

Explore Strategies to increase Profitability in the Retail Industry - A Study in Sri Lankan Organization

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ABSTRACT

Today, as a result of the world's current economic crisis, all the industries are still finding themselves extremely hard to survive with their businesses. Similarly, world's retail organizations too are in the queue of organizations that are losing their proceeds and fame. As far as an organization is considered, though the crises is short term or they evolve for longer, some strategic action needs to be employed if they want to survive in the industry for a long period. During the present study, an attempt has been made to identify how profitability is changing in the retail industry with wastages occurred therein using a selected organization of this industry. The study design has been established covering two major parts. The first part helped identifying the problem of occurring lower profitability with special reference to wastages. Then, in the second part, an experiment was carried out to identify methods of minimizing such wastages. As the outcomes of this research, some solutions have been proposed for the organization using theoretically and practically proven tests, & surveys. Accordingly, if these solutions could save a single cent to the organization which eventually would help avoiding a significant failure, then that would obviously be considered as the ultimate obligation of proceeding with this research.

KEY WORDS: Perishable Goods, Profit, Retail Industry, Wastage

INTRODUCTION

Retailing is not only a part of the economic structure but also shapes, and is shaped by the way of life of people. Interest in the study of retailing has to some extent mirrored the growth and increasing prominence of retail industry. Retailing is an important to study because of its impacts of the economy, its functions in distribution, and its relationship with firms selling goods and services to use. Following factors illustrate the growing importance of the Retail Sector. They are;

- Large and increasing contribution to GDP
- Economic importance
- Major employer

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- As gatekeepers for the manufacturing organizations
- Growth potential up to international level
- Capability of diversifying the retail business according to consumer expectations (Gilbert, 2006)

Berman and Evans (2005) have suggested that profit earning is a reward to the owners of any business as they take risks with their money and time. If there was no profit, then there would be little chance in starting up or putting more money into the business.

Therefore earning profits is an important criterion for investing money. A business that does not make a profit will fail, potentially affecting employees, suppliers and the local community as well (Berman and Evans, 2005). However, it has been suggested that one obvious way to increase profits is to increase sales. But it should need to consider the other ways that can increase profits. They are;

- Improving Operations
- Increasing Effectiveness
- Enhancing Marketing and Branding

The combined efficiency and effectiveness into true efficiency, increased visibility and improved brand image would increase sales and the lifeblood of any business. A well-trained and properly motivated sales team is a key to success and they can do;

- Retailing
- Business-to-Business
- Catalogue & Web-Based
- Service Industry
- Fundraising
- Direct Marketing, etc

Problem Statement

The main objective of the research is to explore strategies to increase profitability in the Retail Industry. An organization's profit can be varied because of following main causes;

- Changes of Income
 - turnover
 - rent income/interest income
- Changes of Costs
 - cost of sales
 - packing material cost
 - wastages
 - utility cost
 - staff expenses
 - other overhead, etc

Among the above mentioned cost centers, the wastages, packing martial cost and utility cost are the highest considerations in an organization. When identifying the reasons for low profitability, management should have to pay much attention to the problems that would occur from those areas.

LITERATURE REVIEW

The Retail Environment

Gilbert (2006) has suggested that the only factor in retailing is "change" and it is certainly true that the pace of development within retailing is accelerating. The market is becoming more segmented with retail formats which focusing on the needs of particular consumer group. Further,

according to Berman and Evans (2005), it has been suggested that while the trading of goods has always been part of traditional societies, in recent times the buying and selling of products has become much formalized and the brand dominance is apparent

Definition

Any business that directs its marketing efforts towards satisfying the final consumer based upon the organization of selling goods and services as a means of distribution (Gilbert, 2006).

The Intangible-Tangible Product Continuum

Berman and Evans (2005) have argued that all products fall on a continuum between pure services and pure goods, with most products being a combination of the two. A pure service would be consultancy or financial advice where as pure good would be more tangible, such as can of beans or bottle of lemonade. A very few products are purely intangible than manufactured goods.

Services, such as retailing, can be characterized as having the following attributes,

- Intangibility
- Perishability
- Inseparability

RESEARCH METHODOLOGY

Research Design

The present research has a model similar to 'Applied Research' type since it would try to make decisions about identifying the reason for lower profitability and suggest ways to avoid or minimize them. Further, this research was carried out in a natural environmental context in which the selected variables were non-contrived and the time horizon of research is cross sectional.

