

BUSINESS ANALYSIS: E-COMMERCE SUPERSTORE RETAILER



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Contents

EXECUTIVE SUMMARY	2
PERFORMANCE OVERVIEW.....	3
TABLES MARKET ANALYSIS	5
Recommendations	6
CUSTOMER BASE ANALYSIS	7
Recommendations	9
CANADIAN MARKET ANALYSIS.....	10
Recommendations	11
SHIPPING ANALYSIS.....	12
Recommendations	14
CONCLUSION.....	14
APPENDIX.....	14
REFERENCES.....	15

EXECUTIVE SUMMARY

Growth of a business is vital; but what is better? Sustainable growth! The following report is a step-by-step guideline on how to achieve the aforementioned. It can be seen that currently the business shows a positive view in terms of aggregate revenue and profitability, however a few problems and pitfalls that may hinder the outlook of the business in the future have been identified. A loss-making tendency in the sale of tables, issues with customer acquisition, low sales count and under exploitation of the Canadian market and inefficient shipping strategies were the key issues which were identified. In order to tackle these issues, an analysis was conducted using the SWOT analysis framework for each problem and multiple recommendations have been made to rectify the firm's internal and external inefficiencies and shortcomings. A few of the highlighted recommendations include, paying special attention to reworking their marketing strategies and sales policies together with fine tuning their shipping and distribution departments and also considering outsourcing certain aspects of their value chain in order to achieve their goals. These reformations are fortunately quick and easy to accomplish and require a minimal fiscal burden while providing exponential growth. Hence, the firm should act with great haste to set all remedial actions in motion and synchronize all departments in order to align themselves for success to reach new heights in this cut throat competitive market.

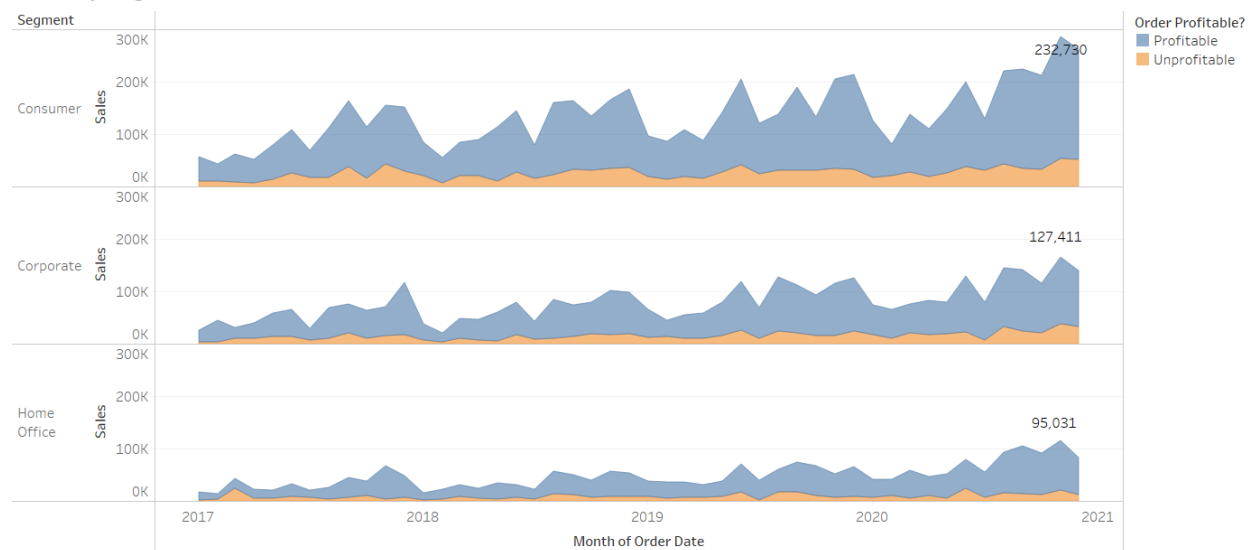
For methodology and assumptions refer appendix.

PERFORMANCE OVERVIEW

The business has seen positive growth overall throughout the years. Raking in over £12.6 million in sales and an overall profit of almost £1.5 million, thus securing a positive profit ratio of 11.61%. The most profitable countries include the United Kingdom, USA, India, China, Australia, France and Germany; all of which yield 6-figure profit aggregates and show an upward of 11% profit margins overall.

Moreover, as shown in figure-1, the firm has made a highly favourable impact on the consumer sector compared to other sectors. Outshining them drastically with profitable sales figures of up to £232,730 per month, while corporate and home-office only show peak profitable sales of up to £127,411 and £95,031 respectively. Nevertheless, apart from the month of March in 2017 in the home-office segment, all other periods showed more profitable orders than unprofitable ones, leading to a net profit throughout in all segments.

