WDC Demand Management Plan

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Introduction:

Work Portfolio Project Representing WDCC's Demand Management Strategy, Forecast Analysis, Inventory Management Strategy, and Scheduling Alternatives. The locally owned Wild Dog Coffee Company has one cafe where customers may order from a menu that includes a variety of espresso drinks, light breakfast and lunch options, and a few dinner selections. We want to grow the company by opening a second office. We hope that the new site will be as fruitful as the present one has been during the last year. This investigation starts with this analysis. While certain new menu items may be tried out at the new site, the restaurant's fundamental operations will stay the same. We have been focusing on demand management as we shift our focus from process improvement in order to be ready for the growth. There are plans afoot for a second Wild Dog Coffee Company café to launch in the near future. To help us fine-tune the model before establishing the second site, I will be analyzing and making suggestions for demand management, which will include forecasting, inventory, and scheduling, for the existing location.

Advertisements' Impact on Consumer Wants and Needs:

The primary goal of advertising is to sway the preferences of a target audience before they make a purchase. As part of this, companies use behavior-based methods to sway consumers to shop with them rather than their competitors. As a consequence, customers feel more connected to the company, which influences their purchasing habits. As a result, advertising is an essential tool for connecting a brand's goods and services with target audiences. In this approach, advertising serves as a critical mechanism for boosting the firm's top line. Erdem, Keane, and Sun (2008) state that producers need to advertise in order to learn about their competitors and adjust their strategies to the current market conditions. Marketing also helps organizations keep their customers, who are essential to keeping up their market share.

Advertising plays a crucial role in today's companies, since it is used to influence customers' opinions of a company's goods and services. A company's ability to advertise its goods and services effectively has a direct impact on consumer demand for those goods and services. Businesses may boost their income via advertising by attracting and keeping clients. Advertising that gets the word out about a product and how it may help a target audience is crucial. Hence, advertising aids firms in attracting new clients and retaining existing ones. With Wild Dog Coffee, the advertising's effect is plain to see in the presented numbers. There is a correlation between a rise in advertising spending and a rise in the demand for espresso beans, according to the statistics. Demand for espresso beans rose by 43% in the first month after an increase of $450 in advertising spending. While less advertising means less demand for WDC's espresso beans, every cup counts.

Forecasting model:

Ando (2000) argues that forecasting is crucial for any business that wants to stay up with consumer demand for its goods and services. Advertising revenue and espresso bean consumption provide the basis for WDC's demand statistics. A positive correlation between these characteristics and an increase in advertising spending suggests that this may be the case with respect to espresso beans. Yet, given that WDC is a fast food establishment, the daily, weekly, and monthly patterns of coffee consumption exhibit significant variation. Seeing this trend in the company's demand is crucial for planning ahead and allocating enough resources. Table 1 below displays the demand information for WDC and forms the foundation of the forecasting model.

Table 1:

Month	Lbs/Beans (y)	Advertising Dollars (x)
1	987	$1,050
2	1,412	$1,500
3	1,020	$1,000
4	1,140	$1,250
5	1,322	$1,500
6	1,399	$1,500

So, a simple linear regression may be used to build WDC's prediction model, which will provide important information about the company's future demand. On the assumption of a linear relationship between the two variables, the forecast model produced the regression formula = 0.79x + 188.22. Use this calculation to forecast the need for WDC in the years to come. In light of this, we estimate 1,253 pounds of demand for the seventh month utilizing a marketing expenditure of $1,350. According to our forecasting equation, the demand for espresso beans will grow by $0.79 for every $1 spent on advertising. The price of coffee beans has risen to $188.22 without any marketing spending. So, the following formula was used to determine the demand for the seventh month:

y = 0.79*1350 + 188.22

y=1253 lbs.

While calculating the number of espressos each day that will need to be made, the organization will need to take into account certain other data. According to the data presented, an hour may provide 30 espresso drinks, with each cup requiring 1.5 ounces of water. The coffee shop is open for a full 14 hours every day, from 6:00 AM to 10:00 PM. Keeping in mind that 1 pound is equivalent to 16 ounces and that the coffee shop is open every day of the week except Christmas Day:

(1253∗16)/1.5

13365

Month 7 has 31 days, so:

13361/31

431

In pounds:

646.8/16

40.4lbs

Regression analysis demonstrates that the x variable (advertising dollars) can account for 95% of the variation in the y variable (the dependent variable) (demand for espresso beans). This suggests that the variation in the dependent variable is explained by the variations in the independent variable. A rise in marketing expenditures naturally leads to a rise in demand for WDC. Yet, the 0.95 R squared number shows that there are other factors outside advertising spend that effect demand. Important variables influencing demand for WDC include seasonality in demand and shifting consumer spending habits. So, these elements must be taken into account throughout the company's inventory management process. So although the corporation may use ad dollars as a predictor of demand, those dollars shouldn't be the sole component since demand can be impacted by things like the weather, politics, and the overall health of the economy.

