**Predict Data Report 2018**

**Data Lions**

Superstore is a multi-segment retail store with an annual turnover of more than 2 million dollars. This report intends to highlight key areas across segments using a S.W.O.T. analysis

1. **Discuss the profit increase for 2016. Does this value indicate steady company growth? What else should we consider**?

|  |  |  |  |
| --- | --- | --- | --- |
| **Row Labels** | **Sum of Sales** | **Sum of Profit** | **%** |
| 2013 | $484 247,50 | $49 543,97 | 10,23% |
| 2014 | $470 532,51 | $61 618,60 | 13,10% |
| 2015 | $608 473,83 | $81 726,93 | 13,43% |
| 2016 | $733 947,02 | $93 507,51 | 12,74% |
| **Grand Total** | **$2 297 200,86** | **$286 397,02** | **12,47%** |

|  |  |
| --- | --- |
| **Year** | **Discounts by Year** |
| 2013 | 315,46 |
| 2014 | 327,09 |
| 2015 | 399,12 |
| 2016 | 519,42 |
| **Grand Total** | **1561,09** |

As the above table and chart shows that the increase in profit is directly correlated to an increase in sales. Increased sales, generally indicates, an increase in market share. Increased market share has a direct impact on profits, as profits are re-invested into operations and new customers will receive favourable discounts.

1. **The three states generating the most profit over the four-year period. Were they consistently the most profitable? If not, what other States (and what year) featured in the top three during that period**.

|  |  |
| --- | --- |
| **Top 3 States** | **2015** |
| California | $19 969,61 |
| New York | $16 654,95 |
| Indiana | $10 385,13 |

The top three states were not consistent,

allowing for an outlier. The state of Indiana

made it into the top three in 2015.

1. **Discuss the total Sales figures over the four-year period. Which year was the most successful and least successful?**

|  |  |  |
| --- | --- | --- |
| **Year** | **Sales** | **Sales Growth Rate** |
| 2013 | $484 247,50 |  |
| 2014 | $470 532,51 | -2,91% |
| 2015 | $608 474,83 | 22,67% |
| 2016 | $733 947,02 | 17,10% |
| **Total** | **$2 297 201,86** |  |
|  |  |  |
| **Avg. Ann. Sales** | **$574 300,47** |  |
| **Avg. Ann. Sales Growth** | | **12,28%** |

The analysis of the four-year sales figures indicates an average growth rate of 12,28% with an average annual sale of $574 300,47. The year with the greatest number of sales is 2016, however 2015 was the most successful with a growth rate of 22,67% and an increase of 25,58% from the previous year. The least successful year as indicated by the attached table is 2014 with a negative growth rate of -2,91%.

1. **What was the increase of the % of items returned from 2015 to 2016?**

Increase from 2015 – 2016 is 1.07%

|  |  |  |  |
| --- | --- | --- | --- |
| **Percentage of Returned Items** | **Sum of Quantity** | **Sum of Returns** | **Sum of Percentage** |
| 2013 | 7581 | 525 | 6,93% |
| 2014 | 7979 | 598 | 7,49% |
| 2015 | 9810 | 790 | 8,05% |
| 2016 | 12503 | 1140 | 9,12% |
| **Grand Total** | **37873** | **3053** | **8,06%** |

1. **In 2016 – What category generated the largest profit? Was this the case for previous years too?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Row Labels** | **2013** | **2014** | **2015** | **2016** | **Grand Total** |
| Technology | $21 492,83 | $33 503,87 | $39 751,31 | $50 706,93 | $145 454,95 |
| Office Supplies | $22 593,42 | $25 099,53 | $35 015,66 | $39 782,19 | $122 490,80 |
| Furniture | $5 457,73 | $3 015,20 | $6 959,95 | $3 018,39 | $18 451,27 |
| **Grand Total** | **$49 543,97** | **$61 618,60** | **$81 726,93** | **$93 507,51** | **$286 397,02** |

The Technology category generated the largest profit with $50 706,93. The same can be seen for the previous years, however Office supplies generated the largest profit of $22 593,42.

