
| RESEARCH ARTICLE

The Impact of Decentralization, Environmental Uncertainty, and Information Technology on Managerial Performance with Management Accounting System as a Mediator

Arie Wibisana Hadianto¹ ✉ and Djuminah²

^{1,2}Faculty of Economics and Business, Magister of Management, University of Sebelas Maret Jl. Ir Sutami No.36A, Jebres, Kec. Jebres Surakarta, Central Java 57126

Corresponding Author: Arie Wibisana Hadianto, **E-mail:** arie_hadianto@student.uns.ac.id

| ABSTRACT

This study aims to examine the effect of decentralization, environmental uncertainty, and information technology on managerial performance through a management accounting system. This research is conducted using a quantitative approach, namely research using research instruments and quantitative data analysis with the aim of testing the predetermined hypothesis. The data used in this study is primary data, the sampling technique used is purposive sampling, and the number of samples is 200 respondents who are processed with the PLS-SEM application. The results showed that the direct effect of decentralization and environmental uncertainty has a positive effect on the accounting management system, while the direct effect of information technology has a negative effect. Then, the indirect effect of decentralization and environmental uncertainty has a positive effect on managerial performance through management accounting systems, while the indirect effect of information technology has a negative effect on managerial performance through management accounting systems. This study uses contingency theory, where all organizational components must be compatible with each other. The contingency approach to management accounting is based on the premise that there is no universal management system in every organization that is always suitable for all and in every situation that occurs, but this system also depends on situational factors that occur in the organization. In general, the more complex the level of technology used, the higher the performance, but in this study, it was found that the more complex the technology used, the more the management accounting system is disrupted and can affect performance. So, this study has a purpose, namely to examine the effect of decentralization, environmental uncertainty, and information technology on managerial performance with the management accounting system as a mediator. The limitation of this study is that the data was obtained only through questionnaires, so further research can be added with direct interview methods to obtain more detailed information from respondents. Besides that, the research sample was expanded with a wider scope to get results that can be generalized.

| KEYWORDS

Decentralization; Uncertainty; Information Technology; Managerial Performance; Management Accounting System.

| ARTICLE INFORMATION

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1. Introduction

Banking financial institutions have an essential function in the economy of a country. Banks as intermediaries in collecting public funds and channeling funds to the public in the form of loans or credit. Regional BPR companies are financial institutions owned by regional governments, both provincial and district/municipal, which carry out their functions and roles and will face competition from other banks and other non-bank financial institutions. An accounting management system needs to be implemented in order to face increasing competition in the world industry; of course, this accounting management system needs to be managed for the

continuity and success of the company. This management accounting system is implemented using the principles of Good Corporate Government (GCG) and following Bank Indonesia regulations, namely following banking Best Practices. Organizations that are large and have many branches under them will be effective if there is a delegation of authority from top-level managers to lower-level managers, the delegation from top-level managers to managers below their level which called Decentralization (Urika, 2022), which is a state of delegation of authority over decision-making authority to lower management levels in an organization (Simamora, 2016). This means that a situation in delegating authority over decision-making authority in the organization to the level of management below or lower (Simamora, 2016). Furthermore, through decentralization, managerial decision-making points move to lower lines for each decision to be made. Decentralization is closely related to the characteristics of the management control system in the organization. This decentralization also gives managers more control and responsibility and requires a large amount of information on each activity (Fuadah et al., 2020).

Performance just measures a small portion of firm performance, so non-financial performance measures are needed (Yuliani, 2014). Managerial performance is a measure of the effectiveness and efficiency of the manager's work to achieve organizational goals (Sigilipu, 2013). One important factor in the company is a managerial performance which can improve the company's overall performance. This, of course, can gain success more quickly in accordance with company goals (Supratinigrum & Lukas, 2021). Managerial performance is the result of work in quality and quantity achieved by a manager in carrying out his duties in accordance with the responsibilities given to him (Ilmy M et al., 2021). Unachieved performance is a measure for making improvements in the future. While the success of the performance requires an award to be able to increase productivity (Yuliani, 2014). In addition, information is needed for companies for planning, control, and decision-making activities. The company's need for information depends on many factors, namely environmental uncertainty and also the company's organizational structure. Company leaders and managers need information for their company with the aim of making the right decisions and also predicting the future by considering external and internal factors of the company.

