

CASE STUDY ON E-COMMERCE COMPANIES: NYKAA, MYNTRA AND FLIPKART

TEAM MEMBERS

19MIA1028 NITHYA SHARMA

19MIA1030 DEEKSHITHA L

19MIA1033 THARANI KUMAR

19MIA1048 PARVATHY AJ

19MIA1053 YUVASHREE R

19MIA1083 K NIHARIKA SAMYUKTHA

Marketing Analytics (MGT3005)

Dr. Thangaraja Arumugam

Assistant Professor Business School

28-04-2022

Winter 2021-2022



TABLE OF CONTENTS

- Introduction
- Objectives
- Data source
- Data description
- Descriptive analytics
- Analytical Model
- Result and Discussion
- Conclusion
- Appendix

INTRODUCTION:

These days, e-commerce tends to be everywhere. You can't go online without seeing article after article declaring that e-commerce is destroying physical stores. It might be difficult to separate true information from falsified data spread by online alarmists. These overly pessimistic views, however, contain some truth. According to studies, by the end of 2021, 65 percent of internet users would be digital shoppers. Given how the data has been trending in recent years, this isn't a stretch.

That isn't to imply that people aren't still buying things in stores. While the National Retail Federation predicts an increase in online sales of 8-12 percent in 2017, brick and mortar retail will continue to account for the great majority of sales, increasing by 2.8 percent over the same period.

It's a burgeoning consumer market that shows no signs of slowing down. If you're selling something and want to keep doing so in the near future, you'll want to pay attention to e-commerce and become involved as soon as it's practical for your company. Working with a digital marketing agency may make the ecommerce shift much easier and help you get started with your online business whenever you decide to join the ranks.

There are a variety of reasons why the world, or at least those with internet connection, appears to be gravitating toward e-commerce. As a commercial outlet, the internet can provide advantages such as increased reach and lower operating costs. All of these advantages might have a substantial impact on the overall business.

Here are a few of the primary advantages of e-commerce:

Attract New Customers

Online retailers have more exposure to a larger audience. A physical business may only be known by pedestrians, whereas an e-commerce store can be visited and watched by an unlimited number of internet users. Using the power of the internet, some of the finest strategies to acquire new clients include:

Search Engine Results If your site is correctly optimized, you can reach a large number of new clients through search engines like Google and Bing. The more optimized your site is, the higher it will appear in search results, and the more clients you will be able to attract.

Social Sharing If your clients are pleased with your items, social sharing makes it simple for them to tell their friends and family about it. This works similarly to word-of-mouth in physical businesses, except that with the internet and social media, customers may provide a direct link to the goods on your website. Other customers now know exactly which product their friend enjoys and where to find it, with no hassle.

No Geographical Limitations

E-commerce, like its capacity to attract new clients, theoretically allows you to sell to customers regardless of where they are located. Of course, how far you're willing to send a product determines whether or not you qualify, but the opportunity there.

More Accessible

The internet, and thus your e-commerce store, is open 24 hours a day, seven days a week, unlike a conventional store. Customers will have easier access to your online store and its products as a result of this. E-commerce can also be accessed from any location with internet access. Customers no longer have to go to your location, which saves them time and money.

Customer Analytics

Customer analytics may help you improve anything from your product offerings to your marketing strategy for those products. In a physical store, you might be able to acquire some consumer information, but it would be time-consuming and possibly erroneous. When it comes to e-commerce, all you have to do is place a line of code into your HTML markup and everything else takes care of itself.

Here are a few examples of the kinds of data that consumer analytics can provide:

- Demographic Data
- Products Purchased
- Products Viewed
- Products Shared
- Referring Source
- Time Spent on Site
- Mobile vs Desktop Views
- Time of Purchase

Automation of Discounts

You can automate discounts and sales with e-commerce. On the backend of your site, you may create discount codes and specify expiration dates for them. This eliminates the risk of accepting an expired coupon, which may happen in a real store.

Customers can also be notified of any sales directly on the site. Each product is neatly labelled without the need for as much manual labor as in real stores.

Lower Costs

E-commerce allows you to automate discounts and sales. You can set discount codes on the backend of your site and create expirations for them. This mitigates the possibility of mistakenly accepting an expired coupon which could occur at a physical store.

One can also immediately notify customers of any sales directly on the site. Each product is clearly marked without much manual labor as is required in physical stores.

MYNTRA

Myntra is a major Indian fashion e-commerce company headquartered in Bengaluru, Karnataka, India. The company was founded in 2007 to sell personalized gift items. In May 2014, Myntra.com was acquired by Flipkart. Myntra understands its shoppers' needs and caters to them with choice of apparel, accessories, cosmetics and footwear from over 500 leading Indian and international brands. Prominent brands include Adidas, Nike, Puma, Catwalk, Inc 5, United Colors of Benetton, FCUK, Timberland, Avirate. FabIndia and Biba to name a few.

Myntra provides a number of Internet-based services through the Platform. One such Service enables Users to purchase original merchandise such as clothing, footwear and accessories from various fashion and lifestyle brands. A few target audience of myntra are people who are Fashion conscious, have medium income, young online shoppers etc. Myntra aims at providing a hassle free and enjoyable shopping experience to shoppers across the country with the widest range of brands and products on its portal.

