

The Influence of Intellectual Capital on Corporate Sustainability through Management Accounting Practices and Corporate Performance Companies of Agroindustry Based in East Jawa

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Abstract—This research is to test and analyze Intellectual Capital in influencing the Company's Sustainability through the Practice of Management Accounting and Corporate Performance in Agro-industry-based companies in East Java. The population of this research is Agroindustry companies in East Java, while the sample of this study is 135 Agroindustry companies which are taken by proportional random sampling, with respondents of company level managers. Data collection uses questionnaires, while data analysis uses Structural Equation Modeling (SEM). The results of testing and analysis show that: Intellectual Capital has no significant effect on Management Accounting Practices; Intellectual Capital has a significant effect on Corporate Performance ; Intellectual Capital has a significant effect on Corporate Sustainability ; then Management Accounting Practices have a significant effect on Corporate Performance ; Management Accounting Practices have a significant effect on Corporate Sustainability ; and Corporate Performance has a significant effect on Corporate Sustainability . No proof of Intellectual Capital has an effect on Management Accounting Practices because management accounting practices are more strongly influenced by the Professional Ethics of Accountants. Based on the results of the investigation to examine the role of endogenous mediation variables, it is known that the seventh hypothesis (H7) about the influence of independent variables (intellectual capital) on the mediating variable (management accounting practice) is not significant, it can be said that the management accounting practice variable is not a mediating variable in the relationship intellectual capital, management accounting practices and corporate performance. Thus H7 states that: Management accounting practices mediate the relationship between intellectual capital and corporate performance, significantly rejected. The eighth hypothesis (H8) is known that the influence of independent variables (intellectual capital) on the mediating variable (management accounting practice) is not significant, it can be said that the variable of management accounting practices is not a mediating variable in the relationship of intellectual capital, management accounting practices and corporate sustainability. Thus H8 states that: Management accounting practices mediate the relationship between intellectual capital and corporate sustainability, significantly rejected. The ninth hypothesis (H9), tenth (H10) and eleventh hypothesis (H11) can be seen that management

accounting practices have a significant effect on corporate performance, corporate performance has a significant effect on corporate sustainability, indirect influence 0.267 is smaller than direct influence 0.383, it can be said that corporate performance as a mediating variable part (partial mediation). Hypothesis 9 (H9) which states that: Corporate performance mediates the relationship between intellectual capital and corporate sustainability, is significantly accepted. Hypothesis 10 (H10) which states that: Corporate performance mediates the relationship between management accounting practices and corporate sustainability, is significantly accepted. Hypothesis 11 (H11) which states that: Among the management accounting practices and corporate performance variables there are full mediation, significantly rejected.

Keywords—*intellectual capital; management accounting practices; corporate performance; corporate sustainability*

I. INTRODUCTION

A. Background

Globalization and economic uncertainty as well as technological developments bring significant changes to the management of a business and the determination of competitive strategies. Business people are beginning to realize that competitiveness is very important by strengthening internal potential and being able to adjust external changes. An important factor in business is not only the ownership of tangible assets, but intangible assets are also important factors in achieving corporate performance and corporate sustainability. Intangible assets that are important factors in business include intellectual capital. Besides intellectual capital, another important thing is management accounting practice. With the strong intellectual capital and precisely management accounting practices, the company's performance will be achieved optimally [1].

Intellectual Capital has become the focus of attention in various fields, both management, accounting, information technology, and sociology [2]. Resource- based view states

that Intellectual Capital are company resources that play an important role, as well as physical capital and financial capital. Based on this context, companies need to develop strategies to be able to compete in the market. In principle, performance and sustainable ability a company is based on Intellectual Capital, so that all owned resources can create added value (value added). Indonesia, research on Intellectual Capital which have been carried out by Ulum [3], which examines the relationship Intellectual Capital towards company performance and future company performance. The results of this study prove that: (1) Intellectual Capital (VAIC) affects the company's financial performance, (2) Intellectual Capital (VAIC) has an effect (3) The rate of growth of a company's intellectual capital (ROGIG) does not affect the company's financial performance in the future.

Management accounting is composed primarily to produce information that is useful for decision makers by management, which includes information on costs, basic prices, so that supervision and cost analysis made in standard form can be done through management accounting. Companies that design management accounting systems will help the organization concerned through its managers, namely in planning, organizing, directing and making decisions. To help with their activities, managers need information support. Management accounting systems are formal systems designed to provide information to managers. Management accounting systems planning which is part of the organization's control system needs attention, so that it can be expected to make a positive contribution in supporting the success of the management control system. Management accounting systems can help managers in controlling activities so that they are expected to help companies achieve their goals.

East Java as a province with almost 60 percent of the geographical area and its population is an agrarian community, so naturally the regional economic support sector is from the agricultural sector as well. Related to this, of course, also the development in the agrarian sector needs attention in order to earnings and the economy of East Java still has a number corresponding to the expectations of government policy provincial in order that local revenue achieved the society per capita income also achieved, industry sector Agroindustry can be optimal. This is in line also with the Vision, Mission and Strategy Development of East Java in 2009-2014, namely: Delivering a fair society and prosperous a mandate of the 1945 Constitution, which must be adhered to and intended to be realized. A prosperous society is a prosperous, inadequate or inadequate society, which not only has physical or material dimensions, but also spiritually. A prosperous society is a society that is just, dignified, and fulfilled its basic rights, free to express thoughts and opinions, free from fear and bondage of discrimination, free from oppression, with quality human resources physically, psychologically and intellectually. Realizing prosperous and prosperous East Java is a necessity. On the basis of geographical conditions, the size of people's livelihoods in the agrarian sector and East Java's development policies in 2009-2014, the agricultural sector, one of which is in the agro-industrial sector, needs strong support so that industries that use raw materials from yield the agrarian / agro sector can produce optimal output , so as the province whose

agrarian industry is able to produce agroindustry industry products while the community especially farmers who produce raw materials in the form of agricultural products can still supply raw materials to the industry and ultimately the farmers' income will be maintained and even go up. Based on this thinking, this study focuses on the theme: "The Influence of Intellectual Capital on Corporate Sustainability through Management Accounting Practices and Corporate Performance Companies Agroindustry Based in East Java ".

B. *Research Problem*

- Does intellectual capital influence on management accounting practices?
- Does intellectual capital affect corporate performance?
- Is capital intellectually influential towards corporate sustainability?
- Does management accounting practices affect corporate performance?
- Does management accounting practices affect corporate sustainability?
- Does corporate performance affect corporate sustainability?
- Does management accounting practice mediate the relationship between intellectual capital and corporate performance?
- Does management accounting practices mediate the relationship between intellectual capital and corporate sustainability?
- Does corporate performance mediate the relationship between intellectual capital and corporate sustainability?
- Does corporate performance mediate the relationship between management accounting practices and corporate sustainability?
- Among the variables of management accounting practices and corporate performance which one mediates in full or partially mediates or not mediation?

II. LITERATURE REVIEW

A. *Overview of Intellectual Capital*

Noting the importance of intellectual capital that is positioned in a strategic place in the context of performance or sustainability of an organization or company, then: First, the phenomenon of the phenomenon of a shift in the type of community of industrialized societies and services for the knowledge society, such as Drucker to predict and simultaneously describe the shift towards the era of the knowledge society in his book *Management in the Middle of Major Changes* [4]. In this type of society, knowledge, as well as capability for learning, and the act of investing for the purpose of building intellectual bases are the drivers of rapid change in society and therefore humans as knowledge workers become the

main actors. The economy characterized as knowledge has three characteristics plus one key characteristic, namely 1) research and education, 2) relations to growth, and 3) learning and capability, and 4) the importance of change, the dominance of a flatter structure, and social capital.

B. Measurement of Intellectual Capital

Referring to Fitz-enz, which says that ending the 20th century the managers of the organization have accepted that humans and not cash, buildings and equipment are the distinguishing factors of performance [5]. Especially when entering society or a knowledge-based economy, the role of human capital and other components of intellectual capital is very critical.

Based on the opinion above, and considering the value of its contribution which is increasingly significant, a reliable measurement system is needed for the purpose of measuring to find out where the value (economics) and potentials can be used to manage intellectual capital for growth. One important problem faced is how to measure intangible assets or intellectual capital. This is allegedly because we have been living in and inherited by a management and accounting regime that ignores intellectual capital as an asset of the organization.

Existing measurement methods can produce results where an organization or society is in a condition of high or low intellectual capital, but it is interesting that explicitly in the context as stated by North and Kares say that intellectual capital is appointed and measured precisely through the concept or waiver of the conditions (ignorance) [6], i.e., the condition of lack of knowledge, education, and information something or unconsciousness (unawareness) will be something the state. North and Kares call that this measurement as the ignorance mater [6].

C. Overview of Management Accounting Practices

In accordance with the focus of this study, the review of Management Accounting Practices is inseparable from the Contingency Approach. The contingency approach to management accounting is based on the premise that there is no universal management accounting system that is always appropriate to be applied to the entire organization. That is because the management accounting system depends also on the situational factors that exist, both outside and within management. Researchers have applied contingency approaches to analyze and design control systems, especially in the area of systems management [7].

