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# The Influence of Competency, Independence, and Objectivity on the Effectiveness of Internal Auditors in Realizing a World-Class University with Internal Auditor Integrity as a Moderating Variable in Higher Education in Medan

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## ABSTRACT

This study aims to determine the effect of competencies, independence, and objectivity on the effectiveness of internal auditors in realizing a World-Class University, with internal auditor integrity as a moderating variable in universities in Medan City.
This research is associative research in the form of causal relationships. The population used in this study was the Internal Supervisory Unit of State Higher Education and Private Universities in the City of Medan. The sample of this study was an internal supervisory unit for State Higher Education and Private Universities, with as many as 89 respondents. The data collection technique used in this study is a questionnaire. The data analysis technique used is structural equation modelling, which is carried out with the help of SmartPLS software.
The results obtained in this study indicate that competencies affect the effectiveness of internal auditors in realizing a world-class university, independence affects the effectiveness of internal auditors in realizing a world-class university, objectivity influences the effectiveness of internal auditors in realizing world-class university, internal integrity auditors can moderate influence Competence on the effectiveness of internal auditors in realizing the World Class University, internal auditor integrity can moderate the effect of independence on the effectiveness of internal auditors in realizing the World Class University, Internal Auditor integrity can moderate the effect of objectivity on the effectiveness of internal auditors in realizing the World Class University.

***Keywords:*** *competency, independence, objectivity, effectiveness of internal auditors, integrity, world-class university.*

## INTRODUCTION

The conception of higher education in Indonesia, based on Government Regulation Number 4 of 2014 concerning the Implementation of Higher Education and Management of Higher Education, provides autonomy to Higher Education as the center of the implementation of Tridharma Higher Education. Law of the Republic of Indonesia Number 12 of 2012 concerning Higher Education in Article 4 states that higher education functions to develop innovative, responsive, creative, skilled, competitive, and cooperative academicians through the implementation of Tridharma. State Universities (PTN) have the autonomy to manage their institutions.

Higher education bears obligations in nation development through reciprocal relations with the government, the private sector, and civil society. Without quality, prestigious, and international-class education, the nation's competitiveness and attractions cannot increase significantly. Education is an essential factor in the aspect of life and growth of a nation, and the university is the top sector in the field of education. Therefore, universities must have active and effective work motivation that positively impacts students. The university must be able to fulfil students' rights through appropriate education services.

Today, quality improvement is inevitable to gain public trust and still exist competitively. In addition, university students are also required to provide the best service to the community and be oriented to the needs of the community. Academic services, along with supporting facilities, are one of the considerations of prospective students when choosing universities to continue their education so that the quality of service becomes an indicator of the success of educational institutions as a public organization.

University management enters the era of quality or quality competition. So, universities in the era of globalization must be based on quality, and universities in educational service activities and human resource development have advantages. In a balanced sense, students studying in tertiary institutions expect the results of communication and multiple motivations, namely science, degrees, skills, experiences, beliefs, and noble behaviour.

The challenge in the future of universities in Indonesia in dealing with global competition is the ability of educational institutions to place themselves parallel to the world's leading universities. In order to achieve this goal, all the value systems that are the key to achieving the level of an international standard university must be developed thoughtfully, as well as legal instruments for the formation of a global quality culture from each component of the tertiary institution. An essential and primary element in achieving this level is academic ethics, which contains morality values (good and bad value systems) that every academic community must own in carrying out activities in the academic field.

Based on the world's webometrics-level data issued by CSIC Cybermetrics Lab in July 2023, the University of Indonesia ranked 561 globally. It ranked the highest compared to other universities in Indonesia. Then, for universities in Medan, the University of North Sumatra is ranked 1647, and Medan State University is ranked 3942.

Realizing the dream of having a world-class college requires extra hard work and a long time. At this time, reforms in higher education must be able to put a strong base through the development of the character of an academic community with academic ethics and rational, objective, and normative characteristics. Academic ethics must be an element of fundamental morality in dealing with social, economic, political, cultural, scientific, and technological development. It is in addition to individual responsibilities that prioritize professional competence, honesty, integrity, and objectivity. Higher education in Indonesia must be able to account for the public, respect for the dignity and rights of human beings, and can be a source of reference for the nation's noble culture.

Government policies directly influence university management by focusing on efficiency. In addition, the effectiveness of the management and governance of the university raises three main principles: institutional autonomy must be respected, academic freedom must be protected, and governance arrangements must be open and responsive (Trakman & South, 2008). By establishing and implementing an internal control system properly and correctly in a university, the university can achieve goals and minimize risk. If an internal control system has been determined by all operations, physical resources, and data will

be monitored and under control, the goal will be achieved, the risk will be small, and the information produced will be higher quality. Thus, it can be ascertained that the university can guarantee and maintain its existence and survival.