Data Collection Strategy

Sampling

The population of this research was the operation department of the purposely

selected organization of the retail industry. Therefore one supermarket outlet was selected randomly from this organization as the sample of this study.

Category of Data

To achieve the objective of the research, following data were gathered. They were,

- Primary Data which were collected using questionnaires, interviews and observations.
- Secondary Data, which were Annual Reports, SAP Data base of the outlet and the operational manuals.

Data Analysis Strategies

The reasons for the lower profitability of the organization were analyzed graphically and to find out the relationship with net profit and main cost centers, the regression analysis were used. In here, it will establish an equation for net profit of the organization with changes of main cost centers and statistical software called SPSS 13 version was used to find this equation.

Statistical Test and Methods of Applications

Coefficient of Determination (R^2)

The measure of goodness of fit is known as coefficients of determination. If the R^2 is closed to zero, then the fit of the sample regression line to the sample data is poor. If R^2 closed to one, then fit is good. This proportion is usually expressed in percentage form.

Test the Significance of the Regression Equation

The regression equation $Y = a + b X + \epsilon$ expressed the form of the casual relationship between Y and X. But, clearly, if $b = 0$, then X does not relate with Y. It indicates that X cannot have any influence of Y. There are cannot be a relationship between Y and X in the population.

To test the hypothesis;

$$H_0: b = 0$$

$$H_1: b \neq 0$$

Where H_0 , i.e. null hypothesis states that $b = 0$ and H_1 , i.e. alternative hypothesis states that $b \neq 0$. That is X can influence Y. The tabulated F values can conclude decision of H_0 .

DATA PRESENTATION AND ANALYSIS

Data Presentation

Cost centers of the selected outlet were identified through a questionnaire which was given to the managerial level. The question no. 06 of that questionnaire was help to identify the main cost centers. According to the received questionnaires, 90% of the respondents were able to mention about common cost centers and those was represented as a functional form as follows.

$$\text{Net Profit} = f (\text{Sales, Packing cost, Wastage Cost, Variance Cost, Overhead Cost, Overtime Cost})$$

Further, the wastage percentage of this outlet was over 0.5% and the organizational standard for perishable wastage is 0.3%. Further, the organization has used the following equation to calculate the wastage percentage and it was as follows;

$$\text{Wastage Percentage} = \frac{\text{Monthly wastage cost} \times 100}{\text{Monthly total sale}}$$

Because of this high wastage, the organization has been affected from;

- Incurring a loss because of high wastage cost
- Non achieving the targets of some departments of the outlets and outlets themselves
- Losing customer reputation, etc.

Data Analysis

In the first stage of the regression analysis, two independent models were derived in accordance to dependant variable of monthly net profit. The summary of those models were shown in Table 1.

Table 1: Model Summary

Model	Dependant Variable	Variables
Model 1	Net Profit	Sales
Model 2	Net Profit	Sales, Wastage Cost

According to those models, the Model 1 exist only one independent variable against dependent variable of net profit. The Model 2 exist two independent variables of sales and wastage cost. The other variables have been rejected by SPSS tool itself automatically as the effects of those variables to the net profit were not significant.

To find the best model, the R, R² and adjusted R² were calculated. Table 2 shows the summary of it.

Table 2: Calculated R, R² and Adjusted R²

Model	R	R ²	Adjusted R ²	Std. Error
Model 1	.905	.819	.808	2111603.601
Model 2	.951	.904	.891	159166.661

Summary;

- Model 1 (R) < Model 2 (R)
- Model 1 (R²) < Model 2 (R²)
- Model 1 (Adjusted R²) < Model 2 (Adjusted R²)
- Model 1 (Std. Error) > Model 2 (Std. Error)

R, the multiple correlation coefficients, is the linear correlation between the observed and model-predicted values of the dependent variable. In this case the Model 2, the R value is greater than the Model 1 and its value of 0.951 indicated a strong relationship.

According to the findings, the Model 2, R² and Adjusted R² values are greater than in the Model 1. Also in the Model 2, the value of R² is closed to one than the Model 1's R² value. The standard error of the Model 2 is lesser than the Model 1.

According to the above reasons the Model 2 is the best model. Therefore, to validate that ANOVA table test was conducted. Summary of ANOVA test in shown in Table 3.

