The Effect of Promotion Costs in Increasing Sales in GN Electric Appliance Business

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Abstract
This study aims to see the effect of promotion costs in increasing sales of GN electric appliance business. Case study research methods and data collection. The company as the object of research, namely the company is engaged in the sale of electric tools at the GN Electric Appliance Business. The result of this calculation means that the cost of promotion has an influence on the increase or decrease in sales of the number of equipment. The regression coefficient is positive, that if the cost of promotion has increased, then sales of power tools will also increase. The calculation of the correlation analysis shows the number r = 0.99 close to positive 1, which means that the relationship between promotion costs and sales of electrical equipment shows a strong and unidirectional relationship, if promotional costs have increased then sales of electrical equipment will also increase.

Keywords: Promotion Costs, Sales Increase, Electricity Business

Introduction
The current economic development has enabled the emergence of various kinds of companies both engaged in trade, services and production. The emergence of these companies was essentially to meet the increasingly complex needs of society.

Along with economic growth and technological advances, the business world has experienced rapid development with the emergence of various companies that are trying to create products and services to meet consumer needs. et al., 2010; Varman & Belk 2008). But on the other hand, this development has resulted in the emergence of fierce competitions that dominate the business world, so that companies work more effectively and efficiently and are more responsive in anticipating the market.

Marketing is one of the operational functions of a company that acts as a direct support for the company’s activities. One of the marketing activities that plays an important role in increasing the company's sales results is promotion (Avlonitis & Karayanni, 2000). Promotion is the most effective and reliable medium that is mostly used by companies to grab market share (Ashley & Tuten, 2015; Castronovo & Huang, 2012).

As the basis for the development of promotion, communication between companies and consumers must be created effectively, by conveying inspiring messages in various ways.
Increased marketing promotion by companies can have an influence on increasing company sales (Pauwels et al., 2004 Oyedapo Williams et al., 2012).

Promotion by the company will increase costs in marketing. The promotion referred to in this study is a sales promotion carried out by the company to increase sales, while the costs referred to include advertising costs through the production of brochures and the use of print and electronic media (Cahoon, 2007; Kazmi & Batra, 2009). Consumer fulfillment through promotion is a means of smoothing the flow of sales of products. In maintaining sales, companies must improve product quality and quality, so that consumers remain impressed with the goods produced by the company (Humphreys & Grayson, 2008).

Thus, product quality is considered so that the company maintains a minimum sales volume, because the role of promotion in increasing sales turnover of production is determined by the smooth flow of goods, the company has several fields of business, but this discussion is only in the section of electrical equipment.

In connection with increasing the sales volume of merchandise, the company is engaged in electrical equipment consisting of ballons, cables and electrical installations, so promotion is part of the effort to streamline manufactured goods. If the definition of promotion is examined in a narrow sense, then the promotion function is an attempt to improve the way the company's sales results in a profitable way. Meanwhile, in a broad sense, the promotion function is not only about finding out how companies can get subscriptions in large numbers by using energy efficiently and effectively. But also how to obtain a number of benefits that are expected together.

**Methods**

The company as the object of research, namely the company is engaged in the sale of electric tools at the GN Electric Appliance Business. To collect data / information and information needed in the preparation of articles, a case study method is used and data collection through research is as follows (1) library research, which is research conducted by conducting direct reviews on several books as library material, as well as scientific essays that are closely related to the above problems. (2) Field research (field research), namely research conducted by making direct visits to the designated research object.

To collect the necessary field data, techniques / methods are used, as follows (1) Interview, which is a question and answer session conducted with company leaders and several staff who have directly handled sales and production issues during the last few years. Qualitative data, namely data obtained from company results either in the form of verbal or written information. Primary data, namely data obtained by conducting observations and direct interviews.

**Results and Discussion**

**Brief History of the Company**

The GN Electric Appliance Business Company has a background in its existence so that one of the companies is engaged in the city electric tools. In this discussion, the history of the establishment of the GN Electric Appliance Business was established by establishing a Limited Liability Company which has been adjusted to its articles of association as follows (1) with GN Electric Appliance
Business on behalf of itself. (2) In other places the Board of Directors with the approval of the Commissioner may establish branches / representatives and agents of this company with due regard to consumers. On this basis, a representative was established in the city with specific aims and objectives. (3) Running a business as a distributor and electrical equipment for office and household goods using electrical materials. (4) Undertaking various kinds of industries, especially those that use electricity. (5) Maintain a business bureau as the sole agent in a special city for electric tools. (6) Carrying out trade in general, including export and import between islands commissioned by sellers or agents.

To discuss a brief history of this company in accordance with the results of the author’s research by meeting one of the staff interviewed and part of the data in the form of a copy that the company is based on.

Organizational structure

In carrying out daily activities, companies need to pay attention to Organizational Structure issues. A good and neat organizational structure will greatly support the company’s operational activities.

Organizational structure describes the boundaries of duties and obligations as well as responsibilities intended to prevent frauds in trading companies. The leadership of the company is directly responsible for and leads the company’s activities and determines the company’s policies, both internal and external.