The objectives of management accounting in detail according to Hansen and Mowen are [8]: (1) To provide information for costing services, products and other objects of interest to management, (2) To provide information for planning, controlling, evaluation, and continuous improvement, (3) To provide information for decision making.

From the definition it can be concluded, the role of management accounting is to present information that is useful in determining costs, especially for products. Besides management accounting also provides information for

planning, controlling and evaluating as well as for decision making. Broadly speaking, management accounting consists of two broad categories, namely functional-based systems and activity-based management [8].

D. Implementation of Management Accounting Practices

The use of Management Accounting Information is the application of information in the decision-making process by company leaders. Engineering information system intended for management purposes, h aru s attention to the interests of officials so that the decision makers the information generated by the system is really beneficial for managers in run management functions. The use of Management Accounting Information relies heavily on the leader and concerns the frequency and type of Management Accounting Information reporting required by the leader. The form of management accounting reports for internal parties, namely detailed reports that are routine or not routine, for example, reports on each part of the company, each product type, each individual activity, each division / department, every region, every center of accountability and report on performance or achievements and special analysis reports.

E. Company Performance Review

Performance according can be defined as follows: "performance is a management accounting statement that will actually compare between an activity with a standard." In terms of performance measurement, basically is to compare the results obtained with costs incurred to determine the level of efficiency, while measuring the effectiveness by comparing the results obtained with the targets set. thus the performance assessment is the determination of periodic operational effectiveness of an organization, part of the organization, and employees based on objectives, standards and criteria that have been set previously. the main objective performance assessment is to motivate employees to achieve organizational goals [9].

In some cases, management is an administrator of capital that is used in the company and is tasked with optimizing net income for all assets used, therefore management is the party responsible for achieving company goals, so management has an interest in knowing, measuring, planning and controlling all financial risks. Included in the scope of these responsibilities, management must create sound financial ratios so that it can guarantee the achievement of the interests of all parties, both internal and external to the company. Financial ratios are numbers obtained from the comparison of financial statement posts with other posts that have a relevant and significant relationship. This financial ratio is very important to analyze the financial condition of the company.

F. Size of Corporate Performance

Company performance can be measured through various aspects both financial and non-financial. Company performance is closely related to the management control system of the company concerned. Management control systems are processes where managers influence other organizational members to implement organizational strategies. That performance is the result of work that can be achieved by a

person or group of people in an organization, in accordance with the authority and responsibility of each, in order to achieve organizational goals. Managerial performance is the individual performance of organizational members in managerial activities including: planning, investigation, coordination, staffing arrangements, negotiations, and others. Many studies include managerial performance, including strategic management, marketing and operations management. Lakhali et al. describe that the company's performance includes [10], 1) Financial Performance (Financial Performance) 2) Quality of Products (Product Quality) 3) Operational Performance (Operational Performance).

Meanwhile the measure of company performance according to Tyles et al., that company performance can be measured through the company's ability to achieve [11]: 1) Financial performance which includes: profit, growth, return on assets, stock performance 2) Non-financial performance that include: leadership, competitiveness, new product success 3) overall performance 4) inner performance: ability to respond to economic change.

G. Company Sustainability Review

Business activities at the level of international companies, regional companies and small companies all have an impact on natural systems, natural resources, clean water supplies and include increases in pollutants and hazardous waste. Company sustainability is something that is expected and maintained by every company. Sustainability will be achieved if the company itself pays attention to aspects that support sustainability itself. The companies need to pay attention the environmental aspects, social aspects besides economic aspects so that environmental, social and economic progress normally and positive, and thus the sustainability of the company will be achieved.

The balance between economic / financial performance, social responsibility and environmental sustainability can be expressed by the triple bottom line model. With the increasing attention from the business community on the development and implementation of proactive sustainable strategies while increasing stakeholder engagement. According to Epstein, sustainable performance can be seen in nine principles that serve as the foundation for regulating the impact on stakeholders namely ethics, governance, transparency, business relationships, financial health, engagement, involvement of community and economic development, the value of goods and services, the practice of appointment of workers, the potential protective of the environment. Stakeholder relations is a process that continues from time to time with stakeholder's awareness, knowledge, satisfaction, and consequences.

The combination of eco-efficiency indicators, environmental management systems, environmental costs, sustainable energy production, environmental damage costs, environmental levies, and the number of complaints that are included are mixed indicators that provide a good picture of environmental performance and responses from the industrial and energy sectors [12].

H. Relationship of Intellectual Capital with Management Accounting Practices, Corporate Performance and Corporate Sustainability

As explained above, that between Intellectual Capital, Management Accounting Practices, Corporate Performance and Corporate Sustainability are interrelated parts. Referring to the theory of Resources Based View (RBV) which states that differences in resources and the ability of companies with competing companies will provide competitive advantages [13]. With the competitive advantage that the company has, it will improve the performance of the company itself. So intellectual capital can be said to be an intangible asset that has a significant impact on performance and all success in business. Research on the relationship between intellectual capital and company performance conducted by Bontis, the results of these studies indicate that intellectual capital has a significant impact on company performance [14].

Human Capital must be managed and developed by the company in order to improve performance. Human capital is an important management in banking because it is human capital that will carry out operational activities in a bank. Human Capital is measured by an indicator, Human Capital Efficiency (HCE). Structural Capital includes all knowledge in a company other than knowledge that exists in human capital, which includes databases, organizational charts, manual processes, strategies, routines and something of higher value than material values [15]. Structural Capital is a supporting tool for Human Capital in improving company performance. Structural Capital is measured by an indicator, namely Structural Capital Efficiency (SCE). Capital Employed (Capital Employed) is defined as total capital utilized in fixed and current assets of a company [16]. Capital Employed is measured by an indicator namely Capital Employed Efficiency (CEE).

Leif Edvinsson and Pat Sullivan define intellectual capital as knowledge that can be converted into values. VAIC as a measure of the efficiency of intellectual capital consists of three components, namely Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE) and Capital Employed Efficiency (CEE). The combination of the three components will result in company value. Companies in managing knowledge, skills and expertise of human capital supported by structural capital that facilitates the operations of the company, plus the capital used will increase the company's assets. The better the company in managing the three components of intellectual capital, shows the better the company in managing assets. Good asset management can increase profits on a number of assets owned by the company as measured by Return on Assets (ROA). Intellectual capital is recognized as a company asset because it is able to produce competitive advantage and superior financial performance [17].

Discussing about corporate sustainability is not separated from the triple bottom line concept. Zu revealed the theory of the triple bottom line with three main aspects namely, economic, social and environmental. Triple bottom line concept that contains a broader spectrum than the performance of companies that only focus on financial performance, but on the triple bottom line performance that must include the values and criteria to measure the success of the company namely

economic, environmental and social. This means extending a simple reporting framework to account for social and environmental performance in addition to financial performance. It also captures the essence of sustainable development by measuring the impact of these three aspects from the company's operations.

Noting the study of the relationship between intellectual capital, management accounting practices, corporate performance and corporate sustainability as described above, it can be concluded that the first factor that exists is intellectual capital where intellectual capital will influence corporate sustainability reflected through economic sustainability, social sustainability and environmental sustainability. Company sustainability measured through these three aspects is highly dependent on intellectual capital factors which include aspects of human intellectual capital, structural intellectual capital and relational intellectual capital. However, in practice to achieve sustainability between intellectual capital and corporate sustainability there are other factors that have an important role internally, namely management accounting practices and corporate performance. Thus it is clear that corporate sustainability is influenced by intellectual capital through management accounting practices and corporate performance.

III. CONCEPTUAL AND HYPOTHESIS FRAMEWORK

A. *Research Conceptual Framework*

Based on the background, problem formulation, research objectives and literature review presented in the previous chapters, this chapter will present a conceptual framework and research hypothesis. As a basis the conceptual framework will be explained in advance the framework of the thinking process to give direction in a deductive thinking process, which begins with the study of the theories underlying the influence between variables.

In relation to management accounting theory, management accounting includes internal organizational factors that can be controlled by the organization. In accordance with the role of management accounting as a provider of information needed by management in decision making, management accounting is part of the design of accounting information systems. In addition to being based on theory, this research is also based on various empirical studies, namely studies that have been done before. An empirical study will lead to thinking inductively, namely a thought process that starts from a specific one towards a general thought process. Furthermore, from theoretical and empirical studies can be formulated research hypothesis which is a temporary guess that still has to be tested with statistics. After the statistical test is done, the results will be obtained which is the core of the dissertation. The findings obtained from the dissertation will strengthen existing theories. In addition, the findings of the dissertation can also be used as a basis for companies to conduct internal evaluations in order to gain competitive advantage. Benefits can also be taken by the authorities both government and other institutions in making policies.

In this regard, the variables in this research that there is 1 (one) exogenous or construct exogenous known also as the

source variable or independent variable that are not predicted by other variables in the model, the exogenous variables in this study is the Capital Intellectual (X) and there are 2 (two) intervening endogenous variables namely Management Accounting Practices (Y1) and Corporate performance (Y2), and there are 1 (one) endogenous variables bound by Corporate Sustainability (Y3). Based on the description of the research variables and indicators.