Table 3: F Values

Model	Calculated F	Tabulated F	Significance
Model 2	70.699	3.68	.000

By using Table 3, it was able to get tabulated F value and was able conclude the decision of H₀. Accordingly,

H₀: No relationship between Y and X

H₁: H₀ is not true

Calculated F value is greater than tabulated F value. Therefore null hypothesis is rejected. That means coefficient of X variable has some value, it is not the zero. The significance value of the sig. statistic is less than 0.05, which means that the variation explained by the model is not due to change. The large F value indicated that most of the variations in Y (net profit) is explained by the regression equation and that the model is useful.

The validated Model 2 was further analyzed to get coefficients of the equation of net profit. The coefficient values of the equation were shown in Table 4.

Table 4: Coefficients

Variable	Coefficient Value	Significance
Constant	-1876782	.000
Sales	.178	.000
Wastage Cost	-4.539	.002

All the significance values of the sig. statistic are less than 0.05, which means

that the variation explained by the model is not due to change. Therefore, variables are best fit with the dependent variable of net profit. Hence, the following equation was derived from the regression analysis.

$$\text{Net Profit} = - 1876782 - 4.539 \text{ Wastage Cost} + 0.178 \text{ Sales}$$

According to the equation, sales have a positive relationship with net profit but wastage cost has a negative relationship with net profit. It means, when increasing one unit by sales, the net profit will be increased by 0.178 units. Also, when wastage cost will be increased by one unit, then profit will be decreased by 4.536 units.

Therefore, further analysis was based on wastage cost of the organization because it would more helpful way to increase the net profit of the organization.

When analyzing the wastage costs in sub departmental level, highly significant wastage generators were found. They were Vegetable, Fish, Fruit, Bakery Products and Meat. Normally, those are identified as Perishable or Fresh Departments of this organization. The Figure 1 illustrates it quite evidently.

