

THE INFLUENCE OF ACCOUNTING AND PROMOTION INFORMATION SYSTEMS ON SALES VOLUME WITH PRODUCT QUALITY AS AN INTERVENING VARIABLE AT PT. BROTHER KARYA**Zaenal Arifin, Agus, Arif Hartadi, M. Aziz, Slamet Riyadi, Maria Yovita R Pandin
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slametriyadi10@untag-sby.ac.id, yovita_87@untag-sby.ac.id**Abstract**

Accounting information systems can aid businesses in enhancing sales volume and profitability, notwithstanding the challenge of increasing sales. This research investigates how promotions and management accounting information systems influence product quality, and explores whether product quality serves as a significant mediator. A survey was conducted among customers of PT. Saudara Karya Surabaya, involving 102 respondents selected through purposive sampling of customers who had completed at least one transaction. Structural equation modelling was employed to analyze the collected data. The findings indicate that both management accounting information systems and promotional strategies positively impact product quality. Furthermore, the study reveals that the relationship between promotions, management accounting information systems, and sales volume is mediated by product quality. This study contributes to the theoretical framework of marketing strategy by integrating concepts of product.

Keywords: Management accounting information system; Product quality; Promotion; Sales volume.**INTRODUCTION**

In today's era of globalization, competition in the business world is getting tougher, and only companies with superior performance will be able to survive. Along with the rapid advancement of information technology, companies need to address every problem that can hinder their business development. The success of a business is largely determined by the extent to which management pays attention to the needs and desires of consumers who are the company's target market (Gea, 2022). By meeting the needs of consumers, their decision to buy the company's products will increase. As a result, the company will achieve higher sales volumes and large profits.

Increasing sales volume is a challenging task for companies. Often, these efforts are hindered by competition between companies offering similar products. Therefore, companies need to implement management accounting strategies to increase sales. One of the strategies that can be used is the management accounting information system (Maharani, Pratiwi, & Pravasanti, 2022).

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Management accounting information systems assist managers in planning, directing operations, and solving problems faced by organizations (Garaika & Feriyana, 2021). The implementation of this system must be accompanied by a marketing strategy that includes promotion and improvement of product quality, so that sales volume can increase (Maharani et al., 2022). (Azizah, Gunawan, & Sinansari, 2021) explained that promotion includes various activities carried out by companies to communicate and introduce products to the target market. Promotions are persuasive and aim to attract buyers. Effective promotion can attract many consumers and increase sales volume.

In the very fierce competition between companies, it is important for companies to expand product marketing by utilizing various promotional media. Companies that have similar products will try to attract as many consumers as possible to achieve high profits. For long-term business sustainability, companies must maintain and improve the quality of products that consumers are interested in.

Product quality is one of the important factors that affect customers' decisions in buying a product (Jainuddin & Ernawati, 2020; Romney & Steinbart, 2016). Good product quality will attract consumer interest, so that it can increase sales volume. If the promotion and product quality are already going well, consumer loyalty in buying products will be formed continuously, which in turn will significantly increase sales volume. Many companies have implemented management accounting strategies, including PT. Brother Karya.

PT. Saudara Karya Surabaya is one of the carpentry businesses that produces various kinds of door and window frames/frames with wooden beams, with various types of wood. The desire of the community to own and build a house, can make the production of wood blocks more developed. Most of the timber blocks produced are obtained from the island of Kalimantan. The application of a good management accounting strategy can make the survival of a company good as well (Nurwanti, Juhari, & Deseria, 2020).

The implementation of management accounting strategies is an important recommendation to encourage the business development of PT. Saudara Karya Surabaya. The researcher assumes that management accounting strategies can increase sales volume and profit through the implementation of management accounting information systems and promotion strategies. This strategy aims to make the company known by the public as a reliable company with a fast and precise process. This research was conducted to fill the gap and develop a model with product quality as an intervening variable.

RESEARCH METHOD

This research was carried out in Bombana Regency, especially at the Bombana Regency Inspectorate with the object of research on the influence of work commitment and work discipline on employee job satisfaction and employee performance (Rukajat, 2018). The population in this study is all employees of the Bombana Regency Inspectorate totaling 49 with ASN status and at the same time are used as respondents in this study using census techniques. The data collection techniques used in this study are documentation and questionnaires.

RESULTS AND DISCUSSION

The description of the respondents including gender, age, education level, and marital status is shown in Table 1 as follows.

Table 1. Respondent characteristics (N = 102)

Characteristic		Frequency	Percentase (%)
Gender	Boy	93	91.2
	Girl	09	08.8
Age	< 30 years	05	05,0
	31-40 years	67	65,6
	> 40 years	30	29,4
Education level	High school level	41	40,2
	College level	61	59,8
Status	Family	99	89.2
	Not yet married	11	10,8

Sumber: Olahan peneliti (2024)

The analysis of descriptive data on 102 respondents showed that: the gender of the respondents was dominated by men (91.2%). Respondents' characteristics based on age were dominated by the age range of 31-40 years, which was 65.6%, at the age of >40 years, as much as 29.4%, and at the age of <30 years, as many as 5.0% of respondents. The education level of the majority of respondents is at the level of higher education which reaches 59.8%, while the rest are educated at the high school level of 40.2%. The status of respondents with families is 89.2%, and the rest are not married.

