Pelican Stores Case Analysis
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The dataset for this analysis included seven variables: type of customer, items (total number of items purchased), method of payment, gender, marital status, age, and net sales ($ amount charged to the credit card).

This analysis was completed in order to gain insights about the customer base and to determine the effectiveness of a promotional campaign involving discount coupons.

The analysis, including graphical and tabular displays, is below.

Analysis #1

According to figures 2.1a and b, we can see that about 93% of the customers are female and out of that number 66% are customers who made a purchase using a discount coupon. Married females compose the greatest percent of customers with a total of 80%.

Also, we can further ascertain that 70% of total customers, whether male or female, used a promotional coupon.

From figures 2.1c and 2.1d, we can determine that majority of the customers are from age groups 30-39 and 40-49. These age ranges consist of 30 and 33% of the total customers respectively, with the greater percentage of both categories being promotional customers.

Figure 2.1a

Count of Type of Customer	Column Labels		
Row Labels	**Promotional**	**Regular**	**Grand Total**
Female	**66.00%**	**27.00%**	**93.00%**
Married	58.00%	22.00%	80.00%
Single	8.00%	5.00%	13.00%
Male	**4.00%**	**3.00%**	**7.00%**
Married	3.00%	1.00%	4.00%
Single	1.00%	2.00%	3.00%
Grand Total	**70.00%**	**30.00%**	**100.00%**

Figure 2.1b

Customer Type vs Gender and Marital Status
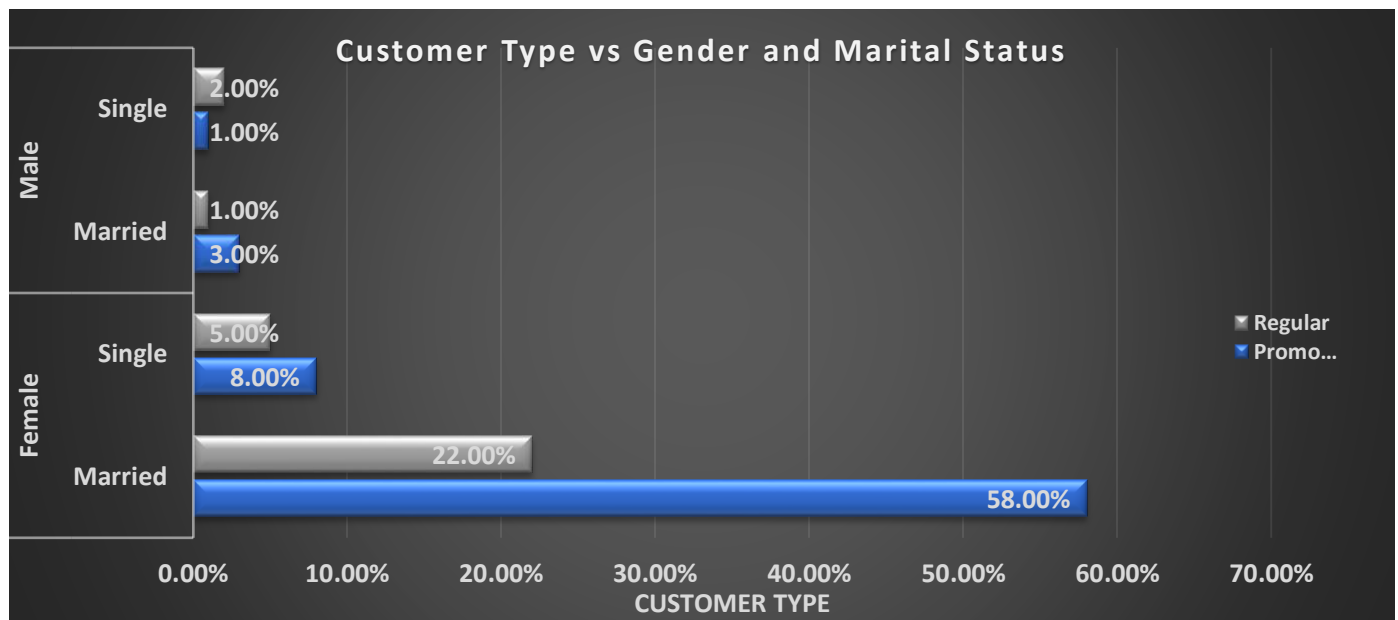
Figure 2.1c