Based on the theory of theory about intellectual capital, management accounting, company performance and corporate sustainability, and based on several studies that have been conducted, it shows that the study that is often discussed is the study of intellectual capital with management accounting practices and then associated with company performance. Research that is more sustainable or associated with corporate sustainability has never existed. There is indeed some research on the sustainability of the company, but the research examines more than just environmental aspects and is even more often referred to as environmental sustainability studies. Meanwhile, if it is explored in terms of the sustainability of the company with the triple bottom line concept approach, then the three aspects, namely economic, environmental and social, must get the same position. The nature of this study are of renewal that focuses on the size of the company's performance which has been the company's performance is only measured on the internal aspects which include aspects of financial and non-financial, but in this study will assess that the company's performance was not only measured by the internal aspects but also external aspects, namely environmental aspects and social aspects in addition to the economic aspects that have been used so far.

B. *Research Hypotheses*

Based on several studies the theory of tick and the results of research beforehand about intellectual capital, management accounting practices, corporate performance and corporate sustainability, within the framework of the process of thinking and framework conceptually, it can be formulated in the hypothesis that the effect of some variable against another. On the basis of the theory and results of research, the hypothesis can be formulated as follows:

- Intellectual capital has a significant effect on management accounting practices.
- Intellectual capital has a significant effect on corporate performance
- Intellectual capital has a significant effect on corporate sustainability
- Management accounting practices have a significant effect on corporate performance
- Management accounting practices have a significant effect on corporate sustainability
- Corporate performance has a significant effect on corporate sustainability

- Management accounting practices mediate the relationship between intellectual capital and corporate performance
- Management accounting practices mediate the relationship between intellectual capital and corporate sustainability.
- Corporate performance mediates the relationship between intellectual capital with corporate sustainability.
- Corporate performance mediates the relationship between management accounting practices in corporate sustainability.
- Among the management accounting practices and corporate performance variables can mediate fully the relationship between intellectual capital and corporate sustainability.

IV. RESEARCH METHODS

A. Research Design

This study was based on research explanatory, the research intends to examine and explain the effect of Intellectual Capital on Corporate Sustainability through Accounting Practice Management and Corporate Performance. The consideration that underlies the selection of such a design is that the information contained in the data that has been provided and published can be utilized more optimally for both the development of science and policy. Vinzi et al. mention this kind of research design with the term causal-predictive analysis [18].

The unit of analysis of this study is the top leader of an agroindustry company in East Java, while the top leadership is chosen as a unit of analysis because top leaders are considered to know company policies concerning intellectual capital, management accounting practices, corporate performance and corporate sustainability.

B. Population and Research Samples

1) *Population*: As the population in this study were 218 Agroindustry companies in East Java, with the distribution based on the region consisting of: Regency as many as 153 companies and Cities as many as 65 companies.

2) *Samples and determination of sample size and sampling technique*: The sample of this study was 135 (thirty five) Agroindustry companies in East Java with the respondents being company leaders at the manager level. This sampling is based on guidelines according to Hair et al. the ideal number of samples to be analyzed using SEM is as much as 100-200 samples [19].

Based on this formula, if using an error rate of 1%, the number of samples is 165, if using t level error 5% then the number of samples is 135, and if using an error rate of 10% then the number of samples 122. Thus in accordance with the field of social science that prevalence using a 5% error rate, then in this study the sample was set as many as 135 samples,

so the conditions as suggested by Hair and Issac can be fulfilled [19].

Based on the guidelines and opinions, the sampling process was randomly drawn from the population based on groups of districts and cities whose numbers were determined proportionally, for the Regency area the samples were calculated 153: $218 \times 100\% = 70\%$, while the city area was calculated 65: $218 \times 100\% = 30\%$ after that the percentage results are multiplied by 135 so that the number of samples for the Regency: $70\% \times 218 = 95$ and for the City: $30\% \times 218 = 40$, thus the delivery process can be categorized as proportional random sampling with a total sample of 135 companies.

C. Classification and Operational Definition of Variables

1) *Classification of variables*: The variables to be analyzed in this study are grouped as follows:

- Exogenous variables or exogenous construct is known also as the source variable or independent variable that are not predicted by other variables in the model, the exogenous variables in this study is the Intellectual Capital (X)
- Endogenous variables, namely variables predicted by one or several other variables in the model [20]. There are two types of endogenous variables in this study, namely:
 - The intervening endogenous variable is a variable that has a strong contingent influence on the relationship of the independent variable with the dependent variable. Variable intervening in this research are Management Accounting Practices (Y1) and Corporate Performance (Y2).
 - Endogenous variable dependent or endogenous constructs depend are factors that predicted by a single or multiple constructs. This variable is a variable that is called the dependent variable or dependent variable. Endogenous variables depend on this research Corporate Sustainability (Y3).

2) *Operational definition of variables*: Research variables that will be used as research instruments are: Intellectual Capital (X), Management Accounting Practices (Y1), Corporate Performance (Y2), and Corporate Sustainability (Y3). The same perception about the definition of a variable is needed to prevent differences in perceptions, because that requires an operational definition of each variable clearly. Each question that reflects the indicators of each research variable will be responded to and assessed by respondents using the L scale scale 1 to 5.

Based on the identification of variables, the following is an explanation of the operational definitions of the variables to be studied:

a) *Intellectual capital (X)*: is capital that is non-physical or intangible assets or invisible. This variable was measured by using questionnaires that contained variable indicators as used

by Edvinson and Malone [21], as well as Stewar [22], Bontis [14], where the size used is:

- Human Intellectual Capital (human intellectual capital), is a human capital owned by a company measured through ability, competence, qualification as a person who performs his duties and functions within the company.
- Structural Intellectual Capital (structural intellectual capital), is a structural capital in the company that concerns how the organizational structure is run starting from planning, organizing, controlling to decision making.
- Relational intellectual capital, is the company's capital in the form of the ability to conduct relationships, especially relationships with external parties, both with customers, suppliers and public policy makers.

b) Management accounting practice (Y1): is the presentation of information that is useful in determining costs, especially for products. Besides management accounting also provides information for planning, controlling and evaluating as well as for decision making. The variables of Management Accounting Practice were measured using questionnaires as used by Guilding et al. [11], Mouritsen and Larsen [23] that fill in variable indicators as the measure used is:

- Reporting and decision (reporting and decision), is the result of management accounting practices measured through how the company's ability to provide management accounting information in full so that it can be used as a basis for strategic internal decision making.
- Performance Measurement (performance measurement) financial and non-financial, is the achievement of management accounting practices that measured how the ability to provide management accounting information in financial measures and non-financial.
- Budgetary control is the result of management accounting practices that are measured by how the ability of the company through its management in controlling the budget.
- Capital investment (capital investment), is the result of management accounting practices that are measured by the company's ability to make decisions in making capital investments.

c) Corporate Performance (Y2): is the performance of a company that can be expressed through management accounting which will actually compare between an activity with a standard. The Corporate Performance variable is measured by using questionnaires that contain variable indicators as used by Simons [24], Neely [25], Porter and Millar [26], Atkinson et al. [27], Amaratunga et al. [28] where the size used is:

- Financial performance, is the company's ability to achieve financial performance as measured by

achieving profit, the ability to increase internal financial capacity to rise.

- Non-financial performance (non-financial performance), is the company's ability to perform non-financial performance as measured by the ability to create innovation, increase the capabilities of intangible capital.
- Ability to respond to economic change, is the ability of the company to respond to external changes, especially economic changes that can be measured by being able to meet the wishes of external parties, able to compete in external competition.

d) Corporate Sustainability (Y3): is a company's sustainability in running a business by paying attention to several stakeholder interests. The Corporate Sustainability variable is measured by using questionnaires that contain variable indicators as measured by White et al. [29], namely:

- Economic sustainability, is the ability of the company to achieve its performance sustainably not only in the financial, non-financial aspects but also able to survive in competition through internal and external strategic forces.
- Environmental sustainability is the company's ability to implement its performance not only in achieving financial, non-financial and economic change responses, but also the company's ability to manage the environment which has a positive internal and external impact.
- Social sustainability, is the company's ability to implement its performance through social aspects both for internal companies and especially for external parties.

D. Research Instruments and Measurement

In research data is collected using a list of questions consisting of questions about the characteristics of respondents and questions about the variables under study. The main instrument used in this study is a questionnaire that is a structured questionnaire used to measure respondents' assessment of the variables under study and the facts relating to the respondent, as well as the conditions that the respondents already know. These questions are presented in the questionnaire and the scale to express the response reveals three requirements in the assessment, namely: (1) Measurements must be a process of determining the operational concept, (2). Measurements must be valid or accurate, and (3). The results of the measurement process must be reproducible (reproducible) so that a measurement must be tested for validity (reliability), reliability (reliability) and the process (unidimensionality). Associated with these two measurement test that is often used in assessing the behavior of the measuring instrument, e.g. questionnaires are validity, reliability test and unidimensionality [30].

