



BUSINESS REPORT

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Table of Contents

EXCUTIVE SUMMARY	2
MARKET ANALYSIS	3
CATEGORY ANALYSIS	11
SALES ANALYSIS	14
SHIPPING ANALYSIS	17
RECOMMENDATIONS	21
APPENDIX	23

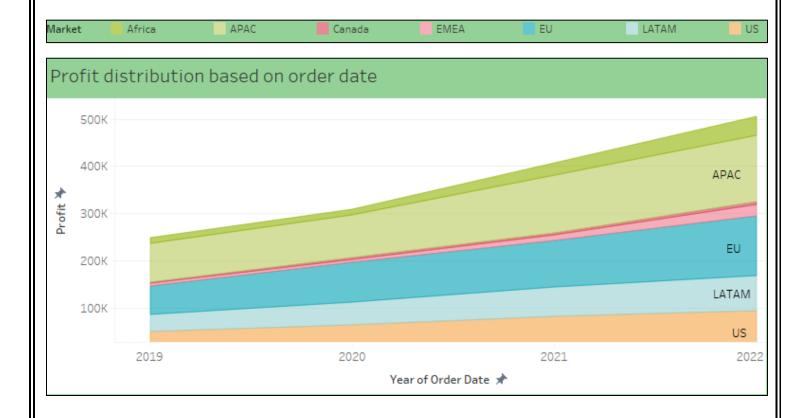
EXCUTIVE SUMMARY

This Business Report consists of key findings found from a deep analysis conducted for a company based on the data available from 2019 to 2022. Products are sold in three different categories; Technology, Office Supplies and Furniture, these categories contribute approximately up to 45.18%, 35.31% and 19.51% of the total profit respectively. These categories are further broken down by different subcategories. The customers are identified to fall into three segments: Consumer, Corporate and Home Office. The Market and the Region in which the customer belongs to is also known. This company provides different order priority levels and various shipping mode options.

This report is broken down to fit five different analyses conducted on Markets, Canada Market in-depth, Categories, Sales and Shipping Cost.

This Report also includes recommendations to senior management based on the discoveries of the analysis.

MARKET ANALYSIS



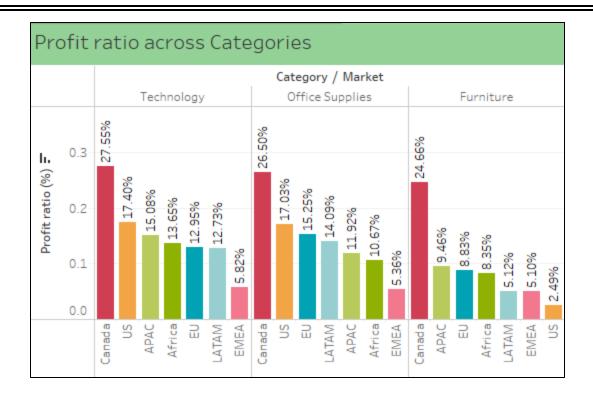
- The above area chart depicts that the APAC market is the market with the highest profit throughout 2019 to 2022.
- The three lowest markets that contribute to profit are Africa, EMEA and
 Canada respectively throughout all the years. Even though the profits have
 increased over the years for these markets, their contribution to total profit is
 still very low compared to the other markets.

Number of customers in the Market	
Market	
Africa	753
APAC	796
Canada	181
EMEA	760
EU	795
LATAM	794
US	793
Distinct count of Customer ID broken down by Market.	

 All the markets except Canada have very similar customer base (approximately between 750 to 800 customers), whereas Canada has only 181 customers.

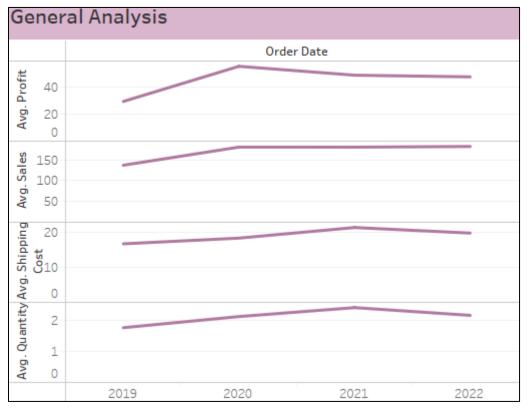


- APAC is the market with the highest sales and discount.
- The EU market has higher sales compared to LATAM and US even though its
 discount is lower than those two markets. EU is the second ranked market for
 total sales.
- Canada has zero discount and hence maybe one of the reasons to cause low sales.
- There is a positive relationship between sales and discount, therefore we can
 try increasing discount rates to boast up sales in the markets.