NYKAA

Nykaa is an e-commerce company founded by Falguni Nayar in 2012 and they sell beauty, fashion, skin and hair-care and wellness products. It is the first Indian company founded by a woman to reach the status of a unicorn startup. As of 2021, the company has over 15 million registered users and 70 stores across India. It retails over 2000 brands and 200,000 products on its platform. The primary customer base of Nykaa are women in the ages of 18-35 and upper-middle-class people in general. The marketing strategies of social media marketing, content marketing, event marketing, video marketing, influencer marketing and cosmetic kiosks in retail stores. These tactics help the brand reach its target demographic with ease and make it more accessible to customers. In this project, we will be analyzing Nykaa's market and customer base to predict market behavior and assess customer experience.

FLIPKART

Flipkart is an Indian e-commerce company headquartered in Bengaluru. In 2007, Sachin Bansal and Binny Bansal started Flipkart and since then, Flipkart has only seen highs, selling a wide variety of products online. In the initial years, Flipkart focused on selling books but today the catalog covers categories like electronics, fashion, home essentials, groceries, and lifestyle products. More than 1 billion people have shopped using Flipkart, making the e-commerce giant the leading e-retailer in India.

Flipkart works on a B2C business model i.e. Business to Consumer model. It uses an undifferentiated targeting strategy and has positioned itself as a trustworthy and customer-friendly E-commerce brand. Flipkart operates with an employee strength of 33,000 employees. The online retail industry market is of a size of around 60 billion USD. It is expected to reach 200 billion by the year 2026. The company earns almost all of its operating revenues from the sale of goods. Flipkart's mission is "to provide delightful customer experience. "Flipkart's vision presently is "to become Amazon of India

OBJECTIVE:

In this project, we aim to perform a **case study analysis** on the customer experience, market behavior prediction and customer journey funnel analytics of three different companies in the E-Commerce industry, namely Myntra, Nykaa and Flipkart. As these companies fall under the same domain and their market and target audience intersect in multiple areas, we will be attempting to find similarities between them, interpret the effects of the marketing campaigns used by these companies and identify their differences in approach and the effects of these on the customer base.

DATA SOURCE:

The data was collected in the form of a csv file from Kaggle. All the three csv files contain information about the products purchased from respective websites. The Myntra dataset was created and data was obtained from PromptCloud and Datastock, which are web scraping companies. The Flipkart and Nykaa datasets were extracted from the website itself.

- Nykaa https://www.kaggle.com/datasets/susant4learning/nykaacosmeticsproductsreview2021
- Myntra
 https://www.kaggle.com/datasets/promptcloud/all-products-from-myntracom-2019
- Flipkart Product 20,000 products on Flipkart
 https://www.kaggle.com/datasets/PromptCloudHQ/flipkart-products

DATA DESCRIPTION & DATA ANALYTICS:

Nykaa Data Collection and Analysis:

The dataset is called 'Nykaa Cosmetics-Products-Review-2021' and was collected from Kaggle. The dataset contains information regarding various products purchased and has 18 columns including Product ID, Product Category, Product Price, Product Rating and Review, etc. The data was analyzed using Python on Google Colab.

After removing unnecessary features like Product ID, Brand Code, etc which does not contribute to data analysis, information about the following features were noted:

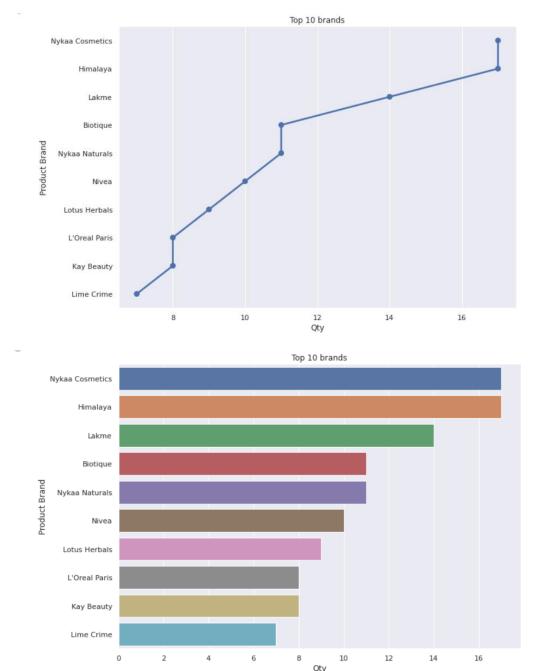
The number of products from each brand was found:

Data	columns (total 6 column	ns):	
#	Column	Non-Null Count	Dtype
0	Product Brand	486 non-null	object
1	Product Category	486 non-null	object
2	Product Description	486 non-null	object
3	Product Price	486 non-null	object
4	Product Reviews Count	486 non-null	float64
5	Product Rating	486 non-null	object
dtype	es: float64(1), object(5)	

	Product Brand	Qty
4	Nykaa Cosmetics	17
21	Himalaya	17
48	Lakme	14
30	Biotique	11
60	Nykaa Naturals	11
6	Nivea	10
7	Lotus Herbals	9
1	L'Oreal Paris	8
86	Kay Beauty	8
11	Lime Crime	7

Visualizing top reviewed brands:

Top ten brands are visualized in the form of point plot and bar chart as shown below:



From these graphs, we can conclude that Nykaa Cosmetics and Himalaya are the top brands with highest number of purchases. Lime Crime is the 10^{th} brand with the most purchases.

