

Effect of Successful Implementation of SIPKD and Human Resource Competence in Supply Chain Management and Budget Decision Making (Survey of Local Governments in West Java and Banten Provinces)

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Abstract- This study aims to determine the effect of the successful implementation of SIPKD and human resource competencies on supply chain management and budget decision-making quality. Hypothesis-testing research is conducted using qualitative primary data collected from questionnaires. The total population of the data set was 37 local governments. Structural equation modeling is the analytical method used to measure the successful application of SIPKD and human resource competence on financial statement quality and budget decision-making quality. The results of this study indicate that the successful implementation of SIPKD and human resource competence significantly influence financial statement quality. An improvement in financial statement quality is influenced by the successful implementation of SIPKD, and human resource competencies improve budget decision-making quality.

Keywords- successful implementation of SIPKD, human resource competencies, quality of financial reports, supply chain management.

1. Introduction

A supply chain consists of all parties involved, directly or indirectly, in fulfilling a customer request. The supply chain not only includes the manufacturer and suppliers, but also transporters, warehouses, retailers, and customers themselves. Within each organization, the supply chain includes all functions involved in receiving and filling a customer request. Generally, decision making in government administrations, as in organizations, is critical, given that the impact is felt by all components of society in various aspects of life. By-Law Number 23 Year 2014 concerning the regional government, which is a change from Law Number 22 Year 1999 and Number 32 Year 2004 on the implementation of regional autonomy, gives authority to the regions based on decentralization by delegating the rights to resource availability and the responsibilities for allocating and using these resources to the greatest extent possible for regional development progress in the form of real and responsible broad autonomy. This study focuses on decision making to

increase locally generated revenue and determine the allocation of direct expenditures. This phenomenon is based on locally generated revenue data that show that the independence of the region at the regency/city government level in the provinces of West Java and Banten is still very low. Apart from these conditions, the Director-General of Treasury of the Ministry of Finance, Marwanto Harjowiryono, stated that his party is currently working to improve the quality of accrual-based financial reporting for better accountability and policymaking. At present, the accounting or financial system process has developed along with the progress of the modern financial system. Government institutions must increasingly improve financial performance quality to follow the development of accounting because information users, especially the general public, demand increased accountability and transparency in these institutions. Given this background, the problems to be examined are as follows.

Do the successful implementations of SIPKD and human resource competence have direct effects on financial statement quality? Furthermore, do these independent variables have an indirect impact on decision-making quality through financial statement quality?

2. Literature review

Agency Theory: Agency theory as pioneered by [1] defines an agency relationship as a contract between one or more people (principals) who want another person (manager) to carry out services by delegating decision-making authority to the agent. Agency theory states that companies that separate management and ownership functions are vulnerable to agency conflicts. In the agency model, a system is designed that involves both parties, namely, the management and the owner.

Decision Usefulness Theory: The financial reporting perspective that focuses on reporting information that is useful to investors is called a decision usefulness approach. The first person to use

this decision usefulness paradigm was Chambers. The decision usefulness approach has two perspectives, namely, the information perspective (information perspective) and the measurement perspective [2-15]. The information perspective emphasizes full disclosure (full disclosure), regardless of its form, to increase the usefulness of accounting information for investors.

High-Reliability Organization (HRO)

Theory: HRO theory recognizes that certain organizational factors allow active and latent failures to be compiled and incubated to the point at which rules and regulations exist to reduce the level of organizational failure [16-20]. HRO can reduce the risks associated with human-technical system interactions by designing initial systems to address complex organizational factors [21] that can increase the organizational vulnerability paradigm [22].

Regional Financial Management Information System (SIPKD): The accounting information system maintains a company's financial assets and provides long-term estimates. Accounting information systems collect, record, store, and handle data to provide information to decision makers through the use of sophisticated technology or simple systems, or a combination [23]. Based on the literature [24-29], accounting information system measurements, especially for local governments, are carried out through the following dimensions and indicators:

1. Resources/personnel, implementing equipment and the rule of law
 - A. Availability of qualified human resources to implement accounting information systems;
 - B. Eligibility of regional regulations or regional head decisions governing accounting information systems; and,
 - C. The existence of regional regulations or decisions of regional heads governing accounting information systems.
2. Tasks
 - A. Implement accurate data processing;
 - B. Controlled data; and,
 - C. Timely provision and distribution of information.
3. Purpose
 - A. The fulfillment of information needs for decision making in the planning and control process of operations.

