

Demand Forecasting of the Beauty Industry in Albania: Selen Cosmetics



BUS 321 - Operations Management
Friona Pocari

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY.....	2
II. INTRODUCTION.....	2
III. DATA COLLECTION.....	3
IV. DIFFERENT FORECASTING METHODS.....	4
V. EVALUATION METRICS FOR METHODS.....	8
VI. SELECTION OF BEST METHODS.....	13
VII. FORECAST OF PERIOD 13.....	13
VIII. BUSINESS IMPLICATIONS & ANALYSIS.....	17
IX. LIMITATIONS AND ASSUMPTIONS.....	18
X. CONCLUSION.....	18
REFERENCES.....	19

I. EXECUTIVE SUMMARY

This project is focused on a thorough examination of Selen Cosmetics' inventory control and forecasting procedures. Metrics like MAD, MSE, and MAPE proved that the trend projection

method—especially when applied to a linear regression model, was the most accurate way to anticipate sales using historical data. Even though Selen Cosmetics uses a strategic approach to inventory management, problems in particular months, such as a minor shortage in July and an excess supply of inventory in October, leads to the requirement of a more thorough review of inventory regulations. The project suggests the implementation of a safety stock policy, dynamic inventory adjustments, investigation of cutting-edge technologies such as inventory management software, and continuous monitoring for continued alignment with market conditions as ways to overcome these obstacles and improve operational efficiency. With the help of these strategic suggestions, Selen Cosmetics will be better positioned to maintain growth and satisfy customers through enhanced inventory control, more accurate forecasting, and proactive response to market changes.

II. INTRODUCTION

Background of the Business in Albania

Selen is an Albanian cosmetic brand, founded by Arsida Cerpja, 10 years ago. She stopped working on the brand in 2020 in order to relaunch it. In addition to finishing her business management degree, she attended the Milan beauty school. Over the years, she has made contacts and accumulated information with important manufacturers in Korea, China, Germany, Italy, and other countries. Twenty years later, she returned to Albania and revitalized Selen with the goal of creating high-quality goods at reasonable costs for Albanian girls to purchase on the local market. Every product has been made with amazing enthusiasm, professionalism, and extensive research. Selen Cosmetics has been praised from many magazines regarding its cosmetics approach, such as Anabel Magazine, a very famous beauty and hacks magazine in Albania, praises “quality, unique identity, and price” (Anabel) of the products, also highlighting how the sales have surpassed their expectations for the company.

Overview of the Product under Consideration

The product chosen is one of the eyeshadow palette of Selen Cosmetic. The "Pasion" eyeshadow palette is part of the first collection in Albania dedicated to Love. The Pasion palette features 9 matte shades and 6 shimmer shades.

Market Conditions and Relevant Industry Trends

Focus on the local and ethical: Selen takes advantage of the market's desire to support small businesses in the community and the growing demand for local, ethical beauty brands.

Novel natural components: In response to the increased customer demand for natural advantages, Selen keeps one step ahead of the competition by incorporating novel natural ingredients into its skincare products.

E-commerce and digital marketing embrace: To stay ahead of the industry's shift toward e-commerce beauty purchasing, Selen makes the most of its online and digital marketing platforms.

Product development with a focus on culture: Selen is responding to cultural influences by developing goods that capture the ideal of Albanian beauty as well as the broader movement to value diversity.

Customized beauty options: Selen is dedicated to offering environmentally responsible and sustainable packaging, acknowledging the growing trend of personalized beauty choices.

III. DATA COLLECTION

We got the honor of learning straight from the creator of Selen Cosmetics through an extensive interview. They gave us essential details on their supply, demand, and leftover inventory data. A deeper understanding of the brand's market dynamics was made possible by the owner's open disclosure, which also demonstrated their dedication to transparency. This gave us the opportunity to examine demand forecasting tendencies and delve into the complexities of the beauty sector.