The goodness of fit model is analyzed from the values of Average Path Coefficient (APC), Average R Squared (ARS), Average adjusted R-squared (AARS) and Average Variance Inflation Factor (AVIF) values. Table 2 shows the results of the analysis. Where AVIF and APC show the multicollinearity of independent variables and their relationships. The data from this evaluation informs that the model is acceptable.

Research Variable Validity Test

Based on Table 3, the loading factor value of each indicator is greater than 0.5, and the value of AVE (average variances extracted) is greater than 0.5. Thus, all indicators and measures of convergent validity variables of the study meet the requirements

Tabel 2. Goodness of fit model

Result	P-Value	Kriteria	Information
Average path coefficient	0.242	> 0,001	Supported
Average R-squared	0.148	> 0,001	Supported
Average adjusted R-squared	0.140	> 0,001	Supported
Average block VIF	1.436	< 5.000	Supported

Table 3. Loading Factor Value, and AVE

Variabel Penelitian	Indikator	Nilai Factor	Loading	AVE
Management accounting information system	SIAM -X.1		0.850	0.624
	SIAM -X.2		0.905	

(SIAM-X1)	SIAM -X.3	0.967	
	SIAM -X.4	0.858	
Promotion	Promosi -	0.874	0.754
(Promotion -X2)	X2.1	0.877	
	Promosi -	0.887	
	X2.2		
	Promosi -		
	X2.3		
Quality Product	Produk -Z.1	0.944	0.713
(Produk -Z)	Produk -Z.2	0.870	
	Produk -Z.3	0.895	
	Produk -Z.4	0.810	
	Produk -Z.5	0.828	
Sales volume	Volume -Y.1	0.871	0.630
(Volume-Y)	Volume -Y.2	0.815	
	Volume -Y.3	0.854	
	Volume -Y.4	0.755	
	Volume -Y.5	0.853	

Source: WarpPLS Output processed

The validity of the discrimination is indicated by the value of AVE,s (square roots of average variance extracted), where the value of AVE,s is in a diagonal position in the correlation between latent variables output of WarpPLS, and the expected value is greater than the correlation value in the same block. Based on Table 4, the value on the diagonal block is greater than the value on the same block. Thus, all variables meet the criteria for the validity of discrimination.

Uji Reliabilitas Variable Penelitian

Uji reliabilitas variable penelitian diukur dengan dua kriteria yaitu Composite reliability dan Cronbach's alpha

Table 4. Correlation between latent variables

Variabel	Produk -X1	Promosi -X2	SIAM-Z	Volume-Y
Product -X1	0.724	0.507	0.402	0.397
Promotion -X2	0.507	0.744	0.489	0.071
SIAM-Z	0.402	0.489	0.643	0.113
Volume-Y	0.397	0.071	0.113	0.775

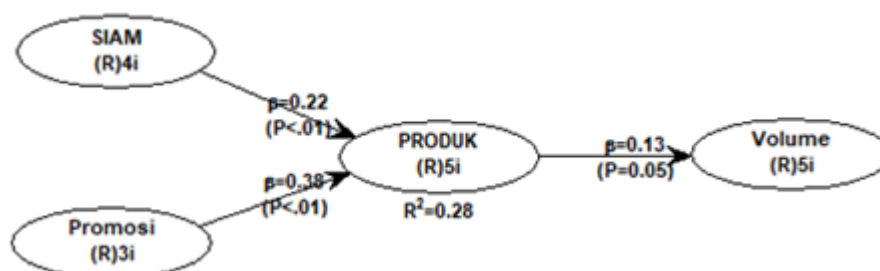
Source: WarpPLS Output processed

Table 5. Reliability Test Results

Cut Off Value	Produk -X1	Promosi -X2	SIAM-Z	Volume-Y	Notes	
Cronbach's Alpha	> 0.6	0.604	0.792	0.710	0.689	Semua item memenuhi persyaratan
Composite	>	0.775	0.787	0.790	0.833	

Reliability 0.7

Source: WarpPLS Output processed



Gambar 1. Koefisien jalur model penelitian (B= coefficient; p=probability; R2=determination)

Table 6. Hypothesis test results

H	Pengaruh antar variabel	Koefisien Standar	P	Keputusan
H1	SIAM-X1 → Produk-Z	0.216	0.003	diterima
H2	Promosi-X2 → Produk -Z	0.376	0.000	diterima
H3	SIAM-Z → Volume-Y	0.134	0.007	diterima
H3a	SIAM-X1 → Produk-Z → Volume-Y	0.029	0.047	diterima
H3b	Promosi-X2 → Produk-Z → Volume-Y	0.050	0.044	diterima

Source: WarpPLS Output processed

Table 5 shows that the cronbach alpha value of each variable is greater than 0.6. Also, the composite reliability value is greater than 0.7. Therefore, all constructs have met the requirements.