Sales by Segment



The plot of sum of Sales for Order Date Month broken down by Segment. Color shows details about whether Order is Profitable?. The data is filtered on Order Date, Country and Profit Ratio. The Order Date filter ranges from 01-Jan-17 to 30-Dec-20. The Country filter keeps 147 of 147 members. The Profit Ratio filter ranges from -163.00% to 44.08%. The view is filtered on Order Profitable?, which keeps Profitable and Unprofitable.

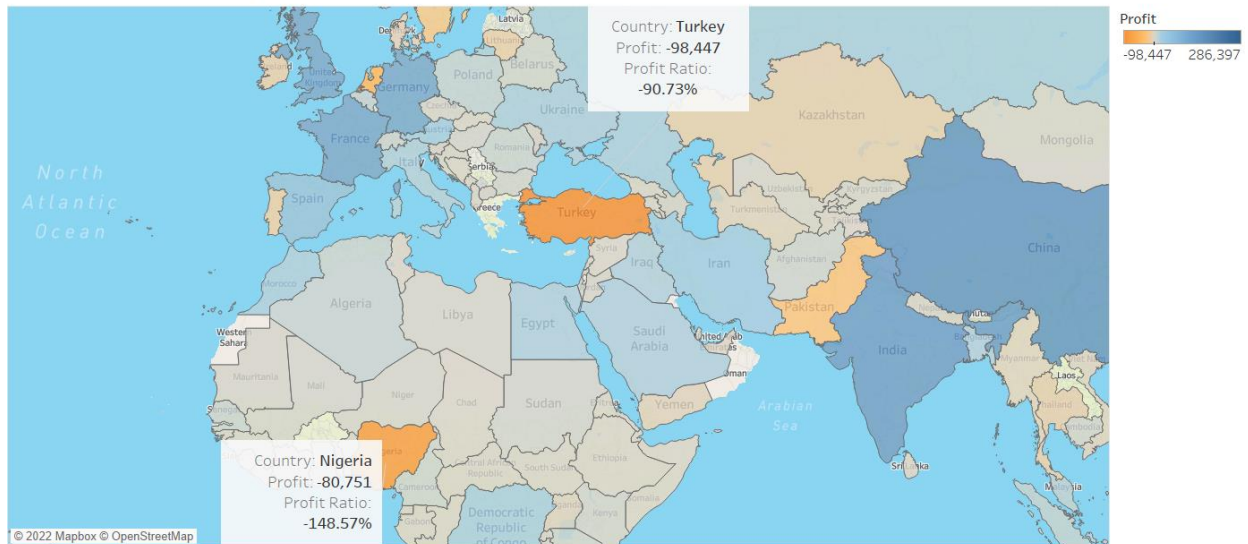
Figure-1

Furthermore, the customer base is seen to have a consistent positive growth in addition to an overall upward trend in the sales-per-customer. However, we can see that there is a pattern of drops in sales

per customer in every first quarter of each year, which might be due to an underlying issue of poor reach or lethargy of the marketing team after the New Year.

Additionally, countries such as Turkey and Nigeria have a net loss of £98,447 and £80,751 which is a staggering -90.73% and -148.57% negative profit ratio (figure-2). Many more similar issues exist which will be broken down further below.

Profitability by country



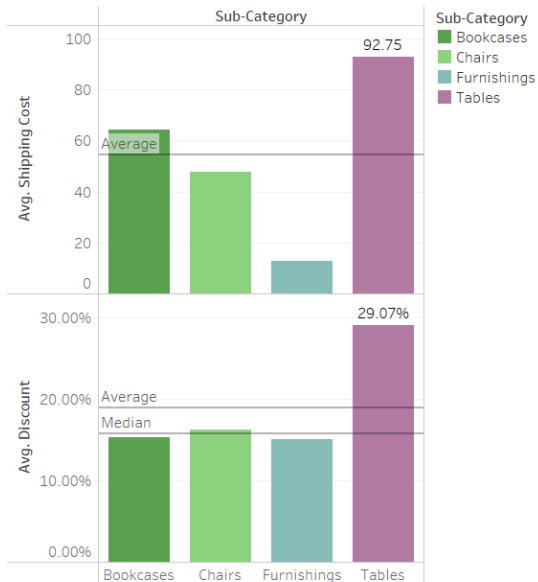
Map based on Longitude (generated) and Latitude (generated). Color shows sum of Profit. Details are shown for Country. The data is filtered on Order Profitable?, which keeps Profitable and Unprofitable. The view is filtered on Country and Profit Ratio. The Country filter keeps multiple members. The Profit Ratio filter ranges from -163.00% to 44.08%.

Figure-2

TABLES MARKET ANALYSIS

The tables sub-category seems to be the only product that is drastically lagging behind in the product portfolio of this business. Even though there is a prominent sales figure of £757,042, the average profit is -£74.4 with a negative profit ratio of -8.46%.