E. Data Collection Procedure

Data collection in this study was carried out by a survey method that is using a questionnaire containing the measuring construct or variable items used in the research model. The dissemination and collection of data is carried out both directly by asking the willingness of respondents to fill out questionnaires, e-mails or by mail on 2015 January to April.

F. Development of Research Instruments

1) *Testing the purpose and content of the question:* Before the questionnaire sent to the respondents that actually, the questionnaire sought opinions to on some level corporate leaders manager level in order to determine whether they understand the purpose and content of the statements in the questionnaire. They also asked for opinions to improve the meaning of the contents of the questionnaire questions and the grammar of the questionnaire. This test is also conducted to determine per estimate of the length of time filling out the questionnaire required. This opinion is needed so that later the leadership of the company as the respondent understands the purpose of the questionnaire statement.

2) *Testing of research instruments:* Before the questionnaire distributed to pinpinan level managers of companies in the study, the test should be carried out through a questionnaire quality of pre-test or try - out to some corporate leaders manager level as much as 10 people. The purpose of the try-out is to gain confidence that the research instrument will measure what should be measured (valid), and measure the accuracy and consistency of the instrument itself (reliable).

3) *Validity test:* Validity is related to whether a variable measures what should be measured. The validity in the study states the degree of accuracy of the research measuring instrument for the content or the actual meaning measured. Validity test is done by correlating each question with the number of scores for each variable. The number of correlations obtained statistically can be compared with the cut-off of 0.3 with conditions ≥ 0.3 .

4) *Reliability test:* Reliability shows the understanding that the instruments used in research to obtain the desired information can be trusted as a means of collecting data and being able to reveal actual information in the field. High reliability shows that indicators (observed variables) have high consistency in measuring latent variables. A technique that is widely used to measure reliability is Cronbach's Alpha. Hair et al. said that the measurement of reliability for Structural Equation Modeling (SEM) can be done using composite / construct reliability measure or variance extracted measure [19]. The extract of the variant s reflects the total variance in the indicator described by the latent construct. Reliability constructs said to be good if the value of the construct reliabilitinya ≥ 0.7 and extract value variant s her ≥ 0.5 .

G. Data Analysis Technique

1) *Structural equation modeling analysis:* In accordance with the research objectives to analyze and prove h association between exogenous and endogenous both endogenous and endogenous intervening depends, after having tested the validity and reliability of research instrument as a whole. Related to this, the techniques used in data analysis are Structural Equation Modeling (SEM) using the Analysis of Moment Structure (AMOS) package.

The use of SEM allows researchers to examine the relationship between complex variables to obtain a comprehensive picture of the overall model. SEM can test together [31]: (1) The structural model of the relationship between independent and dependent constructs, (2) Model measurement: relationship (loading value) between indicators and constructs (latent variables). The combined testing of structural models and measurements allows researchers to: (1) Test measurement errors as an inseparable part of SEM, (2) Analyze equation factors by testing hypotheses.

SEM analysis techniques allow researchers to test several dependent variables at once, with several independent variables [20]. The steps for conducting SEM modeling are 1) Model development based on concepts and theories, 2) Constructing path diagrams, 3) Translating path diagrams into equations, 4) Choosing matrices and estimation techniques, 5) Assessing identification problems, and 6) Evaluation of the criteria for goodness of fit.

2) *Hypothesis testing:* This study consists of 4 variables, namely: (1) intellectual capital, (2) management accounting practices, (3) corporate performance, and (4) corporate sustainability. Meanwhile in testing the hypothesis used multivariate analysis using SEM using the AMOS program. In testing, it will answer whether the proposed hypothesis can be accepted by comparing the probability value (p) with a significant level (α) which is set at 0.05. If the probability value (p) is smaller than the value of α (0.05), then the hypothesis can be accepted, and vice versa if the probability value (p) is greater than the value of α (0.05), then the hypothesis is not accepted. The step of testing the hypothesis is done, but first a comfirmatory analysis factor is carried out to find out the dimensions that can be used to form a factor or construct.

a) *Testing the first hypothesis:* Intellectual capital affects the management accounting practices.

Testing whether this variable can be used to form a factor or construct is done by looking at the probability value (p) of the lambda (λ) coefficient value. If the probability value (p) lambda coefficient (λ) is smaller than the value of α (0, 05), then the indicator / dimension cannot be used to form a factor or construct.

b) *Testing of the second hypothesis:* Intellectual capital influences corporate performance.

Testing whether this variable can be used to construct a factor or construct is done by looking at the probability value (p) of the lambda (λ) coefficient value. If the probability value

(p) of the lambda coefficient (λ) is smaller than the value of α (0.05), then the indicator / dimension cannot be used to form a factor or construct.

c) Testing the third hypothesis: Intellectual capital influences corporate sustainability.

Testing whether this variable can be used to form a factor or construct is done by looking at the probability p value (p) of the lambda (λ) coefficient value. If the probability value (p) of the lambda coefficient (λ) is smaller than the value of α (0.05), then the indicator / dimension cannot be used to form a factor or construct.

d) Testing the fourth hypothesis: Pre-cik management accounting has an effect on corporate performance.

Testing whether this variable can be used to form a factor or construct is done by looking at the probability value (p) of the lambda (λ) coefficient value. If the probability value (p) of the lambda coefficient (λ) is smaller than the value of α (0.05), then the indicator / dimension cannot be used to form a factor or construct.

e) Testing the fifth hypothesis: Management accounting practices influence corporate sustainability.

Testing whether this variable can be used to form a factor or construct is done by looking at the probability value (p) of the lambda (λ) coefficient value. If the probability value (p) of the lambda coefficient (λ) is smaller than the value of α (0.05), then the indicator / dimension cannot be used to form a factor or construct.

f) Testing the sixth hypothesis: Corporate performance influences corporate sustainability.

Testing whether this variable can be used to form a factor or construct is done by looking at the probability value (p) of the lambda (λ) coefficient value. If the probability value (p) of the lambda coefficient (λ) is smaller than the value of α (0.05), then the indicator / dimension cannot be used to form a factor or construct.

3) Intervening / mediation variable testing: In accordance with the theme of the study where this study contained exogenous variables namely intellectual capital (X), endogenous intervening / mediation variables, namely management accounting practices (Y1) and corporate performance (Y2), and endogenous dependent / corporate sustainability (Y3) variables, then for knowing whether the intervening / mediating variable acts as a moderator or not on the exogenous variables of intellectual capital with endogenous variables tied to corporate sustainability, it is necessary to examine the role of the mediating variable.

To determine the level of intervening variable intervention, a mediation variable can be tested based on the opinion of Hair et al., mediating variables in the model are also examined from the results of indirect influence [19].

- From this test it can show which level of intervention of media variables mediates in full (full mediation) or partially mediates (partial mediation) or not mediation.

The methods of examining the mediation variables used are as follows [19]:

- Check the direct effect of the independent variable on the dependent variable on the model by involving mediating variables.
- Examining the effect of independent variants of e l on the dependent variable on the model without involving mediating variables.
- Check the influence of independent variables on mediating variables.
- Check the effect of mediating variables on the dependent variable.

V. ANALYSIS OF RESEARCH RESULTS

A. General Description of Research Respondents

This research was conducted on agroindustry-based companies in East Java with respondents from company leaders at manager level. Agroindustry-based companies are industrial companies that produce products that use the basic ingredients of the agricultural sector which include agricultural, animal husbandry, fisheries, plantations and forestry products. Based on the results of questionnaires to respondents as much as 135, the number of questionnaires from the respondents fulfilled the requirements when referring to the technical requirements for taking the number of samples using the SEM requirement approach as Hair et al. which states the idea 1 sample is between 100-200 samples [19]. Based on position, respondents who filled out the questionnaire were 77.28% filled by top managers while 22.22% were filled by unit business managers in this case the director of finance, so in this case the questionnaire was in accordance with the objectives to get information related to the theme in this study. When viewed from the level of final education, the most respondents were at the master level of education, which was 85.19%, then undergraduate level as much as 11.11%, then doctoral as much as 3.70%. Thus the respondent's education level is in line with expectations in this study, which is related to educational qualifications. When viewed from the scientific field, the last respondent has shown that 56.30% in the economic field, 20.74% in science, 19.26% in engineering, another 2.22% and 1.48% in education. Thus related to the theme of this study, the respondents viewed from the field of education are appropriate because 56.30% is in the economic field. When viewed from the age, respondents who filled out the questionnaire were: age 51-60 years 78.37%, age 41-50 years 18.52%, age above 60 years 7.41%, age 31-40 years 3.70% and under 30 years 0%. Thus related to the theme of this study, the target of respondents as an age has fulfilled, namely the maturity of age as a policy maker, namely the age of 51-60 years. When viewed from how long the respondents served in the position when filling out the questionnaire, then: 11-15 years 81.48%, above 25 years 7.41%, 21-25 years 5.93%, 16-20 years 3.70%, 6-10 years 1.48% and under 5 years 0%. Thus related to this study based on how long the respondents served were on target, most of them were in positions between 11-15 years in office, meaning that the length of the year was the number of established years. Meanwhile, based on the number of

population as many as 218 companies, the distribution of which is 21 regencies and cities with details of regencies as many as 95 companies and cities as many as 40 companies.