Many universities in Indonesia crave to become world-class universities (WCUs), as evidenced by their quality and reputation. Realizing the dream of having a world-class college requires extra hard work. At this time, reforms in higher education must be able to put a strong base through the development of the character of an academic community with academic ethics and rational, objective, and normative characteristics. Academic ethics must be an element of fundamental morality in dealing with social, economic, political, cultural, scientific, and technological development. Competence is associated with the ability, knowledge/ insight, and attitudes used as a guideline in carrying out the responsibilities of work done by employees. Then independence is a condition or position where any party does not bind us.

Moreover, effectiveness is the exact goal of a goal or the choice of the right goal. Objectivity is needed so the auditor can act reasonably without being influenced by the pressure or request of certain parties concerned with the audit results. Integrity is an audit quality that underlies public trust and is a benchmark for members in testing all their decisions. Integrity requires an auditor to be honest, transparent, brave, wise, and responsible in conducting audits.

This research was conducted in state and private universities in Medan. The reason researchers chose PTN and PTS in the city of Medan, in addition to being affordable by the residence of researchers, Medan City is the third largest city in Indonesia. PTN and PTS in Medan City are included in the college that is in demand and is a favorite of prospective students who want to continue their studies.

Based on the background mentioned above and the inconsistency of previous studies' results, the authors try to examine it in the form of a thesis research entitled "The Influence of Competence, Independence, and Objectivity on the Effectiveness of Internal Auditors in Realizing World-Class University with Internal Auditors Integrity as a Moderating Variable on Higher Education in Medan."

## LITERATURE REVIEW

### The Role of Internal Auditors' Effectiveness

Effectiveness is always associated with the relationship between the expected results and the actual results achieved. Effectiveness is the final product of an operational activity that has achieved goals in terms of the quality of the work, the quantity of work, and the targeted time limit (Betri, 2018, p. 35). So, it can be concluded that effectiveness is a relationship between one variable and another that is interrelated and influences the achievement of the goal or outcome of the target.

Internal audits help the organization by identifying and evaluating significant risks and contributing to improving risk management and internal control systems. Based on the risk assessment results, the internal audit function evaluates the internal control system's adequacy and effectiveness, including governance, operating activities, and organizational information systems.

Indicators of the effectiveness of internal auditors include the ability to plan, increase productivity, assess results with the objectives set, implement recommendations, evaluate and improve risk management, evaluate control systems, and recommend

### Competence

An auditor is expected to have a broad view in various ways. In addition, auditors are also intended to have more knowledge about their fields so they can understand various problems more deeply and quickly in following more complex developments.

In this case, competence is needed to effectively show an internal auditor's ability to realize the World Class University. According to IAPI (2018: 5), "Competence is the ability of the auditor individually to apply the knowledge they have to complete work independently and with a team based on the code of ethics, professional standards of public accountants, and applicable legal provisions. Tandontong (2016: 172) mentions competencies relating to expertise, knowledge, and experience, stating that competent auditors have adequate knowledge, training, skills, and experience to complete their audit tasks successfully.

Auditor competencies obtained from experience and knowledge are essential in improving audit quality. The auditor's experience will affect the quality of the audit. With more experience, the auditor can produce various allegations and explain the audit findings.

Indicators to measure competency include experience in business and professional life, the ability and experience of leading, accounting, and financial education knowledge, a good understanding of risks and controls, good communication skills, and adequate knowledge of laws and regulations in the capital market and related laws.

Internal auditors must also have other knowledge, skills, and expertise (Pickett, 2010, p. 387). The applicable theory states that internal auditors' competence, which consists of knowledge, skills, expertise, and behaviour, affects the effectiveness of internal audit functions (Gamayuni, 2016).

**Auditor Independence**

Independence is a general standard number two of the three auditing standards set by the Indonesian Accounting Association (IAI), which states that the auditor must maintain independence and a mental attitude in all related engagements. Independent means the auditor is not easily influenced. The auditor is not justified in favour of anyone's interests. Independent auditors are not easily influenced and are free from management pressure and any party conducting audits. The auditor is obliged to be honest not only to the management and owner of the company but also to the creditor and other parties who trust the auditor's work (Christiawan, 2017). The auditor's code of ethics states that independence is the expected attitude of an auditor not to have a personal interest in carrying out his duties, which is contrary to the principles of integrity and objectivity.

