

# Online Retail Analysis : Unveiling Customer Insights for Growth

# Table Of Content

01      Introduction

02      Dataset Overview

03      Data Cleaning

04      Cohort

05      Retention Analysis

06      Business Strategy

07      Conclusion



05

06

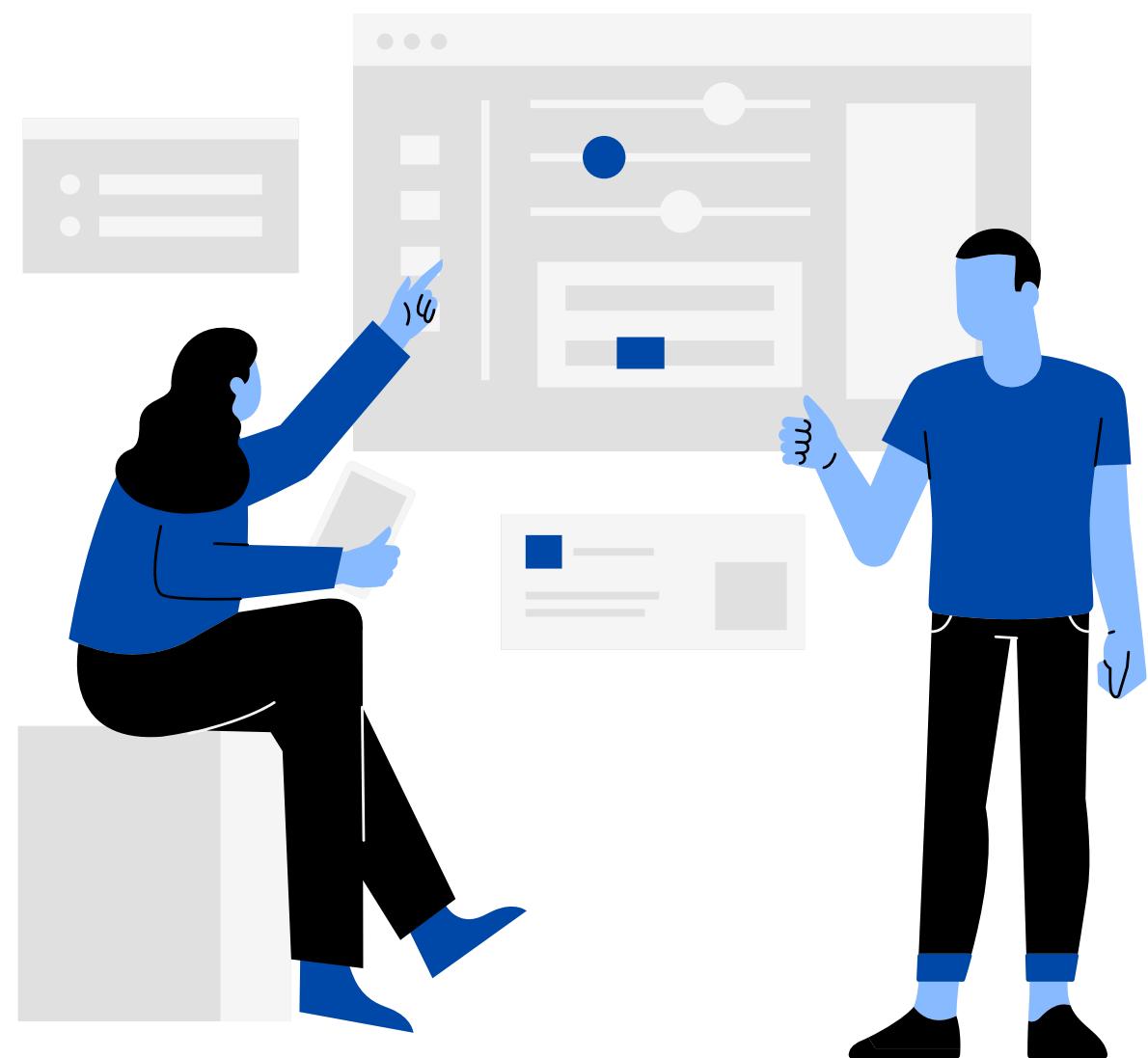
07

# Introduction

Understanding Cohorts: What and Why.