B. Test Validity and Reliability

1) *Validity test:* In this section, the validity of the items asked in accordance with the research variables, namely intellectual capital, accounting practices, corporate performance and corporate sustainability, will be tested. Overall the results of the questionnaire were obtained consisting of 4 research variables consisting of 40 question items. The validity test in this study is to correlate the total of each indicator that comes from the total of all items on the indicator with a total of all items on each variable. In this study the expectation is that the data has validity so that the data obtained is feasible for analysis. In this study testing data validity is done using a minimum cut-off of 0.3. Based on results questionnaire, it is known that the correlation value of 10 items forming the variable of self intellectual capital is greater than the cut-off of 0.3, so it can be said that the ten items are valid [31]. Likewise with the results of the accounting practice variable questionnaire, it is known that the correlation value of 14 items forming the variable self-management accounting practices is greater than the cut-off of 0.3, so it can be said that the fourteen items are valid [31]. In the variable performance of the company, it is known that the correlation value of 10 items forming the variable performance of the company itself is greater than the cut-off of 0.3, so it can be said that the ten items are valid [31]. For the results of the business continuity variable questionnaire, it is known that the correlation value of 6 items forming the company's self-sustainability variable is greater than the cut-off of 0.3, so it can be said that the six items are valid [31].

C. Analysis of Confirmatory Factors

Confirmatory factor analysis aims to confirm each indicator that has been made based on previous research or existing theories can be used to explain the constructs of intellectual capital, accounting practices, company performance and corporate sustainability.

D. Analysis of Confirmatory Factors of Exogenous Constructs

The picture below is the result of an analysis that tests indicators in forming a construct. This is intended to find out whether the indicators are feasible in forming exogenous constructs.

E. Capital Intellectual

Confirmatory Factor Analysis was conducted to test the construct validity of 3 indicators forming the construct of intellectual capital. To find out the three indicators are valid or not yet, can be seen in table 1 as follows.

TABLE I. INTELLECTUAL CAPITAL VALIDITY CONSTRUCTION TEST

Indicator	Estimate	CR	Information
Human Intellectual Capital (X1)	0.654	Fix	Significant
Structural Intellectual Capital (X 2)	0.752	5,494	Significant
Relational Intellectual Capital (X 3)	0.689	5,565	Significant

The next step is reliability testing, which aims to determine the reliability of respondents' responses on each indicator. The results of the calculation of the test, obtained results of the standard loading value and measurement error of CFA intellectual capital as in table 2 as follows:

TABLE II. INTELLECTUAL CAPITAL CONSTRUCTION TEST RELIABLE TEST

Indicator	Standard loading (λ)	(λ^2)	Measurement error ($1 - \lambda^2$)
Human Intellectual Capital (X1)	0.654	0.4277	0.5723
Structural Intellectual Capital (X 2)	0.752	0.5655	0.4345
Relational Intellectual Capital (X 3)	0.689	0.4747	0.5253
total	2.0950	1.4679	1.5321

Based on table 2 the calculation of the value of the reliability of the intellectual capital construct is as follows:

$$\frac{(2,095)^2}{(2,095)^2 + 1,532} = \frac{4,3890}{5,9211} = 0,7413$$

Based on the calculation, the value of the reliability of intellectual capital construction was 0.7413, meaning that the reliability of intellectual capital construction was 74.13%, thus the construct of intellectual capital was reliable.

F. Analysis of Confirmatory Factors in Endogenous Constructs

As with the analysis of exogenous constructs, the figure below is the result of the analyst to find out whether the indicators are able to form endogenous constructs, both for endogenous mediating constructs and endogenous constructs depending.

G. Practice A Management Accounting

Confirmatory factor analysis was conducted to test the unidimensionality of the 4 indicators forming the construct of management accounting practices. To find out the four indicators have formed unidimensionality or not, can be seen in tabel 3 as follows:

TABLE III. UNIDIMENSIONALITY TEST OF ACCOUNTING PRACTICE MANAGEMENT BAGS

Indicator	Estimate	CR	Information
Reporting and Decision Practices (Y1 .1)	0.735	Fix	Significant
Performance Measurement Practices (Y1 .2)	0.545	5,991	Significant
Budgetary Control Practices (Y1 .3)	0.691	7,628	Significant
Capital Investment Practices (Y1 .4)	0.721	4,591	Significant

The next step is reliability testing, which aims to determine the reliability of respondents' responses on each indicator. The result of calculation of the test, the result value of the standard

loading and measurement error CFA praktik accounting management as shown in table 4 as follows:

TABLE IV. CONSTRUCTION RELIABILITY TEST OF ACCOUNTING PRACTICE MANAGEMENT

Indicator	Standard loading (λ)	(λ^2)	Measurement error ($1-\lambda^2$)
Reporting and Decision Practices (Y1 .1)	0.735	0.5402	0.4598
Performance Measurement Practices (Y1 .2)	0.545	0.2970	0.7030
Budgetary Control Practices (Y1 .3)	0.691	0.4775	0.5225
Capital Investment Practices (Y1 .4)	0.721	0.5198	0.4802
total	2.6920	1.8346	2,1654

Based on table 4 the calculation of the value of construct reliability is carried out as follows:

$$\frac{(2,692)^2}{(2,692)^2 + 2,165} = \frac{7,2469}{9,4123} = 0,7669$$

Based on these calculations, the value of construct reliability of management accounting practices is 0.7669, meaning that the construct reliability of management

accounting practices is 76.69%, thus management accounting practices are reliable.

1) *Corporate performance (performance company):* Confirmatory Factor Analysis was carried out to test the unidimensionality of 3 indicators forming the construct of company performance. To find out the three indicators have formed unidimensionality or not, can be seen in table 5 as follows.

TABLE V. CORPORATE PERFORMANCE UNIDIMENSIONALITY TEST

Indicator	Estimate	CR	Information
Perceived ranking in Financial Performance (Y 2 .1)	0.577	Fix	Significant
Perceived ranking in Non-financial Performance (Y . 2)	0.636	6,238	Significant
The ability to respond to economic change (Y 2. 3)	0.694	5,179	Significant

The next step is reliability testing, which aims to determine the reliability of respondents' responses on each indicator. The results of the calculation of the test, obtained the results of the

standard loading value and measurement error CFA of the company's performance as in table 6 as follows:

TABLE VI. CORPORATE PERFORMANCE RELIABILITY TEST

Indicator	Standard loading (λ)	(λ^2)	Measurement error ($1-\lambda^2$)
Perceived ranking in Financial Perform (Y 2 .1)	0.577	0.3329	0.6671
Perceived ranking in Non-financial Perform (Y 2 .2)	0.636	0.4045	0.5955
The ability to respond to economic change (Y 2. 3)	0.694	0.4816	0.5184
total	1.9070	1,2191	1,7809

Based on table 6, the calculation of the construct reliability value of corporate performance is carried out as follows:

$$\frac{(1,907)^2}{(1,907)^2 + 1,7809} = \frac{3,6366}{5,4176} = 0,6713$$

Based on these calculations, obtained the value of corporate performance construct reliability of 0.6713, meaning that

corporate performance construct reliability is 67.13%, thus corporate performance is reliable.

2) *Corporate sustainability (Sustainability Company):* Confirmatory factor analysis was conducted to test the unidimensionality of the 3 constructive indicators of corporate sustainability . To find out the three indicators have formed unidimensionality or not, can be seen in table 7 as follows.

TABLE VII. UNIDIMENSIONALITY CORPORATE SUSTAINABILITY TEST

Indicator	Estimate	CR	Information
Economic Sustainability (Y 3 .1)	0.694	Fix	Significant
Environmental Sustainability (Y 3 .2)	0.674	3,808	Significant
Social Sustainability (Y 3 .3)	0.752	3,434	Significant

The next step is reliability testing, which aims to determine the reliability of respondents' responses on each indicator. The results of the calculations from the test, obtained results of

standard loading values and measurement error CFA for corporate sustainability as shown in table 8 as follows:

TABLE VIII. CONSTRUK CORPORATE SUSTAINABILITY RELIABILITY TEST

Indicator	Standard loading (λ)	(λ^2)	Measurement error ($1 - \lambda^2$)
Economic Sustainability (Y 3 .1)	0.694	0.4816	0.5184
Environmental Sustainability (Y 3 .2)	0.674	0.4543	0.5457
Social Sustainability (Y 3 .3)	0.752	0.5655	0.4345
total	2,1200	1,5014	1.4986

Based on table 8 the calculation of corporate sustainability construct value is calculated as follows:

$$\frac{(2,120)^2}{(2,120)^2 + 1,499} = \frac{4,4944}{5,9930} = 0,7499$$

Based on these calculations, the value of corporate sustainability constructs was 0.7499, meaning that corporate sustainability was 74.99%, thus corporate sustainability was reliable.