Human Resource Competencies: A competency is an underlying characteristic of an individual that is causally related to criterion-referenced effective and superior performance in a job or situation. An underlying characteristic means that competency is a relatively deep and enduring part of a

person's personality and can predict behavior in a variety of situations and job tasks. Causally related means that competency causes or predicts behavior and performance. Criterion-referenced means that the competency predicts who does something well or poorly as measured by a specific criterion or standard. Examples of criteria are the dollar volume of sales for salespeople or the number of clients who stay "dry" for alcohol-abuse counselors [30]. In [9] added that competency is a method that focuses on identifying the measurable and developable human characteristics that predict superior job performance and satisfaction (without race, age, gender, culture, or credential bias).

In [19] stated that, based on the performance function in practice in each section, the competency dimensions can be described as follows:

1. Knowledge, which includes a theoretical and professional understanding, use of evidence, principles, and procedures;
2. Skills, which includes cognitive knowledge and psychomotor and social skills needed to carry out predetermined actions; and,
3. Attributes, which includes personal qualities, characteristics, and behavior concerning the environment.

Supply Chain Management: Global supply chains are evolving into dynamic process networks in which companies connect in novel combinations based on the context and requirements of individual projects. The accuracy of financial information is essential because ratios such as debt-equity, earnings per share, and net leverage are used to make inseparable business decisions [14]. In [22] defined financial reporting as the process of identifying, measuring, accumulating, analyzing, preparing, interpreting, and communicating financial information to external users, such as shareholders, suppliers, banks, and government regulators.

In [26] suggested that financial reporting quality refers to accounting information quality, namely, the qualitative characteristics of accounting information. According to [17], the qualitative characteristics of financial statements are as follows:

1. Understandability;
2. Relevance;
3. Reliability; and,
4. Comparability.

Traditionally, financial reporting has generally occurred in the context of annual reports of public companies. However, SAC1 recognizes that, in many instances, the decision maker needs to rely on financial statements.

Demand for specific supply chain positions is predominantly expected to remain constant, with some growth predicted for positions in logistics information systems tactical and operational, warehousing

operational, customer service tactical and transportation operational.

Budget Decision-Making Quality: Terry and In [15] defined decision making as choosing among two or more alternatives that arise. Leadership acts to solve problems faced by the organizations they lead by selecting one of the alternatives. In [25] stated that decision making is the process of identifying a variety of different actions and choosing one decision that is right for a particular situation. This process is in line with [18], who stated that decision making is the process of choosing among competing alternatives.

Based on the literature [10],[16], in this study, the dimensions and indicators used to measure decision-making quality are as follows:

1. Improvements in the quality of the decisions made to solve problems accurately, and the decisions made have no negative impact;
2. Reduction in decision-making time, consisting of decisions made more quickly and decisions made on time; and,
3. Better budget management, including synchronization of regional government policies with central government policies and following principles and policies for preparing regional revenue and expenditure budgets in accordance with the technical compilation of such budgets and better allocating resources.

Effect of Successful Implementation of SIPKD on Financial Statement Quality: In [11] stated that accounting information systems and internal controls have a positive relationship with financial reporting in the context of producing reliable financial reports because accounting information systems are considered as supporting corporate financial reporting. At present, the development and support of information technology has enabled reports to be generated and made immediately available, and to be summarized and reported by different segments, providing for the possibility of diversifying information at the required transaction level [11].

Effect of Human Resource Competence on Financial Statement Quality: Human resources play an essential role in preparing financial statements. Competent human resources in the government who can do their jobs correctly will produce good quality financial reports under the rules set by [29]. The results of the research by [5] indicate that professional ethics (competence) have a significant effect on improving the quality of the qualitative characteristics of financial statements, which is in line with research conducted by Ismail and King [20].