According to IAPI (2018: 6), independent attitudes are a fundamental factor the auditor must have when conducting an audit engagement. All auditors who are in tertiary institutions, as well as all internal auditor networks of higher education, must be independent. The auditor's independence must be maintained in every engagement, both in appearance (independent in appearance) and thought (independent of mind). The auditor needs the support and commitment of the leadership to understand the provisions of independence and ethics in an engagement to realize compliance in carrying out audits. Based on some of these theories, it can be concluded that independence is the auditor's attitude, always being neutral and objective, free from the influence of anyone during an audit, and giving reports on findings and opinions on financial statements. With good independence, the auditor will be free from conflict of interest in carrying out their duties. The auditor will give an opinion based on the findings of facts that occur in the field during the audit process.

Indicators to assess independence under the second general standard (SA Section 220 in SPAP, 2001) means not being easily influenced, carrying out work for the public interest, not in favour of the interests of anyone, maintaining freedom of opinion, and being honest with all other parties who put trust.

## Objectivity

According to (Hery, 2017), the objective is a free mental attitude that internal auditors must possess. In carrying out an examination, the auditor should not judge everything based on the results of the assessment of others; instead, they can free themselves from a situation that can make them unable to give professional and objective assessments. The 2014 Indonesian government internal audit standard in the basic principle of Section 1100 explains that objectivity is a mental attitude impartial (not biased) that allows auditors to carry out assignments in such a way that the auditor believes in the results of their work and that no quality compromise is made. Objectivity can be interpreted as a belief quality that provides value for auditor services or services. Objectivity is one of the characteristics that distinguishes the accountant profession from other professions.

The principle of objectivity establishes an obligation for the auditor not to take sides honestly, intellectually, and free from conflicts of interest. The auditor conducts a balanced assessment of all relevant conditions and is not affected by his interests or the interests of others in making their decisions. The principle of objectivity establishes an obligation for auditors not to take sides, honestly intellectually, and free from conflicts of interest to obtain the quality of audit results under the desired objectives (Aaipi, 2014). The indicators used to measure this objectivity variable are (1) free from conflict of interest and (2) disclosure of conditions according to facts.

## Internal Integrity Auditor

Integrity is a principle where internal auditors must uphold the truth by showing honesty and compliance with laws and regulations (Rustendi, 2017). Integrity intends that the auditor has to have a personality based on an honest, brave, wise, and responsible attitude to build trust and provide a basis for reliable decision-making (Cahyono, 2015). Integrity is needed as an ethical principle to maintain and expand public trust, and members must carry out all their professional responsibilities with the highest level of integrity (Arens, 2015, p. 99).

Internal auditors are expected to be able to carry out their duties wisely, which means not in a hurry but according to adequate information. Auditor's responsibility assessment if the supervision results are submitted with all evidence supporting audit findings based on relevant and competent evidence. So, the integrity of internal auditors builds trust and thus provides a basis for trust in its consideration. Integrity states honesty, a fair relationship, and actual condition.

According to Rustendi (2017), in audit standards and the code of ethics of internal auditors, clear implementation rules are needed related to integrity, honesty, responsible attitude, working wholeheartedly, providing benefits, and compliance with legal provisions and regulations. So, in this study, the integrity variable can be measured by the following indicators: a) Honest, b) Responsible, c) Work wholeheartedly, d) Useful, and e) Obey the legal provisions.

## Framework

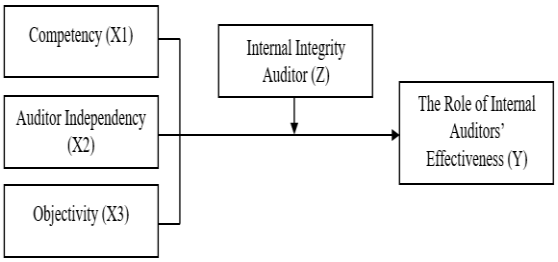


**Figure 1. Conceptual Framework**

H1: Competence affects the effectiveness of internal auditors.

H2: Independence affects the effectiveness of internal auditors.

H3: Objectivity affects the effectiveness of internal auditors in realizing the World Class University

H4: Internal Integrity auditors can moderate the effect of competence on the effectiveness of internal auditors.
H5: Internal Integrity auditors can moderate the effect of independence on the effectiveness of internal auditors.
H6: Internal Integrity auditors can moderate the effect of objectivity on the effectiveness of internal auditors.