Management accounting is structured to produce information that is useful for management decision-making (Qibtiyah & Ananda, 2017). Therefore, the company will design a management accounting system (MAS) to assist managers in planning, organizing, directing, and making decisions. Managers need information support to assist these activities. The management accounting system is an information system that collects financial and operational data, storage, processes and reports to system users, namely managers, executives and workers (Karyanti, 2010). The first part of the organizational control system is planning; this part needs attention in order to make a positive contribution to increasing the success of the management accounting system. Information technology often helps management accounting systems to obtain precise and relevant information.

Information technology is a combination of computer technology and communication technology that is always developing. The availability of information using computer media supported by a variety of software that is easy to operate will make it easier for managers to access information quickly and obtain the required reports in greater numbers. The flow of information that is so fast and dynamic requires all aspects of the business world to be able to compete and survive in a changing business environment. The development of the surrounding environment or environment is, in fact, more complex because it relates to matters concerning uncertainty. This environmental uncertainty will be discussed in the future. An organization, in anticipating the environment, must be better prepared by establishing new organizing principles.

2. Literature Review

2.1 Contingency Theory

Contingency theory means all components of an organization must be unified. Contingency theory is an organizational theory that states that in leading a company, organizing and making decisions, there is no best method to have (Abu Afifa & Saleh, 2022). The contingency approach to management accounting, environmental uncertainty and information systems with technology is based on the premise that there is no universal management system for all organizations and is always appropriate in every situation, but management accounting systems that exist within organizations also depend on existing situational factors (Shenkar & Ellis, 2021). The contingency approach can determine the reliability of the management accounting system, meaning that under each condition, this system has the same effect or not. Based on the contingency approach, the other determinant variables will be mutually aligned and interact related to the conditions faced by the organization. Contingency theory in management accounting describes a model and framework for identifying control systems under the most appropriate conditions. In principle, management accounting practitioners always try to adjust the system so that it can be useful in every situation. the control system that is universally appropriate to apply throughout the organization in every circumstance (Waspodo, 2014), Such as efforts to identify the most important contingent variables and assess their impact on control system design (Shenkar & Ellis, 2021). Organizations can adapt to contingency conditions by knowing various factors that can be controlled so as to form the right configuration. This is expected to result in effectiveness in more complex organizations. The use of the concept of conformity between the

management accounting system and conceptual factors (contingency) provides an opportunity for managers to improve company performance.

The contingency approach in this theory is used to evaluate factors of environmental uncertainty that are thought to cause the management accounting system to be more effective (Pedroso et al., 2020). Contingency theory is used for accounting management systems and design analysis in order to provide information for various purposes in facing competition with related companies. Performance is one factor that can be used to increase organizational effectiveness. Basically, the core of an organization or company is human because those who run it are humans. Performance appraisal is an assessment of human behavior in carrying out functions and authorities within a company (Wasposito, 2014). Managerial performance measures effectiveness and efficiency to achieve organizational goals through the processes of planning and budgeting, administration, accountability reporting, and supervision (Jatmiko, 2022). Managerial performance is one of the important factors in a company because increasing managerial performance can improve the company's overall performance, so it can accelerate the company in achieving its goals. In addition, information is needed for companies for planning, control, and decision-making activities. The need for information in a company depends on various factors, including environmental uncertainty (uncertainty) and factors of the company's organizational structure. Managerial performance is an indicator of the success of managers in achieving goals, as well as being the key to improvement from time to time (Zenita et al., 2015). Managers need the information to predict the future and make decisions by considering the influence of internal factors and external factors of the company.

2.2 Decentralization and Management Accounting Systems

Decentralization is the delegation of organizational responsibility and authority to leaders or managers. The level of delegation refers to the ability of higher management to give authority to lower management to make company policies independently and appropriately. More specifically, decentralization is not only an important contingency variable in the design of a management accounting system but also a supporting mechanism that should be consistent with the intent of the formal structure. Accounting is defined as an information system because it processes data and information as input and produces output in the form of communication from accounting which can be used by (stakeholders), both internal and external, to determine financial activities and performance (Warren et al., 2017). The result of his research is that decentralization has a significant effect on management information system variables (Jatmiko, 2022; Karyanti, 2010; Nguyen et al., 2021).