MONTH	DEMAND (SALES) in units	SUPPLY	LEFTOVER INVENTORY (STOCK)
January	150	180	30
February	200	190	20
March	180	200	40
April	250	240	30
May	300	280	10
June	280	270	0

July	320	310	-10
August	350	380	20
September	400	410	30
October	380	390	40
November	420	400	20
December	450	440	10

IV. DIFFERENT FORECASTING METHODS

This section provides the computations of forecasting the demands of the palette through the forecasting methods of 3-Month Moving Average (3MA), 3-Month Weighted Moving Average (3WMA), Exponential Smoothing with $\alpha = 0.2, 0.3, 0.5$, and Trend Projection / Regression method. Later upon the project, the most accurate method for the demand of the palette will be chosen based on the measures of forecast errors by comparing the actual demands with the forecasted demands of each month throughout the year.

1. Moving Average

MONTH	ACTUAL SALES	3-MONTH MOVING AVERAGE (3MA)
January	150	-
February	200	-
March	180	-
April	250	$(150+200+180)/3 = 176.6$
May	300	$(200+180+250)/3 = 210$
June	280	$(180+250+300)/3 = 243.3$
July	320	$(250+300+280)/3 = 276.7$
August	350	$(300+280+320)/3 = 300$
September	400	$(280+320+350)/3 = 316.7$

October	380	$(320+350+400)/3 = \mathbf{356.7}$
November	420	$(350+400+380)/3 = \mathbf{376.7}$
December	450	$(400+380+420)/3 = \mathbf{400}$

2. Weighted Moving Average

WEIGHTS APPLIED	PERIOD
3	Last Month
2	2 Months Ago
1	3 Months Ago
Total Sum of Weights: 6	

MONTH	ACTUAL SALES	3-MONTH WEIGHTED MOVING AVERAGE (3WMA)
January	150	-
February	200	-
March	180	-
April	250	$[(3 \times 180) + (2 \times 200) + (150)]/6 = \mathbf{181.7}$
May	300	$[(3 \times 250) + (2 \times 180) + (200)]/6 = \mathbf{218.3}$
June	280	$[(3 \times 300) + (2 \times 250) + (180)]/6 = \mathbf{263.3}$
July	320	$[(3 \times 280) + (2 \times 300) + (250)]/6 = \mathbf{281.7}$
August	350	$[(3 \times 320) + (2 \times 280) + (300)]/6 = \mathbf{303.3}$
September	400	$[(3 \times 350) + (2 \times 320) + (280)]/6 = \mathbf{328.3}$
October	380	$[(3 \times 400) + (2 \times 350) + (320)]/6 = \mathbf{370}$
November	420	$[(3 \times 380) + (2 \times 400) + (350)]/6 = \mathbf{381.7}$
December	450	$[(3 \times 420) + (2 \times 380) + (400)]/6 = \mathbf{403.3}$

3. Exponential Smoothing

MONTH	ACTUAL SALES	$\alpha = 0.2$	$\alpha = 0.3$	$\alpha = 0.5$
January	150	150	150	150
February	200	$150 + 0.2(150 - 150) = 150$	$150 + 0.3(150 - 150) = 150$	$150 + 0.5(150 - 150) = 150$
March	180	$150 + 0.2(200 - 150) = 160$	$150 + 0.3(200 - 150) = 165$	$150 + 0.5(200 - 150) = 175$
April	250	$160 + 0.2(180 - 160) = 164$	$165 + 0.3(180 - 165) = 169.5$	$175 + 0.5(180 - 175) = 177.5$
May	300	$164 + 0.2(250 - 164) = 181.2$	$169.5 + 0.3(250 - 169.5) = 193.65$	$177.5 + 0.5(250 - 177.5) = 213.75$
June	280	$181.2 + 0.2(300 - 181.2) = 204.96$	$193.65 + 0.3(300 - 193.65) = 225.56$	$213.75 + 0.5(300 - 213.75) = 256.87$
July	320	$204.96 + 0.2(280 - 204.96) = 219.97$	$225.56 + 0.3(280 - 225.56) = 241.89$	$256.87 + 0.5(280 - 256.87) = 268.43$
August	350	$219.97 + 0.2(320 - 219.97) = 239.98$	$241.89 + 0.3(320 - 241.89) = 265.32$	$268.43 + 0.5(320 - 268.43) = 294.21$
September	400	$239.98 + 0.2(350 - 239.98) = 261.98$	$265.32 + 0.3(350 - 265.32) = 290.72$	$294.21 + 0.5(350 - 294.21) = 322.10$
October	380	$261.98 + 0.2(400 - 261.98) = 289.58$	$290.72 + 0.3(400 - 290.72) = 323.50$	$322.10 + 0.5(400 - 322.10) = 361.05$
November	420	$289.58 + 0.2(380 - 289.58) = 307.66$	$323.50 + 0.3(380 - 323.50) = 340.45$	$361.05 + 0.5(380 - 361.05) = 370.52$
December	450	$307.66 + 0.2(420 - 307.66) = 330.13$	$340.45 + 0.3(420 - 340.45) = 364.32$	$370.52 + 0.5(420 - 370.52) = 395.26$