Count of Type of Customer	Column Labels		
Age Range	Promotional	Regular	Grand Total
20-29	7.00%	3.00%	10.00%
30-39	22.00%	8.00%	30.00%
40-49	20.00%	13.00%	33.00%
50-59	12.00%	4.00%	16.00%
60-69	7.00%	0.00%	7.00%
70-79	2.00%	2.00%	4.00%
Grand Total	70.00%	30.00%	100.00%

Figure 2.1d

Age Range of Customer Types

Percent of Customers

| Age Range	Promotional	Regular
20-29	7.00%	3.00%
30-39	22.00%	8.00%
40-49	20.00%	13.00%
50-59	12.00%	4.00%
60-69	7.00%	0.00%
70-79	2.00%	2.00%
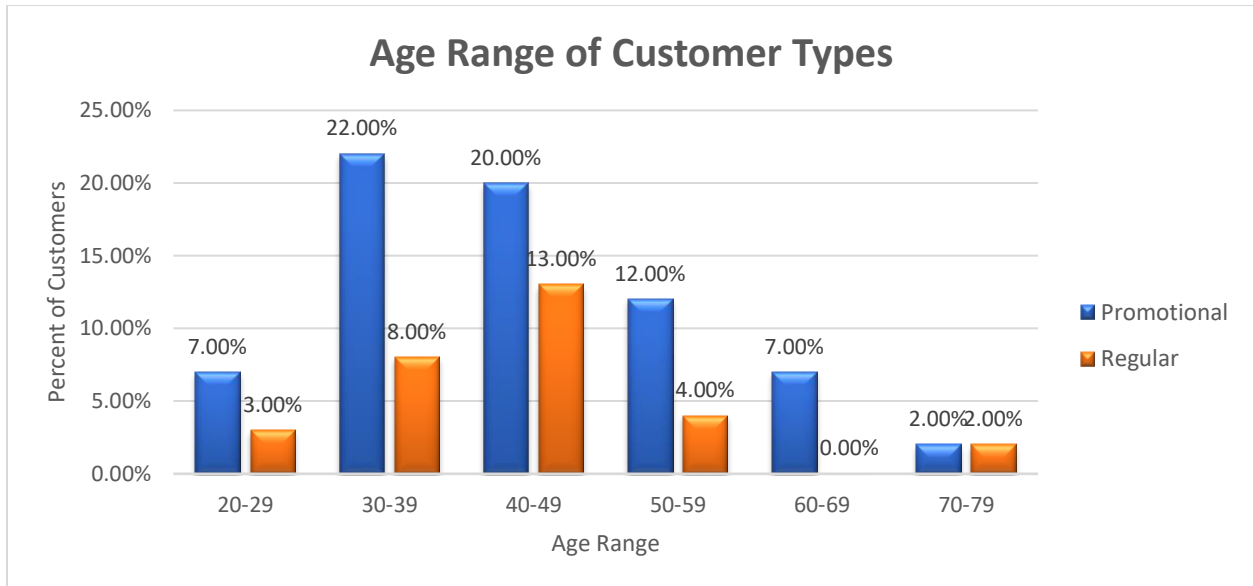
Analysis #2

From figures 2.2a and 2.2b below, we can determine that an overwhelming amount of customers utilized the Proprietary Card method of payment. Out of the 100 customers, 70 used this method of payment.

Figure 2.2a

Payment Method	Percent of Method of Payment
American Express	2
Discover	4
MasterCard	14
Proprietary Card	70
Visa	10
Grand Total	**100**