## MATERIALS & METHODS

This study aims to test the effect of competence, independence, and objectivity on the effectiveness of internal auditors' role in realizing a World-Class University, with internal integrity auditors as moderating variables. Data collection in this study was conducted using a questionnaire and Google Forms. The respondents' questionnaire was collected again and then processed using the Smart PLS program.
Data collection in this study was conducted in several stages, namely by distributing questionnaires to active state and private universities in Medan, as many as 48 universities.
As per the specified time limit and the sampling criteria, as many as 89 rewards of higher education questionnaires were obtained, which became the research sample.

## RESULT

### A. Data Quality Test

### 1. Outer Model

This model aims to measure construct validity, the extent to which observed measurement indicators represent the latent variable. The outer model evaluates the measurement quality of variables that cannot be observed directly by utilizing observation variables that can be measured directly (Hair et al., 2018). The significance of this function in SEM analysis is crucial because it supports the understanding and validation of latent variable constructs, which are essential aspects of research (Hair et al., 2019). Outer Model Analysis in SmartPLS involves three main aspects: outer loading, construct validity and reliability, and discriminant validity.

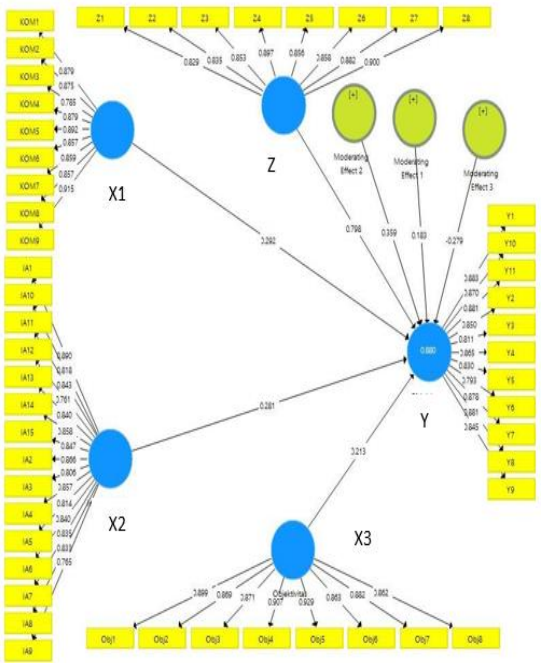


**Figure 2. Testing Outer Model**
***Source: Smartpls Output, (2024)***

### Outer Loading

Outer Loading in SmartPLS refers to the coefficient that measures the extent to which measurement indicators represent the latent variables (constructs) related to partial path analysis. It illustrates the strength of the relationship between indicators and the measured latent variables. Outer loading is calculated as a regression coefficient between indicators and latent variables, and the value ranges from 0 to 1.
Figure 2 above shows that each indicator's outer loading value indicates a value> 0.7. Therefore, all indicators can be included in research and do not need to be excluded from the research process.

### Construct Validity and Reliability

Construct validity measures the extent to which indicators represent the construct referred to in the analysis. It reflects the extent to which the measurement reflects the concept or nature of the latent variable to measure. Construct validity is essential in

ensuring that the resulting model appropriately reflects the latent variable following the theory used (J. F. Hair et al., 2018). Meanwhile, reliability refers to the consistency of measurement results from the same indicator to measure the same construct. If an indicator is highly reliable, the measurement results will be consistent when repeated measurements in the same population. (Hair et al., 2017). In SmartPLS, construct validity and reliability can be assessed through Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE).

### a) Cronbach's Alpha

The Cronbach's Alpha coefficient usually ranges from 0 to 1, where higher values indicate a better level of reliability. Cronbach's Alpha tests whether the indicators used to measure construct have adequate consistency. The decision related to Cronbach's Alpha test was made by checking Cronbach's Alpha value itself. If the value exceeds the figure of 0.7, then the variable is considered to meet the test reliability requirements so that it can be used in research that is being carried out (Garson, 2016).

**Table 1. Cronbach's Alpha Value for Each Variable**

| Variable | Cronbach's Alpha |
|---|---|
| Effectiveness of Internal Auditors | 0.963 |
| Competence | 0.959 |
| Auditor Independence | 0.968 |
| Integrity | 0.951 |
| Objectivity | 0.962 |

***Source: Smartpls Output, (2024)***

The table above shows that all variables listed have a value above 0.7. Therefore, all variables applied in this study indicate a consistent level of consistency in each measurement. Thus, all indicators can be included in research and do not need to be excluded from the research process.

