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Factors Affecting Use of Cost Information: Empirical Evidence from Seafood Processing Enterprises in Vietnam*

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Abstract

The article analyzes the impact of factors affecting the use of cost information is examined, which adds to the empirical evidence on the factors affecting the use of cost information in Vietnam's seafood processing firms. 58 seafood processing firms in Vietnam were surveyed using a questionnaire survey of all levels of management, chief accountants, and accountants. A total of 235 questionnaires were gathered for the survey. Because many of the surveys were invalid due to empty cells, the author selected to use 214 questionnaires. The 5-level Likert scale is familiarly used in many studies, so the author also quantifies each factor according to five levels. Quantitative research was carried out with SPSS 25 software. Research results show that 4 factors The function of cost information, cost management, information technology, and management support in the seafood processing industry in Vietnam all have a positive impact on the use of cost information. The author has provided recommendations based on the research findings to expand the use of cost information, consequently helping to improve the performance of Vietnamese seafood processing businesses. Managers must improve a variety of resources, including facilities (software, hardware), people (in-depth training on CAS for administration), departmental awareness, and UCI's ability to assess responsibility and reward in the organization.

Keywords: Cost Information, Seafood Processing Enterprises, Vietnam

JEL Classification Code: M41, M42, M43

1. Introduction

The IFAC (2009) has emphasized the importance of cost information (CI), arguing that businesses need to have a comprehensive understanding of how resources are used and how costs are incurred; CI will provide insight into costs for specific activities, products, and services. Professional accounting organizations have also begun to pay attention to the importance of CI and

have begun to develop principles of CI systems to help support businesses. IFAC (2009) developed and published guidelines for evaluating and improving costing in organizations, the main body of which provides general principles for measuring, recording, aggregating, and allocating costs and resources to objects such as products, activities, customers, etc., from which these objects are analyzed, explained, deeply understood and continuously improved and developed.

As Vietnam becomes more integrated into the global economy, the competitive environment at home and abroad is becoming more intense. Enterprises must have the management capacity to compete and develop in such an environment. Managers must have the essential information to manage, and cost information is a creative management perspective (CI). Given the relevance of CI, several studies have praised the function of CI in governance. For example, Gagne and Discenza (1993) showed that car manufacturing companies who employed targeted CI received the benefits of lower costs and higher profits. Cooper and Slagmulders (1999) believe that by employing targeted CI, in which expenses are

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distributed among regions, the department is responsible for cost reduction, allowing only profitable new goods to be offered to the market. In addition, CI gives cost estimation capabilities for use in product pricing, as well as areas in the business process that need to be changed to minimize costs. As a result, the organization will be able to better meet the needs of its customers (Kaplan & Cooper, 1998). In terms of decision-making, according to Brierley (2008), CI can be used for decision-making, the ability to provide information about profit and loss of each product, customer, and use for management purposes about decision-making. to add or remove a certain type of product.

This study aims to examine the influence of factors affecting the use of cost information in enterprises in the seafood processing industry in Vietnam, thereby making some recommendations for businesses to implement good accounting using cost information.

2. Literature Review

Existing overseas studies on the use of cost information (UCI) and the benefits of CI contributing to improved operating results (PER) have also been conducted quite a lot.

According to Maelah and Ibrahim (2006), the role of CI is to aid decision-making, provide assistance for managers, and monitor internal performance values. According to Ali (2010), CI plays a critical role in corporate governance, including estimating, determining product selling prices, and assessing customer earnings. Increased control, according to Krumwiede and Suessmair (2007), raises the level of UCI.

Ali (2010) explored cost and management accounting practices utilized by manufacturing companies operating in Istanbul, Turkey. The sample of the study consists of 61 companies, containing both small and medium-sized enterprises and large companies. The major findings of the study are as follows: the most widely used product costing method is job costing; the complexity in production poses as the highest-ranking difficulty in product costing; the most widely used three overhead allocation bases are prime costs, units produced, and direct labor cost; pricing decisions is the most important area where costing information is used; overall mean of the ratio of overhead to total cost is 34.48 percent for all industries; and the most important three management accounting practices are budgeting, planning and control, and cost-volume-profit analysis. Furthermore, decreasing profitability, increasing costs and competition, and economic crises are the factors which increase the perceived importance of cost accounting. The findings indicate that companies perceive traditional management accounting tools as still important. However, new management accounting practices such as strategic planning and transfer pricing are perceived as less important than traditional ones. Therefore, companies need to improve themselves in this aspect.

Baxendale and Jama (2003) suggested that ERP can significantly increase the availability and reliability of operational CI. ERP systems have grown in popularity in recent years and often integrate with management accounting, CAS, production planning, materials management, sales and distribution, human resources management, quality management, and customer service. Besides, there are many other studies such as Saleem and Usman (2021), Vu et al. (2020), and Hoang et al. (2020).

