

ELECKART MARKET MIX MODELLING

CAPSTONE PROJECT : SUCHITH K C & SHIVPRASAD METI



Objective : ElecKart Market Mix Modelling

- To identify the most impactful channels for marketing spends
- To identify other factors having impact on sales of 3 product categories

1.Camera Accessory

2.Game Accessory

3.Home Audio

Data Understanding :

- Data is available for 1 year, i.e. from July 2015 to June 2016
- Data contains all orders & purchases made in this time period
- Monthly advertising spends on different marketing channels is also available
- NPS (brand perception) data is available with the list of all holidays in the time period

MARKET STUDY - CANADA

- GDP Per Capita :US \$ 50725
- Service Sector contribute 70.2% of the GDP
- 84% of Canadian Internet Users made use of e-commerce in 2018 spending CAD 57.4 Billion
- Computers & Electronics constitute 42% of the Items Purchased Online
- Retail Sector is the largest employer hiring nearly 12% Canadians
- Retail E-Commerce Revenue to surge up to CAD 69.55 Billion in 2019
- Internet Penetration - 89.9% of the Population
- The major consumer “**buying holidays**” are Christmas (Dec 25), Boxing Day (Dec 26), Back-to-School (Aug), Mother’s Day (May), Valentine’s Day (Feb 14), Easter (Mar/Apr), Father’s Day (Jun) & Halloween (Oct 31)
- Canada also sees a **rise in sales** around the fourth quarter holidays, most notably Cyber Week, the buying period that begins on the thanksgiving, including Black Friday & Cyber Monday



KPI

Existing Features

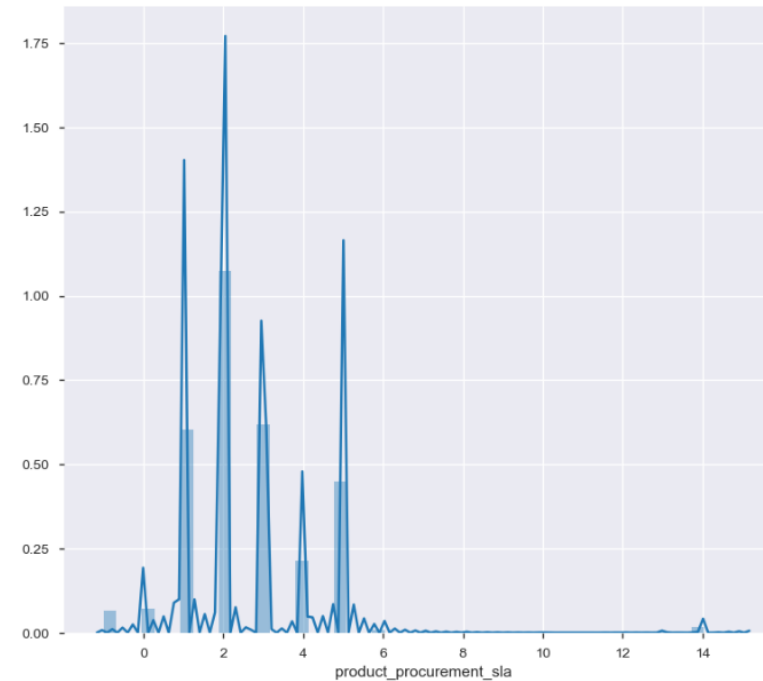
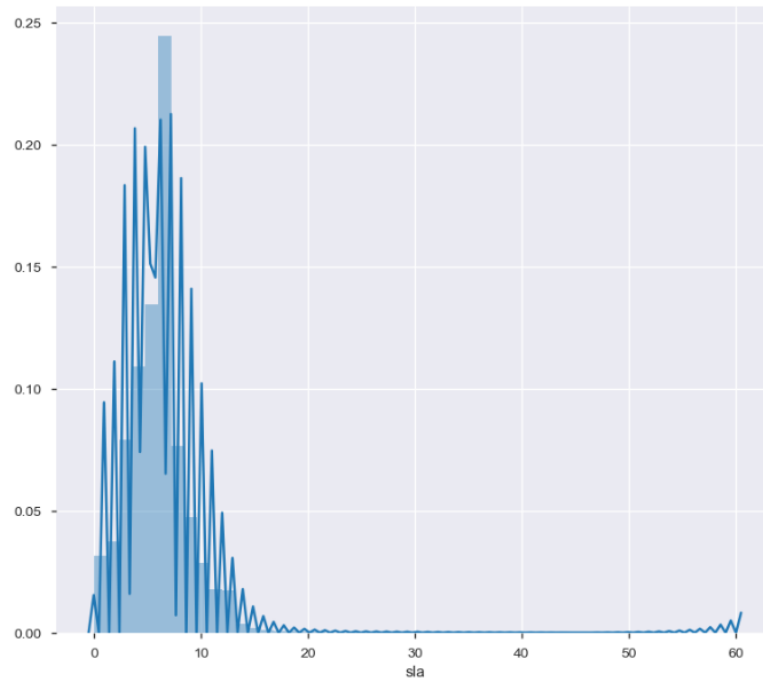
- GMV
- SLA
- PAYMENT TYPE
- UNITS
- MRP OF THE PRODUCT

