Lake Champlain Chocolates Analysis

Lake Champlain Chocolates is a company that manufactures and sells high-quality chocolates. After the website sales have exceeded expectations, the company is considering strategies to increase sales even more. To better understand customers' trends in website visits and transaction execution, the company selected 50 samples from last month's sales data. Through handling and analysis, these data will tell what the company wants to know to optimize its upcoming strategies.

**Descriptive Statistical Analysis**

![Table

Description automatically generated]()

The above table shows that the average length of time each customer spent on the company's website is about 13 minutes. In addition, the maximum time is nearly 33 minutes and the minimum time is less than 5 minutes. For the number of pages viewed, 10 is the largest number of pages and 2 is the smallest number of pages, and after calculation, the average number of pages viewed is about 5 pages. How about the money that customers spent through transactions on the website? $70 is the average amount spent, and the highest value is around $159 while the lowest value is approximately $18.

Figure 1

![Chart, histogram

Description automatically generated]()

Figure 1 is a histogram chart which represents the frequency of the length of time spent by customers on company’s website. It can be seen that the majority of customers spent on the website between 5 to 19 minutes. After examination, the time spent on the website is skewed slightly to the right, so we can conclude that most customers spent less than 13 minutes on the website.

Figure 2

![Chart, histogram

Description automatically generated]()

Figure 2 shows that the frequency of the number of pages viewed by customers towards 3 to 6 pages of the website. Similar to figure 1, this histogram chart also tends to right skewed distribution, so the majority of customers viewed less than 5 pages of the website.

Figure 3

![Chart, histogram, waterfall chart

Description automatically generated]()

There are many successful transactions in the previous month with different values. Looking at figure 3, many customers spent between $36 and $75 dollars on the company's website, and the distribution of dollars spent is skewed to the right, so most transactions have a value less than $70.

**Lake Champlain Chocolates’ business based on the day of the week**

The number of transactions, total of amount spent, and average of amount spent per transaction for each day of the week of the company is tabulated below:

![Table

Description automatically generated]()

After viewing the table, the website experiences the most traffic on Friday and following by Monday. Thus, the total amount which the company received is also largest on Friday with 945.43 dollars, but the average amount spent per transaction peaks on Monday with 90.38 dollars. Sunday and Thursday are the two lowest trading days of the week, but Sunday seems to be the bleakest day for the website because the total and average amount spent both have the lowest value in the table ($218.15 and $43.63).

**Lake Champlain Chocolates’ business based on the type of browser**

The number of transactions, total of amount spent, and average of amount spent per transaction for users of each browser of the company is tabulated below:

![Graphical user interface, application

Description automatically generated]()

It can be easy to see that most customers prefer to choose Google Chrome to visit the company's website and make transactions, so the total value of these transactions is also the largest with 1,656.81 dollars, but surprisingly, the average amount customers' spent on this website is the lowest ($61.36). The second-ranked is Firefox with 16 out of 50 transactions, and the total amount spent is $1,228.21, but the average amount spent peaks at 76.76 dollars.

**The relationship between the time spent on the website and the dollar amount spent**

![Table

Description automatically generated]()

![Chart, scatter chart

Description automatically generated]()

The above scatter chart shows the relationship between time spent on the website and the amount spent. Looking at the chart, there is a decent number of points showing the growth of amount spent when the length of time spent increases. In addition, the correlation between time spent on the website and the amount spent is 0.58, so the relationship between them is moderately strong in a positive direction. It can be concluded that customers who spend more time on the website are likely to spend more money.

**The relationship between the number of website pages viewed and the amount spent**

![Table

Description automatically generated]()

![Chart, scatter chart

Description automatically generated]()

The above scatter chart shows the relationship between pages viewed on the website and the amount spent. Through observations, there are large points that tend to go higher when the horizontal axis towards the right. In addition, the correlation between pages viewed on the website and the amount spent is 0.72, so the relationship between them is strong in a positive direction. It can be concluded that customers who visit more pages on the website will spend more money.

**The relationship between the time spent on the website and the number of pages viewed**

![Table

Description automatically generated]()

![Chart, scatter chart

Description automatically generated]()

The above scatter chart shows the relationship between time spent on the website and the pages viewed. Taking a look at the chart, there is a decent number of points showing the growth of time spent when the number of pages viewed increases. In addition, the correlation between time spent on the website and the page viewed is 0.6, so the relationship between them is moderately strong in a positive direction. It can be concluded that customers who spend more time are likely to visit more pages on the website.

In conclusion, there are several recommendations for Lake Champlain Chocolates if the company wants to increase sales on its website. First of all, because Monday and Friday are the two days of the week with the highest number of transactions as well as the most revenue for the company, the company needs a thorough preparation of website quality two days in advance to avoid unnecessary errors. In addition, Sunday should be the date chosen for the maintenance of the entire site because the customer made the fewest transactions on that date. Moreover, Chrome is the browser that customers choose the most to use for accessing corporate websites but has the lowest average amount spent than Firefox and other browsers. This shows that Chrome seems to have some limitations or conflict with the company's website and makes it impossible for users to perform multiple transactions or view more pages. Because Firefox has the highest average amount spent, the company's website team should compare Chrome and Firefox to find the differences. Therefore, they can optimize Chrome from what they learned from Firefox. Finally, because the strong relationship between pages viewed and the amount of money a customer spent, the company's website should improve to maximize the number of pages that customers view to earn more revenue. The website should add banner ads, buttons, or images that can link to other pages right at the customer's current page without having to go through cumbersome search steps. One point to note is that because the company only picked 50 samples for trend examination, these results only partially represent the company's story last month. If more data is available, the overall picture will be more comprehensive. Therefore, these results should be used only for reference and need to consideration carefully before planning upcoming strategic plans.