

## ORIGINAL

### Managerial Accounting and its Impact on Decision Making in a small company in the food sector in West Lima

### Contabilidad Gerencial y su Impacto en la Toma de Decisiones en una pequeña empresa del sector alimentos de Lima Oeste

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## ABSTRACT

The objective of this research was to determine the impact of managerial accounting on the decision-making of a small company in the food sector of West Lima. It was supported by a quantitative approach, of applied type, of non-experimental, causal correlational design of cross-section. The sample was constituted the financial statements of the organization. Documentary analysis and documentary guidance were used as techniques. The questionnaire as an instrument. Also, for the hiring of hypotheses, the coefficients of the structural model will be addressed to clarify the impact of managerial accounting on decision-making. To consistently establish the goodness-of-fit indicators of the structural model to establish the degree of incidence between the variables. This will be achieved through the use of the statistical software Amos V.20. Managerial accounting impacts significantly and positively on the decision-making of a small company in the food sector of Lima West, because the observed significance 0.000 is less than the theoretical significance 0.05 and positive or direct since the value of the standardized coefficient is 0.893, from which it is concluded that managerial accounting contributes 89% to decision-making. Also, the impact of managerial accounting on decision-making and the contribution of each dimension was observed. the financing decision contributes 86% to decision-making, the risk decision contributes 84%, and the profitability decision contributes 93% to decision-making. In addition, the contributions to the decision-making dimension are shown as; infringe 80%, intolerant 87 and distrustful 94%.

**Keywords:** accounting; decision making; microenterprises; impact.

## RESUMEN

El objetivo de la presente investigación fue determinar el impacto de la contabilidad gerencial en la toma de decisiones de una pequeña empresa del sector alimentos de Lima Oeste. Se amparó bajo un enfoque cuantitativo, de tipo aplicado, de diseño no experimental, correlacional causal de corte transversal. La muestra estuvo constituida los estados financieros de la organización. Se utilizaron como técnicas el análisis documental y la guía documental. Como instrumento el cuestionario. Asimismo, para la contratación de hipótesis se abordarán los coeficientes del modelo estructural para esclarecer el impacto de la contabilidad gerencial en la toma de decisiones. Para, establecer deforma consecuente los indicadores de bondad de ajuste del modelo estructural para establecer el grado de incidencia entre las variables. Esto se logrará por medio del empleo del software estadístico Amos V.20. La contabilidad gerencial impacta de forma significativa y positiva sobre la toma de decisiones de una pequeña empresa del sector alimentos de Lima Oeste, debido a que la significancia observada 0,000 es menor a la significancia teórica 0,05 y positiva o directa ya que el valor del coeficiente estandarizado es de 0.893, de lo que se concluye que la contabilidad gerencial aporta en el 89% a la toma de decisiones. Asimismo, se observó el impacto

que tienen la contabilidad gerencial sobre la toma de decisiones y el aporte de cada dimensión. la decisión de financiamiento aporta en un 86% a la toma de decisiones, la decisión sobre el riesgo aporta el 84%; y, la decisión sobre la rentabilidad aporta un 93% en la toma de decisiones. Además, se muestran los aportes a la dimensión la toma de decisiones como; infringe 80%, intolerante 87 y desconfiado 94%.

**Palabras clave:** contabilidad; toma de decisiones; microempresas; impacto.

## INTRODUCTION

The current situation of small food companies demonstrates the importance of adopting management accounting practices. These practices, combined with the degree of independence enjoyed by private companies, will give the executive team access to key performance indicators that will help them make more informed decisions and run their companies more effectively (Correa et al., 2021). Fundamentally, these organizations are hampered by their inability to foresee how their decisions will affect their financial, equity, human resources, and production situations (Romero et al., 2022).

Particularly in Peru, small companies in this sector have serious problems with administrative management, production, high talent turnover, and poor financial controls because their owners do not consider the risks of investing to grow quickly (Castillo, 2021). This indirectly limits the business and weakens its resources due to hasty decisions, leading to its eventual collapse (Zavaleta, 2023; Mejía et al., 2020).

According to the 2020 Peruvian Chamber of Commerce and Industry report, MYPE (Micro, Small, and Medium Enterprises) drives the country's economic growth, constituting 95% of companies in 2019 and employing 47% of the economically active population. They also contributed 19% of the country's Gross Domestic Product (GDP) (Varona and González, 2021; Chávez and Burgos, 2021).