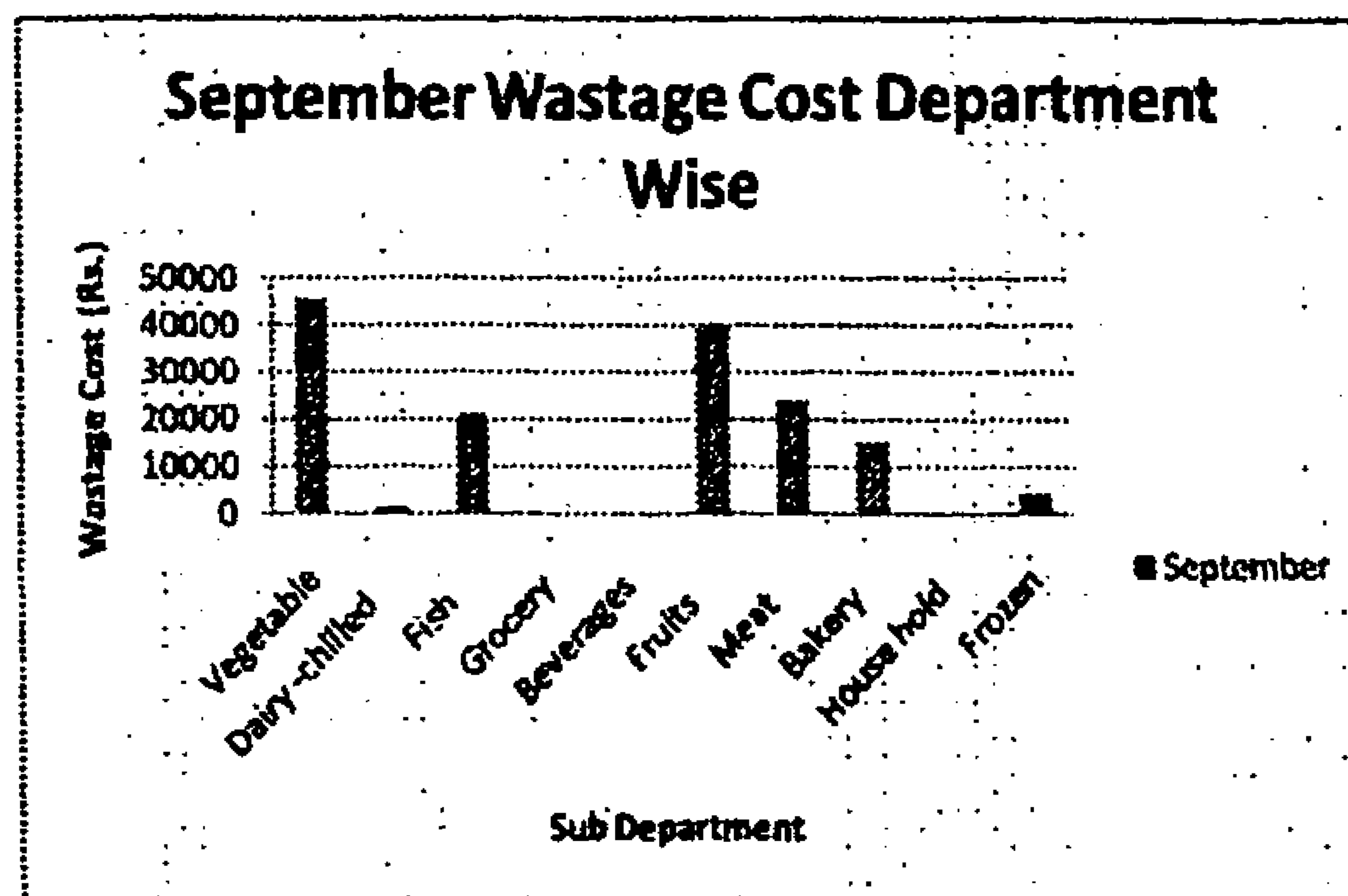
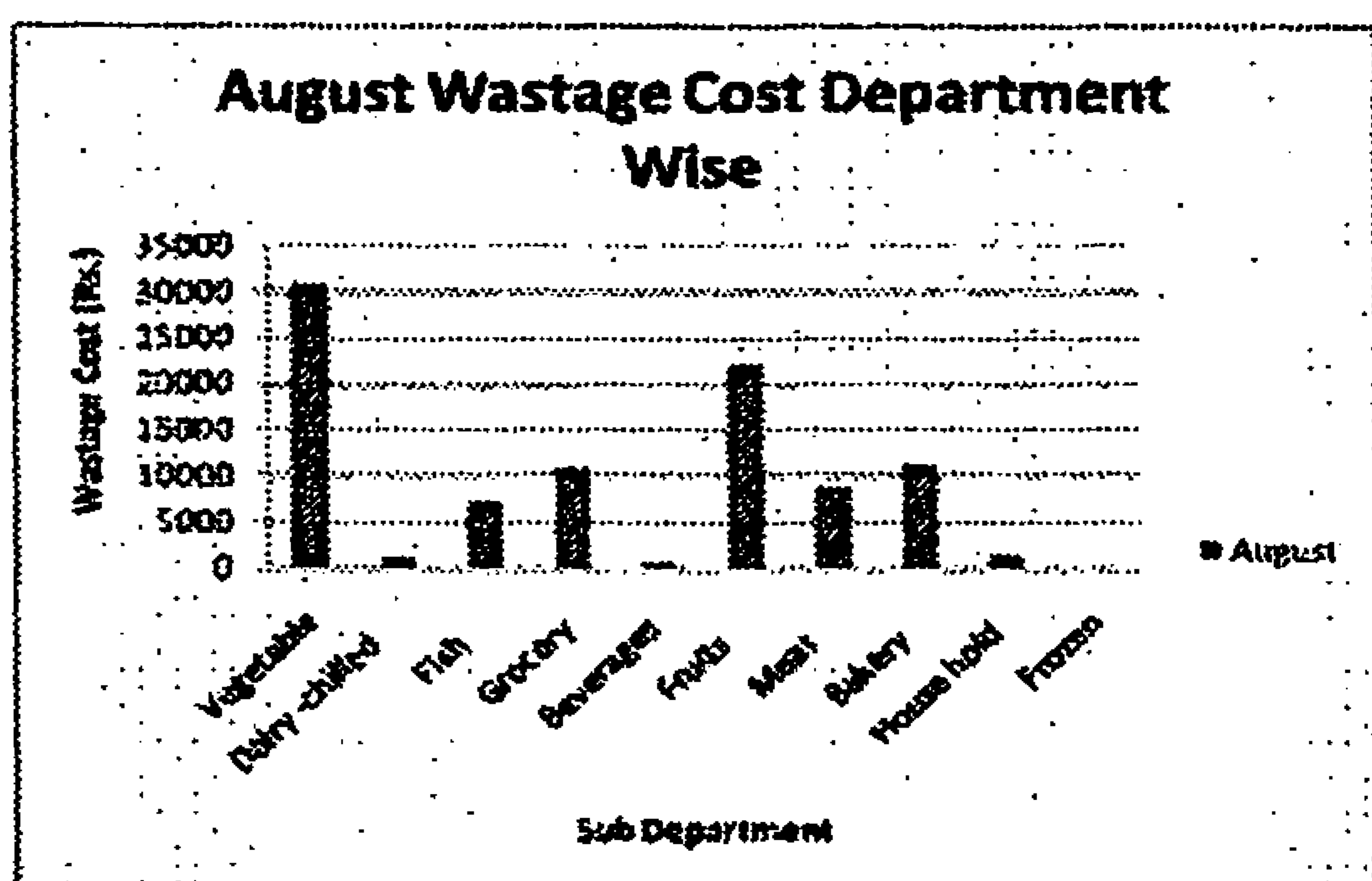