H₁: Decentralization has an impact effect on the management accounting system.

2.3 Environmental Uncertainty and Management Accounting System

Destruction in planning and control planning caused by environmental loads can be reduced by management accounting systems. If the reports generated from the management accounting system are increasingly sophisticated, it can help improve decisions and minimize environmental damage. The management accounting system contains information that can be used as a basis for promotional programs, sales, taxes, customer categories, and levels of customers. This can also be used as one of the means plans to further improve the service and quality of the company (Ilmy M et al., 2021). Environmental uncertainty improves management accounting systems (Latan et al., 2018).

H₂: Environmental uncertainty has an impact on the management accounting system

2.4 Information Technology and Management Accounting Systems

The challenges of environmental change must be able to be faced by accounting management so that they can obtain information that is in accordance with changes in information system technology that is increasing in global competition. Technological advances that are increasingly developing are also a task for management accounting systems to be able to adapt to these advances. In addition, advances in information technology have an impact on the development of the world's industry which requires criteria for assessing company performance in order to obtain optimal goals. With the implementation of an integrated information technology-based information technology system, it is hoped that it will be faster, more precise, and more accurate and can increase the transparency and accountability of its reports (Wasposito, 2014). These criteria cause the management accounting field to be able to present reliable, relevant, timely, complete, understandable and testing information in the context of making strategic and tactical management decisions. Information technology has a positive effect on the management accounting system (Maelani et al., 2021; Supratinigrum & Lukas, 2021).

H₃: information technology has an impact on the management accounting system.

2.5 Decentralization, Management Accounting Systems, and Managerial Performance.

In conditions of a decentralized organizational structure, managers have a greater role in decision-making and implementation, which makes them more responsible for the work activities of the branch they lead. With decentralization, managers get a

delegation of authority from their top managers, so they will need quality and relevant information to support quality decisions as well. Therefore, managers need a reliable management accounting system in order to provide the expected information needs in a timely and relevant manner in making policies to achieve the goals that have been set. Improving managerial performance requires a match between the level of decentralization and management accounting information (Jatmiko, 2022; Nguyen et al., 2021; Pedroso et al., 2020). This means that if the organization has a higher level of decentralization, it needs to be balanced with more reliable characteristics to get good performance.

H₄: Decentralization has an impact on managerial performance through the management accounting system.

2.6 Environmental Uncertainty, Management Accounting Systems, and Managerial Performance

A high-management accounting system will improve optimal managerial performance (Jatmiko, 2022). The management accounting system causes workers, especially in the operations department, to be more optimal. Furthermore, the management accounting system can be seen from the scope, timeliness, and aggregation (Ghasemi et al., 2019). If managers use the information provided by the management accounting system, then these managers can do better in carrying out their work and improve their performance. The use of the company's management accounting system will get very important information (Ilmy M et al., 2021). The availability of information characteristics of the management accounting system will make managerial performance increase when conditions of environmental uncertainty are high (Latan et al., 2018). High quality information is created when there is environmental support provided by the related accounting management system (Abu Afifa & Saleh, 2022).

H₅: environmental uncertainty has an impact on managerial performance through the management accounting system

2.7 Information Technology, Management Accounting Systems, and Managerial Performance

Information technology can affect management accounting systems. The use of information technology which is a combination of computer technology and communication technology, helps the management accounting system to present information in a broad scope. Computer technology with a variety of software allows management accounting systems to present various formats, both formats that refer to formal decision models and the combination of functional and temporal information. Technology can potentially change the rules of competition, create competitive advantages and also affect industry structure (Mohamad et al., 2017). The availability of information technology can affect the management accounting system, enabling managers to make appropriate and fast decisions which in turn can improve managerial performance. (Maelani et al., 2021; Suprانتiningrum & Lukas, 2021).

H₆: information technology has an impact on managerial performance through the management accounting system.