Derived Features

- GMV per Order
- PREMIUM PRODUCT
- DISCOUNT
- ONLINE ORDER SHARE

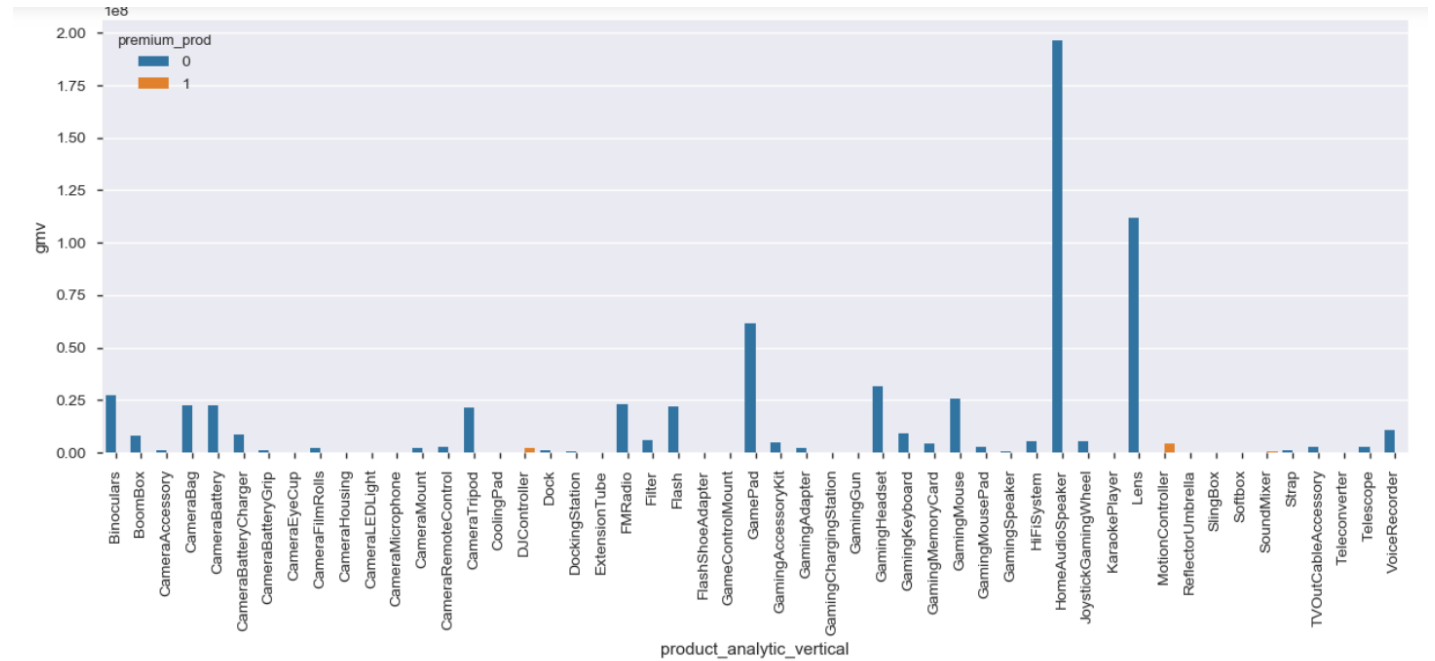