Average shipping cost & discount



Average of Shipping Cost and average of Discount for each Sub-Category. Color shows details about Sub-Category. The data is filtered on Category and Order Date Year. The Category filter keeps Furniture. The Order Date Year filter excludes 2016.

Figure-3

Discounts and shipping costs may play a distinct role as the causal factor. According to figure-3 the average shipping cost for tables came up to £92.75, which was the highest and double the overall average of £54.48! Similarly, the discounts provided for tables was the highest in its class, being two-fold from the median at 29.07%!

From an individual market perspective (figure-4) US, LATAM, APAC and EU show negative profits-per-order and profit ratios but, markets such as Canada, Africa and EMEA show promising results. Therefore, the firm's geographical location-based product strategies and marketing manoeuvres which may be influenced by language, culture and traditions might also be an impactful factor

Tables market analysis

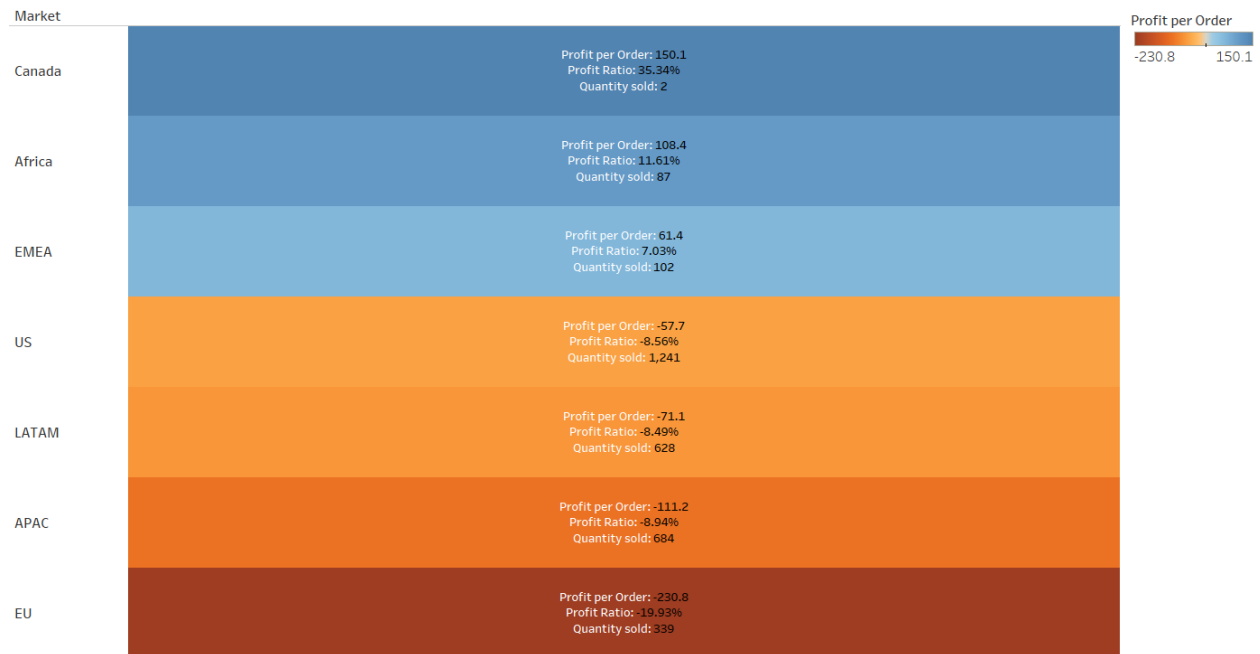


Figure-4

Recommendations

- Reduce shipping costs
 - Offering limited shipping options such as standard class and second class.
 - Outsourcing for cheaper shipping agents if shipping is being done in-house
 - Offer in-store pickup options
- Curbing discount rates and focusing on better marketing to boost sales, profitability and customer retention.
- Conducting an extensive sales policy analysis and rework.
- Identifying proven strategies implemented in profitable markets (Canada, Africa and EMEA) and implementing those tactics in loss-making markets.

CUSTOMER BASE ANALYSIS

The overall customer base has grown rapidly in the first year (2017). Office supplies took the lead with an exceptional 4-figure growth of 1015 new customers in 2017 (figure-5), indicating that its marketing campaign is most effective resulting in higher market penetration. However, the profit margin for office supplies (6.94%) is much lower than others (Appendix:figure-14), therefore that could also be a reason for higher acquisition numbers. Furthermore, the rate of customer acquisition hits a speed-bump and has plateaued by 2019 and 2020. This stagnation is not a good sign for a growing business.