1. **Have a look at the profit generated by the technology category over the four-year period. Can you find any issues that you should notify the company about? Any particularly good outcomes to point out to the company?**

|  |  |  |
| --- | --- | --- |
| **Row Labels** | **Technology Profit** | **Growth Rate** |
| 2013 | $21 492,83 |  |
| 2014 | $33 503,87 | 35,85% |
| 2015 | $39 751,31 | 15,72% |
| 2016 | $50 706,93 | 21,61% |
| **Grand Total** | **$145 454,95** |  |
| **Average Profit** | **$36 363,74** |  |
|  |  |  |
| **Average Profit Growth Rate** | | 24,39% |

The table to the left indicates the profits generated by the Technology Category, which shows normal increases as per Company sales as discussed in Answer 1.

The Technology category accounts for 50,79% of overall profits.

The technology category has increased year on year with an average profit of $36 363,74 and a growth that fluctuates with an Average Profit Rate of 24,39%.

|  |  |
| --- | --- |
| **Sum of Profit by Segment** | |
| Consumer | $45 580,92 |
| Corporate | $26 837,92 |
| Home Office | $21 088,67 |

1. **What was the most profitable segment in 2016? By what percentage is it larger than the second most profitable** **segment?**

The Consumer segment is the most profitable for 2016 with a profit of $45 580,92. With a percentage difference 26%.

1. **Which State and City are the least profitable in 2016 and what is their actual profit?**

|  |  |
| --- | --- |
| **Profit Loss by City** | **2016** |
| Chicago | -$5 701,13 |

|  |  |
| --- | --- |
| **Profit Loss by State** | **2016** |
| Texas | -$8 838,50 |

1. **What is the most common reason for product returns over the four-year period? How do you suggest the company solves this issue?**

The Inaccuracy of Product Description has become the main reason for unhappiness for customers.

We would recommend that Superstore invest in a robust tracking system, which matches the Sales Invoice with Delivery ticket.

This barcode scanning system would compare the SKU’s on both receipts generated.

1. **What return issue seems to have gotten considerably worse in 2016? What do you recommend the company do to fix this?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Reasons for Returns** | | | |
| **Returns per Customer Each Year** | **2015** | **2016** | **Increase by %** |
| Product Description Inaccurate | 82 | 98 | 16,33% |
| Customer Dissatisfied with Product | 57 | 51 | -11,76% |
| Product Damaged | 10 | 49 | 79,59% |
| Product Ordered Accidently | 21 | 33 | 36,36% |
| Product Arrived After Promised Delivery Date | 18 | 29 | 37,93% |
| Incorrect Products Delivered | 9 | **29** | 68,97% |

The above graph indicates that the Damaged Product reason has increased by 79,59% from 2015 to 2016.

Recommendation for Superstore would be to do product handling training with drivers and implement a penalty structure for drivers who deliver the most damaged goods.

1. **What is the % increase in products returned due to damage from 2015 to 2016?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Reasons for Returns** | | | |
| Returns per Customer Each Year | 2015 | 2016 | Increase by |
| Product Damaged | 10 | 49 | 79,59% |
|  |  |  |  |
|  |  |  |  |

1. **Why do you think there is suddenly a much larger number of returns in 2016 in comparison to previous years? Is this expected?**

An increase in returns is expected, as sales increased over the 2015 to 2016 period. As market share increase, so does operational issues arising from gaining the market share.

1. **Give recommendations to the company based on the report, your answers to these questions and anything else relevant you have found.**

**Superstore has shown tremendous sales growth from periods 2013 to 2016. With an average profit growth rate of 24,39%. Superstores greatest sales growth has occurred over the 2015-2016 period. Superstore has concentrated on aggressive growth in new markets and this is evident in the Technology category. Technology now accounts for more than 50% of the company’s revenues, this is Superstores single biggest threat. We recommend an almost equal split in revenues from the three main segments of the business. The Furniture category has performed the worst year on year.**

**We found that the worst performing states have the highest number of items purchased of the worst performing products. This is a great opportunity for Superstore, renewed focus on this client base and implementation of a turnaround strategy for the furniture category will reap new profits.**

**A very normal occurrence in the growth of any business and especially when there is a spike in sales and market share is gained through aggressive penetration, we find operational efficiency diminishing. This is evident in the increase in delivery issues and increasing returns.**

**We strongly recommend a two-pronged approach. Increased product handling training with delivery drivers and implementing a demerit system for bad deliveries. Superstore should also do a cost analysis on the software implementation for a package tracking system & more importantly evaluate if the delivery process should not be outsourced to a third party and Superstore receives profit share on each delivery.**

**The DATA LIONS team would like to thank Superstore for choosing us as a preferred supplier. We look forward to gaining a deeper analytical understanding of your business and more importantly, your success.**