Hypothesis testing

Hypothesis testing was carried out based on the estimated significance value of the research model parameters seen in Table 6.

There is an influence of management accounting information system on product quality of 0.216, with a value of $p= 0.002$. This indicates that H1 is accepted. There is an influence of Promotion on product quality of 0.376, with a value of $p= 0.000$. This indicates that H2 is accepted. There is an effect of product quality on sales volume of 0.134, with a value of $p= 0.007$. This indicates that H3 is accepted.

There is an influence of the management accounting information system on sales volume, through product quality of 0.029. This indicates that H3a is accepted. There is an influence of Promotion on sales volume, through product quality of 0.050. This indicates that H3b is accepted.

This study found that the company's sales volume in PT. Saudara Karya Surabaya can be explained significantly by the variables of management accounting information system, promotion and product quality (Tjiptono, 2015). This study also proves that product quality is a positive intervening variable on the relationship between management accounting information systems, promotions and sales volume. For clarity, the discussion and discussion of the research results were carried out one by one as follows:

The influence of management accounting information systems on product quality and on sales volume through product quality.

The findings of this study inform that management accounting information systems have a significant effect on product quality. Thus, the management accounting information system strengthens product quality.

This evidence shows that the management accounting information system used by PT. Saudara Karya Surabaya, according to the respondents, is good. This is reflected in the respondent's answer that the management accounting information system in the company is very helpful because the respondent gets very clear information through this information system. Likewise, the amount of funds that must be paid by consumers is seen in detail in the company's computer system. The results of this study are in line with the findings of (Kontesa, Wong, Brahmana, & Contesa, 2022; Setyawan, Nainggolan, & Budiarto, 2015) which proves that management accounting information systems have an effect on managerial performance, and organizational performance. The aggregation indicator contributes dominantly to the formation of the management accounting information system, while the timeliness indicator contributes the least to the formation of the variables of the management accounting information system. Therefore, it is necessary to pay attention to timeliness so that the transparency and quality of the information reported are good.

In this study, it was also found that there was an indirect influence between the management accounting information system on sales volume through product quality (Poluan, Mandey, & Ogi, 2019). This informs that product quality is a good intervening variable, in the relationship between the management accounting information system and sales volume. Thus, to increase the value of the company's sales volume can also be done through optimizing the use of management accounting information systems and improving product quality.

The Influence of Promotion on Product Quality and on Sales Volume through Product Quality

The findings of this study inform that promotion has a significant effect on product quality. Thus, promotion strengthens product quality. This evidence shows that the promotion that has been carried out by the company PT. Saudara Karya Surabaya has been running well. This is reflected in the respondent's answer which stated that the respondent knew that the company PT. Saudara Karya Surabaya because it is in an advertisement, and also gets information from friends and family. Companies also often provide discounts on their next purchases. This study, in accordance with the findings of (Nurwanty et al., 2020) which proves that promotion has an effect on increasing sales. (Ginanjar & Syamsul, 2020) shows that promotion costs affect net profit. Public relations indicators contribute dominantly to shaping promotions, while sales promotion indicators contribute the least to shaping promotional variables. Therefore, sales promotions still need to be evaluated, and increased in frequency, so that sales promotions can increase sales.

In this study, it was also found that there was an indirect influence between promotion and sales volume through product quality. This informs that product quality is a good intervening variable, in the relationship between promotion and sales volume.

The Effect of Product Quality on Sales Volume

The findings of this study inform that product quality affects the company's sales volume. Thus, it can be interpreted that product quality strengthens the company's sales volume. This evidence shows that the quality of the products produced by the company PT. Saudara Karya Surabaya is good, and has an impact on the company's sales volume and profit. This is reflected in the respondent's answer that the quality of the company's production is strong, resistant to mold and has a long lifespan. It can also be produced according to the wishes and orders of consumers. This study, in accordance with the findings of (Edison, Anwar, & Komariyah, 2017; Mokal & Tumbel, 2015) which shows that product quality affects the increase in sales and sales volume. Feature indicators contribute dominantly to shaping job satisfaction, while performance contributes the least to shaping product quality variables. Therefore the problem of performance still needs to be evaluated, because one of the main components of product quality is durability, this can be done with the use of better raw materials, so that the product can be used for a long time. The results of this study show that product quality has a positive relationship with the company's sales volume. This informs that by improving the quality of production products, it will encourage an increase in the value of sales volume and company profits.

CONCLUSSION

The findings of this study show that management and promotion accounting information systems have a significant effect on product quality. Product quality is a good intervening variable in connecting the variables of the management and promotion accounting information system with sales volume. This emphasizes that to increase sales volume can be done by trying to increase the value of promotion and optimizing the management accounting information system. Of the two hypothesized variables, the dominant promotion variable has an effect on product quality. This informs that the management at PT. Saudara Karya Surabaya supports the promotion that is carried out continuously, and the transparency and speed of transactions through the use of management accounting information systems. It also increases sales volume by optimizing the production process and reducing operational costs with strategies to improve the quality of products produced.

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