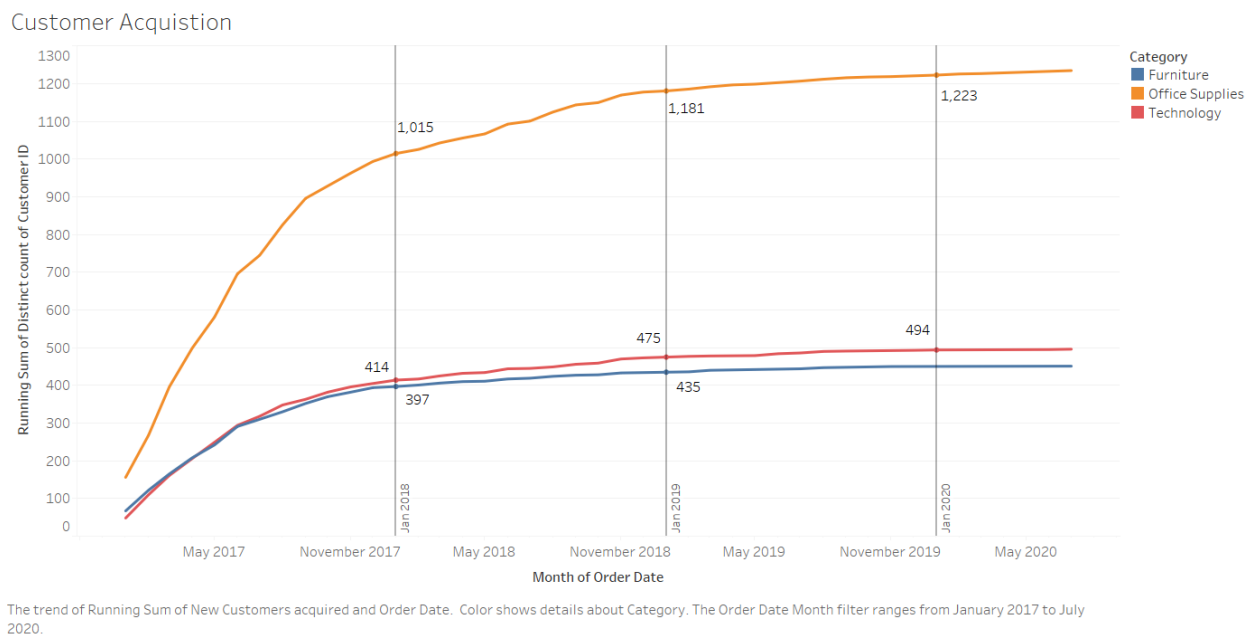


Figure-5

To counteract this, the firm has tried to vary its discount rates to attract new customers (figure-6). For instance, in 2019 the firm increased discounts for furniture from 16.90% to 28.50%. However, this initiative only led to an increase from 397 to 435 new customers. Moreover, between November 2019 and July 2020 only 1 new customer was acquired while the discount rates for furniture dropped from

28.50% to 0%. Hence, we can claim that altering discount rates does not boost customer acquisition.