3. Methodology

The variables used in this study consist of exogenous latent variables, namely decentralization, environmental uncertainty, and information technology. The mediating variable is the management accounting system, while the endogenous latent variable is managerial performance. Exogenous latent variables are variables that are assumed to have an effect on endogenous latent variables. Endogenous is a variable that is influenced or depends on the exogenous latent variable, while the mediating variable is a type of variable that makes an indirect relationship between the variable that lies between the exogenous latent variable and the endogenous latent variable. In other words, the mediating variable can strengthen or strengthen the relationship between variables.

Data collection in this study is a survey method using a questionnaire. The questionnaire is a data collection technique that provides questions or statements that are appropriate to the research topic to predetermined respondents (Sugiyono, 2016). So from the list of statements, it is expected to obtain data directly from respondents who have high reliability and validity. The source of data used in this study is primary data in the form of respondents' answers to statement items contained in five research variables, namely decentralization, environmental uncertainty, information technology, managerial performance, and management accounting systems.

The sample selection used purposive sampling, namely sampling with certain criteria aimed at making sampling more effective in terms of cost and time. The samples selected in this study were Directors, Branch Managers, Cashiers, Customer Service and Teller at BPR in Blora Regency. The total sample taken in this study was 200 respondents.

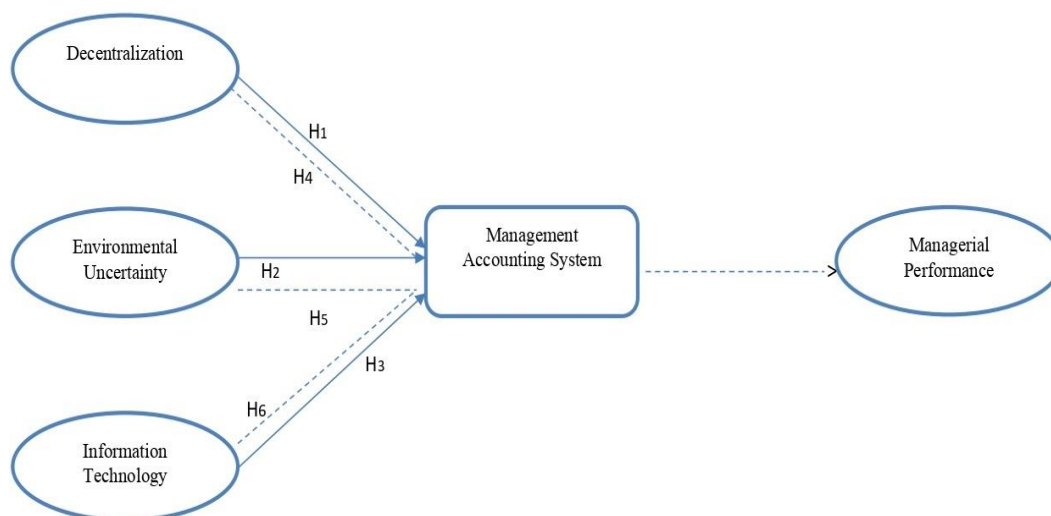


Figure 1 Framework

4. Results and Discussion

4.1 Demographic Characteristics

Table 1 Demographic Characteristics

Question		Frequency	Percentage
Gender	Man	121	60,50
	Women	79	39,50
Education	Senior High School	75	37,50
	Diploma/S1	123	61,50
	S2/S3	2	1,00
Marital Status	Unmarried	43	21,50
	Married	157	78,50

Source: Primary data processing, 2022

This research was tested using Partial Least Square or PLS-SEM analysis technique. Testing with PLS-SEM is divided into an outer model and an inner model. The outer model includes AVE (Average Variance Extracted, Composite Reliability and Outer Loading. The results of this study indicate that all question items have an outer loading value of > 0.7 (Ghozali, 2015), so it can be concluded that the indicators that measure each variable do not need to be deleted. Then this research has fulfilled the Average Variance Extracted > 0.5 and composite reliability > 0.7, so it can be concluded that this study has met the outer model

Tabel 2 Outer Model

Variable	Item	Outer Loading	R ²	AVE	CR	CA
Decentralization (Gordong & Narayanan, 1984)				0.675	0.958	0.954
	The company's decision to timely replace office equipment in each department	0.851				
	The company's decision to timely procure equipment in each section	0.776				
	The company's decision to purchase office stationery in a timely manner in each department	0.852				
	Decisions in making telephone and electricity payments in a timely manner in each department	0.854				