Figure 2.2b

Payment Method Used

| Method of Payment	Total
American Express	2
Discover	4
MasterCard	14
Proprietary Card	70
Visa	10
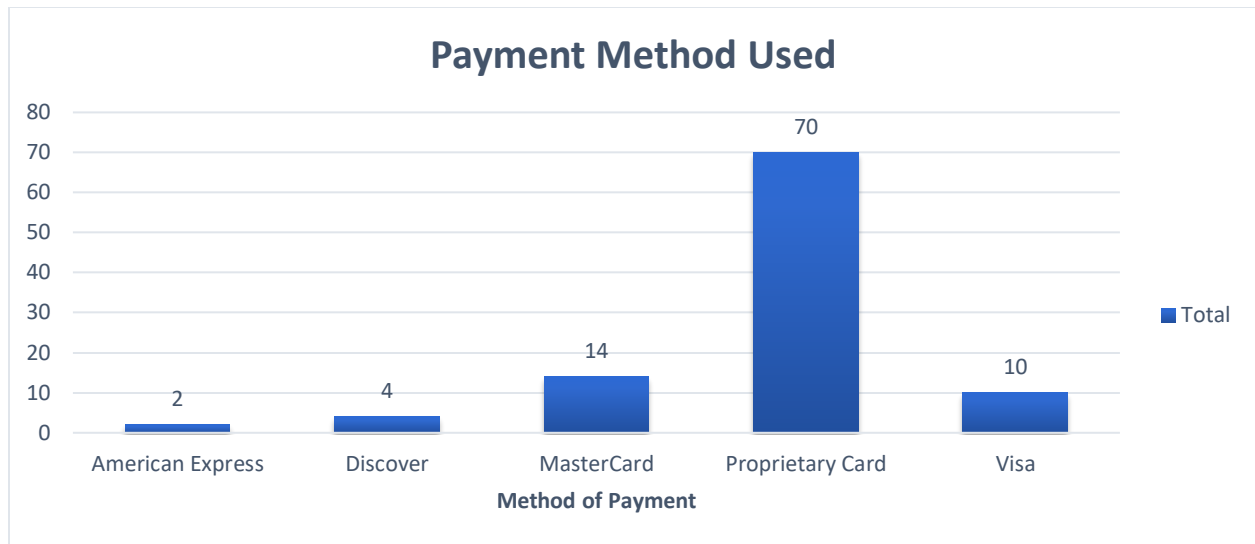
Analysis #3

From the table and graph below, based on net sales, 70% of customers were promotional. Out the grand total net sales of $7,760.05, promotional customers contributed $5,900.30.

Figure 2.3a

Customer type	Percent of Net Sales	Sum of Net Sales
Promotional	70.00%	$5,900.30
Regular	30.00%	$1,859.75
Grand Total	**100.00%**	**$7,760.05**

Figure 2.3b

PERCENT OF NET SALES BY CUSTOMER TYPE
- Promotional 70.00%
- Regular 30.00%
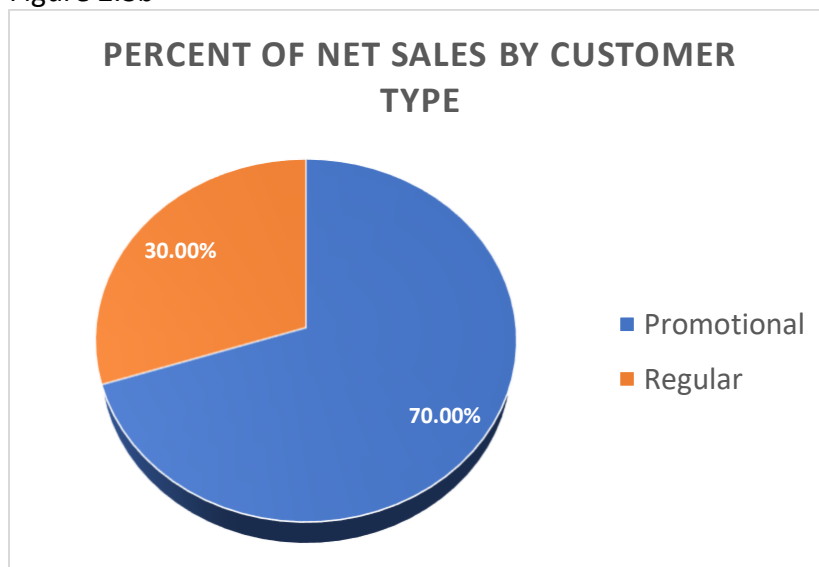
Analysis #4

On the below scatter diagram, there is no pattern to the plotted points and the trendline is horizontal. This implies that there is no relationship, whether positive or negative between net sales and customer age.

Figure 2.4

Age vs. Net Sales

$y = -0.0478x + 79.659$
$R^2 = 0.0001$

Net Sales

Age

● Net Sales —— Linear (Net Sales)