Discount rate over the years

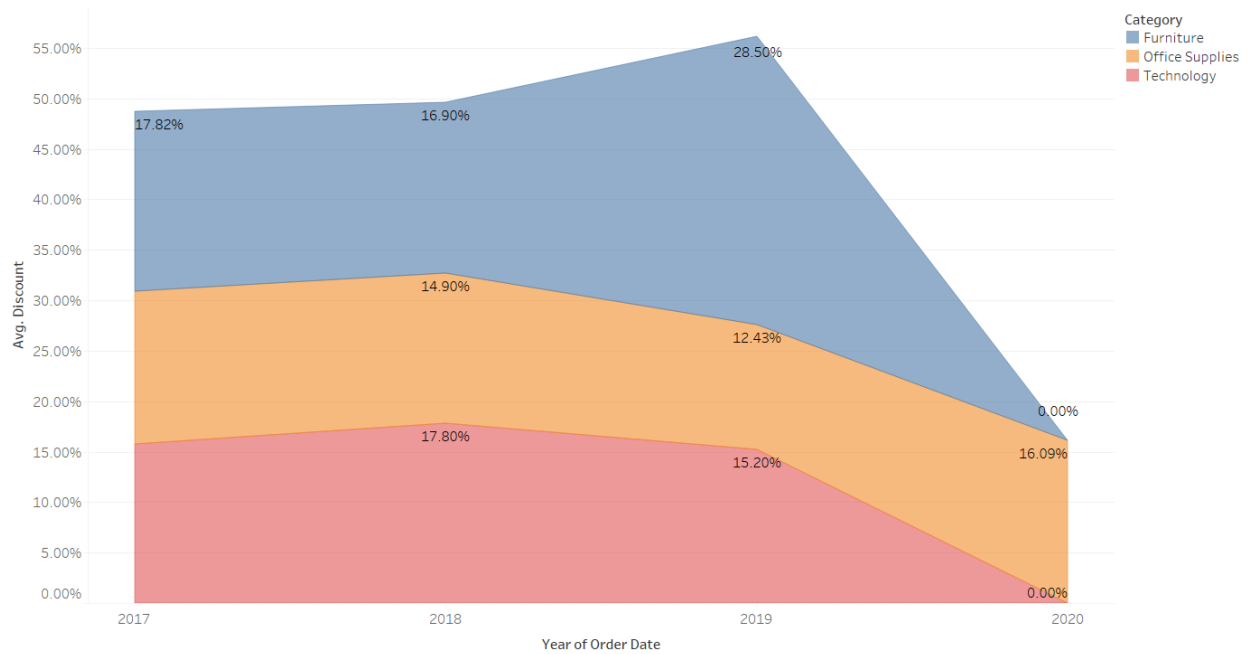
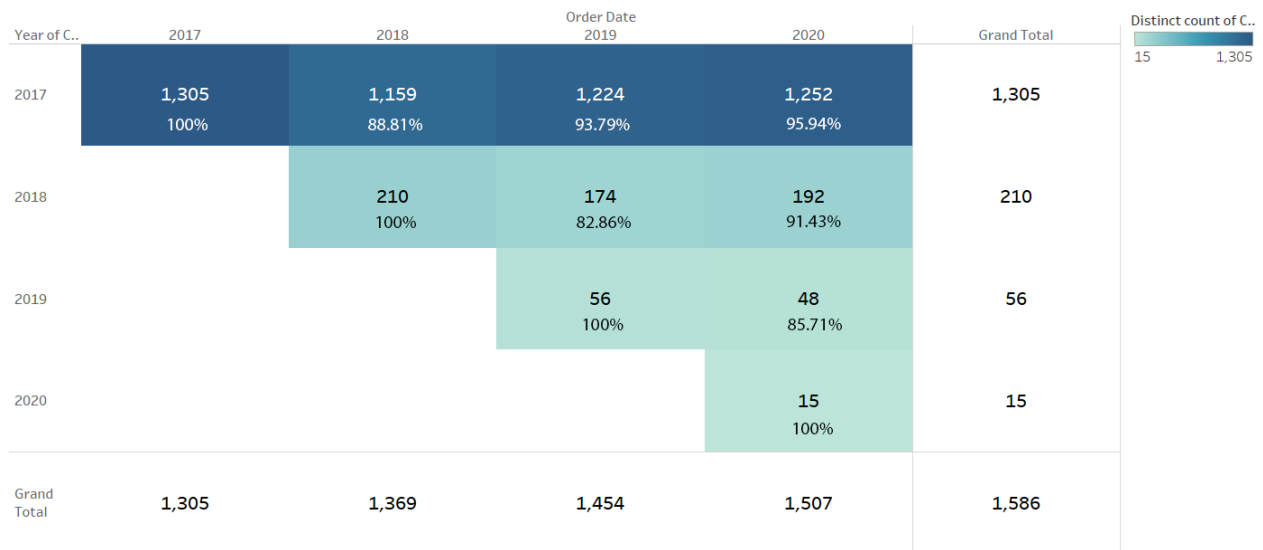


Figure-6

The business has done fairly well when it comes to customer retention. As shown in figure-7A, more than 82% (Appendix:figure-7B) of customers returned between each consecutive year with most customers averaging around 4-8 orders each. This is a decent retention rate; hence the firm should prioritize improving customer acquisition going forward.

Customer Retention



Comparison of count of customers with respect to acquisition date and order date.

Example of how to read the table;

Consider the cell (2017,2019) (row,column), this cell indicates that 1224 customers who were acquired in 2017 have returned and made purchases in 2019

Figure-7A

Recommendations

- Marketing team should focus on improving market penetration for furniture and technology as there may be unsaturated market gaps with new potential customers.
- Hiring younger marketing executives who are more tech savvy would allow for effective promotional strategies as they'd be more aware of modern-day marketing media platforms. (Facebook, Instagram, Tiktok)
- Acquiring a well-known reputable brand ambassador can help grow the customer base.
- Implementing a loyalty scheme where customer savings increases with the number of purchases, thus giving incentive to purchase more.

CANADIAN MARKET ANALYSIS

Considering marketwise performance Canada seems to lie in a grey area. With only 181 customers, which is just a mere 26% of the average customer count, and £66,928 in sales which only yielded a profit of £17,817. This is undoubtedly subpar performance. However, even though the aggregates were low in comparison, Canada managed to pull in outstanding profit ratios of 26.62% and an average profit-per-order of £89 which were the highest figures out of all markets (figure-8).