Likewise, the National Superintendency of Tax Administration and Customs describes micro-enterprises as those that have no more than ten (10) employees and a maximum annual sales volume of one hundred and fifty (150) Tax Units (UIT), which the National Superintendency of Tax Administration and Customs (2019) confirms (Véliz & Véliz, 2021). Therefore, the manager becomes a decision-maker on where to obtain resources, what to invest in, what the benefits or profits are, and when and how to pay external sources of financing and internal customers. Therefore, management accounting must be used, making use of various financial techniques and tools such as financial ratios, the statement of financial position, results and cash flow, profitability indicators, the break-even point, the degree of imbalance, risk management, among others (Párraga et al., 2021; Vite et al., 2022).

## State of the art

Salazar et al. (2021) have said that companies need accurate and timely financial data to support their decisions, which requires keeping financial records that provide details on the accounting of key processes. Here, we want to examine managerial accounting as a crucial tool for providing the decision-maker with information tailored to his or her specific needs. To this end, a bibliographic review has been carried out from various angles, such as Evia (2005), Garrison et al. (2007), and Chacón (2007). The methodology employed is descriptive or documentary, which requires a review of sources specializing in the subject, which are then analyzed in terms of their content to extract relevant accounting information from each source. Among the results, we highlight the importance of management accounting, which, supported by cost accounting, can provide valuable accounting information for decision-making. In order to make sound and timely management decisions, it is crucial to keep detailed records and classify them according to the needs, objectives, and fundamental nature of each organization. Accurate information on the company's operations and transactions can be obtained only in this way.

Achulla (2023) investigated the relationship between management accounting and decision-making in the manufacturing sector of Villa El Salvador. The sample included 35 workers, and the design used was correlational. A Likert-type questionnaire with 40 items was used (20 for general accounting and 20 for decision-making). The instruments were reliable based on Cronbach's alpha coefficient, 0,742 for general accounting and 0,868 for decision-making. The results showed a weak correlation between general accounting and decision-making in the industrial sector of Villa El Salvador (Spearman's  $Rho = 0,423$ ,  $p 0,05$ ). The results suggested that management accounting was helpful for decision-making in the industrial sector of Villa El Salvador.

Huacchillo et al. (2020) used a correlational, non-experimental, and cross-sectional methodology, and a land-based company in Piura served as a case study for 2017-2018. The accounting and administration departments comprised the population, which included 14 workers; therefore, the sample size was representative of the whole. The census was carried out using a convenience sample of less than 50 people, and the data collection methods included questionnaires, interviews, and a document archive. The results showed that 35,71% of respondents rated financial resources as inadequate. In comparison, 28,57% rated financial resources as satisfactory, and 35,71% rated the financial indicators as satisfactory, with a growth in the general liquidity ratio of 2,853 and the net profit margin ratio

of 0,008, respectively.

Zumba and Bermúdez (2023), after noting that “The objective of financial management is to consolidate itself as a tool for companies, in such a way that it provides adequate information for decision-making,” the present report considers the development of the theoretical and conceptual foundations of financial management and its effect on business decision-making through a literature review and an analytical synthesis. This preliminary review process was designed to lay the theoretical foundations for defining the analytical variables of the study and, from there, to create a system for collecting the data and information necessary to build a statistical model. This research studied the key characteristics of financial management, medium-sized companies, and decision-making; the data collected allows for further research, and from there, it was concluded that a financial management model is crucial for decision-making.

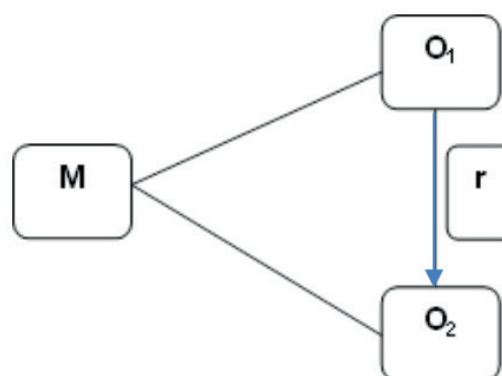
## METHOD

The research took a quantitative approach, as it obtained real data to demonstrate the hypotheses with numerical assessments and statistical analyses in verifying the problem posed (Hernández et al., 2014) according to the peculiar characteristics of the observed phenomenon in relation to the impact of management accounting on the decision-making of the organization in question.

Likewise, the research was applied. According to Sánchez and Reyes (2015), a study of this characteristic is one where “different theoretical knowledge is applied to specific situations, as well as to the practical effects that result from it” (p.37).

For its part, the research design was non-experimental because the study variables were not directly manipulated; that is to say, only the phenomena were evaluated and observed in their natural state, and then descriptive and inferential analyses were carried out to respond to the study’s objectives.