Finding the costliest brands:

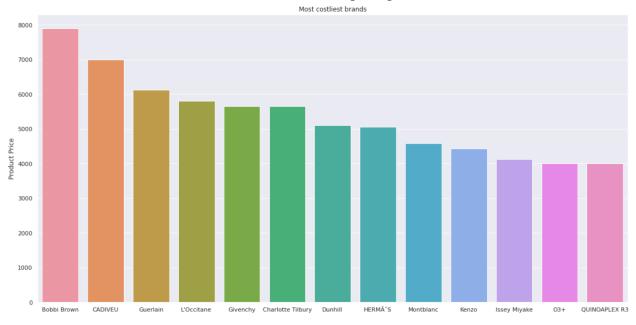
The brands are sorted based on their product prices:

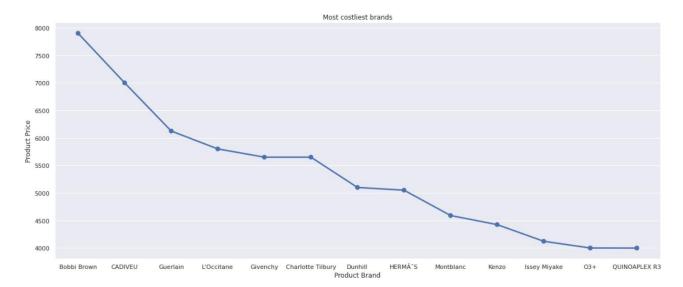
	Product Brand	Product Price	Product Rating
496	Bobbi Brown	7900.0	4.5
18	CADIVEU	7000.0	4.3
388	CADIVEU	7000.0	5.0
109	Guerlain	6125.0	4.7
349	L'Occitane	5800.0	4.3
605	Himalaya	41.0	4.5
115	KamaSutra	40.0	4.1
87	Himalaya	33.0	4.2
448	Liril	32.0	4.4
486	Godrej Protekt	25.0	4.4

The brand CADIVEU appears twice. To avoid this, duplicate products having same brand are removed and only unique ones are kept. After removing, we get the following output:

	Product Brand	Product Price	Product Rating
496	Bobbi Brown	7900.0	4.5
18	CADIVEU	7000.0	4.3
109	Guerlain	6125.0	4.7
349	L'Occitane	5800.0	4.3
135	Givenchy	5650.0	4.7
587	Charlotte Tilbury	5650.0	4.0
335	Dunhill	5100.0	5.0
394	HERMÃ^S	5050.0	4.9
229	Montblanc	4590.0	4.6
572	Kenzo	4425.0	4.0
317	Issey Miyake	4122.0	4.3
30	O3+	4000.0	4.0
514	QUINOAPLEX R3	3999.0	4.0

This information is then visualized into a bar chart and point plot.

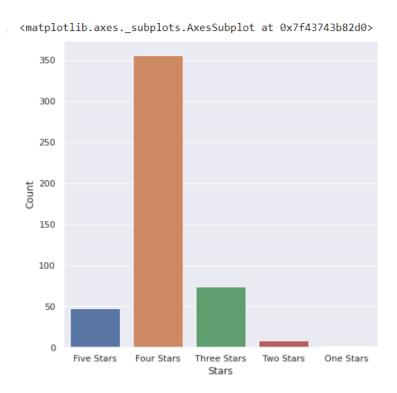




Bobbi Brown is the costliest brand followed by CADIVEU. O3+ and QUINOAPLEZ R3 are the cheapest brand offered by Nykaa.

Star rating in each category:

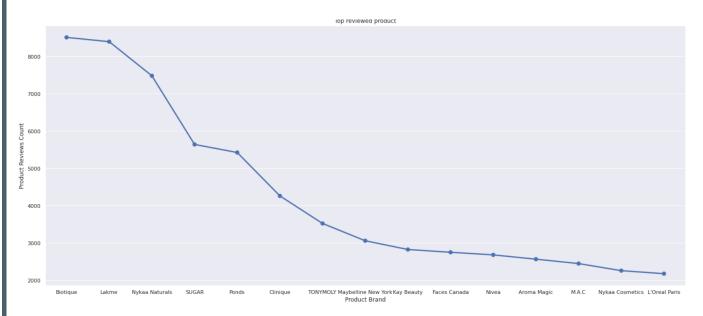
Count of each star rating is found:



	Stars	Count
0	Five Stars	47
1	Four Stars	356
2	Three Stars	74
3	Two Stars	8
4	One Stars	1

From the above bar chart, we can conclude that customers have rated most of the products bought from Nykaa with 4 stars followed by 3 stars. Only one product has received a rating of 1 star.

Visualizing brands with maximum reviews:



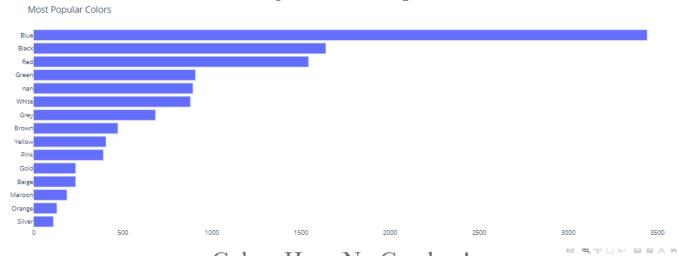
Brand named Boutique has the highest number of reviews with a count of Rs 8000+. L'Oreal Paris has the least number of reviews among all the brands.