Canada overview

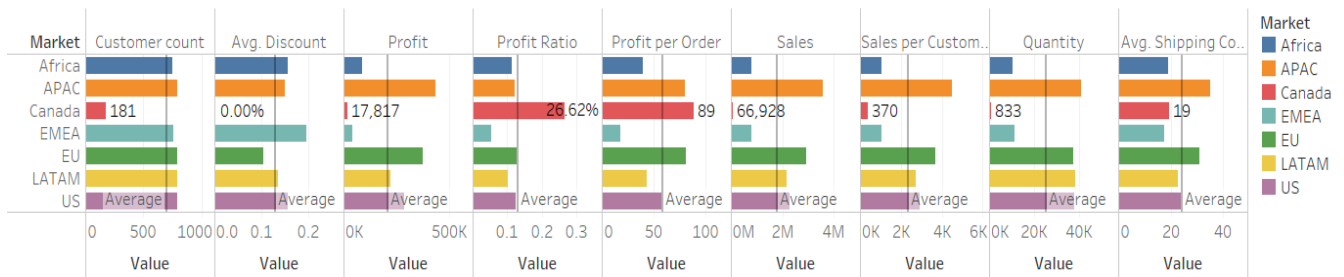


Figure-8

Moreover, 99.48% of all orders from Canada turned out to be profitable (figure-9). These are stupendous figures, meaning Canada might be a promising region with untapped potential.

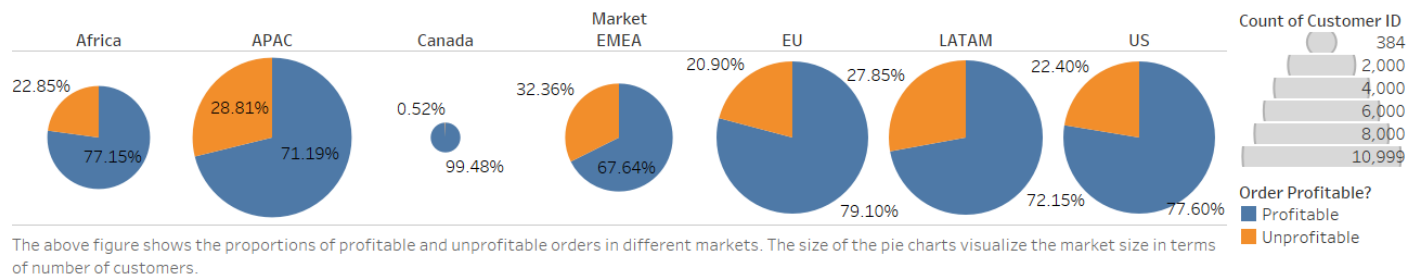


Figure-9

Canada having a smaller customer market due to sparser population might justify the low sales count. However, another reason would be that Canada was the only market to have given no discounts! This would have driven away discount-hungry customers and given competitors the upper hand.

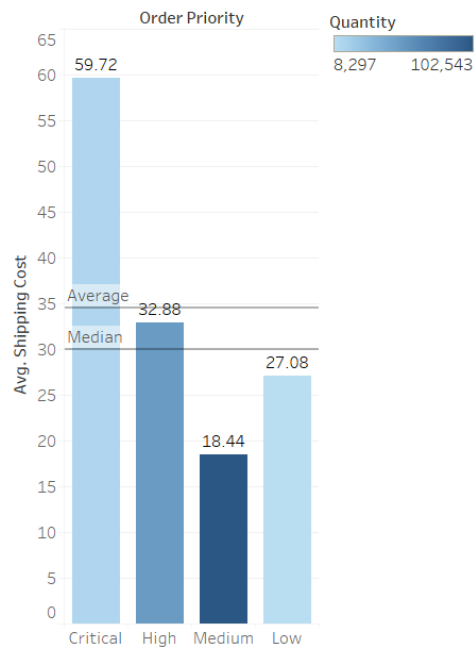
Canada has below average shipping cost of £19 and the lowest shipping delay market-wide with 3.665 days. This is another point of leverage that should be exploited further, as quick deliveries increase repeat purchases and customer loyalty.

Recommendations

- As we already have a high profit margin, the company can afford to offer more discounts and loyalty schemes to boost sales.
- Since shipping costs are quite low, offering free shipping would attract new customers and increase sales
- Offering product bundling savings schemes in the short run to acquire more customers. ([https://www.profitwell.com/recur/all/price-bundling#:~:text=Price%20bundling%20\(product,boost%20product%20sales\)](https://www.profitwell.com/recur/all/price-bundling#:~:text=Price%20bundling%20(product,boost%20product%20sales)))
- Conduct audits in Canadian subsidiaries as internal conflicts and dishonest workers within the subsidiary might be a cause of poor performance.
- Increase advertisement frequency and change marketing strategy to something more accustomed to Canadian market culture.
- Conducting customer surveys and issuing feedback forms at the point of purchase to identify which areas of the business model are lacking and in need of rectification.