Complex Features

- NPS
- Ontario Weather Data
- Media Investments
- Sales Calendar



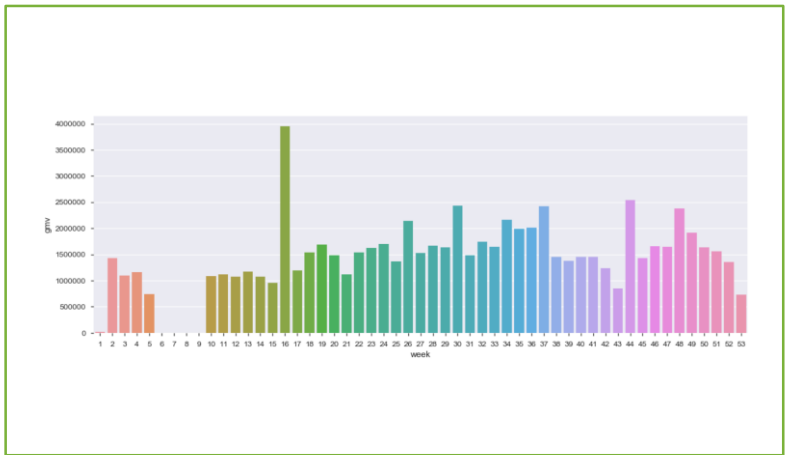