Variable	Item	Outer Loading	R²	AVE	CR	CA
	The decision not to be timely in buying office stationery in each department	0.865				
	Company training decisions assign employees to follow properly	0.864				
	The company's decision to improve high managerial performance by recruiting competent employees	0.760				
	The company's decision to transfer funds is made according to the needs of each division	0.703				
	The company's decision to make timely transfers of funds in each department	0.780				
	The company's decision to improve managerial performance by providing promotions	0.857				
	The company's decision in a timely manner to issue a warning letter	0.856				
Environmental Uncertainty (Miliken, 1987)				0.666	0.933	0.917
	Organizational culture affects managerial performance	0.851				
	Technological advances affect managerial performance	0.776				
	Inflation affects managerial performance	0.852				
	Economic conditions affect managerial performance	0.854				
	Inflation does not affect managerial performance	0.865				
	Science affects managerial performance	0.864				
	Available information affects managerial performance	0.760				
Information Technology (Haag and Cummings, 2010)				0.679	0.959	0.953
	A computer can input data on tim	0.763				
	A computer can input data quickly	0.855				
	A computer can produce timely information	0.883				
	A computer can produce information as needed	0.866				
	A computer can process data as needed	0.824				
	A computer can process data quickly	0.775				
	A computer can not produce information in time	0.835				
A computer can store data well	0.775					

Variable	Item	Outer Loading	R ²	AVE	CR	CA
	A computer can save data for the future	0.799				
	A computer can convey information on time	0.895				
	A computer can convey relevant information	0.783				
			0.786	0.824	0.976	0.973
Management Accounting System (Arsono & Muslichah, 2002)	Availability of information about economic conditions	0.763				
	Availability of information about the likelihood of future events occurring	0.855				
	The information needed is available instantly When requested	0.883				
	Reports are provided on a systematic basis (daily, weekly, monthly)	0.866				
	Required information is not immediately available When requested	0.824				
	Information is provided in different functional sections	0.775				
	Report formats are structured consistently	0.835				
	Availability of information about appropriate targets for activities of all sections	0.775				
	Availability of information regarding the effect of decisions on the operations of all organizational sub-units	0.799				
				0.773	0.703	0.976
Managerial Performance (Mahoney <i>et al.</i> , 1965)	Planning can determine the company's goals well	0.768				
	Good work scheduling can improve managerial performance	0.856				
	Measuring performance results can improve managerial performance	0.752				
	Analyzing the work can improve managerial performance	0.871				
	Completion of programs can improve managerial performance	0.801				
	The exchange of information can improve managerial performance	0.746				
	Completion of the program cannot improve managerial performance	0.851				
	Financial reports can improve managerial performance	0.789				
	Employee appraisal can improve managerial performance	0.840				

Variable	Item	Outer Loading	R ²	AVE	CR	CA
	Training subordinates can improve managerial performance	0.862				
	Explaining work rules can improve managerial performance	0.897				
	Recruiting competent new employees can improve managerial performance	0.905				
	Promotion of competent employees can improve managerial performance	0.895				
	Contracting employees can improve managerial performance	0.779				
	Bargaining occurs against customers can increase managerial performance	0.871				
	Representatives promoting company products can improve managerial performance	0.876				
	Representatives attending meetings with other companies carried out in each section can improve managerial performance	0.865				

Hypothesis testing in this study uses the inner model, namely by looking at the path analysis by looking at the original sample and the significance of the existing outer model. The results of the inner model test can be seen in table 2. The results show that the direct effect of decentralization and environmental uncertainty on the accounting management system shows positive results, while the direct effect of information technology has a negative effect on the management accounting system. Then, the indirect impact of decentralization and environmental uncertainty on managerial performance through information technology showed positive results, while the indirect effect of information technology has a negative impact on managerial performance through management accounting systems.