SHIPPING ANALYSIS

Order priority vs
Shipping cost



Average of Shipping Cost for each Order Priority. Color shows sum of Quantity. The data is filtered on Order Date Year, which excludes 2016.

Figure-10

According to figure-10, low priority orders seem to have higher average shipping costs (£27.08) compared to medium priority orders (£18.44), which would affect profits adversely and reduce producer surplus. However, it can be seen that the quantity of medium priority orders amounts to 102,543 while low priority orders only come up to 8,297. This may be a justifiable reason for low shipping costs for medium priority orders as the firm has achieved economies of scale.

The average shipping cost for critical orders is £59.72 which is almost double the median cost of £29.98. Therefore, finding cheaper alternative shipping partners might become necessary if the firm amasses more critical orders in the future.

Another noticeable trend (figure-11) is that the shipping cost for same day shipping decreases while first class shipping becomes more expensive as we go down from critical order to medium order priority. Implying that the firm could try

utilizing same day shipping instead for high priority orders, as the difference in cost is only £0.22.

Moreover, the firm should definitely switch over to same day shipping for medium priority orders as this will save them £1.81 on average in addition to improving customer satisfaction as first-class shipping has never delivered products within the same day. (See figure-12).

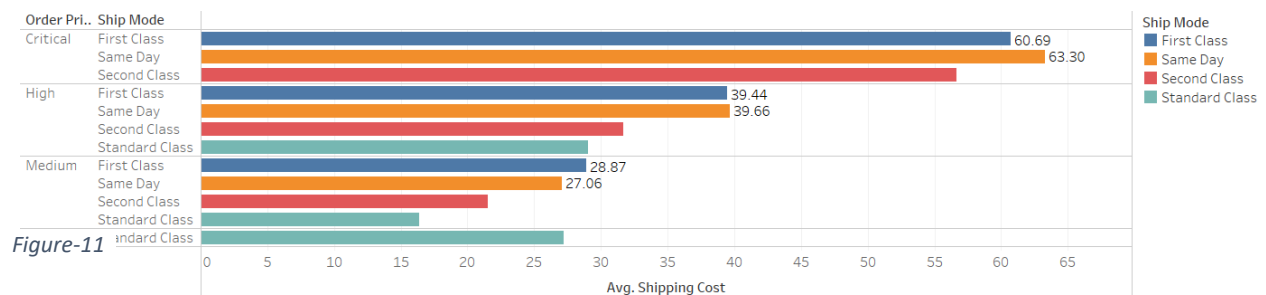
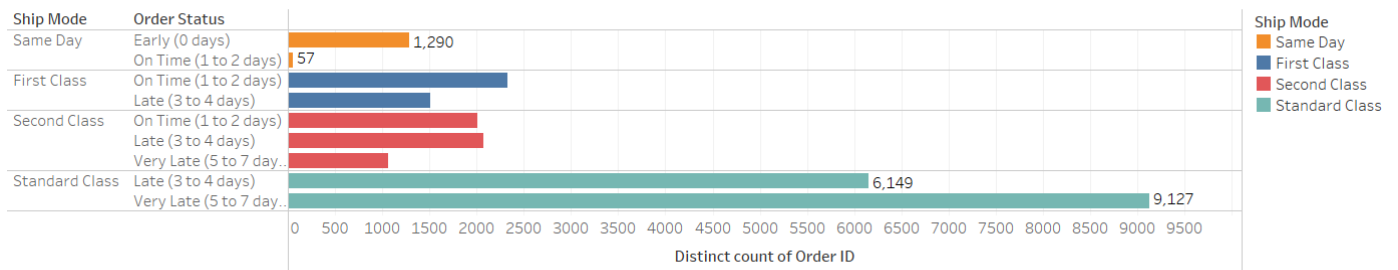


Figure-11

Order Delivery Status



The Order Delivery Status is broken down as follows:
Early (0 days), On Time (1 to 2 days), Late (3 to 4 days) and Very Late (5 to 7 days).

Figure-12

The firm has failed to have a perfect track record when it comes to same day shipping as 57 orders have not been delivered within 24 hours. Moreover, a majority of standard class shipments have been delivered very late, taking 5 to 7 days which is somewhat mediocre. Hence improvement here is vital for the firm to grow.