In an effort to achieve an organizational goal of any company or institution, the organizational structure plays an important role and should not be ignored. Therefore, each company must not have the same thing between one and the other both in terms of size and extent of business, number of employees, quality of employees, and type of business required by each company concerned, resulting in an appropriate company organizational structure for each company. Companies are not the same.

Thus the organization is a place to accommodate people who are willing to work together in order to achieve goals. To make it clearer, below is presented the organizational structure of the GN Electric Appliance Business.

![Organizational Structure Diagram]

Figure 1. Organizational Structure

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Leader

Leaders have the following duties and responsibilities: (1) To lead and coordinate the Finance, Administration and accounting and Sales section. (2) Determine policies for the implementation of work and prepare periodic budgets. (3) Receiving and studying reports submitted by the led department.

Head of Finance

The Head of Finance has the following duties and responsibilities (1) To assist the leadership in determining policies related to finance. (2) Responsible directly to the leadership. (3) Make a cash balance deposit at any time. (4) Head of Administration and Bookkeeping.

The Head of Administration and Bookkeeping has the following duties and responsibilities (1) To lead and coordinate the Administration Section and Bookkeeping Section. (2) Assisting the leadership in determining the implementation of duties in the field of administration and bookkeeping. (3) Providing basic business needs, in accordance with the needs of the company. (4) Oversee cash balances and prepare and report the amount of revenue and expenditure to the leadership.

Administration Section

The Administration Section has the following duties and responsibilities (1) Making letters to be signed by the leadership, both internal and external for the company. (2) Keeping archives of incoming and outgoing letters. (3) Creating a personnel activity report every working day.

Bookkeeping Section

Bookkeeping Section has the following duties and responsibilities (1) Make a recapitulation of sales income every day. (2) Make a recapitulation of receipts that have expired every day to find out the average amount of revenue that must be produced per month. (3) Making daily cash reports for receipts and expenses to be ratified by the Head of Bookkeeping Section, which will then be submitted or reported to the leadership.

Sales Department

The Sales Department has the following duties and responsibilities (1) Responsible to the leadership. (2) His job is to sell merchandise. (3) Make a recapitulation of sales forecasts in the future.

Sales Development Analysis

The development of the company's sales is useful for planning future sales. A company in normal circumstances is a need to make sales forecasts, because sales forecasts can be used or function to provide information and guidance for each company before making decisions in order to develop and market products in the future.

Besides, the sales forecast is also useful for preparing marketing plan activities that will be carried out to increase sales. Planning that is carried out without a sales forecast will end badly for the survival of the company. Planning must be prepared based on careful considerations so that goals do not miss. Here the importance of forecasting a prediction in order to increase or find out how
much increase in company revenue in the future.

With these considerations, in analyzing the sales of the GN Electrical Appliance Business, it displays sales for the last 5 (five) years. To be able to see the development of sales from 2015 to 2019, see label 1 below:

Table 1. Development of GN Electric Appliance Business Sales

| Year | Sales (In USD) | Total |
|------|---------------|-------|
|      | Electric wire | Lamp  | Electrical installation |
| 2015 | 890.000       | 850.100 | 695.521               |
| 2016 | 890.300       | 885.000 | 675.100               |
| 2017 | 890.330       | 950.150 | 726.450               |
| 2018 | 998.425       | 940.210 | 883.000               |
| 2019 | 999.000       | 972.207 | 790.000               |

Source: GN Electric Appliance Business

Promotion Cost Development Analysis

Promotion costs are costs that are directly related to the marketing of electrical equipment, or it can be said that promotion costs dominate the total costs incurred by the GN Electric Appliance Business.

To analyze the effect of promotional costs on company sales, we first explain the promotional costs incurred by the company. Or it can clearly be seen in Table 2 below:

Table 2. Development of GN Electric Appliance Business Promotion Costs

| Year | Promotion Fee (In USD) | Total (In USD) | Percentage % |
|------|------------------------|---------------|--------------|
|      | Print media | Electronic Media |               |
| 2015 | 8.085      | 7.000         | 14.085       | 0.00         |
| 2016 | 16.020     | 9.000         | 25.020       | 2.40         |
| 2017 | 17.431     | 11.500        | 27.931       | 2.69         |
| 2018 | 23.504     | 17.300        | 39.804       | 3.88         |
| 2019 | 27.098     | 19.100        | 45.198       | 4.41         |

Analysis of the Effect of Promotion Costs in Increasing Sales

To measure how much influence the cost of promotion in increasing sales of electrical equipment in the GN Electric Appliance Business, can be used with linear regression calculations and correlation analysis.

In connection with this purpose, the authors want to analyze the functional relationship between the sale of electrical equipment, namely (Y) on the one hand as the dependent variable (bound) with promotion costs, namely (X) on the other hand as an independent variable (free).