4. Trend Projection / Regression

MONTH (x)	SALES (y)	x^2	xy
1	150	1	150
2	200	4	400
3	180	9	540
4	250	16	1000
5	300	25	1500
6	280	36	1680
7	320	49	2240
8	350	64	2800
9	400	81	3600
10	380	100	3800
11	420	121	4620
12	450	144	5400
$\sum x = 78$	$\sum y = 3680$	$\sum x^2 = 650$	$\sum xy = 27,730$

$$\bar{x} = \sum x/n = 78/12 = 6.5$$

$$\bar{y} = \sum y/n = 3680/12 = 306.67$$

$$b = \frac{27,730 - (12)(6.5)(306.67)}{650 - (12)(6.5)^2} = 3809.74/143 = 26.64$$

$$a = \bar{y} - b\bar{x} = 306.67 - (26.64)6.5 = 133.51$$

$$\hat{y} = 133.51 + 26.64x$$

FORECASTING WITH TREND PROJECTION

MONTH	ACTUAL SALES	TREND PROJECTION
1	150	$133.51 + 26.64(1) = 160.15$
2	200	$133.51 + 26.64(2) = 186.81$
3	180	$133.51 + 26.64(3) = 213.43$
4	250	$133.51 + 26.64(4) = 240.07$
5	300	$133.51 + 26.64(5) = 266.71$
6	280	$133.51 + 26.64(6) = 293.35$
7	320	$133.51 + 26.64(7) = 319.99$
8	350	$133.51 + 26.64(8) = 346.63$
9	400	$133.51 + 26.64(9) = 373.27$
10	380	$133.51 + 26.64(10) = 399.91$
11	420	$133.51 + 26.64(11) = 426.55$
12	450	$133.51 + 26.64(12) = 453.19$

V. EVALUATION METRICS FOR METHODS

This section includes broken down tables with the thorough calculations of Mean Absolute Deviation (MAD), Mean Squared Error (MSE), Mean Absolute Percentage Error (MAPE), and Trend Projection.

3-MONTH MOVING AVERAGE

CALCULATING MAD, MSE, MAPE for 3MA					
MONTH	ACTUAL SALES	FORECAST WITH 3MA	ABSOLUTE DEVIATION	(ERROR)^2	ABSOLUTE % ERROR
January	150	-	-	-	-
February	200	-	-	-	-
March	180	-	-	-	-
April	250	176.6	(250-176.6)=73.4	5832.76	100(73.4/250) = 29.36%
May	300	210	(300-210)=90	8100	100(90/300) = 30%
June	280	243.3	(280-243.3)=36.7	1354.69	100(36.7/280) = 13.1%
July	320	276.6	(320-276.6)=43.3	1875.89	100(43.3/320)=13.5%
August	350	300	(350-300)=50	2500	100(50/350) = 14.3%
September	400	316.7	(400-316.7)=83.3	6938.89	100(83.3/400)=20.8%
October	380	356.7	(380-356.7)=23.3	542.89	100(23.3/380) = 6.1%
November	420	376.7	(420-376.7)=43.3	1875.89	100(43.3/420)=10.3%
December	450	400	(450-400)=50	2500	100(50/450) = 11.1%
MAD	(73.4+90+36.7+43.3+50+83.3+23.3+43.3+50)/9=493.3/9= 54.8				
MSE	(5382.76+8100+1345.69+1875.89+2500+6938.89+542.89+1875.89+2500)/9=29682.02/9=3298,0022 = 3298				
MAPE	(29.36%+30%+13.1%+13.5%+14.3%+20.8%+6.1%+10.3%+11.1%)/9=149.5%/9= 16.61%				