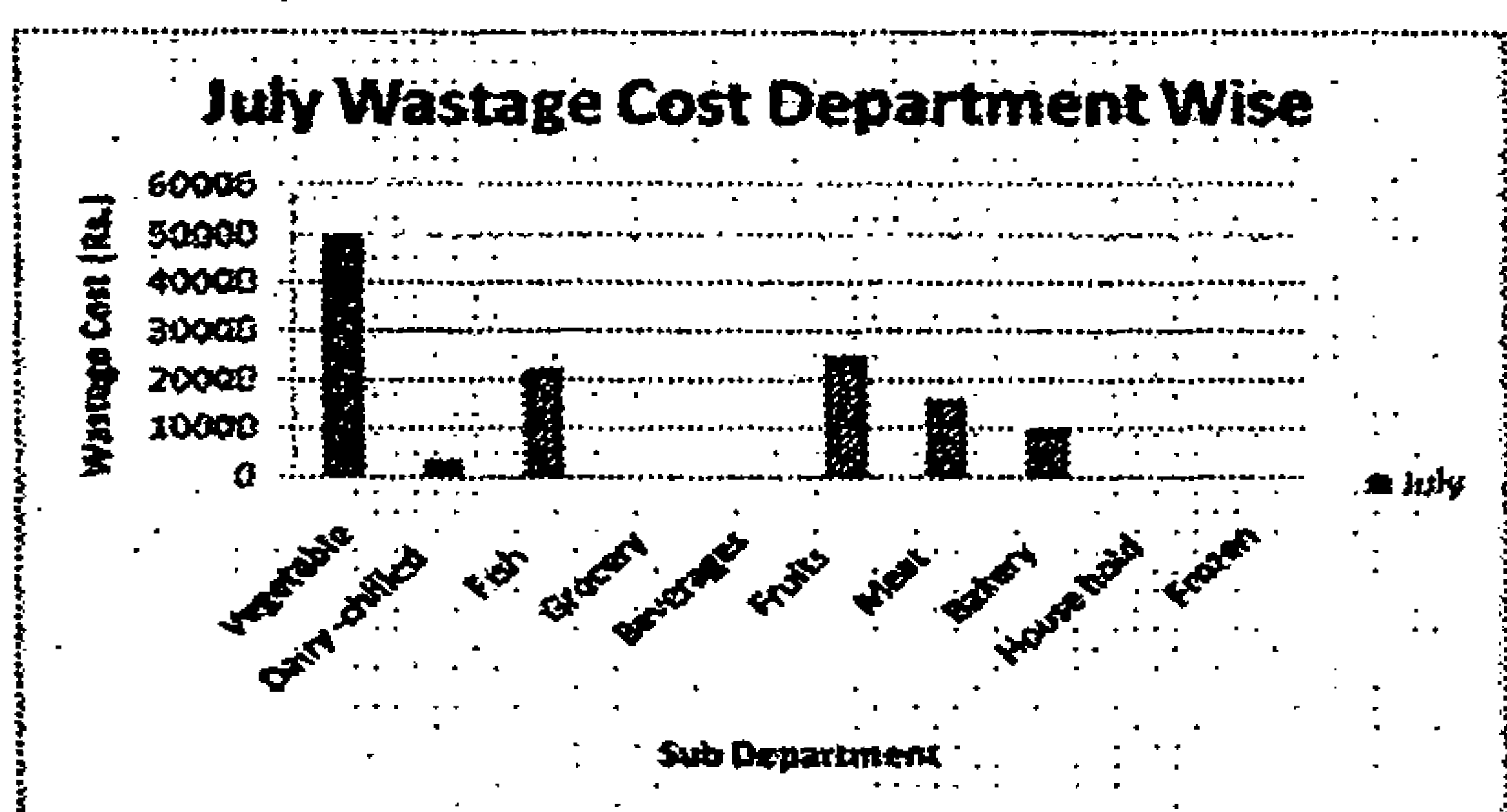