**Cohort analysis** is a powerful tool used to **track** and **analyze** the behavior of customer groups over time. It helps us gain insights into how customer segments **evolve** and **engage** with our online retail business.

By harnessing the **potential** of cohort analysis, we can **uncover** actionable insights to **improve** customer retention, **optimize** marketing strategies, and identify **growth** opportunities within our online retail business.



# Dataset Overview



Let's dive into our online retail dataset, sourced from [Kaggle](#). This dataset contains essential transaction information that is crucial for understanding customer behavior and optimizing our online retail strategy.

	InvoiceNo	StockCode	Description	Quantity	InvoiceDate	UnitPrice	CustomerID	Country
0	536365	85123A	WHITE HANGING HEART T-LIGHT HOLDER	6	12/1/2010 8:26	2.55	17850.0	United Kingdom
1	536365	71053	WHITE METAL LANTERN	6	12/1/2010 8:26	3.39	17850.0	United Kingdom
2	536365	844068	CREAM CUPID HEARTS COAT HANGER	8	12/1/2010 8:26	2.75	17850.0	United Kingdom
3	536365	84029G	KNITTED UNION FLAG HOT WATER BOTTLE	6	12/1/2010 8:26	3.39	17850.0	United Kingdom
4	536365	84029E	RED WOOLLY HOTTIE WHITE HEART.	6	12/1/2010 8:26	3.39	17850.0	United Kingdom

# Data Cleaning

- 01** Drop duplicated rows from data
- 02** Delete missing value of CustomerID
- 03** Slicing Quantity  $\geq 0$  and UnitPrice  $\geq 0$