H. Hypothesis Testing Structural Equation Model

Testing this hypothesis is intended to find out whether the proposed hypothesis is proven or not proven. Testing this hypothesis includes testing (1) the influence of intellectual capital on management accounting practices, (2) the influence of intellectual capital on corporate performance, (3) the influence of intellectual capital on corporate sustainability, (4) the effect of management accounting practices on corporate

performance, (5) the effect of management accounting practices to corporate sustainability, (6) the effect of corporate performance against corporate sustainability.

TABLE IX. RESULTS EVALUATION OF GOOD OF FIT INDEX FROM SEM MODEL

Goodness of Fit Index	Cut-off value	Model Results	Information
<i>Chi Square</i>	<i>Expected to be small</i>	67,972	
<i>Probability</i>	≥ 0.05	0.198	well
<i>GFI</i>	≥ 0.90	0.918	well
<i>AGFI</i>	≥ 0.90	0.902	well
<i>TLI</i>	≥ 0.95	0.969	well
<i>CFI</i>	≥ 0.95	0.936	Pretty good
<i>RMSEA</i>	≤ 0.08	0.036	well

Source: data processed

Based on table 9 goodness of fit index can be seen that all chi square, probability, GFI, AGFI, TLI, CFI and RMSEA parameters have met the requirements.

TABLE X. RESULTS OF HYPOTHESIS TESTING

Hip	Lane	Coefficient	CR	Information
H1	Intellectual Capital → Management Accounting Practices	0.142	1,257	Not significant
H2	Intellectual Capital → Corporate Performance	0.383	3,451	Significant
H3	Intellectual Capital → Corporate Sustainability	0.523	5,469	Significant
H4	Management Accounting Practices → Corporate Performance	0.632	6,257	Significant
H5	Management Accounting Practices → Corporate Sustainability	0.383	2,798	Significant
H6	Corporate Performance → Corporate Sustainability	0.423	3,039	Significant
H7	Intellectual Capital → Corporate Performance through Management Accounting Practices	0.142	1,257	Not significant
H8	Intellectual Capital → Corporate Sustainability through Management Accounting Practices	0.142	1,257	Not significant
H9	Intellectual Capital → Corporate Sustainability through Corporate Performance	0.383	3,451	Significant
H10	Management Accounting Practices → Corporate Sustainability through Corporate Performance	0.383	3,451	Significant
H11	Management Accounting Practice and Corporate Performance can fully mediate	0.142 (MAP) 0.383 (CP)	1,257 (MAP) 3,451 (CP)	PAP Is Not Significant; CP Significant

Source: data processed

Based on tabel 10 above can be explained the results of testing the hypothesis as follows:

1) *The first hypothesis (H1) states that intellectual capital has an effect on management accounting practices: The positive path coefficient is 0.142 with a CR value (critical*

ratio) of 1.257 smaller than 1,282 (significance above 10%), meaning that intellectual capital has no significant effect on management accounting practices. So the one hypothesis (H1) which states that intellectual capital has a significant effect on management accounting practices failed to be accepted.

2) *Hypothesis two (H2) states that intellectual capital influences corporate performance:* The path coefficient marked positive is 0.383 with a CR value (critical ratio) of 3.451 greater than 2.576 (significance 1%), meaning that intellectual capital has an effect on corporate performance. So the second hypothesis (H2) which states that intellectual capital has a significant effect on corporate performance is accepted.

3) *The third hypothesis (H3) states that intellectual capital influences corporate sustainability:* The positive path coefficient is 0.523 with a CR value (critical ratio) of 5.469 greater than 2.576 (1% significance), meaning that intellectual capital has an effect on Corporate Sustainability. So the third hypothesis (H3) which states that intellectual capital has a significant effect on corporate sustainability is accepted.

4) *The fourth hypothesis (H4) states that management accounting practices affect corporate performance:* The positive path coefficient is 0.632 with a CR value (critical ratio) of 6.257 greater than 2.576 (significance 1%), meaning that management accounting practices affect corporate performance. So the six hypothesis (H4) which states that management accounting practices have a significant effect on corporate performance is accepted.

5) *The fifth hypothesis (H5) states that management accounting practices affect corporate sustainability:* The positive path coefficient is 0.383 with a CR value (critical ratio) of 2.798 greater than 2.576 (1% significance), meaning that management accounting practices have an effect on corporate sustainability. So the fourth hypothesis (H5) which states that management accounting practices have an effect on significant corporate sustainability is accepted.

6) *Hypothesis six (H6) states that corporate performance has an effect on Corporate Sustainability:* Path marked positive coefficient of 0.423 with CR (critical ratio) amounted to 3.039 greater than 2,576 (1% significance), it means corporate performance b erpengaruh towards corporate sustainability. So the fifth hypothesis (H6) which states that corporate performance has a significant effect on corporate sustainability is accepted.

I. Testing the Role of Mediation Variables

1) *Testing the indirect effect of Intellectual Capital on Corporate Performance is mediated by management accounting practices:* This test is intended to find out how the role of management accounting practices as a mediator variable on the influence of intellectual capital variables on corporate performance variables. The following are the results of testing about the role of accounting management as a mediator variable:

- Intellectual capital does not have a significant effect on management accounting practices, this is because the value of t is $<1,282$ (significance above 10%) which is equal to 1,257.
- Management accounting practices have a significant effect on corporate performance, this is because the value of $t > 2.576$ (significance 1%) is equal to 6.257.
- Intellectual capital has a significant effect on corporate performance because of the t value > 2.576 (significance 1%) which is equal to 3.451.

To test the level of intervening of mediating variables whether full mediation (partial mediation) or partial mediation (partial mediation) or not mediation. The methods of examining the mediation variables used are as follows [19]:

- Examine the indirect influence of independent variables (intellectual capital) on the dependent variable (corporate performance) on the model by involving mediating variables (management accounting practices). The results show that the indirect effect is 0.089.
- Check the influence of independent variables (intellectual capital) on the dependent variable (corporate performance) on the model without involving mediating variables (management accounting practices). The effect of intellectual capital on corporate performance is 0.383 and the results are significant.
- Check the influence of independent variables (intellectual capital) on mediating variables (management accounting practices). The effect of intellectual capital on management accounting practices is 0.142 and the results are not significant.
- Check the influence of mediation variables (management accounting practices) on the dependent variable (corporate performance). The effect of management accounting practices on corporate performance is 0.632 and the results are significant.

Based on these results, it can be seen that the effect of independent variables (intellectual capital) on the mediating variable (management accounting practice) is not significant, it can be said that the variable management accounting practice is not a mediating variable in the relationship of intellectual capital, management accounting practices and corporate performance. Thus hypothesis 7 (H7) which states that: Management accounting practices mediate the relationship between intellectual capital and corporate performance, are significantly rejected.

2) *Testing the indirect effect of intellectual capital on corporate sustainability is mediated by the practice of management accounting:* The test is intended to determine whether management accounting practices as mediator variables play a role in the influence of intellectual capital on corporate sustainability which can be explained as follows:

- Intellectual capital has no significant effect on management accounting practices because the value of t

is $< 1,282$ (significance above 10%) which is equal to 1,257.

- Management accounting practices have a significant effect on corporate sustainability because the value of $t > 2.576$ (significant 1%) is equal to 2.798.
- Intellectual capital has a significant effect on corporate sustainability because the value of $t > 2.576$ (significant 1%) is equal to 5.469.

To test the level of intervening of mediating variables whether full mediation (partial mediation) or partial mediation (partial mediation) or not mediation. The methods of examining the mediation variables used are as follows [19]:

- Examine the indirect influence of independent variables (intellectual capital) on the dependent variable (corporate sustainability) on the model by involving mediating variables (management accounting practices). The results show that the indirect effect is 0.054.
- Check the influence of independent variables (intellectual capital) on the dependent variable (corporate sustainability) on the model without involving mediating variables (management accounting practices). The effect of intellectual capital on corporate sustainability is 0.523 and the results are significant.
- Check the influence of independent variables (intellectual capital) on mediating variables (management accounting practices). The effect of intellectual capital on management accounting practices is 0.142 and the results are not significant.
- Check the influence of mediation variables (management accounting practices) on the dependent variable (corporate sustainability). The effect of management accounting practices on corporate sustainability is 0.383 and the results are significant.

Based on the results of the investigation of the four influences above, it can be seen that the influence of independent variables (intellectual capital) on the mediating variable (management accounting practice) is not significant, it can be said that the variable of management accounting practices is not a mediating variable in the relationship of intellectual capital, management accounting practices and corporate sustainability. Thus hypothesis 8 (H8) which states that: Management accounting practices mediate the relationship between intellectual capital and corporate sustainability, significantly rejected.

3) *Testing the indirect effects of management accounting practices on corporate sustainability is mediated by corporate performance:* This test aims to determine whether the variable corporate performance functions as a mediator variable on the effect of management accounting practice variables on variavel corporate sustainability with the following results:

- Management accounting practices have a significant effect on corporate performance because the value of $t > 2.576$ (significance 1%) is equal to 6.257.

