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A Study on Sales Forecasting during Festival Season with Special Reference to Reliance Smart Bazar IT Park, Nagpur

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Abstract: *Sales forecasting is the process of estimating a company's sales revenue for a specific time period – commonly a month, quarter, or year. A sales forecast is prediction of how much a company will sell in the future. Sales forecasting is an important part related to supply chain management and operations between the retailer and manufacturers. Manufacturer needs to predict the actual future demand to inform production planning. Similarly, retailers need to predict sales for purchasing decision and minimize the capital costs. So, it depends upon the end users. Sales forecasting is the most challenging task for the inventory management, marketing, customer service and Business financial planning for the information technology chain store. To develop sales forecasting accurate model, it is a very difficult task due to multiple reasons like over forecasting model that increases operation cost and generates unnecessary products and under forecasting model lose customer satisfaction and its sales opportunities. Accurate and robust sales forecasting results can lead to customer satisfaction, enhanced channel relationships, and significant monetary savings. The aim of this research work is to investigate the various sales forecasting method executed in financial area of Reliance Smart Bazar, sales forecasting allows companies to efficiently allocate resources for future growth and manage its cash flow. Sales forecasting also helps businesses to estimate their costs and revenue accurately based on which they can predict their short-term and long- term performance.*

Keywords: Sales forecasting, supply chain management, channel relationships, Customer Service

I. INTRODUCTION

Sales forecasting is the process of estimating a company's sales revenue for a specific time period – commonly a month, quarter, or year. A sales forecast is prediction of how much a company will sell in the future. Sales forecasting is an important part related to supply chain management and operations between the retailer and manufacturers. Manufacturer needs to predict the actual future demand to inform production planning. Similarly, retailers need to predict sales for purchasing decision and minimize the capital costs. So, it depends upon the end users. Therefore, depending upon the nature of the business, sales forecasting can be done through human planning and statistical model or by combining both methods. Sales forecasting is the most challenging task for the inventory management, marketing, customer service and Business financial planning for the information technology chain store. To develop sales forecasting accurate model, it is a very difficult task due to multiple reasons like over forecasting model that increases operation cost and generates unnecessary products and 3 under forecasting model lose customer satisfaction and its sales opportunities. Accurate and robust sales forecasting results can lead to customer satisfaction, enhanced channel relationships, and significant monetary savings. Sales forecasting can have a crucial impact on the success and performance of companies. Inaccurate forecasts presumably lead to stock- outs or over stock inventories which result in losses for the companies. Within the retail and consumer-oriented industries, such as the electronic market or the fashion industry, accurate forecasts are essential. Companies face several challenges regarding accurate forecasts. For instance, they must place their production plans before exact knowledge about future demands is available. This is required since most production plants are in Asian countries and therefore the time-to-market is longer than the selling period of fashionable products.

Therefore, accurate forecasts are crucial because the production of successful products is hardly possible. In addition, other factors, such as changing weather conditions, holidays, public events as well as the general economic situation, can have an impact on future demands.

Techniques of Sales Forecasting:

Survey of buyers' intentions:

Under this method of sales forecasting, first, a list of all potential or prospective buyers is drawn up. Then, a face-to-face interview with a selected group of potential buyers is conducted. Based on the interview, the buyers' intentions are ascertained and an estimate of the sales of the products of the firm is made. This method is a practical method of sales forecasting. This method or approach is, generally, adopted by industrial marketers, i.e., marketers of industrial goods.

Opinion poll of sales force:

Under this method of sales forecasting, an opinion poll of the sales force is conducted. Based on the opinion poll, an estimate of the sales of the firm is made. This method is a very good method of sales forecasting, because the salesmen have a good idea of market conditions. Further, it is less expensive. This method is, generally, used when it is not possible to make use of the first method (i.e., the survey of buyers' intentions).

Expert opinion:

Under this method, the opinions of the experts are sought, and on that basis, sales forecasts are made. The experts may be outside experts or top executives of the firm itself, such as the production executive, marketing executive, finance executive, etc.

Market test method:

A company may conduct a direct market test, and based on its outcome, sales forecast is made. This method may be used either independently or as a supplement to other methods. It is used more frequently by consumer goods marketers. It may also be used by industrial goods marketers. When this method is used by industrial goods marketers, it is called a market probe.

Projection of past sales

Under this approach of sales forecasting, the past year sales of the firm are studied, and by making certain changes in the last year's sales (i.e., by adding or deducting a certain percentage to or from last year's sales), sales forecasts are made. This approach is simple and easy to adopt. It is also the most widely used approach. It is also a safe method for companies engaged in stable 6 industries. However, in many cases, this method is not reliable. Again, this method cannot be adopted in the case of new products or by new companies. trends, cyclical changes, seasonal variations and irregular fluctuations in the sales of a concern are isolated (ignored), and the sales forecast is made on the basis of normal trends. This approach is inexpensive. So, it is widely used.

II. REVIEW OF LITERATURE

Background Supply chain contains different business parties that share physical good and customer services related to goods and money. Supply chain to be developed in two different areas:

Supply chain execution

supply chain planning.

Forecasting Concept Forecasts are nothing but predictions about future. Maybe forecasts of sunrise and sunset can be predictable without any mistake but it is not the scenario in business. Business equations changes as time goes and hence prediction may give error.

(Mentzer and Moon, 2004) describes sales forecast as a projection into future of expected demand, given a started set of environmental conditions. We should not confuse the planning process and forecasting process. Planning is nothing but managerial actions which should be taken to meet or exceed the sales forecast. The aim of right forecast is to predict

demand perfectly. Forecasting have been used in all kinds of companies, service sectors, government organizations, and used as input to the planning project or set of activities 20.