In addition, the research responded to a cross-sectional causal correlational study; this was motivated by the desire to consolidate the intrinsic link between the study variables and their causal sense; that is, it has a causal or incidental character that always had an effect. It also responded to a cross-sectional approach since the information could be collected and the corresponding analysis carried out in a finite time interval. The figure represents the investigative model. 1.



Where:

M: is represented by the study analysis sample

O1: Independent variable: Management accounting

O2: Dependent variable: Decision making

r: Incidence or causality relationship between the study variables.

The population consisted of the company’s quarterly financial statements under study, established within a specific period of 5 years (2019-2023). In addition, the sample was represented by the same study population.

Documentation such as emails, memoranda, and reports was reviewed to ensure consistency with the latest changes resulting from participation in the company’s financial statements.

This measures the relationship between the variables and their optimal application within organizational contexts.

For the construction of hypotheses, the coefficients of the structural model were addressed to clarify the impact of management accounting on decision-making. This promoted the correlative structural equation model between variables and dimensions, which then established the standardized coefficients of said structural model. Subsequently, the goodness of fit indicators of the structural model were established to establish the degree of incidence between the variables. This will be achieved through the use of Amos V.20 statistical software.

Finally, participants provided their data voluntarily and were informed of the objectives of the study and how it would

benefit the men and women on the organization's accounting staff (without restricting their initiative or making them feel threatened). Finally, anonymity was taken into account from the beginning of the research, basing this principle on the Declaration of Helsinki and Peru's Law on the Protection of Personal Data, number 29733.

## RESULTS

The normality test was carried out to determine if the data followed a normal distribution, which determined the type of inferential statistical analysis (parametric or non-parametric) used for the study. The Kolmogorov-Smirnov normality test was carried out to guarantee that the study samples are statistically representative of the population, and its p-value was analyzed in light of the following null and alternative hypotheses.

$H_a = p < 0,05$  The data does not follow a normal distribution

$H_o = p > 0,05$  The data follow a normal distribution

**Table 1.**  
*Test for normality of the data*

	Kolmogorov-Smirnov <sup>a</sup>		Sig.	Result
	Statistician	gl		
Management accountingl	0,512	10	0,000	Not normal
Environmental management	0,321	10	0,000	Not normal
Social management	0,419	10	0,000	Not normal
Financial management	0,529	10	0,000	Not normal
Decision making	0,431	10	0,000	Not normal
Financing decision	0,522	10	0,000	Not normal
Risk decision	0,354	10	0,000	Not normal
Decision on profitability	0,347	10	0,000	Not normal

Given that the normality test of the data in table 1 indicated that the variables and the dimensions did not present normality (the p-value is lower than the theoretical significance value  $\alpha = 0,05$ ), the structural equation model was used to carry out the hypothesis test using the method of estimation of the asymptotic free distribution.

### Research hypothesis

Management accounting has a significant and positive impact on decision-making in a small company in the food sector in western Lima.

### Statistical hypothesis

$H_1$ : Management accounting has a significant and positive impact on decision-making in a small food company in West Lima.

$H_o$ : Management accounting does not have a significant and positive impact on decision-making in a small food company in West Lima.

### Test function

It was carried out using the structural equation model through the "Asymptotic Free Distribution" method. Likewise, the relationship is direct (or positive) if the standardized coefficient between both variables is positive, otherwise the relationship is indirect (or negative).

### Decision rule

Reject  $H_o$  when the observed significance "p" of the coefficients of the structural model is less than  $\alpha$ .

Do not reject  $H_o$  when the observed significance "p" of the coefficients of the structural model is greater than  $\alpha$ .

From table 2, it can be seen that there is a strong, significant positive impact of management accounting on decision-making in a small company in the food sector in western Lima.

### Calculations

Likewise, the four dimensions corresponding to management accounting explain the variable in a unifactorial way, with positive and high standardized factor loadings (0,860; 0,836; 0,793 and 0,930 respectively).

Furthermore, the three dimensions of the decision-making variable explain the variable in a unifactorial way, with high positive standardized factor loadings (0,803, 0,865 and 0,942 respectively), with indirect relationships being observed, first between the infringe and intolerant errors and second between the intolerant and distrustful errors,

indicating that there is something indirect in common that unites both dimensions.

**Structural model:**  $F2 = 0,89 \times F1 + e8$

F1= Management accounting

F2= Decision making: 0,89 = equal to the standardized coefficient.

