



E-Commerce Customer Churn

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Main Question and Our Goal

❖ MAIN QUESTION

Why customers churn from our ecommerce site?

❖ OUR GOAL OF TODAY

Identify specific customer behaviors that signal a likelihood of churn
And find action items to prevent churn in the future



The 8 Main Questions

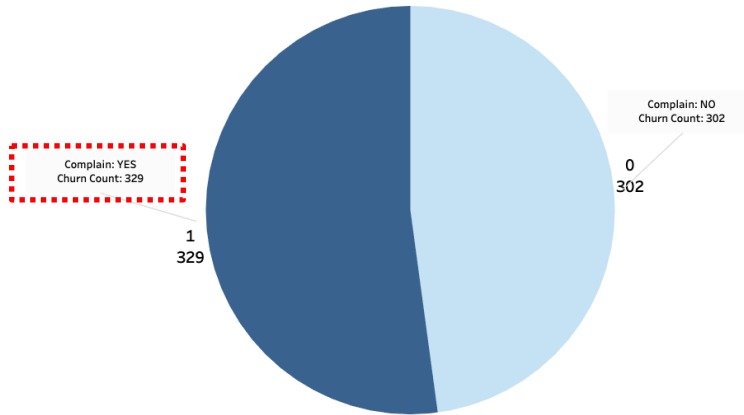


No.	Questions
1	The relationship between Churn and complain / satisfaction level
2	The relationship between tenure & Churn status
3	The relationship between tenure & customer satisfaction
4	The relationship between preferred order category and Churn
5	The relationship between Marital status and churn
6	The relationship between Marital status&product category and churn
7	The relationship of Churn and DaySinceLastOrder
8	The relationship of Churn and warehouse to house?

Q1. The relationship between complain / satisfaction level and Churn

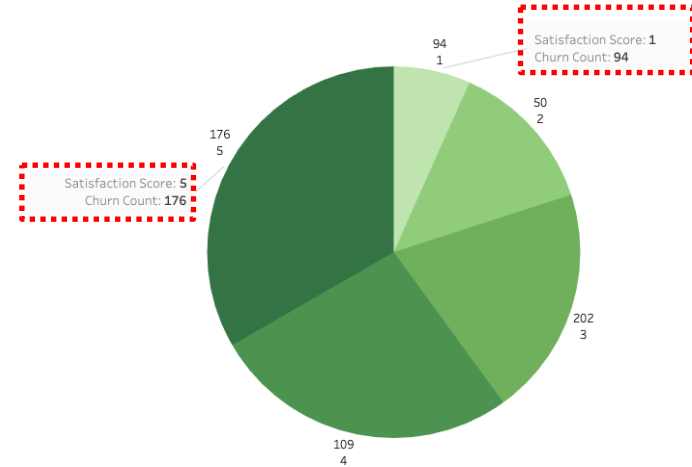
1) Complain & churn

- There is almost not a big difference in complain and churn



2) Satisfaction level & churn

- There are more churn from the high satisfaction level
- Lowest satisfaction has less churn customer than mid



- ❖ Insight : there is no relationship between complain and satisfactory level and churn
- ❖ Action item : more research on if the satisfactory is about the product or user interaction

Q2. The relationship between tenure & churn status

- Customer less than 5yr tenure accounts 37% of total customer, however; this range accounts more than 80% of total churn (37% within its range)
- As tenure increases, churn rate rapidly decreases

Tenure_Range	Cust_Portion	Churn_Portion	Churn_Rate
Less than 5yr	37.0%	81.6%	36.9%
5-10yr	28.0%	7.3%	4.4%
10-20yr	26.6%	10.5%	6.6%
Over 20yr	8.5%	0.6%	1.2%

Tenure	Cust_Portion	Churn_Portion	Churn_Rate
0	8.0%	25.4%	52.8%
1	17.0%	50.9%	50.0%
2	3.6%	1.6%	7.4%
3	4.3%	2.2%	8.7%
4	4.1%	1.6%	6.5%

- Especially out of less than 5yr range, customers of 0~1year tenure take 76% of the 82% of total tenure
- It is also half of its range