Nguyen (1997), citing studies in Vietnam, stated that the ABC system provides CI benefits such as more precise and acceptable cost estimation, assisting managers in making decisions a better choice. To better control costs, Nguyen (2003) proposed using CI to assess the responsibilities of linked individuals and departments based on the difference between real and normative costs. According to Huynh (2009), the allocation of indirect costs is for cost control, efficiency evaluation, and product and service pricing. Planning, control, evaluation, and decision-making are all managerial functions that must be integrated with CI. As Nguyen and Tran (2018) established and discovered the importance of CI in governance from many angles, more recent studies have gradually begun to refer to the elements affecting CAS. These studies, which focus on governance innovation, provide a solid platform for future research in Vietnam. In general, research on CI in management has taken many various approaches at first, but with the need to improve governance capability, it remains a practical, relevant issue at every address, scope, and kind.

3. Research Method and Model

3.1. Research Method

The research method used includes survey through questionnaires of enterprises in the seafood processing industry in Vietnam to evaluate the factors affecting the use of cost information, the accounting factors used, Cost information, Cost information role, Information technology, Management support, Cost administration are measured on a five-level Likert scale Very good, good, average, not good, weak. The 5-level Likert scale is familiarly used in many studies, so the author also quantifies each factor according to five levels. Quantitative research is carried out with the software SPSS 25.

The scope of the research is Vietnamese seafood processing enterprises. Research data is collected in the form of face-to-face interviews and email interviews with managers, employees working in different positions, managers at all levels, chief accountants, and accountants of 58 Vietnamese seafood processing enterprises. The survey results collected 235 questionnaires. After eliminating the invalid questionnaires due to many blank cells, the author chose to use 214 questionnaires.

3.2. Research Model and Hypothesis

From the research overview, the proposed research model is as follows:

$$CIA = \beta_1 + \beta_2 \times RCI + \beta_3 \times IT + \beta_4 \times MS + \beta_5 \times CM + E$$

Assessing the impact of factors on the use of cost information, the study uses four detailed hypotheses as follows:

H1: *The role of cost information has a positive (+) impact on usage cost information of enterprises in the seafood processing industry in Vietnam.*

H2: *Information technology has a positive (+) impact on the use of cost information by enterprises in the seafood processing industry in Vietnam.*

H3: *Managerial support has a positive (+) effect on the use of cost information by enterprises in the seafood processing industry in Vietnam.*

H4: *Cost management has a positive effect (+) on to use of cost information of seafood processing enterprises in Vietnam.*

4. Empirical Results

4.1. Testing the Scale

The results of evaluating the reliability of the scale by Cronbach's Alpha show that the scales have reliability greater than 0.6 and the correlation coefficient of the total variable is greater than 0.3. All scales satisfy the conditions for EFA exploratory factor analysis. The reliability of the scales is summed up in the table below (Table 1).

4.2. Exploratory Factor Analysis

Factor analysis was performed with Principle Component extraction, Varimax rotation for the observed

dependent variable. The results in Table 2 show that the coefficient KMO = 0.848 (condition > 0.5); Significance level and Barlett test = 0.000 (meet condition < 0.05) show that EFA analysis is appropriate. The total variance extracted is 58,498% > 50%, and factor loading factors are all greater than 0.5, so they are satisfactory. The official scale after EFA processing includes 4 independent variables with 17 observed variables as proposed.

4.3. Regression Results

In Table 3, *R*-squared greater than 0.5: the model is significant, 4 variables included in the model explain 58.5% of the change in the dependent variable, the rest is due to out-of-model variables and random error. Durbin-Watson coefficient < 2: there is no first-order series autocorrelation in the model.

The sig value of this model test is 0.000 < 0.05, so the built linear regression model is suitable for the population (Table 4).

The sig test value for each independent variable < 0.05: all variables are significant in the model (Table 5). Beta coefficients are all positive: all variables have the same effect on the dependent variable. The regression model is written as follows:

$$CIA = -0.170 + 0.185 RCI + 0.374 IT + 0.226 MS + 0.229 CM + E$$

VIF coefficients are all < 2: no multicollinearity occurs.

From Figure 1, we can see, a normal distribution curve is superimposed on the histogram. This curve is bell-shaped, which is consistent with the graph of the normal distribution. The mean is close to 0, the standard deviation is 0.991 which is close to 1, so the distribution is approximately normal, so the assumption of normal distribution of the residuals is not violated.

Table 1: Scale Test Results

No	Variable Names	Symbol	Number of Observed Variables	Cronbach's Alpha	Smallest Total Variable Correlation Coefficient
1	Cost information accounting	CIA	4	0.752	0.480
2	Role of cost information	RCI	4	0.864	0.617
3	Information technology	IT	4	0.719	0.424
4	Support of managers	MS	5	0.783	0.459
5	Administrative expenses	CM	4	0.661	0.425

A Scatter Plot chart between normalized residuals (Figure 2) and normalized prediction values helps us to detect whether current data violates linear association assumption count or not. As a result of the output graph, the distribution points of the residuals fluctuate around the zero coordinate line and do not scatter too far.