Effect of Financial Statement Quality on Budget Decision Making Quality: Using information presented in financial statements, leadership makes the best decisions as a form of responsibility and demands their position as leaders. According to [17], a decision

is the result of solving a problem faced by the firm. Decision making deals with answers to questions about what to do and so on regarding the elements of planning. Based on the literature [5],[6],[10], and logical thinking, the authors conclude that a positive relationship exists between financial reporting and making decisions.

Effect of Successful Implementation of SIPKD on Budget Decision-Making Quality: Accounting information plays a role not only as collector and processor of data into information in the form of financial statements but also in providing information to management for planning, resource allocation, measurement, and control [30]. This information then becomes a reference during decision making. Decision making is the most crucial aspect of management activities. An organization's future is determined by current decisions being made. Management needs different tools to make different decisions, and one of these tools is the accounting information system, which assembles the main parts of the information that is directly used in decision making [21,27,28]. Provincial/district/city governments have an interest in quality local financial information to assist them in making optimal financial decisions [12].

Effect of Competence of Human Resources on Budget Decision-Making Quality: To assist with implementing new demands for the organization and to contribute to decision making, professionals need to have skills, competencies, and personal attributes that are more flexible than their counterparts [25]. Data analysis users without the appropriate analytical skills and knowledge can hamper improvements in decision-making performance [11]. Conversely, increasing competence results in improved decision-making performance [16].

Based on the literature [8,16] and logical thinking, the authors conclude that a positive relationship exists between human resource competence and decision making.

Effect of Successful Implementation of SIPKD on Budget Decision-Making Quality through Financial Statement Quality: The results of research conducted by [6] indicated that computer information accounting systems increase the reliability of the information, which in itself facilitates decision making by managers. Based on [9], and logical thinking, the authors concluded that a positive relationship exists among accounting information systems, financial reporting, and decision making.

Effect of Competence of Human Resources on Budget Decision Making Quality through Financial Statement Quality: Human resources play a vital role in the preparation of financial statements. Human resources working in the government who are competent in their fields and able to do their jobs correctly produce good quality financial reports and do so by predetermined rules. Good quality financial statements help investors make decisions [19]. Several interested parties will certainly use financial reports

produced by local governments as necessary information for economic, social, and political decision making and as evidence of accountability and management [23]. In [20] stated that information is useful if it can support decision making and can be understood by users.

3. Research methodology

Target Population and Samples: The target population in this study is all regional governments in the West Java and Banten Provinces. A total of 37 such governments exist, consisting of two provincial

governments, 13 municipal governments, and 22 regency governments.

Methods, Statistical Test Results, Hypothesis Tests, and Discussion: The data analysis method used in this research was the structural equation modeling approach. Model fit testing is conducted to evaluate the degree of matching or goodness of fit between the data and the model [14]. The results of testing the suitability of the model are provided in Table 1.

Table 1. Evaluation of Fit Structural Model Indexes

Goodness of Fit Indicators	Cut Point	Value	Decision
Chi-square	$p\text{-value} \geq 0.05$	1,000	Perfect Fit
RMSEA	$RMSEA \leq 0.08$	0,000	Perfect Fit

Source: Statistical Results (2019)

The goodness of fit statistical results in Table 1.1 indicate that $RMSEA \leq 0.08$, or that the model built for this research is a good fit. The $P\text{-value} = 1,000 > 0.05$ indicates a very good match. The combination of the various matching and all of the testing criteria indicate good results.

After the overall model is declared a fit, an evaluation or analysis of the structural model includes checking the significance of the estimated coefficients. By defining a significance level ($\alpha = 0.05$), each coefficient representing the causal relationship is hypothesized to be statistically significant. Moreover, also needed is an evaluation of a standard for which all coefficients have variants and the maximum value is 1 [14]. The results of the t-test for this study are presented in Figure 1.