3-MONTH WEIGHTED MOVING AVERAGE

CALCULATING MAD, MSE, MAPE for 3WMA					
MONTH	ACTUAL SALES	FORECAST WITH 3WMA	ABSOLUTE DEVIATION	(ERROR)^2	ABSOLUTE % ERROR
January	150	-	-	-	-
February	200	-	-	-	-
March	180	-	-	-	-
April	250	181.7	68.3	4670.89	27.32%
May	300	213.8	81.7	6671.89	27.23%
June	280	263.3	16.7	278.89	5.96%
July	320	281.7	38.3	1468.89	11.97%
August	350	303.3	46.7	2180.89	13.34%
September	400	328.3	71.7	5132.89	17.93%
October	380	370	10	100	2.63%
November	420	381.7	38.3	1468.89	9.12%
December	450	403.3	46.7	2180.89	10.38%
MAD	$(68.3+81.7+16.7+38.3+46.7+71.7+10+38.3+46.7)/9=418.4/9=$ 46.49				
MSE	$(4670.89+6671.89+278.89+1468.89+2180.89+5132.89+100+1468.89+2180.89)/9=22134.01/9=$ 2459.33				
MAPE	$(27.32+27.23+5.96+11.97+13.34+17.93+2.63+9.12+10.38)/9=125.88/9=$ 13.98%				

EXPONENTIAL SMOOTHING

MONTH	SALES	$\alpha = 0.2$	MAD 0.2	$\alpha = 0.3$	MAD 0.3	$\alpha = 0.5$	MAD 0.5
January	150	150	0	150	0	150	0
February	200	150	50	150	50	150	50

March	180	160	20	165	15	175	5
April	250	164	86	169.5	80.5	177.5	72.5
May	300	181.2	118.8	193.65	106.35	213.75	86.25
June	280	204.96	75.04	225.56	54.44	256.87	23.13
July	320	219.97	100.03	241.89	78.11	268.43	51.57
August	350	239.98	110.02	265.32	84.68	294.21	55.79
September	400	261.98	138.02	290.72	109.28	322.10	77.9
October	380	289.58	90.42	323.50	56.5	361.05	18.95
November	420	307.66	112.34	340.45	79.55	370.52	49.48
December	450	330.13	119.87	364.32	85.68	395.26	54.74
TOTAL			1021.84/12 = 85.15		810.09/12 = 67.5		586.91/12 = 48.9

Among the alpha values of 0.2, 0.3, and 0.5, the alpha of 0.5 is selected for the continuation of the comparison of the forecasting methods, as it produces the smallest value of MAD among the other alphas, making the demand forecasts more accurate in the long-run. Thus, the analysis continues with breaking down the 0.5 alpha forecasts into the table below to calculate not only MAD, but also MSE AND MAPE to further compare with the other methods within this case study.

CALCULATING MAD, MSE, MAPE for Exponential Smoothing 0.5					
MONTH	ACTUAL SALES	FORECAST WITH Exponential Smoothing	ABSOLUTE DEVIATION	(ERROR)^2	ABSOLUTE % ERROR
January	150	150	0	0	0%
February	200	150	50	2500	25%
March	180	175	5	25	2.7%
April	250	177.5	72.5	5256.25	29%
May	300	213.75	86.25	7439.06	28.75%

June	280	256.87	23.13	534.99	8.26%
July	320	268.43	51.57	2659.46	16.11%
August	350	294.21	55.79	3112.5	15.94%
September	400	322.10	77.9	6068.41	19.47%
October	380	361.05	18.95	359.1	4.98%
November	420	370.52	49.48	2448.27	11.78%
December	450	395.26	54.74	2996.46	12.16%
MAD	586.91/12 = 48.9				
MSE	33399.5/12 = 2738.2				
MAPE	174.15/12 = 14.51%				

