

Relationship between Accounting Information and Decision Making in the Sri Lankan Manufacturing Sector

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ABSTRACT: *Accounting information is used extensively by organizations in strategic decision making. This study analyses the relationship between accounting information and strategic decision making in the Sri Lankan manufacturing sector, specifically the relationship between accounting information and manufacturing and marketing related strategic decision making of companies operating in Sri Lanka's manufacturing sector. Sample for the study consisted of 70 public quoted manufacturing companies operating in the country. The unit of analysis for this research was at company level. Primary data for the study were collected via a questionnaire survey which was conducted with the Chief Executives Officers of the selected manufacturing organizations. The relationship between accounting information and marketing and manufacturing related strategic decision making was analysed using Pearson's Correlation. Findings from the study indicated that accounting information has a statistically significant strong positive correlation with both marketing related strategic decision making and manufacturing related strategic decision making of companies operating in Sri Lanka's manufacturing sector.*

Key Words: *Accounting Information, Manufacturing, Marketing, Public Quoted Manufacturing Companies*

I. INTRODUCTION

The manufacturing sector which is the main contributor to the industry sector of Sri Lanka has developed exponentially since the introduction of open market economic policies in the late 1970s. The liberalization of the economy has contributed to the large scale development of the manufacturing sector on account of the significant investment and participation of the private sector. Private sector participation which was extremely limited prior to economic liberalization has grown exponentially on account of the investment friendly policies introduced by the Government of Sri Lanka such as the establishment of the Greater Colombo Economic Commission and Free Trade Zones, which facilitated the entry of foreign participants into the local manufacturing sector. These investor friendly initiatives have contributed to significant growth in the manufacturing sector. Manufacturing output increased from 1.7% per annum pre liberalization to 5.6% per annum post liberalization, whilst capacity utilization increased from 63% per annum to 75% per annum during this same period. In addition, total contribution of the manufacturing sector to the GDP of the country has also grown from 15% per annum in the 1990s to over 17% per annum since 2010. Given the increasing contribution of the manufacturing sector to the GDP of the country, it is important to access the influence of accounting information on strategic decision making of firms operating in the industry. The importance of accounting information on decision making has been highlighted by a number of studies. Findings from research conducted by Anderson indicate that analysis of accounting information is indispensable in decision making [1], whilst research conducted by Royae, A. Salehi and H.S. Aseman concluded that accounting information is the primary information used by managers in all types of decision making, and are the variables which have the most application amongst all variables employed in this context [2]. For example, an organization cannot make efficient manufacturing related decisions without relevant accounting information pertaining to equipment and production costs, marketing personnel need accounting information to determine product pricing, develop marketing and promotional budgets, etc. Although previous studies have clearly established the positive correlation between accounting information and decision making from a global context, there is a little research on the relationship between these two variables in the Sri Lankan manufacturing sector. This study aims to address this research gap.

IV. STATEMENT OF THE PROBLEM

Findings from previous research indicate that accounting information plays a significant role in organizational decision making. However, there is dearth of research on the relationship between these two variables in the Sri Lankan manufacturing sector. Understanding the relationship between these two variables is important as it will enable companies in Sri Lanka's manufacturing sector to make more effective decisions, particularly strategic decisions. This in turn should have a positive impact not only on the manufacturing sector, but also on the overall economy of Sri Lanka, given the significant contribution of this sector to the country's

GDP. Based on these facts and limiting the scope of the study, the problem statement can be presented as “What is the relationship between accounting information and marketing and manufacturing related strategic decision making in Sri Lankan manufacturing companies?”

Main Objective of the Study

The main objective of this study is to analyse the relationship between accounting information and marketing and manufacturing related strategic decision making of companies operating in Sri Lanka’s manufacturing sector.