MYNTRA DATA COLLECTION AND ANALYSIS:

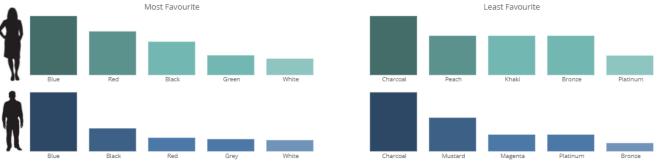
The dataset is called 'Myntra Products-Review-2021' and was collected from Kaggle. The dataset contains information regarding various products purchased and has 8 columns including Product ID, ProductName, ProductBrand, Gender, Price(INR) Num/Images Description and PrimaryColor. The data was analysed using Python on Google Colab.

	ProductID	ProductName	ProductBrand	Gender	Price (INR)	Numlmages	Description	PrimaryColor
0	10017413	DKNY Unisex Black & Grey Printed Medium Trolle	DKNY	Unisex	11745	7	Black and grey printed medium trolley bag, sec	Black
1	10016283	EthnoVogue Women Beige & Grey Made to Measure	EthnoVogue	Women	5810	7	Beige & Grey made to measure kurta with churid	Beige
2	10009781	SPYKAR Women Pink Alexa Super Skinny Fit High	SPYKAR	Women	899	7	Pink coloured wash 5-pocket high-rise cropped	Pink
3	10015921	Raymond Men Blue Self-Design Single-Breasted B	Raymond	Men	5599	5	Blue self-design bandhgala suitBlue self-desig	Blue
4	10017833	Parx Men Brown & Off-White Slim Fit Printed Ca	Parx	Men	759	5	Brown and off-white printed casual shirt, has	White

We visualized and found out the Most Popular Colors among customers

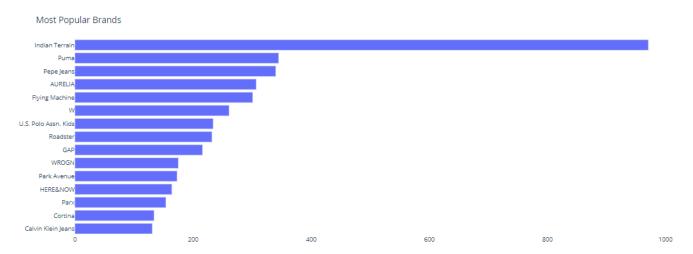


Colors Have No Genders!

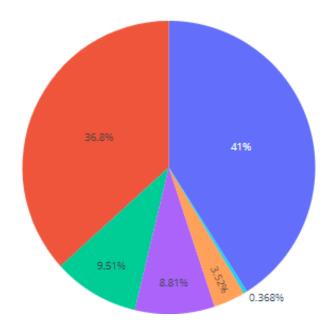


This graph shows that colors isn't Gender Specific

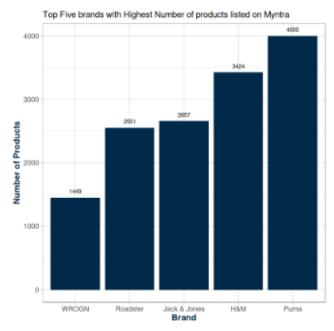
And also, the Most Popular Brands among customers



This graph below shows the gender distribution

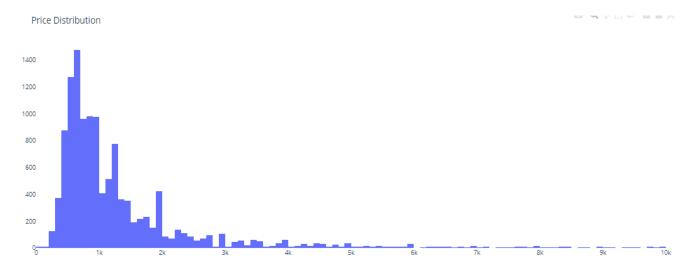


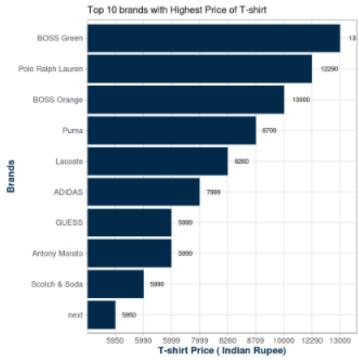
Women Men Unisex Boys Girls Unisex Kids



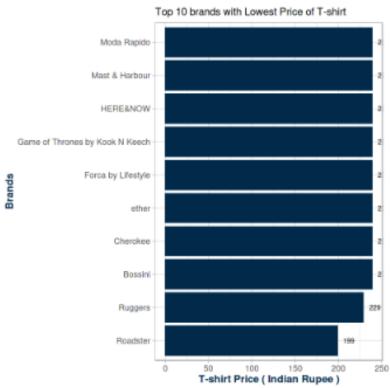
This graph shows the Top 5 brands with the highest number of products listed on Myntra.

