RETAIL GIANT

Global Mart Case study

Agenda

Introduction

Finding the best segment

Forecasting

Summary

Introduction

ON THE BASIS OF 21 UNIQUE MARKET SEGEMENTS FINDING THE MOST CONSISTENTLY PROFITABLE MARKET SEGMENT

AFTER FINDING THE OPTIMIAL MARKET SEGMENT

FORECASTING ITS SALES FOR FUTURE MONTHS

(IDENTIFYING WHICH MODEL SHOULD BE USED.

All the Sectors

Markets – USA, APAC EU Africa EMEA LATAM CANADA

Segments – Consumer, Corporate, Home Office

FINDING THE OPTIMAL SECTOR

We will use coefficient of Variance to determine the most consistently earning profit segment

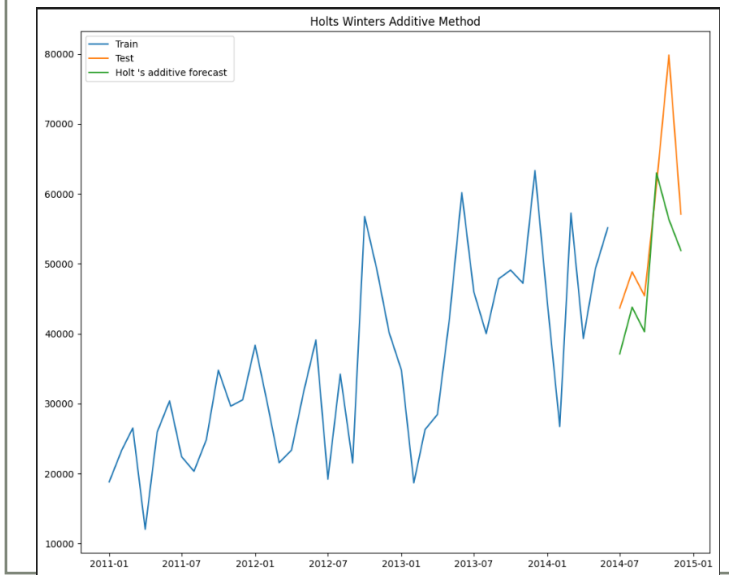
combinedMarketSegment	0	std	covariance
APAC-Consumer	4400.894243	2300.457687	0.522725
APAC-Corporate	2574.919807	1364.837734	0.530051
APAC-Home Office	1511.088314	1523.508658	1.008219
Africa-Consumer	957.707000	1254.932072	1.310351
Africa-Corporate	412.617571	780.566850	1.891744
Africa-Home Office	377.221071	759.322203	2.012937
Canada-Consumer	225.987632	282.555788	1.250315
Canada-Corporate	90.980294	162.493114	1.786025
Canada-Home Office	118.003750	279.632866	2.369695
EMEA-Consumer	423.960286	1124.552711	2.652495
EMEA-Corporate	182.642643	1160.698430	6.355024
EMEA-Home Office	84.231366	651.283095	7.732073
EU-Consumer	3699.977143	2202.282289	0.595215
EU-Corporate	2216.299429	1600.336696	0.722076
EU-Home Office	1224.456536	1148.627937	0.938072
LATAM-Consumer	2295.555697	1569.632686	0.683770
LATAM-Corporate	1122.633016	990.360880	0.882177
LATAM-Home Office	818.398941	957.275713	1.169693
US-Consumer	2686.740912	2715.031412	1.010530
US-Corporate	1754.199083	1880.200775	1.071829
US-Home Office	1132.065762	1272.476439	1.124030

From the above analysis we can infer that APAC-Consumer has the lowest variance hence we should focus on it also its mean profit is on the higher end

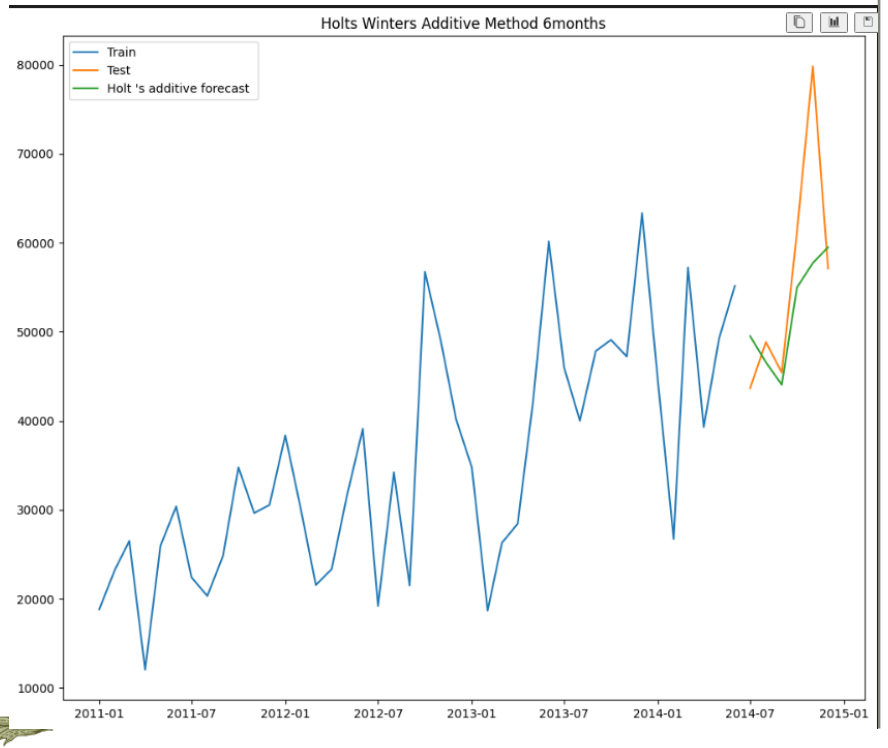
Time Series

After in-dept analysis we can conclude that Holts- Smoothing Additive (6m for seasonality) should be used (12m also works)

12m



6m



Looking at it from the error Side

Holts Additive Method Provides us with the least amount of Error both for MAPE, RSME

Method	MAPE	RSME
Naive Method	17.47	12355.97
Simple average Method	34.34	24146.06
Simple moving average Method	13.79	13167.96
Simple Exponential Smoothing forcast	15.99	15011.49
Holts Exponential Smoothing forcast	14.64	11456.45
Holts Additive method 12m	13.02	11456.45
Holts Additive method 6m	10.52	11456.45
Holts Multiplicative method 12m	13.14	11456.45

Summary

From in depth analysis we can conclude that we should focus on APAC-Consumer and for forecasting we should use Holts method Of Smoothing Additive as it is the most accurate

Thank you

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