**Measurement models:**

$z1 = 0,86 \times F1 + e1$

$z2 = 0,83 \times F1 + e2$

$z3 = 0,79 \times F1 + e3$

$z4 = 0,93 \times F1 + e4$

$m21 = 0,80 \times F2 + e5$

$m22 = 0,86 \times F2 + e6$

$m23 = 0,94 \times F2 + e7$

**Table 2**

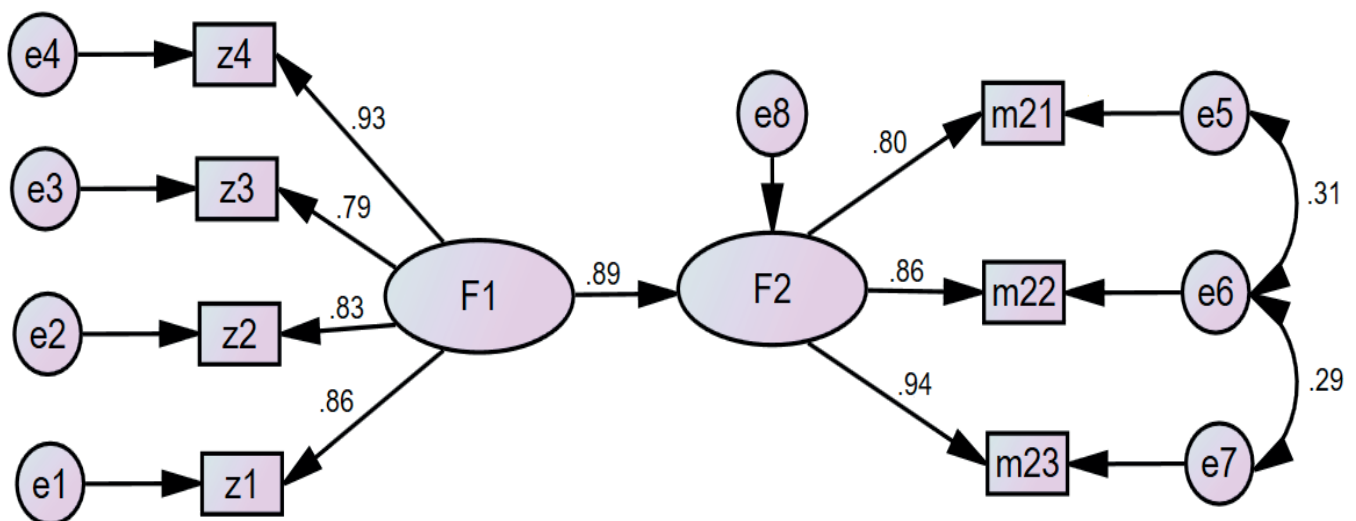
*Management accounting and its impact on decision-making*

Relationship			Coefficient	Standardized coefficient	S.E.	CR.	Sig.
F2: decision making	<---	F1: Management accounting	1,102	0,893	0,210	12,620	***
z1: Financing decision	<---	F1: Management accounting	1,000	0,860			
z2: Decision on the risk	<---	F1: Management accounting	1,314	0,836	0,165	11,971	***
z3: Decision on profitability	<---	F1: Management accounting	1,209	0,793	0,098	10,012	***
m1: Environmental management	<---	F2: Decision making	1,153	0,930	0,870	10,263	***
m2: Social management	<---	F2: Decision making	1,000	0,803			
m3: Economic management	<---	F2: Decision making	2,340	0,865	0,143	14,632	***

\*\*\* Values close to zero

**Figure 1.**

*Standardized coefficients of the structural model of the impact of management accounting on decision-making in a small company in the food sector in western Lima.*



According to the goodness-of-fit indicators, the estimated structural model is acceptable as it fulfills its dimensions and variables.

For its part, management accounting has a significant and positive impact on decision-making in a small company in the food sector in western Lima because the observed significance of 0,000 is less than the theoretical significance of 0,05 and positive or direct since the value of the standardized coefficient is 0,893, from which it is concluded that management accounting contributes 89% to decision-making.



**Table 3.**

*Indicators of goodness of fit of the structural model of the impact of management accounting on decision-making in a small company in the food sector in western Lima*

Pseudo R-squared	Fit measurement	Value	Acceptable limit *
Standardized adjustment index	NFI	0,921	$\geq 0,9$
Comparative adjustment index	GFI	0,732	$\geq 0,9$
Adjusted goodness of fit index	AGFI	0,697	$\geq 0,85$
Relative index of adjustment	RFI	0,672	$\geq 0,9$
Square root of the mean square error	RMR	0,018	$\leq 0,1$

\* Byrne, B. (2010). Structural Equation Modeling with AMOS. 2da. Ed. New York. Routledge Taylor & Francis Group.