V. LITERATURE REVIEW

Accounting information is extremely important in order to understand the activities and performance of an organization, regardless of its size or ownership status [3]. Accounting information facilitates decision making as it provides the quantitative data essential for organizational planning, control and evaluation [4]. Accounting information is broadly segmented into two categories of information i.e. information employed by organizations for control and decision making purposes, and information employed by organizations which facilitates the decision making process and organizational coordination [5]. The primary source of accounting information within an organization is the accounting unit. Key functions of the accounting unit include the systematic recording, analysis, interpretation and summarising of accounting information via a system of preparing source documents and the entry of accounting data into subsidiary records to ledger. Accounting data is generated through the financial activities of an organization, with source documents being the tool which captures these financial transactions in an organization’s records. Common accounting source documents of an organization include cash receipts, invoices, cash book, etc. Strategic decision making can be described as the “infrequent decisions made by the top leaders of an organization that critically affect organizational health and survival” [6]. Strategic decisions are the most critical decisions of an organization [7] as these decisions establish the long term goals, objectives and direction of the organization, whilst also influencing its policy, structural and resource position. Ineffective or wrong strategic decision making can result in long term negative consequences for an organization. The importance of effective strategic decision making for the long term success and viability of organizations has resulted in massive responsibility on the strategic decision maker [7]. Accounting information is pivotal in organization decision making as it provides a comprehensive picture of the exact financial position of an organization and can be used extensively by management to develop a better understanding of their roles and responsibilities, to make more effective decisions and to minimize the risk associated with decision making [8]. Findings from previous studies indicate that accounting information has a strong positive correlation with organizational decision making. According to Miko, in today’s dynamic, extremely competitive global business environment accounting information is vital for managers to make effective and informed decisions as it helps them to develop a comprehensive understanding of the financial position of the organization [9]. As per Hall accounting information is a key source of information on a company’s financial performance and position and can be used by managers to develop knowledge pertaining to the organization in a number of ways ranging from exposing events which are not detectable by the daily activities of managers, to developing a quantitative overview of organizational performance, etc., which in turn facilitates effective decision making [10]. This ability of accounting information to provide an overview of the organization is an indisputable advantage in decision making [11]. Accounting information is also crucial for decision making as it “brings light order and control to all corners of an enterprise” [12]. In order for accounting information to be useful in decision making it needs to be intelligible i.e. should be understood by users who have a fair knowledge of accounting and business concepts, relevant i.e. enables the user to understand historic, current and future events, reliable i.e. should be error free and unbiased, and comparable i.e. the information should be comparable over time and should be relative to other benchmarks [13].

VI. THEORETICAL FRAMEWORK

The theoretical framework can be defined as the foundation upon which the entire research project is based [14]. It describes the relationship between the various variables identified as critical for the study. As shown in “Fig 1”, strategic decision making is the dependent variable and is the primary variable of interest in this study, whilst accounting information is the independent variable. It is assumed in this conceptual framework that the independent variable in this has a positive relationship with the dependent variable.

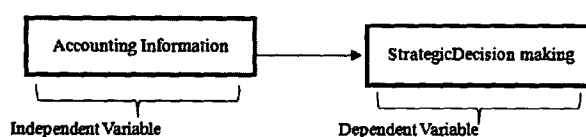


Fig 1: theoretical framework

VII. HYPOTHESIS OF THE STUDY

The following hypothesis were tested in this study;

- H₁: There is no correlation between accounting information and marketing related strategic decisionmaking in Sri Lankan manufacturing companies
- H₂: There is no correlation between accounting information and manufacturing related strategic decision making in Sri Lankan manufacturing companies

Population and Sample

Research population in this study consisted of all manufacturing companies in Sri Lanka (approximately 2,554 companies). Sample population for the study consisted of all public quoted manufacturing companies in the country (approximately 83 companies). The composition of the sample population is shown in Table 1.