Tabel 3 Inner Model

Variable	Original Sample	Hypothesis
DC→MAS	0.735(7.346**)	Supported
EU→MAS	0.538(11.434**)	Supported
IT→MAS	-0.381(4.030**)	Supported
DC→MAS→MP	0.447(4.465**)	Supported
EU→MAS→MP	0.327(5.603**)	Supported
IT→MAS→MP	-0.232(3.023**)	Supported

4.2 Discriminant Validity

To test discriminant validity, use the cross-loading test. The Cross Loading test itself is a test of the Outer Loading value that belongs to a variable construct that must have a greater value for its own variable compared to other variables. The following is the value of the results of the cross-loading research:

Table 4 Processing value of Cross Loading

	Decentralization	Environmental Uncertainty	Managerial Performance	Management Accounting System	Information Technology
DS1	0,851				
DS10	0,857				
DS11	0,856				
DS2	0,776				

	Decentralization	Environmental Uncertainty	Managerial Performance	Management Accounting System	Information Technology
DS3	0,852				
DS4	0,854				
DS5	0,865				
DS6	0,864				
DS7	0,760				
DS8	0,703				
DS9	0,780				
KL1		0,807			
KL2		0,835			
KL3		0,738			
KL4		0,823			
KL5		0,838			
KL6		0,824			
KL7		0,842			
KM1			0,768		
KM10			0,862		
KM11			0,897		
KM12			0,905		
KM13			0,895		
KM14			0,779		
KM15			0,871		
KM16			0,876		
KM17			0,865		
KM2			0,856		
KM3			0,752		
KM4			0,871		
KM5			0,801		
KM6			0,746		
KM7			0,851		
KM8			0,789		
KM9			0,840		
SAM1				0,848	
SAM2				0,911	
SAM3				0,933	
SAM4				0,949	
SAM5				0,932	
SAM6				0,805	
SAM7				0,931	
SAM8				0,902	
SAM9				0,946	
TI1					0,763
TI10					0,895
TI11					0,783
TI2					0,855
TI3					0,883
TI4					0,866
TI5					0,824
TI6					0,775
TI7					0,835
TI8					0,775
TI9					0,799

Source: SmartPLS Algorithm output

The results of previous calculations show that the research has shown its validity through the converging validity and discriminant validity tests. Furthermore, tests were carried out to test the research reliability through the composite reliability and Cronbach's alpha values. The following are the research reliability values:

Table 5 Composite Reliability processing value

	Cronbach's Alpha	Composite Reliability
Decentralization	0,954	0,958
Environmental Uncertainty	0,917	0,933
Managerial Performance	0,973	0,976
Management Accounting System	0,973	0,977
Information Technology	0,953	0,959

Source: SmartPLS Algorithm output

Table 4 above shows that Cronbach's Alpha and Composite Reliability values for each variable meet the standard of greater than 0.60. This shows that the research's reliability is acceptable. In addition, the composite reliability value is also higher than Cronbach's alpha value. This indicates that all research variables have met the requirements regarding the appropriate reliability criteria as the basis for SEM research, which can be analyzed using SmartPLS.

Structural model testing is done by looking at the R-square value, which indicates the goodness-of-fit test of the model. The following are the results of the R-squared value test in the final Outer Model test :

Table 6 R-Square processing value

	R Square	R Square Adjusted
Managerial Performance	0,773	0,769
Management Accounting System	0,786	0,783

Source: SmartPLS Algorithm output

4.3 Hypothesis testing

Hypothesis testing is done by the bootstrapping technique. The data used for bootstrapping is from the measurement stage. Hypothesis testing is included in the structural model and shows the relationship that has been hypothesized. Hypothesis testing is done by doing a t-statistic comparison or t-count that has been determined. The t-count generated in the booting test must be greater than the one-tail t-table practice simulation.