Likewise, the impact of management accounting on decision-making and the contribution of each dimension is observed. The financing decision contributes 86% to decision-making, the risk decision contributes 84%, and the profitability decision contributes 93%. In addition, the contributions to the decision-making dimension are shown as infringe 80%, intolerant 87, and distrustful 94%.

## DISCUSSION

The ability of a company to pay its debts is measured by its liquidity ratio; if this ratio is more significant than one, the company is considered to be economically stable at a moderate level; if it is less than one, the company is not financially stable at all. However, for this study, in 2019, after the implementation of general accounting, liquidity ratios are less relevant. Solvency ratios indicate a company's capacity to take on debt or the degree to which its assets can be pledged against its liabilities. In the case of the company in question, the ratio exceeded 50% in 2018. However, after implementing the solution using modifications within its financial statements, the company could increase its assets and decrease its liabilities.

Likewise, within the business documentary analysis, the company's ability to generate profits is shown in the profitability ratios; for example, the net profit ratio doubled between 2019 and 2020, indicating more profits for management. In addition, return on equity (ROE) improved by 20% due to increased operational efficiency, while the company's equity investment remained unchanged through bank financing, indicating financial stability. In addition, the microenterprise's return on assets (ROA) almost tripled in percentage terms between 2019 and 2020, thanks to the increase in the value of its assets (both tangible and intangible). This is a crucial metric when applying for a loan from a financial institution. It should be noted that the Return on Investment (ROI) grew by an astonishing 270% in 2019 compared to 12% in 2020, making it a fantastic indicator for the investor (manager) who took advantage of the measures and solutions provided by management accounting.

The statistical results show that, according to the adjustment indicators, the estimated structural model is acceptable as it satisfies its dimensions and variables.

For its part, management accounting has a significant and positive impact on the decision-making of a small company in the food sector in western Lima because the observed significance of 0,000 is less than the theoretical significance of 0,05 and positive or direct since the value of the standardized coefficient is 0,893, from which it is concluded that management accounting contributes 89% to decision-making.

Likewise, the impact of management accounting on decision-making and the contribution of each dimension are observed. The financing decision contributes 86% to decision-making, the risk decision contributes 84%, and the profitability decision contributes 93%. In addition, the contributions to the decision-making dimension are shown as infringe 80%, intolerant 87%, and distrustful 94%.

Achulla (2023) mentioned a weak correlation between general accounting and decision-making in the industrial sector of Villa El Salvador (Spearman's Rho = 0,423, p 0,05). The results suggested that management accounting was helpful for decision-making in this sector.

For their part, Huacchillo et al. (2020) showed that 35,71% of respondents rated the level of financial resources as inadequate, while 28,57% rated the state of financial resources as satisfactory, and 35,71% rated the financial indicators as satisfactory, with a growth in the general liquidity coefficient of 2,853 and the net profit margin coefficient of 0,008, respectively.

Likewise, the four dimensions corresponding to management accounting explain the variable unifactorial, with positive and high standardized factor loadings (0,860, 0,836, 0,793, and 0,930, respectively).

Furthermore, the three dimensions of the decision-making variable explain the variable in a unifactorial way, with high positive standardized factor loadings (0,803, 0,865, and 0,942, respectively). Indirect relationships are observed, first between the infringe and intolerant errors and second between the intolerant and distrustful errors, indicating that there is something indirect in common that unites both dimensions.

## CONCLUSIONS

Management accounting has a significant and positive impact on decision-making in a small food company in western Lima because the observed significance of 0,000 is less than the theoretical significance of 0,05 and positive or direct since the standardized coefficient is 0. 893, from which it is concluded that management accounting contributes 89% to decision-making.

Likewise, the impact of management accounting on decision-making and the contribution of each dimension were observed. The financing decision contributes 86% to decision-making, the risk decision contributes 84%, and the profitability decision contributes 93%. In addition, the contributions to the decision-making dimension are shown as infringe 80%, intolerant 87%, and distrustful 94%.

It has been demonstrated that management accounting significantly impacts decision-making in a small company in the food sector of western Lima by facilitating access to key financial and administrative data to those who need it to make better investments and obtain more excellent benefits; this was achieved by verifying and refining, through observational data and statistical analysis, the substantial benefits obtained by adopting a centralized accounting system. However, to support the claims made, a quantitative analysis of the company's financial position, performance, ratios, and management team was carried out using the management reports collected during the study; a qualitative analysis of members' perceptions of decision-making effectiveness was also carried out using a before-and-after test, the results of which supported the claims made. Therefore, this work serves as a model for other small companies operating in various sectors that researchers should study and promote, shedding light on the underlying issue and improving the adaptability of general accounting to the specific needs of each company.

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None.

## CONFLICT OF INTEREST

None.

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