- Corporate performance has a significant effect on corporate sustainability because the value of $t > 2.576$ (significant 1%) is equal to 3.039
- Management accounting practices have a significant effect on corporate sustainability because the value of $t > 2.576$ (significant 1%) is equal to 2.798.
- To test the level of intervening of mediating variables whether full mediation (partial mediation) or partial mediation (partial mediation) or not mediation. The methods of examining the mediation variables used are as follows [19]:
- Examining the indirect influence of the independent variable (management accounting practice) on the dependent variable (corporate sustainability) on the model involving mediating variables (corporate performance). The results show that the indirect effect is 0.267.
- Examine the influence of independent variables (management accounting practices) on the dependent variable (corporate sustainability) on the model without involving mediating variables (corporate performance). The effect of management accounting practices on corporate sustainability is 0.383 and the results are significant.
- Check the influence of independent variables (management accounting practices) on mediation variables (corporate performance). The effect of management accounting practices on corporate performance is 0.632 and the results are significant.
- Checking the influence of mediating variables (corporate performance) on the dependent variable (corporate sustainability). The effect of corporate performance on corporate sustainability is 0.423 and the results are significant.

Based on the results of the investigation of the four influences above, it can be seen that management accounting practices have a significant effect on corporate performance, corporate performance has a significant effect on corporate sustainability, 0.267 indirect influence is less than the direct influence of 0.383, it can be said that corporate performance is a partially mediating variable (partial mediation). Therefore:

- Hypothesis 9 (H9) which states that: Corporate performance mediates the relationship between intellectual capital and corporate sustainability, is significantly accepted.
- Hypothesis 10 (H10) which states that: Corporate performance mediates the relationship between management accounting practices and corporate sustainability, is significantly accepted.
- Hypothesis 11 (H11) which states that: Among the variables of management accounting practices and corporate performance can mediate in full (full mediation), significantly rejected.

VI. DISCUSSION OF RESEARCH RESULTS

A. Discussion of Research Results

In the discussion chapter the results of the study contain a study to answer the formulation of the problem proposed based on the results of data analysis using path coefficients (standardized regression), which then from the results of the significance test will be discussed whether the proposed hypothesis is accepted or rejected. Based on the results of the analysis described in chapter 5 before, then the relevance of the theories will be discussed, the results of previous studies, as well as existing empirical facts, so that the results of this study are expected to reveal new findings or developments. new theories that already exist. In the discussion of the results of this study, we will also describe the limitations and weaknesses of this study and it is hoped that it will become the basis for subsequent research with similar themes.

B. Effect of Intellectual Capital on the Practice of Management Accounting

Based on the results of the path coefficient test shows that the influence of intellectual capital on management accounting practices has a positive k- coefficient path value of 0.142 with a CR value of 1, 257 smaller than 1,282 (sig of 20% significance). This results in the finding that intellectual capital has no significant effect on management accounting practices. The results of these tests can be concluded that the hypothesis 1 (H1) in this study which states that " electrified capital has a significant effect on management accounting practices" is not proven. The findings of this study are not in line with the theories put forward by Pulic [16] and Bontis [14] and empirical by Tayles et al. which says that intellectual capital has an effect on management accounting practices [11]. Some theories explicitly have not stated that intellectual capital influences the practice of management accounting, but in these theories states that intellectual capital will influence the success of the company's process and will ultimately affect the performance of the company. The research conducted by Tayles et al., which states that intellectual capital has an effect on management accounting practices as well as influencing company performance [11]. In the research conducted Tayles only analyzed partially, namely: first, intellectual capital had an effect on management accounting practices, second, intellectual capital influenced h on company performance [11].

C. Effect of Intellectual Capital on Corporate Performance

In this study the results of testing the path coefficient indicate that the influence of intellectual capital on corporate performance has a positive path coefficient value of 0.383 with a CR value of 3.451 greater than 2.576 (significant 1%). This shows that in this study there were findings that intellectual capital had a significant effect on corporate performance. Thus the results of testing hypothesis 2 (H2) in this study which states "intellectual capital has a significant effect on corporate performance" is proven. The findings of this study are in line with the theories and empiric which states that intellectual capital has an effect on corporate performance.

Chen et al. who used the Pulic model (VAIC TM) to examine the relationship between intellectual capital and

market value and the company's financial performance using a sample of public companies in Taiwan [32]. The results show that intellectual capital has a positive effect on market value and corporate financial performance. Chen et al. also prove that intellectual capital can be one indicator to predict company performance in the future [32]. This shows that intellectual capital has an effect on corporate performance. Tayles et al. also use the Pulic model (VAIC TM) to test whether intellectual capital influences company performance, where intellectual capital includes human capital, structural capital and relational capital, while financial performance includes financial performance, non-financial performance, overall performance and the ability to respond to economic changes [11]. The results of this study indicate that intellectual capital affects the performance of the company. The theory of Pulic [16], Bontis [14], Stewart [22] generally explained that intellectual capital (intangible capital) has an important role and needs to be positioned with tangible capital, because intellectual capital also determines the success of the company through its business processes. Thus in the theory of intellectual capital it can be concluded that intellectual capital influences the performance of the company.

D. Influence of Intellectual Capital on Corporate Sustainability

The results of testing the path coefficient in this study indicate that the path coefficient value that is positive is 0.523 with a CR value of 5.469 greater than 2.576 (significance 1%). This shows that in this study there were findings that intellectual capital had a significant effect on corporate sustainability. Thus the results of testing hypothesis 3 (H3) in this study which states "intellectual capital has a significant effect on corporate sustainability" is proven. The findings of this study are in line with the theories and empiric which states that intellectual capital influences corporate sustainability.

Mavridis [33] and Kamath [34] who chose the banking sector as a research sample, the second result of this study shows that VAIC TM can be used as an instrument to rank the banking sector in Japan and India based on the performance of intellectual capital. This study classifies banks based on the performance of intellectual capital in four categories, namely (1) top performers, (2) good performers, (3) common performers, and (4) bad performers, so that it can be concluded that the sustainability of the company is influenced by intellectual capital. Similar to the study of corporate performance, the theory put forward by the Theory of Pulic [16], Bontis [14], Stewart [22] also explains that intellectual capital (intangible capital) has an important role and needs to be positioned with tangible capital, because capital intellectuals also determine the success of the company through its business processes, thus corporate sustainability is influenced by intellectual capital.

E. Effect of Management Accounting Practices on Corporate Performance

In this study the results of testing the path coefficient indicate that the effect of management accounting practices on corporate performance has a positive path coefficient value of 0.632 with a CR value of 6.257 greater than 2.576 (significant

1%). This shows that in this study there are findings on management accounting practices that have a significant effect on corporate performance. Thus the results of testing hypothesis 4 (H4) in this study which states "management accounting practices have a significant effect on corporate performance" is proven. The findings of this study are in line with the theories and empiric which states that management accounting practices influence corporate performance.

Hansen and Mowen explain that the role of management accounting is to present information that is useful in determining costs, especially for products [8]. Besides management accounting also provides information for planning, controlling and evaluating as well as for decision making. Broadly speaking, management accounting consists of two broad categories, namely functional-based systems (functional-based management accounting system) and activity-based management (activity-based management accounting). While according to Nakamura explained that in the face of changes in the business environment with high uncertainty experts in the field strategic management accounting has carried out various studies on target costing (cost design), quality costing, activity-based costing, product life cycle costing and value chain costing including benchmarking in supporting strategy implementation so that the company is able to achieve competitive advantage, and management accounting is associated with needs companies in implementing the strategies needed in achieving these competitive advantages [35].

F. Effects of Management Accounting Practices on Corporate Sustainability

The results of testing the path coefficient in this study indicate that the path coefficient value which is positive is 0.383 with a CR value of 2.798 greater than 2.576 (significant 1%). This shows that in this study there are capital findings of management accounting practices that have a significant effect on corporate sustainability. Thus the results of testing hypothesis 5 (H5) in this study which states "management accounting practices have a significant effect on corporate sustainability" are proven. The findings of this study are in line with the theories and empiric which states that management accounting practices have an effect on corporate sustainability.

Tayles et al. stated that intellectual capital, management accounting practices and their effects on company performance [11]. A critical factor in business is not only situated in the ownership of tangible assets, but the intangible assets has also become an important factor in achieving the performance of the company (corporate performance). Intangible assets (intangible assets) are an important factor in this business such as intellectual capital (intellectual capital), as well as in the process supported the practice of management accounting (management accounting practice), because with the strong intellectual capital and appropriate management accounting practices, the company's performance will be achieved optimally.

Another study conducted by Kelly and Tan Mui-Siang, which analyzed the effect of profit-sharing on corporate sustainability, the results of this study indicate that in

management accounting practices optimal financial performance will be obtained through the outcomes achieved so that this will have an effect on sustainability of the company (corporate sustainability) [36].

Based on the theory and empiric as described above, it shows that the theory and empiricism are in harmony with the findings of this study that management accounting practices influence corporate sustainability. It is also the same that management accounting practices influence the performance of the company. Company sustainability which includes economic, social and environmental aspects in its achievement must be supported by internal performance which includes management accounting practices. In this study, companies engaged in agro-industry-based industries actually implement internal policies that are related to economic, social and environmental aspects because if these aspects are not addressed, they will bring negative results, both internal and external linkages, such as issues related to government regulations and policies regulated by laws and regulations from the central and regional levels.