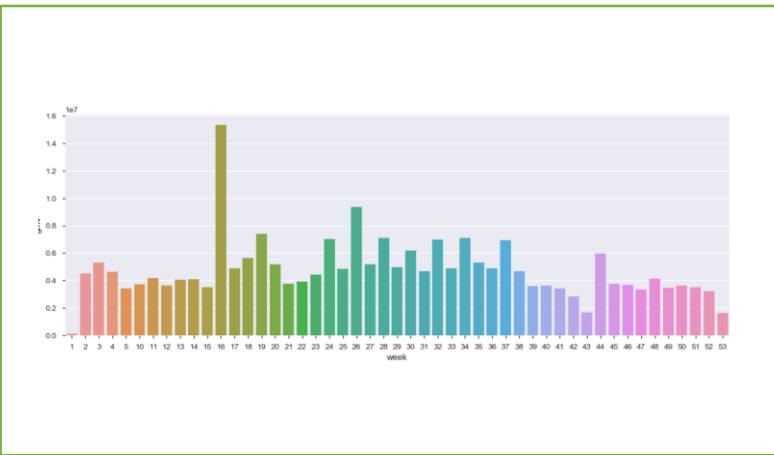
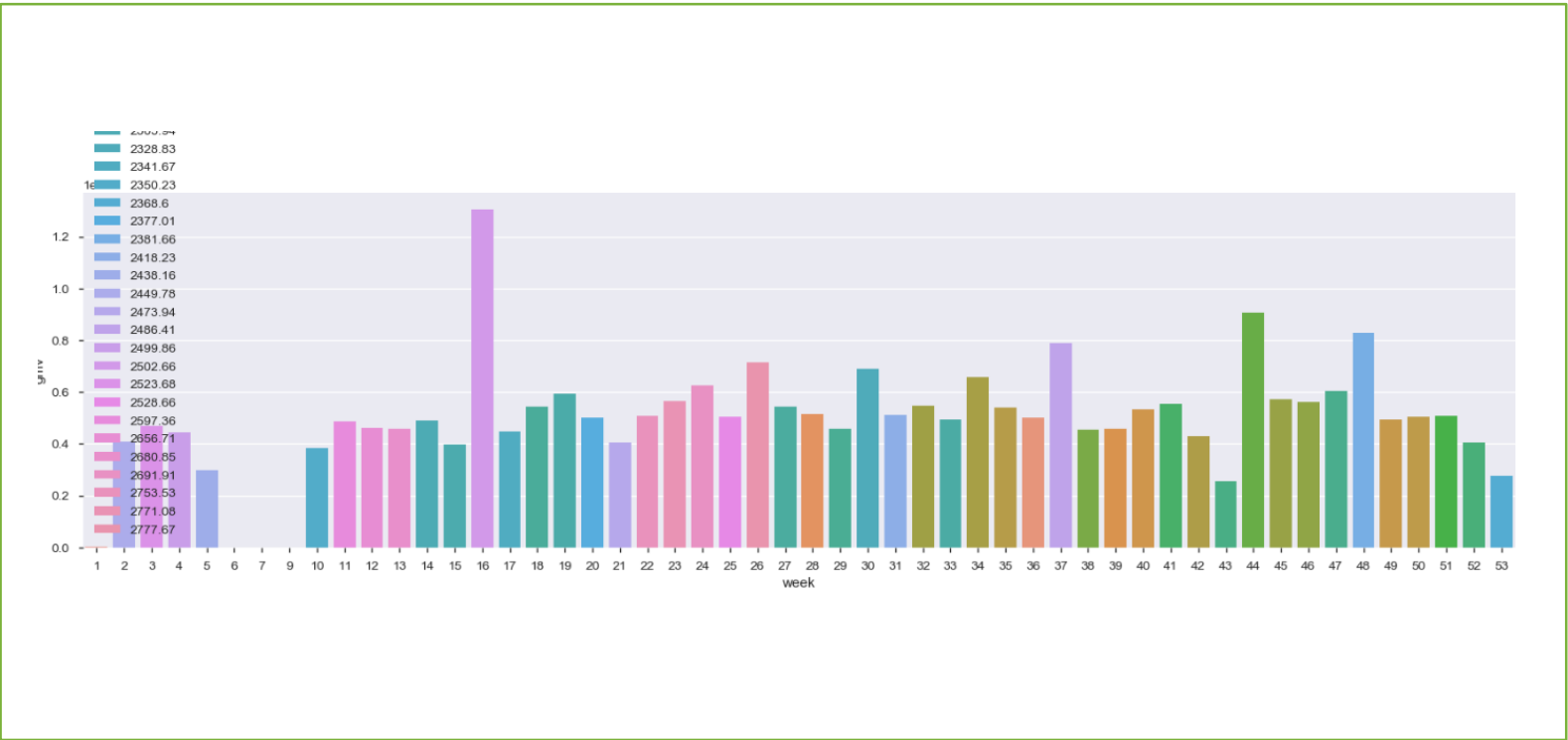
SLA VS PRODUCT PROCUREMENT SLA