Table 1: Composition of Sample Population

Industry	No. of Companies
Manufacturing	39
Beverage, food and tobacco	21
Chemicals and pharmaceuticals	12
Footwear and textile	07
Construction and engineering	04
Total	83

VIII. DATA COLLECTION AND ANALYSIS

The unit of analysis for this study was at company level. Primary data for the study were collected via a questionnaire survey which was distributed to the Chief Executive Officers of the sample companies. The questionnaire was prepared based on relevant literature pertaining to the subject. Data obtained from the questionnaire has been analysed using SPSS. Pearson correlation has been used to analyse the relationship between the dependent and independent variables and to test the hypotheses. Simple statistical tools such as standard deviation and mean have been used to measure the extent to which accounting information is used by public quoted manufacturing companies in Sri Lanka in strategic decision making.

IX. FINDINGS

The extent to which accounting information is used by public quoted manufacturing companies in strategic decision making is shown in Table 2. As shown in this table whilst all public quoted manufacturing companies in Sri Lanka use accounting information in strategic decision making, the extent to which accounting information is used in this regard varies. 25.3% of surveyed companies indicated that they use accounting information in all strategic decision making, 20.5% of the survey companies indicated they use accounting information frequently in strategic decision making, 43.4% of the surveyed companies indicated that they sometimes use accounting information in strategic decision making, whilst 10.8% of the surveyed companies indicated they rarely use accounting information in strategic decision making.

Table 2: Extent to which Accounting Information is used by Sri Lankan Public Quoted Manufacturing Companies in Strategic Decision Making

Question	Never	Rarely (In less than 25% of the strategic decisions made)	Sometimes (In 25% - 50% of the strategic decisions made)	Frequently (In 50% - 99% of the strategic decisions made)	In all strategic decisions made
To what extent is accounting information used in strategic decision making in your firm?	---	9 (10.8%)	36 (43.4%)	17 (20.5%)	21 (25.3%)

The extent to which accounting information is used by Sri Lankan public quoted manufacturing companies in marketing related strategic decision making is shown in Table 3. As shown in this table 55.4% of the respondents indicated that their respective companies use accounting information in the formulation of marketing strategy, 63.9% of the respondents indicated that accounting information is used by their respective companies in the development of advertising and promotional strategies, 50.6% of the respondents indicated accounting information is used in decisions relating to market segmentation, targeting and positioning, 45.8% of the respondents indicated that accounting information is used in decisions relating to sales commissions and incentives, whilst 56.6% of the respondents indicated that accounting information is used by their respective companies in marketing decisions pertaining to new product and market development.

Table 3: Extent to which Accounting Information is used in Marketing Related Strategic Decision Making

Question	SD*	D*	N*	A*	SA*
Accounting information is used in the development of marketing strategy	---	3 (3.6%)	34 (41.0%)	36 (43.4%)	10 (12.0%)
Accounting information is used in the development of advertising and promotional strategies	---	13 (15.7%)	17 (20.5%)	36 (43.4%)	17 (20.5%)
Accounting information is used in decisions relating to market segmentation, targeting and positioning	---	16 (19.3%)	25 (30.1%)	34 (41.0%)	8 (9.6%)
Accounting information is used in decision relating to sales commissions and incentives	---	13 (15.7%)	32 (38.6%)	26 (31.3%)	12 (14.5%)
Accounting information is used in new product and market development related decisions	---	18 (21.7%)	18 (21.7%)	31 (37.3%)	16 (19.3%)

*SD=Strongly Disagree, D=Disagree, N=Neither agree nor disagree, A=Agree, SA=Strongly Agree

The correlation between accounting information and marketing related strategic decision making in public quoted manufacturing companies in Sri Lankan is shown in Table 4. As shown in this table, accounting information has a strong positive statistically significant correlation with marketing related strategic decision making. Further given that the level of significance in this table is 0.000 hypothesis H_1 is rejected as this level of significance indicates that accounting information has a correlation with marketing related strategic decision making in Sri Lankan public quoted manufacturing companies.