Inventory management:

Logistics from suppliers to storage to the storefront are all part of inventory management. As well as facilitating the compilation of financial records critical to monitoring the company's financial status, effective inventory management is crucial for eliminating delays, boosting user convenience, and reducing costs. This is so as the records are necessary for settling discrepancies between sold goods, returned products, and inventories. Yet, a small business like Wild Dog Coffee may skip the middlemen and handle receiving and stocking operations in-house. Nonetheless, major firms often have dedicated receiving facilities where received goods are inspected to ensure they are in accordance with supply requirements. Yet, technological developments have made this process easier by allowing businesses to keep tabs on stock levels in real time and from numerous locations. Keeping track of stock is crucial for every company, since it helps them to better serve their customers. This is because it allows management to strike a good balance between stocking an adequate quantity of inventory and keeping holding expenses to a minimum. While keeping a small stockpile helps a business save money on storage fees, the system evaluates stock levels after each sale so that management always knows how much is on hand.

In addition, the firm may now order from its suppliers the precise quantity of stock necessary to meet the demands of its customers at any given time. To avoid production delays and stockouts, businesses using automated continuous inventory management systems establish a reorder point. This also gives suppliers enough time to fulfil the company's requirements. Each business's reorder point is based on its own unique set of factors, including its own demand history and predictions, the logistics network, and the supply chain's available resources. There are benefits and drawbacks to the continuous method of inventory management. Using automation, it improves a business's stock management efficiency. The technology allows for accurate inventory monitoring and real-time updates, both of which are crucial to the company's day-to-day decision making processes. Businesses may simply adjust the review frequency of the SKUs, which aids in lowering holding and ordering expenses. Yet, the initial expenses to acquire the software and hardware necessary to automate company operations are high, making the acquisition of such a system capital expensive. Capital needs might be too expensive for small enterprises, rendering the system unfeasible. As a result of the high bar for accuracy required in the first scanning phase, inventory management mistakes may easily be made if handled by humans.

Management of stock on hand is assessed at predetermined periods in the periodic method. This implies that companies utilizing this technique choose a certain period during the month, week, or day to assess whether or not their stock levels are enough to fulfil anticipated demand. Due to the lack of automation, the business will need to establish a system of human inventory monitoring if it chooses this route. This means that the strategy is simple to adopt and does not need a large financial outlay. This method also facilitates the uniformity of stock delivery periods by the placement of orders at regular intervals. Costs in the supply chain and logistics may be reduced with periodic inventory management, as stated by de Vries (2007), since suppliers provide better price per unit as compared to bulk. As manual stock tracking and monitoring is required, this method is not without the possibility of human mistake.

Workforce Scheduling:

The first feasible shift plan asks for the hiring of four workers to work full-time shifts, in addition to one person to work part-time who is not a barista. Full-time employees will take turns working weekend hours, while part-time employees will fill in the spaces between weekday shifts. Considering the existing staffing requirements of the organization, the management team will be in a position to explore promoting the employee to a full-time role. Nonetheless, the increased cost of salaries makes it less appealing. In instance two, there will be a significant increase in the amount of work that has to be done, and the organization will need the assistance of four individuals who work weekends and part-time. Nevertheless, the scenario does not take into account any downtime that may occur in between shifts throughout the course of the work week. This plan ensures that certain employees will have days off by using part-time workers to cover more shifts than would otherwise be necessary.

Recommendations:

The periodic inventory management system is the one that is the best suited for WDC's needs when it comes to inventory management. This system is well suited for a smaller business since it enables inventory management on an interval basis, which is well suited to the weekly supply of espresso beans that the business receives. The first scenario is the best option for the company's scheduling needs since it is the most cost-effective and guarantees that every shift will be worked.

Conclusion:

In conclusion, WDCC hopes to expand on the progress made at our current site and, by using the same operational efficiency and procedures, preserve the gains we've made there while also making necessary improvements. As it will be our second location, we may utilize it as a model for future shop expansions. Positive outcomes are something that everyone hopes for.

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