Table 7 Hypothesis Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Decentralization -> Managerial Performance	0,371	0,367	0,116	3,200	0,001
Decentralization -> Management Accounting System	0,735	0,748	0,100	7,346	0,000
Environmental Uncertainty -> Managerial Performance	0,034	0,025	0,070	0,479	0,632
Environmental Uncertainty -> Management Accounting System	0,538	0,533	0,047	11,434	0,000
Management Accounting System -> Managerial Performance	0,608	0,615	0,087	6,990	0,000
Information Technology -> Managerial Performance	-0,109	-0,103	0,102	1,065	0,288
Information Technology -> Management Accounting System	-0,381	-0,389	0,095	4,030	0,000

Source: SmartPLS Bootstrapping output

Table 8 Value of Specific Indirect Effects Hypothesis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Decentralization -> Managerial Performance	0,447	0,462	0,100	4,465	0,000
Decentralization -> Management Accounting System					
Environmental Uncertainty -> Managerial Performance	0,327	0,329	0,058	5,603	0,000
Environmental Uncertainty -> Management Accounting System					
Management Accounting System -> Managerial Performance					

Information Technology -> Managerial Performance	-0,232	-0,241	0,077	3,023	0,003
Information Technology -> Management Accounting System					

Source: SmartPLS Bootstrapping output

4.4 Discussions

This research was conducted to determine the effect of decentralization, environmental uncertainty, and information technology on managerial performance with the management accounting system as an intervening variable for Rural Banks employees in Blora Regency on Central Java. Based on the results of research and hypothesis testing, the researchers found that decentralization had a positive and significant impact on the accounting management system. The delegation carried out by management shows that there is an increase in the management accounting system caused by decentralization. The design of the accounting system will be more effective if every employee can work with confidence through the delegation given by the management. Thus hypothesis one is accepted. This study supports research conducted by Karyanti (2010), Nguyen et al. (2021), Pedroso et al. (2020), which states that decentralization has an impact on the management accounting system.

Obstacles in controlling and preparing planning caused by this environmental burden can be minimized by implementing an information management accounting system. If the reports generated from management accounting system information are increasingly sophisticated, it can improve the quality of decisions and help reduce environmental demands. High environmental uncertainty requires the construction of a sophisticated, relevant, accurate, and reliable information system to produce a good management accounting system so as to support the achievement of improving organizational performance. Thus the second hypothesis is accepted. This study supports the research conducted by Badollahi & Susanto (2022), Latan et al. (2018), Nguyen et al. (2021), and Pedroso et al. (2020), which state that environmental uncertainty has an impact on the management accounting system.

Management accounting must be able to face the challenges of environmental changes so that it can produce information in accordance with changes in information system technology and global competition. Management accounting is structured to produce information that is useful for management decision-making. Therefore, the company will design a management accounting system (MAS) to assist managers in planning, organizing, directing, and making decisions. The results showed that information technology had a negative impact on the management accounting system. The existence of good information technology does not make the management accounting system more efficient and flexible but is more complex at the level of implementation. This makes workers prefer conventional and not use technology that is too complex. Thus the third hypothesis is accepted. This study supports research conducted by Maelani et al. (2021); Supratinigrum & Lukas (2021), which state that information technology has an impact on management accounting systems.

In conditions of a decentralized organizational structure, managers have a greater role in decision-making and implementation which makes them more responsible for the work activities of the branch they lead. With decentralization, managers get a delegation of authority from their top managers, so they will need quality and relevant information to support quality decisions as well. Therefore, managers need a reliable management accounting system to provide the expected information needs in a timely and relevant manner in making policies to achieve the goals that have been set. Thus the fourth hypothesis is accepted. This study supports research conducted by Karyanti (2010), Nguyen et al. (2021), and Pedroso et al. (2020), which states that decentralization has an impact on managerial performance through the management accounting system.

The characteristics of a reliable management accounting information system will improve managerial performance in conditions of high environmental uncertainty and have a negative impact on conditions of low environmental uncertainty. Every organization has a different view of the environmental conditions it faces. The organization's assessment of the uncertainty it faces depends on each management's perception and its ability to assess and predict situations that will occur in the future. Management that is able to predict uncertain conditions in the future the smaller management's perception of environmental uncertainty (Ilmy M et al., 2021). Thus the fifth hypothesis is accepted. This study supports the research conducted by Badollahi & Susanto (2022), Latan et al. (2018), Nguyen et al. (2021), Pedroso et al. (2020), which state that environmental uncertainty has an impact on managerial performance through management accounting system.