Figure 1: Department Wise Monthly Wastage Cost

RESULTS AND DISCUSSION

According to the results of the regression analysis, there is a positive relationship with net profit & sales and a negative relationship between net profit & wastage cost. Therefore, this implies that to increase the net profit it has to increase sales or minimize the wastage. The organization has already set a target on wastage percentage. That is 0.3% against total monthly sales.

According to Figure 1, when considering the wastage cost in sub department level, there is a high impact on the profit from the perishable departments. Therefore, the organization should have to pay a high emphasis on wastage minimizing techniques for these perishable departments.

By considering above findings, following solutions were identified for minimizing the perishable wastage.

List of Alternative Solutions

Solution 1: Maintain "Quality Standards"

It needs to set quality guidelines and train all Customer Service Assistants (CSA's) through appointed responsible supervisors in order to check the quality of the perishable goods at the receiving point. If there are any quality issues, then those issues should be highlighted with the respective suppliers. Further, the organization should start implementing a "Quality Register" in order to highlight the

quality issues at the point of receiving goods.

Solution 2: Doing Accurate Ordering

The outlet should need to create a system to place orders accurately. Using the “Item Movement Report”, the organization can do it to meet the demand effectively.

Solution 3: Proper Storage of Food

It is necessary to train employees to store food under correct temperatures and they should be made aware of the standard temperatures of such items.

Solution 4: Proper Maintenance of Equipment and Cool Room

The Vegetable Chiller and the Meat Serve Over/ Fish Serve Over are the main equipment that needs to be maintained properly in order to minimize wastages in perishable goods. Therefore by preparing an operation and maintenance manuals the employees can get aware of using these equipment. Also, there should need good housekeeping techniques to maintain the cool room as well.

Solution 5: By Products (Value Addition)

The fruits can be used make ready to drink juices, salads and could be sold as cut fruits. From the vegetables, the byproducts of types of pickles, fried vegetables, cutlets, Chutney, etc. can be prepared. The meat and fish are also can be used to prepare such byproducts of cutlets, roasted meat / fish, BBQ, etc.

Solution 6: Wastage Targets for All Departments

Outlet management should need to analyse the previous month’s wastage percentages and should set individual targets for the outlets to minimize their wastages.

Feasibility Study for the Solutions

Feasibility studies contain comprehensive, detailed information about the business structure, the products and

services, the market, logistics of how the organization will actually deliver a product or service, the resources that need to make the business efficiently and also the other information about the business. The Table 5 summarizes such feasibilities for each solution mentioned above.

Table 5: Feasibility Study

Solution	Technic-al	Finan-cial	Organiza-tional	Mar-ket
1.	√	√	√	√
2.	?	√	√	√
3.	?	√	√	√
4.	?	?	√	√
5.	√	√	√	√
6.	√	?	?	√

Selection of Best Feasible Solution

According to Table 5, the solution 1 and 5 are feasible for the organization and the solution 1 was already implemented in the organization. Therefore, solution 5 can be implemented in to the organization. But the organization should have to consider the implementation of solution 2, 3, 4 and 6 in future.

CONCLUSION

The main objective of this research was to explore strategies to increase profitability in the retail industry through a selected organization in Sri Lanka. Therefore, the research had to investigate the root causes for lower profitability and barriers to improve the profitability. By carrying out this research it was founded that the profitability was decline due to the occurrence of high wastage.

Therefore, the profitability would be improved, if the organization could control their wastage. Due to lack of consideration to the wastage percentage of the organization, the prevailing profitability of

the organization has reduced to a certain extent. Therefore, by paying more attention to reduce this wastage percentage, the management can enhance the productivity. Otherwise, with this high percentage of wastage, the organization might not be in a position to increase its profitability.

Further, the organization has already established a standard for the wastage of itself. But there is no common standard for this industry because the occurrence of wastage in the retail industry is an inherent problem. Therefore, such a standard has to be established as a collaborative work among all retail organizations in Sri Lanka in order to make this industrial sector more profitable and thereby create a dynamic engine for economic growth of the country.

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