

Executive Summary

	The executive team from an e-commerce company is interested in understanding how well the website is converting a product page views into purchases. Calculation of the conversion funnel and retention rates produced 3 stages and 5 different cohorts tracking a 4 month period from the start of each cohort.
Results	Synopsis
Conversion Funnel	The Conversion Funnel for the e-commerce company's website resulted in 3 stages: view, shopping_cart, and purchase. The total conversion rate calculated the percentage of the purchase stage from the view stage resulted in 10.34% and the conversion rate calculated the percentage of the purchase stage from the shopping cart stage resulted in 35.61%. The total conversion rate and conversion rate resulted in 29.04%. In conclusion, the biggest drop is between the view stage and shopping cart stage resulted in over a 70% drop. Improving the total conversion and conversion rates from the view stage to the shopping cart stage will boost purchases based on the purchase conversion rate percentage of 35.61%, from the shopping cart conversion rate of 29.04%.
Retention Rates	The Retention Rates for the e-commerce company was organized by 5 different cohorts covering 4 months. Cohort 9/1/2020 had the highest retention rate in month 1 than any other cohort. The 10/1/2020 cohort is the only cohort to have at least a retention rate in all 4 months. Cohort 1/1/2021 only had a retention rate in the first month and 0% retention rate for the remaining 3 months. Three out of 5 cohorts had 0% retention rates within month 4. A retention rate around or during the upcoming holidays were established by each cohort. In conclusion, the cohorts' retention rates depended on when the specific cohort started and ended the 4 month period and what events were happening during the 4 month periods.
Analysis	Description
Raw Data	The Raw Data activity log timespan was between 9/24/2020 to 2/28/2021. The event types associated with the activity log are view, shopping cart, and purchase. The data captured customer's actions while interacting with the website. The actual columns utilized to analyze the data are user_id, event_type, and event_date.
Conversion Funnel	The data utilized to calculate the conversion rates was the unique count of user_id. The total conversion rate calculated the particular stage divided by the first stage. Conversion rate calculated the particular stage divided by the previous stage.
Retention Rates	The Retention Rates' cohorts were formed by year and month and the cohorts were tracked for 4 months afterwards. The calculation for the retention rates were collected from the cohort analysis sheet.