The use of information technology which is a combination of computer technology and communication technology, helps the management accounting system to present information in a broad scope. However, this study found that the use of reliable information technology actually made the complexity increase which caused the management accounting system to be disrupted. As a result, managerial performance will also not be achieved in accordance with company expectations, in this case, banking. Thus hypothesis six is accepted. This study supports the research conducted by Maelani et al. (2021) and Supratinigrum & Lukas (2021), which state that information technology has an impact on managerial performance through the management accounting system.

5. Conclusion

The results showed that the direct effect of decentralization and environmental uncertainty on the accounting management system showed positive results, while the direct effect of information technology has a negative effect on the management accounting system. Then, the indirect effect of decentralization and environmental uncertainty on managerial performance through information technology showed a positive impact, while the indirect effect of information technology had a negative impact on managerial performance through management accounting systems. BPR, as a financial institution, has many challenges to compete with other financial institutions, so there is a need for delegation of authority from top-level managers to managers below them because sometimes top-level managers lack the ability to obtain fast information due to the current environment where uncertainty is very high. A fast and accurate information system is also needed to support organizational performance, but the complexity of the information technology used can sometimes actually hinder performance improvement, so every organization should be able to create a system that fits the characteristics of its organization by taking into account existing human resources. This research shows that decentralization has a positive effect on the management accounting system, meaning that this research proves that with the delegation of authority, there will be accelerated decisions in creating a management accounting system that is in accordance with the characteristics of the institution or organization. Each BPR must have different characteristics so that the management accounting system created will also be different. In addition, with the delegation of authority, employees can have the opportunity to express their opinions to the fullest about the system to be used. High environmental uncertainty requires organizations to adapt to deal with it, so a system that can mediate high environmental uncertainty is needed. In this study, it was found that environmental uncertainty had a positive effect on the management accounting system, meaning that this study proved that when changes occur in the organizational environment, the management accounting system used should also follow these changes. Because if the system users cannot be flexible following changes in the organizational environment, it can have an impact on organizational performance. In addition, today's organizations are required to be agile organizations. The Management Accounting System is a system created with the help of information technology such as computers and other IT devices, but because Human Resources is the driving force of the organization, when an organization uses information technology that is complex and cannot be used optimally by employees, the information technology is not having a lot of impact on organizational performance. In this study, it was found that information technology has a negative effect on the management accounting system; this proves that when a management accounting system is used on a complex and less user-friendly information technology basis, the management accounting system will make it difficult for employees to work. For this reason, companies must adapt to the competencies of their employees when building technology-based systems. Decentralization and environmental uncertainty have a positive effect on organizational performance through the management accounting system. This proves that large organizations with many branches will also face big challenges because they will be faced with fluctuating situations and conditions that cannot be predicted in advance by the existing management accounting system. exists, so there is a need for delegation of authority so that decision-making can be faster in responding to the turmoil that exists around the organization. The need for delegation of authority in large organizations is also because each branch is in different environmental uncertainties, so the systems built can also be different from one another, so when there is delegation of authority to managers under them who have more information when compared to top managers can then improve overall managerial performance. Information technology has a negative effect on managerial performance through the management accounting system; this proves that the organization is very close to human resources in it. Where when the information technology used is too complex and high while the human resources as users are not ready or do not consume adequate information technology, the system built will actually make employees feel difficult to use it. Based on the results of this study, the researcher feels confident that why financial institutions such as BPRs have not used information technology as is done by commercial banks by making massive use of digital platforms such as i-banking, etc., because the human resources working in these organizations do not have sufficient competence. inadequate, and there is no special section that deals with information technology issues; the segments targeted by financial institutions such as BPRs are mostly micro and small business actors whose IT adoption capabilities are very minimal, which ultimately means that the management accounting system used in BPR institutions is still minimal from the adoption of information technology that complex and most of them still use the manual recording. For this reason, the researcher recommends that top managers at BPRs provide opportunities for their employees to improve their skills in using information technology, form a unit tasked with creating a reliable management accounting system, and be able to handle problems in the system that has been created. Because it is undeniable that the progress of information technology is very rapid as it is currently bringing such a large positive side to the development of organizational performance, organizations that do not make the most of information technology can lose competitiveness with organizations that can maximize the use of information technology, and coupled with the COVID-19 pandemic which limits face-to-face meetings with consumers, organizations should adapt to online services to reduce face-to-face interactions.

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