■ GMV VS PRODUCT ANALYTIC
VERTICAL - Premium Product
Contribution to GMV

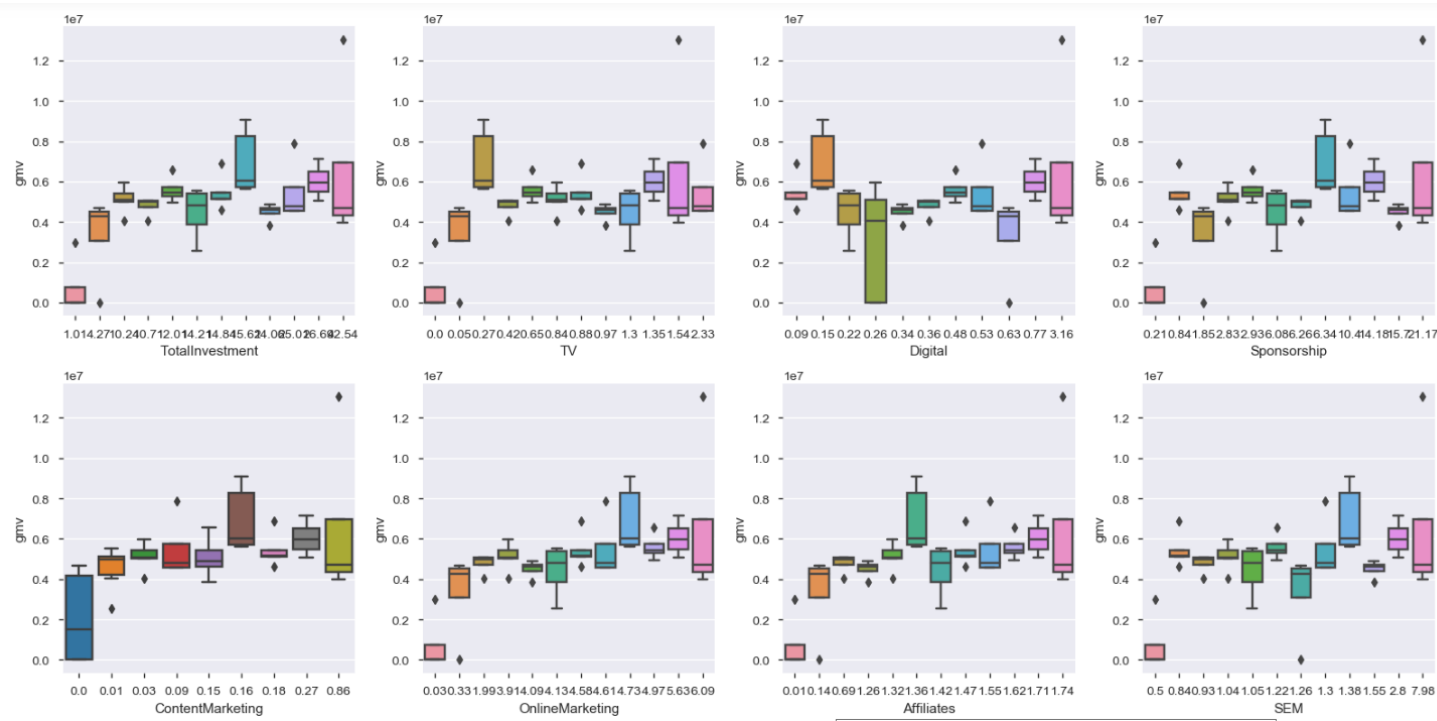


GMV PERFORMANCE ACROSS THE WEEK