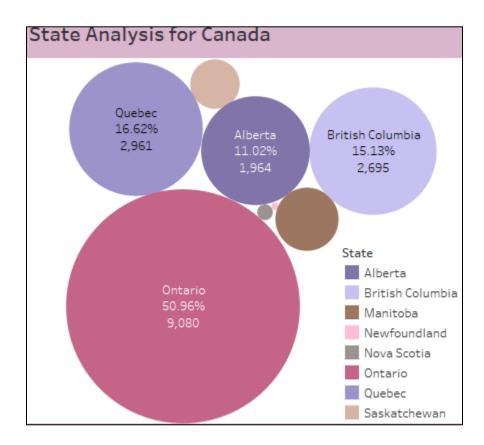


- The profit ratio of the Canada market is the highest in all three categories,
 which implies that Canada is indeed a very profitable market.
- The US market is more profitable in technology and office supplies but the least profitable in the furniture category.
- EMEA is the market with the lowest profit ratio overall.

CANADA MARKET ANALYSIS



- Maximum average profit for the Canada market is obtained in 2020,
 afterwards the average profit has been decreasing even though the average
 sales remain constant. This can be due to the increase in average shipping
 cost (which may be incurred due to the increase in quantity) or else maybe
 the customers opt to products which make lower profit.
- The Canada Market performs the best in 2020 compared to the other years.

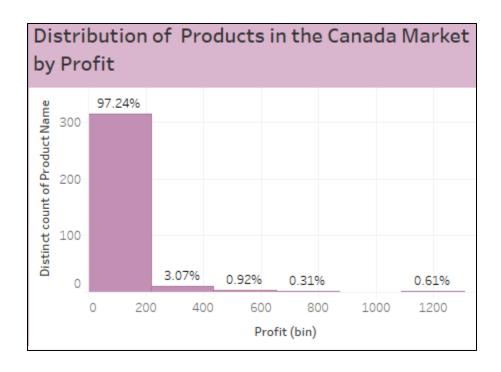


 Ontario contributes half the profit of the Canada market, this can be due to high population in Ontaria compared to the other states. We can conclude that profit distribution depends on the population among different states.



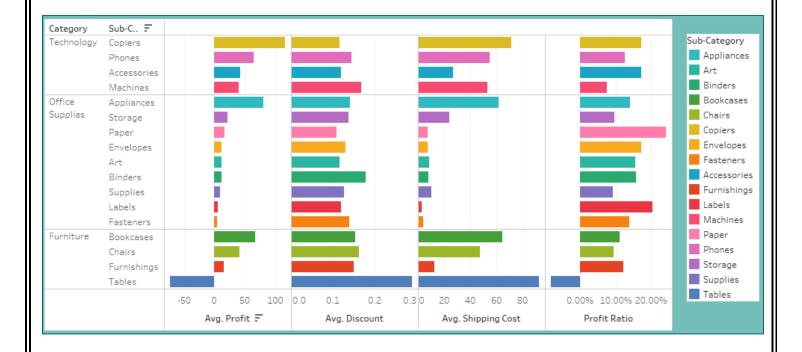
- When comparing all the markets, Canada is the only market in which
 products do not cause any negative profits. We can deduce that the product
 portfolio is maintained effectively for that market.
- The product which contributes the highest sum of profit in the Canada market is Hewlett wireless fax, high speed (\$1854), however other markets have more products which contribute more to the total profit.
- Canada has only 329 distinct products whereas the other markets have more than 1600 different products.¹

¹ Refer appendix



 Analyzing further, we can see that almost 97.24% of the products purchased by the consumers in the Canada market yields profits only within \$100 to \$200 approximately.

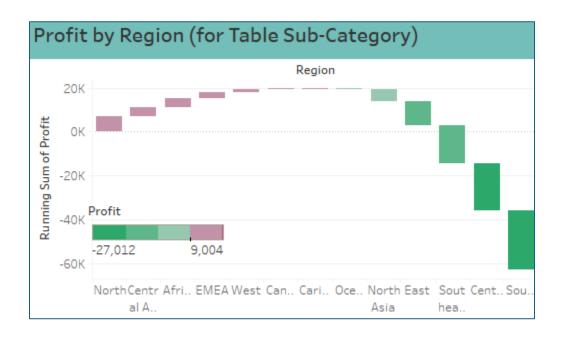
CATEGORY ANALYSIS



- Copiers, Appliances and Bookcases have the highest average profit for technology, office supplies and furniture categories respectively.
- Tables subcategory gives the highest average discount and has the highest average shipping cost as well, these factors can exert a minor influence on its profitability. It is the only subcategory which has a negative profit, which induces a negative profit ratio as well.
- Papers, labels and accessories are the subcategories with the top three profit ratios.