The effect of promotional costs (X), on the sale of electrical equipment (Y), can be expressed in the form of the Linear Regression equation with the following formula:

\[ Y = a + bx \]
Where to calculate the values for parameters a and b the formula is used:

\[ a = \frac{Y - bx}{n} \]
\[ b = \frac{n(xy) - (x)(y)}{n(x^2) - (x)^2} \]

In this analysis, the authors use 5 (five) years of data while the value for promotion and sales costs is expressed in millions of USD.

Meanwhile, in distributing the values to the authors above, it can be searched by using a list of calculations for Linear Regression and Correlation Analysis as in table 3 below:

**Table 3. Calculation of Linear Regression and Correlation Analysis Between Promotion Costs and Sales in 2015 - 2019 (In USD)**

| Year | X   | Y     | X²   | Y²   | XY    |
|------|-----|-------|------|------|-------|
| 2015 | 14.085 | 2.325.650 | 181.22 | 4.993.517,92 | 30.122,63 |
| 2016 | 25.020 | 2.535.821 | 586.96 | 5.993.223,94 | 59.508,42 |
| 2017 | 27.931 | 2.616.930 | 735.28 | 6.234.936,62 | 68.783,44 |
| 2018 | 39.804 | 2.758.635 | 1.605,75 | 7.058.340,06 | 104.165,67 |
| 2019 | 45.198 | 2.925.207 | 1.983,46 | 7.881.794,59 | 125.868,50 |
| Total | 148.038 | 12.762.243 | 4.952,67 | 31.271.813,13 | 384.448,66 |

Source: Data reprocessed

Based on table 3 above, the parameter values a and b can be calculated as follows:

\[ b = \frac{n(xy) - (x)(y)}{n(x^2) - (x)^2} \]
\[ b = \frac{5(383.448,66) - (147.038)(12.662.243)}{5(4.932,67) - (147.038)^2} \]
\[ b = \frac{1.917.243,3 - 1.861.830,89}{24.663,35 - 21.620,17} \]
\[ b = \frac{55.412,41}{3.043,18} \]
\[ b = 18,21 \]
\[ a = y - bx \]
\[ a = 2.532.448,6 - (18,21) (29.407,6) \]
\[ a = 2.532.448,6 - 535.12,4 \]
\[ a = 1.996,94 \]

**Linear Regression:**
\[ y = a + bx \]
\[ y = 1.996,94 + 18,21 x \]

Furthermore, Correlation Analysis can explain the relationship between the results of sales of power tools and the amount of promotional costs. To calculate Correlation Analysis, the formula
Based on the results of the correlation calculation, it shows that the promotional costs incurred by the company electrical equipment companies have a strong and positive relationship to the increase in sales of electrical equipment. It is evident from the calculation of the correlation coefficient value of 0.99 or close to positive 1.

Thus it can be said that the relationship between promotion costs and sales of electrical equipment shows a strong and unidirectional relationship. Unidirectional means that an increase in promotional costs will also be followed by an increase in sales, this indicates that the more active the company is in running the promotion, the increasing too.

Furthermore, to determine the effect of promotional costs on increasing sales of electrical equipment at the company, the coefficient of determination can be calculated as follows:

\[ r = (0.99)^2 = 0.98 \text{ or } 98\% \]

Thus, it can be seen that the effect of promotion costs on an increase in sales of electrical equipment by 98%. This means the other 2% is adhered to by other factors, for example other facility services that can support increased marketing and product quality.

Based on the results of the analysis above, it can be concluded that promotion has a positive effect on the increase in sales of electrical equipment, namely by 98%. Therefore, the hypothesis proposed in the discussion of this thesis is proven or acceptable.

Conclusion

From the results of the linear regression analysis between the number of sales of electrical equipment and the cost of promotion at the GN Electric Appliance Business, the following regression equation is obtained (1) The results of this calculation mean that promotion costs have an influence on increasing or decreasing sales of the number of equipment. (2) The regression coefficient is positive, that if the cost of promotion has increased, then sales of power tools will also increase. The calculation of the correlation analysis shows the number \( r = 0.99 \) close to positive 1, which means that the relationship between promotion costs and sales of electrical equipment can be used: \( n(xy) - (x)(y) \)

\[
\begin{align*}
  r &= \frac{n(xy) - (x)(y)}{\sqrt{n(x^2) - (x)^2 \cdot n(y^2) - (y)^2}} \\
  &= \frac{5(383.448.66) - (147.038))(12.662.243)}{\sqrt{5(4.932.67) - (147.038)^2 \cdot 5(32.271.813.13) - (12.662.243)^2}} \\
  &= \frac{1.917.243.3 - 1.861.830.89}{(24.663.35 - 21.620.17). (161.359.065.7 - 160.332.397.8)} \\
  &= \frac{55.412.41}{55.895.8} \\
  r &= 0.99
\end{align*}
\]
equipment shows a strong and unidirectional relationship, if promotional costs have increased then sales of electrical equipment will also increase. The calculation of the analysis of determination shows \( r = 0.98 \) or 98%, which means the effect of promotional costs on an increase in sales of electrical equipment by 98% and another 2% is influenced by other factors, for example other facility services that can support increased sales of equipment and product quality.

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