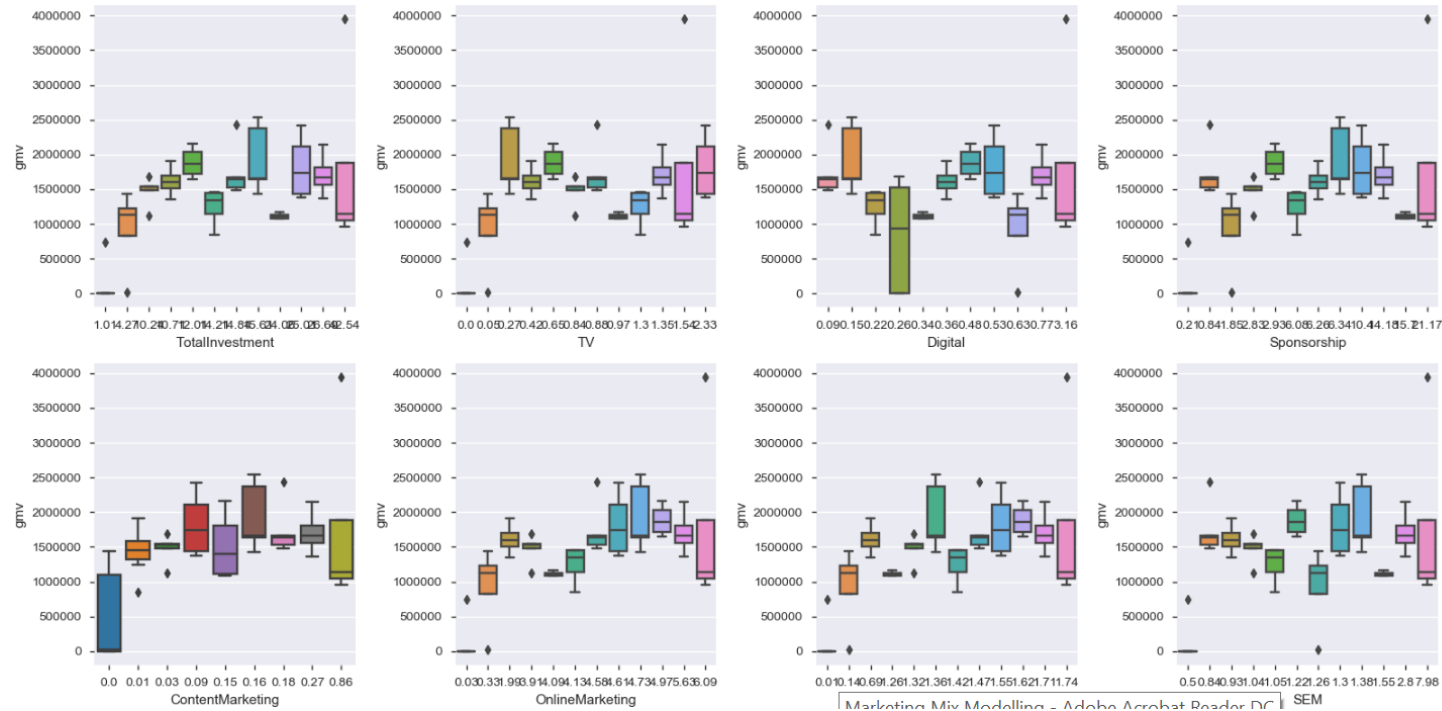
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- Gaming Accessory
- Home Audio