G. Effects of Corporate Performance on Corporate Sustainability

In this study the results of testing the path coefficient indicate that the effect of corporate performance on corporate sustainability has a positive path coefficient value of 0.423 with a CR value of 3.039 greater than 2.576 (significant 1%). This shows that in this study there were findings of corporate performance on the significance of corporate sustainability. Thus the results of testing hypothesis 6 (H6) in this study which states "corporate performance has a significant effect on corporate sustainability" is proven. The findings of this study are in line with the theories and empiric which states that corporate performance influences corporate sustainability.

The theory presented by Azapagic and Perdan, that the working frame of indicators consists of one, two and three dimensions [37]. The measurement of company sustainability with multi indicators provides complexity and is very relevant in the context of continuous assessment [38]. The combination of eco-efficiency indicators, environmental management systems, environmental costs, sustainable energy production, environmental damage costs, environmental levies, and the number of complaints that are included are mixed indicators that provide a good picture of environmental performance and responses from the industrial and energy sectors [12].

Based on the results of previous studies and theories, the findings of this study show that they are in line with previous research and existing theories which state that corporate performance influences corporate sustainability. Looking at the conceptual aspects of the company's performance and the sustainability of the company, these two things cannot be separated from each other. Therefore in this study the sustainability of the company is very dependent on the performance of the company. Economic, social and environmental aspects as a measure of corporate sustainability will be determined by the financial, non-financial and responsive aspects of the company as a measure of company performance, particularly in agro-industry-based companies

that sometimes face scarce raw inputs both in terms of power supply and raw materials.

1) Management accounting practices mediate the relationship between intellectual capital and corporate performance: Based on the results of the analysis show that intellectual capital does not have a significant effect on management accounting practices this is because the value of $t < 1,282$ (significance of 20%) is equal to 1,257. Furthermore, management accounting practices have a significant effect on corporate performance, this is because the value of $t > 2.576$ (significance 1%) is equal to 6.257. Then intellectual capital has a significant effect on corporate performance because of the value of $t > 2.576$ (significance 1%) which is equal to 3.451. Thus hypothesis 7 (H7), namely: The practice of management accounting mediates the relationship between intellectual capital and corporate performance, significantly rejected.

This means that because intellectual capital has no effect on management accounting practices, which among the causes is the very strong role of "professional ethics" in influencing management accounting practices, so in this study management accounting practices are significantly not as variables mediating the relationship of intellectual capital with corporate performance.

2) Management accounting practices mediate the relationship between intellectual capital and corporate sustainability: The results of the analysis show that intellectual capital has no significant effect on management accounting practices because the t value is $< 1,282$ (significance of 20%) which is equal to 1,257. Then management accounting practices have a significant effect on corporate sustainability because the value of $t > 2.576$ (significant 1%) is equal to 2.798. Furthermore, intellectual capital has a significant effect on corporate sustainability because the value of $t > 2.576$ (significant 1%) is equal to 5.469. Thus hypothesis 8 (H8) which states that: Management accounting practices mediate the relationship between intellectual capital and corporate sustainability, significantly rejected.

This means that, because intellectual capital has no effect on management accounting practices, which among the causes is the very strong role of "professional ethics" in influencing management accounting practices, then in this study management accounting practices are significantly not as variables mediating the relationship of intellectual capital with corporate sustainability.

3) Corporate performance mediates the relationship between intellectual capital and corporate sustainability: The results of data analysis show that management accounting practices have a significant effect on corporate performance because the value of $t > 1.96$ is equal to 6.257, corporate performance has a significant effect on corporate sustainability because the value of $t > 2.576$ (significance 1%) is 3.039 and influential management accounting practices significant for corporate sustainability because the value of $t > 2.576$

(significant 1%) is equal to 2.798. Based on the results of the analysis, it means that hypothesis 9 (H9) states that: corporate performance mediates the relationship between intellectual capital and corporate sustainability, is significantly accepted.

Proven that corporate performance as a mediating variable on the relationship of intellectual capital with corporate sustainability, it indicates that the position is as mediating variables turned out corporate performance influenced the intellectual capital and also influenced the practice of management accounting, thus in a position like that then corporate performance role as mediating the relationship between intellectual capital and corporate sustainability.

4) Corporate performance mediates the relationship between management accounting practices and corporate sustainability: The results of data analysis show that management accounting practices have a significant effect on corporate performance because the value of $t > 1.96$ is equal to 6.257, corporate performance has a significant effect on corporate sustainability because the value of $t > 2.576$ (significance 1%) is 3.039 and influential management accounting practices significant for corporate sustainability because the value of $t > 2.576$ (significant 1%) is equal to 2.798. Based on the results of the analysis, it means that hypothesis 10 (H10) states that: corporate performance mediates the relationship between management accounting practices and corporate sustainability, is significantly accepted.

The proof is that corporate performance as a mediating variable on the relationship of management accounting practices with corporate sustainability, this shows that corporate performance is influenced by intellectual capital and influence also by management accounting practices, so as a mediating variable corporate performance can play a significant role as mediating the relationship between practice management accounting with corporate sustainability.

5) Among the variables of management accounting and corporate performance practices are those that fully mediate: Paying attention to the results of hypothesis 7 (H7), hypothesis 8 (H8) and hypothesis 9 (H9), hypothesis 10 (H10) where management accounting practice variables are not mediating variables, while corporate performance variables prove significant as mediating variables, where hypothesis 11 (H11) which states that: Among the management accounting practices and corporate performance variables there are full mediation, significantly rejected.

No role of management accounting practice variables as mediating variables, and only corporate performance variables act as mediating variables, this causes non-functioning of the two variables as variables that are capable of full mediation, but corporate performance which is proven to act as mediation, then mediation of corporate performance are mediated in part (partial mediation).

VII. CONCLUSION AND SUGGESTION

A. Conclusion

Based on the results of data analysis and hypothesis testing, the following points can be concluded:

- The results of the first hypothesis that states that intellectual capital has a significant effect on management accounting practices, shows that intellectual capital does not affect management accounting practices. Thus the role of intellectual capital on management accounting practices in agro-industry-based companies in East Java is less significant.
- The second hypothesis states that intellectual capital has a significant effect on corporate performance, indicating that intellectual capital has a significant positive effect on corporate performance. This means that intellectual capital in companies based on agroindustry in East Java can significantly influence corporate performance.
- In testing the third hypothesis states that intellectual capital has a significant effect on corporate sustainability, indicating that intellectual capital has a significant positive effect on Corporate Sustainability. In this case, it shows that intellectual capital has a role in influencing corporate sustainability in companies based on agroindustry in East Java.
- Testing the fourth hypothesis states that management accounting practices have a significant effect on corporate performance, indicating that management accounting practices have a significant positive effect on corporate performance. Thus in management accounting practices can affect corporate performance (corporate performance) in companies based on agroindustry in East Java.
- The fifth hypothesis testing states that management accounting practices have a significant effect on corporate sustainability, indicating that management accounting practices have a significant positive effect on Corporate Sustainability. Thus, corporate sustainability is influenced by management accounting practices, in agroindustry-based companies in East Java.
- The sixth hypothesis testing states that corporate performance has a significant effect on Corporate Sustainability, indicating that corporate performance has a significant positive effect on Corporate Sustainability. Thus the corporate sustainability of agro-industry-based companies in East Java is influenced by corporate performance.
- Based on the results of the four investigations, it can be seen that the influence of independent variables (intellectual capital) on the mediating variable (management accounting practice) is not significant, it can be said that the management accounting practice variable is not a mediating variable in the relationship of intellectual capital, management accounting practices and corporate performance.

- The results of the next investigation, it can be seen that the influence of independent variables (intellectual capital) on the mediating variable (management accounting practice) is not significant, it can be said that the variable of management accounting practices is not a mediating variable in the relationship of intellectual capital, management accounting practices and corporate sustainability.
- The results of further investigation, it is known that the practice of management accounting significant effect on corporate performance and corporate performance significantly influence corporate sustainability, while the indirect effect is smaller than the direct effect, it can be said that corporate performance as a mediating variable portion (partial mediation).

B. Suggestion

On the basis of conclusions based also on the results of data analysis and proof of hypotheses, the authors try to give the following suggestions:

- Working intellectual needs attention by all components of the stakeholders because intellectual capital will determine the sustainability of the company. Besides intellectual capital, considering management accounting practices are factors that can determine the performance and sustainability of the company, then in carrying out internal management accounting practices need to be considered by adhering to applicable standards and norms.
- Performance of the company (corporate performance) who appears to have a role in achieving the sustainability of the company (corporate sustainability), then the performance of the company was to be maintained by running the intellectual capital management practices and accounting practices for sustainability management company can be reached. In addition to the company's performance, given that corporate sustainability is the company's ultimate goal in order to survive in a business full of competition, the supporting components need to be implemented in practice and there is management commitment in conducting business.

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