TREND PROJECTION

CALCULATING MAD, MSE, MAPE for TREND PROJECTION					
MONTH	ACTUAL SALES	FORECAST WITH TP	ABSOLUTE DEVIATION	(ERROR)^2	ABSOLUTE % ERROR
January	150	160.15	10.15	103.02	6.77%
February	200	186.81	13.19	173.98	6.6%
March	180	213.43	33.43	1117.56	18.57%
April	250	240.07	9.93	98.60	3.97%
May	300	266.71	33.29	1108.22	11.1%
June	280	293.35	13.35	178.22	4.77%
July	320	319.99	0.01	0.0001	0.003%
August	350	346.63	3.37	11.36	0.96%
September	400	373.27	26.73	714.49	6.68%
October	380	399.91	19.91	396.41	5.23%
November	420	426.55	6.55	42.90	1.55%

December	450	453.19	3.19	10.18	0.708%
MAD	$(10.15+13.19+33.43+9.93+33.29+13.35+0.01+3.37+26.73+19.91+6.55+3.19)/12 = \mathbf{14.4}$				
MSE	$(103.2+173.98+1117.56+98.60+1108.22+178.22+0.0001+11.36+714.49+396.41+42.90+10.18)/12 = \mathbf{329.58}$				
MAPE	$(6.77\%+6.6\%+18.57\%+3.97\%+11.1\%+4.77\%+0.003\%+0.96\%+6.68\%+5.23\%+1.55\%+0.708\%)/12 = \mathbf{5.58\%}$				

VI. SELECTION OF BEST METHODS

METHOD	MAD	MSE	MAPE
3MA	54.8	3298	16.61%
3WMA	46.49	2459	19.98%
Exponential Smoothing	48.9	2738.2	14.51%
Trend Projection	14.4	329.58	5.58%

Trend Projection stands out as the most unbiased and successful forecasting method with the lowest Mean Absolute Deviation (MAD), indicating minimal average deviation from actual values, and a low Mean Squared Error (MSE), highlighting precise predictions. The method's Mean Absolute Percentage Error (MAPE) is also among the lowest, solidifying Trend Projection as the most accurate forecasting approach upon this analysis, which will be used in continuation of the analysis to forecast period 13 and further solidify the forecast analysis for Selen Cosmetics.

VII. FORECAST OF PERIOD 13

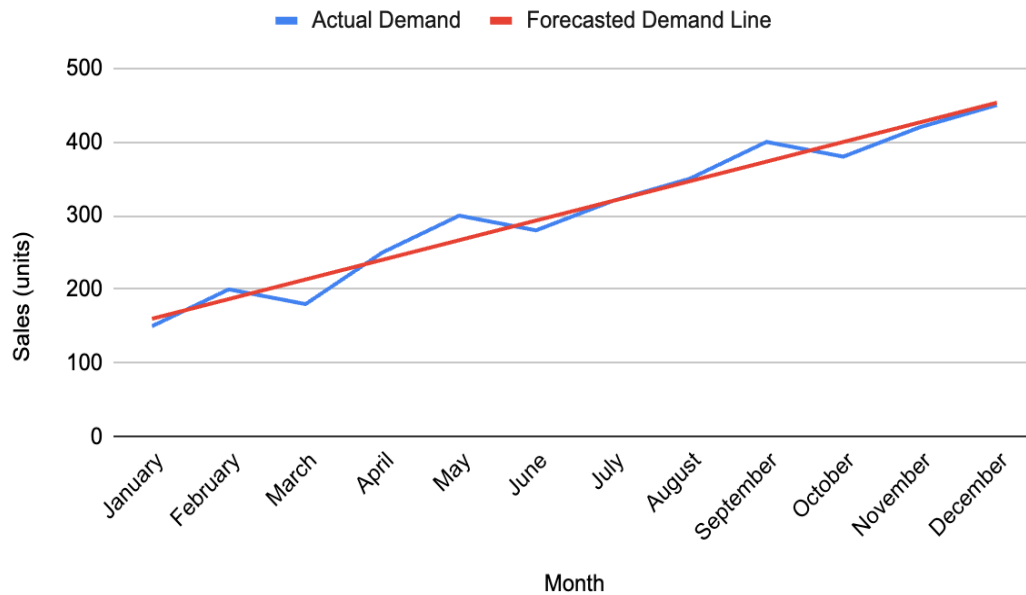
The chosen method for forecasting Period 13 was the trend projection forecasting method, justified by the smallest values of error calculated for all MAD, MSE, and MAPE. The trend projection method was the most accurate method in capturing the underlying sale data trend of the palette, demonstrating a higher accuracy than the other methods upon predicting the sales.