The graphs below shows the price distribution from this we can infer what price range the customers prefers:



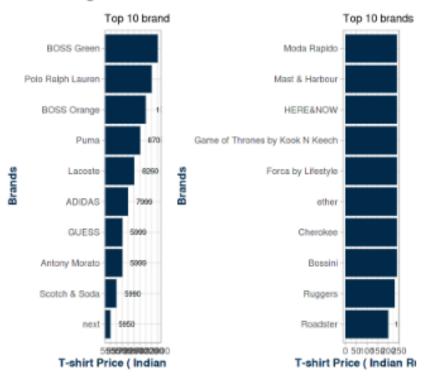


From this graph we can understand that BOSS Green brand is the most expensive and Next brand is the least expensive among the Highest Price brands



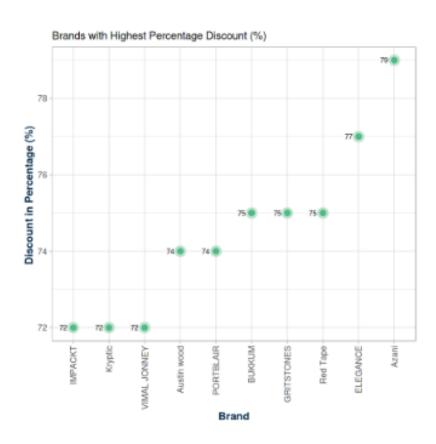
This graph helps us understand that among the Lowest Price brands Roadster and ruggers is the least expensive the rest is somewhat of the same price range.

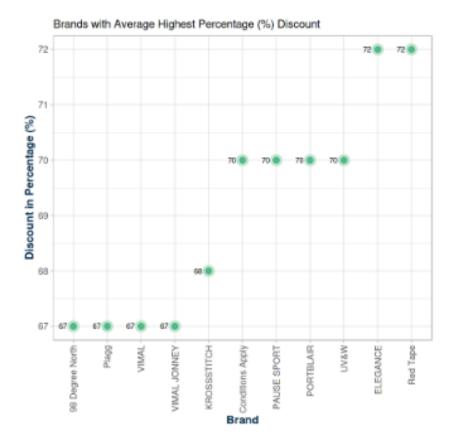
Highest and Lowest Price of Brands



Data: Kaggle-2020

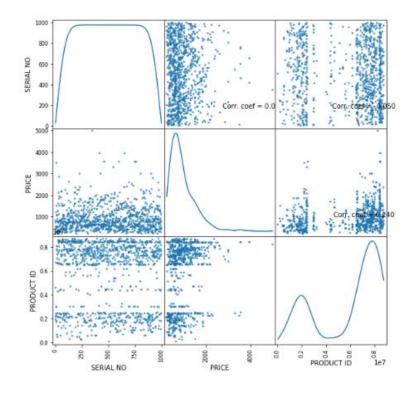
This the combined view of high price and lowest price brands.

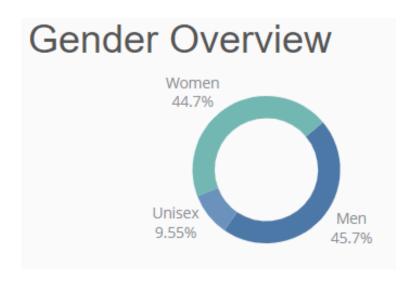




This graph helps us infer the discount percentage among the brands and we knw that AZANI gives the highest discount (79%).

We visualized the correlation between ProductID, Price and Serial_no.





When it comes to choosing the brands there are some most common brands for men's and women's made to the top list such as Aurelia, W, and US Polo for women, and for men, it is Indian Terrain, Pepe Jeans, and Flying Machine.

The below chart will help you understand the most favorite brands from men and women.



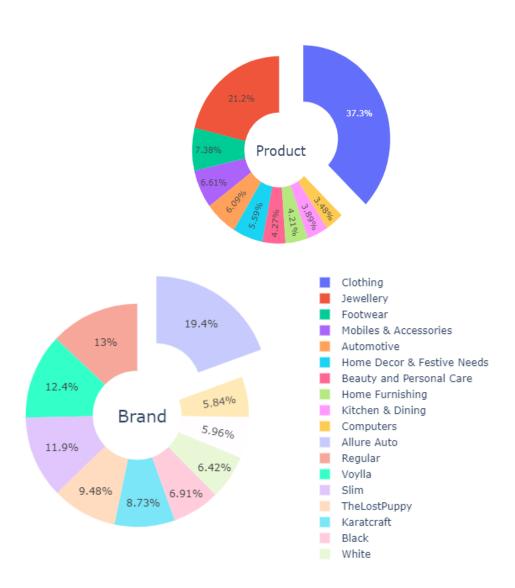
FLIPKART DATA COLLECTION AND ANALYSIS:

The dataset is called 'Flipkart E-commerce Dataset' and was collected from Kaggle. The dataset contains information regarding various products purchased and has 18 columns including Product ID, Product Category, Retail Price, Product Rating, etc. The data was analyzed using Python on Google Colab.

Firstly, the dataset is checked for missing values.

ANALYSIS OF TOP PERFORMING PRODUCTS AND BRANDS:

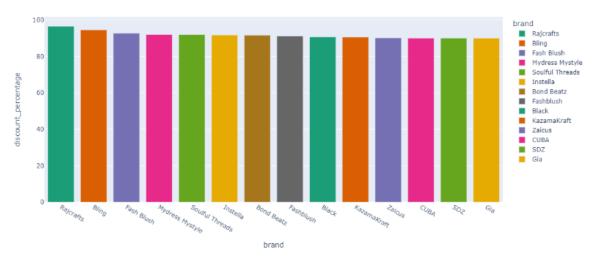




We observe that the top product customers are purchasing is 'Clothing', whereas, the top brand is 'Allure Auto'. The other top performing products and brands can be seen in the pie chart.