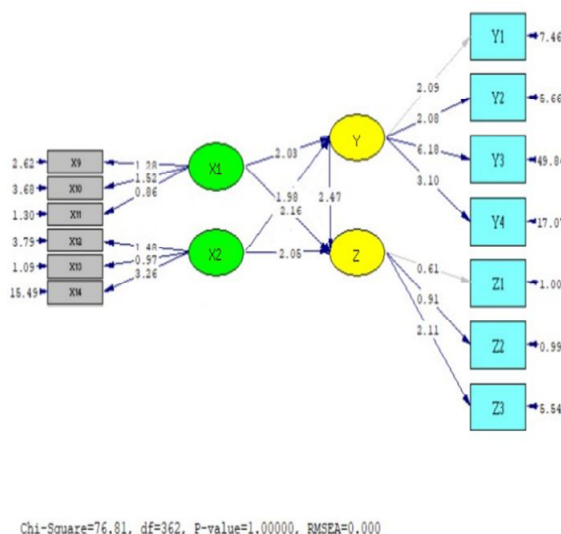
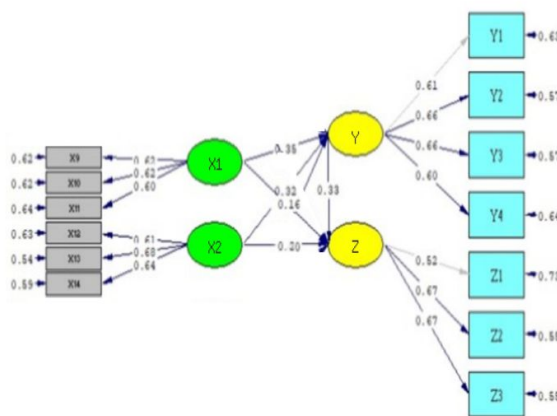


Figure 1. Research Model Diagram

In the model shown, the construct coefficient, loading factors, and t-values are met. In the goodness of fit model, all indicators required for a model fit have reached the value of a good fit. The test indicates that the constructed value produced has met the required value, and it can be said to be significant if the t-count

is higher than the t-table value. The t-table value used in this study was 1.96 at a 95% confidence level. The t-value model indicates the magnitude of the influence among the latent variables through the resulting model. The results of the model estimation are presented in Figure 1.2.



Chi-Square=76.81, df=362, P-value=1.00000, RMSEA=0.000

Figure 2. Result Model Estimation

$$Z = 0.33 * Y + 0.16 * SIA + 0.20 * KSDM, \text{Errorvar} = 0.15, R^2 = 0.85 \quad (2).$$

Structural model analysis results: Figure 1.2 provides the overall estimated value of the model expressed in the following equation:

$$Y = 0.35 * X1 + 0.032 * X2, \text{Errorvar} = 0.12, R^2 = 0.88; (1)$$

and

After evaluating the overall fit of the structural model and the model is declared fit, the next process is to test the hypothesis and causal relationships between the research variables.

Table 2. Research Hypothesis Test

No	Path	t-value	Impact			Null Hypothesis (H ₀)	Alternative Hypothesis (H _a)
			Direct	Indirect	Total		
1	X1 → Y	2,03	0,35	-	0,35	Rejected	Accepted
2	X2 → Y	2,16	0,32	-	0,32	Rejected	Accepted
3	Y → Z	2,47	0,33	-	0,33	Rejected	Accepted
4	X1 → Z	1,98	0,16	-	0,16	Rejected	Accepted
5	X2 → Z	2,05	0,20	-	0,20	Rejected	Accepted
6	X1 → Y → Z	2,03	0,35	0.35 * 0.33 = 0.1155	0,465	Rejected	Accepted
7	X2 → Y → Z	2,16	0,32	0.32 * 0.33 = 0.1056	0,425	Rejected	Accepted

Source: Statistical Results (2019)

Test Results of the Effect of Successful Implementation of SIPKD on Financial Statement Quality: The application of SIPKD as part of a management information system represents one of the essential systems of economic and organizational unity. This study identifies the impact of using accounting information systems on financial statement quality and on decision making and accelerating the completion of departmental work. Previous studies that supported the results of research that found that the successful implementation of SIPKD has a positive influence on financial statement quality are as follows [3-5, 9]. An accounting information system can support a company's financial statements. Such a system might be related to how information is delivered, who is the recipient of the information, how the information will be used and for what purpose, and other vital issues.