### b) Composite Reliability

**Table 2. Composite Reliability Results**

| Variable | Composite Reliability |
|---|---|
| Effectiveness of Internal Auditors | 0,967 |
| Competence | 0,965 |
| Auditor Independence | 0,971 |
| Integrity | 0,959 |
| Objectivity | 0,967 |

***Source: Smartpls Output, (2024)***

Based on compositerality values, all variables have a value above 0.700. It shows that each variable used in this study meets the standards. Thus, all indicators can be included in research and do not need to be excluded from the research process.

### c) Average Variance Extracted (AVE)

In making decisions based on AVE, if the AVE value exceeds 0.5, the variable faces no reliability problem. Therefore, these variables are suitable for use in the context of research.

**Table 3. Average Variance Extracted Test Results**

| Variable | Average Variance Extracted (AVE) |
|---|---|
| Effectiveness of Internal Auditors | 0.729 |
| Competence | 0.752 |
| Auditor Independence | 0.693 |
| Integrity | 0.747 |
| Objectivity | 0.784 |

***Source: Smartpls Output, (2024)***

The table above shows that each existing variable has an Average Variance Extracted value that exceeds the figure of 0.5. Therefore, each variable used in this study can reflect the latent variable it represents. Thus, all indicators can be included in research and do not need to be excluded from the research process.

## Discriminant Validity

Several methods can be used in SmartPLS to test Discriminant Validity. The commonly used methods are the Fornell-Larcker criterion, heterotrait-monotrait (HTMT), and crossloading.

### a) Fornell-Larcker Criterion

The Fornell-Larcker criterion tests the relationship between variables in its construct. In testing the Fornell-Larcker

criterion, each variable is evaluated for the Average Variance Extracted (AVE) value. The AVE value must be greater than the correlation between the construct and other constructs.

**Table 4. Fornell-Larckercriterion Test**

| Variable | Internal Auditor | Auditor Independence | Integrity | Auditor Competence | Objectivity |
|---|---|---|---|---|---|
| Effectiveness of Internal Auditor | 0.854 | | | | |
| Auditor Independence | 0.421 | 0.832 | | | |
| Integrity | 0.794 | 0.538 | 0.864 | | |
| Auditor Competence | 0.612 | 0.462 | 0.489 | 0.867 | |
| Objectivity | 0.116 | 0.074 | 0.054 | 0.027 | 0.886 |

***Source: Smartpls Output, (2024)***

From the table above, it can be observed that the correlation value between variables and other variables is high. Therefore, it can be concluded that the Fornell-Larcker testing criteria have been fulfilled.

### b) Heterotrait-Monotrait (HTMT)

This method calculates the ratio between the correlation between variables and other variables and the correlation between variables and themselves. If this ratio is smaller than 0.90, namely the boundary value used, then discriminant validity is met (Garson, 2016).

**Table 5. Heterotrait-Monotrait (HTMT)**

| Variable | Internal Auditor | Auditor Independence | Integrity | Auditor Competence | Objectivity |
|---|---|---|---|---|---|
| Effectiveness of Internal Auditor | | | | | |
| Auditor Independence | 0.420 | | | | |
| Integrity | 0.826 | 0.551 | | | |
| Auditor Competence | 0.625 | 0.480 | 0.502 | | |
| Objectivity | 0.105 | 0.093 | 0.078 | 0.055 | |

***Source: Smartpls Output, (2024)***

Based on the table above, if the HTMT value in each variable is less than 0.9, then each variable meets the HTMT requirement and meets discriminant validity.

### c) Cross Loading

Cross-loading refers to situations where an indicator correlates highly with multiple latent variables. A variable indicator with high cross-loading can indicate that it does not exclusively reflect certain latent variables, which can raise doubts about the construct validity measured by these variables (Hair et al., 2019).

If a high cross-loading is found on an indicator in more than one latent variable, the removal of related indicators may need to be considered. A good cross-loading value on an indicator is above 0.700, with the highest correlation on its latent variable. Crossloadiang values of each indicator can be seen in the table below:

**Table 6. Cross Loading Value For Each Indicator**

| Var | $X_1$ | Var | $X_2$ | Var | $X_3$ | Var | $X_3$ | Var. | $X_4$ |
|---|---|---|---|---|---|---|---|---|---|
| AI1 | 0,890 | COM1 | 0,879 | Obj1 | 0,899 | Y1 | 0,883 | Z1 | 0,829 |
| AI2 | 0,866 | COM2 | 0,875 | Obj2 | 0,869 | Y2 | 0,850 | Z2 | 0,835 |
| AI 3 | 0,806 | COM3 | 0,785 | Obj3 | 0,871 | Y3 | 0,811 | Z3 | 0,853 |
| AI 4 | 0,857 | COM4 | 0,879 | Obj4 | 0,907 | Y4 | 0,865 | Z4 | 0,897 |
| AI5 | 0,814 | COM5 | 0,892 | Obj5 | 0,929 | Y5 | 0,830 | Z5 | 0,856 |
| AI6 | 0,840 | COM6 | 0,857 | Obj6 | 0,863 | Y6 | 0,793 | Z6 | 0,858 |
| AI7 | 0,835 | COM7 | 0,859 | Obj7 | 0,882 | Y7 | 0,878 | Z7 | 0,882 |
| AI8 | 0,833 | COM8 | 0,857 | Obj8 | 0,862 | Y8 | 0,881 | Z8 | 0,900 |
| AI9 | 0,765 | COM9 | 0,915 | | | Y9 | 0,845 | | |
| AI10 | 0,818 | | | | | Y10 | 0,870 | | |
| AI11 | 0,843 | | | | | Y11 | 0,881 | | |
| AI12 | 0,761 | | | | | | | | |
| AI13 | 0,840 | | | | | | | | |
| AI14 | 0,858 | | | | | | | | |
| AI15 | 0,847 | | | | | | | | |

***Source: Smartpls Output, (2024)***

Based on the cross-loading value of each indicator used in this study, all indicators have a cross-loading value above 0.700 and have the highest correlation with the latent variable. So, no indicators need to be issued.

### Collinearity Statistics (VIF)

Multicollinearity occurs when two or more variables in the model have a significant correlation. This situation can make results difficult to interpret, reduce the reliability of the regression coefficient, and cause instability in the model.

The VIF value ranges from 1 to 10. A low value, around 1 to 5, shows that the variable has a relatively minimal influence on multicollinearity and can be accepted in the model. VIF values between 3 and less than three are considered the recommended research standards (Hair et al., 2018). However, if the VIF value exceeds five or even 10, the variable is influenced by multicollinearity and needs to be handled.

**Table 7. Collinearity Statistics (VIF) Test Results**

| No | Indicator | VIF | Details | No | Indicator | VIF | Details |
|---|---|---|---|---|---|---|---|
| 1 | AI1 | 4,620 | Valid | 27 | Obj3 | 4,521 | Valid |
| 2 | AI10 | 3,605 | Valid | 28 | Obj4 | 4,428 | Valid |
| 3 | AI11 | 3,847 | Valid | 29 | Obj5 | 4,487 | Valid |
| 4 | AI12 | 2,618 | Valid | 30 | Obj6 | 3,556 | Valid |
| 5 | AI13 | 3,885 | Valid | 31 | Obj7 | 4,082 | Valid |
| 6 | AI14 | 4,546 | Valid | 32 | Obj8 | 3,321 | Valid |
| 7 | AI15 | 4,036 | Valid | 33 | Y1 | 4,715 | Valid |
| 8 | AI2 | 4,586 | Valid | 34 | Y10 | 4,220 | Valid |
| 9 | AI3 | 3,497 | Valid | 35 | Y11 | 4,408 | Valid |
| 10 | AI4 | 4,306 | Valid | 36 | Y2 | 3,530 | Valid |
| 11 | AI5 | 3,517 | Valid | 37 | Y3 | 3,126 | Valid |
| 12 | AI6 | 3,968 | Valid | 38 | Y4 | 4,073 | Valid |
| 13 | AI7 | 3,590 | Valid | 39 | Y5 | 3,334 | Valid |
| 14 | AI8 | 3,858 | Valid | 40 | Y6 | 2,682 | Valid |
| 15 | AI9 | 2,519 | Valid | 41 | Y7 | 4,029 | Valid |
| 16 | COM1 | 3,473 | Valid | 42 | Y8 | 4,967 | Valid |
| 17 | COM2 | 3,783 | Valid | 43 | Y9 | 3,694 | Valid |
| 18 | COM3 | 2,693 | Valid | 44 | Z1 | 2,930 | Valid |
| 19 | COM4 | 3,768 | Valid | 45 | Z2 | 2,738 | Valid |
| 20 | COM5 | 4,680 | Valid | 46 | Z3 | 3,217 | Valid |
| 21 | COM6 | 3,539 | Valid | 47 | Z4 | 4,240 | Valid |
| 22 | COM7 | 3,566 | Valid | 48 | Z5 | 3,178 | Valid |
| 23 | COM8 | 3,391 | Valid | 49 | Z6 | 3,656 | Valid |
| 24 | COM9 | 4,907 | Valid | 50 | Z7 | 3,935 | Valid |
| 25 | Obj1 | 3,618 | Valid | 51 | Z8 | 4,315 | Valid |
| 26 | Obj2 | 3,742 | Valid | | | | |

***Source: Smartpls Output, (2024)***

Based on the data in the table above, all indicators have a VIF value of less than 5. Therefore, it can be concluded that all variables in the construct have no multicollinearity problems.