❖ **Insight** : Less than 5years of tenure customers are 37% of total customer

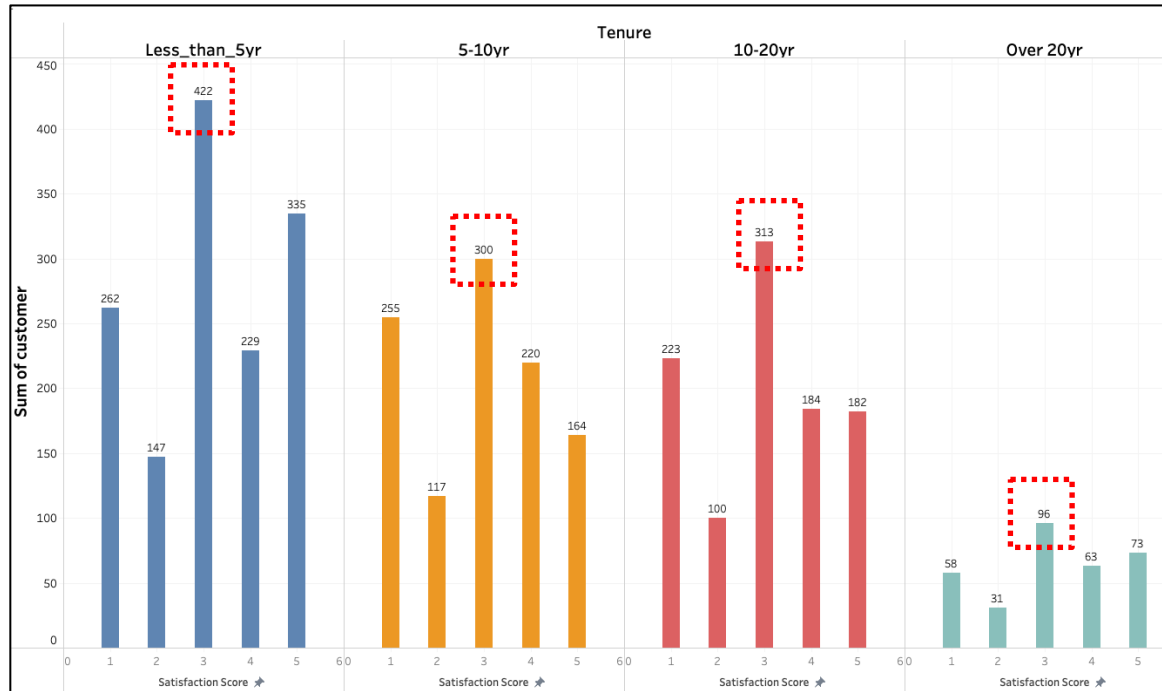
this is the biggest portion out of all the tenure range.

Although less royalty means high churn,

there must be some action to prevent high churn rate from customers with early tenure

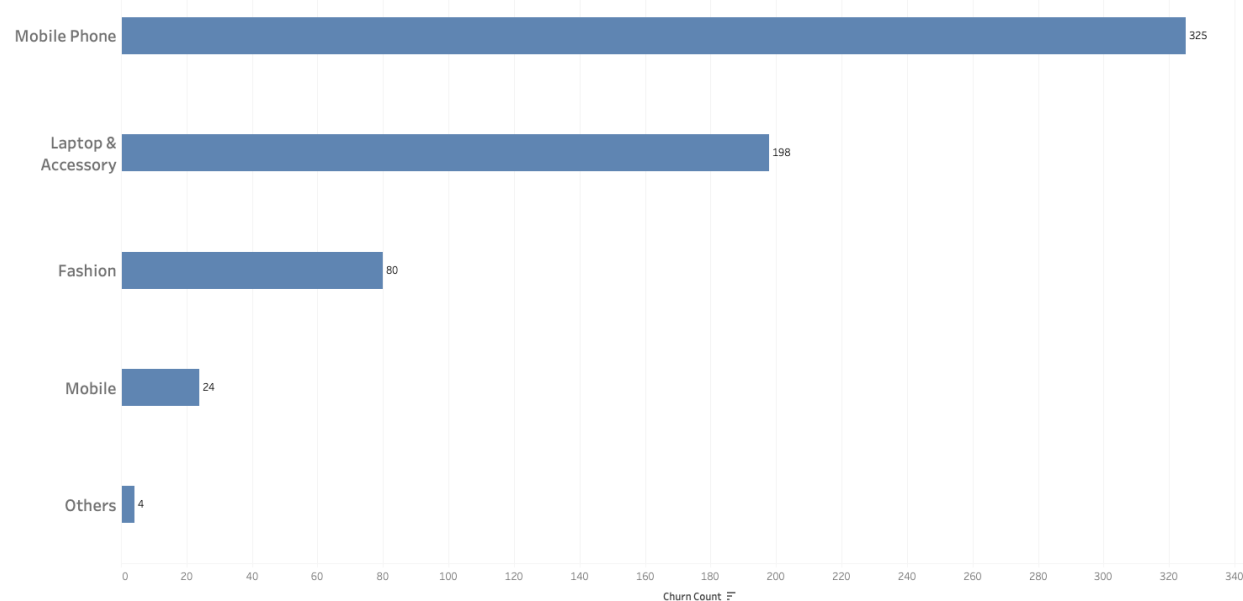
Q3. The relationship between tenure & customer satisfaction

- There are more customers in less than 5 year range, and in each range, satisfaction score 3 are the most common score.
- Even with high tenure such as more than 20 years, satisfaction score is well distributed
- **Royalty relates churn but it does not directly mean high customer satisfaction**



Q4. The relationship between preferred order category and Churn

- Most of churn customer bought Mobile Phone and laptop & accessory follows



- ❖ Action item : more than half of churn is from mobile phone category, there needs to be more research on mobile phone product related services or product quality etc

Q5. The relationship between Marital status and churn

- Single churn rate is more than 300 which is more than 50% of total churn, and 26% of total

