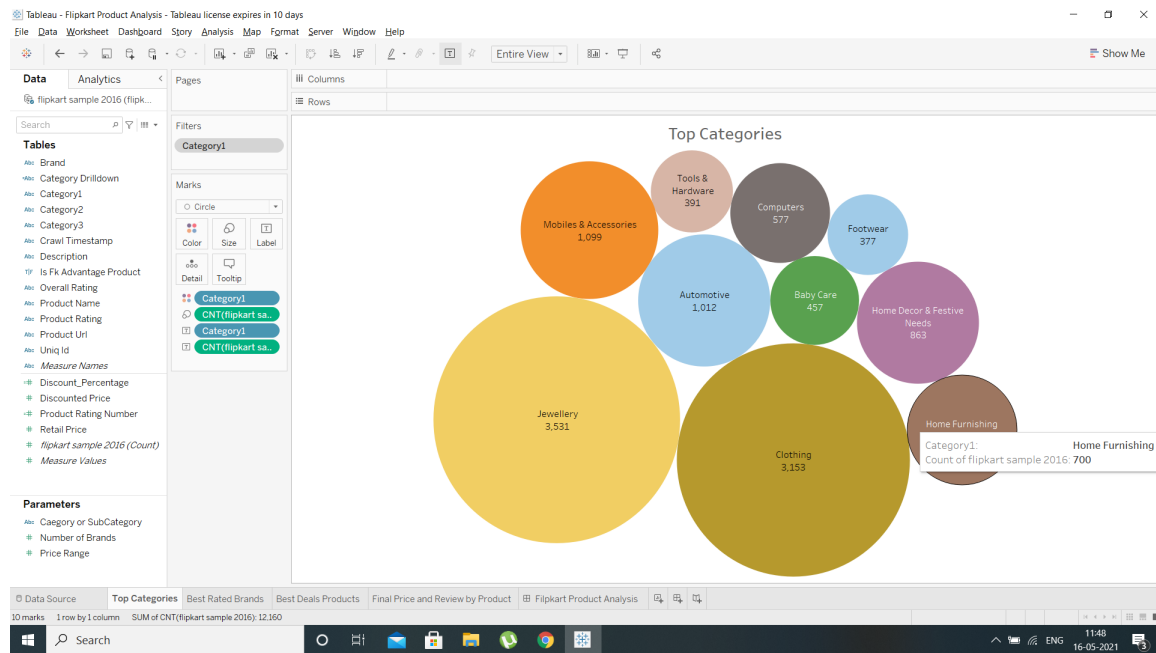


Fig 7.2.2 Top Categories

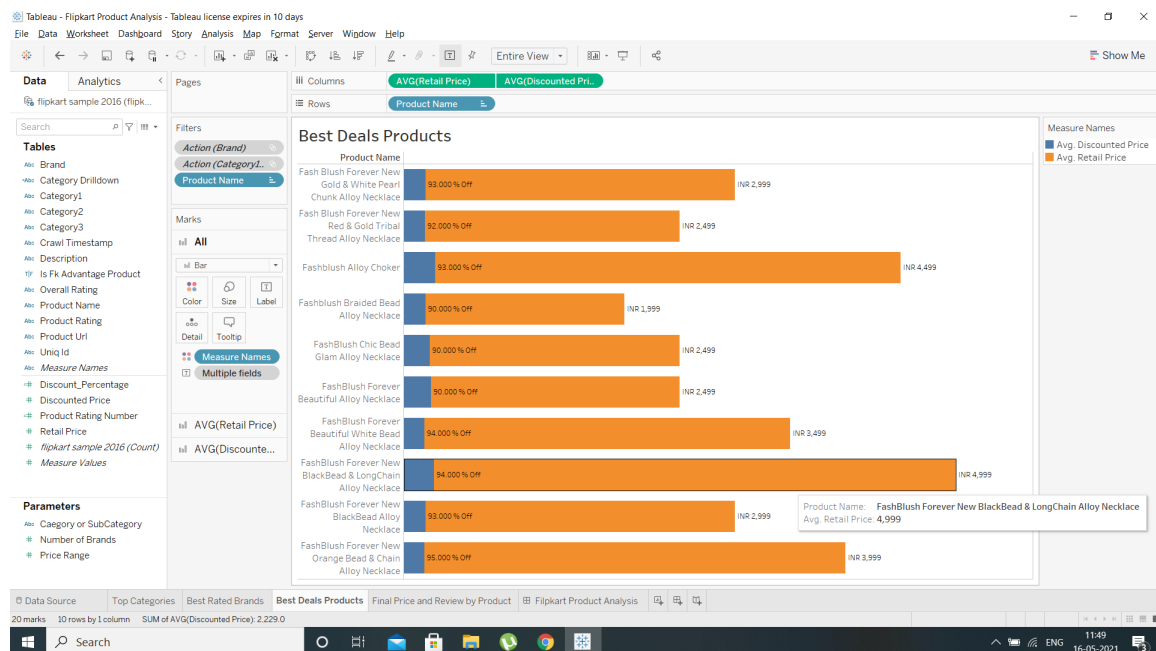


Fig 7.2.3 Best Deal Products

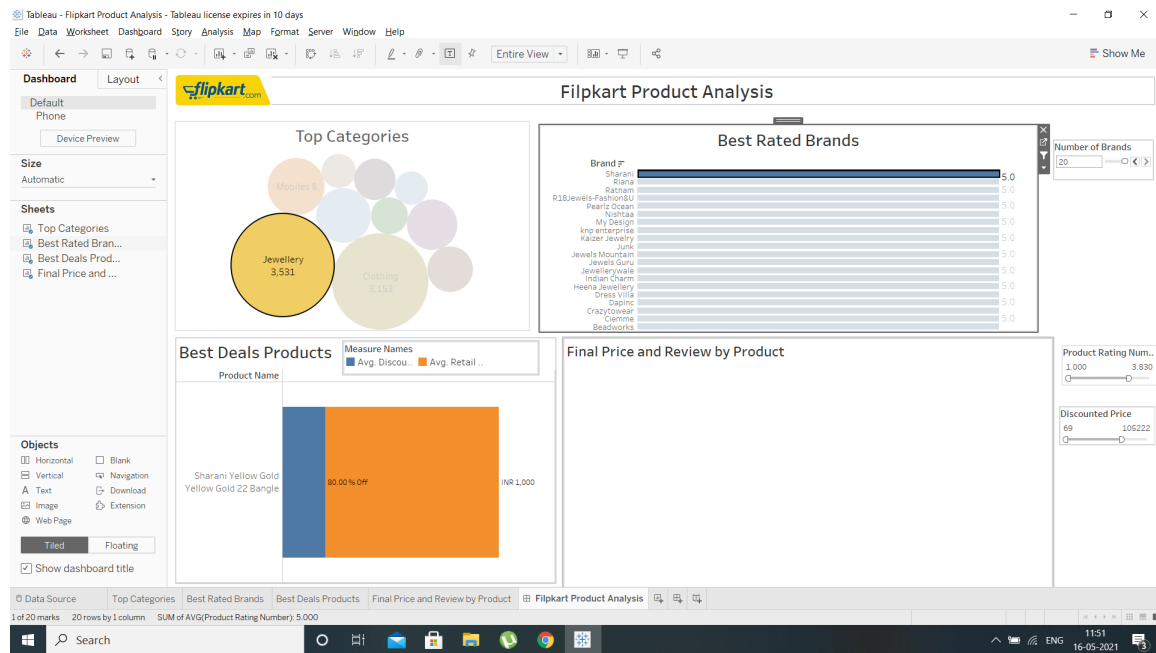


Fig 7.2.4 Best Rated Brands

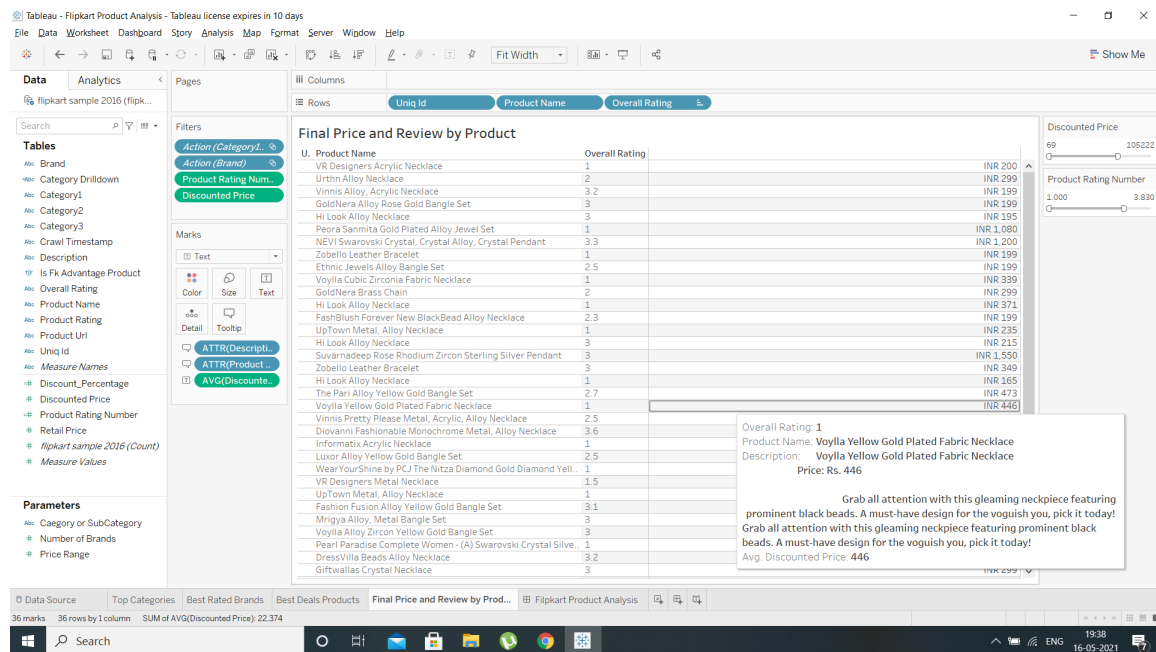


Fig 7.2.5 Final Price And Reviews

## **8. CONCLUSION**

Tableau is a business intelligence and reporting tool that allows users to create intuitive reports. A growing number of organizations are using Tableau as their business analytics solution. This tool provides an efficient and effective way to communicate concepts in general because the human brain processes visualized information. In Flipkart analysis, we analysed the sales, discounts and order in order to forecast future demands using Tableau Public.