## Inner model

The inner Model is related to the relationship between the construct in the research model. The inner model helps test the hypothesis of the relationship between latent variables and analyze the extent to which this relationship is significant. The usefulness of the inner model analysis is in understanding the complex relationship between the variables in a research model. Testing the inner model shows the relationship between variables and whether they are significant or not, with the hypothesis that has been compiled. The inner model in this study uses the R square test, T statistical or hypothesis test, and Q Square.

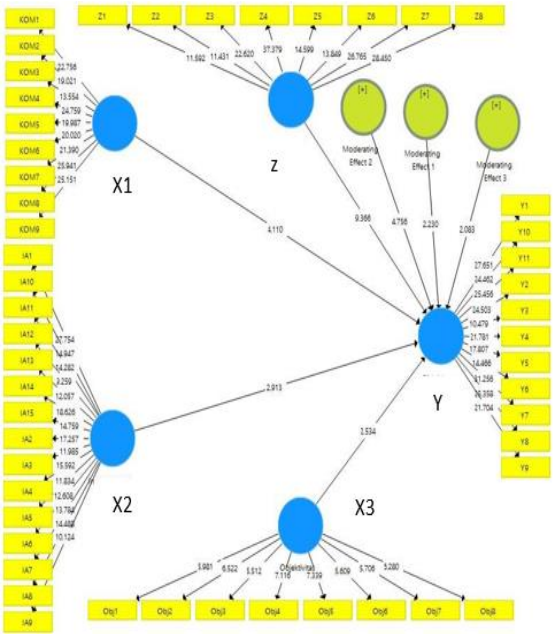


**Figure 3. Inner Model Test Result**
***Source: Smartpls Output, (2024)***

### 1. R Square

R Square measures the extent to which variations in the dependent variable can be explained by the independent variables in a research model (Hair et al., 2017). The range of R square values is between 0 and 1, where the value 1 shows that the independent variable can predict the dependent variable perfectly. The table below summarizes the R Square value for each dependent variable in this study:

**Table 8. R Square Test Results**

| Variable | R Square | R Square Adjusted |
|---|---|---|
| Y | 0,880 | 0,869 |

***Source: Smartpls Output, (2024)***

Based on the results of the R Square test above, it can be concluded that the independent variable influences the dependent variable of internal auditors' effectiveness by as much as 0.880 or 88%. Meanwhile, the remaining 12% is influenced by other factors not included in this research's scope.

### 2. Q Square

Q Square refers to the statistical test used in multivariate statistical analysis. The Q

Square test is used in StructureQuation Modeling (SEM) or Partial Least Squares (PLS) to measure the significance of the difference between measurement and structural models. This test helps researchers determine whether there is a significant difference between the model's measurement parameters and structural parameters. Quality requirements for Q Square are Q Square value> 0. The following are the results of Q Square testing:

**Table 9. The Results of Q Square**

| Dependent Variable | SSO | SSE | $Q^2$ (=1-SSE/SSO) |
|---|---|---|---|
| Y | 979,000 | 406,362 | 0,585 |

***Source: Smartpls Output, (2024)***

From the table above, it can be seen that the Q Square value in the effectiveness of the effectiveness of the internal auditor = 0.585 means that the value is > 0, so it can be concluded that the independent variable can explain the effectiveness of the internal auditor's effectiveness variable.

## 3. Fit Model

The fit model used in this study uses the SRMR value. SRMR measures the suitability between the path model produced and the observed data. SRMR assesses how well the model produced can reflect the relationship between the observed variables in actual data.

SRMR ranges from 0 to unlimited; getting closer to zero, the better. The SRMR value between 0.06 and 0.08 is considered the best and shows that the model is compatible with observation data (Henseler et al., 2016). The following are the results of testing the fit model:

**Table 10. Fit Model Output**

| Indicator | Saturated Model | Estimated Model |
|---|---|---|
| SRMR | 0,065 | 0,086 |
| d_ULS | 5,541 | 9,751 |
| d_G | 5,512 | 5,405 |
| Chi-Square | 1865,850 | 1957,613 |
| NFI | 0,698 | 0,683 |

***Source: Smartpls Output, (2024)***

The table above shows that the SRMR value in the Saturated Model is 0.065, and the Estimated Model is 0.086, so the model formed is declared to meet its feasibility.