MaritalStatus	TotalCustomers	ChurnCount	ChurnPercentage
Single	1245	327	26.3%
Married	1982	219	11.0%
Divorced	547	85	15.5%

❖ **Insight** : single has the highest churn rate and married next, however churn percentage is for married people is lower than divorced

Q6. Marital status&product category and churn

- Single mobile churn percentage is 28.7% highest

Marital ..	Fashion	Laptop & Accessory	Mobile	Mobile Phone	Others
Divorced	2.4%	4.9%	0.3%	5.5%	0.3%
Married	5.5%	10.6%	1.0%	17.3%	0.3%
Single	4.8%	15.8%	2.5%	28.7%	

- ❖ **Insight** : single has the highest churn rate but combining with the product, single/ mobile and following married/mobile has highest churn rate
- ❖ **Action item** : company need to research on mobile product and need to do some promotions for singles

Q7. The relationship Churn and DaySinceLastOrder?

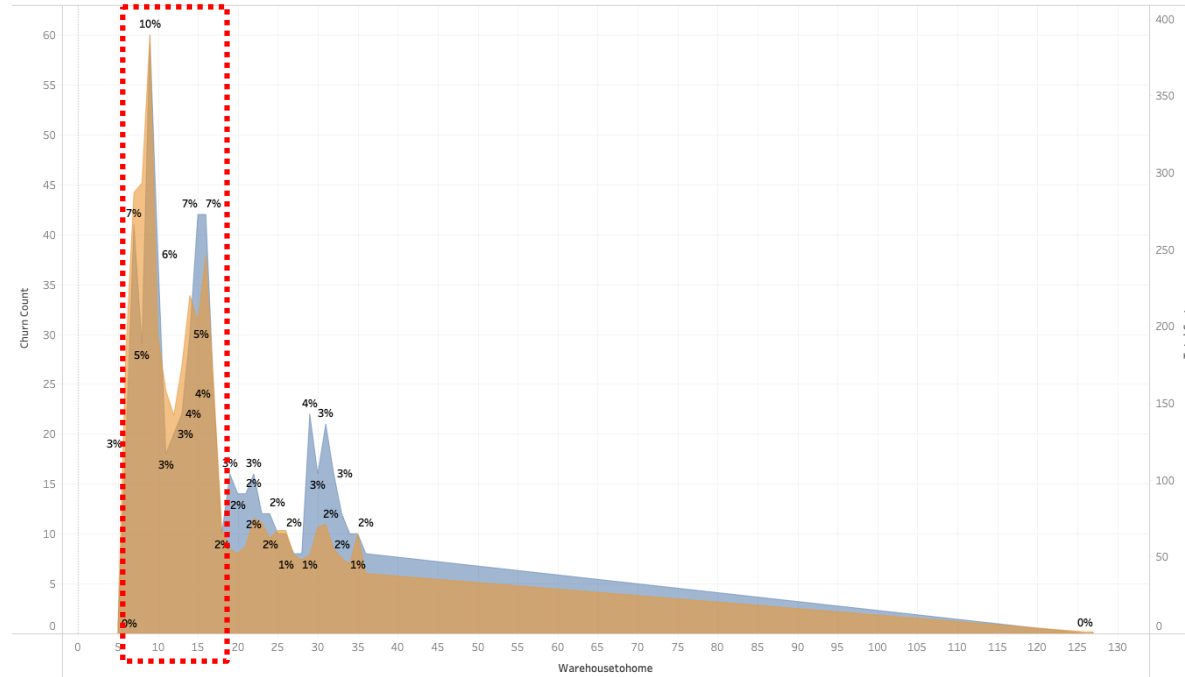
- There are more churn from the recent customers
- 20% of order from less than 5days churned

last_order_days	TotalCustomers	ChurnCount	ChurnPercentage
Less than 5days	2289	457	20.0%
5-10days	1334	167	12.5%
more than 10days	151	7	4.6%

- ❖ Insight : there is a relationship between the last day since last order and churn
- ❖ Action item : need to check if recently there has been any problems, or in general, the company focuses on regular customers than new customers

Q8. The relationship Churn and warehouse to house?

- 9mile from ware house to home has the highest churn rate and it goes up at 15



- ❖ Insight : at 9~15mile, it has very high churn rate
- ❖ Action item : Need to check if there is any delivery issues or if warehouse can be built within 5 miles

Insights and action items

Category	Relationship with churn	Action Item
Tenure	People with 0~5 year tenure accounts 80% of churn (to be specific, 0~1year tenure takes approx. 57% of TTL)	There must be some action to take to prevent high churn rate from customers with early tenure Royalty relates churn but it does not directly mean high customer satisfaction
Product	More than 50% of churn is from mobile phone category	There needs to be more research on mobile phone about related services or product quality etc
Marrige status	Single has the highest churn rate, especially who bought mobile products	Need to reseach more on mobile phone and do more
Order status Order status	Customers with recent order has more churn rate as 72% of total	Need to check if recently there has been any problems, or in general, the company focuses on regular customers than new customers
Location	At 9~15mile, it has very high churn rate	Need to check if there is any delivery issues or if warehouse can be built within 5 miles

Thank you