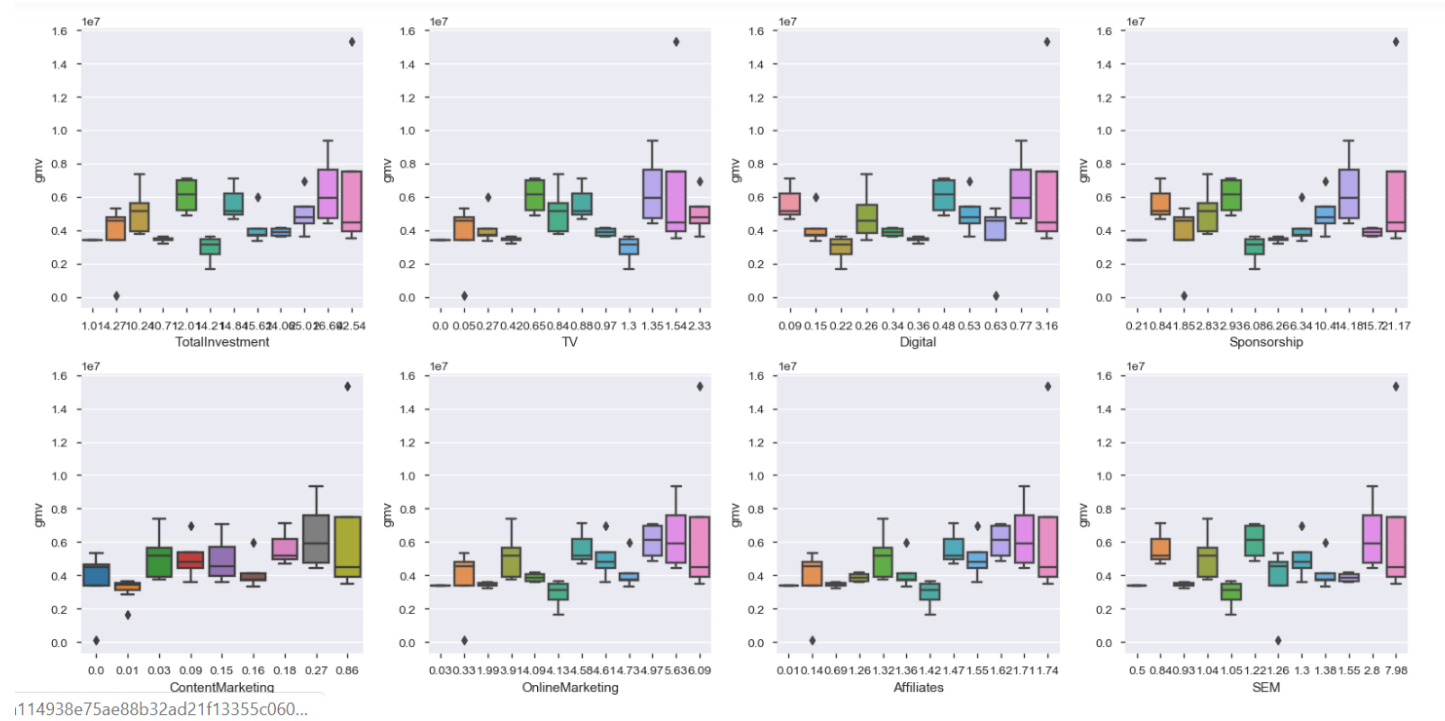


BIVARIATE ANALYSIS FOR CAMERA ACCESSORIES



BIVARIATE ANALYSIS FOR GAMING ACCESSORIES





BIVARIATE ANALYSIS FOR HOME AUDIO ACCESSORIES

FEATURE RECOMMENDATION VIZ MODEL DESIGNING: CAMERA ACCESSORIES

- **Basic Linear Model:** onlineordershare, payment_order_type, Sponsorship_ads, Special sales
- **Multiplicative Model:** discount, payment order type, onlineordershare, Content_marketing_ads, CoolDegDays
- **Kyocks Model:** discount, sla, payment_order_type, onlineordershare, Online_marketing_ads, HeatDegDays, Special_Sales
- **Distributed Lag(Additive) Model:** payment_order_type, onlineordershare, Online_marketing_ads, Special_sales
- **Distributed Lag(Multiplicative) Model:** product_procurement_sla, payment_order_type, onlineordershare, lag1disc, lag1NPS, lag1gm

RECOMMENDATION – CAMERA ACCESSORIES



FOCUSING ON SALES OF
PREMIUM PRODUCTS



OFFER MORE DISCOUNTS



FOCUSING ON ONLINE
MARKETING & CONTENT
MARKETING OF CAMERA
ACCESSORIES



REDUCING THE MONEY SPEND
ON OTHER FORMS OF
MARKETING

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RECOMMENDATION – GAMING ACCESSORIES



FOCUSING ON SALES
OF PREMIUM
PRODUCTS



OFFER MORE
DISCOUNTS



COMPLETING SLAS ON
TIME



FOCUSING ON ONLINE
MARKETING OF
CAMERA ACCESSORIES



REDUCING THE MONEY
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FEATURE RECOMMENDATION VIZ MODEL DESIGNING: CAMERA ACCESSORIES

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RECOMMENDATION – HOME AUDIO ACCESSORIES



FOCUSING ON SALES
OF PREMIUM
PRODUCTS



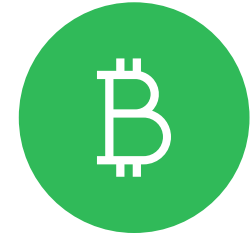
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COMPLETING SLAS ON
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FOCUSING ON ONLINE
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REDUCING THE MONEY
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thank

you!