Box & whisker plot for shipping cost by market

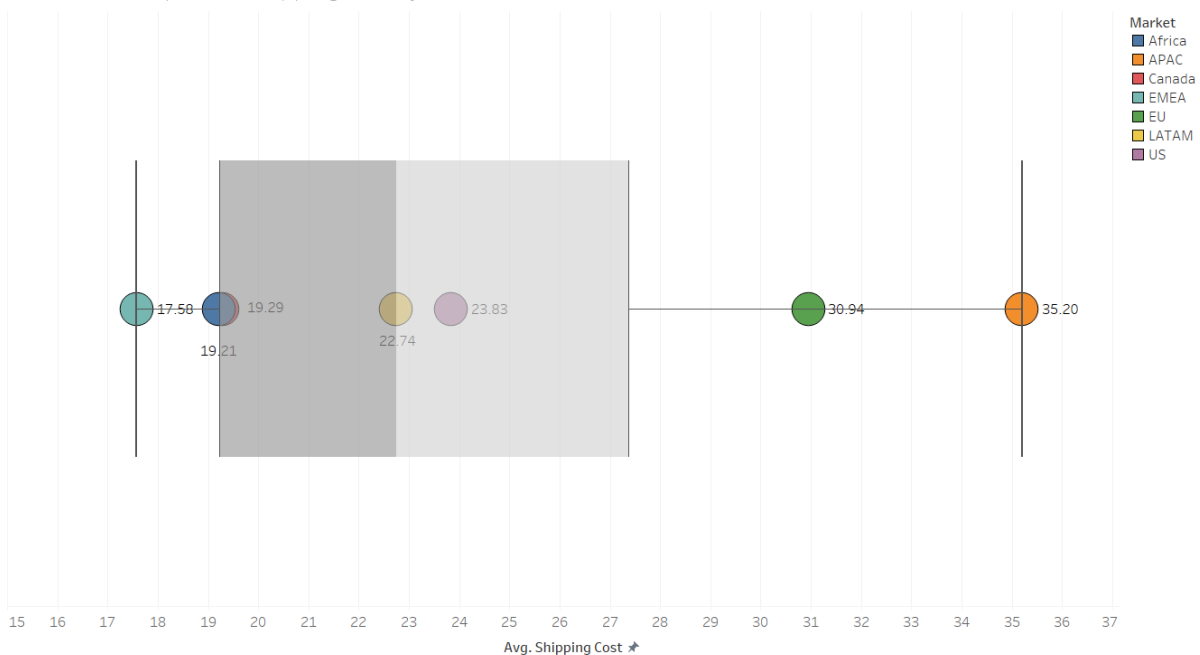


Figure-13

Recommendations

- Offering product bundling options so that they can be shipped together
- Using better logistics software so that customers who make multiple separate orders can have everything shipped together.
- Reprioritize low priority orders as medium priority to exploit lower shipping costs. However, make sure that the quantities do not overburden the shipping department as it may lead to diseconomies of scale, thus conversely raising shipping costs.
- Offering in-store pickup option, thus eliminating shipping costs entirely.
- Outsourcing for shipping agents is an option if the firm is being overburdened handling shipping themselves.

CONCLUSION

Even though the business seems profitable as of now, various issues have been surfaced. Hence it is vital to follow recommendations and be proactive and tackle them with utmost urgency, in order to preserve and achieve sustainable growth and development.

APPENDIX

- Since there was only a single entry in the year 2016 (specifically on 31.12.2016) it was omitted from the analysis as it may sabotage and output misleading results when dealing with order, shipment dates etc.
- The fictitious company has been treated as a retailer.
- Currency has been assumed as Sterling Pounds (£)
- Postal code column was omitted from analyses as it mostly contained null values.
- Abbreviations:
 - APAC – Asia Pacific
 - US – United States
 - LATAM – Latin America
 - EMEA – Europe, Middle East and Africa
 - EU – European Union

Customer Retention PERCENTAGE

Year of C...	2017	2018	Order Date 2019	2020	Grand Total	% of Total Distinct..
2017	100.00%	88.81%	93.79%	95.94%	100.00%	82.86% 100.00%
2018		100.00%	82.86%	91.43%	100.00%	
2019			100.00%	85.71%	100.00%	
2020				100.00%	100.00%	
Grand Total	82.28%	86.32%	91.68%	95.02%	100.00%	

Comparison of percentage of count of customers with respect to acquisition date and order date.

Example of how to read the table:

Consider the cell (2017,2019) (row,column), this cell indicates that 93.79% of customers who were acquired in 2017 have returned and made purchases in 2019

Figure-7B

Profit margin for office supplies

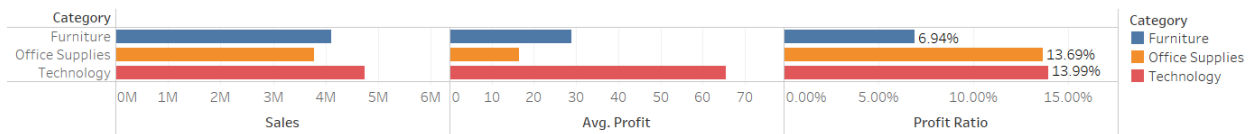


Figure-14

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< [https://www.profitwell.com/recur/all/price-bundling#:~:text=Price%20bundling%20\(product,boost%20product%20sales](https://www.profitwell.com/recur/all/price-bundling#:~:text=Price%20bundling%20(product,boost%20product%20sales) >