CAPSTONE  
  
  
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MODULE 7 PROJECT ASSIGNMENT

WEEK 7: BUSINESS RECOMMENDATIONS

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**Introduction**

The assignment aims at gathering and analyzing the Exploratory Data Analysis performed in Assignment #3 to provide business recommendations to the company. These business recommendations will help the company management in planning out their projects and budgets. Moreover, the data insights help the company in improvising their business by analyzing data patterns and metrics like gross revenue, profit over a period of time and corresponding sales of products. Sometimes, the important business parameters are ignored by companies while managing their businesses, therefore, it is important to highlight the impacted data variables to the team in the form of dashboards.

**Analysis**

As we know, it is important to provides business recommendations for businesses after analyzing the data. This helps the companies improve their business outcomes based on the recommendations. The business recommendations can be noted as below:

* Market Segmentation Analysis: This will help to understand the customer buying patterns based on the demographics. So, if the store is located in a particular location, we can use the market segmentation analysis for understanding customer buying patterns which would help in predicting the revenue. Moreover, this analysis can be followed by performing the Apriori algorithm which works by performing data mining. Also, this algorithm will calculate the frequency and likelihood of a customer purchasing an item, using association rules.

For example: If a customer has been purchasing table from the store, this algorithm will show a recommendation to the customer for buying a chair along with the table, using the association rule. This will help in improving the company’s business over a period of time.

* Value Chain Analysis: The concept of value chain analysis can help the company in generating profit margins over a period of time. This method can be performed by analyzing the internal activities of a business. There are companies who add an initial value to their products and then sell those products for more than the added value, this helps in generating some profit margins for every product sold. Moreover, this analysis will help in bringing competitive advantage amongst the company’s competitors.
* Vendor Analysis: This will help the company in understanding the strengths and weaknesses of their suppliers. There are companies that work with suppliers for their businesses, so it is important for companies to understand ways to make profits even after engaging with vendors from different companies. This can be performed by analysis the vendor’s details like, the products, quality, staff etc. It is good to analyze a few vendors and rank them based on various business parameters, further, this analysis can be used to select a supplier for the store that will help the store in improving its business.
* Performing sate wise sales analysis: As we know, every location will have different sales patterns, as it depends on the demographics of that particular area. Therefore, it is important for the store to perform analysis of sales at various states over a period of time, where the store is located. This will help to analyze the reason for higher sales at some locations so that their marketing strategy can be utilized for sales at other locations. This will help to improve the overall business of various stores of that company.
* Analyzing the employment of people in the given area: We know that, the sales in a given region depends on the employability of people in that area. Therefore, it is important to perform a comparative analysis of people in a given area based on the employment rates, so that the stores can be opened at locations accordingly to the sales. This will help in planning the business locations for the company.
* Analyzing the state wise expenditure on consumer goods: As we know, every state has a quota allocated for consumer goods. Therefore, states have some amount invested for the home décor and furnishing industry. The company should lay focus at this factor before opening a store at any location, as it will help in providing details about the expansion of stores at that particular location, and therefore the company can plan its revenue accordingly.
* Analyzing per capita household income per state: The per capita income of citizens plays a major role in planning out infrastructure projects in a given area. Therefore, it is important to analyze the per capita income of people residing in the particular area which will help in understanding their employment rates. As we know, there are states that have higher poverty rates, therefore analyzing employment rates of citizens will help in planning budget for a given store.
* E-commerce website: As we know, most of the customers prefer to buy the products online, therefore, it is important for the furniture stores to have a proper functioning e-commerce website and a mobile application. This will help in improving the sales online, along with in-store sales, thereby increasing the revenue of the store.
* Improvise on marketing schemes: As we are aware, marketing schemes play major role for a home furnishing industry in maximizing profits. These campaigns increase the sales based on the marketing. It is important to optimize these marketing methods, to attract more customers on a regular basis (Hill, B. 2016, October 26),thereby improving profits for the company and therefore, the overall revenue.

After performing the business recommendation analysis, it was realized that, the hypothesis about person income and their respective buying pattern, was not rejected. It was observed that, the people with higher income are more interested in having great aesthetics than people with lower income groups. Therefore, the sale of furniture stores in locations where people live a luxurious life is high. Moreover, some additional data like, percentage of migration rates of these people from higher income groups, professions of people etc. will help in performing accurate analysis.

The metrics that helped in the business recommendations are:

Per Capita Income Analysis: This was based on the Per Capita Income data and County Name, as this shows the income of people staying around the stores.

Taxes Paid: Tax amount paid to other states, as this helped in showing the tax amount paid by various states, which is important for a business.

Buyer goods by top 10 states: This is based on Buyer goods, and median household income. This helped in displaying highest quantity of goods bought, based on the median income.

The management can utilize the business recommendations to improve the business and revenue for the At Home Group. It can be done through the below ways:

* Analyzing the financial trends over a period of time to gauge the dependency of variables on each other based on time. This will help the management in deciding important financial risk factors and look for ways to mitigate them accordingly.
* Tracking the business trends: The management can use the data to monitor and track trends for the organization which will help in analyzing the parameters that would impact business decisions. Also, cutting down on irrelevant expenses can help the company save on costs.
* Managing Future Risks: The management can utilize and analyze the trends in the variables for managing the risks which puts the company’s goals on risk. This will help the management in planning for strategies to mitigate risks.
* Competitive Advantage: The analysis will provide deep insights about targeting future competitors by planning out marketing strategies.

**Conclusion**

After analyzing the data and formulating the business recommendations for the At Home Group, it was observed that the company should consider, various latest business strategies for improving their revenue, and also consider major risk factors that would impact the business in ling run. These recommendations will help the management in improving overall profits for the company.

**References**

Hill, B. (2016, October 26). *Corporate Life Cycle Strategy*. Small Business - Chron.com. https://smallbusiness.chron.com/corporate-life-cycle-strategy-77736.html.

bizjournals.com. (n.d.). https://www.bizjournals.com/boston/news/2018/04/01/5-ways-to-improve-your-business-processes.html.