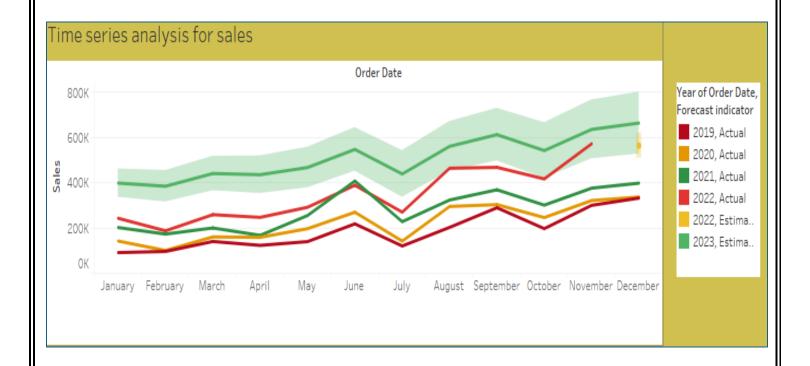


- Discount and quantity sold have a positive (approximately exponential behavior), basically we can conclude that an increase in discount would cause an increase in the quantity sold.
- Sales and shipping cost have a perfectly linear relationship implying increase in sales would increase shipping cost by the same ratio.
- However, we are not able to find a relationship between quantity sold and sales, this may be due to influence of other factors such as discounts.

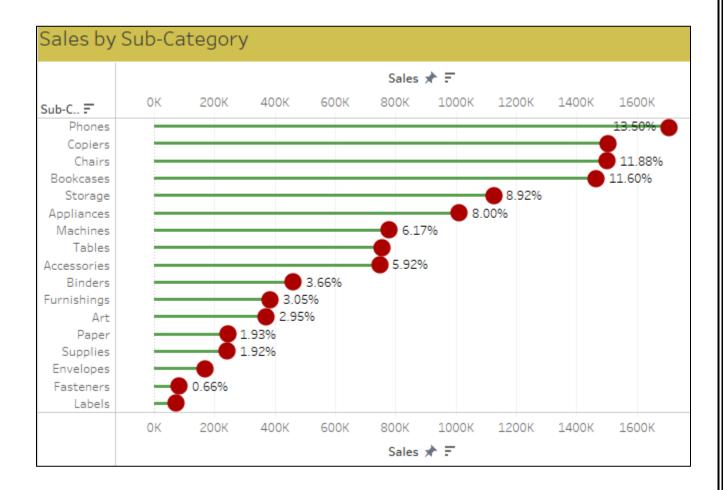


- Analyzing the table subcategory further by profit contribution from different regions, it is identified that some of the regions like North, Central Asia,
 Africa, EMEA, West, Canada and Caribbean contribute to positive profits.
- Deeper analysis should be conducted to identify the influencing factors.

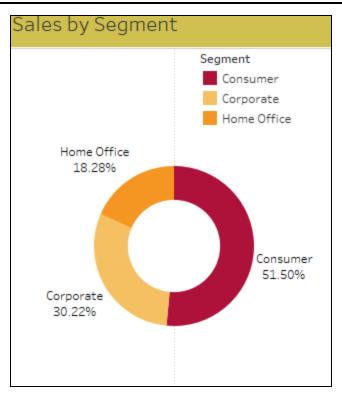
SALES ANALYSIS



- A seasonality in sales can be observed, throughout all the years the same trend in sales occurs.
- March, June, either August or September and November are identified as the top four months with high sales.
- The sales for 2023 is forecasted using past sales data, which can help the company to prepare for the future sales and plan their production.
- Sales in 2021 June has the highest peak and in fact greater than the sales in 2022 June, deeper analysis can be conducted to investigate this sudden big increase in sales.

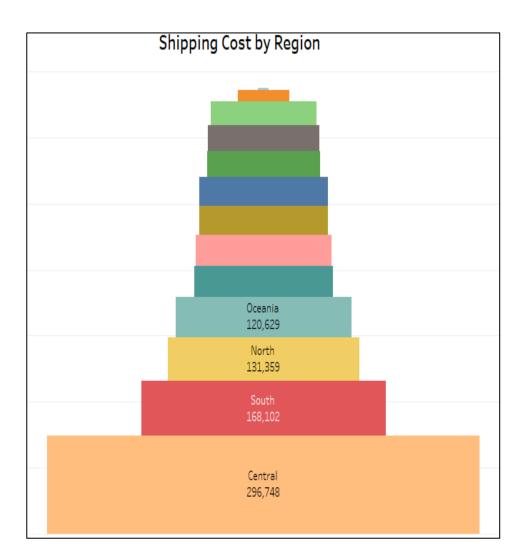


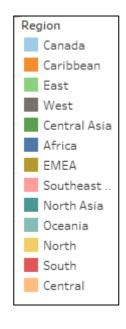
- Phones, Copiers and Chairs are the top three subcategories with highest sales.
- Labels has the least sales. It was identified previously that labels have a high profit ratio hence the company should try to boast sales of labels.