# Cohort Analysis

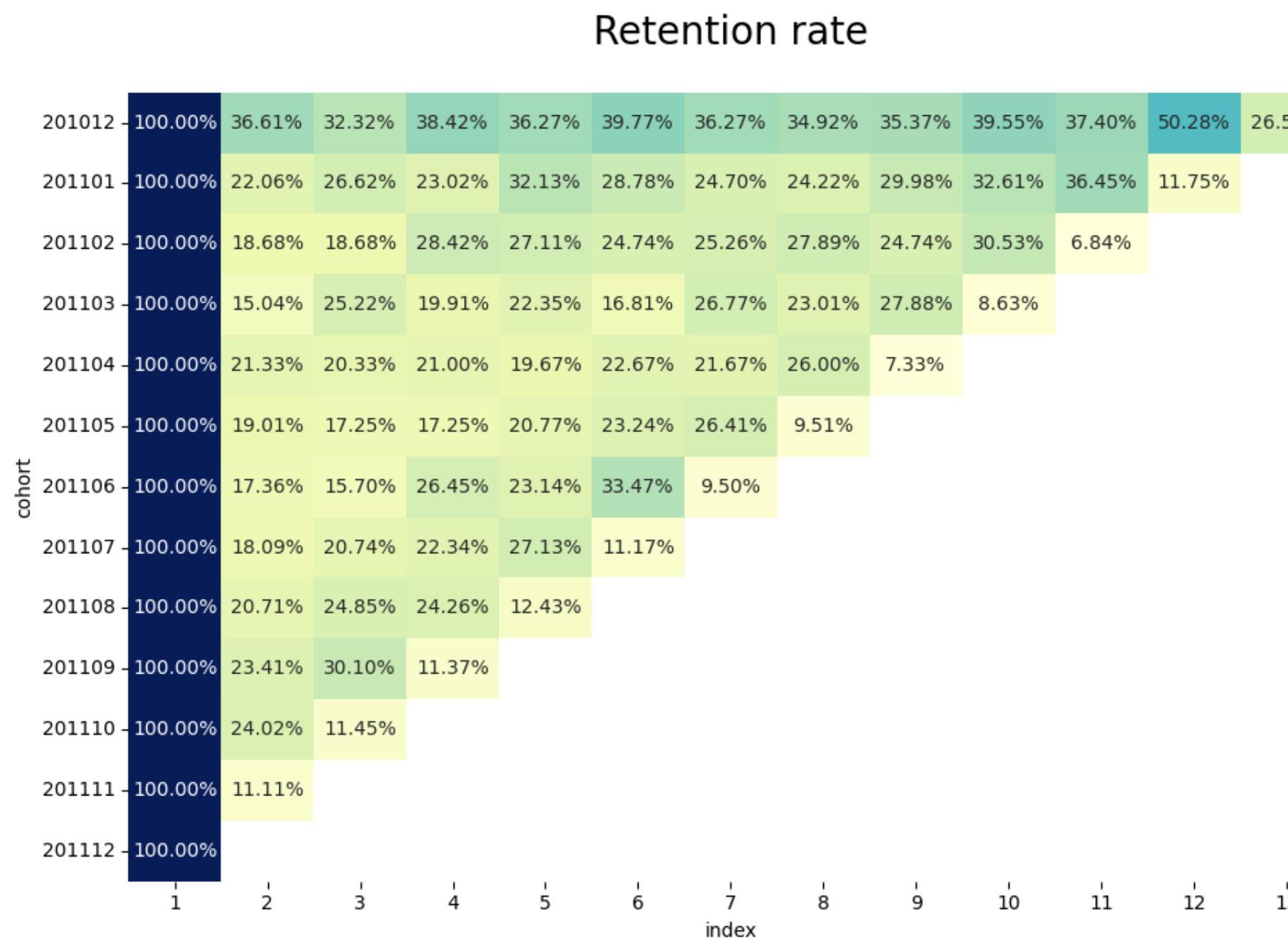
## Instance of Cohort Analysis

**Retention rate** is a **critical** KPI that measures the percentage of customers who continue to **engage** with our online retail platform over time. It's a **key indicator** of customer loyalty and the success of our retention strategies.

In cohort analysis, we **track** the percentage of customers from a specific cohort who make **repeat purchases** in subsequent periods. This helps us understand how effectively we **retain** customers within different groups



# Retention Analysis



Let's analyze this table :

- For the cohort **201012**, we can see that **36.61%** of them **returned** in the second period. This indicates that the **customers is satisfied**.
- Cohort **201104**, on the other hand, exhibits **steady** retention, indicating a **consistent customer base**
- Cohort **201108** faces a **decline** in retention, highlighting **potential challenges** in retaining this group

# Business Strategy

## 1. Satisfied Cohort (201012)

Case :

Since cohort 201012 shows a **relatively high** retention rate in the second period (36.61%), it's essential to **maintain** and **enhance** customer satisfaction.

Action : **Capitalize on Customer Satisfaction**

**Implementation :**

- Conduct customer surveys and **feedback analysis** to **understand** what is driving their satisfaction.
- **Consider** introducing loyalty programs or **special offers** to **reward** and **retain** these satisfied customers.
- Continuously monitor their **preferences** and **preferences** to tailor marketing campaigns and product recommendations.

# Business Strategy

## 2. Steady Retention Cohort (201104)

Case :

Cohort 201104 demonstrates **steady retention**, indicating a reliable customer base that is worth **nurturing**.

Action : **Strengthen Engagement with the Consistent Customer Base**

**Implementation :**

- Focus on **expanding product lines or service offerings** that cater to the preferences of this cohort.
- Consider **introducing subscription models** or exclusive perks for this group to **enhance their loyalty**.
- **Invest** in targeted marketing campaigns to maintain their **interest and engagement**.

# Business Strategy

## 3. Declining Retention Cohort (201108)

Case :

Cohort **201108** faces **declining** retention, which suggests **potential** issues in retaining this group. It's crucial to address these challenges.

Action : **Address Challenges and Re-engage Customers**

**Implementation :**

- **Conduct** in-depth customer analysis to **identify** the **reasons** behind the decline in retention.
- **Reach out** to customers from this cohort to gather **feedback** and **understand their concerns**.
- **Implement** tailored retention **strategies** such as personalized offers, win-back campaigns, and improved customer support.
- **Continuously** monitor the **impact** of these strategies and adjust as needed.

# Conclusion

The analysis of **customer retention rates** within our online retail business has **unveiled critical insights** that can significantly **impact** our path to sustainable **growth** and **long-term success**.

In all cases, data-driven decision-making remains our cornerstone. Continuously monitoring **retention rates**, actively seeking **customer feedback**, and adapting **strategies** based on **insights** are paramount for our continued **growth** and **success** in the online retail landscape.



# Big Thanks

For reading this till end