Brands are offering the highest discount:

One of the major reasons why brands offering the highest discount is important for our analysis is because we can promote and recommend these target brands to our active customers. The high discount in itself is attractive, which can draw more customers to the shopping website, which will eventually lead to an increase in sales.

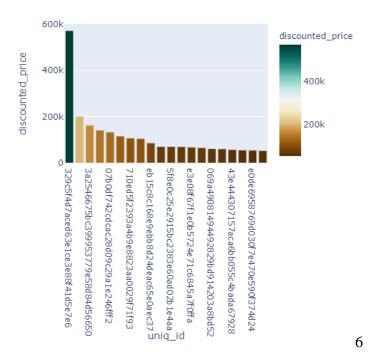


The bar graph has returned a very insightful result into the brands offering the highest discounts. Some of these brands are 'Rajcrafts', 'Bling', 'Fash Blush' and more.

What are some of the target customers that spend the most money on Flipkart?

It is important to take into consideration the most active customers on the platform. We assume that the customers that have spent the highest on the platform, shop the most from Flipkart. These potential customers are our target audience.

The column uniq_id in our dataset is the unique ID that the system assigns to each individual customer using the website. We can make use of these unique IDs and treat them like unique customers. By grouping these customers with the sum of discount_price spent by them, we can get a list of our potential buyers.

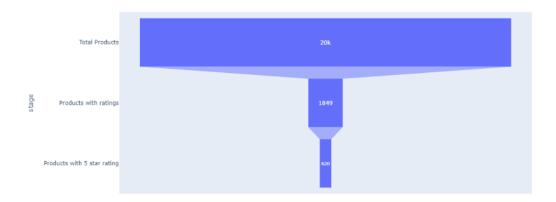


We have found out the top 20 customers that are spending the highest on Flipkart. The Flipkart accounts associated with these unique IDs are our areas of focus.

AN ANALYSIS OF PRODUCT RATINGS:

The great benefit of the rating system is that they create standardization which allows the customers to compare different products/brands easily and can be used to segregate the top-quality products and brands with the rest. It goes without saying that the 5-star products/brands are the most trusted for the customers and should be recommended and promoted more.

5 star rating



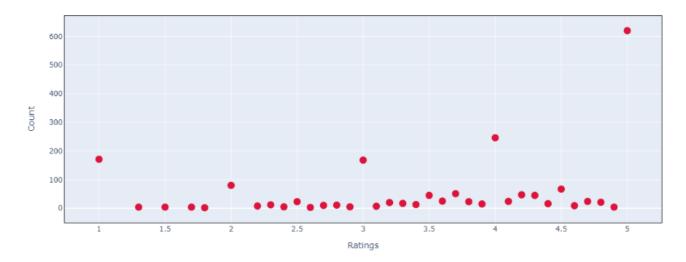
The above graph shows us the different levels, starting from the total products and ending at the 5 star products. We observe that out of 20,000 products, only 1849 have product ratings and **only 620 products have 5 star ratings**. This is a very small proportion of the total population.

***** The best and worst-performing products and brands in terms of ratings:

For the best performing brands, we will look at the 5-star products/brands and for the worst performing, we will look at the 1-star products/brands. It's important to also look at the 1-star products/brands because these are particularly the problem areas. These products/brands can be further improved to meet customer requirements and increase the quality of the items on the website.

	Top products	Top brands	Bottom products	Bottom brand	
0	Clothing	Regular	Home Improvement	Legrand	
1	Jewellery	Slim	Health & Personal Care Appliances	Zobello	
2	Footwear	Black	Kitchen & Dining	Shop Rajasthan	
3	Watches	Bosch	Sports & Fitness	VR Designers	
4	Kitchen & Dining	JDX	Baby Care	Trident	

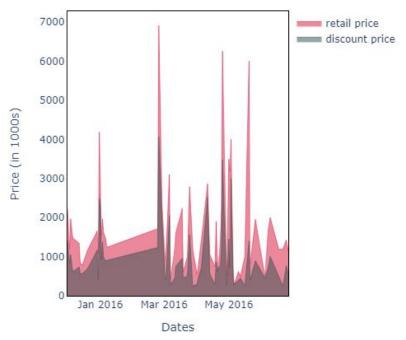
Ratings v/s Count



AN ANALYSIS OF PRODUCT, PRICE, DISCOUNT AND SALES:

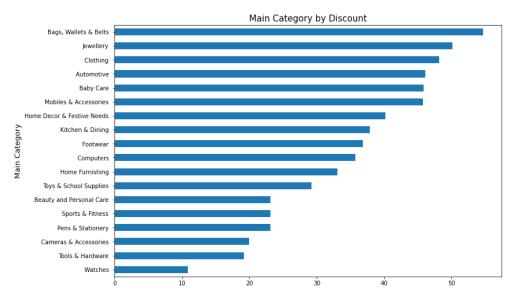
Is there any trend associated with the retail price and discount price over the months?

One of the reasons to analyze the trend of retail and discount prices is to understand during what time of the year the prices have spiked up or down. We can use this data to make informed decisions like when to raise or lower prices on products.