Table 2: Results of EFA Analysis

	Factor			
	1	2	3	4
RCI4	0.896			
RCI3	0.848			
RCI2	0.828			
RCI1	0.711			
MS4		0.746		
MS2		0.716		
MS3		0.660		
MS5		0.653		
MS1		0.592		
CM4			0.731	
CM1			0.681	
CM2			0.630	
CM3			0.612	
IT3				0.722
IT2				0.677
IT1				0.653
IT4				0.597

5. Discussion and Recommendations

Based on the results of quantitative research on factors affecting the use of cost information, the following conclusions can be drawn:

$$CIA = -0.170 + 0.185 RCI + 0.374 IT + 0.226 MS + 0.229 CM + E$$

The multiple linear regression equation extracted by standardized Beta shows that information technology factors have higher standardized Beta coefficients (0.374) than all remaining factors. The normalized Beta coefficients of the remaining factors are Cost management (0.229), Manager’s support (0.226), and the role of cost information (0.185).

From the results of research on factors affecting the use of cost information by enterprises in the seafood processing industry in Vietnam, the author makes some recommendations to increase the use of cost information, which contributes to improving the operational efficiency of enterprises in the seafood processing industry in Vietnam as follows:

Technology is considered a core factor for all activities of consumer goods enterprises, in which the use of Software to support accounting and corporate governance plays a decisive role in the integration process. Leaders need to promote investment in infrastructure and software applications for management accounting. Choosing software of good quality, capable of integrating many management functions such as EPR planning software, is highly effective in accounting as well as human resource planning. Strong investment in information technology such as powerful software capable of handling CI to meet administrative needs such as ERP is an indispensable part of information technology investment

Table 3: Statistical Results of Factors

Model Summary					
Model	R	R-squared	R-squared	Estimated Error of Standard Deviation	Durbin-Watson
1	0.765 ^a	0.585	0.577	0.46 858	1.890

^aPredictors: (Constant), CM, RCI, IT, MS. ^bDependent Variable: CIA.

Table 4: Suitability Test (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.729	4	16.182	73.702	0.000 ^b
	Residual	45.889	209	0.220		
	Total	110.618	213			

Table 5: Results of A Multiple Regression

Model Unnormalized		Coefficient						
		Unstandardized Coefficient		Standardized Coefficient	t	Sig.	Multicollinear Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-0.170	0.254		-0.670	0.503		
	RCI	0.147	0.039	0.185	3.733	0.000	0.806	1.241
	IT	0.360	0.054	0.374	6.702	0.000	0.638	1.568
	MS	0.249	0.063	0.226	3.949	0.000	0.607	1.647
	CM	0.310	0.069	0.229	4.482	0.000	0.760	1.315

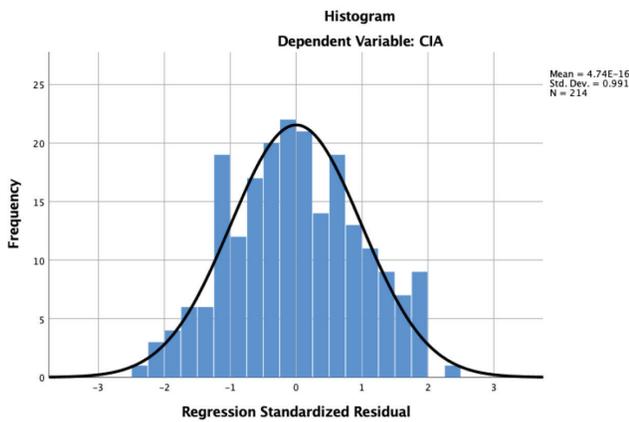


Figure 1: Normalized Residual Frequency Plot

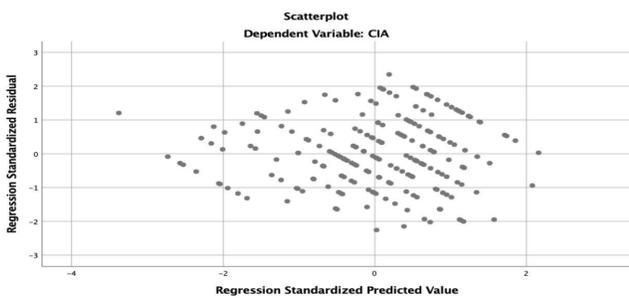


Figure 2: Scatter Plot Chart Testing Linear Association Assumption

for businesses. Enterprises need to create high-quality, timely, flexible, and easy-to-understand CI that will help managers and functional departments make better decisions.

Managers need to strengthen many resources in terms of facilities (software, hardware), people (in-depth training

on CAS for administration), awareness of departments, strengthening UCI in assessing responsibility as well as reward in the enterprise. One of the key conditions for the success of CI processing and delivery is the support of senior management.

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