Test Results of the Effect of Competence of Human Resources on Financial Statement Quality: In [13] stated that every organization is formed to

achieve specific goals, and achieving these goals is called a success. To achieve success, a strong foundation is needed in the form of leadership and employee competencies that can strengthen and maximize the overall competence. Educational background is an exciting topic to analyze to determine human resource competency; it is not the most important topic but at least has a significant influence. Previous studies that supported the results of the research that found that human resource competence has a positive influence on financial statement quality are as follows [24, 27]

Test Results of the Effect of Financial Statement Quality on Decision-Making Quality: Transparent financial management is a demand of stakeholders at both the central and regional levels and is related to realizing the prosperity of a just society. The Head of State and the Regional Head as the manager of state/regional finances have been asked to carry out the mandate to manage state/regional

finances for the public in an election. Government financial statements generally emphasize who was responsible for whether or not the applicable budget or legislation used the resources obtained. Thus, financial statements describe information related to sources of government revenue, how such revenue is used, and the government's current financial position. Previous studies that supported the results of research that found that financial statement quality have a positive influence on decision-making quality are as follows [5, 6]

Test Results of the Effect of Successful Implementation of SIPKD on Decision-Making Quality: The Regional Government Accounting System is a systematic set of procedures, arrangements, equipment, and other elements to realize the accounting function through an analysis of transactions related to the financial statements within a local government. The information generated should already meet the standards of quality and should be reliable. The information needed is related to the decision-making process concerning the regional government budget to enable the plan for the use of the budget to be developed optimally and to be optimally absorbed at the time of its realization. Some previous studies that supported the results of research that found that the successful application of SIPKD has a positive influence on decision-making quality are as follows [13, 22].

Test Results of the Effect of Competence of Human Resources on Decision-Making Quality: Previous studies that supported the results of research that found that human resource competence has a positive influence on decision-making quality are as follows [8, 9].

4. Conclusions and recommendations

Supply chain is a term “now commonly used internationally –to encompass every effort involved in producing and delivering a final product or service, from the supplier's supplier to the customer's customer”. As the name implies, the primary focus in supply chains is on the costs and efficiencies of supply, and the flow of materials from their various sources to their final destinations. Based on the results of the research conducted, to determine the effect of the successful implementation of SIPKD and human resource competencies on financial reporting quality and budget decision-making quality, the following conclusions can be drawn.

1. These results are in line with research by [1], who found that accounting information systems can improve the department's financial reporting quality because the use of the appropriate information systems procedures and controls will be carried out well, enabling the implementation process and stages of work to be more secure, thus guaranteeing financial statement quality.

2. Although human resources competence has a positive influence on financial reporting quality, it can still be said that weaknesses remain. These weaknesses result from training being rarely conducted for officials who have the ultimate authority, making the decision makers the main factors that cause such weaknesses. This conclusion is in line with research from [29], who found that human resource competence has a positive effect on the preparation of financial statements.
3. Financial statements are well developed and considered an essential source of information for decision making. This concept supports the results of the research by [15], who suggested that quality financial reports have a positive effect on decision making.
4. In [23] stated that several interested parties will certainly use financial reports produced by local governments as necessary information when engaging in economic, social, and political decision making as well as evidence of accountability and management.

5. Recommendations

Referring to the conclusions that have been previously presented, the recommendations from this research are as follows.

Regulations must exist that can synchronize with the central government the requirements for the preparation and development of Accounting Information Systems in each region.

We continue to improve competencies, especially conceptual skills training, humanity skills, and technical skills, in the field of accounting for budget users in regional job training centers as a reporting entity, inspectorates as a government internal supervisory apparatus, and regional apparatus work units as accounting entities.

A need exists to increase the understanding of local financial stakeholders through open information under statutory regulations, limited focus group discussions, and even seminars.

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