Table 4: Correlation – Accounting Information and Marketing related Strategic Decision Making

		Accounting Information	Marketing related Strategic Decision Making
Accounting Information	Pearson Correlation	1	.870**
	Sig. (2-tailed)		.000
	N	83	83
Marketing related Strategic Decision Making	Pearson Correlation	.870**	1
	Sig. (2-tailed)	.000	
	N	83	83

** . Correlation is significant at the 0.01 level (2-tailed).

The extent to which accounting information is used by Sri Lankan manufacturing companies in manufacturing related strategic decision making is shown in Table 5. As shown in this table 51.8% of the respondents indicated that their respective companies use accounting information in production equipment purchasing and upgrading decisions, 53.0% of the respondents indicated that accounting information is used by their respective companies in manufacturing plant related strategic decisions, 51.8% of the respondents indicated that they use accounting information in production planning and control related strategic decisions, 45.8% of the respondents indicated that accounting information is used by their respective companies in supply chain related strategic decisions, whilst 72.2% of the respondents indicated that their respective companies use accounting information when making product quality and cost trade off decisions.

Table 5: Extent to which Accounting Information is used in Manufacturing Related Strategic Decision Making

Question	SD*	D*	N*	A*	SA*
Accounting information is used in production equipment purchasing and upgrading related decisions	---	13 (15.7%)	27 (32.5%)	25 (30.1%)	18 (21.7%)
Accounting information is used in manufacturing plant related strategic decisions	---	17 (20.5%)	22 (26.5%)	34 (41.0%)	10 (12.0%)
Accounting information is used in production planning and control related decisions	---	13 (15.7%)	27 (32.5%)	33 (39.8%)	10 (12.0%)
Accounting information is used in supply chain related strategic decisions	---	20 (24.1%)	25 (30.1%)	33 (39.8%)	5 (6%)
Accounting information is used in product costs and quality trade off related decisions	---	10 (12.0%)	13 (15.7%)	51 (61.4%)	9 (10.8%)

*SD=Strongly Disagree, D=Disagree, N=Neither agree nor disagree, A=Agree, SA=Strongly Agree

The relationship between accounting information and manufacturing related strategic decision making in Sri Lankan public quoted manufacturing companies is shown in Table 6. As shown in this table, accounting information has a strong positive statistically significant correlation with manufacturing related strategic decision making. Given that the level of significance in Table 6 is 0.000, hypothesis H_2 is rejected as this level of significance indicates that there is a correlation between accounting information and manufacturing related strategic decision making in Sri Lankan public quoted manufacturing companies.

Table 6: Correlation – Accounting Information and Manufacturing related Strategic Decision Making

		Accounting Information	Manufacturing related Strategic Decision Making
Accounting Information	Pearson Correlation	1	.867**
	Sig. (2-tailed)		.000
	N	83	83
Manufacturing related Strategic Decision Making	Pearson Correlation	.867**	1
	Sig. (2-tailed)	.000	
	N	83	83

** . Correlation is significant at the 0.01 level (2-tailed).

X. CONCLUSION

This study was conducted with a view to assess the relationship between accounting information and marketing and manufacturing related strategic decision making of companies operating in Sri Lanka's manufacturing sector. Sample for the study consisted of all public quoted manufacturing companies in Sri Lanka. Data for the study was obtained via a questionnaire which was distributed to the Chief Executive Officers of the sample companies. The data obtained from the research survey was analysed and interpreted using various applied statistical tools. Findings from the data analysis indicated that accounting information has a strong statistically significant positive correlation with marketing and manufacturing related strategic decision making in Sri Lankan public quoted manufacturing companies. In terms of the extent to which accounting information is used in marketing related strategic decision making, findings from the study indicated that accounting information is used mostly in decisions pertaining to the formulation of marketing strategy, development of advertising and promotional strategies and policies, and in new product and market development. In terms of the extent to which accounting information is used in manufacturing related strategic decision making, findings from the study indicated that accounting information is mostly used in strategic decisions pertaining to product quality and cost trade-offs, and in the development and upgrading of production facilities..

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