(Hofmann, 2013) summarizes the characteristics of sales forecast as follows:

Forecasts are always wrong and hence one should always expect evaluation of errors in it

Long term forecast is normally less accurate than short time forecasts. This is because larger standard deviation of error relative to mean than short term forecasts.

Aggregate forecasts are normally more accurate than disaggregate forecasts. Aggregate forecast contains smaller standard deviation of error than disaggregate forecasts.

The Greater the distortions of information in supply chain the higher are the errors in sales forecast. Sales forecasting need in Planning Manufacturing industries work on principle to satisfy customer demand by appropriate supply.

According to (Mentzer and Moon, 2004), companies consider the sales forecasting as integral part of this process. End customers create demand, and it can be increased by activities like promotions. Hence marketing focus 21 on end customers for creating demand. Sales department ease the same by different strategies such as servicing other parties in this streamline like wholesaler and retailers. Supply should be enough to meet demand. Different management functions like manufacturing, purchasing and logistics work together to maintain the supply.

Forecasting Methods and Techniques Several standardized methods for forecasting are available. They differ in terms of the relative performance in forecasting over the level of quantitative sophistication used, and the logic base (historical data, expert opinion, or surveys) from which the forecast is derived. Those methods could be categorized into three different groups:

Historical projection

Qualitative

Casual(Ballon, 2004).

(Ballon, 2004) states that "when a reasonable amount of historical data is available and the trend and seasonal variations in the time series are stable and well defined, projecting these data into the future can be an effective way of forecasting for the short term". He also mentions that the quantitative 22 nature of the time series supports the use of mathematical and statistical models as primary forecasting tool. By using such tools accuracy can be reached for forecasted periods. These methods are most appropriate when the environmental situation is stable, and the basic demand pattern does not vary significantly from year to year.

2.1 OBJECTIVES OF THE STUDY

The research is being conducted for the following research objectives:

- To examine forecasting analysis of Reliance smart bazar Nagpur
- To examine impact of forecasting technique on customers of Reliance smart bazar
- To examine the challenges faced by the Reliance smart bazar
- To study different forecasting techniques used by Reliance smart bazar during festive season
- To study the different products categories offered by Reliance Smart Bazar, Nagpur

2.2 HYPOTHESIS

Ho- The forecasting Technique adopted by Reliance smart bazar is satisfactory and creates good impact on customers.

H1- The forecasting Technique adopted by Reliance smart bazar is not satisfactory and unable to create good impact on customers

III. RESEARCH METHODOLOGY

3.1 STATEMENT OF THE PROBLEM:

The aim of this research work is to investigate the various sales forecasting method executed in financial area of Reliance Smart Bazar, sales forecasting allows companies to efficiently allocate resources for future growth and manage its cash flow. Sales forecasting also helps businesses to estimate their costs and revenue accurately based on which they can predict their short-term and long- term performance.

SAMPLE SIZE AND SAMPLE UNIT:
The design of the sample is as follows
Population: • Employees/Workers of Reliance Smart Bazar
Customers of Reliance Smart Bazar
Sampling Technique:
Simple Random Sampling:
Specific sampling method was used to collect the data from the respondents because sample size is large. Customers & employees of Reliance Mart were selected for the survey.
Sample size: 50

3.2 LIMITATIONS OF THE STUDY

Despite all sincere efforts, the study is not fool proof in nature. It suffers from variety of limitations due to the following reasons:
The study is limited to Nagpur city only.
Besides that, the detailed study has been conducted taking on only 1 store of Reliance smart Bazar.
Data pertaining to the study has been collected for a period of only 2 months.
Time is also a limiting factor as the study is conducted in a very short span of time

IV. CONCLUSION

In conclusion, the study on sales forecasting during the festival season with special reference to Reliance Smart Bazar in IT Park, Nagpur provides valuable insights into the dynamics of consumer behaviour and purchasing patterns during this crucial period.
By analysing historical sales data, customer preferences, and market trends, the study aimed to forecast sales accurately and assist Reliance Smart Bazar in optimizing their inventory management, promotional strategies, and overall business operations.
Throughout the research process, various methodologies such as statistical analysis, data mining, and predictive modelling were employed to develop accurate sales forecasting models.
These models incorporated key factors such as previous festival season sales, demographic information, seasonal trends, and promotional activities to generate reliable predictions.By leveraging these insights, Reliance Smart Bazar can make informed decisions related to stocking, pricing, and marketing strategies, ensuring efficient resource allocation and customer satisfaction
The findings of this study highlighted the significance of understanding consumer behaviour and preferences during festival seasons. The festival season serves as a crucial period for retailers, presenting opportunities to maximize sales and build brand loyalty.
By accurately forecasting sales, Reliance Smart Bazar can proactively address demand fluctuations, avoid stockouts or overstocking, and optimize their revenue potential. Moreover, this research contributes to the existing literature on sales forecasting by focusing on a specific retail store in the IT Park area of Nagpur.
By narrowing the scope of the study, it provides a more localized and context-specific understanding of sales dynamics during festival seasons, catering to the needs of Reliance Smart Bazar in their target market. However, it is important to acknowledge certain limitations of the study.
The research heavily relied on historical data, if past patterns would continue to hold true in the future. External factors such as economic conditions, competitor activities, and unforeseen events could impact sales, which may not be fully captured by the models. Future research could explore incorporating real-time data and external variables to enhance the accuracy of sales forecasting models
Overall, this study serves as a valuable resource for retailers, particularly Reliance Smart Bazar, in understanding and predicting sales patterns during the festival season. By leveraging these insights, businesses can streamline their operations, improve customer satisfaction, and maximize their revenue potential, ultimately contributing to sustainable growth and success in the competitive retail industry

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