 We can see that more than half the sales are from the consumer segment (51.50%), followed by corporate segment (30.22%) and then Home Office (18.28%).

SHIPPING ANALYSIS

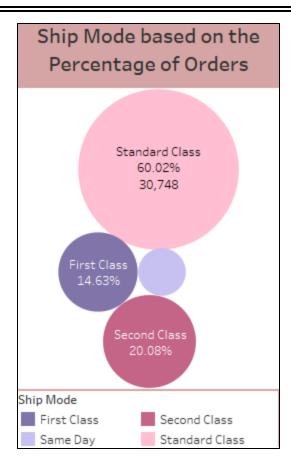




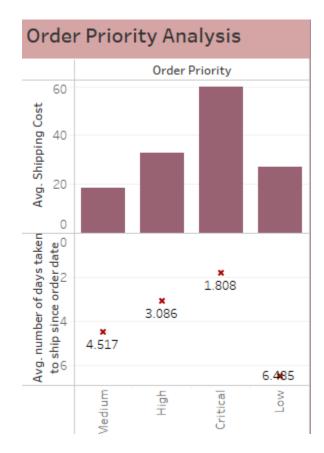
When analyzing shipping cost by region we can identify that Central region
has the highest shipping cost (\$296,748) and the lowest in Canada (\$7,406).



- Average profit gained from all the ship modes are approximately equal,
 therefore the company is equally profitable in all the shipping modes.
- However, the average shipping cost is high for same day shipment followed by first class ship mode and then by second class. The least average shipping cost is for standard class ship mode.



- In this graph, it is evident that 60.02% of the orders are shipped by standard class.
- 20.08% of the orders are shipped using second class followed by 14.63% of orders shipped using first class.
- Only 5.27% of the orders are shipped on the same day.



- Critical order priority has the highest average shipping cost and it takes the least time to process the order and dispatch it (approximately within 2 days)
- When comparing medium and low order priority, low order priority takes
 more time to dispatch and also has higher shipping cost than medium order
 priority, therefore it is better for customers to pick medium order priority than
 low order priority.

RECOMMENDATIONS

- Since markets such as APAC and EU contribute a lot toward the profit earned by the company, customers from these markets should be kept happy and satisfied to maintain these good profit levels therefore loyalty points systems or monthly free giveaways to one customer picked at random from those who purchased above a specific amount would ideally help us preserve our customer base and also increase sales.
- Canada has a very low customer base and sales compared to other markets, this implies that not a lot of people in Canada are aware of our products. It also does not give any discounts, which is a bad marketing strategy, hence we can try new advertising and marketing strategies such as discounts for customers who place an order for the first time or a referral discount option for our existing customers.
- More variety of products should be advertised in Canada because only limited products are purchased by the people in Canada. Bundling up complimentary products, for example if products from Copiers and Papers are bought together then a small discount is given. This can also lead to an increase in sales.
- The subcategory tables should reduce the average discount given because it will have a similar effect to price-quality perception, consumers are more likely to

think that the product has some defect and hence a higher discount is offered which can be a possible reason for low sales and quantity sold.

- The average shipping cost for tables is very high this maybe due to the space consumption when shipping and the weight therefore we can try to introduce self-assembly tables, which the consumer can easily assemble by themselves.
- Since the sales for 2023 is forecasted the company has to be well stocked to meet the expected demand, mainly subcategories such as Phones, Copiers and Chairs should be well stocked since these are the high sales contributors.
- The orders should be made sure to be shipped on time because this affects the customers' satisfaction. Based on order priorities an order should be processed and shipped by the second day if it's critical and by the fourth, fifth and seventh day if it is high order priority, medium priority and low priority respectively. If suppose due to some unavoidable situation the time taken to process the order is taking longer than expected, then make sure to inform the customer informed and updated about the process.

APPENDIX

Distint co	nt of Products Availabe in Different Mark	ets
Market 2+ ▼		
Africa	1,664	
APAC	2,723	
Canada	329	
EMEA	1,707	
EU	1,915	
LATAM	2,199	
US	1,862	