Period 13, also referred to as January of the next year for Selen Cosmetics, can be calculated by plugging the period 13 as the x value within the linear regression equation calculated earlier as $\hat{y} = 133.51 + 26.64x$, which gives the forecasted value of 479.83, so

Selene Cosmetics anticipates approximately 480 palettes to be demanded for the sales of January.

FORECASTING WITH TREND PROJECTION		
MONTH	ACTUAL SALES	TREND PROJECTION
1	150	$133.51 + 26.64(1) = 160.15$
2	200	$133.51 + 26.64(2) = 186.81$
3	180	$133.51 + 26.64(3) = 213.43$
4	250	$133.51 + 26.64(4) = 240.07$
5	300	$133.51 + 26.64(5) = 266.71$
6	280	$133.51 + 26.64(6) = 293.35$
7	320	$133.51 + 26.64(7) = 319.99$
8	350	$133.51 + 26.64(8) = 346.63$
9	400	$133.51 + 26.64(9) = 373.27$
10	380	$133.51 + 26.64(10) = 399.91$
11	420	$133.51 + 26.64(11) = 426.55$
12	450	$133.51 + 26.64(12) = 453.19$
13	x	$133.51 + 26.64(13) = 479.83$

Actual Sales and the Computed Trend Line



The graph comparing the actual demand and the forecasted demand through the trend projection method by following the trend line is observed above. As can be observed, the forecasted demand line is quite close to the actual demanded sales, encompassing and passing through approximately in-between the actual demand coordinates within the graph. The overall trend is generally captured, showing only slight underestimations of overestimations throughout the months.

COMPUTING THE TRACKING SIGNAL

TRACKING SIGNAL			
MONTH	ACTUAL SALES	TREND PROJECTION	ERROR
1	150	160.15	-10.15
2	200	186.81	13.19
3	180	213.43	-33.43
4	250	240.07	9.93
5	300	266.71	33.29
6	280	293.35	-13.35
7	320	319.99	0.01
8	350	346.63	3.37
9	400	373.27	26.73
10	380	399.91	-19.91
11	420	426.55	-6.55
12	450	453.19	-3.19
			$\sum \text{Errors} = -0.06$
TRACKING SIGNAL = Cumulative Error / MAD = $-0.06 / 14.4 = -0.0042$			

The tracking signal is a highly valuable tool which comes in help in forecasting, helping to monitor performance of the tracking method throughout time and also provides further insights regarding the accuracy that the predictions consist of. Interpreting the computed tracking signal of -0.0042 in the case of the trend projection method, this value which is extremely close to 0 suggests that there is very minimal bias, and if there is any, it is practically insignificant and negligible to the overall forecast accuracy. To explain appropriately, bias error includes a forecast which consistently is lower or higher than the actual demand values for a specific time series. The method tends to consistently forecast the demand in a balanced manner and the negative sign in general simply refers to excess inventory, meaning that the demand is slightly overestimated, yet the value is extremely close to bias, making this near zero

bias basically negligible. There are specific acceptable limits which make tracking signals ring a bell to producers to basically signal that the forecasting methods should be reevaluated. In this case, being this close to zero, the tracking signal suggests an accurate and well-balanced method of forecasting within acceptable boundaries.

VIII. BUSINESS IMPLICATIONS & ANALYSIS

In order to balance supply and prevent stockouts or excess inventory, the company maintains its inventory to match changing demand over the months. With 180 units supplied compared to 150 units demanded in January, the company keeps 30 units of excess inventory on hand. This tactic is still in place to guarantee that there is sufficient inventory buffer to handle future spikes in demand. By June, supply and demand are almost exactly in balance, leaving 0% inventory left over. In July, the company had a small inventory shortfall of -10 units, suggesting a possible stockout, despite a demand of 320 units and a supply of 310 units. There was a rebound in August, with 380 units supplied against the demand, leaving 20 units in excess inventory. The company constantly modifies its inventory levels to suit demand, albeit there are occasional difficulties keeping a perfect balance, as July and October demonstrate. To maximize operational effectiveness and client satisfaction, inventory management procedures must be continuously monitored and adjusted. This is where the forecasting method of trend projection which was found to be the most unbiased and effective comes into play.