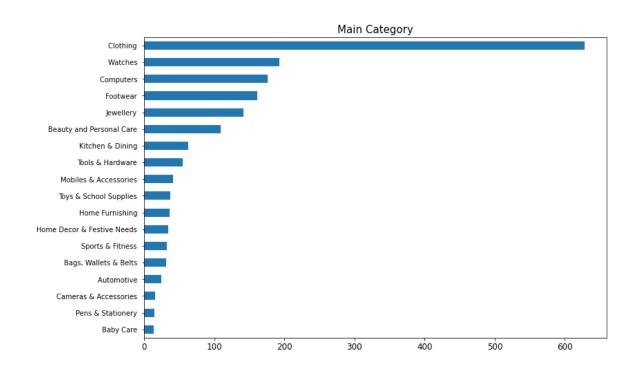
From the above plotted Area chart, we can infer that in the months of **December**, **February**, **April**, **and May** the prices had spiked up, which can be due to various reasons.

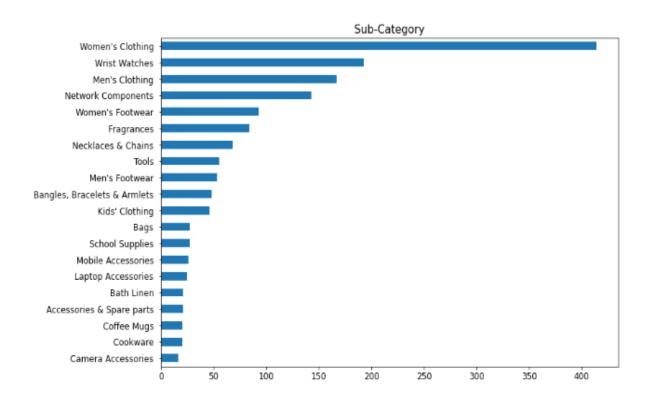
MAIN CATEGORY BY DISCOUNT:

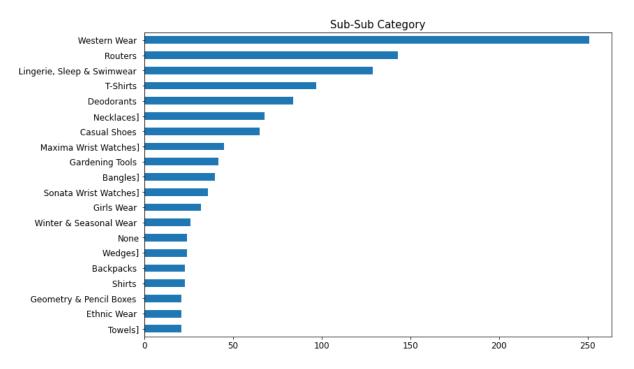


Products belonging to the category Bags, wallets and Belts have high discount rate.

ANALYSIS OF SALES BASED MAIN AND ITS SUB-CATEGORIES:







Top Ten Sub-Categories by Sales	
Women's Clothing	414
Wrist Watches	193
Men's Clothing	167
Network Components	143
Women's Footwear	93
Fragrances	84
Necklaces & Chains	68
Tools	55
Men's Footwear	53
Bangles, Bracelets & Armlets	48

Top Sub-Sub Categories by Sales	3
Western Wear	251
Routers	143
Lingerie, Sleep & Swimwear	129
T-Shirts	97
Deodorants	84
Necklaces	68
Casual Shoes	65
Maxima Wrist Watches	45
Gardening Tools	42
Bangles	40
_	

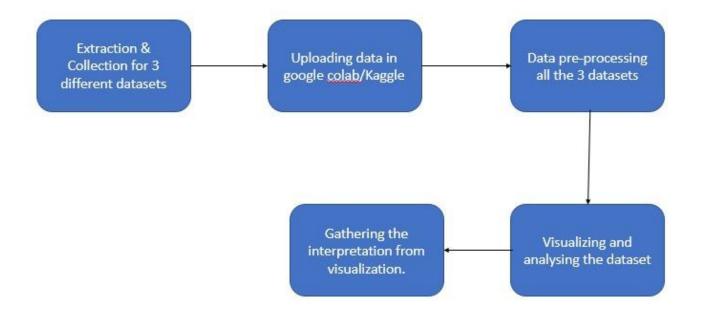
CUSTOMER ACTIVITY DURING THE DAY:

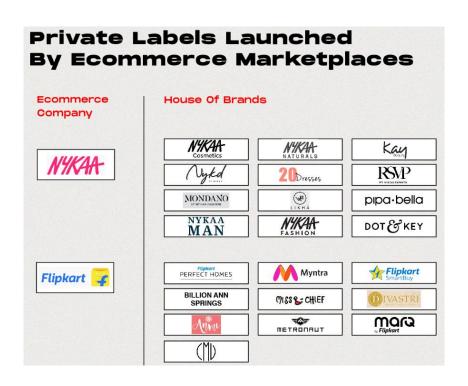
We can relate the customer activity with the different product URLs being clicked using the column product_url. This will tell us when different URLs are being clicked during the day. One of the reasons why it is an important thing to analyze is to understand when the rush hours are more and we can improve the Flipkart platform performance during these hours. Moreover, ads for different brands can also run during these active hours.

No. of clicks vs time



ANALYTICAL MODEL





RESULTS AND DISCUSSION:

COMPARATIVE STUDY OF NYKAA, FLIPKART and MYNTRA

	Your Beauty. Our Passion.	Flipkart 🙀	Myntra	
NET SALES FY21	22 Billion rupees	433 billion	24.646 billion	
NUMBER OF VISITS TO THEIR WEBSITE	2.5 Mn	20 million	44 Mn	
NUMBER OF SHIPMENTS PER DAY	More than 15,000 orders every day	About 10,00,000 orders per day	About 30,000 orders per day	

Despite a huge and growing addressable base of ecommerce shoppers (140 Mn+ in 2021), ecommerce apps have to battle each other for downloads and repeat buyers. Discounts and sales are often how brands get downloads and activity, while UI/UX (user interface and user experience), reward mechanism and leveraging data are the key to getting repeat buyers.

