**1a.** Chart, bar chart

Description automatically generated

The Central , East, South and West regions has made highest sales in Consumer Segment and least in the Home office.

The Consumer segment had highest sales in the East region, while Corporate and Home office segments had highest sales in West region. All the three segments made least sales in the South region

**1b.** Chart, bar chart

Description automatically generatedThe profit ratios of Consumer segment and Corporate segent in South and Central regions respectively are the highest among all others by fetching 20% profits of total sales. I’m particularly impressed with the Consumer segment’s performance in the South region because even though profit sales have been less(as the color card shows it slightly fader than the dark blue), the profit ratio and the less number of loss sales compared to the corporate sgement’s central region makes its performance to be better.

**1c**

**Chart, bar chart

Description automatically generated**

The consumer segment in the west region yields the highest total profit.

**1d.**

Treemap chart

Description automatically generated with medium confidence

The Office supplies category of products has yielded towards the total profit in the consumer segment of 2021

**1e.**

Chart

Description automatically generated

The Furniture Category has the highest average discount in the Central region which is 0.3 , that is 30%.

Treemap chart

Description automatically generated

As a BI Manager for superstore, it is observed that more discounts have led to losses in the central region of furniture segment and this is not ideal business goal. Discounts should be offered while keeping profits in mind and such strategies should be planned.

**2a**.Chart, bar chart

Description automatically generated

**2b**.Timeline

Description automatically generated with low confidence

The lowest profit margin is observed in the Tables sub category which is -0.0853 , which is -9%

Timeline

Description automatically generated

**2c.**

**Graphical user interface, application

Description automatically generated**

The number of orders for Tables subcategory is 326, Supplies is 192 and for bookcases it is 232

Graphical user interface, text, application

Description automatically generated

**2d**

**Graphical user interface, application

Description automatically generated**

As BI manager, it is observed that the east region has the highest negative profit margin for all three product subcategories, followed by central region. BI manager should work on improving the profit to sales ratio and make great profits and sales with strategic management and IT support.

**3a**

Graphical user interface, application, table

Description automatically generated

**3b**

I have observed each subcategory for all the quarters of years 2021 and 2022 and made few observations that,

Chairs have increasing sales with each quarter in both years, in a linear and steady way the sales increased.

Binders had a 2x growth in their sales from Q2 to Q3 during 2021 and 2022. Most of the categories had stable ups and downs during the quarter’s sales.

Storage also had consistent growth of sales during each year’s quarters.

**3c**

From the above results, the subcategories of products which have had stable and steady sales growth during given quarters have been identified. The remaining sales where fluctuations look place, especially where sales reduced in the upcoming quarters, the data analysis techniques should be implemented to understand why growth of sales stoop to low during the quarters and from those insights technologies and strategical changes should be made to make more sales

**4a**

**Graphical user interface, application, table, calendar

Description automatically generated**

**4b**

**Graphical user interface

Description automatically generated with medium confidence**

**4c**

**Graphical user interface, chart

Description automatically generated**

In all the three charts of average sales and profit per order, it is observed that the profit made per order is very less and, in few subcategories, it is a negative value. Management should work on improving the profits per order while keeping sales intact and help increase both sales and profits