## 4. Hypothesis Testing

The hypothesis test on the smart-pls is carried out through path coefficients, which are used to determine the amount and direction of the influence of the independent variable on the dependent variable. The following are the results of path coefficient testing:

**Table 11. Hypothesis Test Results**

| Construct | Original Sample Estimate | T-Statistics | P-Values | Hypothesis | Description |
|---|---|---|---|---|---|
| Competency -> Effectiveness of Internal Auditors | 0.292 | 4.110 | 0.000 | H1 | Accepted |
| Auditor Independence -> Effectiveness of Internal Auditors | 0.281 | 2.913 | 0.004 | H2 | Accepted |
| Objectivity -> Effectiveness of Internal Auditors | 0.213 | 2.534 | 0.012 | H3 | Accepted |
| Internal Auditor Integrity -> Competency -> Effectiveness of Internal Auditors | 0.183 | 4.756 | 0.000 | H4 | Accepted |
| Auditor Internal Integrity -> Auditor Independence -> Effectiveness of Internal Auditors | 0.359 | 2.230 | 0.026 | H5 | Accepted |
| Internal Integrity Auditor -> Objectivity -> Effectiveness of Internal Auditors | 0.279 | 2.083 | 0.038 | H6 | Accepted |
| Internal Integrity Auditor -> Effectiveness of Internal Auditors | 0.798 | 9.366 | 0.000 | Z | Accepted |

***Source: Smartpls Output, (2024)***

Based on the table above, the conclusions can be drawn as follows:

1. Structural Model Research: EAI = 0.292 Competency + 0.281Independence + 0.213 Objectivity + 0.183 Z1 + 0.359 Z2 + 0.279 Z3.
2. Effect of Competency on the Effectiveness of Internal Auditors has a P Values value of 0,000 <0.05. Therefore, it can be concluded that competencies significantly positively affect internal auditors' effectiveness, so H1 is accepted.
3. The effect of independence on internal auditors' effectiveness has a P value of 0.004 <0.05. Therefore, it can be concluded that independence significantly affects internal auditors' effectiveness, so H2 is accepted.
4. The effect of objectivity on the effectiveness of internal auditors has a

value of P values of 0.0012 <0.05. Therefore, it can be concluded that objectivity has a significant positive effect on the effectiveness of internal auditors, so H3 is accepted.

5. The Effect of Integrity in Modeling the Effects between Competencies on the Effectiveness of Internal Auditors has a value of P Values of 0,000 <0.05. Therefore, it can be concluded that the auditor's integrity can moderate independence on the effectiveness of internal auditors so that H4 is accepted.
6. The effect of integrity in moderating the effect between independence and the effectiveness of internal auditors has a value of p values of 0.026 <0.05. Therefore, it can be concluded that integrity moderates independence in the effectiveness of internal auditors, so H5 is accepted.

## CONCLUSION

Based on the results of research and discussion in the previous chapter, it can be concluded as follows:

1. Competence influences the effectiveness of internal auditors in realizing the World Class University.
2. Independence affects the effectiveness of internal auditors in realizing the World Class University.
3. Objectivity affects the effectiveness of internal auditors in realizing the World Class University.
4. Internal Integrity Auditors can moderate the effect of competence on the effectiveness of internal auditors in realizing a world-class university.
5. Internal Integrity Auditors can moderate the effect of independence on the effectiveness of internal auditors in realizing World Class University.
6. Internal Integrity Auditors can moderate the effect of objectivity on the effectiveness of internal auditors in realizing World Class University.

## SUGGESTIONS

Based on the conclusions and limitations in this study, the suggestions that can be submitted by researchers related to these conclusions are as follows:

1. Referring to the results of this study, it is known that competence, independence, and objectivity influence internal auditors' effectiveness in realizing a world-class university moderated by the integrity of internal auditors. So, internal auditors should maintain or improve that attitude. Internal auditors are also expected to be able to conduct evaluations and improvements, if needed, related to the effectiveness of internal auditors. The auditor can be a benchmark and support media to prevent problems that can affect the goals and sustainability of higher education.
2. In further research, it is recommended that researchers use other variables that are thought to affect the effectiveness of the role of internal auditors in realizing a world-class university. Further research is recommended to add independent variables other than variables tested in this study, such as audit quality, senior management, and ongoing audit.

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