OTT PLAT FORM	LAUNC- HED IN	HEADQUA RTERS	PARENT COMPANY	TOTAL FUNDING	NO. OF BRANDS	NO. OF USERS	ТҮРЕ	REVE NUE FY20
NYKAA.com Your Beauty. Our Passion.	2012	Mumbai	FSN E- commerce venture Ltd	\$341.9 Mn	2.5k+	15 Mn+	Beauty, personal care & fashion	\$24.0 Mn
Flipkart <table-cell></table-cell>	2007	Bengaluru	Walmart Inc.	\$12.6 Bn	375k+	150 Mn+	Horizon t-al Marketp lace	\$4.6 Bn
Myntra	2007	Bengaluru	Flipkart	\$399.8 Mn	1k+	50 Mn+	Fashion Market place	\$231. 8 Mn

CONCLUSION:

India's ecommerce market has been largely dominated by the Amazon-Flipkart duopoly over the past few years. But more recently, the likes of AJIO, Nykaa, Purplle, Tata CLiQ, Myntra (Flipkart-owned) and others have risen in prominence thanks to the maturing ecommerce user base as well as the need for brands and sellers to diversify their channels.

A comparative study of Flipkart.com with other competitors such as Nykaa delivers the information about the different strategies to succeed in e-commerce market and different opportunities available in India.

REFERENCES:

Mahapatra, D. M., Mohanty, A. K., & Patajoshi, A. (2015). India's online business restructuring: A case study of flipkart. com and Myntra. Training & Development Journal, 6(1), 82. https://doi.org/10.5958/2231-069x.2015.00010.4

Suchitra, & Pai, R. (2021). NYKAA: A comprehensive analysis of a leading Indian e-commerce cosmetic company. International Journal of Case Studies in Business, IT, and Education, 254–265. https://doi.org/10.47992/ijcsbe.2581.6942.0140

Kapoor, D. D. (2011). E-tailing: A case study on myntra.com. Indian Journal of Applied Research, 4(2), 10-12. https://doi.org/10.15373/2249555x/feb2014/83

Agarwal, V. (2021, August 3). Myntra Marketing strategy: Their success mantra. MarqueEx. Retrieved April 27, 2022, from https://marqueex.com/myntra-marketing-strategy-their-success-mantra/

Pragati. (2021, October 5). Flipkart's marketing strategy & why it works. Talkwalker. Retrieved April 27, 2022, from https://www.talkwalker.com/blog/flipkart-marketing-strategy

Why is the NYKAA marketing strategy so successful? Pepper Content. (n.d.). Retrieved April 27, 2022, from https://www.peppercontent.io/blog/nykaa-marketing-strategy

Raju, S. (2022, April 8). NYKAA marketing strategy to reach the target audience. StartupTalky. Retrieved April 27, 2022, from https://startuptalky.com/nykaa-marketing-strategy/

Menghani, T. (2020, July 6). How NYKAA is revolutionising the online beauty industry? How Nykaa is Revolutionising the Online Beauty Industry? Retrieved April 27, 2022, from https://www.themarcomavenue.com/blog/nykaa-revolutionising-the-online-beauty-industry-with-persuasive-marketing-tactics/

Nazi, A. S. K. A. B. C., Kaur, A. S., & Nazi, A. B. C. (2022, April 11). What marketing strategy makes NYKAA so unique? The Strategy Story. Retrieved April 27, 2022, from https://thestrategystory.com/2020/12/02/beauty-e-commerce-startup-nykaa-marketing-strategy/

NYKAA adopts 360-degree marketing strategy to promote products; but influencers play a vital role. Moneycontrol. (n.d.). Retrieved April 27, 2022, from https://www.moneycontrol.com/news/business/why-nykaa-has-chosen-to-largely-market-products-via-influencers-6191331.html

Digital marketing strategy of Myntra - Roasted Metric. Roasted Metric - Our conversion focused approach helps you achieve better ROI. Click to know how. Organic SEO Services. eCommerce SEO. PPC Campaigns. Website SEO Services. (2021, December 22). Retrieved April 27, 2022, from https://roastedmetric.com/digital-marketing-strategy-of-myntra/

History & Marketing Strategies of Myntra Brand. Creative Blog on Indian brands, Marketing and Advertising. (2019, August 20). Retrieved April 27, 2022, from https://brandyuva.in/2019/08/marketing-strategies-of-myntra.html

Story of myntra & its Genius Influencer marketing strategy to attract customers. the digitaly ug.com. (2021, September 16). Retrieved April 27, 2022, from https://the digitaly ug.com/startup/story-of-myntra-its-genius-influencer-marketing-strategy-to-attract-customers

BuzzInContent Bureau & Delhi, D. 18. (n.d.). Myntra's Influencer Marketing Strategy to create buzz for 11th edition of end of reason sale. Buzzincontent. Retrieved April 27, 2022, from https://www.buzzincontent.com/story/myntra-single-s-influencer-marketing-strategy-to-create-buzz-for-11th-edition-of-end-of-reason-sale/