The estimated demand of about 480 palettes for the 13th period (January) shows a predicted rise in demand for Selen Cosmetics, according to the expected trend projection approach. In order to manage the anticipated increase in demand, Selen Cosmetics have to think about putting a strong inventory plan into place. Based on past performance and the sporadic difficulties in achieving a perfect balance noted all year long, it is recommended that the company have an excess inventory buffer, or safety stock. Various criteria, like as lead times, demand unpredictability, and desired service levels, determine how much safety stock to hold. To begin with, it could be wise to set aside an extra 10% of the anticipated demand as safety stock. In this case, Selen Cosmetics' inventory would include an additional 48 palettes (10% of 480).

This preventative measure guarantees that the company is ready to handle a rise in demand and offers flexibility in the event of unforeseen changes in consumer purchasing patterns. This strategy helps to improve operational resilience and customer satisfaction while also protecting against future stockouts. Since it is predicted that there will be an increase in

demand, especially backed due to the increase of popularity and marketing campaigns of Selen Cosmetics with the palette being of winter shades, it is highly suggested for the company to take immediate action on the safety stock it holds, so the same situation as July is not repeated in which they had to push the orders for the next month, There was a stockout in July as seen by the negative leftover inventory value (-10 units). This implies that for that particular month, there was insufficient supply to meet the demand, as they were not prepared for the surge of demand coming from the marketing campaign success in the summer.

IX. LIMITATIONS AND ASSUMPTIONS

Recognising the assumptions made throughout the forecasting process as well as the inherent constraints of the study is critical. The use of historical data, which makes the assumption that previous trends will hold true going forward, is one drawback. Market dynamics might change, causing previous patterns to not hold true. Furthermore, even if the forecasting techniques used are strong, they make the assumption that the underlying patterns can be sufficiently captured. Unexpected events or changes in the economy are examples of external factors that could introduce uncertainties into the study that cannot be fully accounted for. Additionally, the safety stock calculation makes the assumption that the proportion will be the same in every case, but depending on certain business circumstances, adjustments may be required. Transparency is created by outlining these constraints and underlying presumptions. This facilitates a more sophisticated interpretation of the data and encourages a continuous improvement attitude for upcoming forecasting projects.

X. CONCLUSION

To conclude, the thorough research and forecasting project for Selen Cosmetics emphasizes how important it is to have strong inventory management plans in order to satisfy consumer demand and maintain operational effectiveness. The project found patterns, predicted demand for the 13th month, and assessed existing inventory levels by applying forecasting techniques, such as Trend Projection regression, and carefully examining previous data. The suggested approach advises maintaining an agile supply chain, putting a safety stock strategy into place, and optimizing inventory by matching it with anticipated demand. Selen Cosmetics can effectively manage stockouts and excess inventory by strengthening its real-time monitoring and continuous improvement procedures. This will ultimately boost customer happiness and

overall business performance. Selen Cosmetics has the potential to grow sales and revenue significantly, especially with the success of new product releases, according to the forecasting research. Selen will need to carefully weigh the risks associated with entering new markets, taking both regulatory and economic concerns into account. In order to raise brand awareness, we advise investing more in e-commerce, product innovation, digital marketing, and strategic alliances. Selen is positioned to thrive in this competitive sector. By building on its advantages and overcoming obstacles, the company will be able to become a global and local leader in the cosmetics industry.

References

Pak histori. Selen Cosmetics. (n.d.). <https://www.selencosmetics.com/pages/kush-jemi>

Pse këto Produkte make up-i Duhet të Jenë Blerja Juaj e Radhës. Pse këto produkte make up-i duhet të jenë blerja juaj e radhës - Make-Up. (2020, September 29). <https://www.anabelmagazine.com/news/52732/pse-keto-produkte-make-up-i-duhet-te-jene-blerja-juaj-e-radhes>